## CATALOG OF COURSES <br> 2006-2007

The Catalog of Courses outlines, in detail, course requirements needed to complete the various degree programs offered at Fort Lewis College.

Students assume the responsibility of reading the catalog, completing a minimum of 120 credits as outlined by the degree program, and maintaining a minimum cumulative grade point average of 2.0 and a minimum grade point average of 2.0 for those courses accepted to meet the requirements for the major and minor course of study.

Students will be assigned an advisor to help them with the appropriate course selections, but students assume the ultimate responsibility of knowing and completing all graduation requirements.

For more information, contact:
Registrar's Office
1000 Rim Drive
Durango, CO 81301-3999
Phone: 970-247-7350
E-mail: records@fortlewis.edu
Admission Office
1000 Rim Drive
Durango, CO 81301-3999
Phone: 970-247-7184
E-mail: admission@fortlewis.edu
Website: www.fortlewis.edu

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## ACADEMIC CALENDAR 2006-2007

## FALL SEMESTER 2006

Last day to withdraw with no financial penalty
*Classes begin
Deadline for adding classes (Census date)
Deadline for dropping individual classes without a recorded grade (Census date)
Mid-term grades due
Winter Semester Registration:
Advising
Registration
Thanksgiving Break
**Last day of classes
Final exams
Commencement
Final grades due
Sunday, August 27
Monday, August 28
Tuesday, September 12
Tuesday, September 12
Monday, October 16
Monday-Friday, October 23-November 3
Monday-Friday, November 6-17
Monday-Friday, November 20-24
Friday, December 8
Monday-Friday, December 11-15
Saturday, December 16
Monday, December 18, 10:00 am

## WINTER SEMESTER 2007

Last day to withdraw with no financial penally
*Classes begin
Deadline for adding classes (Census date)
Deadline for dropping individual classes without a recorded grade (Census date)
Mid-term grades due
Spring Break
Fall Semester and Summer Registration:
Advising
Registration
**Last day of classes
Final exams
Commencement (two ceremonies)
Final grades due
Sunday, January 7
Monday, January 8
Tuesday, January 23
Tuesday, January 23
Monday, February 26
Monday-Friday, March 5-9
Monday-Friday, March 12-23
Monday-Friday, March 26-April 6
Friday, April 20
Monday-Friday, April 23-27
Saturday, April 28
Monday, April 30, 10:00 am

## SUMMER SEMESTER 2007

## May Session

Last day to withdraw with no financial penalty
*Classes begin
Deadline for adding classes (Census date)
Deadline for dropping individual classes without a recorded grade (Census date)
**Last day of classes
Final grades due
Sunday, April 29
Monday, April 30
Friday, May 4
Friday, May 4
Friday, June 1

## June Session

Last day to withdraw with no financial penalty
*Classes begin
Deadline for adding classes (Census date)
Deadline for dropping individual classes without a recorded grade (Census date)
**Last day of classes
Final grades due
Sunday, June 3
Monday, June 4
Friday, June 8
Friday, June 8
Friday, July 6
Monday, July 9, 10:00 am

## July Session

Last day to withdraw with no financial penalty Sunday, July 8
*Classes begin
Deadline for adding classes (Census date)
Deadline for dropping individual classes without a recorded grade (Census date)
**Last day of classes
Final grades due

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## OTHER RESOURCES

The Fort Lewis College Catalog of Courses is intended to guide students in degree planning. The Fort Lewis College website and numerous departmentally-sponsored publications provide additional information.

## Academic Policies and Procedures

Academic policies and procedures are not catalog-specific. For this reason, the policies and procedures in effect for the coming academic year are published in newsprint form each fall by the Registrar's Office. The document is also available electronically via the Records Office website: www.fortlewis.edu/academics/records_office/default.asp

## Admission

All the information prospective students need regarding the admission process can be found at the Office of Admission website: www.fortlewis.edu/prospective_students/admission/

## Assessment

Information about the college-wide and departmental assessment efforts can be found at the Office of Assessment website:
www.fortlewis.edu/faculty_staff/assessment/

## Campus Life

Information about student clubs and organizations can be accessed through the College Union website: www.fortlewis.edu/current_students/student_clubs_orgs/

## Community and Regional Services

Information about the Center for Academic Readiness, Child Development Center, Community Concert Hall, Office of Community Services, Office of Economic Analysis and Business Research, Education Outreach, Events Planning Office, Extended Studies, Fort Lewis College Foundation, Library, Office of Local Affairs, Professional Associates, San Juan Forum, Small Business Development Center, Center of Southwest Studies, and Center for Tourism Research can be found by searching the Fort Lewis College website: www.fortlewis.edu

## Financial Aid

Information about financial aid, including the latest edition of the Financial Aid Handbook, can be found on the Office of Financial Aid website: www.fortlewis.edu/current_students/financial_aid/

## Student Conduct Code

The Student Conduct Code is published on the Fort Lewis College website: www.fortlewis.edu > Current Students > Student Services and Policies > Student Conduct Code

## Student Services

Information about the Academic Advising Center, Bookstore, Career Services, Computing Services, Counseling Center, Disability Services, Food Services, Health Center, Housing, Learning Support and Success Services, Police and Parking Services, Post Office, and Recreational Services can be found on the Fort Lewis College website: www.fortlewis.edu

## Tuition, Fees, and Expenses

Information about tuition, fees, expenses, and payment policies can be found on the Office of Accounting website: www.fortlewis.edu/administrative_services/accounting_office/

## GENERAL INFORMATION

## MISSION

Fort Lewis College offers accessible, high quality, baccalaureate liberal arts education to a diverse student population, preparing citizens for the common good in an increasingly complex world.

## THE COLLEGE

Fort Lewis College is a four-year, state-assisted, undergraduate institution that offers quality baccalaureate degree programs in the arts and sciences and in the professional areas of education and business. The College has an enduring commitment to develop and maintain its programs at a level equal to those of other outstanding undergraduate institutions in the nation. Fort Lewis College has an approximate enrollment of 4,500 students.

## DEGREES OFFERED

Fort Lewis College offers a number of programs leading to the bachelor's degree. The Bachelor of Science degree is offered in biology, chemistry, geology, and physics; the Bachelor of Arts degree is granted in all other four-year programs. In addition, the College offers a program leading to the Associate of Arts degree in agricultural science.

The Fort Lewis College teacher education programs have been approved by the Colorado Department of Education. Licensure programs are offered for the following: early childhood (pre-school, K-2), middle childhood (elementary), young adult (secondary), and K-12 (art, music, physical education).

## COLLEGE-WIDE LIBERAL EDUCATION OUTCOMES

A liberal arts education encompasses more than specific curricular requirements. The College has defined four liberal education outcomes that students will attain through fulfilling their general education requirements as well as through in-depth study within the major and the experiences available to them at a liberal arts institution. The four liberal education outcomes for Fort Lewis students are:

Learning as inquiry - The ability to use modern methods to access, analyze, interpret, and apply a wide range of information, data, and appropriate sources.

Critical thinking as problem solving - The ability to analyze, synthesize, evaluate, and apply information in order to solve complex problems.

Communication as intellectual contribution - The ability to contribute to scholarly understanding of a subject by balancing complexity and clarity of argument, clear conceptual organization of evidence, and adaptation to context and audience.

Action as responsible application of academic learning - The ability to use all of the above to make positive contributions to one's community and the larger society.

## HISTORY

Fort Lewis College is named for Fort Lewis, a U.S. Army Post established in 1878 at Pagosa Springs, Colorado. Two years later, the military post moved to Hesperus, Colorado, a location more central to Indian settlements and pioneer communities. The U.S. government abandoned the site as a military post in 1891 and, in its place, established Fort Lewis as a school offering free education to Native American students.

By 1911, Congress had deeded the Hesperus site to the State of Colorado, which then established a high school of agriculture under the supervision of the State Board of Agriculture. The school began to offer some college-level courses in 1925 and, in 1933, Fort Lewis began to offer college courses exclusively. In 1948, Fort Lewis was officially designated a junior college with its own president.

Fort Lewis moved to the Durango campus in 1956. The first baccalaureate degrees were granted in 1964. From 1986 to 2002, Fort Lewis was part of the Colorado State University System under the governance of the State Board of Agriculture. An independent board of trustees currently governs Fort Lewis College.

Fort Lewis College continues to honor its historic commitment to Native Americans by offering tuition scholarships to all qualified American Indians who meet admission requirements. It is the only college in Colorado to do so, and it has for more than 100 years.

## LOCATION

Fort Lewis College sits on a mesa-like terrace overlooking Durango and the 13,000-foot peaks of the La Plata Mountains. With a population of approximately 15,000, Durango is the largest community in Southwest Colorado and serves as a hub of commercial activity for a regional population of more than 60,000. Durango's elevation is 6,500 feet; it is surrounded by the Rocky Mountains, yet it is only 50 miles away from the deserts of the Southwest. Durango is about 350 miles from Denver, 200 miles from Albuquerque, and 450 miles from Phoenix.

## THE CAMPUS

The distinctive architecture of custom stonework found on the Fort Lewis campus reflects the heritage of Southwest Colorado's Ancestral Pueblo Indians. The backdrop of the rugged San Juan Mountains creates a learning environment of incomparable natural beauty and sets off the architecture that is based on the ancient and contemporary living sites of the first inhabitants of this region.

Academic activities are centered in Chemistry Hall, Education and Business Hall, Center of Southwest Studies, Sage Hall, Art Hall, John F. Reed Library, Theatre Building, Dan Noble Hall, and the academic wing of Berndt Hall. The College Union Building houses a cafeteria, snack bar, post office, bookstore, lounge and meeting rooms, as well as Student Government offices, the student newspaper, public radio station, and Student Activities.

The on-campus Housing Office, Financial Aid Office, Registrar's Office, Native American Center, Advising Center, Career Services, and Health Center are in Miller Student Center.

About 1,580 students live on campus in residence halls and apartment complexes. Physical education and recreation facilities include the Student Life Center, Outdoor Pursuits, a large gymnasium, indoor swimming pool, football stadium, tennis courts, softball fields, soccer fields, track, nature trails, and nearby cross-country ski tracks in winter and golf course in summer.

## SEMESTER CALENDAR

Fort Lewis College operates on a semester calendar. The semesters are each 15 weeks. The fall semester generally begins late August or early September and ends mid-December; the winter semester begins in early January and ends late April or early May; the summer semester begins in early May and concludes in early August. The summer semester is traditionally divided into three five-week blocks.

## SUMMER PROGRAMS

The summer programs at Fort Lewis College offer a rich variety of courses from the regular curriculum for students who wish to graduate in fewer than four years.

## THE FACULTY

Fort Lewis recruits its faculty from the best colleges and universities in the country. About 90 percent of the tenure track faculty hold the highest degree attainable in their disciplines. Many of Fort Lewis College's faculty have developed national reputations for excellence in teaching, research, and curriculum development. Because Fort Lewis College is primarily an undergraduate institution, faculty members focus on teaching and work closely with students.

## ACCREDITATION

Fort Lewis College is accredited by the Higher Learning Commission, a commission of the North Central Association of Colleges and Schools (www.ncacihe.org). Fort Lewis College is also a member of the American Council of Learned Societies and the Council of Public Liberal Arts Colleges. Additional accreditations include:

Music Department - National Association of Schools of Music
Chemistry Department - American Chemical Society
Exercise Science Department - Commission on Accreditation of Allied Health Education Programs School of Business Administration - Association to Advance Collegiate Schools of Business International Education Department - Teacher Education Accrediting Council (National); Colorado Department of Education (state)
Engineering Physics - Accreditation Board for Engineering and Technology (ABET)


#### Abstract

ASSESSMENT

To improve instruction and to ensure that it is meeting its educational goals, the College regularly assesses students' progress. The College assesses institution-wide and departmental goals by using a wide variety of measures including surveys, student work samples, its own instruments, and nationally standardized tests such as Graduate Record Exam, ETS Major Field Tests, and National Survey of Student Engagement to measure the quality and success of its programs. The College frequently requires students to participate in assessments to help the College improve its academic programs and teaching methods. All departments have assessment processes in place that provide data on student learning in the majors. For more information about assessment, visit www.fortlewis.edu/faculty_staff/ assessment/


## BASIC SKILLS REQUIREMENTS

## COLORADO BASIC SKILLS ASSESSMENT POLICY

Degree-seeking students admitted after fall 2001 must fulfill the requirements of Colorado Basic Skills Assessment Policy. The policy was created by the Colorado Commission on Higher Education to implement legislation passed in 2000 by the Colorado Legislature (CRS 23-1-113). The policy requires students to be assessed at matriculation to determine if they are college-level in reading, writing, and mathematics. Approved assessments are the ACT, the SAT I, and Accuplacer. The Colorado Basic Skills Policy is administered by the New Student Advising and Registration Office, which issues Basic Skills Assessment reports to each new student upon registration for courses. Students who do not submit the documentation required for Basic Skills Assessment as specified by the New Student Advising and Registration Office will have a hold placed on their academic records.

There are three assessments possible in each competency area: exempt, college-level, and remedial. Students are exempt from all assessment if they already have earned a bachelor's degree or a transferoriented associate's degree. Students are exempt in assessment in reading if they have earned 1) a C - or better in college composition; 2) a C - or better in a college preparatory reading course; or 3) have a documented reading disability. Students are exempt from assessment in writing if they have earned 1) a C - or better in college composition; 2) a C - or better in a college preparatory writing course; or 3) have a documented writing disability. Students are exempt from assessment in mathematics if they have earned 1) a C- or better in a college-level mathematics course; 2) a C- or better in an intermediate algebra course; or 3) have a documented disability in mathematics. Students who are exempt do not need to take further action under the policy.

Students who are assessed as college-level in reading, writing, or mathematics are reported to the Colorado Commission on Higher Education as not needing remediation in the relevant competency area. Students who are college-level in a competency area do not need to take further action under the policy.

Students who are assessed as remedial in reading, writing, or mathematics are reported to the Colorado Commission on Higher Education as in need of remediation in the relevant competency area. Students who do not meet the SAT I or ACT minimum scores listed below will be required to take the appropriate remedial coursework and earn a grade of C - or higher by the time they earn 30 credits at Fort Lewis College.

| Subject Area | ACT Score | SAT I Score |
| :--- | :--- | :--- |
| Math | 19 Minimum | 460 Minimum |
| English | 18 Minimum | 440 Minimum |
| Reading | 17 Minimum | 430 Minimum |

## GRADUATION REQUIREMENTS

## GENERAL GRADUATION REQUIREMENTS

It is the responsibility of the student to know and complete all graduation requirements.
Each candidate for graduation must complete a minimum of 120 credits, with at least a minimum cumulative grade point average of 2.0 and a minimum grade point average of 2.0 for those courses accepted to meet the requirements for the major and minor course of study.

Candidates for bachelor's degrees must complete three elements in their academic programs: general education requirements, major requirements, and free electives. Many students choose to use electives to complete the requirements for a minor or teacher licensure.

Among the 120 credits required for the degree, 45 credits must be upper-division courses.
A course offered in substitution for a required course or the request that a requirement be waived must be initiated through an appointment with a Registrar's Office representative who, with the student, will initiate the Exception to Graduation Requirements process. The appropriate department chair, school dean, or program director will determine approval.

## MAJOR

Each student seeking a baccalaureate degree must select a major area of study for specialization. For a complete list of majors and descriptions, see the "Majors, Minors, and Options" section of this catalog.

## DOUBLE MAJOR

A "double major" is defined as two different majors earned simultaneously with the same baccalaureate degree (i.e., both being a Bachelor of Arts or Bachelor of Science degree).

Students may elect to complete concurrently the requirements for two majors. The Petition for Candidacy for a Degree form, which is sent to the student once 80 credit hours have been earned, must be completed with both majors listed and submitted to the Registrar's Office. Any major or minor additions or changes after submission of the original Petition for Candidacy for a Degree form must be updated in the Registrar's Office. Courses meeting auxiliary requirements may count in meeting curriculum requirements for both majors. Both majors must be completed prior to graduation.

Students wishing to complete a different second major after the first major has been completed and conferred must complete a minimum of 30 additional credits, including the major requirements.

## MINORS

Minors, even though not required for graduation, are offered. Requirements for a minor are described in the "Majors, Minors, and Options" section of this catalog. No more than one course from the major department will count toward any minor. Students with two minors may count no more than one course toward both minors. If a minor is chosen, it must be completed prior to graduation. Minors may not be added after a bachelor's degree has been awarded.

## CERTIFICATE PROGRAMS

Certificate programs at Fort Lewis College consist of a specified set of academic courses that focus on a specific topic, representing a coherent and relatively free standing body of knowledge. Successful completion of a certificate signifies the achievement of competence in the specified domain and is recognized by the awarding of a certificate (an official document) from the sponsoring department or program. Completion of certificate programs approved by the College will also be annotated on the official student transcript.

Each certificate program has a designated program director, to whom students should direct inquiries. Currently (January 2006), Fort Lewis College has one approved certificate program in Geographic Information Systems (GIS), directed by Dr. Scott White of the Geosciences Department.

## GRADUATION REQUIREMENTS FOR SECOND BACHELOR'S DEGREE CANDIDATES

Students pursuing a second bachelor's degree after earning the first bachelor's degree must complete a minimum of 30 additional credit hours at Fort Lewis College. To be recognized, the first degree must be from a regionally accredited institution. General education requirements are waived for those students whose first degree is a Bachelor of Arts or Bachelor of Science. No honors are awarded upon receipt of such a degree.

Students who have previously completed a minor while attending any institution (including Fort Lewis College) may return to or attend Fort Lewis College and obtain a major in that area by completing the degree requirements and a minimum of 30 additional credit hours.

## STUDENT BILL OF RIGHTS (CRS 23-1-125)

Colorado colleges and universities are governed by CRS 23-1-125, known as the Student Bill of Rights. The General Assembly directed the Colorado Commission on Higher Education to implement this legislation. Direct any questions, requests, issues, or concerns about Fort Lewis College's compliance with this law to the Dean of the Division of General and Exploratory Studies.

Students have a right to:
(a) A quality general education experience that develops competencies in reading, writing, mathematics, technology, and critical thinking through an integrated arts and science experience
(b) Students should be able to complete their Associate of Arts and Associate of Science degree programs in no more than 60 credit hours or their baccalaureate programs in no more than 120 credit hours unless there are additional degree requirements recognized by the Commission.
(c) 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. [Contact the Dean of the Division of General and Exploratory Studies for more information about the graduation agreement process and deadlines.]
(d) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees.
(e) Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education.
(f) Students, upon successful completion of core general education courses, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education.
(g) Students have a right to know if courses from one or more public higher education institutions satisfy the students' degree requirements.
(h) 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.

It is the student's responsibility to notify Fort Lewis College of any and all possible transfer, exam, or military credits in a timely fashion.


## TRANSFER, EXAM, AND MILITARY CREDIT

## TRANSFER OF CREDITS

Courses are generally accepted in transfer to Fort Lewis College if they are regular, college-level academic courses completed with grades of C - or better and taken at a regionally accredited collegiate institution. Courses that will not transfer include those that are not college level, such as remedial and developmental; non-academic such as vocational, career exploration, cooperative education, practicums, etc; or courses with grades of D+ or lower or the grades pass/fail, credit/no credit, or satisfactory/unsatisfactory. However, courses with grades of pass, credit, or satisfactory, may be accepted if they are physical education (PE) courses or if the student demonstrates that the course could not be taken under the normal A-F grading mode and the institution verifies that the grade awarded is equivalent to a C - or better.

Transfer credits more than 10 years old will not be automatically accepted and require special approvals to be applied toward general education, major, auxiliary, or minor requirements.

Courses accepted in transfer become part of the credit hours completed and are not used in grade point average (GPA) calculations. The Fort Lewis College GPA is based on work completed at Fort Lewis College only.

Lower-division credits are freshman- and sophomore-level credits (courses numbered 100 and 200, respectively, at Fort Lewis College). Upper-division credits are junior- and senior-level credits (courses numbered 300 or 400, respectively, at Fort Lewis College). Lower- and upper-division designation is based on the transfer institution's lower- and upper-division designation. Course equivalency may be granted for a lower-division course from another college that is an upper-division course at Fort Lewis College, but the course will not count as upper-division credit at Fort Lewis. Credits earned at a two-year college cannot be used to meet Fort Lewis College's credit requirement in upper-division courses.

The maximum number of credits that may transfer to Fort Lewis College is 90 . Within these 90 credits, the maximum number of credits that may transfer from an accredited community/junior college is 60 .

## TRANSFER POLICIES

## Transfer of Associate of Arts and Associate of Science degrees

Fort Lewis College will honor the transfer of an Associate of Arts (A.A.) degree or Associate of Science (A.S.) degree earned at a Colorado public institution that offers A.A. or A.S. degrees. Admissible students who complete the graduation requirements for an A.A. and/or A.S. degree program(s) at a Colorado public college with 60 transferable credits will transfer with junior standing into any arts and science degree program offered by Fort Lewis College, provided that the student earns a C - or better in each course. This includes the general education courses that are state guaranteed general education. The transferable credits earned in the associate degree program will apply, at minimum, to 35 credit hours of lower-division general education and up to 25 credit hours of additional elective credits towards graduation. Because all liberal arts and science degrees are designed to be completed in 120 credit hours, a transfer student who follows the 60-60 guides for Fort Lewis College can finish a four-year degree at Fort Lewis College by taking 60 additional credits. Programs that can be finished within the 60-60 agreement can be found at www.fortlewis.edu/academics/records_office/transfer_links.asp. Fort Lewis College will evaluate credit for prior learning, advanced placement, and correspondence courses following its standard policy.

## Transfer under statewide articulation agreements

Statewide articulation agreements between Colorado public community/junior colleges and Fort Lewis College exist in the areas of Business and Teacher Education. Details of the articulation agreements may be viewed via the Colorado Commission on Higher Education website:
www.state.co.us/cche/academic/transfer/agreements/index.html

## Transfer of general education

Colorado's state guaranteed general education courses are designed to allow students to begin their general education courses at one Colorado public higher education institution and later transfer to another without loss of general education credits. Effective Fall 2003, Colorado policy ensures that students who successfully complete a state guaranteed general education course(s) will receive transfer credit(s) to be applied to general education requirements in all majors at all public institutions unless a specific statewide articulation agreement exists.

The state's guaranteed general education is organized into five categories: communication, mathematics, arts, and humanities, social and behavioral sciences, and physical and life sciences. The state general education policy guarantees transfer of 10 state approved general education courses limited to the number of semester credit hours allowed in each general education category (below). Students must earn a C- grade or better in each course. Additional information is available at: www.state.co.us/cche/academic/transfer/index.html.

| Semester <br> Credit Hour | General Education Categories |
| :---: | :--- |
| 6 | $\frac{\text { Communication }}{1 \text { Intro. Writing course (3 semester credits) }} 1$ <br> 1 Intermediate Composition (3 semester credits) <br> $\frac{\text { Mathematics }}{1 \text { course (3 to } 5 \text { semester credits) }}$ |
| 15 | Arts, Humanities, and Social and Behavioral Sciences <br> At least 2 courses from Arts and Humanities with no more than 2 <br> tourses from any 1 category: <br> Arts <br> Literature and Humanities <br> Ways of Thinking <br> Modern Languages <br> $\frac{\text { Social and Behavioral Sciences }}{\text { At least 2 courses, with 1 course required in History and no more }}$than 2 courses from any 1 category <br> History <br> Economic and Political Systems <br> Geography <br> Human Behavior and Social Systems <br> 7 <br> Physical and Life Sciences <br> 2 courses, at least 1 with an associated laboratory |

## Transfer agreements and guides with non-Colorado colleges

Fort Lewis College also has transfer guides with San Juan College in New Mexico and Diné College in Arizona. These guides are on the Fort Lewis College website. Published transfer guides govern transfer policies for those twoyear colleges.

Any student transferring from a regionally accredited collegiate institution with an A.A. or A.S. degree will fulfill general education requirements upon the completion of two Thematic Studies 2 courses from two different themes.

## Transfer of degrees from international institutions

All associate and bachelor degrees being transferred from international institutions will be reviewed by the Registrar's Office to determine transferability.

## Effective catalog for transfer students

For academic program purposes, the catalog in effect for graduation requirements for a transfer student is the catalog in effect when the student transfers to Fort Lewis College. Previous catalogs may be used when specified by a particular articulation or transfer guide.

## Transfer inquiry/appeals process

The inquiry/appeals process follows and applies to transfer appeals from Colorado public colleges as well as all other accredited colleges.

The student may appeal:

- A decision regarding the transferability of a specific course(s);
- A decision regarding the placement of a specific course(s);
- The institution's failure to provide a transcript evaluation within the designated 30 calendar day period.

1. The appeal must be submitted in writing to the Registrar's Office. The decisions regarding course transferability and/or placement made in the initial transcript evaluation will be binding if the student fails to file a written letter of appeal within 15 calendar days:
a. The Registrar's Office and appropriate department chair will review the written appeal submitted by the student.
b. The appropriate department chair will have 30 calendar days to review the student's appeal. The Registrar's Office will inform the student in writing of the department's decision on the appeal, including the rationale for that decision. In addition, the student shall be informed in writing about the process for appealing the appeal decision should the student feel that reasonable doubt exists.
c. If the Registrar's Office fails to inform the student of the available appeal options, the departmental decision shall be null and void. The student's request prevails and cannot be overturned by any institutional administrator or committee.
2. An opportunity to appeal the first appeal decision:
a. The student may appeal the first appeal decision by writing the Office of Academic Affairs at Fort Lewis College. The appeal must be filed within 15 calendar days of the postmark date of the letter notifying the student of the departmental decision. If the student fails to file an appeal within this time period, the original decision shall be binding.
b. Fort Lewis College must hear and reach a decision on the appeal within 15 calendar days after the appeal is filed.
c. The student will be notified in writing by Fort Lewis College of its decision regarding the transfer appeal and the rationale for the decision. In addition, the institution shall inform the student that the student may appeal the decision by writing the governing board.
3. An opportunity to appeal the institutional appeal decision:
a. The student may appeal the institutional decision by writing the Office of Academic Affairs. The appeal must be filed within five calendar days of the postmark date of the letter notifying the student of the institutional decision. If the student fails to file an appeal within this time period, the institutional decision shall be binding.
b. The governing board staff shall review and reach a decision on the appeal within five calendar days after the appeal is filed.
c. The student will be notified in writing by the governing board of its decision regarding the transfer appeal and the rationale for the decision. In addition, the institution shall inform the student that the student may appeal the decision by writing the Colorado Commission on Higher Education. The appeal must be filed within five calendar days of the postmark date of letter notifying the student of the governing board's decision.

## Colorado Commission on Higher Education Procedures for Resolution of Student Transfer Disputes

The appeals process is to be initiated by the student after all remedies have been exhausted without resolution of the issue at the institutional level.

An appeal is initiated by the student informing the Commission in writing of the situation and the reason for the appeal. Complete instructions regarding this level of appeal may be found on the CCHE website: www.state.co.us/ cche/academic/transfer/index.html

## CREDIT BY EXAMINATION

## INSTITUTIONAL CREDIT BY EXAMINATION

Credit for some courses may be earned through institutional examinations. This procedure is limited to regular catalog courses and may not apply to such courses as Special Topics, Independent Study, Practicums, or Internships.

The student should apply to the appropriate department chair, who may assign a faculty member to administer the exam. The chair will assure that the reason(s) for the course challenge is legitimate, and, if the course is an advanced one, that the student has the necessary prerequisites.

A student may not take a special exam for a course that he or she has already taken in the regular fashion, regardless of the grade earned previously unless it was an audit grade.

The fee for credit by examination is listed in the current year Tuition and Fee Schedule, and must be paid before the exam is given. A proctoring fee may also be assessed.

## EXTERNAL CREDIT BY EXAMINATION

College credit is also awarded for exceptional performance on tests administered by the following external testing agencies. To qualify for college credit based on test performance, the test must be completed prior to taking any collegiate coursework at Fort Lewis College in the same area.

## ADVANCED PLACEMENT

Fort Lewis College participates in the Advanced Placement Program of the College Entrance Examination Board. Under this program, outstanding secondary school students may take certain college-level courses in their own high schools. Satisfactory scores on an examination administered and graded by the College Board are forwarded to Fort Lewis College and may serve as a basis for credit and/or advanced placement. Scores of 3 or higher are considered for college credit. For additional information, students should consult their high school counselor or write to the College Entrance Examination Board, Box 592, Princeton, NJ 08550.

| Advanced Placement Test | Fort Lewis College Equivalency COURSE TITLE | CREDITS |
| :---: | :---: | :---: |
| Art | Art 190 Art | 6 |
| Art-2D Design | Art 190 2D Design | 6 |
| Art-3D Design | Art 190 3D Design | 6 |
| Art-Drawing | Art 190 Art - Drawing | 6 |
| Art-History | Art 262R Art History to the Renaissance Art 263R Art History from the Renaissance | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Biology | Bio 112 Intro Biology II Bio 190 Biology | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |
| Chemistry | Chem 150Nx Fund Chem I Chem 151Tx Fund Chem II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Computer Science A | CSIS 106 Intro Prog in Visual Basic CSIS 190 Computer Science | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |
| Computer Science AB | CSIS 110 Intro to Programming (Java) CSIS 190 Computer Science | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |
| Economics | Econ 262 Microeconomics | 2 |
| (Microeconomics) | Econ 190 Economics | 4 |
| Economics | Econ 272 Macroeconomics | 2 |
| (Macroeconomics) | Econ 190 Economics | 4 |
| English (Score=3) | Engl 191 Language and Composition | 3 |
| (Lang and Comp) | Engl 190 Language and Composition | 3 |
| English (score=4+) | Comp 150 Reading \& Writing College | 4 |
| (Lang and Comp) | Engl 190 Language and Composition | 2 |
| English (score=3) | Engl 191 Literature and Composition | 3 |
| (Literature/Comp) | Engl 190 Literature and Composition | 3 |
| English (score=4+) | Comp 150 Reading \& Writing College | 4 |
| (Literature/Comp) | Engl 190 Literature and Composition | 2 |
| Environmental Science | Bio 190 Environmental Science | 6 |
| French | ML 147 Elementary French I ML 148 Elementary French II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| German | ML 123 Elementary German I ML 124 Elementary German II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Government and Politics (Comp) | PS 190 Government \& Politics (Comp) | 6 |
| Government and Politics (United | PS 110S US National Government | 4 |
| States) | PS 190 Government and Politics | 2 |
| History (European) | Hist 160R Survey Western Civ I Hist 261S Western Civ II | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |
| History (United States) | Hist 280 Survey US Hist 1600-1877 Hist 281R Survey US Hist 1877-Present | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |
| History (World) | Hist 191R World History Hist 261S Western Civ II | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |
| Human Geography | Geog 190 Human Geography | 6 |
| Latin | ML 109 Intro Latin I ML 110 Intro Latin II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Mathematics (Calculus AB ) (Score = 3) | Math 121Q Pre-Calculus and Math 190 Calculus | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |
| Mathematics (Calculus $A B$ ) (Score = 4+) | Math 221Q Calculus I and Match 190 Calculus | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |
| Mathematics (Calculus BC) (Score = 3) | Math 221Q Calculus I and Match 190 Calculus | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |
| Mathematics (Calculus BC) (Score = 4+) | Math 221Q Calculus I and Math 222Q Calculus II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Music Theory | MU 128 Theory \& Musicianship I MU 190 Music Theory | $\begin{aligned} & 5 \\ & 1 \end{aligned}$ |
| Physics B | Phys 201 Physics-Non Calc I Phys 202 Physics-Non Calc II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Physics C | Phys 217Tx Physics-Sci \& Engr I Phys 218 Physics-Sci \& Engr II | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ |
| Psychology | Psy 157 Intro to Psychology <br> Psy 190 Intro to Psychology | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |
| Spanish | ML 115 Elementary Spanish I ML 116 Elementary Spanish II | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ |
| Statistics | Math 201Q Elementary Statistics Math 190 Statistics | $\begin{aligned} & 4 \\ & 2 \end{aligned}$ |

## ACT CREDIT

Superior scores on the ACT Assessment Battery also serve as a basis for credit and/or advanced placement. Students who have ACT scores in Math, English or Science of 29 or higher, and have grades no lower than B during their junior and senior years in the same subject area, will be considered for credit and/or advanced placement. For further information, contact the Office of Admission at (970)247-7184.

| ACT Test | Fort Lewis College Equivalency <br> COURSE TITLE | CREDITS |
| :--- | :--- | :---: |
| Math | Math 110Q College Algebra | 4 |
| English | Engl 190 Special Topics | 3 |
| Science | PhSc 105T The Physical Sciences | 3 |

## COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Fort Lewis College has adopted a policy whereby up to a maximum of 24 credits may be granted on the basis of appropriate scores on the general examinations of the College Level Examination Program (CLEP). Students who obtain at least a standard score of 50 or the 50th percentile in approved examinations will be considered for credit unless college coursework has been taken that covers much of the area covered by the examinations. Further information may be obtained from CLEP, Box 1821, Princeton, NJ 08540.

| CLEP Test | FLC Equivalent | Course Title | Credits |
| :---: | :---: | :---: | :---: |
| Calculus | Math 221Q | Calculus I | 4 |
| College Algebra | Math 110Q | College Algebra | 4 |
| College Algebra-Trigonometry | Math 121Q | Pre-Calculus | 4 |
| College Math | Math 105Q | College Mathematics | 3 |
| Pre-Calculus | Math 121Q | Pre-Calculus | 4 |
| Trigonometry | Math 191Q | Special Topics-Trigonometry | 4 |
| U.S. History, Pre-Civil War | Hist 280 | Survey of US History, 1600-1877 | 3 |
| U.S. History, Post-Civil War | Hist 281R | Survey of US History, 1877-Present | 3 |
| Western Civilization I | Hist 160R | Survey of Western Civilization I | 3 |
| Western Civilization II | Hist 261S | Western Civilization II: 1350 to Present | 3 |
| American Literature | Engl 240R | Survey of American Literature | 4 |
| British Literature | Engl 230R | Survey of British Literature | 4 |
| French Level I | ML 147 | Elementary French I | 4 |
|  | ML 148 | Elementary French II | 4 |
| French Level II | ML 247R | Intermediate French I | 4 |
|  | ML 248 | Intermediate French II | 4 |
| Spanish Level I | ML 115 | Elementary Spanish I | 4 |
|  | ML 116 | Elementary Spanish II | 4 |
| Spanish Level II | ML 215 | Intermediate Spanish I | 4 |
|  | ML 216R | Intermediate Spanish II | 4 |
| German Level I | ML 123 | Elementary German I | 4 |
|  | ML 124 | Elementary German II | 4 |
| German Level II | ML 223 | Intermediate German I | 3 |
|  | ML 224R | Intermediate German II | 3 |
| American Government | PS 110 S | U.S. National Government | 4 |
| English Composition with Essay | Comp 125 | Reading in College | 3 |
|  | Comp 126 | Writing in College | 3 |
| Introductory Psychology | Psyc 157 | Introduction to Psychology | 3 |
| Intro to Educational Psychology | Psyc 218 | Psych Foundation of Education | 2 |
| Human Growth and Development | Psyc 254 | Life Span Human Development | 4 |
| Biology | Bio 112N | Intro Organismic \& Evolutionary Biology | 4 |
|  | Bio 190 | Biology | 2 |
| Chemistry | Chem 150NX | Fund of Chem I Atoms \& Molecules | 4 |
| Introductory Business Law | BA 260S | Legal Environment of Business | 3 |
| Principles of Management | BA 301 | Management \& Organizational Behavior | 4 |
| Principles of Microeconomics | Econ 262 | Principles of Econ-Micro | 2 |
| Principles of Macroeconomics | Econ 272 | Principles of Econ - Macro | 2 |
| Introductory Sociology | Soc 1915 | Special Topics-Intro Sociology | 3 |
| Humanities | GS 191R | Humanities | 6 |

## INTERNATIONAL BACCALAUREATE

The international baccalaureate is a comprehensive course of study for academically talented high school students in select high schools throughout the world. Fort Lewis College awards semester credit for most standard or higher level examinations on which a score of 4 or higher is earned. The number of credits awarded for successful completion of an IB diploma program will be a minimum of 24 semester credits. If a score of less than 4 is received on an exam, the number of credits granted will be reduced accordingly at the institution's discretion. Credits transfer as shown in the chart below. Questions about the IB program should be directed to International Baccalaureate North America, 475 Riverside Dr, 16th Floor, New York, NY 10115, 212-696-4464 or IBNA@IBO.ORG.

| IB Subject Exam Title | Level of Evaluation | FLC Course Equivalent | Semester Hours |
| :---: | :---: | :---: | :---: |
| Anthropology | Higher Standard | Anth 210R (4), Anth 190 (2) No credit | 6 |
| Art | Higher Standard | Art 190 (6) <br> Art 101 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| Biology | Higher Standard | $\begin{aligned} & \text { Bio } 112 N(4) \text {, Bio } 113(4) \\ & \text { Bio } 191 \text { (3) } \end{aligned}$ | $\begin{aligned} & 8 \\ & 3 \end{aligned}$ |
| Chemistry | Higher <br> Higher Standard | $\begin{aligned} & \text { Chem 150Nx (4), Chem 151Tx (4) } \\ & \text { Chem } 150 N x(4) \text {, Chem } 190(2) \\ & \text { Chem } 191 \text { (3) } \end{aligned}$ | $\begin{aligned} & 8 \\ & 6 \\ & 3 \end{aligned}$ |
| Computer Science | Higher Standard | $\text { CSIS } 105 \text { (4), CSIS } 190 \text { (4) }$ No Credit | 8 |
| Design Technology | Higher Standard | No Credit No Credit |  |
| Economics | Higher Standard | Econ 190 (6) <br> Econ 190 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| English (A-1) | Higher Standard | Comp 150 (4), Engl 190 (2) No Credit | 6 |
| French (A-1) | Higher Standard | ML 390 (6) <br> ML 147 (4), ML 148 (4) | $\begin{aligned} & 6 \\ & 8 \end{aligned}$ |
| French (B) | Higher Higher Standard | ML 247R (4), ML 248 (4), ML 390 (3) ML 247R (4), ML 248 (4) ML 147 (4), ML 148 (4) | $\begin{aligned} & 9 \\ & 6 \\ & 8 \end{aligned}$ |
| Geography | Higher Standard | $\begin{aligned} & \text { Geog } 271 \mathrm{R}(4), \text { Geog } 190 \text { (2) } \\ & \text { Geog 271R (4) } \end{aligned}$ | $\begin{aligned} & 6 \\ & 4 \end{aligned}$ |
| German (B) | Higher Standard | ML 123 (4), ML 124 (4) ML 123 (4) | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ |
| History of Europe | Higher Standard | Hist 160R (3), Hist 261S (3) Hist 190 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| History of the Americas | Higher Standard | Hist 281R (3), Hist 190 (3) Hist 190 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| History (other) | Higher Standard | Hist 191 (3), Hist 190 (3) Hist 190 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| Latin | Higher Standard | ML 109 (4), ML 110 (4) ML 109 (4) | $\begin{aligned} & 8 \\ & 4 \end{aligned}$ |
| Mathematics | Higher and Further Higher Higher Standard | Math 221Q (4), Math 222Q (4) <br> Math 221Q (4), Math 190 (2) <br> Math 110Q (4), Math 190 (2) <br> No Credit | $\begin{aligned} & 8 \\ & 6 \\ & 6 \end{aligned}$ |
| Music | Higher Standard | MU 190 (6) No Credit | 6 |
| Philosophy | Higher Standard | Phil 141S (4), Phil 190 (2) Phil 191 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| Physics | Higher Standard | Phys 217Tx (5), Phys 218 (5) PhSc 105T (3) | $\begin{gathered} 10 \\ 3 \end{gathered}$ |
| Psychology | Higher Standard | $\begin{aligned} & \text { Psyc } 157 \text { (3), Psyc } 190 \text { (3) } \\ & \text { Psyc } 157 \text { (3) } \end{aligned}$ | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |
| Russian (B) | Higher Standard | $\begin{aligned} & \text { ML } 191 \text { (6) } \\ & \text { ML } 191 \text { (6) } \end{aligned}$ | $\begin{aligned} & 6 \\ & 6 \end{aligned}$ |
| Spanish (A-1) Spanish B | Higher Standard Higher Higher Standard | $\begin{aligned} & \text { ML } 319(4), \text { ML } 390 \text { (2) } \\ & \text { ML } 319(4) \\ & \text { ML } 215(4), \text { ML } 216 R(4), \text { ML } 319 \text { (4) } \\ & \text { ML } 215(4), \text { ML } 216 R(4) \\ & \text { ML } 115(4), \text { ML } 116(4) \end{aligned}$ | $\begin{gathered} 6 \\ 4 \\ 12 \\ 8 \\ 8 \end{gathered}$ |
| Theatre | Higher Standard | Thea 190 (6) <br> Thea 190 (3) | $\begin{aligned} & 6 \\ & 3 \end{aligned}$ |

## MILITARY SERVICE CREDIT

Veterans are often allowed credit for previous education. Credit for military experience also may be allowed according to the American Council on Education recommendations. The D.D. 214 form and other relevant information should be submitted to the Registrar's Office at the College. The student must make a written request for an evaluation of credits for military service.


## GENERAL EDUCATION

## LIBERAL ARTS EDUCATION

Fort Lewis College's commitment to the liberal arts is embodied in its innovative general education program and in its majors in the arts, sciences, humanities, and social sciences. The traditional liberal arts disciplines - humanities, arts, mathematics, history, social sciences, and physical and life sciences - are relevant for all students, regardless of major or vocational aspiration. However, liberal arts education is not confined to any particular field of study or discipline.

Liberal in liberal arts means "free", freedom from ignorance. A liberal arts education is intended to impart the capacities and values required for responsible citizenship in a free and democratic society. These include breadth of knowledge, the ability to analyze and weigh evidence, open-mindedness and tolerance of difference, critical thinking, quantitative reasoning, and communication, in addition to a commitment to continued learning.

Academic competencies, exploration, and breadth of knowledge are important aspects of a liberal arts education. Exploration of different areas of knowledge and ways of understanding the world is a valuable educational experience that is especially important during the first years of college in order to learn about one's interests and strengths. At Fort Lewis, students are exposed to a breadth of knowledge by exploring a variety of themes and disciplines in general education. At the same time, competencies in communication, critical thinking, and quantitative reasoning are developed in required general education courses. Students experience integrated learning that promotes continued learning and allows them to think flexibly and critically in work and life.

This focus on liberal arts education complements career and professional education provided by specific majors. Employers want college graduates who are ready to contribute positively to a rapidly changing world and work environment. Fort Lewis College graduates can communicate effectively and think critically; they understand how the world works and are prepared for the challenges of work and life.

## General education

General education is where the liberal arts mission of the College is put into practice. Since general education is at the core of the College's liberal arts mission, its requirements are spread across all four years.

The main curricular components of the general education portion of the bachelor's degree are:
Reading and Writing
Academic Library Research
Quantitative Reasoning
Physical Well-Being
Thematic Studies

## Reading and Writing (Comp 126 or $\mathbf{1 5 0}$ or $\mathbf{2 5 0}$ and W, writing in the major)

The ability to write effectively and read critically underlies professional projects, civic actions, and academic endeavors. Analyzing whom and what to vote for, reading with an open mind about social, economic, and philosophical issues, and developing the competencies to contribute to the world of ideas are important. General education reading and writing courses provide the foundational work necessary for students to begin to think, read, and write in the world of ideas and to join important conversations about real world issues.

Students satisfy the initial academic reading and writing requirement by taking either the two-semester Comp 125 (Reading in College) and Comp 126 (Writing in College) courses or the one-semester courses, Comp 150 (Reading and Writing in College) or Comp 250 (Academic Inquiry and Writing).

## Academic Library Research (Lib 150)

In this course, students develop their abilities to conduct effective research, critically evaluate a wide variety of information sources, and, as student scholars, choose appropriate sources.

## Quantitative Reasoning (Q courses)

Mathematics underlies modern technology, is essential to understanding and critically examining public policy, and is a powerful tool for many disciplines. Pattern recognition, generalization, abstraction, problem solving, careful analysis, and rigorous quantitative argument are important to all well educated citizens.

Students satisfy the $Q$ requirement in one of two ways:

- By taking an approved traditional math or statistics course. This option is intended for students whose major includes quantitative reasoning.
- By taking a course that specifically addresses quantitative reasoning skills and provides a general quantitative experience.


## Physical Well-Being (ES 100 and PE Activities)

The Physical Well-Being component educates students in the benefits and joys of physical activity, emphasizing how physical well-being enhances overall quality of life. In the Fitness and Wellness (ES 100) course, students learn how principles of fitness and wellness contribute to the development of an active, healthy lifestyle and contribute to positive, productive citizenship.

Three courses are required: ES 100, 1 PE skills course and 1 PE fitness course.

## Thematic Studies

Thematic Studies is designed to provide the breadth of knowledge needed for understanding important issues in life and work in a complex global world. The Thematic Studies requirements contribute to a liberal arts education by focusing on interdisciplinary learning centered around four theme-based knowledge areas. This approach enables students to integrate information across academic disciplines.

Students are required to take two courses in each theme, one at the lower division and another at the upper division. Note: One lower-division course must include a lab (Tx or Nx). The themes are:

Culture, Identity and Expression (R) - Students develop an understanding and appreciation of diverse legacies of culture and expression.

- Systems $(S)$ - Students learn how individuals and institutions function within broader political, economic, and socio-cultural systems.
- Technology $\left(T / T_{x}\right)$ - Students acquire the critical capacities to make informed use of the technologies that permeate our lives and society.
- Natural Environment ( $\mathrm{N} / \mathrm{Nx}$ ) - Students gain an understanding of the natural environment and of the responsibility to sustain a balance between natural resources and human needs.


## GENERAL EDUCATION REQUIREMENTS

| REQUIREMENT | Credits* |
| :---: | :---: |
| Reading and Writing - Comp 125 and 126 or Comp 150 or Comp 250 | 4-6 |
| Academic Library Research - Lib 150 | 1 |
| Quantitative Reasoning - Any approved Q course | 3-4 |
| Physical Well-Being - ES 100 and 2 PE activities (1 skill, 1 fitness) | 3 |
| THEMATIC STUDIES 1 |  |
| One course in each theme, lower division. These courses have department prefixes followed by an R, S, T, or N designation. Either N or T must have a lab ( Nx or T x ). |  |
| Culture, Identity and Expression (R) | 3-4 |
| Systems \& Institutions (S) | 3-4 |
| Technology (T/TX) | 3-4 |
| Natural Environment ( $\mathrm{N} / \mathrm{Nx}$ ) | 3-4 |
| THEMATIC STUDIES 2 |  |
| One course in each theme, upper division, specifically designated TS2 classes. These courses have a TS2 prefix. Prerequisites for TS2 courses are completion of all four TS1s, Lib 150, Comp 126 or 150 or 250 , Q, and Junior standing. |  |
|  |  |
| Culture, Identity and Expression (TS2R) | 3-4 |
| Systems and Institutions (TS2S) | 3-4 |
| Technology (TS2T) | 3-4 |
| Natural Environment (TS2N) | 3-4 |
| Total General Education Credits* | 35-46 |

*Some of the courses that meet general education requirements may also count for major requirements. See specific majors for more information.

## gtPathways - statewide guaranteed general education

As a public Colorado institution, Fort Lewis College participates in the statewide guaranteed transfer general education (see page 15) known as gtPathways. Students who plan to transfer out of Fort Lewis College to another Colorado public institution should follow the gtPathways structure and take statewide guaranteed transfer general education courses at Fort Lewis College. Additional gtPathways information is available at: www.state.co.us/cche/academic/transfer/index.html

## Fort Lewis College Thematic Studies 1 Courses

| Ag 101Tx: Intro. Animal Science | Tx |
| :---: | :---: |
| Ag 203T: Intro. to Medicinal Crops | T |
| Anth 120S: Anthropology of the Southwest | S |
| Anth 151S: Intro. to Anthropology (GT-SS3; 03) | S |
| Anth 171T: World Archaeology | T |
| Anth 201T: Intro. to Archaeology | T |
| Anth 208N: Trad. Eco. Knowledge/Cult. Survival | N |
| Anth 210R: Intro. to SocioCultural Anthropology | R |
| Anth 213S: Peasant Societies | S |
| Anth 215R: Magic \& Religion | R |
| Anth 217R: Cultural Images Women/Men | R |
| Anth 236Tx: Intro. Physical \& Bio. Anthropology | Tx |
| Anth 243S: Food: Systems of Prod. Dist. | S |
| Art 162R: Art in the Humanities (GT-AH1; 03) | R |
| Art 262R: Art History I: Ancient World to M.A. | R |
| Art 263R: Art History II: Ren. to Mod. World (GT-AH1; 05) | R |
| BA 260S: Legal Environment of Business* | S |
| BA 271R: Principles of International Business (GT-SS1; 05) | R |
| Bio 105Tx: Issues in Genetic Engineering (GT-SCl; 05) | Tx |
| Bio 110Tx: Modern Biological Issues (GT-SC1; 03) (if taken pre 2002-03 w/o lab: T theme only) | Tx |
| Bio 112N: Intro. Organismic \& Evol Biology | N |
| Bio 120N: Environmental Conservation (03-04 \& prior) | N |
| Bio 121Tx: Human Anatomy \& Physiology (04-05 \& prior) | Tx |
| Bio 125Nx: Conservation Biology | Nx |
| Bio 132T: Human Sexuality | T |
| Bio 141N: Global Ecological Issues | N |
| Bio 202Nx: Plants \& Human Affairs* | Nx |
| Bio 241N: Environmental Policy Analysis (03-04 \& prior) | N |
| Bio 250Nx: Ecology of the SW (Crosslist: SW 250)* (GT-SC1; 05) | Nx |
| Chem 123T: Chemistry for Consumers | T |
| Chem 125N: Environmental Chemistry | N |
| Chem 150Nx: Fundamentals of Chemistry I (GT-SC1; 04) | Nx |
| Chem 151Tx: Fundamentals of Chemistry II (GT-SC1; 05) | Tx |
| Econ 170S: Current Economic Issues | S |
| Econ 266S: Principles of Economics | S |
| Ed 200R: Intro. to Education in America | R |
| Ed 210S: Culture of Childhood \& Youth | S |
| Eng 180N: Literature of the Environment (GT-AH2; 05) | N |
| Engl 116T: Intro. to Mass Communications (GT-AH2; 05) | T |
| Engl 128R: Bible as Literature (GT-AH2; 05) | R |
| Engl 173R: 20th C Asian/African Literature (02-03 \& prior) | R |
| Engl 174R: African-American Literature (GT-AH2; 05) | R |
| Engl 175R: Women's Literature (GT-AH2; 05) | R |
| Engl 176R: Native American Literature | R |
| Engl 177R: U.S. Latina/o Literature (GT-AH2; 05) | R |
| Engl 221R: Classical Literature (GT-AH2; 05 | R |
| Engl 230R: Survey of British Literature | R |
| Engl 240R: Survey of American Literature (GT-AH2; 03) | R |
| Engl 265S: Semantics (GT-AH2; 05) | S |
| Engl 270R: History of Film (GT-AH1; 05) | R |
| Engl 280R: Literature of the SW | R |
| ES 150R: SocioCultural Fdns. of Human Mvmt. | R |
| ES 243S: Personal Health | S |
| Geog 250T: Intro. to Computer Mapping \& GIS | T |
| Geog 271R: World Regional Geography (GT-SS2; 03) | R |
| Geol 107Nx: Earth Systems Science (GT-SC1; 03) | Nx |
| Geol 113Tx: Physical Geology (GT-SC1; 04) | Tx |
| Geol 150N: Geology of the SW | N |
| Geol 170N: Earth Shock | N |


| Geol 180N: Intro. to Oceanography | N |
| :---: | :---: |
| GS 101R: Human Heritage I (GT-AH2; 04) | R |
| GS 102S: Human Heritage II (GT-AH2; 05) | S |
| Hist 140R: Survey of African History I | R |
| Hist 141R: Survey of African History II | R |
| Hist 160R: Survey of Western Civilization I (GT-HI1; 03) | R |
| Hist 170R: Survey of E. Asian Civilization I | R |
| Hist 171R: Survey of E. Asian Civilization II | R |
| Hist 181N: U.S. Environmental History (Crosslist: SW 181) | N |
| Hist 261S: Western Civilization II 1350-present (GT-HI1; 05) | S |
| Hist 262S: Tolerance\&Persecution in Mid. Ages | S |
| Hist 263R: Medieval Life in Modern Film/Lit. | R |
| Hist 270R: Colonial Latin America | R |
| Hist 271S: Latin America Since Independence | S |
| Hist 281R: Survey of US Hist, 1877 to present (GT-HI1; 03) | R |
| ML 118R: Spanish in the SW | R |
| ML 216R: Intermediate Spanish II | R |
| ML 224R: Intermediate German II | R |
| ML 247R: Intermediate French I | R |
| Mu 101R: The Musical Experience (GT-AH1; 03) | R |
| Mu 102R: Blues, Jazz, \& Rock (GT-AH1; 05) | R |
| Mu 120S: Fundamentals of Music | S |
| Phil 141S: Intro. to Philosophy ( GT-AH3; 03) | S |
| Phil 244R: Chinese Philos. (Crosslist: RS 244) | R |
| Phil 251S: Moral Philosophy | S |
| Phil 252N: Environmental Ethics | N |
| Phil 261R: Philos. of Religion (Crosslist: RS 261) | R |
| Phil 274R: Ancient/Medieval Philosophy | R |
| PhSc 105T: Physical Sciences (no lab) | T |
| PhSc 106Tx: Physical Sciences (lab) (GT-SC1; 03) | Tx |
| PhSc 115Nx: Environmental Physical Science (GT-SC1; 04) | Nx |
| PhSc 205T: Astronomy for Liberal Arts (no lab) | T |
| PhSc 206Tx: Astronomy for Liberal Arts (lab) (GT-SC1; 03) | Tx |
| Phys 217Tx: Physics for Science \& Engr I (Prereq: Math 221Q) | Tx |
| PS 101S: Intro. to Political Science (GT-SS1; 03) | S |
| PS 110S: US National Government | S |
| PS 120S: State \& Local Government | S |
| PS 205N: Environmental Politics | N |
| PS 280S: Intro Comparative Politics | S |
| Psyc 110S: Human Relations | S |
| Psyc 260Nx: Environmental Psychology | Nx |
| Psyc 265S: Global Community Psychology | S |
| RS 244R: Chinese Philos. (Crosslist: Phil 244) | R |
| RS 261 R: Philos. of Religion (Crosslist: Phil 261) | R |
| Soc 100S: Introduction to Sociology (GT-SS3; 05) | S |
| Soc 250R: Soc Issues/Contemporary Nat. Soc. | R |
| Soc 275S: Families, Marriage, Sex Role Systems | S |
| Soc 279R: Ethnicity, Gender \& Class in SW | R |
| Soc 280S: Pop Culture \& Mass Communication | S |
| SW 123R: American Indian History | R |
| SW 131N: Southwest History and Culture | N |
| SW 135R: The Southwest | R |
| SW 181N: U.S. Environmental History (Crosslist: Hist 181) | N |
| SW 250Nx: Ecology of the SW (Crosslist: Bio 250)* (GT-SC1; 05) | Nx |
| SW 280S: Native American in Modern World | S |
| Thea 101R: Intro. to Theatre (GT-AH1; 03) | R |
| Thea 126R: Intro. to the Dance | R |
| Thea 240R: Ancient and Classical Theatre | R |
| WS 101S: Intro. to Women's Studies (GT-SS3; 05) | S |

*These courses have prerequisites
These courses are gtPathways approved (state category; approval date)

## GENERAL EDUCATION PROGRAMS

## Academic Library Research (LIB 150)

Course listing for Lib 150 begins on page 147.
Coordinator-Tina L. Evans
Librarian and Associate Professors - Tina L. Evans, Jeffrey L. Frisbie, Chandler
C. Jackson, Minna D. Sellers, Elayne S. Walstedter

Librarian and Assistant Professor - Donna L. Arment
The Lib 150 program is responsible for instruction of the required freshman course in library research methods.

## Freshman Mathematics Program

Course listings for basic skills (TRS) mathematics courses begin on page 174. Course listings for college-level mathematics courses begin on page 147.

Director - Amy K. Getz
Mathematics Department Liaison - Carl F. Lienert
Visiting Instructors - Cameron I. Cooper, Amy K. Getz, Leslie Goldstein, Mary Kay Stewart, Kathryn Wellborn, and Sherri M. Wilson

The Freshman Mathematics Program is responsible for instruction for basic skills and beginning college-level mathematics courses that fulfill the Quantitative Reasoning requirement in general education and for coordination of the Math Center. The mission of the Freshman Mathematics Program is to provide a positive learning experience that helps students connect mathematics to their lives. In the Freshman Mathematics Program, we strive to make mathematics accessible to our students and responsive to their interests and needs.

## Human Heritage

Course listings for Human Heritage courses begin on page 142.
Coordinator - Susan Palko-Schraa
Professors - Byron Dare, Phil Duke, Kathleen S. Fine-Dare, Gordon P.
Cheesewright, Reyes R. Garcia, Mary Jean Moseley
Associate Professor - John M. Condie
Visiting Instructors - Bridget J. Irish, Susan M. Palko-Schraa, Ana N. Hale
The Human Heritage Program was created in 1992 to advance the College's mission in educating students to live in a multicultural world. The year-long course sequence (GS 101R and GS 102S) explores broad themes related to human experience across three cultures: Native American, Euro American, and Chinese.

## Writing Program

Course listings for Composition courses begin on page 126.
Director - Bridget J. Irish
Assistant Director of Curriculum - Ann Hartney
Librarian and Associate Professor - Tina L. Evans
Assistant Professors - Bradley P. Benz, Nancy K. Cardona, Shawn Fullmer Visiting Instructors - Karin L. Becker, Molly C. Costello, Ana Hale, Ann Hartney, Bridget J. Irish, Susan Palko-Schraa

The Writing Program provides instruction in basic skills reading and writing courses, the required college-level composition courses, and elective writing and speech courses. It also coordinates the Writing Center. Faculty in the Writing Program consider their courses "heirs of the ancient liberal art of rhetoric." The study of rhetoric began in Greece, about 2,500 years ago, as the art of using language persuasively. Although the original emphasis of rhetoric was on speaking, in the modern era its domain has expanded to encompass writing. The Writing Program teaches students that effective communication is highly situational, requiring students to compose and deliver messages appropriate for the occasion, purpose, and audience.

## MAJORS, OPTIONS, AND MINORS

FORT LEWIS COLLEGE



## AGRICULTURE

Course listings for Agriculture begin on page 110.
Department Chair - Sherell Kuss Byrd
Associate Professor - Philip E. Shuler
Visiting Instructor - Beth A. LaShell
Several programs of study in Agriculture are available for students at Fort Lewis College.

As a cooperative effort between the Agriculture Program and the School of Business Administration, a four-year degree program is available for those students who are interested in professional careers in the agribusiness sector. See the School of Business Administration "Agricultural Business option" section of this catalog for more information.

Within Agriculture Program itself, four options are available. A Guaranteed Transfer Program with Colorado State University is available for students interested in pursuing a four-year bachelor's degree. Through this program a student can complete a prescribed sequence of coursework at Fort Lewis College during the freshman and sophomore years and, with a minimum grade point average, be qualified for full transfer to Colorado State with junior standing. Major areas of study offered through the transfer program include agricultural business, agronomy and animal sciences.

A second agricultural option is a two-year program at Fort Lewis College leading to an Associate of Arts degree in Agricultural Science. This program is designed to fill the needs of those students pursuing an agricultural career on a farm, ranch, or other agriculture-oriented business. Students may decide to concentrate in animal science, agricultural business, or agronomy.

Students also have the option of developing a studentconstructed major. This option is for students who plan to continue in a four-year program and combine agriculture with a second field of study, such as biology, economics, or chemistry, which would lead to a degree in Agricultural Chemistry, Agricultural Science, or Organic Agriculture.

Minors are available in agriculture and agroecology/ sustainable agriculture for students majoring in other disciplines. Requirements for these minors are listed at the end of this section.

## REQUIREMENTS FOR AN ASSOCIATE OF ARTS DEGREE IN AGRICULTURAL SCIENCE:

General Education ..... 4
Comp 150 Reading and Writing in College ..... 1
ES 100 Fitness and Wellness ..... 3-4
Four courses to be selected from
General Education T, N, S, R (one from each group) ..... 12-16
TOTAL GENERAL EDUCATION ..... 21-26
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.
Specific Agricultural Science Requirements:
**Ag 101Tx Introductory Animal Science ..... 4
Ag 102 Principles of Crop Production ..... 4
Approved math course (**Math 105Q or **Math 110Q) ..... 3-4
Subtotal Specific Requirements ..... 14-15
Agricultural Science Electives (at least five courses selected from the following):${ }^{* *}$ Ag 180N Sustainable Agriculture3
Ag 202 Integrated Pest Management/Weed Control ..... 4
**Ag 203T Introduction to Medicinal Crops ..... 3
Ag 204 Forage Production and Management ..... 3
Ag 235 Soils and Soil Fertility ..... 4
Ag 240 Principles of Animal Nutrition ..... 4
Ag 299 Individualized Study ..... 1-6
Ag 301 Range Management ..... 4
Ag 325 Beef Science ..... 3
Ag 346 Agricultural Marketing ..... 3
Ag 370 Internship in Agriculture ..... 3
Ag 390 Special Topics (as offered) ..... 3-4
Ag 499 Independent Study ..... 1-6
TS2T 402 Agricultural Issues in Society ..... 3
Subtotal Agricultural Science Electives (minimum) ..... 15
TOTAL MAJOR REQUIREMENTS ..... 29-30
Free Electives Subtotal ..... 4-10
Suggested Electives:
**Geog 250T Intro To Computer Mapping and GIS
Geog 300 Intermediate GIS: Vector-Based Analysis
Engr 103 Computer Aided Draffing
Engr 205 Surveying I
Courses in Computer Science, Economics, Chemistry, Biology, Business
Administration
Agricultural Experience: A student is required to have a minimum of 15 weeks of work experience on a farm, ranch, or other acceptable agricultural business prior to the awarding of the Associate of Arts degree in Agricultural Science. This requirement may also be fulfilled by an acceptable Ag 370 Internship in Agriculture experience.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## PROGRAM OF STUDY FOR GUARANTEED TRANSFER PROGRAM:

Students participating in the guaranteed transfer program will select courses in consultation with their academic advisor. The specific courses required will depend on which concentration is selected.

## AGRICULTURE MINOR

Course listings for the Agriculture Minor begin on page 110.
REQUIREMENTS FOR A MINOR IN AGRICULTURE:

One of the following:
${ }^{* *}$ Ag 101Tx Introductory Animal Science 4
Ag 102 Principles of Crop Production 4
**Ag 180N Sustainable Agriculture 3
Additional courses (select three to five of the following):
Ag 150 Farm Records and Accounts
3
Ag 202 Integrated Pest Management/Weed Control 4
**Ag 203T Introduction to Medicinal Crops 3
Ag 204 Forage Production and Management 3
Ag 235 Soils and Soil Fertility
Ag 240 Principles of Animal Nutrition
TS2T 402 Agricultural Issues in Society
Ag 301 Range Management
Ag 325 Beef Science
Ag 346 Agricultural Marketing
Ag 370 Internship in Agriculture
Ag 390 Special Topics
$\square$ 4
3

TOTAL REQUIRED FOR AGRICULTURE MINOR
'A minimum of 20 credits is required, six of which must be 300-level or above. Students may concentrate in such areas as general agriculture, animal science, agronomy, or agricultural business.

## REQUIREMENTS FOR A MINOR IN AGROECOLOGY/SUSTAINABLE AGRICULTURE :

Specific Departmental Requirements:
One of the following:
**Ag 180N Sustainable Agriculture or 3
${ }^{* *}$ Ag 101Tx Introductory Animal Science or 4
Ag 102 Principles of Crop Production 4
One of the following:
${ }^{* *}$ Bio $250 \mathrm{Nx} /{ }^{* *}$ SW 250Nx Ecology of the Southwest or 4
Bio 220 Fundamentals of Ecology 4
One of the following:
Ag 370 Internship in Agriculture or 3
Soc 320 Community Service or 3
Bio 480 Internship in Biology or 3
$\mathrm{Ag} /$ Bio 299-Ag/Bio 499 Independent Study 3
Other Departmental Requirements:
Three of the following:
**Ag 101Tx Introductory Animal Science 4
Ag 102 Principles of Crop Production 4
**Ag 180N Sustainable Agriculture 3
Ag 202 Weed Control/Integrated Pest Management 4
Ag 204 Forage Production 4
Ag 235 Soils and Soil Fertility 4
**Anth 243S Food: Systems of Production 4
Anth 406 Ethnobotany of the Southwest 4
Bio 471 Field Ecology 5
Econ 335 Environmental Economics 4
**Geog 250T Intro to Computer Mapping and GIS 4
Geol 401 Natural Resources and the Environment 3
TS2N 406 Water in the West 3
**Phil 252N Environmental Ethics 4
Phil 352 Ecology and Morality 4
PS 205 Environmental Politics 3
SW 330 Cowboys, Cattlemen, and Popular Culture 3
**SW 135R The Southwest I 3
SW 136 The Southwest II 3
TOTAL REQUIRED FOR AGROECOLOGY/SUSTAINABLE
AGRICULTURE MINOR


## ANTHROPOLOGY

Course listings for Anthropology begin on page 111.
Department Chair - Philip Duke
Professors - Philip G. Duke and Kathleen S. Fine-Dare
Associate Professor - David L. Kozak
Assistant Professors - Aaron Lampman, Dawn Mulhern and Charles Riggs Visiting Instructor and Field School Director - Mona C. Charles

Fort Lewis College offers a program of courses leading to the Bachelor of Arts degree with a major in Anthropology. A variety of courses is offered to serve the interests of all students. Courses within the department are suitable as electives in the broad liberal arts tradition and also are designed to fulfill the requirements of those who wish to continue their studies in one of the subfields of the discipline.

The department offers an archaeological field school program and occasional innovative month trips, both on this continent and in Europe. Students of anthropology are encouraged to pursue study of a second language and look into internship and study abroad opportunities.

The Department of Anthropology offers minors in Sociocultural Anthropology and Archaeology for students who are not anthropology majors. Requirements for these minors are listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ANTHROPOLOGY:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Specific Departmental Requirements:

${ }^{* *}$ Anth 151S Introduction to Anthropology 3
**Anth 201T Introduction to Archaeology
**Anth 210R Introduction to Sociocultural Anthropology 4
**Anth 236Tx Introduction to Physical and Biological Anthropology
Anth 303W Anthropological Debates 4
Anth 370 Quantitative Methods in Anthropology
Anth 395 History of Anthropological Thought 4
Anth 496 Senior Capstone Seminar in Anthropology 4
Subtotal Specific Departmental Requirements

## Other Departmental Requirements:

Two additional courses in sociocultural anthropology, one of which must be numbered 300 or above (choose from
${ }^{* *}$ Anth 208N, Anth 212, ${ }^{* *} 213 \mathrm{~S},{ }^{* *} 215 \mathrm{R},{ }^{* *} 217 \mathrm{R},{ }^{* *} 243 \mathrm{~S}$, $350,351,355,356,357,365,371,388,406,412$, approved 390 or 391)

One non-New World archaeology course
(choose from Anth 309, 313, 340, 341, or approved 390 or 391)

One other archaeology course
(choose from Anth 220, 259, 309, 310, 313, 320, 330,
$340,341,348,402,403,430$, or approved 390 or 391 )

One research-based course in anthropology
(choose from ${ }^{* *}$ Anth 208N, Anth 212, 302, 310, 313, 353, $356,357,365,402,406,412,430,450,455$, or specifically indicated sections-saying, i.e., "this course
fulfills the research requirement" -of 390/391 or 499).
0-4
NOTE: One of these research-based courses may count for two purposes, i.e., archaeology and research or sociocultural anthropology and research).

Subtotal Other Departmental Requirements
12-20
TOTAL DEPARTMENTAL REQUIREMENTS
43-51
Free Electives (variable)
Strongly recommended for students going to graduate school:
At least 4 semesters of a second language
Computing expertise
More than one research-based course
TOTAL REQUIRED FOR GRADUATION
120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

# ANTHROPOLOGY - SOCIOCULTURAL MINOR 

## REQUIREMENTS FOR A MINOR IN SOCIOCULTURAL ANTHROPOLOGY

**Anth 210R Introduction to Sociocultural Anthropology 4
**Anth 201T Introduction to Archaeology 4 OR
**Anth 236Tx Introduction to Physical and Biological
Anthropology
Two additional courses in sociocultural anthropology, one of which must be numbered 300 or above 6-8
Additional anthropology electives 4
TOTAL REQUIRED FOR SOCIOCULTURAL MINOR 18-20
Note: Anthropology majors may not minor in one of these anthropologybased minors. A minor is not required for graduation, but if you are an anthropology major and wish to minor in something else, it must be outside of the major.

Note: No grade of less than C- will be accepted for the minor.

## ARCHAEOLOGY MINOR

## REQUIREMENTS FOR A MINOR IN ARCHAEOLOGY:

**Anth 201T Introduction to Archaeology
**Anth 210R Introduction to Sociocultural Anthropology OR
**Anth 236Tx Introduction to Physical and Biological Anthropology
Two additional courses in archaeology, one of which must be numbered 300 or above
Additional anthropology electives
OR
Anth 259 or 403, archaeological field school
TOTAL REQUIRED FOR ARCHAEOLOGY MINOR
Note: Anthropology majors may not minor in one of these anthropologybased minors. A minor is not required for graduation, but if you are an anthropology major and wish to minor in something else, it must be outside of the major.

Note: No grade of less than $C$ - will be accepted for the minor.

## ART

Course listings for Art begin on page 114.
Department Chair - Michael Freeman
Professors - Susan Moss and C. Gerald Wells
Associate Professor - Michael Freeman and Amy K. Wendland Assistant Professors - Kevin Bell and Chad Colby Visiting Assistant Professor - Karina Hean

The Art Program is designed to increase the student's awareness and understanding of art and its relationship to society within a broad liberal arts background. The art major prepares the student to be a practicing artist, to enter graduate school for further professional schooling, or to teach art on either the elementary or secondary level. The program also seeks to provide art experiences for application to problem solving, the use of leisure time, and to create a fuller and richer visual life. Students, faculty members, and other art professionals have the opportunity to display their works in the art gallery in Art Hall on the Fort Lewis College campus.

A minor in art is available for students majoring in other disciplines. A minor in art history is available for art majors and for students majoring in other disciplines. Requirements for these minors are listed at the end of this section.

## ART - ART OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ART - ART OPTION:

General Education ..... 35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.
Specific Departmental Requirements:
Art 101 Drawing ..... 4
Art 109 Basic Design ..... 4
**Art 262R Art History I: Ancient World to Middle Ages ..... 4
**Art 263R Art History II: Renaissance to Modern World ..... 4
Art 296 Sophomore Seminar ..... 1
Art 385W Contemporary Art: Process, Theory, \& Criticism ..... 4
Art 496 Senior Seminar ..... 3
15 credits from the remainder of art offerings with theexception of Art 162R Art in the Humanities andArt 273 Art for Elementary Teachers15
Subtotal Specific Departmental Requirements ..... 39
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION120

## ART - BUSINESS ART OPTION

Coordinator - Susan Moss, Professor of Art
The Business Art option is designed to combine training in studio art and art history with business knowledge applicable to a variety of art world work contexts, such as sales galleries or non-profit arts organizations. In addition to providing preparation for working in these venues, the Business Art option provides an understanding of the business side of being an artist and is appropriate preparation for graduate programs in arts administration.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ART - BUSINESS ART OPTION:

| General Education | 35-46 |
| :---: | :---: |
| See page 25 for General Education requirements. |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements |  |
| Art 101 Drawing | 4 |
| Art 109 Basic Design | 4 |
| **Art 262R Art History I: Ancient World to Middle Ages | 4 |
| **Art 263R Art History II: Renaissance to Modern World | 4 |
| Art 271 Art Institutions | 4 |
| Art 296 Sophomore Seminar | 1 |
| Art 385W Contemporary Art: Process, Theory, \& Criticism | 4 |
| Art 496 Senior Seminar | 3 |
| An additional 11 credits from the remainder of Art offerings with the exception of Art 162R and Art 273. |  |
| Art 210 is recommended. | 11 |
| Subtotal Specific Departmental Requirements | 39 |
| Auxiliary Requirements from Other Departments ${ }^{1,2}$ : |  |
| BA 101 Business World | 4 |
| BA 240 Business Creativity and Innovation | 2 |
| BA 339 Selling | 3 |
| BA 340 Marketing | 4 |
| BA 348 Public Relations | 3 |
| ${ }^{* *}$ Econ 266S Principles of Economics | 4 |
| One additional course selected from the following: |  |
| ACC 225 Financial Accounting | 4 |
| BA 205 Small Business Venturing | 3 |
| BA 342 Retailing | 3 |
| BA 344 Advertising | 3 |
| BA 347 Consumer Behavior | 3 |
| Subtotal Auxiliary Requirements | 23-24 |

[^1]
## ART - K-12 TEACHING OPTION

Coordinator - Kevin Bell, Assistant Professor of Art
The K-12 Teaching option is designed to prepare students to become effective and successful art teachers in a K-12 school setting. This option recognizes that students need to have a broad knowledge of art-making skills and techniques as well as an understanding of art teaching methods and concepts. Because of the specific and diverse demands of the $\mathrm{K}-12$ Teaching option, careful planning is extremely important. Students choosing this option should consult with the Art Education advisor as early as possible in their college careers. Upon successful completion of this program, in conjunction with the Teacher Education Licensure Program, students will be recommended for a Colorado teaching license.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ART - K-12 TEACHING OPTION:

General Education35-46See page 25 for General Education requirements.** Courses marked with double asterisks may also be counted toward TS1 or$Q$ requirements.Specific Departmental Requirements
Art 101 Drawing ..... 4
Art 109 Basic Design ..... 4
Art/SW 154 Indian Arts and Crafts ..... 3
Art 213 Basic Sculpture ..... 3
Art 224 Basic Painting ..... 3
Art 231 Introduction to Printmaking ..... 3
Art 243 Basic Photography ..... 3
Art 250 Ceramics ..... 3
**Art 262R Art History I: Ancient World to Middle Ages ..... 4
**Art 263R Art History II: Renaissance to Modern World ..... 4
Art 273 Art for Elementary Teachers ..... 3
Art 296 Sophomore Seminar ..... 1
Art 385W Contemporary Art: Process, Theory, \& Criticism ..... 4
Art 496 Senior Seminar ..... 3
Subtotal Specific Departmental Requirements ..... 45
Auxiliary Requirements from Other Departments
**ED 200 Introduction to Education ..... 4
**ED 210 Culture of Childhood and Youth ..... 4
ED 421 Individualized Instruction in a Pluralistic Society ..... 4
ED 424 Language and Math in Secondary School ..... 4
ED 494 Lab for Elementary School ..... 7
ED 495 Lab for Secondary School ..... 8
Psyc 157 Introduction to Psychology ..... 3
Psyc 254 Life Span Human Development ..... 4
Subtotal Auxiliary Requirements ..... 38
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION ..... 120
Additional Recommended Courses
Art 201 Figure Drawing ..... 3
Art 210 Graphic Design ..... 3

## ART MINOR

REQUIREMENTS FOR A MINOR IN ART:

Students must complete 22 art credits, including Art 101, 109, and an art history course, and have the approval of the department chair.

## ART HISTORY MINOR

Coordinator - Michael Freeman, Associate Professor of Art

## REQUIREMENTS FOR A MINOR IN ART HISTORY:

The minor in Art History provides students in all majors the opportunity to document their studies in this unique discipline. This minor will help students to be more competitive in applying to graduate art and art history programs, and in entering professional fields related to the study of art history (e.g., museum studies, gallery work, architecture, advertising, art marketing, and other art-related professions).

Students who minor in Art History will be required to take a total of 20-24 credits, with 9-12 credits in upper-division courses. Three courses must be lower-division (two required, one additional) and three courses must be upper division (two to three from regular courses, with one optional from additional listings). Art majors who wish to complete an Art History minor must use art studio courses to fulfill elective art credits required by the major, and must complete a minimum of 16 credits in art history or other designated courses beyond Art 262R and Art 263R. Students who wish to complete a minor in Art History should consult their advisor and the Art Department coordinator.

| Lower division courses (required): |  |
| :---: | :---: |
| **Art 262R Art History I Ancient World to Middle Ages | 4 |
| ${ }^{* *}$ Art 263R Art History II Renaissance to the Modern World | 4 |
| Choose one from the following: |  |
| Art 265/SW 265 Art History of the Southwest | 3 |
| **Anth 201T Introduction to Archaeology | 4 |
| Subtotal Lower Division | 11-12 |
| Upper division courses (choose 2 or 3): |  |
| Art 363 Modern Painting and Sculpture, 1863-1945 | 4 |
| Art 364 Modern Painting and Sculpture, 1945-present | 4 |
| Art 365 Mesoamerican Art History | 3 |
| Art 366 Women, Art, and Visual Culture | 4 |
| Art 367 American Art History: Colonial era to the 1930s | 3 |
| Art 368 Native N. American Art History | 3 |
| Additional upper division (choose one): |  |
| Anth 309 Archaeology of Britain | 4 |
| Anth 330 Archaeology of the Southwest | 4 |
| Anth 340 Ancient Egypt | 3 |
| Art 390/391 Appropriate Art History Topics Course | 3-4 |
| Phil 361 Philosophy of Art | 4 |
| Soc 345 Art and Society | 4 |
| TS2R 408 Genius \& Representation | 4 |
| Subtotal Upper Division | 9-12 |
| TOTAL REQUIRED FOR ART HISTORY MINOR | 20-2 |

BIOLOGY

Course listings for Biology begin on page 117.
Department Chair - Sherell Kuss Byrd
Professors - Sherell Kuss Byrd, David W. Jamieson, Deborah M. Kendall, J.
Page Lindsey, John L. Ninnemann, Joseph C. Ortega, and Thomas P. Sluss Associate Professors - John M. Condie and Catherine P. Ortega Assistant Professors - Susanne Bockholt, Cynthia E. Dott, Ginny Hutchins and Julie Korb

The various biology curricula are designed to meet the different needs of students considering the broad field of biology. Although all of these curricula lead to a Bachelor of Science degree in Biology, there are four options available: General Biology, Environmental Biology, Cellular and Molecular Biology, and Biology for Secondary Education.

The General Biology option provides exposure to all the major conceptual areas of biology. It is intended for students wishing to tailor a program to match their interests. It prepares students for professional careers in veterinary medicine or graduate school in a broad area of the biological sciences. It is also recommended for those students who are undecided about specific career goals in biology.

The Environmental Biology option provides a broad exposure to the principles and practices of ecology, environmental conservation, and management of natural resources. Thus, this option is particularly valuable for those students who plan to work for the many private firms and state and federal agencies involved in natural resource management and environmental impact assessment. This curriculum also provides appropriate preparation for students interested in graduate study in ecology and environmental science.

The Cellular and Molecular Biology option is designed to prepare students for graduate study in cell and molecular biology or to find employment in the biotechnology and health care industries. Students with this major are highly sought after in forensics technology, pharmaceutical development, and industries involving bioinformatics and gene discovery. This option is ideal for students preparing for postbaccalaureate careers as physicians, physician's assistants, dentists or in naturopathic medicine.

The Biology for Secondary Education option is designed to prepare students to teach in secondary schools. To obtain requirements for teacher certification, please contact the Teacher Education Department.

Both government and industry have considerable demand for people trained in the biological sciences and for which a bachelor's degree is sufficient. Administrative and professional careers may be found in government service and with a variety of conservation and recreation agencies at both state and federal levels. Laboratory and technical work is available with industry and with several government agencies. Some sales positions, especially with pharmaceutical houses, require a biology background. There is a considerable demand for secondary school teachers with certification in
biology. Many positions for biologists require a graduate degree, for which a liberal arts major in biology is an excellent background.

A minor in biology is available for students majoring in other disciplines. Requirements for a minor in biology are listed at the end of this section. All minors must be arranged in consultation with the student's biology advisor.

## BIOLOGY - CELLULAR AND MOLECULAR BIOLOGY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN BIOLOGY - CELLULAR AND MOLECULAR BIOLOGY OPTION:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
**Bio 112N Intro to Organismic and Evolutionary Biology 4
Bio 113 Introduction to Cellular and Molecular Biology 4
Bio 210 Survey of Organismic Diversity 4
Bio 260 Genetics 4
Bio 270 Foundations of Molecular Biology 4
Bio 321 General Physiology 4
Bio 331 Microbiology 4
Bio 342 Embryology \& Developmental Biology of the Vertebrates OR
Bio 456 Cell Physiology
Bio 460 Immunology 4
Bio 380W Issues in Evolution and Biological Thought 4
Bio 455 Cell \& Molecular Biology 4
Bio 496 Senior Seminar 2
Bio 497 Senior Thesis 2
Subtotal Specific Departmental Requirements 44
Auxiliary Requirements from Other Departments:
${ }^{* *}$ Chem 150Nx Fundamentals of Chemistry I 4
${ }^{* *}$ Chem 151Tx Fundamentals of Chemistry II 4
Chem 250 Org Chem I: Organic Compounds 4
Chem 251 Org Chem II: Biological Chemistry 4
**Math 121Q Pre-calculus 4
${ }^{* *}$ Math 201Q Elementary Statistics 4
Subtotal Auxiliary Requirements 24
Recommended Electives (for students anticipating application to medical or graduate school):
${ }^{* *}$ Math 221 Calculus I, Phys 201 and 202, Physics-Non Calculus I and II, and
Chem 311 General Biochemistry
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to double majors: Students double-majoring in Chemistry-Biochemistry and Biology-Cellular and Molecular may take the senior seminar sequence in either chemistry (Chem 496 and Chem 497) or biology (Bio 496 and Bio 497) and may take the writing class in either chemistry (Chem 300W) or biology (Bio 380W); these students do not have to take both senior seminar sequences or both writing classes.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## Cellular and Molecular Biology Option Suggested Course Sequence

| Fall Freshman Year |  | Winter Freshman Year |  |
| :---: | :---: | :---: | :---: |
| Bio 112 N | 4 | Bio 113 | 4 |
| Chem 150Nx | 4 | Chem 151Tx | 4 |
| Math 110Q ${ }^{1}$ | 4 | Math 121Q | 4 |
| Lib 150 | 1 | Comp 150 | 4 |
| Total | $13^{2}$ | Total | 16 |
| Fall Sophomore Year |  | Winter Sophomore Year |  |
| Bio 210 | 4 | Bio 270 | 4 |
| Bio 260 | 4 | Chem 251 | 4 |
| Chem 250 | 4 | Math 201Q | 4 |
| TS1 | 4 | ES 100 | 1 |
| Total | 16 | TS1 | 4 |
|  |  | Total | 17 |
| Fall Junior Year |  | Winter Junior Year |  |
| Bio 321 | 4 | Bio 380 | 4 |
| Bio 331 | 4 | TS2 | 4 |
| TS2 | 4 | PE Fitness | 1 |
| PE Skills | 1 | Elective | 4 |
| Upper Division Elective | 4 | Total | $13^{2}$ |
| Total | 17 |  |  |
| Fall Senior Year |  | Winter Senior Year |  |
| Bio 496 | 2 | Bio 497 | 2 |
| Bio 455 | 4 | Bio 342 OR Bio 456 OR |  |
| Upper Division Elective | 4 | Bio 460 | 4 |
| TS2 | 4 | TS2 | 4 |
| Total | $14^{2}$ | Upper Division Elective |  |
|  |  | Total | $14^{2}$ |
| Total Upper Division Credits | 52 | Total Credits | 120 |
| 'The math course that a student will take is determined by a placement test. There are five levels of math that one may enter. Placement into a course lower than Math 110 will retard this schedule, and placement into a higher course than Math 110 will accelerate it. <br> ${ }^{2}$ During these semesters students should take additional courses in preparation for biology career, medical school, veterinary, or graduate school. Your biology faculty advisor can help you with the selection of these courses. |  |  |  |

## BIOLOGY - ENVIRONMENTAL BIOLOGY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN BIOLOGY ENVIRONMENTAL BIOLOGY OPTION:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
**Bio 112N Intro to Organismic and Evolutionary Biology 4 Bio 113 Introduction to Cellular and Molecular Biology
Bio 206 General Botany
4 4

General Zoology
Bio 220 Fundamentals of Ecology
Bio 260 Genetics 4

Bio 302 Systematic Botany 4

Bio 380W Issues in Evolution and Biological Thought
Bio 471 Field Ecology
Bio 496 Senior Seminar
Bio 497 Senior Thesis4
5

Two courses from the following choices:
Ag 235 Soils \& Soil Fertility 4
Ag 301 Range Management 4
Bio 315 Ichthyology 4
Bio 324 Mammalogy
Bio 334 Ornithology 4

Subtotal Specific Departmental Requirements 49
Auxiliary Requirements from Other Departments:
**Chem 150Nx Fundamentals of Chemistry I 4
${ }^{* *}$ Chem 151Tx Fundamentals of Chemistry II 4
*Math 121Q Pre-calculus 4
**Math 201Q Elementary Statistics 4
Chem 250 Organic Chemistry 4 AND
Chem 365 Analytical Chemistry
OR
Geog 250 Intro to Comp Mapping/GIS
4
AND
Geog 300 Intermediate GIS
Subtotal Auxiliary Requirements
23-24
Recommended Electives (to be selected in consultation with student's advisor): Bio 305 Entomology
Bio 331 Microbiology
Chem 250 Organic Chemistry
Chem 365 Analytical Chemistry
Geog 335Weather and Climate
Geog 400 Adv GIS: Raster-based Analysis
**Math 221Q Calculus
Phys 201, 202 College Phys I \& II
Free Electives (variable)

TOTAL REQUIRED FOR GRADUATION

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

Environmental Biology Option Suggested Course Sequence

| Fall Freshman Year |  | Winter Freshman Year |  |
| :---: | :---: | :---: | :---: |
| Bio 112 N | 4 | Bio 113 | 4 |
| Chem 150Nx | 4 | Chem 151Tx | 4 |
| Math 110Q ${ }^{1}$ | 4 | Math 121Q | 4 |
| Lib 150 | 1 | Comp 150 | 4 |
| Total | $13^{2}$ | Total | 16 |
| Fall Sophomore Year |  | Winter Sophomore Year |  |
| Bio 207 | 4 | Bio 260 | 4 |
| Chem 250 | 4 | Bio 206 | 4 |
| ES 100 | 1 | Ag 235 | 4 |
| TS 1 | 4 | TS 1 | 4 |
| Math 201Q | 4 | Total | 16 |
| Total | 17 |  |  |
| Fall Junior Year |  | Winter Junior Year |  |
| Chem 365 | 4 | Bio 220 | 4 |
| TS2 | 4 | Bio 380 | 4 |
| PE Skills | 1 | TS2 | 4 |
| Ag 301 | 4 | Total | $12^{2}$ |
| Total | $13^{2}$ |  |  |
| Fall Senior Year |  | Winter Senior Year |  |
| Bio 302 | 4 | Bio 497 | 2 |
| Bio 496 | 2 | Upper Division Biology (2) | 8 |
| TS2 | 4 | PE Fitness | 1 |
| Upper Division Elective | 3 | TS2 | 4 |
| Total | $13^{2}$ | Total | $15^{2}$ |
|  |  | Senior Year <br> $2^{\text {nd }}$ Summer Session <br> Bio 471 | 5 |

${ }^{1}$ The math course that a student will take is determined by a placement test. There are five levels of math that one may enter. Placement into a course lower than Math 110 will retard this schedule, and placement into a higher than Math 110 will accelerate it.
${ }^{2}$ During these semesters students should take additional courses in preparation for a biology career, or graduate school. Your biology faculty advisor can help you with the selection of these courses


## BIOLOGY - GENERAL BIOLOGY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN BIOLOGY - GENERAL BIOLOGY OPTION:

| General Education | 35-46 |
| :---: | :---: |
| See page 25 for General Education requirements. |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| **Bio 112N Intro to Organismic and Evolutionary Biology | 4 |
| Bio 113 Introduction to Cellular and Molecular Biology | 4 |
| Bio 206 General Botany | 4 |
| Bio 207 General Zoology | 4 |
| Bio 220 Fundamentals of Ecology | 4 |
| Bio 260 Genetics | 4 |
| Bio 321 General Physiology | 4 |
| Bio 380W Issues in Evolution and Biological Thought | 4 |
| Other biology courses, excluding cooperative |  |
| education and internship | 11 |
| Bio 496 Senior Seminar | 2 |
| Bio 497 Senior Thesis | 2 |
| Subtotal Specific Departmental Requirements | 47 |
| Auxiliary Requirements: |  |
| **Chem 150Nx Fundamentals of Chemistry I | 4 |
| **Chem 151Tx Fundamentals of Chemistry II | 4 |
| Chem 250 Org Chem I: Organic Compounds | 4 |
| Chem 251 Org Chem II: Biological Chemistry | 4 |
| **Math 121Q Pre-calculus | 4 |
| **Math 201Q Elementary Statistics | 4 |
| Subtotal Auxiliary Requirements | 24 |

Recommended Courses (suggested for those students anticipating graduate school):
**Math 221Q, Calculus I, Phys 201 and 202 College Physics I and II

## Free Electives (variable)

TOTAL REQUIRED FOR GRADUATION

## General Biology Option Suggested Course Sequence

| Fall Freshman Year |  | Winter Freshman Year |  |
| :---: | :---: | :---: | :---: |
| Bio 112 N | 4 | Bio 113 | 4 |
| Chem 150Nx | 4 | Chem 151Tx | 4 |
| Math 110Q ${ }^{\text {² }}$ | 4 | Math 121Q | 4 |
| Lib 150 | 1 | Comp 150 | 4 |
| Total | $13^{2}$ | Total | 16 |
| Fall Sophomore Year |  | Winter Sophomore Year |  |
| Bio 207 | 4 | Bio 206 | 4 |
| Chem 250 | 4 | Chem 251 | 4 |
| Math 201Q | 4 | ES 100 | 1 |
| TS1 | 4 | TS1 | 4 |
| Total | 16 | Total | $13^{2}$ |
| Fall Junior Year |  | Winter Junior Year |  |
| Bio 220 | 4 | Bio 321 | 4 |
| Bio 260 | 4 | Bio 380 | 4 |
| TS2 | 4 | Upper Division Electives | 4 |
| PE Skills | 1 | TS2 | 4 |
| Upper Division Elective |  | PE Fitness | 1 |
| Total | 17 | Total | 17 |
| Fall Senior Year |  | Winter Senior Year |  |
| Bio 496 | 2 | Bio 497 | 2 |
| Two Upper Division |  | Upper Division Biology | 4 |
| Biology | 8 | TS2 | 4 |
| TS2 | 4 | Upper-Division Elective | 4 |
| Total | $14^{2}$ | Total | $14{ }^{2}$ |

${ }^{1}$ The math course that a student will take is determined by a placement test. There are five levels of math that one may enter. Placement into a course lower than Math 110 will retard this schedule, and placement into a higher level than Math 110 will accelerate it.
${ }^{2}$ During these semesters students should take additional courses in preparation for a biology career, medical school, veterinary or graduate school. Your biology faculty advisor can help you with the selection of these courses.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BIOLOGY - BIOLOGY FOR SECONDARY EDUCATION OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN BIOLOGY - BIOLOGY FOR SECONDARY EDUCATION OPTION:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
**Bio 112N Intro to Organismic and Evolutionary Biology 4 Bio 113 Introduction to Cellular and Molecular Biology 4
Bio 206 General Botany 4
Bio 207 General Zoology 4
Bio 220 Fundamentals of Ecology 4
Bio 260 Genetics
Bio 321 General Physiology
Bio 380W Issues in Evolution and Biological Thought
Bio 496 Senior Seminar 2
Bio 497 Senior Thesis 2
Subtotal Specific Departmental Requirements 36
Auxiliary Requirements from Other Departments:
${ }^{* *}$ Chem 150Nx Fundamentals of Chemistry I4

**Chem 151Tx Fundamentals of Chemistry II Chem 250 Org Chem I: Organic Compounds
**Math 201Q Elementary Statistics
**Geol 107Nx Earth Systems Science
Phys 201 College Physics
**ED 200R Intro to Education in America
**ED 210S Culture of Childhood and Youth
c Society
6
ED 424 Language and Math Literacy in Secondary 4
ED 495 Student Teaching15

Subtotal Auxiliary Requirements ..... 57

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BIOLOGY MINOR

## REQUIREMENTS FOR A MINOR IN BIOLOGY:

**Bio 112N Intro to Organismic and Evolutionary Biology ..... 4
Bio 113 Introduction to Cellular and Molecular Biology ..... 4
Bio 206 General BotanyOR
Bio 207 General Zoology
Bio 210 Survey of Organismic Diversity ..... 4
Two upper division biology courses ..... 6-8
TOTAL REQUIRED FOR BIOLOGY MINOR ..... 18-20

## BUSINESS <br> ADMINISTRATION

Course listings for Business Administration begin on page 120.

## Dean - Thomas C. Harrington

Interim Assistant Dean - Lawrence S. Corman
Professors - Kendall A. Blanchard, William B. Dodds, Thomas C. Harrington and Kenneth A. Hunt
Associate Professors - Paul J. Herz, Douglas W. Lyon, Frederick H. Mull, Stephanie J. Owings and Deborah L. Walker
Assistant Professors - Eric L. Huggins, Larry Hughes, Paul T. McGurr, Luke T. Miller, J. Brad Reich, Robert J. Sonora, Simon G. Walls and Suzanne L. Wilhelm
Visiting Professor - Lawrence S. Corman, Iqbal A. Memon and Charles J.
Yoos, II
Visiting Instructors - Cory Foster, Chris Ann Lyon, Terrence Tannehill and Stephen Stovall

## SCHOOL OF BUSINESS MISSION

The School of Business Administration works as a team to create student-focused learning experiences that prepare graduates for a dynamic global environment.

## VALUES AND LEARNING OUTCOMES

The School of Business Administration (SOBA) provides high quality undergraduate programs with a commitment to developing a liberally educated and professionally competent student. SOBA's success depends upon maintaining a quality faculty dedicated to teaching and a broad spectrum of discipline based scholarship, contributions to practice, learning and pedagogical research, and current professional experience.

To support the SOBA's mission, the faculty are committed to develop and maintain a curriculum that is responsive to society's needs and to increase learning inside and outside the classroom. The School of Business Administration degree programs are designed to provide a balanced combination of the arts and sciences and professional business education. The learning outcomes of the Bachelor of Arts degree programs offered by the School of Business Administration are designed so that students will:

- acquire a general understanding of the principles of modern business and organizational practices


## (Learning as Inquiry)

- become skilled in the use of analytical tools and techniques for decision making in the business world (Critical Thinking and Problem Solving)
- acquire the communication and group interaction skills necessary for a business career


## (Communication)

- apply academic learning in preparation for a business career in a dynamic global environment (Real World Application)


## VISIBILITY AND REPUTATION

The Fort Lewis College School of Business Administration is accredited by the Association to Advance Collegiate Schools of Business International (AACSB). AACSB International accreditation represents the highest standard of achievement for business schools worldwide. Institutions that earn accreditation confirm their commitment to quality and continuous improvement through a rigorous and comprehensive peer review process that ensures a thoughtful and strategic plan, sufficient resources to support a vibrant and relevant mission, high-caliber teaching and current curricula, graduates that have achieved specified learning outcomes, and meaningful interaction between students and faculty. The Business Club, American Indian Business Leaders, Beta Alpha Psi accounting professional society, Beta Gamma Sigma national honorary business fraternity, FLY AHEAD, Semester Abroad, and Innovative Month are examples of clubs and programs that promote such interactions.

## ACCEPTANCE OF TRANSFER CREDITS

It is recommended that students planning to transfer into the Fort Lewis College School of Business Administration do so by the end of their sophomore year. Students must complete their final 30 credit hours in residence at Fort Lewis College.

Students taking their first two years of work at a junior or community college or at another four-year institution should take only those business courses that are offered at the freshman or sophomore level at Fort Lewis College. To be exempt from the School of Business Administration sophomore-level writing requirement (BA 221, Writing in the Business World), students should take a business writing or business communications course at their junior or community college. Business courses taught at junior or community colleges may not be used to satisfy upper-division credits.

## NON-BUSINESS STUDENTS

Students who are not working toward a baccalaureate degree in business are prohibited from taking business credits that will exceed 25 percent of their total program. This provision is in accordance with the accreditation standards of the School of Business.

## TRIMESTER ABROAD

The Trimester Abroad courses are offered through the Junior Trimester Abroad (JTA) program and are taught by a Fort Lewis College Business School faculty member in Europe during the winter term. The schedule provides for two fiveweek sessions with at least two courses offered during each session. Generally, the course offerings include at least one junior-level core business course and other business electives. Spring Break provides the opportunity to travel. The trimester ends around the first week in April, allowing about three weeks of independent travel for those who wish to take advantage of that opportunity before the summer semester begins at the Fort Lewis College campus in Durango.

Costs of this program are kept low through the use of Fort Lewis College faculty and the minimal cost of facilities in Europe. Details for any given year regarding location, cost, climate, travel arrangements, etc., may be obtained from the JTA program faculty.

In addition to the Semester Abroad program, SOBA faculty provide a number of Innovative Month international courses during the summer terms. These courses are published in the summer term class schedules and advertised on the Foreign Studies information board in the Education and Business Hall.

## ACCOUNTING/BUSINESS/ECONOMICS/ MARKETING MINORS

Requirements for minors in Accounting, Business
Administration, Economics, Entrepreneurship and Small Business Management, and Marketing are located alphabetically at the end of the Business Administration Majors and Options section.

## THE CURRICULA

The curricula offered by SOBA lead to the Bachelor of Arts degree with a major in Accounting, Business Administration, or Economics. Within the Business Administration major, options are offered in Agricultural Business, Business Administration, Engineering Management, Finance, Information Management, International Business, Management, Marketing, and Tourism and Resort Management. Within the Economics major, options are offered in Business Economics and Economics. Students may select only one option within the Business Administration and Economics majors. Students may elect a double major by combining two of these three majors.

These majors provide excellent education in business within the broad context of a liberal arts curriculum. The degree programs offer a cross section of a "Common Requirement" of courses, and 15 to 25 credit hours in a concentration in one of the areas of business. The degree programs are designed to meet the needs of students wishing to continue their education in graduate school or to work in their chosen professional area.

## A student who majors in one of the three Bachelor of Arts degree programs in the School of Business Administration must complete:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## COMMON SOBA REQUIREMENTS:

Acc 225 Introduction to Financial Accounting 4
Acc 226 Introduction to Managerial Accounting 4
**Econ 266S Principles of Economics 4
BA 221 Writing in the Business World 3
${ }^{* *}$ BA 253Q Business Statistics 4
**BA 260S Legal Environment of Business 3
BA 301 Management and Organizational Behavior 4
BA 340 Marketing 4
BA 353 Operations Management 4
BA 380 Financial Management 4
BA 496 Senior Seminar in Strategic Management 4
Subtotal Common SOBA
Quantitative Reasoning Requirement:
Complete one of the following:
BA 346 Managing Customer Value 4
BA 446W Marketing Research 4
BA 485 Investments and Porifolio Management 4
Econ 361 Managerial Economics 4
${ }^{* *}$ Math 210Q Survey of Calculus 4
${ }^{* *}$ Math 221Q Calculus I 4
**Math 222Q Calculus II 4
**Math 360Q Introduction to Operations Research
4

## Subtotal Q Requirement

NOTE: BA 346, BA 446 and BA 485 are not accepted for Quantitative Reasoning Requirement within the Accounting major.

NOTE: Accounting Majors may complete BA 311 and 312 to replace BA 260.
Auxiliary Requirement (outside SOBA):
CSIS 322 Management and Information Systems
4

TOTAL COMMON SOBA REQUIRMENTS
50
Each candidate for graduation must complete a minimum of 120 credits, with a minimum cumulative grade point average of at least 2.0 and a minimum grade point average of 2.0 for those courses accepted to meet the requirements for the major course of study. For majors in Accounting, Business Administration and Economics, a minimum of C - must be earned in 300 - and 400-level Accounting, Business Administration, Computer Science and Information Systems, or Economics courses to count toward graduation. It is the responsibility of the student to know and complete all graduation requirements.

Additional requirements are listed on the following pages under each major or option.

## Group W Requirement

To complete the college Group W requirement, Accounting, Business Administration, and Economics majors must take one of the Group W courses designated for the major or option. Some majors and options have designated only one course as fulfilling the Group W requirement; other majors and options have designated multiple courses of which students should choose at least one. In all cases the Group W courses satisfy other requirements in the major and need not add additional required hours. BA 221 Writing in the Business World is a prerequisite for all Group W writing courses in the School of Business Administration.

Prerequisite Statement:
Acc 225, Acc 226, Econ 266S, and Comp 150 are prerequisites for 300and 400 -level courses offered by the School of Business Administration. Students with majors offered by the School of Business Administration should complete these courses BEFORE the start of the junior year or substantial delay in graduation may result. Students may not enroll in 300- or 400-level business courses until Comp 150 and BA 221 have been completed and the student has attained junior standing ( 60 or more credit hours completed). Any exceptions require the written approval of the Dean or Assistant Dean of the School of Business Administration.

Note to transfer and former students: If you have taken any of your major or minor requirements and received a different number of credits than listed above, you may need to complete additional credit requirements. Please consult with your advisor.

## ACCOUNTING

Course listings for Accounting begin on page 110.
See Business Administration for faculty listing.
The accounting major prepares students to embark immediately upon a career as a public, industrial or governmental accountant and provides a foundation in accounting and business administration that will enable them to pursue graduate study. Graduates can expect to work in such areas as management advisory services, income tax, auditing, budgeting, cost accounting and general accounting.

A student studying accounting must complete the following requirements:

$$
\begin{aligned}
& \text { General Education } \\
& \text { See page } 25 \text { for General Education requirements. } \\
& * * \text { Courses marked with double asterisks may also be counted toward TS1 or } \\
& \text { Q requirements. }
\end{aligned}
$$

Major Requirements
Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements
4

Other Departmental Requirements:
Acc 323 Intermediate Accounting I 4
Acc 324 Intermediate Accounting II 4
CSIS 335 Accounting Information Systems 3
Plus a minimum of 13 credits of upper division accounting courses selected from the following, at least one of which must be Acc 430W or Acc 436W:

Acc 370 Topics in Accounting 1-6
Acc 426 Advanced Accounting 4
Acc 430W Income Tax Accounting 3
Acc 431 Income Tax Accounting II 3
Acc 436W Auditing - Theory and Practice 4
Acc 470 Governmental/Not-For-Profit Accounting 3
Any 300 or 400 level accounting elective, including any
Accounting 390.
3-4
Subtotal Other Departmental Requirements 241
TOTAL MAJOR REQUIREMENTS 74
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
${ }^{1}$ Credits used to satisfy the accounting major may not be used to satisfy any other major, minor or option within the School of Business Administration.

Note: Accounting majors may complete BA 311 and 312 to replace BA 260.
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

For information regarding CMA, CPA, and other professional certifications and requirements in states other than Colorado, please see an accounting professor.

## Accounting Majors

Suggested Course Sequence

## FIRST YEAR

| Semester 1 |  | Semester 2 |  |
| :--- | :--- | :--- | :--- |
| Eecon 266 S | 4 | Comp 150 | 4 |
| ES 100 | 1 | LIB 150 | 1 |
| PE Activity | 1 | TS1 (R) | $3-4$ |
| PE Skills | 1 | Math | 4 |
| TS1 (N) | 4 | Elective | 3 |
| TS1 (T) | 4 | Total | $\mathbf{1 5 - 1 6}$ |
| Total | 15 |  |  |

## SECOND YEAR

| Semester 3 |  | Semester 4 |  |
| :--- | :--- | :--- | :--- |
| ACC 225 | 4 | ACC 226 | 4 |
| BA 253 | 4 | BA 301 | 4 |
| Elective | $3-4$ | BA 221 | 3 |
| BA 260 | 3 | TS1R or Q | $3-4$ |
| Total | $\mathbf{1 4 - 1 5}$ | Total | $\mathbf{1 4 - 1 5}$ |

## THIRD YEAR

| Semester 5 |  | Semester 6 |  |
| :--- | :--- | :--- | :--- |
| ACC 323 | 4 | ACC 324 | 4 |
| CSIS 335 | 3 | CSIS 322 | 4 |
| BA 340 | 4 | BA 353 | 4 |
| TS2 | 4 | TS2 | 4 |
| Total | 15 | Total | $\mathbf{1 6}$ |

## FOURTH YEAR

Semester 7
ACC 430 W
OR

| Elective | $3-4$ | Elective | $3-4$ |
| :--- | :--- | :--- | :--- |
| BA 380 | 4 | ACC Elective | $2-4$ |
| ACC Elective | $3-4$ | BA 496 | 4 |
| TS2 | 4 | TS2 | 4 |
| Total | $\mathbf{1 4 - 1 6}$ | Total | $\mathbf{1 3 - 1 6}$ |

## BUSINESS ADMINISTRATION AGRICULTURAL BUSINESS OPTION

The Business Administration major - Agricultural Business option integrates agriculture, economics, and business administration to prepare students for professional careers in the agribusiness sector. These include positions in agricultural
finance, product development, marketing and distribution, and agribusiness management. Flexibility within this option allows students to concentrate in a specific area of study, including general agriculture, animal science or agronomy. Students selecting this option may also choose to complete the requirements for the Marketing option. The credits used to meet the Agricultural Business electives may not be used to also meet the Marketing electives.

A student studying agricultural business must complete the following requirements:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Major Requirements:

Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements 4
Other Departmental Requirements:
${ }^{1}$ Econ 364W Macroeconomics 4
${ }^{* *}$ Ag 101T Introductory Animal Science 4
Ag 102 Principles of Crop Production 4
Ag 346 Agricultural Marketing 3
Plus 12 credits from the list below; at least two courses must be taken from each category:

## Agriculture:

Ag 150 Farm Records and Accounts 3
Ag 202 Integrated Pest Management/Weed Control 4
Ag 204 Forage Production and Management 3
Ag 235 Soils and Soil Fertility 4
Ag 240 Principles of Animal Nutrition 4
Ag 301 Range Management 4
Ag 325 Beef Science 3
Ag 390 Special Topics 3
TS2T 402 Agricultural Issues in Society 3
Business Administration/Economics:
Econ 361 Managerial Economics
$\begin{array}{ll}\text { Econ } 361 \text { Managerial Economics } & 4 \\ \text { Econ } 390 \text { Special Topics } & 4\end{array}$
BA 311 Business Law I 3
BA 312 Business Law II 3
BA 387 Real Estate 4
BA 392 Research Topics - Ag Business Related 1-3
BA 437 Internship in Business - Ag Business Related 3
Econ 335 Environmental Economics 4
Subtotal Other Departmental Requirements $2 \mathbf{2 7}^{2}$
TOTAL MAJOR REQUIREMENTS 77
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.
${ }^{1}$ Completion of this course fulfills the Group W requirement for students in the Agricultural Business option.
${ }^{2}$ The 27 credits used to satisfy an option in Agricultural Business may not be used to satisfy any other major, minor or option.

## BUSINESS ADMINISTRATION BUSINESS ADMINISTRATION OPTION

The Business Administration option, sometimes referred to as "general business," provides a broad base of knowledge for beginning a business career. It enables maximum flexibility in career choice and change throughout one's career. Students are expected to develop a basic understanding of the social, legal and economic environments of business, including an introduction to international business, organizational behavior, the principles of leadership and organization theory, the quantitative tools of decision-making and the functional areas of the firm.

Students work with assigned advisors to select elective courses that enhance their particular interest. Emphasis is placed on developing a general background with a well-balanced understanding of business. This program, then, provides a sound undergraduate education for entrance into a professional career or graduate school.

A student studying business administration must complete the following requirements:

## General Education

$35-46$
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Major Requirements:

Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements 4
Other Departmental Requirements:
One 300- or 400-level Economics Course

## 4

Plus a minimum of 15 credits of business administration courses selected from the following three groups (MK, MG, FI), with at least one course from each group ${ }^{1,2}$ :

## Group MK: MARKETING

BA 240 Business Creativity and Innovation 2
BA 339 Selling 3
BA 342 Retailing 3
BA 344 Advertising 3
BA 346 Managing Customer Value 4
BA 347 Consumer Behavior 3
BA 348 Public Relations 3
BA 356 Business of Gaming 4
BA 372W Global Business Seminar 4
BA 390 Special Topics in Marketing 1-4
BA 392 Research Topics-Marketing Related 1-3
BA/CSIS 402 Electronic Commerce 4
BA 437 Internship in Business - Marketing Related 3
BA 445W Marketing Strategy and Policy 4
BA 446W Marketing Research 4
Group MG: MANAGEMENT
BA 205 New Business Venturing ..... 3
**BA 271R Fundamentals of International Business ..... 3
BA 302W Human Resource Management ..... 4
BA 308 Office Management ..... 3
BA 311 Business Law I ..... 3
BA 312 Business Law II ..... 3
BA 313 Ethical Issues in Business ..... 3
BA 315W International Law ..... 3
BA 316 Tourism and Recreation Law ..... 3
BA 330 Tourism and Resort Management ..... 4
BA 356 Business of Gaming ..... 4
BA 370 Topics in International Business ..... 1-6
BA 372W Global Business Seminar ..... 4
BA 390 Special Topics in Management ..... 1-4
BA 392 Research Topics - Management Related ..... 1-3
BA/CSIS 402 Electronic Commerce ..... 4
BA 407W Management Consulting ..... 4
BA 415 Management in Action ..... 3
BA 437 Internship in Business - Management Related ..... 3
BA 439 Marketing and Management of Services ..... 4
CSIS 352 Project Management ..... 4
Group FI: FINANCE
BA 317 Technical Analysis - Securities ..... 3
BA/Econ 382 Money, Banking and Financial Institutions ..... 4
BA 386 Insurance ..... 4
BA 387 Real Estate ..... 4
BA 389 International Finance ..... 4
BA 390 Special Topics in Finance ..... 1-4
BA 392 Research Topics - Finance Related ..... 1-3
BA 437 Internship in Business - Finance Related ..... 3
BA 481W Cases in Financial Management ..... 4
BA 485 Investments and Portfolio Management ..... 4
${ }^{3}$ Econ 369 Public Finance ..... 4
Subtotal Other Departmental Requirements ..... $19^{2}$
TOTAL MAJOR REQUIREMENTS ..... 69
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION120

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.
${ }^{1}$ Completion of Econ 364W, BA 302W, BA 315 W , BA 372 W , BA 407 W , BA 445W or BA 481W fulfills the Group W requirement for students in the Business Administration option.
${ }^{2}$ Credits used to satisfy an option in Business Administration may not be used to satisfy any other major, minor or option within the School of Business Administration.
${ }^{3}$ May not be used to fulfill the 300- or 400-level Economics course requirement and the finance group requirement simultaneously.

## BUSINESS ADMINISTRATION ENGINEERING MANAGEMENT OPTION

The Business Administration major - Engineering Management option prepares students who can integrate management skills with engineering skills to solve complex problems in an increasingly technical world. It is designed to prepare students for entry-level engineering-related jobs and to be able to move rapidly into supervisory/management positions.

A student studying the management option must complete the following requirements:
General Education ..... 35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Major Requirements:

Common SOBA Requirements (see page 40) 42
Other Departmental and Auxiliary Requirements:
'BA 302W Human Resource Management4
Engr103 Computer-Aided Drafting ..... 3
Engr 104 Computer Programming for Scientists \& Engineers ..... 3Engr 217 Statics
Engr 221 Dynamics3
${ }^{* *}$ Math 221Q Calculus I3
**Math 222Q Calculus II ..... 4
CSIS 322 Management Information Systems4
Phys 218 Physics for Science and Engineering II ..... 5
Plus choose one of the following 2 options:
General Engineering Option:
Engr 201 Electric Networks I ..... 4
Plus one of the following:
Engr 202 Electric Networks II
OR
Engr 317 Mechanics of Materials ..... $3-4$
Civil/Surveying Engineering Option:
Engr 205 Surveying I ..... 4
Engr 305 Surveying II ..... 4
Subtotal Other Departmental Requirements ..... 45-46
TOTAL MAJOR REQUIREMENTS ..... 87-88
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION ..... 120
${ }^{1}$ Completion of this course fulfills the Group W requirement for students in theengineering management option.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BUSINESS ADMINISTRATION FINANCE OPTION

The Business Administration major - Finance option focuses on those financial activities that affect business, government and non-profit organizations. Students will be introduced to financial planning and management as they pertain to organizations, to the function of both capital and money markets, and to fund raising in these markets.

Financial theory and practice have changed rapidly in the past 20 years and will probably continue to change at least as rapidly in the immediate future. Therefore, students will be introduced to the rapidly evolving theory of finance so that they will be able to evaluate the effectiveness of a firm's financing decisions and investments. Students also will become familiar with the analytical techniques that can be used to seek solutions to a wide range of financial problems.

A student studying finance must complete the following requirements:

General Education 35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Major Requirements:
Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements
4
${ }^{3}$ Other Departmental Requirements:
One 300- or 400-level Economics Course 4
'BA 481W Cases in Financial Management 4
BA 485 Investments and Portfolio Management 4
Plus a minimum of seven (7) credits from the following:
BA 317 Technical Analysis - Securities 3
BA/Econ 382 Money, Banking and Financial Institutions 4
BA 386 Insurance
4
4
BA 387 Real Estate 4
BA 389 International Finance 4
BA 390 Special Topics in Finance 1-4
BA 392 Research Topics - Finance Related 1-3
BA 437 Internship in Business - Finance Related 3
${ }^{2}$ Econ 369 Public Finance 4
${ }^{2}$ Econ 371 International Economics 4
${ }^{2}$ Econ 364W Macroeconomic Theory 4
Subtotal Other Departmental Requirements 1933
TOTAL MAJOR REQUIREMENTS 69
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION 120
${ }^{1}$ Completion of this course fulfills the Group W requirement for students in the finance option.
${ }^{2}$ May not be used to fulfill the 300- or 400-level Economics course
requirement and the Finance option requirement simultaneously.
${ }^{3}$ The 19 credits used to satisfy an option in Finance may not be used to satisfy any other major, minor or option within the School of Business Administration.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BUSINESS ADMINISTRATION INFORMATION MANAGEMENT OPTION

The Business Administration major - Information Management option integrates information systems and business administration to prepare students for professional careers in the information systems sector. These include positions in systems analysis, business consulting, e-commerce, and information management.

The Information Management option is not intended to prepare students for a programming career; rather the option is designed to prepare students for the management of business information systems. For a more technical approach, students should pursue a degree in Computer Science or Information Systems.

A student studying Information Management must complete the following requirements:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or
Q requirements.

## Major Requirements:

Common SOBA Requirements (see page 40) 42
SOBA Quantitative Reasoning Requirements 4
Other Departmental Requirements:
One (1) 300- or 400-level Economics Course 4
CSIS 106 or CSIS 110 (Visual Basic or Java) 4
CSIS 322 Management Information Systems (MIS) 4
CSIS 350 Database Management Systems 4
CSIS 431 Computer Network Administration 4
Also:
${ }^{1}$ CSIS 361W (Computers and Human Issues) 4
AND 4 credits from approved elective list:
CSIS 335 Accounting Information Systems 3
CSIS 352 Project Management 4
CSIS 360 Software Engineering I: Systems Analysis 4
CSIS 370 Software Engineering II: Systems Design 4
BA/CSIS 402 Electronic Commerce 4
BA 392 Research Topics - Info Management Related 1-3
Subtotal Other Departmental and Auxiliary Requirements $28^{2}$

TOTAL MAJOR REQUIREMENTS 74
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
${ }^{1}$ Completion of this course fulfills the Group W course requirement.
${ }^{2}$ The credits used to satisfy an option in Information Management may not be used to satisfy any other major, minor or option.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BUSINESS ADMINISTRATION INTERNATIONAL BUSINESS OPTION

The Business Administration major - International Business option prepares students to enter the exciting and rapidly growing world of international business. Increasingly, businesses find that suppliers and customers may come from anywhere in the world. To better prepare students for a future career in business that will likely require some international proficiency, students in this option take courses to gain competency in at least one foreign language, a cultural and political understanding of the region of the world where that language is dominant, and those special business skills needed to operate effectively in the international environment.

The option is strongly interdisciplinary. A student studying International Business must complete the following requirements:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Major Requirements:

Common SOBA Requirements (see page 40) 42
SOBA Quantitative Reasoning Requirements 4
Auxiliary Requirements 4

Other Departmental Requirements:
A minimum of 15 credit hours from the following courses: 1,2
BA 271R Principles of International Business 3
BA 302W Human Resource Management 4
BA 313 Ethical Issues in Business 3
${ }^{3}$ BA 315W International Business Law 3
BA 316 Tourism and Recreation Law 3
BA 370 Topics in International Business 1-6
3BA 372W Global Business Seminar 4
BA 389 International Finance 4
BA 390 Special Topics (with International emphasis) 1-4
BA 392 Research Topics - $\operatorname{lnt}^{\prime} \mid$ Business Related 1-3
BA 499 Independent Study: Semester Abroad 4
Econ 370 Topics in International Economics 1-6
Econ 371 International Economics 4
Econ 390 Special Topics (with International emphasis) 1-4
Econ 410 Economics, a Radical Perspective 4
ML 350 Spanish for the Professions 4
Subtotal Other Departmental Requirements $\quad 15^{1}$
Plus completion of the following:
A. International Experience.

This requirement can be met in several ways:

1. Participation in a Semester Abroad program.
2. International Exchange Program in any discipline.
3. Participation in any summer Innovative Month program that includes an international experience.
4. Residence abroad-minimum of three months.
5. Extensive individual travel abroad. Each method requires documentation, and approval of the SOBA Director of Foreign Studies.
B. Modern Language Proficiency

This requirement can be met in several ways:

1. Completion of a $200-$ level modern language course.
2. Completion of a 100 -level modern language course in TWO different modern languages.
3. Score of 3 or above on an AP modern language exam.
4. ACTFL proficiency exam score.
5. Native speaker of a language other than English.
6. Completion of an intensive language training program.

Each method requires documentation and approval of the SOBA Director of Foreign Studies.

Subtotal International Experience and/or Modern Language Proficiency

TOTAL MAJOR REQUIREMENTS 65-77

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
${ }^{1}$ The 15 credits used to satisfy an option in International Business may not be used to satisfy any other major, minor or option.
${ }^{2}$ ALTERNATIVE STUDY PROGRAM: Up to 12 credits of the International Business option requirements may be satisfied by successful completion of Study Abroad courses (Accounting, Business Administration or Economics) or exchange program(s) approved by SOBA.
${ }^{3}$ Completion of BA 372 W or BA 315 W fulfills the Group W requirement for students in the International Business option.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.


## BUSINESS ADMINISTRATION MANAGEMENT OPTION

The Business Administration major - Management option prepares students for responsible supervisory and management positions in all types of organizations: business, government and non-profit. Students become familiar with the opportunities and processes of management as they develop skills in planning, organizing, leading and controlling.

Students in management are introduced to the process of acquiring and using financial, human and physical resources in the pursuit of organizational objectives. Interpersonal relations, leadership and decision-making are emphasized.

A student studying the management option must complete the following requirements:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Major Requirements:
Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements 4
'Other Departmental Requirements: One (1) 300- or 400-level Economics Course 4

Plus a minimum of 15 credits from the following courses':
BA 205 New Business Venturing
**BA 271R Fundamentals of International Business 3
2BA 302W Human Resource Management 4
BA 308 Office Management 3
BA 311 Business Law I 3
BA 312 Business Law II 3
BA 313 Ethical Issues in Business 3
${ }^{2}$ BA 315W International Business Law 3
BA 316 Tourism and Recreation Law 3
BA 330 Tourism and Resort Management 4
BA 356 Business of Gaming 4
BA 370 Topics in International Business 1-6
BA 372W Global Business Seminar 4
BA 390 Special Topics in Management 1-4
BA 392 Research Topics - Management Related 1-3
2BA 407W Management Consulting 4
BA 437 Internship in Business - Management Related 3
BA 439 Marketing and Management of Services 4
CSIS 352 Project Management
${ }^{2}$ Econ 364W Macroeconomic Theory
4
Econ 364W Macroeconomic Theory 4
Subtotal Other Departmental Requirements 191
TOTAL MAJOR REQUIREMENTS 69

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
'Credits used to satisfy an option in Management may not be used to satisfy any other major, minor or option within the School of Business Administration. ${ }^{2}$ Completion of Econ 364W, BA 302W, BA 372W or BA 407W fulfills the Group W requirement for students in the Management option.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BUSINESS ADMINISTRATION MARKETING OPTION

The Business Administration major - Marketing option emphasizes the performance of business activities designed to plan, price, promote, and distribute goods and services to satisfy consumer needs and wants. The study of marketing recognizes the large proportion of the consumer dollar allocated to marketing, thus creating vast opportunities for graduates in this field.

Careers in marketing may be pursued in industry, government, and non-profit organizations, in such areas as retailing, purchasing, marketing research, sales, advertising, sales promotion, product management, public relations, physical distribution and consumer affairs.

A student studying Marketing must complete the following requirements:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Maior Requirements:

Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements 4
${ }^{2}$ Other Departmental Requirements:
One (1) 300- or 400-level Economics Course 4
BA 347 Consumer Behavior 3
1BA 445W Marketing Strategy and Policy 4
BA 446W Marketing Research 4
Plus a minimum of 4 credits from the following courses:
BA 240 Business Creativity and Innovation 2
BA 339 Selling 3
BA 342 Retailing 3
BA 344 Advertising 3
BA 346 Managing Customer Value 4
BA 348 Public Relations 3
BA 356 Business of Gaming 4
BA 372W Global Business Seminar 4
BA 390 Special Topics in Marketing 1-4
BA 392 Research Topics - Marketing Related 1-3
BA 402 Electronic Commerce 4
BA 437 Internship in Business - Marketing Related 3
BA 439 Marketing and Management of Services 4
Subtotal Other Departmental Requirements 19²
TOTAL MAJOR REQUIREMENTS 69
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
${ }^{1}$ Completion of this course fulfills the Group W requirement for students in the marketing option.
${ }^{2}$ Credits used to satisfy an option in Marketing may not be used to satisfy any other major, minor or option within the School of Business Administration.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## BUSINESS ADMINISTRATION TOURISM AND RESORT MANAGEMENT OPTION

Recent decades have witnessed the phenomenal growth of service industries. The service sector of the economy now accounts for most of the job opportunities. In this region of the country the leading service industry is the tourism industry. A major portion of this industry is located in growing year-round resorts. This industry will continue to grow and serve national and international markets. As it does, it will need future leaders and managers with better education and broader perspectives. The Tourism and Resort Management option addresses this need.

The Business Administration major - Tourism and Resort Management option provides a general understanding of the management challenges and organizational practices of a complex and diverse industry. The use of analytical tools and techniques for decision making, the development of the capacity for critical thought and leadership, and the ability to work with others will be significantly improved by interaction with regional companies through field projects in most courses and a required work experience.

A student studying Tourism and Resort Management must complete the following requirements:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Major Requirements:
Common SOBA Requirements (see page 40) 42
Quantitative Reasoning Requirements 4
Auxiliary Requirements 4
${ }^{2}$ Other Departmental Requirements:
One (1) 300- or 400-level Economics Course 4
BA 330 Tourism and Resort Management 4
BA 437 Internship in Business - Tourism Related 3
BA 439 Marketing and Management of Services 4
Plus one additional course from the following:
'BA 302W Human Resource Management 4
BA 316 Tourism and Recreation Law 3
BA 356 Business of Gaming 4
BA 390 Special Topics in Tourism 3-4
'BA 407W Management Consulting 4
BA 446W Marketing Research 4
Subtotal Other Departmental Requirements 18-19²
TOTAL MAJOR REQUIREMENTS 68-69
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION

[^2]Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## ECONOMICS

Course listings for Economics begin on page 129.
See Business Administration for faculy listing.
The School of Business Administration offers two degree options for students pursuing studies in Economics. Both Economics options prepare students for graduate studies in economics as well as employment in business and finance. The study of economics also provides a good background for students who want to prepare for a career in law. These programs lead to a degree in either Business Economics or Economics.

## ECONOMICS - BUSINESS ECONOMICS OPTION

The Business Economics option is designed to provide students with an understanding of economic principles underlying the business world. The option shows the relationships between the study of economics and basic business decision-making both from the standpoint of the individual firm and from the standpoint of business operating in the national and global economy. Students majoring in Business Economics will be prepared to continue graduate study in economics and for employment in government and business.

A student majoring in Business Economics must complete the following departmental requirements:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or
$Q$ requirements.

| Major Requirements: | 42 |
| :--- | :--- |
| Common SOBA Requirements (see page 40) | 4 |
| Quantitative Reasoning Requirements | 4 |
| Auxiliary Requirements |  |
|  |  |
| 1Other Departmental Requirements: 4 <br> Econ 356 Microeconomic Theory 4${ }^{2}$ Econ 364W Macroeconomic Theory |  |

${ }^{2}$ Econ 364W Macroeconomic Theory 4

Plus any three of the following courses:
Econ 307 Evolution of Economic Thought 4
Econ 310 Economic History of the United States 4
Econ 335 Environmental Economics
4
Econ 361 Managerial Economics
Econ 369 Public Finance
Econ 371 International Economics 4

BA/Econ 382 Financial Institutions
Econ 390/391 Special Topics in Economics 4
Subtotal Other Departmental Requirements
TOTAL MAJOR REQUIREMENTS

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
${ }^{1}$ Credits used to satisfy the Business Economics option may not be used to satisfy any other major, minor or option within the School of Business Administration.
${ }^{2}$ Completion of Econ 364 W fulfills the Group W requirement for students in the Business Economics option.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## ECONOMICS - ECONOMICS OPTION

The Economics option focuses mainly on economics and is designed to provide students with an understanding of the present economic system and how economics relates to other disciplines and fields of study. The major is designed for students who desire to study economics but do not wish to take all of the common requirements courses prescribed for Business Administration majors. Students majoring in Economics will have the flexibility to pursue minors in other areas as well as preparing for teaching certification.

Students majoring in the Economics option must complete the following departmental requirements:

[^3]
## Business Administration/Economics Major Suggested Course Sequence ${ }^{1}$

FRESHMAN YEAR

| Fall | Winter |  |  |
| :--- | :--- | :--- | :--- |
| BA 101 | $4^{2}$ | Econ 266 S | 4 |
| TS1 and/or Electives | 9 | Comp 150 | 4 |
| ES 100 | 1 | Lib 150 | 1 |
| Total | $\mathbf{1 4}$ | TS1 and/or Elective | 4 |
|  |  | Total | $\mathbf{1 3}$ |

SOPHOMORE YEAR

| Fall | Winter |  |  |
| :--- | :--- | :--- | :--- |
| Acc 225 | 4 | Acc 226 | 4 |
| BA 260 S | 3 | BA 253 | 4 |
| BA 221 | 3 | TS1 and/or Elective | 8 |
| PE Activities | 1 | Total | $\mathbf{1 6}$ |
| TS1 and/or Electives | 4 |  |  |
| Total | $\mathbf{1 5}$ |  |  |

JUNIOR YEAR

| Fall | Winter |  |  |
| :--- | :--- | :--- | :--- |
| BA 301 | 4 | BA 353 | 4 |
| BA 380 | 4 | BA Electives | 4 |
| Q/R Course | 4 | CSIS 322 | 4 |
| BA 340 | 4 | TS2 and/or Elective | 4 |
| Total | $\mathbf{1 6}$ | Total | $\mathbf{1 6}$ |

## SENIOR YEAR

| Fall | Winter |  |  |
| :--- | :--- | :--- | :--- |
| BA Electives | 7 | BA 496 | 4 |
| TS2 and/or Electives | 8 | BA Elective | 3 |
| Total | $\mathbf{1 5}$ | TS2 and/or Electives | 8 |
|  |  | Total | $\mathbf{1 5}$ |

## ACCOUNTING MINOR

REQUIREMENTS FOR A MINOR IN ACCOUNTING:

A student majoring in any discipline other than accounting may complete a minor in Accounting upon satisfactorily fulfilling the following requirements: ${ }^{1}$
Acc 225 Introduction to Financial Accounting ..... 4
Acc 226 Introduction to Managerial Accounting ..... 4
Acc 323 Intermediate Accounting I ..... 4
Total ..... 12
Electives:
Any two upper division Accounting course with ACC prefix OR one upperdivision ACC course and CSIS 335 .
Total Elective hours ..... 6-8
TOTAL REQUIRED FOR ACCOUNTING MINOR ..... 18-20
BUSINESS ADMINISTRATION MINOR REQUIREMENTS FOR A MINOR IN BUSINESS ADMINISTRATION:

A student majoring in any discipline other than Accounting, Business Administration, Art-Business Art, Music-Music Business, Economics, or Sports Administration, may complete a minor in Business Administration upon satisfactorily fulfilling the following requirements:

| **Econ 266S Principles of Economics | 4 |
| :--- | :--- |
| Acc 225 Introduction to Financial Accounting | 4 |
| **BA 260 Legal Environment of Business | 3 |
| BA 301 Management and Organizational Behavior | 4 |
| BA 340 Marketing | 4 |
| BA 205, Econ 201, CSIS 322, or one upper-division |  |
| Business Administration elective | 3-4 |
| Total |  |

## ECONOMICS MINOR

REQUIREMENTS FOR A MINOR IN ECONOMICS:
A student majoring in any discipline other than Economics or Business Economics may complete a minor in Economics upon satisfactorily fulfilling the following requirements:
**Econ 266S Principles of Economics
4
Electives:
Fourteen (14) semester hours of additional economics courses, twelve (12) must be upper-division

TOTAL REQUIRED FOR ECONOMICS MINOR

# ENTREPREMEURSHIP AND SMALL BUSINESS MANAGEMENT MINOR 

## REQUIREMENTS FOR A MINOR IN ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT:

A student majoring in any discipline other than Business Administration may complete a minor in Entrepreneurship and Small Business Management upon satisfactorily completing the following requirements:

| BA 205 | New Business Venturing | 3 |
| :--- | :--- | :--- |
| BA 221 | Writing in the Business World | 3 |
| BA 240 | Business Creativity and Innovation | 2 |
|  |  | $\mathbf{8}$ |

Electives - Choose a minimum of 11 hours, at least 6 hours of which must be 300 -level or above (please refer to the catalog to determine if there are any prerequisites for any of the elective courses):
Acc 225 Financial Accounting ..... 4
**Econ 201Q Personal Finance ..... 3
**Econ 266S Principles of Economics ..... 4
**BA 260S Legal Environment of Business ..... 3
BA 301 Management and Organizational Behavior ..... 4
BA 302W Human Resource Management ..... 4
BA 308 Office Management ..... 3
BA 330 Tourism and Resort Management ..... 4
BA 340 Marketing ..... 4
BA 342 Retailing ..... 3
BA 346 Managing Customer Value ..... 4
Subtotal ..... 11
TOTAL REQUIRED FOR ENTREPRENUERSHIP AND SMALL BUSINESS MANAGEMENT MINOR ..... 19

## MARKETING MINOR

## REQUIREMENTS FOR A MINOR IN MARKETING:

A student majoring in any discipline other than Business Administration may complete a minor in Marketing upon satisfactorily completing the following requirements:

| **Econ 266S Principles of Economics | 4 |
| :---: | :---: |
| BA 101 Business World | 4 |
| BA 340 Marketing | 4 |
| Subtotal | 12 |
| Minimum of eight (8) hours selected from the following: |  |
| BA 240 Business Creativity and Innovation | 2 |
| BA 339 Selling | 3 |
| BA 342 Retailing | 3 |
| BA 344 Advertising | 3 |
| BA 346 Managing Customer Value | 4 |
| BA 347 Consumer Behavior | 3 |
| BA 348 Public Relations | 3 |
| BA 356 Business of Gaming | 4 |
| BA 372W Global Business Seminar | 4 |
| BA 390 Special Topics in Marketing | 1-4 |
| BA 439 Marketing and Management of Services | 4 |
| BA 445W Marketing Strategy and Policy | 4 |
| BA 446W Marketing Research | 4 |
| Subtotal | 8-9 |
| TOTAL REQUIREMENTS FOR MARKETING MINOR | 20-21 |

## CHEMISTRY

Course listings for Chemistry begin on page 123.
Department Chair - Ron C. Estler
Professors - William R. Bartlett, Ron C. Estler, Robert E. Milofsky and Leslie E. Sommerville
Assistant Professors - Cindy C. Browder and Monte Helm
Chemists are concerned with the structure, composition, energy relationships, chemical conversions, and other properties of substances. Fields such as environmental analysis, biotechnology, material science, semiconductors, waste management, pollution control, energy research and production, forensic science and pharmaceuticals all rely on chemists. In fact, the various areas of chemical and biochemical technology offer the largest field of employment in the physical sciences.

The chemistry curriculum provides modern chemical skills and knowledge to students preparing for careers in these and other areas. Many students continue their studies in professional or graduate programs, while others start technical careers immediately after graduation. Chemistry graduates will find additional applications for their training in the fields of education, business, industry, law, government, and medicine.

Three major options within the American Chemical Society accredited Chemistry Department meet a variety of student interests as well as professional and industry demands.

The Chemistry option prepares students for professional work in various areas of applied chemistry, for admission to graduate programs in chemistry, or for interdisciplinary careers in the environmental or medical fields.

The Biochemistry option prepares students for graduate programs in biochemistry or for employment in the rapidly expanding biotechnology field. Both options are appropriate preparations for health careers or graduate studies.

The Chemistry for Secondary Teachers option prepares students for teaching science at the secondary or elementary levels, with an emphasis on chemistry. This option is not recommended for students interested in graduate programs in chemistry or biochemistry or employment in related industries.

The Chemistry Department also offers certification by the American Chemical Society (ACS) to students completing the specific requirements of the ACS-certified curriculum. ACS certification requires coursework above and beyond that of any of the three major options. Students interested in ACS certification should consult with the faculty of the Chemistry Department.

Appropriate preparation for graduate or professional school often involves advanced elective coursework. Students planning on graduate studies in chemistry, biochemistry, or related fields should consult with the chemistry faculty in planning their coursework. Students planning on professional
studies in pharmacy, medicine, dentistry, physical therapy, nursing, or veterinary medicine should consult with the chemistry faculty and the Pre-Health committee when planning their studies. (See "Health Careers Program Options" section of this catalog.)

A minor in chemistry is available for students majoring in other disciplines. Requirements for a minor in chemistry are listed at the end of this section.

## CHEMISTRY - CHEMISTRY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY CHEMISTRY OPTION:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
${ }^{* *}$ Chem 150 Nx Fundamentals of Chemistry I 4
**Chem 151Tx Fundamentals of Chemistry II 4
Chem 250 Organic Chemistry I 4
Chem 251 Organic Chemistry II 4
Chem 300W At the Forefront of Chemical Research 3
Chem 311 General Biochemistry I 3
Chem 356 Physical Chemistry I 3
Chem 357 Physical Chemistry II 3
Chem 360 Physical Measurements 2
Chem 363 Inorganic Chemistry 3
Chem 365 Analytical Chemistry 4
Chem 465 Instrumental Analytical Chemistry 4
Chem 496 Senior Seminar 1
Chem 497 Senior Seminar 1
Subtotal Specific Departmental Requirements 43
Auxiliary Requirements for Other Departments:
${ }^{* *}$ Math $221 Q-* * 222$ Calculus I and II
**Phys 217 Tx Physics for Science and Engineering I
(preferred)
OR
Phys 201 College Physics I
AND
Phys 218 Physics for Science and Engineering II (preferred) 5
OR
Phys 202 College Physics II
4
Subtotal Auxiliary Requirements
16-18
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## CHEMISTRY - BIOCHEMISTRY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY BIOCHEMISTRY OPTION:

General Education ..... 35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.
Specific Departmental Requirements:
**Chem 150Nx Fundamentals of Chemistry I ..... 4
**Chem 151Tx Fundamentals of Chemistry II ..... 4
Chem 250 Organic Chemistry I ..... 4
Chem 251 Organic Chemistry II ..... 4
Chem 300W At the Forefront of Chemical Research ..... 3
Chem 311 General Biochemistry I ..... 3
Chem 312 General Biochemistry Lab ..... 1
Chem 313 General Biochemistry II ..... 3
Chem 356 Physical Chemistry I ..... 3
Chem 357 Physical Chemistry II ..... 3
Chem 360 Physical Measurements ..... 2
Chem 363 Inorganic Chemistry ..... 3
Chem 365 Analytical Chemistry ..... 4
Chem 496 Senior Seminar ..... 1
Chem 497 Senior Seminar ..... 1
Subtotal Specific Departmental Requirements ..... 43
Auxiliary Requirements from Other Departments:
**Math 221Q-**222Q Calculus I and II ..... 8
Bio 113 Introduction to Molecular and Cellular Biology ..... 4
**Phys 217Tx Physics for Science and Engineering I (preferred ) ..... 5OR
Phys 201 College Physics I ..... 4
Phys 218 Physics for Science and Engineering II(preferred) ..... 5
OR
Phys 202 College Physics II ..... 4
Choose one from the following:
Bio 321 General Physiology ..... 4
Bio 331 Microbiology ..... 4
Bio 260 Genetics ..... 4
Bio 455 Cell and Molecular Biology ..... 4
Subtotal Auxiliary Requirements ..... 24-26
Note: For Biochemistry majors, the Biology Department waives Bio 112 N as a prerequisite for Bio 113 and has made Bio 113 the only prerequisite for the upper-division courses listed above.
Note: Students double majoring in Chemistry-Biochemistry and Biology-
Cellular and Molecular Biology may take the senior seminar sequence in either chemistry (Chem 496 and 497) or biology (Bio 496 and 497); they may take the writing class in either chemistry (Chem 300W) or biology (Bio 380 W ); these students do not have to take both senior seminar sequences or both writing classes.
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION

## CHEMISTRY - CHEMISTRY FOR SECONDARY TEACHERS OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY CHEMISTRY FOR SECONDARY TEACHERS OPTION:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TSI or $Q$ requirements.

Specific Departmental Requirements:
**Chem 123T Chemistry for Consumers OR
**Chem 323T Chemistry for Consumers 3
**Chem 150Nx Fundamentals of Chemistry I 4
**Chem 151Tx Fundamentals of Chemistry II 4
**Chem 125N Environmental Chemistry 4
Chem 250 Organic Chemistry I
Chem 251 Organic Chemistry II
Chem 300W At the Forefront of Chemical Research
Chem 311 General Biochemistry I
Chem 365 Analytical Chemistry
Chem 496 Senior Seminar
Chem 497 Senior Seminar
Choose one from the following:
Chem 356 Physical Chemistry I
Chem 363 Inorganic Chemistry
3

Subtotal Specific Departmental Requirements38

Auxiliary Requirements from Other Departments:
${ }^{* *}$ Geol 107Nx Earth Systems Science4
${ }^{* *}$ Math 221Q Calculus I 4
Phys 201-202 College Physics I and II
**Bio 112N Intro to Organismic and Evolutionary Biology
**ED 200R Intro to Education in America
**ED 210S Culture of Childhood and Youth4ED 421 Individualized Instruction in a Pluralistic Society6
ED 424 Language and Math Literacy ..... 4
ED 495 Student Teaching ..... 15
Subtotal Auxiliary Requirements ..... 53

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## CHEMISTRY MINOR

## REQUIREMENTS FOR A MINOR IN CHEMISTRY:

**Chem 150Nx Fundamentals of Chemistry I ..... 4
**Chem 151Tx Fundamentals of Chemistry II ..... 4
Chem 365 Analytical Chemistry ..... 4
Chem 250 Organic Chemistry IOR
Chem 363 Inorganic Chemistry ..... 3-4
Choose one of the following:
Chem 305 Natural Products from Plants ..... 3
Chem 311 General Biochemistry I ..... 3
Chem 356 Physical Chemistry I ..... 3
TOTAL REQUIRED FOR CHEMISTRY MINOR ..... 18-19

## THE ACS-CERTIFIED BACHELOR OF SCIENCE DEGREE

Chemistry majors may qualify for certification by the American Chemical Society (ACS) upon graduation by successfully completing a core of specified courses in chemistry and related fields. This program is particularly recommended for students planning to seek employment in industry. The ACS certification of the Fort Lewis College degree requires an extension of the degree requirements given above. Students will need to consult with their advisor to carefully plan their schedules to meet these requirements.

Students planning to earn an advanced degree in chemistry, engineering, medicine, or other science-based postgraduate program for the purpose of teaching or research are encouraged to extend the basic Chemistry major by including three or four additional courses in biology, chemistry, mathematics, or physics. These courses should be selected in consultation with the Chemistry faculty.

Chemistry majors are also encouraged to study a foreign language.

## CHEMISTRY MAJOR FOR CAREERS IN THE HEALTH PROFESSIONS

Chemistry majors are well prepared to seek admission to professional programs in law, medicine, veterinary medicine, dentistry, physical therapy, medical technology, and pharmacy. For assistance in planning their curricula, students interested in these programs should consult with members of the Chemistry faculty who are members of the Pre-Professional Advisory Committee. (See "Health Careers Program Options" section of this catalog, page 69.)

## COMPUTER SCIENCE

 INFORMATION SYSTEMS(CSIS)

Course listings for CSIS begin on page 126.

Coordinator - Evans J. Adams
Professors - Evans J. Adams and Lawrence S. Corman
Associate Professor - Aaron Gordon
Assistant Professor - Brian Hanks
Visiting Instructor - Greg Butler

The interdisciplinary major leading to the Bachelor of Arts degree in Computer Science Information Systems (CSIS) combines the fields of computer science (the science of creating computer software) and information systems (the application of computer soffware). The program emphasizes breadth of knowledge and the development of written and oral communication skills, which are trademarks of a liberal arts education, combined with professional competence in computer science and/or information systems. The student specializes in one of these fields by choosing the Computer Science Option or the Information Systems option described below.

The primary objectives of the curriculum are to ensure that every graduate is thoroughly familiar with the fundamental principles of modern computer science and information systems; understands how these principles relate to soffware, hardware, and system design; and is familiar with at least one significant area of applications of computers. Other major objectives include: providing graduates with the ability to understand a variety of problem-solving algorithms; familiarity with several programming languages for implementing these algorithms; understanding of hardware and/or soffware systems; the ability to make informed choices of software and hardware for a variety of problems; and an understanding of the role that human factors play in implementing computerbased systems.

Computer Science generally refers to the application of scientific and engineering principles to the development of software products. Students choosing the Computer Science option will receive training far beyond the ability to write programs that work. Software engineers must construct program systems that work efficiently and are comprehensible so that modification can be performed effectively when required. Software maintenance is as much a part of soffware engineering as the creation of new soffware.

Selection of the Information Systems option generally leads to a career as a systems analyst, information system manager, or soffware project manager. These positions are responsible for choosing the right hardware and software for a particular data-processing problem and for organizing the database in a suitable form. A significant portion of the courses for this option also will address the concepts of software engineering and software project management as they apply to the development of large-scale software systems. A growing number of systems analysts also design and maintain computer networks.

## COMPUTER SCIENCE AND INFORMATION SYSTEMS COMPUTER SCIENCE OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR OF CSIS - COMPUTER SCIENCE OPTION:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
CSIS 110 Introduction to Programming (Java) 4
CSIS 230 Object-Oriented Programming 4
CSIS 305 Discrete Structures 4
CSIS 310 Data Structures 4
CSIS 321 Computer Architecture and Organization 4
CSIS 360 Soffware Engineering 1:Systems Analysis 4
CSIS 361W Computers and Human Issues 4
CSIS 370 Software Engineering 2: Systems Design 4
CSIS 421 Operating Systems 4
CSIS 496 Senior Seminar 2
CSIS Electives:
Three additional CSIS courses over 300 level 12
Subtotal Specific Departmental Requirements 50
Auxiliary Department Requirements:
**Math 201Q Elementary Statistics 4
**Math 221Q Calculus I 4
**Math 222Q Calculus II
OR
**Math 311Q Matrices \& Linear Algebra 4
Subtotal Auxiliary Requirements 12
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## COMPUTER SCIENCE AND INFORMATION SYSTEMS INFORMATION SYSTEMS OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR OF CSIS - INFORMATION SYSTEMS OPTION:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements

Specific Departmental Requirements:
CSIS 105 The Computer as a Tool 4
CSIS 106 Introduction to Programming in Visual Basic
CSIS 110 Introduction to Programming (Java)
CSIS 206 Advanced Programming in Visual Basic
CSIS 350 Database Management Systems
CSIS 360 Software Engineering I: Systems Analysis
CSIS 361W Computers and Human Issues
CSIS 370 Software Engineering II: Systems Design
CSIS 496 Senior Seminar
4

CSIS Electives:
Three additional upper level CSIS courses 12
(CSIS 230 may substitute for one)
Subtotal Specific Departmental Requirements
46

Auxiliary Department Requirements:
**Math 201Q Elementary Statistics
OR
**BA 253Q Business Statistics 4
**Math 210Q Survey of Calculus 4
BA 353 Operations Management 4
Subtotal Auxiliary Requirements12

Free Electives (variable)

TOTAL REQUIRED FOR GRADUATION

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

As part of the general electives requirement for graduation, students majoring in CSIS are strongly encouraged to complete a minor (or the equivalent of a minor) in any field of study offered Fort Lewis College. By doing so, the student will solidity his/her liberal arts education and be prompted to pay close attention to career planning during the last two years of study. The choice of the minor should be discussed with the student's CSIS advisor.

## COMPUTER SYSTEMS SCIENCE INFORMATION MINOR

## REQUIREMENTS FOR A MINOR IN COMPUTER SCIENCE INFORMATION SYSTEMS:

Choose one of the following two sequences:
CSIS 110 Introduction to Programming (Java) ..... 4
CSIS 230 Object-Oriented ProgrammingOR
CSIS 106 Intro to Programming in Visual Basic ..... 4
CSIS 206 Advanced Programming in Visual Basic ..... 4
Three additional CSIS courses, at least 2 of which are numbered above 300 ..... 12
TOTAL REQUIRED FOR CSIS MINOR ..... 20
CRIMINOLOGY MINOR(See page 95.)


## ENGINEERING

Course listings for Engineering begin on page 132.
Department Chair - Gerald Crawford
Professors - Gerald Crawford, Omnia I. El-Hakim and Donald R. May Assistant Professor - Laurie Williams

The Engineering program at Fort Lewis College is designed to meet the needs of those students who are interested in obtaining an engineering degree, but prefer to complete their first two years of study at a small college with a liberal arts emphasis. After completing a requisite block of courses that includes engineering, mathematics, the sciences, and the humanities, students are eligible for full junior standing at one of the institutions with which Fort Lewis College maintains a transfer agreement. Or, the student may choose to apply to any other degree- granting engineering program as a normal transfer student.

Fort Lewis College participates in formal engineering transfer agreement programs with Colorado State University (CSU) at Fort Collins, Colorado School of Mines (CSM) at Golden, the University of Colorado (CU) at Boulder, Colorado State University at Pueblo, the University of New Mexico (UNM) at Albuquerque, and New Mexico State University (NMSU) at Las Cruces.

Under these block-transfer agreements, the student completes the prescribed sequence of courses listed below, in residence at Fort Lewis College. Successful completion of this sequence with the required minimum grade point average (GPA) is sufficient for the collective transfer of these courses to the cooperating institution with full junior standing. For those students who can take calculus their first term, the blocktransfer sequence may be completed in two years of residence at Fort Lewis College. For detailed information about specific agreements and programs, students should consult with an engineering advisor.

Required minimum GPAs by school:

- Colorado State University - 2.5
- Colorado School of Mines - 2.5
- University of Colorado - 2.75
- Colorado State University at Pueblo-2.5 (Industrial Engineering only)
- University of New Mexico - 2.25 (Completion of an additional 18 technical hours with a grade point of at least 2.5 is required.)
- New Mexico State University - 2.75 (Regular admission), 2.0-2.75 (Provisional admission) - must establish a minimum GPA at NMSU, depending on the major.)

Note:

1. Only those courses in which a student received a grade of C or higher will transfer.
2. The GPA requirements can change without notice, and those listed in this catalog may not be current and should be used as a general guide only. Check with your advisor for current GPAs.

Although the above plans pertain specifically to the agreements with the schools listed above, the courses offered are ordinarily accepted for credit for comparable courses at other degree-granting engineering institutions. In addition, the engineering courses are offen used by students in planning student-constructed majors at Fort Lewis College. Studentconstructed majors using the engineering courses are available in conjunction with physics, geology, mathematics, and other disciplines. The student should consult with his or her advisor and the Academic Advising Center if interested in a student-constructed major.

## ENGINEERING-RELATED DEGREES

Two engineering-related degrees are offered at Fort Lewis College. The first is the Engineering Physics option in Physics. This program offers a combination of physics and engineering courses resulting in a BS degree in Physics. This program is accredited as an engineering program by the Accreditation Board for Engineering and Technology (ABET). For more information please see the Physics section of this catalog. The second is a cooperative effort between the Engineering program and the School of Business Administration resulting in a four-year degree program in Engineering Management. For more information, please see the Business Administration section of this catalog.

Students who are interested in obtaining a mathematics degree in addition to an engineering degree may wish to pursue a " $3-2$ " program. The student attends Fort Lewis College for six terms (equivalent to three academic years) and the cooperating institution for two academic years. During residence at Fort Lewis College, the student completes the requirements for the basic engineering core and most of the requirements for a mathematics major. At the cooperating institution the student completes the remaining requirements for a Bachelor of Arts degree in Mathematics awarded by Fort Lewis College, and the requirements for an engineering degree from the cooperating institution.

A minor in engineering is available for students majoring in other disciplines. Requirements for a minor in engineering are listed at the end of this section.

The Engineering program is supported by Fort Lewis College's modern computer facilities. Registered students may use any of the student computing labs, which are generally open seven days a week. These facilities include PC and Macintosh computers and laser printers. Internet connectivity is provided through the campus network; modem access is also available.

The transfer agreements listed below can change without notice and may not be current. They should be used as a general guide only. Check with your advisor for current transfer agreement information.

## CSU TRANSFER AGREEMENT

Common courses required of most students:
Engr 104 Computer Prog. for Scientists and Engineers 3
Engr 105* Engineering Principles 3
Engr 217 Statics
3
Engr 221* Dynamics
Engr 270* Engineering Thermodynamics 3
Comp 150 Reading and Writing in College 4
Math 221Q, 222Q, 223Q Calculus I, II, II 12
Math 327Q Differential Equations 4
Phys 217Tx, 218 Physics-Science and Engineering I, II 10
**Chem 150Nx, 151Tx* Fundamentals of Chemistry 8
Humanities and Social Science Electives 6
PE Act Physical Activities 2
*Electrical Engineering majors take Engr 238, Engr 201, Engr 202, and Econ 266 S instead. Additional courses may be required for specific majors (see an Engineering advisor).

## CSM TRANSFER AGREEMENT

## Specific courses required of all students:

Math 221Q, 222Q, 223Q Calculus I, II, III 12
Math 327Q Differential Equations 4
Engr 104 Computer Prog. for Scientists and Engineers 3
Engr 217 Statics 3
${ }^{* *}$ Chem 150Nx, 151Tx Fundamentals of Chemistry 8
Geol 113Tx Physical Geology and Lab 4
Phys 217Tx, 218 Physics-Science and Engineering I, II 10
Econ 266S Principles of Economics 4
PE Act Physical Activities 2
Humanities and Social Science Electives 9

| Additional course(s), depending on the intended | maior, selected from: |
| :--- | :---: |
| Engr 103 Computer Aided Drafting | 3 |
| Engr 201,202 Electric Networks I, II | 8 |
| Engr 205 Surveying I | 4 |
| Engr 221 Dynamics | 3 |
| Engr 270 Engineering Thermodynamics | 3 |
| Engr 317 Mechanics of Materials | 3 |
| Engr 321 Fluid Mechanics | 3 |
| Geol 114 Historical Geology and laboratory | 4 |
| Math 311Q Marrices and Linear Algebra | 4 |
| Math 320Q Numerical Analysis | 3 |
| Chem 357 Physical Chemistry | 3 |
| Phys 320 Modern Physics | 3 |
| Chem 250 Organic Chemistry I | 4 |
| Chem 251 Organic Chemistry II | 4 |

## CU TRANSFER AGREEMENT

Common courses required of most students:
Engr 104 Computer Prog. for Scientists and Engineers 3
Engr 217* Statics 3
Math 221Q, 222Q, 223Q Calculus I, II, III 12
**Chem 150Nx Fundamentals of Chemistry 4
Phys 217Tx, 218 Physics-Science and Engineering I, II 10
Humanities and Social Sciences Electives 6-9
*Electrical, Electrical and Computer Engineering majors take
Engr 238, Engr 201, Engr 202 instead.
Additional courses are required for specific majors (see an Engineering advisor).

## UNM TRANSFER AGREEMENT

Common courses required of most students: ..... 4
Math 221Q, 222Q, 223Q Calculus I, II, III ..... 12
**Chem 150Nx, 151Tx Fundamentals of Chemistry ..... 8
Engr 103 Computer Aided Draffing ..... 3
Engr 104 Computer Prog for Scientists and Engineers .....
Phys 217Tx, 218 Physics-Science and Engineering I, II ..... 10
Engr 201 Electric Nełworks ..... 4
Math 327Q Differential Equations ..... 4
PE Act Physical Activities ..... 2
Minimum of 15 additional credits, depending on major, selected from:
Engr 202 Electric Networks II ..... 4
Engr 205, 305 Surveying I, II ..... 8
Engr 217 Statics ..... 3
Engr 221 Dynamics ..... 3
Engr 238 Digital Logic Design ..... 4
Engr 270 Engineering Thermodynamics ..... 3
Engr 317 Mechanics of Materials ..... 3
Engr 321 Fluid Mechanics ..... 3
Phys 320 Modern Physics ..... 3
Math 311 Q Matrices and Linear Algebra ..... 4
CSIS 230 Object-Oriented Programming in C++ ..... 4
Chem 250, 251 Organic Chemistry I, II ..... 8
Econ 266S Principles of Economics ..... 4
Bio 110 N Modern Biological Issues ..... 4
Bio 207 General Zoology ..... 4
Humanities and Social Science Electives
CSU AT PUEBLO TRANSFER AGREEMENT FOR INDUSTRIAL ENGINEERING
Engr 103 Computer Aided Draffing ..... 3
Engr 104 Computer Prog. for Scientists and Engineers ..... 3
Engr 105 Engineering Principles ..... 3
Engr 201 Electric Networks I ..... 4
Engr 217 Statics ..... 3
Engr 270 Engineering Thermodynamics ..... 3
Engr 317 Mechanics of Materials ..... 3
Math 221Q, 222Q Calculus I, II ..... 8
4
Math 327Q Differential Equations ..... 4
**Chem 150Nx, 151Tx Fundamentals of Chemistry ..... 8
Humanities and Social Sciences Electives ..... 3
NMSU TRANSFER AGREEMENT
Common courses required of all students:
Comp 150 Reading and Writing in College ..... 4
Math 221Q, 222Q, 223Q Calculus I, II, III ..... 12
${ }^{* *}$ Chem 150 Nx Fundamentals of Chemistry ..... 4
Phys $217 \mathrm{Tx}, 218$ Physics-Science and Engineering I, II ..... 10
Engr 103 Computer Aided Drafting ..... 3
Engr 104 Computer Prog. for Scientists and Engineers ..... 3
Engr 101 Engineering Principles ..... 3
Engr 217 Statics ..... 3
Engr 221 Dynamics ..... 3
Engr 270 Engineering Thermodynamics ..... 3
Econ 266S Principles of Economics ..... 3
Humanities and Social Science Electives ..... 9

## ENGINEERING MINOR

Course listings for Engineering Minor begin on page 132.

## REQUIREMENTS FOR A MINOR IN ENGINEERING:

Engr 104 Computer Prog. for Scientists and Engineers 3
Engr 105 Engineering Principles 3
Engr 217 Statics
Plus three additional Engineering courses numbered 200 or above.

TOTAL REQUIRED FOR ENGINEERING MINOR


## ENGLISH

Course listings for English begin on page 133.
Department Chair - Gordon P. Cheesewright
Professors - Gordon P. Cheesewright, Larry K. Hartsfield and Mary Jean Moseley
Associate Professors - Jennie C. Dear, Jennifer A. Gehrman, Michele M.
Malach, Faron L. Scott and Delilah G. Orr
Assistant Professors - Bradley P. Benz, Nancy K. Cardona, Shawn Fullmer and
Kurt W. Lancaster
The work offered in English deals with several aspects of liberal education: the linguistic and literary history of Western culture; selected studies in non-Western literature in translation; human values; the relationships between cultures in the Southwest; and written and oral communication, both utilitarian and creative.

Students with other majors find the courses in English valuable for their general educational development. In addition, the English Department offers supporting courses for the Southwest Studies major, the Humanities major, and other courses in intercultural studies.

English advisors can help students plan courses of study preparing them for graduate or professional school; careers in business, industry, or government; careers in communications, theatre, or teaching.

The English major has four options:
The General option: A traditional English major; preparation for graduate or professional school.

The Communications option: An English major with an emphasis on mass media theory and practice; preparation for graduate school or industry.

The English Education option: Preparation for secondary school teaching.

The Writing option: An English major with an emphasis on writing; preparation for graduate school and writing-related careers.

Minors in Communications, Literature and Writing are available for students majoring in other disciplines. Requirements for these minors are described at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENGLISH - GENERAL OPTION:

## General Education

$35-46$
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
Choose one from the following six courses:
4
**Engl 174R African-American Literature
**Engl 175R Women's Literature
**Engl 176R Native American Literature
**Engl 177R U.S. Latina/o Literature
**Engl 221R Classical Literature
**Engl 280R Literature of the Southwest
Engl 268W Reading Texts/Writing Texts 4
**Engl 230R Survey of British Literature
**Engl 240R Survey of American Literature
Engl 320 The Novel
4

Choose one of the following three courses:
Engl 315 Media Writing: Topics
Engl 363 Advanced Composition
Engl 464 Creative Writing
Engl 432 Shakespeare
4
Choose one of the following two courses:
4
Engl 461 History of the English Language
Engl 462 Linguistics
Choose one Topics course in British literature from:
Engl 340, 341, 430
4

Choose one Topics course in American Literature from:
Engl 345, 346, 380
Choose one additional Topics course from:
Engl 315, 317, 341, 345, 346, 380, 417,
$423,424,430,461,462,477$, Thea 340W, 381
Engl 496 Senior Seminar
Note: Engl 499 cannot replace Engl 496.
Subtotal Specific Departmental Requirements

## 48

Auxiliary Requirements:
Two semesters of one college-level modern language
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

ENGLISH - COMMUNICATIONS OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENGLISH COMMUNICATIONS OPTION:

General Education35-46See page 25 for General Education requirements.** Courses marked with double asterisks may also be counted toward TS1 or$Q$ requirements.
Specific Departmental Requirements:
**Engl 116T Introduction to Mass Communications ..... 4
Choose one of the following six courses: ..... 4
**Engl 174R African-American Literature
**Engl 175R Women's Literature
**Eng 176R Native American Literature
**Engl 177R U.S. Latina/o Literature
**Eng 221R Classical Literature
**Engl 280R Literature of the Southwest
Engl 215 News Media Writing ..... 4
Choose one of the following two courses: ..... 4${ }^{* *}$ Engl 230R Survey of British Literature**Engl 240R Survey of American Literature
Engl 268W Reading Texts/Writing Texts ..... 4
Choose one of the following two courses: ..... 4
Engl 304 Digital Video ProductionEngl 306 Radio Broadcasting
Choose one of the following three courses: ..... 4
Engl 315 Media Writing: TopicsEngl 363 Advanced CompositionEngl 464 Creative Writing
Engl 416 Media Theory and Criticism4Choose two Topics courses from the following:Engl 315 (excluding 315 if used to satisfy othermajor requirements), 317, 320, 340, 341, 345,$346,380,417,423,424,430,477$, Thea $340 \mathrm{~W}, 381$8
At least four credits from:
Engl 250/350 Practicum - Newspaper
Engl 251/351 Practicum - RadioEngl 404 Advanced Video Production4
(Note: Students are allowed a maximum of 18 credits toward graduation in practicum courses in any combination of the following: Engl 250/251 up to 6 credits and Engl 350/351 up to 12 credits.)

Engl 496 Seminar
4
Note: Engl 499 cannot replace Engl 496.
Subtotal Specific Departmental Requirements
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENGLISH ENGLISH EDUCATION OPTION:

## General Education

See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
**Engl 116T Introduction to Mass Communications 4
Choose one Literature course from the following: 4
Engl ${ }^{* *} 174 \mathrm{R},{ }^{* *}$ 175R, ${ }^{* *}$ 176R, ${ }^{* *}$ 177R,
**221R, **280R
**Engl 230R Survey of British Literature 4
**Engl 240R Survey of American Literature 4
Engl 268W Reading Texts/Writing Texts 4
Engl 366 Teaching Writing 4
Choose one Topics course from the following': 4
Engl 317, 320, 340, 341, 345, 346, 380,
417, 423, 424, 430, 477
Engl 378 Young Adult Literature 4
Engl 432 Shakespeare 4
Engl 461 History of the English Language 4
Engl 462 Linguistics 4
Engl 483 Methods and Materials for Teaching High School English

4
Engl 496 Senior Seminar 14
Note: Engl 499 cannot replace Engl 496.
Subtotal Specific Departmental Requirements
Writing Course Within Discipline:
Included in Specific Departmental Requirements above.
Auxiliary Requirements:
Two semesters of one college-level modern language ${ }^{1}$ 6-8
'A teacher-candidate who holds a Bachelor of Arts or a Bachelor of Science degree from any institution other than Fort Lewis College is exempt from this requirement.

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## ENGLISH - WRITING OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENGLISH WRITING OPTION:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:

Choose one of the following six courses:
**Engl 174R African-American Literature
**Engl 175R Women's Literature
**Engl 176R Native American Literature
**Engl 177R U.S. Latina/o Literature
**Engl 221R Classical Literature
**Engl 280R Literature of the Southwest
Engl 215 News Media Writing 4
Choose one of the following two courses: 4
**Engl 230R Survey of British Literature
**Engl 240R Survey of American Literature
Engl 267: Persuasion: Hist, Theo, Prac 4
Engl 268W Reading Texts/Writing Texts 4
Engl 273: Intro to Literary Types 2
Engl 315: Media Writing Topics 4
Engl 363: Advanced Composition 4
Engl 464: Creative Writing 4
Choose two courses from the following: 8
$317,320,340,341,345,346,366,378,380,416,417$,
$423,424,430,432,461,462,477$
Engl 496 Seminar
4
Note: Engl 499 cannot replace Engl 496.
Subtotal Specific Departmental Requirements
46
Free Electives (variable)
(English advisors can help students select courses which will further strengthen their individual career goals.)

TOTAL REQUIRED FOR GRADUATION
120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## COMMUNICATIONS MINOR

## REQUIREMENTS FOR A MINOR IN COMMUNICATIONS:

This minor requires 22-24 credit hours.
The following courses are required:
**Engl 116T Introduction to Mass Communications 4
Engl 215 News Media Writing 4
Engl 304 Digital Video Production
OR
Engl 306 Radio Broadcasting 4
Engl 315 Media Writing: Topics
OR
Engl 363 Advanced Composition
Engl 416 Media Theory and Criticism 4
Two or four credits from:
Engl 250/350 Practicum-Newspaper OR
Engl 251/351 Practicum-Radio
OR
Engl 404 Advanced Video Production 2-4
TOTAL REQUIRED FOR COMMUNICATIONS MINOR

## LITERATURE MINOR

## REQUIREMENTS FOR A MINOR IN LITERATURE:

This minor requires 20 credit hours.
The following three courses are required:
**Engl 230R Survey of British Literature
**Engl 240R Survey of American Literature
Engl 432 Shakespeare
Plus, two upper-division literature courses
selected from the following:
Engl 320 The Novel
Engl 340 19th Century British Literature: Topics
Engl 341 Early Modern Literature: Topics
Engl 345 American Literature: Topics I
Engl 346 American Literature: Topics II
Engl 380 Native American Literature: Topics
Engl 423 Genres: Topics
Engl 424 Comparative Literature: Topics
Engl 430 Medieval Literature and Chaucer: Topics
Engl 477 20th Century Literature: Topics
TOTAL REQUIRED FOR LITERATURE MINOR

## WRITING MINOR

## REQUIREMENTS FOR A MINOR IN WRITING:

This minor requires 16 credit hours.<br>The following course is required:<br>Engl 267 Persuasion: History, Theory \& Practice<br>4<br>Plus, three writing courses selected from the following:<br>Engl 215 News Media Writing<br>Engl 315 Media Writing: Topics<br>Engl 363 Advanced Composition<br>Engl 366 Teaching Writing<br>Engl 464 Creative Writing

TOTAL REQUIRED FOR WRITING MINOR

## ENVIRONMENTAL POLICY MINOR

Coordinator - Mark Seis, Associate Professor of Sociology

Advisors:
Professors - Reyes R. Garcia (Philosophy) and Leslie E. Sommerville (Chemistry)
Associate Professors - Robert R. Bunting (Southwest Studies and History), Gary Gianniny (Geosciences), David Kozak (Anthropology), Alane Brown (Psychology) and Mark Seis (Sociology/Human Services)
Assistant Professors - Julie Korb (Biology)
Environmental Policy takes a trans-disciplinary approach to the study of broad-based environmental issues, from the point of view of the sciences and areas of humanities, social sciences, and policy. Students of any major can complement their course of study and demonstrate their commitment to environmental concerns by completing this minor. Additional goals for the Environmental Policy minor include providing information to students who may desire post-graduate training in an area of environmental concern and advising by Environmental Policy advisors about career and graduate school opportunities. Courses in the science area or courses that could fulfill general requirements are recommended to the student who wishes to pursue this minor. It is the spirit of this minor to provide students with a breadth of experience across various departments. Students are strongly encouraged to work closely with their advisors to choose courses that complement their major area of specialization.

Students interested in completing the minor should contact the coordinator, Mark Seis, as soon as possible so they can learn about campus events, new courses, internships, and practicum opportunities relevant to the minor.

There are three components to the minor:

1) Students select 18 hours from a list of existing courses representing the spectrum of perspectives on environmental issues (see below). A maximum of four credits can be applied toward the minor from an Independent Study, Internship, Innovative Month, or Practicum with the prior approval of the coordinator.
2) Students must also take a statistics course and at least two lab science courses; these are listed as auxiliary requirements (see below) and may be used to meet major requirements as well as the minor. In addition, two courses must be taken outside the departments of Agriculture, Biology, Chemistry, Geosciences, and Physics/Engineering.
3) Finally there is an integrative capstone course, GS 495, taken in the junior or senior year in which students and faculty of varied backgrounds come together to work on joint projects related to local, regional, or national environmental concerns.

## REQUIREMENTS FOR THE ENVIRONMENTAL POLICY MINOR:

Specific Requirements:

1. GS 495 Environmental Colloquium

4
2. 18 hours of additional credit chosen from the list below, at least nine hours of which must be upper-division credits. No more than 4 credits from Independent Study, Internship, Innovative Month, or Practicum are allowed without prior approval of coordinator. It is the spirit of this minor to provide students with a breadth of experience across various departments. Students are strongly recommended to work closely with their advisor to choose courses that complement their major area of specialization. NOTE: NO MORE THAN ONE COURSE FROM YOUR MAJOR DEPARTMENT WILL COUNT TOWARD THIS MINOR.

List of possible courses for the minor (the prerequisites for each selected course must also be taken):
** Courses marked with double asterisks may also be counted toward TS1 requirements.
Agriculture:Ag 301 Range Management4
Anthropology:
Anth 225 Introduction to Population Issues ..... 1
Anth 356 Ecological Anthropology ..... 4
Biology:
**Bio 125Nx Conservation Biology ..... 4
**Bio 141N Global Ecological Issues ..... 3
Bio 220 Fundamentals of Ecology ..... 4
Bio 471 Field Ecology ..... 5
Chemistry:
**Chem 123T Chemistry for Consumers ..... 3
**Chem 323T Chemistry for Consumers ..... 3
Economics:Econ 335 Environmental Economics4
Engineering:
Engr 205 Surveying I ..... 4
Geography:
${ }^{* *}$ Geog 271R World Geography ..... 3
Geog 320Natural Regions of North America ..... 3
Geology:
Geol 325 Introduction to Remote Sensing ..... 3
Geol 401 Natural Resources and the Environment ..... 3
Philosophy:
**Phil 252N Environmental Ethics ..... 4
Phil 352 Ecology and Morality ..... 3
Physics:
Phys 400 Science and Human Values ..... 2
Political Science:
**PS 205N Environmental Politics ..... 3
Sociology:
Soc 310 Ecology and Society ..... 4
Soc 311 Ecology and Society Field School ..... 8
Southwest:**SW 181N U.S/Southwest Environmental History3
Thematic Studies:
TS2N 406 Water in the West ..... 4
TS2T 402 Ag Issues in Society ..... 3

Relevant courses from a variety of disciplines may also be offered as 190, 390, 191, or 391 courses. See the Environmental Policy coordinator and/or advisors about current offerings that could be applied toward a minor in Environmental Policy. PRIOR APPROVAL FROM COORDINATOR OF THE ENVIRONMENTAL POLICY MINOR MUST BE OBTAINED IN ORDER TO HAVE THESE COURSES INCLUDED AS PART OF THE MINOR. Additional courses may be added to this list from time to time; consult the environmental policy coordinator for current listings.

Auxiliary Requirements:

1. One course in statistics (choose from **Psych $241 \mathrm{Q},{ }^{* *}$ Math 201Q, ${ }^{* *}$ BA 253Q).
2. Two laboratory science courses, which may be taken as part of the major.

## EXERCISE SCIENCE

Course listings for Exercise Science begin on page 136.
Department Chair - Paul W. Petersen
Professors - Paul W. Petersen
Associate Professors - Mary Ann Erickson, Melissa Knight-Maloney and JoAnn C. Soignier
Assistant Professors - Robert W. Brooks, James S. Cross, Marcelyn B. Jung, Carrie Meyer and Cathy M. Simbeck
Instructors - Wayne Barger and Andrew Vanous

## DEPARTMENTAL MISSION

The Exercise Science department aims to meet the needs of its graduates to function more efficiently as professionals in the discipline and to compete more favorably in today's job market by providing students with a variety of opportunities to develop a scientific knowledge base; engage in practical experiences; and learn, develop and master social and leadership skills. Students acquiring this knowledge will be prepared to pursue opportunities through occupations such as teaching, coaching, administration, and athletic training, as well as other recreational, wellness, and fitness careers. The department also endeavors to provide the students of Fort Lewis College with opportunities to learn and experience the components of healthy living, life-long activities, and sport competition.

## OBJECTIVES

1. The professional preparation of skilled teachers of human movement and exercise forms as well as qualified persons in the allied areas of administration, coaching, athletic training, and the field of fitness.
2. A meaningful program (individual, dual, and team activities) stressing the lifetime value of activity for all students.
3. Practical extracurricular experiences in health, fitness, exercise, and athletic training.
4. Professional leadership for the intramural, recreational, and fitness activities of the students.

## PROGRAMS OF STUDY

The Exercise Science department has developed four options within the Exercise Science major. These options provide concentrated study in many of the disciplines associated with the Exercise Science major. The options are:

1) Athletic Training for those interested in sports injury evaluation and rehabilitation.
2) Exercise Specialist, a flexible option for individuals interested in a variety of opportunities in the field of Exercise Science. This option can provide the foundation for those interested in personal training, physical therapy, or graduate study in Exercise Science.
3) K-12 Teaching option for those wanting to become physical educators in the school system. It is strongly advised that all students interested in the K-12 option consult with an advisor in the Teacher Education Department to ensure that all licensure requirements are met.
4) Sport Administration option studies the business and administrative aspects of sport and recreation. The students in this option will study in both the Exercise Science department and the School of Business Administration. As with all majors, the Exercise Science faculty encourage strong contact with Exercise Science advisors to ensure timely completion of the major.

## EXERCISE SCIENCE - ATHLETIC TRAINING OPTION

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits the Athletic Training Education Program.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN EXERCISE SCIENCE ATHLETIC TRAINING OPTION:

General Education
$35-46$
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS 1 or $Q$ requirements.

Specific Departmental Requirements:
ES 205 Emergency Response
$1-2$
ES 223 T
ES 223 Techniques in Conditioning 1
ES 224 Basic Principles of Athletic Training 3
ES 240 Clinical in Athletic Training II 1
ES 283 Evaluation of Injuries I
ES 285 Evaluation of Injuries II
ES 285 Evaluation of Injuries II 3
ES 301W Current Issues in Sport OR
ES 302W Issues in Health and Well-Being 3
ES 320 Clinical in Athletic Training III 1
ES 335 Kinesiology and Biomechanics 4
ES 340 Motor Learning and Control 3
ES 353 Nutrition for Fitness and Sport 3
ES 360 Exercise Physiology 4
ES 361 Advanced Exercise Physiology 3
ES 363 Computer Applications 3

ES 375
Sport and Exercise Psychology 3
ES 385 Therapeutic Modalities 2
ES 387 Reconditioning of Athletic Injuries 3
ES 420 Clinical in Athletic Training IV 1
ES 424 Advanced Athletic Training 3
ES 440 Clinical in Athletic Training V 1
ES 480 Administration of Programs in Exercise Science 3
ES 495 Research Design and Development 1
ES 496 Senior Seminar 2
Subtotal Specific Departmental Requirements 60
Auxiliary Department Requirements:
Bio 233 Human Anatomy
$\begin{array}{ll}\text { Bio } 234 \text { Human Physiology } & 3\end{array}$
Psych 157 Introduction to Psychology 3
Subtotal Auxiliary Requirements 9
MAJOR TOTALS 69
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

Candidates for admission to the Athletic Training Education Program compete for available slots within the educational program. It is possible for students to meet all admittance requirements and still not be accepted into the program. See the Program Director for further details.

## FORT LEWIS COLLEGE ATHLETIC TRAINING EDUCATION PROGRAM APPLICATION CRITERIA AND PROCESS

## Purpose of the Application

1. To inform interested students of the requirements for acceptance into the Fort Lewis College Athletic Training Education Program (ATEP).
2. To establish equal student opportunity for acceptance by providing comparable background information on the student applicant to the screening and acceptance committee.
3. To serve as a contract for acceptance into the Fort Lewis College Athletic Training Education Program (ATEP).

## Prerequisites of Application

1. Proof of enrollment in or completion of: a. ES 224 - Basic Athletic Training with a grade of B or better.
b. ES 220 - Clinical in Basic Athletic Training with a grade of $B$ or better.
c. ES 205 - Emergency Responder with a grade of $B$ or better.
d. BIO 233 - Human Anatomy with a grade of C or better.
2. A current minimum overall grade point average of 2.5 .
3. An Exercise Science grade point average of 3.0.
4. Completion of a minimum of 75 hours observation in the Fort Lewis College Athletic Training Room at the time of application.

## Application Procedure

All applicants for the Athletic Training Education Program must submit the following materials to the Program Director by the first Tuesday in April (for Fall admittance) or the first Tuesday after Thanksgiving (for Winter admittance):

1. Application cover sheet
2. Letter of application
3. Resume
4. A Statement of personal philosophy (Including but not limited to: personal ethics, morals, how personal background has prepared the student to be a professional)
5. Letters of recommendation:
a. Two from Fort Lewis College faculty members:

One in the Exercise Science department (cannot be an Athletic Training faculty member)
One outside the Exercise Science department
b. One from an adult professional outside Fort Lewis College (excluding immediate family) who is familiar with student's professional goals and your work ethic.
6. A completed Athlete Registration Packet (available in the training room).
7. A copy of all unofficial transcripts
8. Documentation of a minimum of 75 clinical hours spent in the Fort Lewis College Athletic Training Room

The ATEP Committee will evaluate the submitted materials. Applicants will be evaluated on the quality of the materials presented and grades in the required classes.

Once the application has been accepted, an interview with the screening committee will be conducted to discuss the application. A completed application and interview will not guarantee admittance into the Athletic Training Education Program.

Upon acceptance into the Athletic Training Education Program, the student will be responsible for specific programmatic fees, such as: individual liability insurance - approximately $\$ 40.00$ year; Fort Lewis College physical - approximately $\$ 40 /$ year; varicella (chickenpox) vaccination if needed - approximately $\$ 170$, one time fee; student nametag, approximately $\$ 10.00$, one-time fee; Colorado Department of Education background check, approximately $\$ 40.00$, onetime fee; and NATA and Fort Lewis College SATA memberships, recommended.

## ATHLETIC TRAINING EDUCATION PROGRAM TECHNICAL STANDARDS FOR ADMISSION

The Athletic Training Education Program at Fort Lewis College is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the

Athletic Training Educational Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Allied Heath Education Programs [CAAHEP]).

All students admitted to the Athletic Training Educational Program must meet the following abilities and expectations. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted to the program.

Candidates for selection to the Athletic Training Education Program will be required to verify that they understand and meet these technical standards or that they believe that, with certain accommodations, they can meet the standards.

Compliance with the program's technical standards does not guarantee a student's eligibility for the NATABOC certification exam or acceptance into the Athletic Training Education Program.

Candidates for selection to the Athletic Training Educational Program must demonstrate:

- The mental capacity to assimilate, analyze, synthesize and integrate concepts and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm;
- Sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and accurately, safely, and efficiently use the equipment and materials during the assessment and treatment of patients;
- The ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with competent professional practice;
- The ability to record the physical examination results and a treatment plan clearly and accurately;
- The capacity to maintain composure and continue to function well during periods of high stress;
- The perseverance, diligence and commitment to complete the Athletic Training Education Program as outlined and sequenced;
- Flexibility and the ability to adjust to changing situations and uncertainty in clinical situations;
- Effective skills and appropriate demeanor and rapport that relate to professional education and quality patient care.


## EXERCISE SCIENCE - EXERCISE SPECIALIST OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN EXERCISE SCIENCE EXERCISE SPECIALIST OPTION:

| ral E | 35-4 |
| :---: | :---: |
| See page 25 for General Education requirements. |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| **ES 150R Sociocultural Foundations of Human Movement | 3 |
| **ES 242Q Testing and Statistics | 3 |
| ES 301W Current Issues in Sport OR |  |
| ES 302W Issues in Health and Well-Being | 3 |
| ES 335 Kinesiology \& Biomechanics | 4 |
| ES 340 Motor Learning \& Control | 3 |
| ES 353 Nutrition for Fitness \& Sport | 3 |
| ES 354 Adapted Exercise | 3 |
| ES 360 Exercise Physiology | 4 |
| ES 361 Advanced Exercise Physiology | 3 |
| ES 363 Computer Applications in Exercise Science 3 |  |
| ES 450 Internship for the Exercise Specialist | 3 |
| ES 480 Administration of Programs in Exercise Science | 3 |
| ES 495 Research Design and Development | 1 |
| ES 496 Senior Seminar \& Research in Exercise Science | 2 |
| Subtotal of Specific Departmental Requirements | 41 |
| Auxiliary Department Requirements: |  |
| Bio 233 Human Anatomy | 3 |
| Bio 234 Human Physiology | 3 |
| Psych 157 Introduction to Psychology | 3 |
| Subtotal of Auxiliary Requirements | 9 |
| TOTAL MAJOR REQUIREMENTS | 50 |
| Free Electives (variable) |  |
| TOTAL REQUIRED FOR GRADUATION | 120 |

## EXERCISE SCIENCE - EXERCISE SCIENCE K-12 TEACHING OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN EXERCISE SCIENCE EXERCISE SCIENCE K-12 TEACHING OPTION:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
${ }^{* *}$ ES 150R Sociocultural Foundations of Human Movement 3
ES 224 Basic Principles of Athletic Training 3
**ES 242Q Testing and Statistics 3
**ES 243S Personal Health 3
ES 250 Competencies to Teach 1
(Tumbling, Aquatics, Fundamental Skills)
ES 251 Competencies to Teach 1
(Dance, Recreational Games, Non-Traditional Sports)
ES 252 Competencies to Teach
(Basketball, Soccer, Softball, Volleyball)
ES 253 Competencies to Teach
(Fitness, Golf, Racquet Sports)
ES 301W Current Issues in Sport
OR
ES 302W Issues in Health and Well-Being 3
ES 335 Kinesiology and Biomechanics 4
ES 340 Motor Learning and Control 3
ES 354 Adapted Exercise 3
ES 360 Exercise Physiology 4
ES 363 Computer Applications in Exercise Science 3
ES 375 Sport and Exercise Psychology 3
ES 381 Methods/Curric for K-12 Phy Ed 4
ES 480 Administration of Programs in Exercise Science 3
ES 495 Research Design and Development 1
ES 496 Senior Seminar and Research in Exercise Science 2
Subtotal Specific Departmental Requirements 49
Auxiliary Department Requirements:
Bio 233 Human Anatomy
Bio 234 Human Physiology 3
Psych 157 Introduction to Psychology 3
Subtotal Auxiliary Requirements 9
TOTAL MAJOR REQUIREMENTS 58
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION 120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

If Teaching Licensure is desired, students must also complete the appropriate K-12 teacher licensure program courses listed in the Teacher Education section. Teaching option is $\mathrm{K}-12$ only.
*Some special grade and GPA requirements exist for admission to the Teacher Education Licensure Program and permission to student teach. See Teacher Education section for information.

## EXERCISE SCIENCE - SPORT ADMINISTRATION OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN EXERCISE SCIENCE SPORT ADMINISTRATION OPTION:

[^4]ES 375 Sport and Exercise Psychology 3
ES 455 Internship in Sport Administration 8-12
ES 480 Administration of Programs in Exercise Science 3
ES 495 Research Design and Development 1
ES 496 Senior Seminar and Research in Exercise Science 2
Subtotal Specific Departmental Requirements 36-40
School of Business Administration Requirements:
Acc 225 Introduction to Financial Accounting 4
**Econ 266S Principles of Economics 4
**BA 260S Legal Environment of Business 3
BA 301 Management and Organizational Behavior 4
BA 340 Marketing 4
BA 347 Consumer Behavior
OR
BA 348 Public Relations 3
Subtotal School of Business
Administration Requirements 22
Note: A minimum of C- must be earned in 300- and 400-level School of Business Administration requirements.

Auxiliary Department Requirements:
Psych 157 Introduction to Psychology 3
Subtotal Auxiliary Requirements 3
TOTAL MAJOR REQUIREMENTS 61-65
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION 120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

NOTE: Sport Administration majors may not declare another major or minor in Business Administration

## SPORT ADMINISTRATION COMPETITIVE ADMISSION REQUIREMENTS

1. Sophomore standing
2. Written letter of application in approved business format stating objectives
3. Interview with faculty committee
4. Cumulative GPA of 2.50
5. Two letters of recommendation
6. One character reference from an adult mentor
7. One Fort Lewis College faculty reference detailing professional potential
8. Current professional resume

## SPORT ADMINISTRATION INTERNSHIP REQUIREMENTS

1. Senior standing
2. Major GPA of 2.50
3. Completion of all major course work

## EXERCISE SCIENCE - COACHING MINOR

REQUIREMENTS FOR A MINOR IN COACHING:
Required Courses:
ES 185 Introduction to Coaching ..... 2
ES 224 Basic Principles of Athletic Training ..... 3
ES 225-231 Techniques of Coaching - 2 courses ..... 4
ES 233-238 Officiating - 2 courses ..... 2
ES 389 Coaching InternshipAnd one of the following Elective Courses:
IES 335 Kinesiology \& Biomechanics ..... 4
ES 337 Sport Ethics ..... 3
1ES 340 Motor Learning \& Control ..... 3
1ES 345 Legal Aspects of Sport/PE ..... 3
1ES 353 Nutrition ..... 3
1ES 360 Exercise Physiology ..... 4
1ES 375 Sport and Exercise Psychology ..... 3
ES 480 Admin Programs Exercise Science ..... 3
1These courses require at least one prerequisite.TOTAL REQUIREMENTS FOR COACHING MINOR16-17
EXERCISE SCIENCE MINOR
REQUIREMENTS FOR A MINOR IN EXERCISE SCIENCE:
Bio 233 Human Anatomy ..... 3
Bio 234 Human Physiology ..... 3
Psyc 157 Introduction to Psychology ..... 3
**ES 150R Sociocultural Foundations of Human Movement ..... 3
ES 335 Kinesiology and Biomechanics ..... 4
ES 360 Exercise Physiology ..... 4
Two Additional Upper-Division Exercise Science Courses ..... 4-6
TOTAL REQUIRED FOR EXERCISE SCIENCE MINOR ..... 24-26

## GENDER \& WOMEN'S STUDIES

Course listings for Gender \& Women's Studies begin on page 178.
Director - Michele Malach
Professor - Kathleen S. Fine-Dare, Kathryn Moller, Susan Moss and Carol L. Smith
Associate Professors - Alane S. Brown, Janine M. Fitzgerald, Jennifer A.
Gehrman, Michele M. Malach, Delilah Orr and Jan E. Sallinger
Assistant Professors - John Baranski, Keri Brandt, Marcelyn Jung, Michael T. Martin and Sarah Roberts-Cady

The Gender and Women's Studies Major approaches the study of gender - including masculinity, women's equality, human sexuality, and human sexual orientation - from a deeply interdisciplinary perspective. Informed by feminist and other critical theories, the G/WS curriculum is committed to honest and productive discussions about the key role of gender in social life; the interplay of race, class, and gender in the construction of meaning; and the reasons that unequal access to resources and power persists in the world. Central to a Gender/Women's Studies program are respect for diversity; a concern for social justice; and an exploration of alternative ways of achieving self-expression, conducting research, and working in the world. The major is designed to fit squarely within a liberal arts tradition as well as to prepare students for careers in arenas where addressing social inequality is important.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN GENDER \& WOMEN'S STUDIES:

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
I. CORE COURSES

| **WS 101S Introduction to Women's Studies | 4 |
| :--- | :--- |
| WS 301W Feminist and Gender Theories | 4 |
| WS 332 Women in American History | 4 |
| WS 355 Anthropology of Gender | 4 |
| WS 496 Women's Studies Senior Seminar | 2 |
| Core |  |

## Subtotal Core

II. APPLICATIONS

Choose any TWO from the list below OR ONE from the list below plus ONE Practicum from the PRACTICUM STUDY list:

| WS 280 | Issues in Women's Health | 4 |
| :--- | :--- | :--- |
| WS 351 | Gender and Work | 4 |
| WS 365 | Women and Development | 3 |

PRACTICUM STUDY: Students may sign up for an internship or practicum in any field, as long as the project undertaken is Gender or Women's Studiesrelated. Be sure to check prerequisites for all courses. (Students must receive approval from the Gender/Women's Studies Director before signing up for internship or practicum credit). Students must sign up for a minimum of 2 credits and a maximum of 6 credits in one of the following (NOTE: If the course has variable credit, the student must select the appropriate number of credits when registering.):

ANTH 316 Internship in Anthropology

BIO 480 Internship in Biology 1-3
BA 437 Internship in Business 3
ED 488 Seminar \& Practicum in College Teaching 2-3
ENGL 258 Service Learning Practicum in English 1-6
ENGL 358 Practicum - Service Learning 1-6
ES 450 Internship Exercise Specialist 3
SOC 320/WS 320 Community Service Practicum/Women's Studies Practicum (may be taken for 4 credits to fulfill a G/WS major requirement when the project is approved in advance by the G/WS Director; This course is the same as WS 320; credit will be given for only one of these courses.

## Subtotal Applications

5-10

## III. DISCIPLINARY EXPLORATIONS

Choose FOUR courses from the list below. Three of the four must be from different disciplines; two of the four must be numbered above 300; 6-8 credits. Appropriate courses numbered 190/390 and 191/391 may also count, if approved in advance by the G/WS Director.

## Anthropology

**Anth 217R Cultural Images of Women and Men 4
Art
Art/WS 366 Women, Art, and Visual Culture 4
(These are the same; credit will be given for only one.)

## Biology

**Bio 132T Human Sexuality 3

## English

**Engl 175R Women's Literature 4
Women's Studies approved topics courses in Engl 317, 337, 345, 346, 380, 420 and 477(A list of Women's Studies approved courses is produced each term. Examples include Engl 380 Native American Literature: Contemporary Female Writers; Engl 420 World Literary Traditions: Topics: Contemporary Latin American Women's Literature; Engl 423 Genres: Topics, etc.)

4

## History

Hist 354 Women, Fam \& Gender in Chinese Hist 4
Hist 368 Medieval Women
4

## Modern Languages

ML 308 Topics in French Literature (when topic is
Women's Studies approved)
ML 334 Topics in German Literature (when topic is
Women's Studies approved)
3
Philosophy
Phil 365 Philosophies of Feminism 3
Political Science
PS 365 Women and Development (same as WS 365;
a student may receive credit for only one of these courses) 3
Psychology
Psyc 270 Psychology of Gender 4
Sociology
${ }^{* *}$ Soc 275S Families, Marriages, and Other Sex Role Systems 4
**Soc 279R Ethnicity, Gender, and Class in the Southwest 4
Soc 300 Theories of Social and Personal Life 4
Soc 383 Women in Society
4
Subtotal Disciplinary Explorations 12-16
TOTAL MAJOR REQUIREMENTS 35-44
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
NOTE: It is strongly recommended that Gender \& Women's Studies majors consider one of the following courses to fulfill their TS2 Requirement: TS2S 404 Gender and the Sciences, TS2S 407 Gender and Sport, or TS2R Gender and Performance.

## GENDER \& WOMEN'S STUDIES MINOR

## REQUIREMENTS FOR A MINOR IN GENDER \& WOMEN'S STUDIES:

## I. CORE COURSES

| **WS 101S Introduction to Women's Studies | 4 |
| :--- | :--- |
| WS 301W | 4 |
| Feminist and Gender Theories |  |
| OR |  |
| WS 332 | Women in American History |
| WS 496 | 4 |
| Women's Studies Senior Seminar |  |
| OR |  |
| WS 499 | Individualized Study |

Total Core
II. APPLICATIONS
(Choose one; 3-6 credit hours)

| WS 280 | Issues in Women's Health | 4 |
| :--- | :--- | :--- |
| WS 351 | Gender and Work | 4 |
| WS 355 | Anthropology of Gender | 4 |
| WS 365 | Women and Development | 3 |
| WS 320 | Women's Studies Practicum* | $4-6$ |

*NOTE: Students may take WS 320 only if they are enrolled in the Sociology Block Program. Students wishing to have an internship or practicum experience outside of Sociology may sign up for an internship or practicum course in another department, as long as the project undertaken is genderrelated. (See the Gender and Women's Studies Director to receive approval before signing up.) Examples of such courses include: Anth 316 Internship in Anthropology; Engl 258/358 Service Learning Practicum in English; and ES 450 Internship Exercise Specialist. Students should look closely at the prerequisites for any of these courses before attempting to sign up. Students may not apply more than 6 hours of internship or practicum experience to the Gender and Women's Studies minor.

## III. DISCIPINARY EXPIORATIONS

Choose two, one of which must be numbered above $300 ; 6-8$ credits. Courses numbered 190/390 and 191/391 may also count, if approved.

## Anthropology

**Anth 217R Cultural Images of Women and Men
4
Anth 355 Anthropology of Gender (same as WS 355;
a student may receive credit for only one of these courses)
4

## Art

Art/WS 366 Women, Art, and Visual Culture
4
(These are the same; credit will be given for only one.)

## Biology

**Bio 132T Human Sexuality3

## English

**Engl 175R Women's Literature
Women's Studies approved topics courses in Engl 317, 337, 345, 346, 380 , 420 and 477(A list of Women's Studies approved courses is produced each term. Examples include Engl 380 Native American Literature: Contemporary Female Writers; Engl 420 World Literary Traditions: Topics: Contemporary Latin American Women's Literature; Engl 423 Genres:
Topics, etc.)
4

## History

Hist 332 Women in American History (same as WS 332; a student may receive credit for only one of these courses) Hist 354 Women, Fam \& Gender in Chinese Hist

## Modern Languages

ML 308 Topics in French Literature (when topic is Gender
and Women's Studies approved)
ML 334 Topics in German Literature (when topic is Gender and Women's Studies approved)

Philosophy
Phil 365 Philosophies of Feminism

## Political Science

PS 365 Women and Development (same as WS 365; a student may receive credit for only one of these courses)

## Psychology

Psyc 270 Psychology of Gender

## Sociology

**Soc 275S Families, Marriages, and Other Sex Role Systems 4
**Soc 279R Ethnicity, Gender, and Class in the Southwest 4
Soc 300 Theories of Social and Personal Life
Soc 383 Women in Society 4
TOTAL REQUIRED FOR GENDER \& WOMEN'S STUDIES MINOR 19-24

## GEOGRAPHY

Course Listings for Geography begin on page 140.

## GEOGRAPHIC INFORMATION SYSTEMS CERTIFICATE:

For general information about Fort Lewis College's certificate programs, see page 12.

For specific information about the GIS Certificate program, see Geosciences, page 67.

Coordinator of GIS Certificate Program - Scott White


## GEOSCIENCES

Course listings for Geology begin on page 141.
Department Chair - James D. Collier
Professors - James D. Collier and Ray Kenny
Associate Professors - Gary L. Gianniny, David A. Gonzales, Kimberly A. Hannula and Scott White

The department offers a Bachelor of Science degree in Geology with three different options: Geology, Environmental Geology, and Earth Science for Secondary Teachers. The Geology option is designed to meet the needs of students wishing to continue their education in graduate school or to work as professional geologists. The Environmental Geology option is designed for students planning to work in the areas of natural resource management and environmental impact assessment and remediation. The Earth Science for Secondary Teachers option is designed for students whose specific goal is to teach earth science at the secondary school level.

The study of geosciences at Fort Lewis College is strengthened by the College's proximity to the remarkable natural geological laboratory in the Southern Rocky Mountains and adjacent areas of the Southwest. The Grand Canyon, Monument Valley, Shiprock, and the San Juan volcanic field and mining district are representative of classical geological localities nearby. The numerous outcrops and mine and oil field workings are sources of excellent real-world experiences for students. Also, the sequence of rocks in the Animas River Valley represents literally hundreds of millions of years of earth history. Laboratory and field equipment and geological holdings in the College library are available for research and reading.

Advanced graduate work in geology is required for positions in state and federal surveys, petroleum and mining companies, and college teaching. Employment with engineering firms, governmental agencies, mining companies, and environmental consulting organizations, among others, is available for persons with bachelor's degrees in geology and environmental geology.

The department also has course offerings in Geography. Geography classes are recommended for those students who wish to enhance their understanding of such topics as geopolitics, world cultures, globalization, weather and climate, natural landscapes and mountain environments, in addition to technical topics such as computer mapping and Geographic Information Systems (GIS).

A Certificate Program in Geographic Information Systems is also offered. A Geographic Information System (GIS) is a large digital map database and soffware program that includes an integrated set of tools for storing, querying, analyzing, and displaying geo-referenced information. GIS merges theoretical and practical aspects of spatial analysis across many different disciplines, such as environmental
biology, geology, archaeology, agriculture, engineering, computer science, business administration, and, of course, geography. A GIS is used to build cartographic databases, create attributes for map information, and analyze and visualize complex spatial relationships in the mapped information. Students enrolled in the GIS Certificate Program take courses in which they gain valuable experience using industry-standard GIS software, as well as familiarity with various modern field mapping procedures, such as Global Positioning System (GPS) units. Surveying, remote sensing and computer science courses provide additional fundamental skills related to GIS. Completion of the GIS Cerrificate will provide the student with skills and experience that are in high demand in today's workplace.

For more information on the GIS Certificate, visit theprogram's website: http://geo.fortlewis.edu/GIS/certificate.html.

Students majoring in geology may be certified to teach science at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

A minor in geology is available for students majoring in other disciplines. Requirements for a minor in geology are listed at the end of this section.

Geographic Information Systems Certificate available. Information on this page and page 12.

## GEOLOGY - GEOLOGY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN GEOLOGY GEOLOGY OPTION:

| General Education | $35-46$ |
| :--- | :--- |
| See page 25 for General Education requirements. |  |
|  |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or |  |
| Q requirements. |  |
| Specific Departmental Requirements: |  |
| **Geol 107Nx Earth Systems Science |  |
| OR |  |
| **Geol 113 Tx Physical Geology |  |
| Geol 114 Historical Geology |  |
| Geol 202 Geologic Methods |  |
| Geol 207 Mineralogy | 4 |
| Geol 208 Optical Mineralogy | 4 |
| Geol 210 Petrology | 2 |
| Geol 323 Geomorphology | 3 |
| Geol 333 Introductory Paleontology | 4 |
| Geol 337 Structural Geology | 4 |
| Geol 361 Stratigraphy and Sedimentation | 4 |
| Geol 380 Technical Writing in Geology | 3 |
| Geol 405 Geologic Data Analysis | 4 |
| Geol 441 Field Geology | 4 |
| Geol 496 Senior Seminar I - Research | 3 |
| Geol 497 Senior Seminar II - Thesis | 4 |
| Subtotal Specific Departmental Requirements | 6 |

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
${ }^{* *}$ Geol 107Nx Earth Systems Science OR
**Geol 113Tx Physical Geology 4
Geol 114 Historical Geology 4
Geol 202 Geologic Methods
Geol 207 Mineralogy
Geol 210 Petrology
Geol 323 Geomorphology
Geol 333 Introductory Paleontology
Geol 361 Stratigraphy and Sedimentation
4
Geol 380W Technical Writing in Geology 3
Geol 405 Geologic Data Analysis 4
Geol 441 Field Geology
6
Geol 496 Senior Seminar I - Research 1
Geol 497 Senior Seminar II - Thesis

52

Auxiliary Requirements:
**Chem 150Nx Fundamentals of Chemistry I
${ }^{* *}$ Chem 151Tx Fundamentals of Chemistry II 4
OR
Geol 420 Introduction to Geochemistry 3
${ }^{* *}$ Math 221Q Calculus I 4
Phys 201 College Physics 4
OR
**Phys 217Tx Physics for Science and Engineering I
5
One of the following:
${ }^{* *}$ Math 222Q, ${ }^{* *}$ Math 201Q, ${ }^{* * B A} 253 Q$, or ${ }^{* * P s y c} 241$ Q 4

Subtotal Auxiliary Requirements
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## GEOLOGY - ENVIRONMENTAL GEOLOGY OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN GEOLOGY ENVIRONMENTAL GEOLOGY OPTION:

## General Education

$35-46$
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
${ }^{* *}$ Geol 107Nx Earth Systems Science OR
**Geol 113Tx Physical Geology 4
Geol 114 Historical Geology 4
Geol 202 Geologic Methods 2
Geol 207 Mineralogy 3
Geol 210 Petrology
4
**Geog 250T Intro Computer Mapping/GIS 4
Geol 323 Geomorphology
4
Geol 337 Structural Geology
Geol 361 Stratigraphy and Sedimentation 4
Geol 380W Technical Writing in Geology 3
Geol 420 Introduction to Geochemistry 3
Geol 430 Engineering Geology 3
Geol 435 Groundwater Geology 4
Geol 441 Field Geology
Geol 496 Senior Seminar I - Research 1
Geol 497 Senior Seminar II - Thesis 2
Subtotal Specific Departmental Requirements 55
Auxiliary Requirements:
${ }^{* *}$ Chem 150Nx Fundamentals of Chemistry I 4
**Chem 151Tx Fundamentals of Chemistry II 4
${ }^{* *}$ Math 221Q Calculus I 4
Phys 201 College Physics 4
OR
**Phys 217Tx Physics for Science and Engineering I

One of the following:
${ }^{* *}$ Math 201Q, ${ }^{* *}$ Math 222Q, ${ }^{* * B A} 253 Q,{ }^{* * P s y c} 241$, or Geol 405

Subtotal Auxiliary Requirements
20-21
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

# GEOLOGY - EARTH SCIENCE FOR SECONDARY TEACHERS OPTION 

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN GEOLOGY - EARTH SCIENCE FOR SECONDARY TEACHERS OPTION:

General Education35-46
See page 25 for General Education requirements.** Courses marked with double asterisks may also be counted toward TS1 or$Q$ requirements.
Specific Departmental Requirements:
${ }^{* *}$ Geol 107Nx Earth Systems Science ..... 4
Geol 114 Historical Geology ..... 4
**Geol 180N Oceanography ..... 3
Geol 202 Geologic Methods ..... 2
Geol 207 Mineralogy ..... 3
Geol 210 Petrology ..... 4
Geol 323 Geomorphology ..... 4
Geol 332 Plate Tectonics ..... 3
Geol 333 Introductory Paleontology ..... 3
Geog 335Weather and Climate ..... 3
Geol 380W Technical Writing in Geology ..... 3
Geol 401 Natural Resources and the Environment ..... 3
Geol 496 Senior Seminar I - Research ..... 1
Geol 497 Senior Seminar II - Thesis ..... 2
Subtotal Specific Departmental Requirements ..... 42
Auxiliary Requirements:
**Bio 112N Introduction to Biology: ..... 4
**Chem 150Nx Fundamentals of Chemistry ..... 4
**Math 110Q College Algebra ..... 4
Phys 201 College Physics ..... 4
**PhSc 206Tx Astronomy ..... 4
Teacher Education Courses':
**Ed 200R Intro to Ed in America ..... 4
**Ed 210S Culture of Childhood and Youth ..... 4
Ed 421 Individualized Instruction in a Pluralistic Society ..... 6
Ed 424 Language and Math Literacy ..... 4
Ed 495 Laboratory Experience and Seminar in the Secondary
School ..... 15
Subtotal Auxiliary Requirements ..... 53
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION120

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## PREPARATION FOR GRADUATE SCHOOL

The following additional courses are recommended for Geology majors who plan to attend graduate school:
Geol 332 Plate Tectonics
Geol 405 Geologic Data Analysis and Modeling by Computer
French, German, or Spanish
Engr 205 Surveying I
Engr 103 Computer Aided Drafting
Phys 202 College Physics (non-Calculus) II
**Math 222Q Calculus II

## GEOLOGY MINOR

## REQUIREMENTS FOR A MINOR IN GEOLOGY:

Specific Departmental Requirements:<br>**Geol 113Tx Physical Geology<br>OR<br>**Gel 107Nx Earth Systems Science 4<br>Geol 114 Historical Geology 4<br>Geol 207 Mineralogy<br>3<br>Geol 210 Petrology<br>Upper-division Geology electives<br>10<br>TOTAL REQUIREMENTS FOR GEOLOGY MINOR<br>25

## HEALTH CAREERS PROGRAM OPTIONS

## FOR STUDENTS INTERESTED IN HEALTH CAREERS

Students may pursue courses at Fort Lewis College that lead to a variety of health careers. Over the years, the Pre-Health Advisory Committee and Fort Lewis College have developed a very favorable rapport with the professional schools in Colorado, Arizona, New Mexico, and Utah. Many of our students have chosen to attend schools in the Four Corners states; many also have attended professional schools throughout the nation.

The most popular pre-professional programs at Fort Lewis College have been those in nursing, medicine, physical therapy, and veterinary medicine, but advising and academic planning also are available for programs in other allied health fields.

Specific pre-professional course requirements vary significantly depending upon the health field chosen. All professional schools, however, prefer those students who have had a broad undergraduate education, have a solid foundation in the natural sciences, possess well-developed
communication skills, and have had some experience (either volunteer or paid) in the health-related profession of their choice. Hence, the pre-health-professions student should anticipate securing a thorough understanding in biology, chemistry, mathematics, physics, and English. At Fort Lewis College, the degree option that fulfills a majority of the requirements for most health professions programs is the Cellular and Molecular Biology option in the Biology Department. Although most pre-health professions students have majored in biology or biochemistry, most professional schools will consider graduates in other major fields who have met the basic requirements for admission.

Students considering careers in health professions should carefully plan their academic program very early in their undergraduate education. To assist the prospective pre-health professions student in selecting curricula that will satisfy the academic requirements of specific professional schools, Fort Lewis College has established a Pre-Health Advisory Committee. It is strongly recommended that the pre-health professions student, in addition to consulting his or her major advisor, select a member of this committee to serve as a personal academic advisor. Contact the Biology or Chemistry department chair for information on members of this committee.

The Medical College Aptitude Test (MCAT) that students must take prior to application to medical school emphasizes knowledge in cell biology; genetics; embryology; bacterial physiology; basic chemistry; human physiology; organic chemistry, particularly as it relates to biological molecules; and basic physics related to biological systems. Many of the other health-associated professions (i.e., veterinary medicine, physical therapy, pharmacy) also look for general knowledge in these areas, in addition to other more specific requirements. Other standardized tests, such as the Graduate Record Exam (GRE), may be required for admission to these programs.

## GENERAL BSN NURSING PREREQUISITE COURSES AVAILABLE AT FORT LEWIS COLLEGE

This is a suggested two year sequence of courses that are Bachelor of Science in Nursing prerequisites in most nursing programs. By completing these courses at Fort Lewis College, students should be able to enter a BSN program as a junior. Every BSN program differs slightly in the specifics of its course requirements; it is the student's responsibility to know exactly what is required at the nursing school of choice. The suggested curriculum below does not guarantee admission into any BSN program.

## Freshman Fall Semester

Bio. 233 Human Anatomy 3
GS 100 Freshman Sem. Pre-Health Prof. 1
Psyc. 157 Intro. To Psychology 3
Soc. 100 Social Issues 4
$\begin{array}{llll}\text { Phil. } 141 & & & 4 \\ & \text { Intro. To Philosophy } & \text { Total } & 15\end{array}$

Note: If your Math ACT score is 20 or better, you are ready for Math 110 - College Algebra next semester. If your Math ACT score is 17, 18 or 19, you must enroll in TRS 92, Intermediate Algebra; if it is 16 or below, TRS 82. If your reading and writing ACT scores are below 19, you must enroll in Comp. 125 your first semester, and take Comp. 126 in the 2nd semester. To complete both the math and composition preparation courses during the Fall and Winter Freshman semesters, Soc 100 and Phil 141 should be taken during the summer trimesters.

| Freshman Winter Semester |  |  |
| :---: | :---: | :---: |
| Bio. 234 Human Physiology |  | 3 |
| Math 110 College Algebra |  | 4 |
| Comp 150 Reading and Writing in College |  | 4 |
| Psyc 254 Life Span \& Human Development |  | 4 |
|  | Total | 15 |
| Summer Freshman Year |  |  |
| Chem 150 Fundamentals of Chem I |  | 4 |
| ES 100 Fitness \& Wellness |  | 1 |
| PE ACT Fitness |  | 1 |
|  | Total | 6 |
| Sophomore Fall Semester |  |  |
| Bio 113 Intro. to Cell \& Molecular Biol. |  | 4 |
| Bio 390 Medical Microbiology |  | 3 |
| Math 201 Elementary Statistics |  | 4 |
| Anth 210 Intro. Sociocultural Anthropology |  | 4 |
|  | Total | 15 |
| Sophomore Winter Semester |  |  |
| Bio 390 Pathophysiology |  | 3 |
| Bio 390 Cellular Basis of Nutrition |  | 3 |
| PS or Hist. Elective |  | 4 |
| Eng. Literature Elective |  | 4 |
| PE ACT Skill |  | 1 |
|  | Total | 15 |

Total Transfer Credits $=66$

## PHYSICIAN'S ASSISTANT

Physician Assistants (PAs) are members of the fastest growing health profession. To date there are more than 46,000 practicing PAs, 55 percent employed in group practices and 23 percent employed by hospitals. PAs are academically and clinically prepared to work closely with a supervising physician to provide many of the same services. They take histories, order diagnostic tests, perform physical exams, make diagnoses and prescribe medications. The majority of PAs work in primary care such as family practice, pediatric, or internal medicine settings. The second largest group works in various surgical specialties or the emergency room.

Most PA programs require you to complete a $B A / B S$ before entry into PA school. A few require several years of experience in a healthcare field. If you do complete a baccalaureate degree before applying, it may be in any field in which you will excel. Many choose science majors because the prerequisites for PA school and those for a science degree overlap.

If you are considering a Physician Assistant program, plan to have completed a Baccalaureate degree by the time of admission. Students most often choose biology or integrative physiology as a major, since courses in these majors overlap with the prerequisites making them a logical choice. However, you should feel free to choose any major you like - one that interests you and one in which you will do excel.

## Prerequisites for Physician's Assistant Programs

Each school has specific prerequisite requirements, but the following list is common to many. Check with the specific school for details.

- General Chemistry (2 semesters w/ lab)
- General Biology (2 semesters w/ lab)
- Genetics (1 semester)
- Human Physiology (1 semester w/ lab)
- Upper-division Science (1 semester w/lab)
- General Psychology (2 semesters)
- Statistics (1 semester)
- Humanities (variable)

These could include any combination from the following: foreign language, fine arts, music, classics, speech/ communication, composition, or philosophy. If you are pursuing a major in addition to the prerequisites, be sure to take courses that count toward your degree.

## PREREQUISITE COURSE SEMESTER HOURS FOR MEDICAL SCHOOL

## Prerequisite Course

Biology (with lab)

| Semester Credits |
| :---: |
| 8 |
| 8 |
| 8 |
| 8 |
| 9 |
| 6 |

*Should include at least college-level algebra and trigonometry or the equivalent by means of advanced placement.

Calculus and a quantitative, mathematically-oriented physics course are strongly recommended. Many students find a course in biochemistry to be helpful, although this is not a requirement for admission. Literature and composition requirements are based on the recognized need for future physicians to have skills in communications. In order to receive credit for advanced placement, the subject matter credited must be listed on a college transcript.

## PRE-HEALTH ADVISORY COMMITTEE

The purpose of the Pre-Health Advisory Committee is to guide and counsel all students in the health careers preparatory programs. This committee has prepared a pre-professional student handbook containing examples of suggested course schedules and curricula. Interested students may access the handbook on the Fort Lewis College Biology Department website.

In addition to advising students in their preparatory programs, the Committee assists students with application procedures and in preparing for professional school admissions interviews. The Committee will, upon student request, provide recommendation documents to professional schools in accordance with the student's qualifications.

Please contact the chair of the Pre-Health Advisory Committee for more information.

## HISTORY

Course listings for History begin on page 143.
Department Chair - Michael F. Fry
Professors - Neil McHugh
Associate Professor - Michael F. Fry
Assistant Professors - John Baranski, Michael Martin and Ellen Paul
The Department of History offers a wide variety of courses that will enhance students' understanding and appreciation of the human past. The study of history promotes tolerance between peoples and helps make the world and our lives more intelligible. We are the wiser for knowing that our belief systems, institutions, and conflicts have their roots in the past. Courses in the history of Africa, East Asia, Latin America, and the Middle East introduce the creative achievements of other civilizations. Through the exploration of our own national experience and the history of western civilization, students gain a deeper understanding of the historic foundations underlying the challenges we face in our own time.

Students of history learn to collect and interpret data, develop logical and convincing arguments, and to write with clarity and economy. A degree in history provides a solid foundation for students seeking careers in teaching, archival management, library science, law, politics, international affairs and governments, as well as the training needed for success in graduate school.

Courses numbered 100 are broad topical courses; 200-level courses are "survey" courses providing overviews of the history of regions and periods. These are the foundation courses for history majors. Courses designated 300 -level explore more specialized topics and assume background in lower-division history courses. Courses at the 400 -level courses are conducted as seminars and provide the advanced instruction required for the Senior Research Seminar. The courses described are those offered on a regular basis. From time to time, the department offers new courses. Students should check the full list of courses published by the department at the time of registration.

History majors are required to take 14 history courses totaling 44-48 credits. Majors must concentrate in one of the areas listed below. Under special circumstances, a student may propose a student-constructed concentration. This special option requires the approval of the department chair.

Students majoring in history may be certified to teach social studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

## GOALS AND OBJECTIVES:

Familiarize students with the history of human experience in at least three regions of the world.

Provide students with particular competence in their area of concentration including a factual base of information, familiarity with the important historiographical and interpretive concerns of historians of that area, and an ability to synthesize their understanding around recurrent historical themes.

Encourage an understanding of how different societies in different times and places have constructed class, race, and gender.

Encourage development of critical thinking skills - thinking that is rigorous, fair-minded, and nuanced.

Foster the research and writing skills that enable students to define a suitable topic, conduct thorough and resourceful searches for relevant information, and express their findings in writing in a clear, persuasive, and interesting fashion.

Cultivate in students an understanding of the complex epistemological challenges involved in studying history.

Help students appreciate that a historical understanding of the human experience can contribute in vital ways to a responsible and reflective life.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN HISTORY - EUROPEAN OPTION:



OTHER DEPARTMENTAL REQUIREMENTS
Three Upper Division European courses chosen
from the following:
Hist 302 Ancient Rome
Hist 308 Rise of Christianity
Hist 359 Medieval Europe
Hist 360 Renaissance Europe
Hist 361 Czarist Russia
Hist 362 Rise \& Fall of Soviet Union
Hist 364 Germany: Roman Times to 1919
Hist 365 Germany, 1919 to Present
9-12 credits

Hist 366 Hitler and the Holocaust
4
,
Hist 382 Reformation Europe and Wars of Religion 4
Hist 465 Advanced Studies in European History
Three Upper Division Non-European courses, one must be World, one must be US:

## World

| Hist 342 | West Africa | 4 |
| :--- | :--- | :--- |
| Hist 343 | Ancient Nile Valley | 4 |
| Hist 344 | Northeast Africa | 4 |
| Hist 346 | South Africa | 4 |
| Hist 348 | Africans in the Americas | 4 |
| Hist 349 | Islam in History | 4 |
| Hist 351 | U.S.-East Asian Relations | 4 |
| Hist 352 | Modern China | 4 |
| Hist 354 | Women Family \& Gender in Chinese History | 4 |
| Hist 355 | East Asian Popular Religion | 4 |
| Hist 356 | History of Japan | 4 |

Hist 371 History of Central America ..... 4
Hist 372 U.S.-Latin American Relations ..... 4
Hist 373 History or Mexico ..... 4
Hist 440 Advanced Studies in African History ..... 3
Hist 446 Ancient Israel and Judah ..... 3
Hist 450 Advanced Studies in East Asian History ..... 3
Hist 475 Advanced Studies in Latin American History ..... 3
United States
Hist 311 Colonial and Revolutionary Am, 1492-1789 ..... 4
Hist 314 Inventing America, 1789-1850 ..... 4
Hist 315 Irish, Catholic, American ..... 4
Hist 316 Civil War America ..... 4
Hist 318 Emergence of Modern America, 1893-1939 ..... 4
Hist 322 Western American Mining ..... 3
Hist 324 Colorado History ..... 3
Hist 326 Baseball and the American Dream ..... 4
Hist 331 Politics of Poverty in U.S. ..... 4
Hist 332 Women in American History ..... 4
Hist 333 America Since 1945 ..... 4
Hist 334 United States and Vietnam ..... 4
Hist 335 Work and Workers in the U.S. ..... 4
Hist 337 Cultural and Intellectual Hist in the 20th Cent ..... 4
Hist 485 Advanced Studies in United States History 3Subtotal Other Departmental Requirements18-24
Total required in major ..... 38-44
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION ..... 120

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## Recommended Courses:

History majors are strongly urged to take two courses in one modern language, and courses in Anthropology, Art (in particular Art History), Economics, English, Geography, Philosophy, Political Science, Psychology, Sociology, and Southwest Studies (of particular interest, SW 340: Archival Theory \& Practice and SW 341: Oral History: Theory and Practice).

## HISTORY - UNITED STATES OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN HISTORY - UNITED STATES OPTION:

| General Education | 35-46 |
| :---: | :---: |
| See page 25 for General Education requirements. |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| Two US survey courses: | 6 credits |
| Hist 280 Survey of US History, 1600-1877 | 3 |
| **Hist 281 Survey of US History, 1877-Present | 3 |
| Two non-US surveys, one in Europe and one in World; at least one of the two must be History 140, 160, 170, or 270 (from the groups below): | 6 credits |
| One course from the following (Europe): |  |
| **Hist 160 Survey of Western Civilization I | 3 |
| **Hist 261 Survey of Western Civilization II | 3 |

One course from the following (World):
**Hist 140 Survey of African History I
**Hist 141 Survey of African History II
**Hist 170 Survey of East Asian Civilization I
**Hist 171 Survey of East Asian Civilization II
**Hist 270 Colonial Latin America
**Hist 271 Latin America Since Independence
Hist 396W Philosophy and Methods
Hist 496 Research Senior Seminar
Subtotal Specific Departmental Requirements

## OTHER DEPARTMENTAL REQUIREMENTS

| Three upper division US History courses chosen |  |
| :--- | :--- |
| from the following: $9-12$ <br> Hist 311 Colonial and Revolutionary Am, 1492-1789 | 4 |
| Hist 314 | Inventing America, 1789-1850 |

## World

| Hist 342 | West Africa | 4 |
| :--- | :--- | :--- |
| His 343 | Ancient Nile Valley | 4 |
| Hist 344 | Northeast Africa | 4 |
| Hist 346 | South Africa | 4 |
| Hist 348 | Africans in the Americas | 4 |
| Hist 349 | Islam in History | 4 |
| Hist 351 | U.S.-East Asian Relations | 4 |
| Hist 352 | Modern China | 4 |
| Hist 354 | Women Family \& Gender in Chinese History | 4 |
| Hist 355 | East Asian Popular Religion | 4 |
| Hist 356 | History of Japan | 4 |
| Hist 371 | History of Central America | 4 |
| Hist 372 | U.S.-Latin American Relations | 4 |
| Hist 373 | History of Mexico | 4 |
| Hist 440 | Advanced Studies in African History | 3 |
| Hist 446 | Ancient Israel and Judah | 3 |
| Hist 450 | Advanced Studies in East Asian History | 3 |
| Hist 475 | Advanced Studies in Latin American History | 3 |

## Europe

| Hist 302 | Ancient Rome | 4 |
| :--- | :--- | :--- |
| Hist 308 | Rise of Christianity | 4 |
| Hist 359 | Medieval Europe | 4 |
| Hist 360 | Renaissance Europe | 4 |
| Hist 361 | Czarist Russia | 4 |
| Hist 362 | Rise \& Fall of Soviet Union | 4 |
| Hist 364 | Germany: Roman Times to 1919 | 4 |
| Hist 365 | Germany, 1919 to Present | 4 |
| Hist 366 | Hitler and the Holocaust | 3 |
| Hist 368 | Medieval Women | 4 |
| Hist 382 | Reformation Europe and Wars of Religion 4 |  |
| Hist 465 | Advanced Studies in European History | 3 |

4Hist 359 Medieval Europe
Hist 360 Renaissance Europe ..... 4Hist 362 Rise \& Fall of Soviet Union4
Hist 365 Germany, 1919 to Present ..... 4Hitler and the Holocaust
Hist 368 Medieval Women ..... 4
Hist 465 Advanced Studies in European History ..... 3
Subtotal Other Departmental Requirements

Total required in major
38-44

## Free Electives (variable)

## TOTAL REQUIRED FOR GRADUATION

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## Recommended Courses:

History majors are strongly urged to take two courses in one modern language, and courses in Anthropology, Art (in particular Art History), Economics, English, Geography, Philosophy, Political Science, Psychology, Sociology, and Southwest Studies (of particular interest, SW 340: Archival Theory \& Practice and SW 341: Oral History: Theory and Practice).

## HISTORY - WORLD OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN HISTORY - WORLD OPTION:

| General Education <br> See page 25 for General Education requirements. | 35-46 |
| :---: | :---: |
|  |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| A 2-course survey sequence in the World Option: | 6 credits |
| **Hist 140 Survey of African History I | 3 |
| **Hist 141 Survey of African History II OR | 3 |
| ${ }^{* *}$ Hist 170 Survey of East Asian Civilization I | 3 |
| **Hist 171 Survey of East Asian Civilization II OR | 3 |
| **Hist 270 Colonial Latin America | 3 |
| **Hist 271 Latin America Since Independence | 3 |
| Two non-World surveys, one in US and one in Europe; at least one of the two must be History 160 or 280: | 6 credits |
| One course from the following (US): |  |
| Hist 280 Survey of US History, 1600-1877 | 3 |
| **Hist 281 Survey of US History, 1877-Present | 3 |
| One course from the following (Europe): |  |
| **Hist 160 Survey of Western Civilization I | 3 |
| **Hist 261 Survey of Western Civilization II | 3 |
| Hist 396W Philosophy and Methods | 4 |
| Hist 496 Research Senior Seminar | 4 |
| Subtotal Specific Departmental Requirements | 20 |
| OTHER DEPARTMENTAL REQUIREMENTS |  |
| Three upper division World History courses |  |
| chosen from the following: | 9-12 |
| Hist 342 West Africa | 4 |
| Hist 343 Ancient Nile Valley | 4 |
| Hist 344 Northeast Africa | 4 |
| Hist 346 South Africa | 4 |
| Hist 348 Africans in the Americas | 4 |
| Hist 349 Islam in History | 4 |
| Hist 351 U.S.-East Asian Relations | 4 |
| Hist 352 Modern China | 4 |
| Hist 354 Women Family \& Gender in Chinese History | 4 |

$35-46$
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:

Hist 355 East Asian Popular Religion
Hist 356 History of Japan
Hist 371 History of Central America
Hist 372 U.S.-Latin American Relations
Hist 373 History of Mexico
Hist 440 Advanced Studies in African History
Hist 446 Ancient Israel and Judah
Hist 450 Advanced Studies in East Asian History
Hist 475 Advanced Studies in Latin American History
Three Upper Division Non-World courses,
one must be US, one must be European:

## United States

Hist 311 Colonial and Revolutionary Am, 1492-1789
4
Hist 314 Inventing America, 1789-1850
Hist 315 Irish, Catholic, American
Hist 316 Civil War America
Hist 318 Emergence of Modern America, 1893-1939
Hist 322 Western American Mining
Hist 324 Colorado History
Hist 326 Baseball and the American Dream
Hist 331 Politics of Poverty in U.S.
Hist 332 Women in American History
Hist 333 America Since 1945
Hist 334 United States and Vietnam
Hist 335 Work and Workers in the U.S.
Hist 337 Cultural and Intellectual Hist in the 20th Cent
Hist 485 Advanced Studies in United States History 3
Europe

| Hist 302 | Ancient Rome | 4 |
| :--- | :--- | :--- |
| Hist 308 | Rise of Christianity | 4 |
| Hist 359 | Medieval Europe | 4 |
| Hist 360 | Renaissance Europe | 4 |
| Hist 361 | Russia in Revolution to 1924 | 4 |
| Hist 362 | Soviet Union: Stalin to Gorbachev | 4 |
| Hist 364 | Germany: Roman Times to 1919 | 4 |
| Hist 365 | Germany, 1919 to Present | 4 |
| Hist 366 | Hitler and the Holocaust | 3 |
| Hist 368 | Medieval Women | 4 |
| Hist 382 | Reformation Europe and Wars of Religion | 4 |
| Hist 465 | Advanced Studies in European History | 3 |

## Subtotal Other Departmental Requirements

Total required in major
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

Recommended Courses:
History majors are strongly urged to take two courses in one modern language, and courses in Anthropology, Art (in particular Art History), Economics, English, Geography, Philosophy, Political Science, Psychology, Sociology, and Southwest Studies (of particular interest, SW 340: Archival Theory \& Practice and SW 341: Oral History: Theory and Practice).

## REQUIREMENTS FOR A MINOR IN HISTORY:

A total of 6 courses is required from at least two different instructors. Three courses ( 9 credits) should be lower division and three courses (10-12 credits) should be upper division. See the department chair for further information.

TOTAL REQUIRED FOR HISTORY MINOR
19-21

## HUMANITIES

Coordinators - Gordon P. Cheesewright and Kathryn Moller.

## Humanities Advisors:

Professors - Gordon P. Cheesewright (English), Byron Dare (Political Science), Larry K. Hartsfield (English), Rochelle G. Mann (Music) and Susan M. Moss (Art)
Associate Professors - Michael C. Anziano (Psychology), Jennifer A. Gehrman (English), David L. Kozak (Anthropology), Dennis W. Lum (Sociology) and Dugald L. Owen (Philosophy) Associate Professor.

The Humanities major consists of a primary concentration of 30 credits in one of the disciplines listed below and two secondary concentrations of 12 credits each in two other of these disciplines. At least half of the credits constituting the primary concentration and half of the total credits in the secondary concentrations must be upper-division courses. Students majoring in humanities must choose advisors from the disciplines of their primary concentrations. Humanities majors choosing to take the senior seminar within their primary concentration should consult carefully with their advisors to be sure they complete the departmental prerequisites for that course. As an alternative, students may choose to take an interdisciplinary senior seminar (GS 496). Students may not count courses used in their primary concentrations toward second majors in the disciplines of their primary concentrations. Courses used in a primary or secondary concentration may count toward both the humanities major and the general education requirements. The disciplines from which students may choose concentrations within the humanities major are listed below. Please note any restrictions, requirements, or exceptions indicated for each discipline.

Anthropology: Anth 301 does not count
Art: Two art history courses and two studio courses required for Primary Concentration

Economics: Econ 201 does not count
English: Engl 215, 250, 251, 252, 304, 306, 350, 351, 352, 450, 451, 452,453 , and 483 do not count

History

Modern Language: In addition to all Modern Language courses, Ed 333 is allowed
Music: Allowed as a secondary concentration only. Mu 331 and 332 required; all additional credits must be chosen from among Mu 120, 128, $129,228,229$, or 337

Philosophy
Political Science: PS 301, 350, and 450 do not count
Psychology: No more than a total of six Psychology credits of off-campus coursework, innovative month, or independent study combined may be counted toward a primary or secondary concentration.

Sociology
Southwest Studies
Theatre: Thea 101 does not count; only nine credits allowed from among Thea 100, 200, 300, and 400 (four credits for secondary concentration)

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN HUMANITIES:

General Education35-46See page 25 for General Education requirements.** Courses marked with double asterisks may also be counted toward TS1 or$Q$ requirements.
Specific Departmental Requirements:
Primary Concentration (includes Writing course and496 Senior Seminar or GS 496. 15 creditsmust be upper division):30
Two Secondary Concentrations ( 12 credits each. A total of 12 of the 24 credits must be upper division): ..... 24
Subtotal ..... 54
Auxiliary Department Requirements:
Two semesters of one college-level modern language ..... 6-8
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.
Humanities majors with a primary concentration in psychology should note that Psyc 296W is the writing course in this discipline. Prerequisites for Psyc 296W are Psych 157 and Psyc 241Q. The Senior Seminar, Psyc 496, requires the following prerequisites: Psyc 157, Psyc 241Q, Psych 296 and Psyc 300. No more than a combined total of six credits in psychology from off-campus coursework or Innovative Month or independent study (Psyc 299/ Psyc 499) may be counted toward a primary or secondary concentration.

## INTERDISCIPLINARY STUDIES

For information: see David Hayes, Director of Teacher Education
The Interdisciplinary Studies Major is the major designed primarily for Fort Lewis College students who are seeking Colorado teaching licensure in either Early Childhood Education (preschool-3rd grade) or Elementary Education (K6). Interdisciplinary Studies is structured to promote the acquisition of a broad range of content area knowledge in math, science, social sciences, and language arts. Fort Lewis College students who are interested in this broad content preparation but are not interested in seeking a teaching licensure may also choose this major. The Interdisciplinary Studies Major is organized into three parts: 1) coursesrequired of all Fort Lewis College students (general education), 2) a specified number of courses from each of four content areas, and 3) electives; the teacher licensure requirements serve as the electives for students seeking licensure.

## Interdisciplinary Studies includes two options: Early Childhood Education and Elementary Education

Students choosing either option of the Interdisciplinary Studies major should choose an academic advisor in the Teacher Education Department and communicate whether they are following the Early Childhood Education or Elementary Education option. Students seeking teaching licensure should read thoroughly the section on the Teacher Education Licensure Program, beginning page 99, to determine which courses in the general education and free elective categories shown below they must complete for licensure.

# INTERDISCIPLINARY STUDIES - EARLY CHILDHOOD EDUCATION OPTION 

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN INTERDISCIPLINARY STUDIES - EARLY CHILDHOOD EDUCATION (ECE) OPTION:

[^5]9 additional credits chosen from the following:

ED 333 SW Language Immersion for Teachers
1-3
Soc 376 Language and Social Behavior
Thea 323 Children's Thearre
Any modern language course
Any course with Engl prefix


Social Studies subtotal
Minimum 20
Other Major Course Requirement
GS 496 Interdisciplinary Senior Seminar
Subtotal Major Course Requirements
Minimum 46
Free Electives (variable)
NOTE: Students seeking Early Childhood Education teaching licensure will complete the required teacher education licensure courses as their electives (37 credits). See Teacher Education, page 102.

TOTAL REQUIRED FOR GRADUATION

## INTERDISCIPLINARY STUDIES ELEMENTARY EDUCATION OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN INTERDISCIPLINARY STUDIES - EARLY ELEMENTARY EDUCATION OPTION:

## General Education Requirements

$35-46$
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Specific Departmental Requirements

Language Arts

## Required Courses:

ED 317 Professional Writing for Educators ..... 3
ED 327 Children's Literature ..... 3
ED 335 Linguistics for Educators ..... 3
One additional course chosen from the following:
ED 333 SW Language Immersion for Teachers ..... 1-3
Soc 376 Language and Social Behavior ..... 4
Thea 323 Children's Theatre ..... 4
Any foreign or modern language course ..... 3-4
Any course with Engl prefix ..... 4
Language Arts subtotal Minimum 12
Mathematics:
Required Courses:
**Math 215Q Math for Elementary School Teacher I ..... 3
**Math 318Q Math for Elementary School Teacher II ..... 3
One additional math course from the following: ..... 4
**Math 105Q College Mathematics ..... 3
**Marh 110Q College Algebra ..... 4
**Math 121Q Pre-Calculus ..... 4
**Math 201Q Elementary Statistics ..... 4
**Math 221Q Calculus I ..... 4
**Psyc 241Q Basic Stats for Psychologists ..... 4
Math subtotal ..... 9-10
Science: Courses from two different disciplines; one must include a lab${ }^{* *}$ Choose any courses with Bio, Chem, Geol, Phsc or Phys prefix
Science subtotalMinimum 10
Social Studies
Required Courses:
Psyc 254 Life Span Human Development ..... 4
One of the following American History courses:
**Hist 181 US/SW Environmental History ..... 3
OR
**SW 181 US/SW Environmental History ..... 3
Hist 280 Survey of US History 1600-1877 ..... 3
**Hist 281 Survey of US History 1877-Present ..... 3
Hist 311 Colonial \& Revolutionary America 1492-1789 ..... 3
Hist 314 Inventing America 1789-1850 ..... 4
Hist 318 Emergence/Modn America 1893-1939 ..... 4
Hist 333 America Since 1945 ..... 4
Hist 337 Cult \& Intell Hist of Amer 20th C ..... 4
**SW 123 American Indian History ..... 3
SW 125 History of Hispanos in Southwest ..... 3
One additional course from the following:
ED 331 Southwest Minority Child Classroom3Any course with one of the following prefixes: Anth,Econ, Geog, Hist, PS, Soc or SW.
Subtotal Social StudiesMinimum 10
Other Major Course Requirement (2 cr)GS 496 Interdisciplinary Senior Seminar2

Free Electives (variable)

NOTE: Students seeking Elementary Education teaching licensure will complete the required teacher education licensure courses as their electives (37 credits). See Teacher Education, page @@.

# INTERNATIONAL STUDIES PROGRAM 

Coordinator - Jan E. Sallinger, Associate Professor

The intent of this curricular program is to offer the student an interdisciplinary introduction to the multifaceted nature of international and inter-state relations. Students wishing to complete this major must follow the format for a studentconstructed major. The student-constructed major form may be obtained from the Academic Advising Center, Miller Student Center 140. Shown below is a suggested model program, but it can be modified to meet individual needs. The core courses in the student-constructed international studies major are appropriate courses in history, political science, and anthropology of a given region or several geographical regions. In addition, courses proposed for the major should reflect sufficient exposure to contemporary cultures and societies from the viewpoints of language, business, economics, and sociology. Typically, the student is expected to either stipulate a geographical region of concentration having a coherence in terms of specific course selection from those disciplines that offer courses relevant to the geographical orientation (for example, a European concentration will have appropriate courses from history, modern language, political science, etc.), or design a broader, non-region specific, worldview emphasis. Successful completion of a welldesigned International Studies major will give the student a broader, more analytical understanding of the international community in terms of bilateral and multilateral relations that affect the decisions of both the individual and his or her government.

## EXPECTATIONS

Regardless of the specific orientation, each student is expected to choose courses from among the following disciplines.

## General Education

35-46
See page 25 for General Education requirements.
NOTE: 12-16 credits of TS1 courses may also count toward major requirements.

## Language

Listed below are the possible geographical designations with the appropriate language courses. The language section
includes a total of 12 or 16 hours of intermediate and advanced work in a single language. There is an exception in the
Asian field because of limited course offerings.
Europe
6 hours of intermediate German, or 8 hours of French or Spanish
6 hours of upper-level German, or 8 hours of French or Spanish

## Latin America

8 hours of intermediate Spanish
8 hours of upper-level Spanish

## Asia

6 hours of beginning Japanese
6 hours of cultural Japanese

Africa
8 hours of intermediate French
8 hours of upper-division French
Total Language

## Geography

Each student in International Studies should take:
**Geog 271R World Geography
4

## History

The listing of courses for the history department is by geographical area and course title. The student is encouraged to select the appropriate courses relating to the specific focus of the major. Moreover, it is understood that the courses selected from this discipline are contemporary in scope. Each student should select two or more courses from among those listed below in order to satisfy this component of the major. This applies to all students in the program.

| Hist 342 | West Africa | 4 |
| :--- | :--- | :--- |
| Hist 344 | Northeast Africa | 4 |
| Hist 346 | South Africa | 4 |
| Hist 349 | Islam in History | 4 |
| Hist 351 | U.S.-East Asian Relations | 4 |
| Hist 352 | Modern China | 4 |
| Hist 362 | Rise \& Fall of Soviet Union | 4 |
| Hist 365 | Germany, 1919 to Present | 4 |
| Hist 371 | History of Central America | 4 |
| Hist 372 | United States-Latin American Relations | 4 |
| Hist 373 | History of Mexico | 4 |
| Hist 440 | Advanced Studies in African History | 3 |
| Hist 450 | Advanced Studies in East Asian History | 3 |
| Hist 465 | Advanced Studies in European History | 3 |
| Hist 475 | Advanced Studies in Latin American History | 3 |

## Political Science

Each student should select at least three courses from the political science area regardless of geographical designation. All students are strongly urged to take PS 280 , and PS 320.

| ${ }^{* *}$ PS $205 N$ | Environmental Politics | 3 |
| :--- | :--- | :--- |
| ${ }^{* *}$ PS 280 Introduction to Comparative Politics | 4 |  |
| PS 300 | Religion and Politics | 4 |
| PS 320 | International Politics | 4 |
| PS 322 | International Political Economics | 4 |
| PS 325 | Middlle East Politics | 4 |
| PS 337 | U.S. Foreign Policy | 4 |
| PS 360 | Revolution and the Modern World | 3 |
| PS/WS 365 Women and Development | 3 |  |
| PS 370 | Latin American Politics | 4 |
| PS 372 | African Politics and Development | 4 |
| PS 374 | Pacific Rim Politics and Issues | 4 |
| PS 380 | Comparative Communist Systems | 4 |
| PS 385 | Twentieth-Century Socialisms | 3 |

## Business

Each student is urged to take one of the following as part of the program in International Studies:
**BA 271R Principles of International Business 3
BA 389 International Finance 4
BA 372W Global Business Seminar 4

## Economics

Each student, regardless of specific area of focus, is urged to select from the following courses offered by the Department of Economics:
Econ 370 Topics in International Economics 1-6
Econ 371 International Economics

## Anthropology

Each student in International Studies should take **Anth 210R
and ${ }^{* *}$ Anth 217 R regardless of geographical area of concentration.
**Anth 210R Intro to Cultural and Social Anthropology 4
**Anth 217R Cultural Images of Women and Men 4

Each student is urged to select one of the following (where appropriate, the course should be in accord with the area of concentration selected):
Anth 350 Ethnology of Mesoamerica 4
Anth 351 Ethnology of Andean South America 4
Anth 353 Ethnology of India
Anth/WS 355 Anthropoogy of Gender
Anth 356 Ecological Anthropology
Anth 371 Ethnology of Amazonian South America
4

Sociology/Human Services
Each student, regardless of geographical area of concentration, is urged to take the following courses in Sociology/Human Services:
Soc 301 Comparative Societies 4
Soc 376 Language and Social Behavior 4

## Writing Course

Writing course in appropriate discipline/department 2-4
Independent Study or Senior Seminar in appropriate
discipline/department
A minimum of 44 semester credits must apply toward the major, including at least two credits of 496 or 499 . Forty percent of the major courses must be numbered 300 or above.

## TOTAL REQUIRED FOR GRADUATION

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## JAPANESE

See Modern Languages on page 79. See course listings on page 149.

## LATIN

See Modern Languages on page 79. See course listings on page 149.

## MATHEMATICS

Course listings for Mathematics begin on page 147.
Department Chair - Deborah L. Berrier
Associate Professors - Deborah L. Berrier, Pamela K. Smith
Assistant Professor - Carl F. Lienert, Vesta Coufal
Visiting Instructor - Dorothy D. McShan

## MATHEMATICS MAJOR

Society is increasingly dependent upon solving complex problems of a numerical, quantitative, and statistical nature.
These all require logical thought. The Mathematics major is a solid introduction to all aspects of mathematics. It helps students prepare for the exciting challenges of today and tomorrow.

Many graduates have chosen to be teachers in the public schools. Others have chosen graduate study or careers in such fields as computer science, statistics, engineering, business, biometrics, the actuarial sciences, and other areas involving mathematics. Additionally, for those students who are undecided about a career, a Mathematics major proves an excellent background in critical thinking and problem solving.

## TEACHER EDUCATION

Those students seeking certification to teach in a senior high school must complete all the general requirements for the math major, including the following specific courses: Math 316Q, 325 , and 342Q.

To obtain information about all the requirements for teaching licensure, please contact the
Department of Teacher Education.

## MATHEMATICS MINOR

A minor is available in mathematics and requirements are listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN MATHEMATICS:

| General Education | 35-46 |
| :---: | :---: |
| See page 25 for General Education requirements. |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| ${ }^{* *}$ Math 201Q Elementary Statistics | 4 |
| **Math 221Q Calculus I | 4 |
| **Math 222Q Calculus II | 4 |
| **Math 223Q Calculus III | 4 |
| **Math 301W Foundations for Advanced Mathematics | 4 |
| ${ }^{* *}$ Math 311Q Matrices and Linear Algebra | 4 |
| **Math 327Q Differential Equations | 4 |
| ${ }^{* *}$ Math 424Q Advanced Calculus | 4 |
| ${ }^{* *}$ Math 487Q Algebraic Structures | 4 |
| Three additional Math courses above 300, except 318Q | 9-12 |
| Math 496 Mathematics Senior Seminar | 3 |
| Subtotal Specific Departmental Requirements | 48-51 |
| Auxiliary Requirements from Other Department: |  |
| CSIS 106 Introduction to Programming in Visual Basic OR |  |
| CSIS 110 Introduction to Programming (Java) | 4 |
| Subtotal Auxiliary Requirements | 4 |
| Free Electives (variable) |  |
| TOTAL REQUIRED FOR GRADUATION | 120 |
| Note to transfer and former students: If you have taken requirements and received a different number of credits may need to complete additional major credit requireme | your m ted abov |

## MATHEMATICS MINOR

## REQUIREMENTS FOR A MINOR IN MATHEMATICS:

Mathematics Minor:
${ }^{* *}$ Math 221Q Calculus I ..... 4
**Math 222Q Calculus I ..... 4
Three additional mathematics courses above the 300 level (except Math 318) ..... 9-12OR
**Math 223Q Calculus III ..... 4
AND
Two additional mathematics courses above the 300 level (except Math 318) ..... 6-8
TOTAL REQUIREMENTS FOR MATHEMATICS MINOR ..... 17-20
MODERN LANGUAGES

Course listings for all Modern Languages begin on page 149.

Department Chair - Kathleen Aguilar
Professors - Lourdes M. Carrasco, Ingrid W. Ryan
Assistant Professor - Kathleen Aguilar, Patricia Sanchez-Flavian
Visiting Instructors - Ellen Hartsfield, Amy Sellin
The mission of the Department of Modern Languages is to promote knowledge and appreciation of various languages, cultures, and literatures. The Department offers French, German, Japanese, Latin, Navajo, and Spanish. A major in Spanish is available and student self-constructed majors are available in French and German. Minors are available in Spanish, French, and German. Requirements for these minors are listed at the end of this section.

Note: Language auxiliary requirements for other departments may be met with transferred American Sign Language courses. Contact the Records Office for more information.

## GUIDELINES FOR GRANTING CREDIT FOR FOREIGN LANGUAGE COMPETENCE

Fort Lewis College has three methods of granting credit for foreign language competence. One method is based upon the transfer of college credits from a fully accredited college or university. The second method is by examination. A student may pass subject examinations of the College Level Examination Program (CLEP), Advanced Placement (AP), or International Baccalaureate (IB). Also, a student may challenge a foreign language course for credit through the Credit by Examination procedure, provided the challenged course is not more than one step below the student's present level. Except for transfer credits, credit will be granted for competence in a foreign language only for courses taught at Fort Lewis College.

Further information concerning foreign language competence is available through the Department of Modern Languages or the Records Office.

## STUDY ABROAD

Several programs in many parts of the world are available to students. For more information contact the International Program Office or a faculty member of the Department of Modern Languages.

To earn a major in Spanish, a student is required to complete the equivalent of 40 credits of coursework in the language. 100 -level courses do not count toward the major. A student with previous study may be placed at the appropriate level. Please refer to the Modern Languages webpage for additional information.

A student electing Spanish as a major will devise a plan of study in consultation with a member of the Spanish faculty. Students intending to acquire a teaching credential at the elementary or secondary level should consult with an advisor in the Teacher Education Department. At the elementary level, a bilingual/bicultural concentration is offered.

Minors in French, German and Spanish are also available. Requirements for these minors are described below.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN SPANISH:

35-46
General Education
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS 1 or $Q$ requirements.

Specific Departmental Requirements:
ML 215 Intermediate Spanish I
4
**ML 216R Intermediate Spanish II
ML 319 Advanced Spanish Conversation and Composition
ML 320W Advanced Spanish Conversation and Composition II

4
Choose one of the two following sequences:
ML 336 Survey of Spanish Literature
4 AND
ML 345 Hispanic Culture and Civilization I 4 OR
ML 337 Survey of Spanish American Literature AND
ML 346 Hispanic Culture and Civilization II
ML 496 Senior Seminar in Spanish
4
Other Departmental Requirements:
12 credits to be taken from 300- or 400-level Spanish courses12

Total 40
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION

FRENCH MINOR

## REQUIREMENTS FOR A MINOR IN FRENCH:

French:<br>ML 147 Elementary French I 4<br>ML 148 Elementary French II 4<br>ML 247R Intermediate French I 4<br>ML 248 Intermediate French II 4<br>300- or 400-level French courses 9<br>TOTAL REQUIRED FOR FRENCH MINOR 25<br>When planning a minor in French, students should consult with an appropriate faculy member in the Department of Modern Languages.<br>Students may also pursue a student-constructed major in French under the supervision of the appropriate faculty member (See Academic Programs).<br>For French, German, Japanese, Latin, and Navajo, see Modern Language course listings, page 149.

## GERMAN MINOR

## REQUIREMENTS FOR A MINOR IN GERMAN:

German:<br>ML 123 Elementary German I 4<br>ML 124 Elementary German II 4<br>ML 223 Intermediate German I 3<br>**ML 224R Intermediate German II 3<br>300- or 400-level German courses 9<br>TOTAL REQUIREMENTS FOR GERMAN MINOR 23<br>When planning a minor in German, students should consult with an appropriate faculty member in the Department of Modern Languages.

Students may also pursue a student-constructed major in German under the supervision of the appropriate faculty member (See Academic Programs).

For French, German, Japanese, Latin, and Navajo, see Modern Language course listings, page 149.

## SPANISH MINOR

## REQUIREMENTS FOR A MINOR IN SPANISH:

Completion of 24 credits in Spanish, 12 credits of which must be 300- or 400-level courses.

TOTAL CREDITS REQUIRED FOR SPANISH MINOR
When planning a minor in Spanish, students should consult with an appropriate faculty member in the Department of Modern Languages.

Course listings for Mountain Studies begin on page 151.<br>Coordinators - David Kozak and Gary Gianniny<br>Advisors:<br>Professors - Thomas Skurky (Psychology)<br>Associate Professor - Alane Brown (Psychology), Gary Gianniny<br>(Geosciences), David Kozak (Anthropology), and Scott White (Geosciences)<br>Assistant Professors - Cynthia Dott (Biology) and Julie Korb (Biology)

Mountain Studies is a regionally focused, globally relevant interdisciplinary and experiential exploration of mountains and their role in human mythology, history, culture, and the social and natural sciences. As a type of landform, mountains have captivated the imaginations of people from around the world, influenced art, and inspired the creation of religions. Moreover, mountains are vitally important for the health of the planet and for supplying the majority of fresh water for human consumption. The Mountain Studies minor offers an exciting opportunity to study the role of mountains in human culture and natural history, and to experience firsthand the vast mountainous terrain in southwest Colorado and beyond while attending Fort Lewis College. A unique partnership between Fort Lewis College and Mountain Studies Institute in Silverton, Colorado enhances the student's experience available in this innovative program.

Students completing the minor may take classes in the humanities, social sciences, sciences and exercise science in order to achieve an interdisciplinary experience. Students should contact one of the coordinators, David Kozak or Gary Gianniny, in order to plan a course of study or learn the details of the program and internships. NOTE: Students electing the Mountain Studies minor must receive advising from a Mountain Studies advisor.

There are five primary components to the minor:

1) Students select 12 credit hours from a list of existing courses (at least 6 hours of biology or specified geosciences offerings including labs); 6 credit hours must be upper division.
2) Students complete a total of four credit hours of internship (MS 350). MS 350 is a variable credit course (1-4). Students can take the internship once or several times, to complete the requirement of 4 credit hours. Students will be responsible for maintaining documentation proving completion of this requirement. This documentation will be required to attain instructor permission to register for MS 496.
3) Students take 2 credit hours of Physical Education (PE) classes selected from an approved list of existing courses.
4) Students culminate their Mountain Studies minor with an integrative capstone course, MS 496 (2-4-hours).
5) Students participate in 4 pre-approved Outdoor Pursuits outings. These experiences form the basis of reflective writing essays in the Mountain Studies Colloquium. The student will be responsible for maintaining documentation proving completion of this requirement. This documentation will be required to attain permission to register for MS 496.

## REQUIREMENTS FOR THE MINOR IN MOUNTAIN STUDIES:

NOTE: NO MORE THAN ONE COURSE FROM YOUR MAJOR DEPARTMENT WILL COUNT TOWARD THE MOUNTAIN STUDIES MINOR. UPPER DIVISION ELECTIVES IN THIS MINOR MUST TOTAL 6 CREDIT HOURS. THEY MAY BE SELECTED FROM EITHER THE BIOLOGY/GEOLOGY LIST OR FROM THE GENERAL ELECTIVES LIST BELOW.
${ }^{* *}$ Courses marked with double asterisks may also be counted toward TSI or $Q$ requirements

## Specific Requirements:

1. MS 350 Mountain Studies Internship 1-4

Note: This is a variable credit course. Students must complete a total of 4 credit hours of this course.
2. MS 496 Mountain Studies Colloquium 2-4
3. Minimum of 6 credit hours from Biology or Geosciences (including labs); Choose from:

## Biology

**Bio 125Nx Conservation Biology 4
**Bio/SW 250Nx Ecology of the Southwest 4
Geosciences
Geog 335
${ }_{* *}$ Weather and Climate
${ }^{* *}$ Geol 107Nx or Geol 113Tx Earth Sys Sci or Phys Geol 4
Geol 305 Volcanism of Hawaii 2
Geol 323 Geomorphology 4
4. Minimum of 6 credit hours selected from the General Electives list below Anthropology
Anth 351 Ethnology of Andean South America 4

## Business Administration

BA 330 Tourism and Resort Management 4

## English

**Engl 180N Literature of the Environment 4
Geography
**Geog 271R World Regional Geography 4
Geog 320 Natural Regions of N. America 3

## History

**Hist 181N US/SW Environmental History 3
Hist 322/SW 482 Western American Mining 4
Sociology
Soc 310 Ecology and Society 4

## Southwest Studies

SW 333 Wilderness in America

| Thematic Studies (May be counted toward minor and TS2 requirement) |  |  |
| :--- | :--- | :---: |
| TS2N 05 | Wilderness | 4 |
| TS2N 406 | Water in the West | 4 |
|  |  | 4 |
| TS2N 410 | Fire in the West | 4 |
| TS2R 403 | Spirit of Adventure |  |
|  |  |  |
| 5. Two credit hours of Physical Education; Choose from: |  |  |
| PE 1410S | Backpacking and Camping |  |
| PE 1430F | Day Hiking | 1 |
| PE 1450S | Kayaking-Beginning | 1 |
| PE 1460S | Rock Climbing | 1 |
| PE 1481F | Skiing-Cross Country | 1 |

Relevant courses from a variety of disciplines may also be offered as 190, 390,191 , or 391 courses. See the Mountain Studies coordinator and/or advisors about current offerings that could be applied toward a minor in Mountain Studies. PRIOR APPROVAL FROM COORDINATOR OF THE MOUNTAIN STUDEIS MINOR MUST BE OBTAINED IN ORDER TO HAVE THESE COURSES INCLUDED AS PART OF THE MINOR. Additional courses may be added to this list from time to time; consult the environmental policy coordinator for current listings.
6. Additional Requirement: Participation in 4 approved Outdoor Pursuits outings.

TOTAL REQUIRED FOR MOUNTAIN STUDIES MINOR
20-22

MUSIC

Course listings for Music begin on page 151.
Department Co-Chairs - Timothy P. Farrell and Katherine D. Jetter Tischhauser Professors - Linda S. Mack, Rochelle G. Mann and John C. Pennington
Associate Professors - Timothy P. Farrell, Katherine D. Jetter Tischhauser and Mark A. Walters
Assistant Professors - Lisa Campi and Mikylah Myers McTeer Visiting Instructor - Brock Burbach

## Program Mission and Goals

The Fort Lewis College Music Department is committed to the philosophy that the arts enrich both the human mind and spirit, and the faculty are dedicated to fostering artistic and intellectual development throughout the campus and surrounding communities.

Through programs that both challenge and nurture, the Music Department attempts to meet the following goals:

1. Provide an opportunity for all the students of this liberal arts institution to develop a better understanding of the musical arts;
2. Provide training in music leading to its associated careers;
3. Provide artistic leadership and musical performances for the enrichment of the cultural aspects of the College and community.

The Music Department has also established the following objectives:

1. In general education, the Music Department should serve a large portion of the student population both in courses which require previous musical experience and in courses designed for the neophyte.
2. Graduating seniors with majors in music should: a) demonstrate an understanding of the formal, harmonic, and melodic structure of standard musical literature, b) demonstrate performance competency in at least one area of applied music, c) demonstrate practical knowledge of keyboard skills, d) demonstrate an understanding of music in its historical and cultural contexts, and e) where applicable (Music Education option), meet qualification requirements for certification by the Colorado State Department of Education.
3. Musical performances should offer a wide variety of literature and styles in live concerts by both student and professional musicians. The College and community should both be actively involved in these programs.

## College-Wide Goals that the Music Department's Goals Address:

The Music Department's goals are aligned with two of the College's four general education goals

## to be assessed:

1. Goals 1 and 3 and objectives $1,2 a$ and $2 d$ correspond to College-wide goal, "Learning as Inquiry."
2. Goal 2 and objectives $2 b, 2 c, 2 e$, and 3 correspond to the College-wide goal, "Responsible Action."

In today's complex society, the need persists for the educated person to be aware of the important role played by the arts. The Fort Lewis College Music Department, an accredited member of the National Association of Schools of Music, provides an opportunity for all students to be actively involved in the expansion of their understanding of music. The discipline and sensitivity developed by the study of music provides an excellent background for many and varied careers. The Music Department awards both majors and minors in music.

For the student interested in majoring in music, the department offers a comprehensive curriculum. There are five different courses of study (options), each leading to the Bachelor of Arts degree in Music: General Music Studies, Jazz Studies, Music Business, Music Performance and Music Education. In general, students should choose only one option in which to major.

All students majoring in music will be required to pass an entrance audition and theory placement exam. Music majors must also successfully pass an individual performance exam during the trimester they are enrolled in MU 229 (Theory and Musicianship IV). This is a juried exam occurring within the student's Applied Music course that term. Most often this will occur during the second semester of the sophomore year.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN MUSIC:

All music majors must satisfy the following Special Departmental Requirements as well as the listed Common Requirements.

Special Departmental Requirements:
Piano Proficiency Requirements:
All music majors must satisfy a piano proficiency requirement before taking Mu 349 Conducting I or Mu 423 Orchestration. The requirement includes sight reading, harmonization of a simple melody, and demonstrated ability to perform easier piano compositions (such as Clementi: "Sonatina Op. 36 \#1;" Bach: "Two Part Invention"). Students with adequate skills may petition to take the examination and may receive credit for the appropriate courses. (See Credit by Examination, page 18.) Those with less background must take a piano placement test and, in their freshman year, enroll in the proper course in the Piano class sequence 103, 104, 203, and 204. Successful completion of this sequence with a grade of $A$ or $B$ also satisfies the piano proficiency requirement.

Music Literature Requirement:
Concert Attendance. Attendance at scheduled recitals and concerts and at regularly scheduled listening labs is required each semester.

Major Ensemble Requirement:
At least 8 credits from Mu 105, 110, 117, 305, 310, and 317 are
required. Students will be assigned to the appropriate major ensemble by the applied music instructor(s). At least one of the above is required each semester of residency with the exception contained within the following:

Music Education concentration - A Major Ensemble is not required during the semester of student teaching. Mu 110, 117,310, or 317 is required for the instrumental specialization, and Mu 105 or 305 for the choral specialization.

Applied Music Requirement:
One applied course is required each semester of residency except during the semester of student teaching (Music Education Concentration). The following guidelines pertain to the Performance Concentration: Students must obtain music faculty approval before declaring the Performance Concentration and subsequently register for 2 credits of applied music on their major instrument each semester of residency.

Foreign Language Requirement:
Two semesters of foreign language, either German or French, are strongly recommended for the General Music Studies and Music Performance options. The voice specialization within the Music Performance option requires three semesters of German or French, including at least one semester of each language.

## Common Requirements:

| Mu 128 | Theory and Musicianship I | 5 |
| :--- | :--- | :--- |
| Mu 129 | Theory and Musicianship II | 5 |
| Mu 228 | Theory and Musicianship III | 5 |
| Mu 229 | Theory and Musicianship IV | 5 |
| Mu 331 | History of Music I | 3 |
| Mu 332 | History of Music II | 3 |
| Mu 349 | Conducting I | 2 |
| Mu 350 Conducting II | 2 |  |
| Mu 415 WLiterature and Conversation: Writing About Music | 3 |  |
| Mu 423 Orchestration | 1 |  |
| Mu 496 Senior Seminar | 2 |  |
|  |  |  |
| Total Common Requirements | 36 |  |

## MUSIC - GENERAL MUSIC STUDIES OPTION

The General Music Studies option is designed for students interested in a liberal arts education with an emphasis in music.

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Common Requirements (listed above)
36
Specific Departmental Requirements:
Music Literature/Concert Attendance
0
Major Ensemble
8
Applied Music
16

## Subtotal

Total
Additional Requirements:
Students must present a half recital of at least 30 minutes duration during the junior or senior year.

Free Electives (variable)

## TOTAL REQUIRED FOR GRADUATION

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.



TOTAL REQUIRED FOR GRADUATION
120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

MUSIC - MUSIC BUSINESS OPTION

| General Education <br> See page 25 for General Education requirements. | $\mathbf{3 5 - 4 6}$ |
| :--- | :---: |
| ${ }^{* *}$ Courses marked with double asterisks may also be counted toward TS1 or |  |
| Q requirements. |  |
| Common Requirements (listed above) | 36 |
| Specific Departmental Requirements: |  |
| Mu 342 Topics in Music Business |  |
| Mu 343 Technology \& Music Industry | 2 |
| Music Literature/Concert Altendance | 2 |
| Mapor Ensemble | 0 |
| Applied Music | 8 |
| Subtotal | 8 |

Total Departmental Requirements
$\begin{array}{ll}\text { Auxiliary Requirements From Other Departments } 1.2 \text { : } \\ \text { BA } 101 \quad \text { Business World } & 4\end{array}$
$\begin{array}{lll}\text { BA 101 } & \text { Business World } & 4 \\ \text { BA 240 } & \text { Business Creativity and Innovation } & 2 \\ \text { BA } 339 & \text { Selling }\end{array}$
BA 339 Selling 3
BA 340 Marketing 4
**Econ 266S Principles of Economics 4
$\begin{array}{ll}\text { One additional course from the following } \\ \text { ACC } 225 & \text { Financial Accounting }\end{array}$
$\begin{array}{lll}\text { BA } 205 & \text { Small Business Venturing } & 4\end{array}$
BA 342 Retailing 3
BA 347 Consumer Behavior 3
Subtotal Auxiliary Requirements 20-21
${ }^{1}$ Students may not take more than 30 credit hours in accounting, business and economics
${ }^{2}$ A minimum grade of C - must be earned in 300 - and 400 -level business courses to count toward graduation for the Music Business Option.

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## MUSIC - MUSIC PERFORMANCE OPTION

The Music Performance option is designed for students who have demonstrated a strong commitment to music performance and who wish to use some of their elective hours to further concentrate in this area. The performance concentrations are limited to the areas of expertise represented by the music faculty. The areas of concentration are Piano, Voice, Brass, Woodwinds, Percussion, and Strings. A specific instrument must be chosen from within the brass, woodwinds, and strings.General Education35-46See page 25 for General Education requirements.** Courses marked with double asterisks may also be counted toward TS1 or$Q$ requirements.
Common Requirements (listed above) ..... 36Specific Departmental Requirements:
Music Literature/Concert Attendance ..... 0
Major Ensemble ..... 8
Applied Music ..... 16
Subtotal Specific Departmental ..... 24
Total ..... 60
Additional Requirements:
Students must present a half recital of at least 30 minutes duration during thejunior year and a full recital of at least one hour duration during the senioryear.
Free Electives (variable)

## Music Performance Suggested Course Sequence

| Semester 1 (Fall) |  | Semester 2 (Winter) |  |
| :---: | :---: | :---: | :---: |
| MU128 Theory/ | 5 | MU129 Theory/Musician- | 5 |
| Musicianship I | 2 | ship II | 2 |
| MU109 Applied Music |  | MU109 Applied Music |  |
| MU105 or 110 or 117 | 1 | MU105 or 110 or 117 | 1 |
| Ensemble | 0 | Ensemble | 0 |
| Concert Attendance | 4 | Concert Attendance | 3-4 |
| Comp 150 | 1 | TS1 N or T w/lab | 3 |
| Lib 150 | 1 | TS1 Q | 1 |
| ES 100 | 3-4 | PE ACT |  |
| TS1 - N or T MU 103 Piano I (if needed) | 1 | MU104A Piano II (if needed) Vocal Diction- Voice Majors only | 1 |
| Semester 3 (Fall) |  | Semester 4 (Winter) |  |
| MU228 Theory/ | 5 | MU229 Theory/ | 5 |
| Musicianship III | 2 | Musicianship IV | 2 |
| MU209 Applied Music |  | MU209 Applied Music |  |
| MU105 or 110 or 117 | 1 | MU105 or 110 or 117 | 1 |
| Ensemble | 0 | Ensemble | 0 |
| Concert Attendance | 3-4 | Concert Attendance | 3-4 |
| TS1 R or S |  | TS1 R or S |  |
| MU203A Piano III (if | $1$ | MU204A Piano IV | 1 |
| needed) |  | (if needed) |  |
| PE ACT |  | Electives |  |
| Semester 5 (Fall) |  | Semester 6 (Winter) |  |
| MU309 Applied Music | 2 | MU309 Applied Music | 2 |
| MU305 or 310 or 317 |  | MU305 or 310 or 317 |  |
| Ensemble | 1 | Ensemble | 1 |
| Concert Attendance | 0 | Concert Attendance | 0 |
| TS2 N, T, R or S | 3-4 | MU350 Conducting II or | 2 |
| TS2 N, T, R or S | 3-4 | MU332 Music History II | 3 |
| MU349 Conducting I | 2 | MU415W Writing About |  |
| or |  | Music | 3 |
| MU331 Music History I | 3 | Junior Recital | 0 |
| ML Modern Language |  | TS2 N, T, R or S | 3-4 |
|  |  | ML Modern Language |  |
| Semester 7 (Fall) |  | Semester 8 (Winter) |  |
| MU409 Applied Music | 2 | MU409 Applied Music | 2 |
| MU305 or 310 or 317 |  | MU305 or 310 or 317 |  |
| Ensemble | 1 | Ensemble | 1 |
| Concert Attendance | 0 | Concert Attendance | 0 |
| MU349 Conducting I | 2 | MU350 Conducting II or | 2 |
| or |  | MU332 Music History II | 3 |
| MU331 Music History I | 3 | MU496 Senior Seminar |  |
| MU423 Orchestration | 1 | (Recital) | 2 |
| TS2 N, T, R or S | 3-4 | Upper Division Electives |  |
| ML Modern Language |  |  |  |
| Upper Division Electives |  |  |  |

MUSIC - MUSIC EDUCATION OPTION
The Music Education option is designed for students planning to teach music in the public schools. Coordinated with the Teacher Education Department, this degree includes K-12 certification in music.

| General Education | $35-46$ |
| :--- | :--- |
| See page 25 for General Education requirements. |  |
| $* *$ Courses marked with double asterisks may also be counted toward TS1 or |  |
| Q requirements. |  |
| Common Requirements (listed above) | 36 |
| Additional Departmental Requirements: |  |
| Mu 103 Voice in Class | 1 |
| Mu 103 Brass in Class | 1 |
| Mu 103 Woodwinds in Class | 1 |
| Mu 103 Percussion in Class | 1 |
| Mu 103 Strings in Class | 1 |
| Mu 314 Methods and Principles of Teaching Vocal Music | 3 |
| Mu 315 Methods and Principles of Teaching Instrumental | 3 |
| Music | 3 |
| Mu 316 Music in the Elementary School | 14 |
| Subtotal |  |
| Specific Departmental Requirements: | 0 |
| Music Literature/Concert Attendance | 7 |
| Maior Ensemble | 7 |
| Applied Music | 14 |
| Subtotal | $\mathbf{6 4}$ |
| Total |  |

## Total

64Additional Requirements:
Students must complete the following courses for teacher licensure. Consult the Teacher Education Department for specific requirements. All Music Majors must also have an advisor from the Teacher Education Department.
**Ed 200R Introduction to Education in America 4
${ }^{* *}$ Ed 210S Culture of Childhood and Youth 4
Ed 421 Individualized Instruction in a Pluralistic Society 6
Ed 494 and 495 Laboratory Experience 15
( 7 credits Ed 494-Elementary/8 credits Ed 495-Secondary)

## Subtotal

29
Students must present a half recital of at least 30 minutes duration during the junior or senior year.

## MINIMUM REQUIRED FOR GRADUATION

128

[^6]Music Education Suggested Course Sequence

| Semester 1 (Fall) |  | Semester 2 (Winter) |  |
| :---: | :---: | :---: | :---: |
| MU128 Theory/ | $\backslash 5$ | MU129 Theory/ |  |
| Musicianship I | 1 | Musicianship II | 5 |
| MU109 Applied Music |  | MU109 Applied Music | 1 |
| MU105 or 110 or 117 | 1 | MU105 or 110 or 117 |  |
| Ensemble | 0 | Ensemble | 1 |
| Concert Attendance | 4 | Concert Attendance | 0 |
| Comp 150 | 1 | MU103 B, C, D, E or F | 1 |
| Lib 150 | 1 | TS1 N or T w/lab | 3-4 |
| ES 100 | 3-4 | TS1 Q | 3 |
| TS1-N or T |  | PE ACT | 1 |
| MU103A Piano I (if needed) | 1 | MU104A Piano II (if needed) | 1 |
| Semester 3 (Fall) |  | Semester 4 (Winter) |  |
| Apply to Teacher Ed |  | MU229 Theory/ |  |
| Program | 5 | Musicianship IV | 5 |
| MU228 Theory/ |  | MU209 Applied Music | 1 |
| Musicianship III | 1 | MU105 or 110 or 117 |  |
| MU209 Applied Music |  | Ensemble | 1 |
| MU105 or 110 or 117 |  | Concert Attendance | 0 |
| Ensemble | 1 | TS1 Ed 210 S | 4 |
| Concert Attendance | 0 | MU350 Conducting II or | 2 |
| TS1 Ed 200R | 4 | MU332 Music History II | 3 |
| MU349 Conducting I | 2 | MU103 B, C, D, E or F | 1 |
|  |  | MU204A Piano IV (if | 1 |
| MU331 Music History I | 3 | needed) |  |
| MU103 B, C, D, E or F | 1 |  |  |
| MU203A Piano III (if |  |  |  |
| needed) | 1 |  |  |
| PE ACT | 1 |  |  |
| Semester 5 (Fall) |  | Semester 6 (Winter) |  |
| MU309 Applied Music | 1 | MU309 Applied Music | 1 |
| MU305 or 310 or 317 |  | MU305 or 310 or 317 |  |
| Ensemble | 1 | Ensemble | 1 |
| Concert Attendance | 0 | Concert Attendance | 0 |
| TS2 N, T, R or S | 3-4 | MU350 Conducting II or | 2 |
| MU349 Conducting I | 2 | MU332 Music History II | 3 |
| or |  | MU103 B, C, D, E or F | 1 |
| MU331 Music History I | 3 | MU316 Music in the |  |
| MU314 Choral |  | Elementary School | 3 |
| Methods or | 3 | MU415W Writing About |  |
| MU315 Instrumental |  | Music | 3 |
| Methods | 3 | TS2 N, T, R or S | 3-4 |
| MU103 B, C, D, E or F | 1 | TS2 N, T, R or S | 3-4 |
| MU423 Orchestrationif offered | 1 |  |  |
| Semester 7 (Fall) |  | Semester 8 (Winter) |  |
| Take P.L.A.C.E Exam |  | Ed 494 and Ed 495 Student | 15 |
| MU409 Applied Music | 1 | Teaching |  |
| MU305 or 310 or 317 |  |  |  |
| Ensemble | 1 |  |  |
| Concert Attendance | 0 |  |  |
| MU314 Choral |  |  |  |
| Methods or | 3 |  |  |
| MU315 Instrumental |  |  |  |
| Methods | 3 |  |  |
| MU423 Orchestration | 1 |  |  |
| MU496 Senior | 2 |  |  |
| Seminar(Recital) |  |  |  |
| TS2 N, T, R or S | 3-4 |  |  |
| Ed 421 Indiv. Instr in a |  |  |  |
| Pluralistic Society | 6 |  |  |

## MUSIC MINOR

## REQUIREMENTS FOR A MINOR IN MUSIC:

\author{

1. A minimum of 19 credits of music with at least 6 credits in upper-division
} courses
2. A core curriculum that includes:

Mu 128 Theory and Musicianship I 5
Mu 129 Theory and Musicianship II 5
Mu 331 Music History I or Mu 332 Music History II 3
3. Three years of Applied Music (MU 109, 209, 309 and 409)

Interested students should consult with their Applied Music instructor or the department chair.

## PHILOSOPHY

Course listings for Philosophy begin on page 158.
Department Chair - Dugald Owen
Professor - Reyes R. Garcia
Associate Professor - Dugald L. Owen
Assistant Professor - Sarah Roberts-Cady
The purpose of the Philosophy curriculum at Fort Lewis College is not only the study of traditional and contemporary philosophical issues and positions for their intrinsic interest and importance, but also the demonstration that these age-old but continuing efforts to understand ourselves and our relation to the world are important to everyone. It is the mark of a liberally educated person to understand the conclusions of the specialized sciences in terms of their basic assumptions, to think seriously about the nature of such assumptions, and to be aware of the way in which our views of reality are influenced by our cultural heritages and by the very structures of our languages. Perhaps the most important function of philosophy as part of the liberal education is the destruction or at least the recognition of the complacency and provincialism of much of our thinking.

A major in philosophy will provide a sound foundation for graduate studies in philosophy and will also serve as an excellent preparation for law school or for theological studies. For its majors, as well as for those majoring in other disciplines and minoring in philosophy and for those taking several philosophy courses as electives, the program is designed to provide a systematic acquaintance with humankind's most fundamental attempts at self-knowledge and a concomitant basis from which students can formulate their own views of themselves and the world.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN PHILOSOPHY:

General Education<br>35-46<br>See page 25 for General Education requirements.<br>** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.<br>Major Requirements:<br>**Phil 251S Moral Philosophy<br>\section*{OR}<br>Phil 264 Social and Political Philosophy 4<br>Phil 271 Logic<br>**Phil 274R Ancient and Medieval Philosophy<br>Phil 305W Writing Philosophy<br>Phil 379 Modern Philosophy<br>Phil 380 Nineteenth Century Philosophy<br>Phil 496 Seminar in Philosophy<br>Subtotal Major Requirements<br>Other Departmental Requirements:<br>Two other courses in philosophy (a minimum of 6 credits), including at least one course in non-western philosophy. PS 386 and PS 387 may be applied toward this requirement.<br>Subtotal Other Departmental Requirements<br>6-8<br>Total Requirements<br>34-36<br>Auxiliary Requirements from Other Departments:<br>Two semesters of one modern language<br>6-8<br>Free Electives (variable)<br>TOTAL REQUIRED FOR GRADUATION<br>Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## PHILOSOPHY MINOR

## REQUIREMENTS FOR A MINOR IN PHILOSOPHY:

| ction to Philosophy OR |  |
| :---: | :---: |
| **Phil 274R Ancient and Medieval Philosophy | 4 |
| **Phil 251S Moral Philosophy | 4 |
| Phil 271 Logic | 4 |
| Phil 379 Modern Philosophy OR |  |
| Phil 380 Nineteenth Century Philosophy | 4 |
| At least one other 4-credit philosophy course numbered |  |
| 300 or above. | 4 |
| TOTAL REQUIREMENTS FOR PHILOSOPHY MINOR | 20 |

## PHYSICAL EDUCATION

Course listings for Physical Education (Exercise Science) begin on page 155 .

## PHYSICAL SCIENCE

Course listings for Physical Science begin on page 159.

## PHYSICS

Course listings for Physics begin on page 160.

Department Chair - Gerald Crawford
Professors - Gerald Crawford, Martha Iverson
Assistant Professors - Charles Hakes, Jeffrey Loats and Craig Tyler
The Bachelor of Science degree in Physics is designed to allow students to attain their professional goal of entering graduate work in physics or astrophysics; to obtain technical positions in industry in areas including energy science, engineering, electronics, optics, medical physics, and many more; or to obtain preparation for secondary certification in teaching physics in public schools. The geologist, engineer, chemist, and biologist all deal with matter and energy in their various forms. Since physicists probe the physical laws underlying all physical processes, the study of physics is the cornerstone for all the natural sciences.

The physics curriculum is predicated upon the role physicists play in a modern, technological world society that is currently experiencing shortages of trained personnel in various scientific areas and in science education. Coursework in physics will provide the student pursuing entrance to graduate school in physics or astronomy with a strong grounding in mathematics and physics, while being immersed in an atmosphere of a broad, liberal education in the humanities and social sciences. This curriculum also will enable a student to enter applied technical fields in industry such as electronics, optics, and aerospace, where there is currently a high demand. Students seeking a degree in physics should consult early in their college career with staff members of the Physics Department.

Fort Lewis College offers three options to the BS degree in physics: traditional Physics, an ABET-accredited option in Engineering-Physics and preparation for secondary education teachers in physics. A minor in physics is available for students majoring in other disciplines. Requirements for each option and the minor are listed at the end of this section.

Courses used to meet all Physics options and minor requirements must be passed with a grade of C - or higher.

## PHYSICS - PHYSICS OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN PHYSICS - PHYSICS OPTION:

General Education 35-46<br>See page 25 for General Education requirements.<br>** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

All courses listed under Specific Departmental Requirements, Additional Departmental Requirements, and Auxiliary Requirements from other departments must be passed with a grade of "C-" or higher

## Specific Departmental Requirements:

**Phys $217 T_{x}, 218$ Physics for Science and
Engineering I, II
Phys 320 Modern Physics 3
Phys 354 Theoretical Mechanics 3
Phys 361 Principles of Electricity and Magnetism 4
Phys 380 Advanced Lab I 1
Phys 381 Advanced Lab II 1
Phys 397W Writing in Physics 3
Phys 400 Science and Human Values 2
Phys 420 Introductory Quantum Mechanics I 3
Phys 496 Senior Seminar 2
Subtotal Specific Departmental Requirements 32
Additional Departmental Requirements:
Six additional credits to be chosen from:
Phys 301 Introduction to Electronics 3
Phys 340 Optics 4
Phys 370 Heat and Thermodynamics 3
Phys 421 Quantum Mechanics II 3
Phys 454 Advanced Topics in Physics 1-4
Subtotal Additional Departmental Requirements 6
Auxiliary Requirements from Other Departments:
${ }^{* *}$ Chem 150Nx Fundamentals of Chemistry I
**Chem 151Tx Fundamentals of Chemistry II 4
**Math 221Q, 222Q, 223Q Calculus I, II, III 12
**Math 327Q Differential Equations 4
Engr 104 Computer Prog for Scientists and Engineers 3
Engr 201 Electric Networks I 4
'Engr 202 Electric Networks II 4
Subtotal Auxiliary Requirements 35
Can substitute Phys 301
Recommended Additional Math - Choose one:
**Math 311Q Matrices and Linear Algebra
**Math 320Q Numerical Analysis
Other math courses numbered 300 or 400 as recommended by a Physics advisor

TOTAL MAJOR REQUIREMENTS 73
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN PHYSICS - ENGINEERING PHYSICS OPTION:

General Education35-46See page 25 for General Education requirements.${ }^{* *}$ Courses marked with double asterisks may also be counted toward TS1 orQ requirements.Specific Departmental Requirements in Physics:
**Phys 217 Tx Physics for Science and Engineering I ..... 5
Phys 218 Physics for Science and Engineering II ..... 5
Phys 320 Modern Physics ..... 3
Phys 361 Princ. of Electricity and Magnetism ..... 4
Phys 380 Advanced Physics Lab I ..... 1
Phys 381 Advanced Physics Lab II ..... 1
Phys 420 Introductory Quantum Mechanics I ..... 3
Subtotal Specific Departmental Physics Requirements ..... 22
Specific Departmental Requirements in Engineering:
Engr 103 Computer Aided Draffing ..... 3
Engr 104 Computer Prog for Scientists and Engineers ..... 3
Engr 105 Engineering Principles and Design ..... 3
Engr 201 Electric Networks I ..... 4
Engr 217 Statics ..... 3
Engr 221 Dynamics ..... 3
Engr 270 Thermodynamics ..... 3
Engr 317 Mechanics of Materials ..... 3
Engr 397 W Tech Writing and Engineering Projects ..... 3
Engr 405 Engineering Design and Practice ..... 3
Engr 496 Senior Seminar-Design ..... 2
Engineering Electives: at least 14 credits chosen from the list below (coursesselected to meet another requirement cannot be double-counted as anelective):
Engr 202 Networks II ..... 4
Engr 205 Surveying I ..... 4
Engr 238 Digital Logic Design ..... 4
Engr 305 Surveying II ..... 4
Engr 321 Fluid Mechanics ..... 3
Engr 454 Special Topics in Engineering ..... 3
Phys 301 Introduction to Electronics ..... 3
Phys 340 Optics ..... 4
Subtotal Specific Departmental Engineering Requirements ..... 47
Total Specific Departmental Requirements ..... 69
Auxiliary Requirements:
**Chem 150Nx Fundamentals of Chemistry I ..... 4
**Math 221Q, 222Q, 223Q Calculus I, II, III ..... 12
**Math 327Q Differential Equations ..... 4
Subtotal Auxiliary Requirements ..... 20
TOTAL MAJOR REQUIREMENTS ..... 89
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION124
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## PHYSICS - PHYSICAL SCIENCE FOR SECONDARY TEACHERS OPTION

## REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN PHYSICS - PHYSICAL SCIENCE FOR SECONDARY TEACHERS OPTION:

## General Education

See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

## Specific Departmental Requirements:

**Phys 217 Tx Physics for Science and Engineering I 5
Phys 218 Physics for Science and Engineering II 5
Phys 320 Modern Physics 3
Phys 340 Optics 4
Phys 380 Advanced Physics Lab I 1
Phys 381 Advanced Physics Lab II 1
Phys 397W Writing in Physics 3
Phys 496 Senior Seminar 2
**PhSc 206Tx Astronomy 4
PhSc 405 Cosmic Time Place 3
Subtotal Specific Departmental Requirements 31
Auxiliary Requirements:
**Marh 221Q Calculus I 4
**Math 222Q Calculus II 4
**Bio 112N Introduction to Org/Ev Bio 4
**Chem 150NX Fundamentals of Chemistry I 4
**Chem 151Tx Fundamentals of Chemistry II 4
Technical Electives: Chosen from Physics, Chemistry, or Geology at the 300- or 400-level, or from Biology at the 200-,300-, or 400-level

8
Ed 421 Individualized Instruction in a Pluralistic Society 6
Ed 424 Language and Math Literacy 4
Ed 495 Lab Experience \& Seminar Secondary School 15
Subtotal Auxiliary Requirements 53
TOTAL MAJOR REQUIREMENTS 84
See Teacher Education section of catalog for Teacher Licensure requirements.
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## PHYSICS MINOR

## REQUIREMENTS FOR A MINOR IN PHYSICS:

| **Phys 217Tx, 218 (with departmental approval |  |
| :--- | :---: |
| Phys 201, 202) | 10 |
| Phys 320 Modern Physics | 3 |
| Phys 380 OR 381 Advanced Physics Lab I or II | 1 |
| A minimum of 6 additional credits chosen from among: |  |
| Phys 301, 340, 354, 361, 370, 420, 421, 454 | $6-7$ |

TOTAL REQUIRED FOR PHYSICS MINOR

## POLITICAL SCIENCE

Course listings for Political Science begin on page 161.
Department Chair - Dugald Owen
Professors - Kenyon Bunch and Byron Dare
Associate Professor - Jan E. Sallinger and Jeffrey C. Fox
Visiting Instructor - Johannes Woldemariam

The study of political science is concerned with the relationship between the governed and the government, the nature of the political process, and the role of the citizen in a democratic society.

The Political Science major provides excellent training for the person who (1) plans a career in law, journalism, or government; (2) hopes to work abroad; (3) plans to enter graduate school and later teach or serve as an administrator at the college level; or (4) expects to enter politics, either as a candidate or as an administrative aide to a public official.

Political science course offerings are also available to the student who is majoring in another area but who wants to learn something about politics and government.

A minor in political science is available for students majoring in other disciplines. Requirements for a minor in political science are listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN POLITICAL SCIENCE:

| General Education <br> See page 25 for General Education requirements. | 35-46 |
| :---: | :---: |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| **PS 101S Introduction to Political Science | 4 |
| **PS 110S U.S. National Government | 4 |
| PS 250W Introduction to Political Analysis | 4 |
| PS 251W Advanced Research Methods | 4 |
| PS 386 Ancient Political Thought | 4 |
| PS 387 Modern Political Thought | 4 |
| Option A: |  |
| PS 495 Pro-Seminar in Political Science AND | 2 |
| PS 496 Senior Seminar | 2 |
| OR |  |
| Option B: |  |
| PS 480W Contemporary Political Thought | 4 |
| PS 495 Pro-Seminar in Political Science | 2 |
| OR |  |
| Option C: |  |
| PS 499 Independent Study (exceptional circumstances) AND | 2 |
| PS 495 Pro-Seminar in Political Science | 2 |
| Subtotal Specific Departmental Requirements | 28-30 |

Other Departmental Requirements:
19-20 additional hours, with at least one upper-division course from each of the following subfields $1-1 I I$, and not more than 8 credits in internships:
I. U.S. Politics

| $* *$ PS 120S State and Local Government | 4 |  |
| :--- | :--- | :--- |
| PS 310 | Public Opinion and Action | 4 |
| PS 330 | Government Performance | 4 |
| PS 421 | The American Presidency | 4 |
| PS 422 | Legislative Process | 4 |

II. Public Law

PS 140 Introduction to Law and Legal Systems 4
PS 241 Introduction to Criminal Justice Systems 4
PS 340 Constitutional Law: Bill of Rights 4
PS 341 Const Law: Fedlsm Sep Powers 4
PS/SOC 400 Native American Law and Politics 4
PS 423 Philosophy of Law 4
PS 425 Prisons and Prisoners 4
III. Comparative Politics and International Relations
**PS 205N Environmental Politics
3
**PS 280S Introduction to Comparative Politics PS 320 International Politics
PS 322 International Political Economy 4 PS 325 Middle East Politics
PS 337 U.S. Foreign Policy
PS 360 Revolution and the Modern World
PS 365 Women and Development
PS 370 Latin-American Politics
PS 372 African Politics and Development
PS 374 Pacific Rim Politics and Issues
PS 380 Comparative Communist Systems
PS 437 National Security Strategy and Policy



II. Public Law 4

4

- 4
IV. Theory and Methods

The Theory and Methods subfield requirement is included in Specific Departmental Requirements above (PS 250W, PS 251W, PS 386, and PS 387), but the following courses may be used to fill the 19-20 additional hours requirement:
$\begin{array}{lll}\text { PS } 300 & \text { Religion and Politics } & 4 \\ \text { PS } 385 & \text { 20th-Century Socialism } & 3\end{array}$
PS 480 Contemporary Political Thought 4
Subtotal Other Departmental Requirements 19-20
Auxiliary Requirements from Other Departments:
Hist 280 Survey of U.S. History, 1600-1877
**Hist 281R Survey of U.S. History, 1877 to present 3 OR
2 courses in one modern language 6-8
Subtotal Auxiliary Requirements 6-8
Total required in major 53-58
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## POLITICAL SCIENCE MINOR

## REQUIREMENTS FOR A MINOR IN POLITICAL SCIENCE:

1. At least 24 credits in political science, exclusive of internship hours.
2. At least 12 of those credits must be upper division.

## PSYCHOLOGY

Course listings for Psychology begin on page 163.
Department Chair - Beverly Chew
Professors - Betty J. Dorr, Beverly R. Chew, Janet L. Jones and Thomas A. Skurky
Associate Professors - Michael C. Anziano, Alane S. Brown, Ziarat Hossain Assistant Professor - Brian A. Burke
Visiting Professor - Michael Uhes
The Psychology major is designed to meet the needs of many students, all of whom have an interest in the scientific study of behavior and its causes, which is the most general definition of modern psychology. Some students may wish to pursue psychology in depth; others may prefer to approach psychology from a more general interdisciplinary perspective within the liberal arts tradition.

The needs of all psychology students are addressed by a major that is demanding, yet flexible; a major that ensures exposure to current thinking and techniques of modern psychology, but at the same time allows students to explore their own interests and set their own goals. As they become more familiar with the field of psychology and more aware of individual interests, students are encouraged to redefine their goals. Students are encouraged to work closely with their advisors to meet their academic and professional goals.

If you are interested in graduate school and planning to take the Graduate Record Examination (GRE) in the content area of psychology, the following classes are strongly recommended as your psychology electives: Psyc 254 Lifespan Human Development, Psyc 327 Physiological Psychology, Psyc 342 Psychological Testing, Psyc 383 History of Psychology, Psyc 387 Abnormal Psychology, Psyc 425 Social Psychology, Psyc 426 Sensation and Perception, Psyc 441 Memory and Cognition.

A minor in Psychology is available for students majoring in other disciplines. Requirements for a minor in Psychology are listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN PSYCHOLOGY:

General Education<br>35-46<br>See page 25 for General Education requirements.<br>** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:

[^7]Subtotal Core
2. Foundations of Psychology - 16 credits (any 4 courses) from the following group:
Psyc 327 Physiological Psychology 4
Psyc 330 Animal Behavior 4
Psyc 342 Psychological Testing
4
Psyc 354 Topics in Child Psychology 4
Psyc 375 Multicultural Psychology 4
Psyc 383 History of Psychology
Psyc 387 Abnormal Psychology 4 4

Psyc 425 Social Psychology
Psyc 426 Sensation and Perception 4
Psyc 441 Memory and Cognition 4
Subtotal Foundations 16
3. Psychology Electives 8

The student must complete an additional 8 credits in psychology. The remaining 8 credits required for the major may be selected from any courses offered in the department, including Foundational Courses. No more than 4 credits of Independent Study (Psyc 299/Psyc 499) will be accepted. No more than 6 credits of off campus coursework or Innovative Month will be accepted. Students are urged to work closely with their advisors in choosing the most appropriate array of courses for their interests and plans.

Total Departmental Requirements 43

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## PSYCHOLOGY MINOR

## REQUIREMENTS FOR A MINOR IN PSYCHOLOGY:

A minor in psychology consists of at least 19 required credits, at least 8 of which must be upper division. Psyc 157 and at least one course from the Foundations of Psychology group are required.

TOTAL REQUIREMENTS FOR PSYCHOLOGY MINOR

## RELIGIOUS STUDIES MINOR

Course listings for Religious Studies begin on page 166.
Coordinator - Dr. Robert R. Bunting
Professors - Reyes Garcia, Neil McHugh and Mary Jean Moseley Associate Professors - Alane Brown, Robert R. Bunting, David L. Kozak, Dugald L. Owen and Richard M. Wheelock
Assistant Professor - Kalin L. Grigg
Religion is one of the most powerful influences on both individual and collective human behavior throughout history, yet it is often neglected as a unified area of critical study in higher education. The minor in Religious Studies is an interdisciplinary approach to the study of various religious traditions and their impact on modern society. This minor examines religious experience within a framework of economic, political, gender, historical, class, and ethnic concerns. Coursework in Religious Studies may be used in practical application such as faith-based service in a church, synagogue, or mosque, as well as involvement with activist, social justice initiatives. This program will also provide a foundation for those students who wish to proceed to more advanced studies in seminaries and graduate schools.

## REQUIREMENTS FOR THE MINOR IN RELIGIOUS STUDIES:

1) At least 18 hours of coursework from the listing below, at least nine of which must be in upper-division courses.
2) Coursework for the minor must represent at least four different disciplines.
Some of the following courses carry Religious Studies (RS) designations.These courses may be taken only once for credit. For example, Hist 328 maynot be repeated under its RS 328 designation.
Note: No more than one course from your major department will counttoward this minor.
Possible course choices for the minor:
Anthropology
**Anth 215R Magic and Religion ..... 3
English
**Engl 128R Bible as Literature ..... 4
**Engl 221R Classical Literature ..... 4
Engl 380 Native American Literature: Topics ..... 4
History
**Hist 262S Tolerance \& Persecution in the Middle Ages ..... 4
Hist 308 Rise of Christianity ..... 4
This is the same as RS 308 ..... 4
Hist 315 Irish, Catholic, American
Hist 328 Christianity in U.S. History ..... 4
This is the same as RS 328
Hist 349 Islam in History ..... 4
Hist 355 East Asian Popular Religion ..... 4
This is the same as RS 355
Hist 359 Medieval Europe ..... 4
Hist 368 Medieval Women ..... 4

This is the same as RS 244
**Phil 261R Philosophy of Religion
This is the same as RS 261
Phil 320 Indigenous Worldviews 4

This is the same as RS 320
Phil 321 World Religions
This is the same as RS 321
Political Science
PS 300 Religion and Politics
Psychology
Psyc 310 Psychology of Religion
This is the same as RS 310 .
Religious Studies
**RS 244R Chinese Philosophy 3
This is the same as Phil 244
**RS 261R Philosophy of Religion
This is the same as Phil 261
RS 308 Rise of Christianity
This is the same as Hist 308
RS 310 Psychology of Religion
4
This is the same as Psyc 310
RS 320 Indigenous Worldviews
This is the same as Phil 320
RS 321 World Religions
4
This is the same as Phil 321
HRS 328 Christianity in U.S. History
4
This is the same as Hist 328
RS 382 Dead Sea Scrolls
3
RS 385 Historical Jesus 3
RS 446 Ancient Israel \& Judah 3
Sociology
Soc 340 Religion and Social Life
4
Southwest Studies
SW 322 American Indian Philosophies
Also appropriate are Special Topics courses 190/390s, 191/391s and Independent Study 499 with a focus on religious studies in any of the disciplines. These courses must be approved by the Religious Studies Coordinator.

## SOCIOLOGY/HUMAN SERVICES

Course listings for Sociology/Human Services begin on page 167.
Department Chair - Janine Fitzgerald
Associate Professors - Janine M. Fitzgerald, Dennis W. Lum, Mark C. Seis and Carey Vicenti
Assistant Professors - Kalin L. Grigg and Patricia Sanchez-Flavian

Sociology seeks to explore how our individual and collective biographies intersect history within society. The relationships between social structure and individual consciousness, historical processes and everyday life, and collective interests and individual prerogatives provide the sociological substance
by which we become self-conscious. It is through the study of sociology that we become aware of the meaning of our everyday lives and recognize the extent to which we participate in the construction of social formations.

The sociological task of comprehending the relationships among individuals and groups is a significant part of any student's educational experience. Extensive work in sociology is recommended for students planning careers in human services. Health services administration, family casework, community planning and development, and criminal justice work are typical human service careers. Moreover, an emphasis in sociology provides foundational preparation for graduate work in sociology, social work, public administration, law, journalism, and other fields.

In order to cultivate critical consciousness and active participation in processes of development and change in society, the Sociology/Human Services curriculum is organized to facilitate the integration of theory (reflection) and practice (action). While participation in the human service and practicum courses forms the nucleus of the praxis experience, the Block Internship, Latin American, Community Services and Service Learning programs all provide further opportunities for engaging in field experience.

In addition to the General option, the Sociology Department offers options in Criminology and Ethnic Studies. Students may choose only one option to complete their Sociology major.

## Sociology Block Internship Program

The Sociology Block program is designed to integrate 16 credit hours of Sociology course work with an intensive community placement in a regionally-based community-based non-profit, grassroots organization or a community-based research project. The goal of the program is to provide an educational experience in which academic study is integrated around, and driven by, a community-based service internship. Service placements are organized according to student interest and the ability of the community-based program to provide a high-quality educational and community service experience for the student. Students are expected to serve as responsible participants in the programs to which they are assigned. While the schedule for internship hours varies according to the needs of the particular placement, students are expected to work approximately 20-25 hours per week in their placement. In addition, students are responsible for completing all of the assigned coursework, most of which will be integrated into a single final paper. Students will be assigned to one of three participating Sociology faculty members who will serve as the students' primary mentors in both the academic and community-based work. Students enrolled in the Sociology Block Program should not be enrolled in any other courses while taking the Block. The Block Program also serves as the upper level writing course for participating students.

## Mexico Programs

Fort Lewis College has encouraged a number of Study Abroad opportunities in Mexico. The main purpose of these programs is to develop fluency in the use of the Spanish language and to acquire an in-depth knowledge of the culture of Spanishspeaking people by immersion and by studying specific courses in the social sciences and arts oriented toward this goal. The normal duration of this experience is one or two semesters. Most opportunities to study in Mexico require a good background in the language at least equivalent to one year of college-level Spanish. Students are strongly encouraged to live with a Mexican family. Students who are interested should contact the chair of the Sociology Department.

A minor in Sociology/Human Services is available for students majoring in other disciplines. Requirements for a minor in Sociology/Human Services are listed at the end of this section.

## SOCIOLOGY/HUMAN SERVICES GENERAL OPTION

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN SOCIOLOGY/HUMAN SERVICES - GENERAL OPTION:

General Education
35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
**Soc 100S Introduction to Sociology
Soc 200 Social Change and Human Services
Soc 210W Social Inquiry and Research Methods
Soc 300W Theories of Social and Personal Life
${ }^{1}$ Soc 320 Community Service Practicum
Soc 421 Contemporary Social Analysis in the Southwest
Soc 496 Senior Seminar
Subtotal Specific Departmental Requirements
Other Departmental Requirements:
A minimum of 12 additional credits in Sociology/Human Services12

Total Departmental Requirements 44

Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION
'Up to 8 credits of WS 320 may be substituted for up to 8 credits of Soc 320 .
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## SOCIOLOGY/HUMAN SERVICES CRIMINOLOGY OPTION

The Criminology option explores how historically-generated political, economic, and power/knowledge systems influence the creation of laws, attitudes and perceptions about crime, and the actual functioning of our contemporary criminal justice system. Criminal behavior and juvenile delinquency are also examined in light of historically-generated social, economic, and political conditions. The Criminology major is designed to give students a thorough understanding of the political nature of law creation, enforcement, adjudication, and punishment, as well as a thorough understanding of the bureaucratic structure of these various components of the criminal justice system. Alternative Native American and restorative justice systems and concepts are also explored as viable ways of thinking about problems of crime.

The Criminology option offers a unique opportunity to examine the relationship between theory and practice. Students in the criminology option are required to participate in a semester-long internship where students work and study within various criminal justice-related social service programs.

The Criminology option provides excellent opportunities for those students interested in graduate school or a career in 1) law; 2) law enforcement; 3) probation; 4) social work; or 5) corrections.

A minor in Criminology is available for students majoring in other disciplines. Requirements for a minor in Criminology are listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN SOCIOLOGY/HUMAN SERVICES - CRIMINOLOGY OPTION:

| General Education | 35-46 |
| :---: | :---: |
| See page 25 for General Education requirements. |  |
| ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements. |  |
| Specific Departmental Requirements: |  |
| **Soc 100S Introduction to Sociology | 4 |
| Soc 210W Social Inquiry and Research Methods | 4 |
| PS 241 Introduction to Criminal Justice Systems | 4 |
| Soc 320 Community Service Practicum | 1-16 |
| Soc 362 Criminology and Criminal Justice | 4 |
| Soc 363 Juvenile Delinquency 4 |  |
| Soc 421 Contemporary Social Analysis in the Southwest | 4 |
| Soc 496 Senior Seminar | 4 |
| Subtotal Specific Departmental Requirements | 29-44 |

Other Departmental Requirements:
A minimum of 12 additional hours, with at least 8 of those in upper division courses to be chosen from the following course selections:
**Phil 251S Moral Philosophy ..... 4
**Phil 252N Environmental Ethics ..... 4
PS 140 Introduction to Law and Legal Systems ..... 4
PS 330 Public Administration ..... 4
PS 340 Constitutional Law: Bill of Rights ..... 4
PS 341 Constitutional Law: Federalism and the Separation of Powers ..... 4
PS/Soc 400 Native American Law and Politics ..... 4
PS 423 Nature of Law and Judicial Process ..... 4
PS 425 Prisons and Prisoners ..... 4
Psyc 233 Personality* ..... 4
Psyc 325 Group Dynamics* ..... 4
Psyc 342 Psychological Testing* ..... 4
Psyc 387 Abnormal Psychology* ..... 4
Psyc 392 Foundations of Clinical Psychology* ..... 4
Soc 361 Deviance ..... 4
*Courses followed by an asterisk have prerequisites.
Subtotal Other Departmental Requirements ..... 12
TOTAL DEPARTMENTAL REQUIREMENTS ..... 41-56
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION ..... 120

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## SOCIOLOGY/HUMAN SERVICES ETHNIC STUDIES OPTION

The Ethnic Studies Option explores the multiple meaning of ethnicity and the reasons for its continuing strength as a crucial source of group identity for large numbers of people in the contemporary world. Special consideration is given to the relation of these meanings to the phenomena of the nation state and national identity. There is also a focus on the intersection of ethnicity with class and gender.

This option emphasizes ethnic groups and their histories in the United States, including African Americans, Asian Americans, Chicano/Latino Americans, and Native Americans. Students will receive 16 credits for an intensive internship with a community-based organization that works with a minority ethnic group in the Four Corners region.

Through their experience and study, students have the opportunity to consider the important elements of ethnicity, such as religion, language, gender roles, and political and ecological culture. Students consider both their own ethnic backgrounds and those of other groups.

The Ethnic Studies option provides excellent opportunities for those students interested in graduate school or a career in human services working with ethnic minorities.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN SOCIOLOGY/HUMAN SERVICES - ETHNIC STUDIES OPTION:

General Education<br>39-50<br>See page 25 for General Education requirements.<br>* Courses marked with a single asterisk are part of the Sociology Block program. Students in the Ethnic Studies option must work with a communitybased organization that focuses on ethnic issues.<br>** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.<br>Specific Departmental Requirements:<br>**GS 101R Human Heritage I 4 OR<br>**Soc 250R Social Issues-Native Society 4<br>Soc 210W* Social Inquiry and Research Methods 4<br>**Soc 279R Ethnicity, Gender and Class in the SW 4<br>Soc 300W Theories of Social and Personal Life 4<br>Soc 320*Community Service Practicum 8<br>Soc $421^{*}$ Contemporary Social Analysis in the Southwest 4<br>Soc 496 Senior Seminar<br>4<br>Subtotal Specific Departmental Requirements 32<br>Writing Course Within Discipline:<br>Included in Specific Departmental Requirements above.

Other Departmental Requirements:
A minimum of 16 additional hours to be chosen from the following course selections:
**Anth 215R Magic and Religion 3
Anth 350 Ethnology of Mesoamerica 4
Anth 351 Ethnology of Andean South America 4
Anth 353 Ethnology of India 4
Anth 371 Ethnology of Amazonian South America 3
Anth 388 Ethnology of the Southwest 4
Anth 406 Ethnobotany of the Southwest 4
**Engl 174R African-American Literature 4
**Engl 176R Native American Literature 4
**Engl 177R U.S Latina/o Literature 4
**Engl 280R Literature of the Southwest 4
Engl 380 Native American Lit: Topics* 4
${ }^{* *}$ GS 102S Human Heritage II 4
Hist 348 Africans in the Americas 4
Hist 349 Islam in History
Hist 351 U.S.-East Asian Relations
Hist 373 History of Mexico 4

ML 100 Fundamentals of Navajo Language 3
ML 101 Navajo Language II 3
**ML 118 R Spanish of the Southwest
4
ML 318 Advanced Spanish of the Southwest 4
ML 331 Chicano Literature*
**Phil 244R Chinese Philosophy*
**Phil 261R Philosophy of Religion 4
Phil 320 Indigenous World Views 4
Phil 382 Philosophies of the Southwest 3
PS/Soc 400 Native American Law and Politics 4
Psyc 375 Multicultural Psychology* 4
Soc 301 Comparative Societies 4
Soc 340 Religion and Social Life 4
**SW 123R American Indian History 3
SW 125 History of Hispanos in the Southwest 3
**SW 280S Native Americans in the Modern World 3
Any SW 300 level and above
3-4
*Courses followed by an asterisk have prerequisites.
Subtotal Other Departmental Requirements

TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## CRIMINOLOGY MINOR

## REQUIREMENTS FOR A MINOR IN CRIMINOLOGY:

Students must take a total of 20 credits. Four of those credits must be either Soc 362 or PS 241, and the additional 16 credits must be taken from any of the other courses listed for the Criminology Option.

## SOCIOLOGY/HUMAN SERVICES MINOR

## REQUIREMENTS FOR A MINOR IN SOCIOLOGY/ HUMAN SERVICES:

Completion of 20 credits in Sociology/Human Services of which a minimum of 12 credits are in upper-division courses.

TOTAL REQUIRED FOR SOCIOLOGY/HUMAN SERVICES MINOR

# SOUTHWEST STUDIES AND AMERICAN INDIAN STUDIES 

Course listings for Southwest Studies begin on page 169.
Department Chair - Robert R. Bunting
Professors - Robert R. Bunting, Andrew J. Gulliford and Duane A. Smith Associate Professor - Richard M. Wheelock
Assistant Professor - Peter McCormick
Visiting Instructors - Christopher Jocks and Karen Jarratt-Ziemski
The Department of Southwest Studies and American Indian Studies offers an interdisciplinary approach to the study of the American Southwest. By understanding the region's distinct environments and diverse cultures, and how those peoples and environs interacted to define and redefine one another, graduates will find their lives deepened and their career opportunities in teaching, government, museum work, archives, public history, and graduate school admissions enhanced. To fully grasp a broad-based and in-depth
understanding of the region, a variety of course selections are offered from the natural sciences, social sciences and fine arts.

A major in American Indian Studies or Southwest Studies must complete 45 hours. The 45 hours consist of 15 hours of core courses, 15 hours of concentration courses, and 15 hours of southwest elective courses. At least 27 of the 45 total hours of course work needed for a Southwest major must be at the 300 and 400 levels.

The American Indian Studies degree embraces the study of Native peoples of North, Central and South America and Indigenous peoples of the world.

In addition to offering majors in American Indian Studies and Southwest Studies, the department also offers minors in Southwest Studies and Native American Studies. The Southwest Studies minor consists of 18 hours of course work within the department, with at least 9 of those hours being upper-division courses. The minor in Native American Studies is listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN AMERICAN INDIAN STUDIES:

Coordinator - Richard M. Wheelock

## General Education

35-46
See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
SW 110 Introduction to American Indian Studies 3
**SW 123R American Indian History 3
**SW 280S Native Americans in the Modern World 3
SW 301W Writing/SW Studies Discipline 3
SW 355 Development of US Indian Policy 3
SW 493 Intern SW Studies 3-6
SW 496 Senior Seminar 3
Subtotal Specific Departmental Requirements 21-24
Distribution Requirements:
Literature, Arts, and Media (minimum 2 courses):
Art/SW 154 Indian Arts and Crafts I 3
Art/SW 368 Native North American Art History 3
**Engl 176R Native American Literature 4
Engl/SW 380 Native American Lit: Topics 4
SW 115 Native American Newsletter 3
SW 315 Native American News Writing 3
SW 317 History of American Indians in Film 3
SW 327 American Indians \& Mass Media 3
SW 344 Native American Oral Tradition 3
Culture, Language, Cosmology (minimum 2 courses):
**Anth 120S Anthropology of the Southwest 3
ANTH 330 Archaeology of the Southwest 4
ANTH 348 North American Archaeology 4
ANTH 388 Ethnology of the Southwest 4
ML/SW 100 Fundamentals of Navajo Language 3
ML/SW 101 Navajo Language II 3
SW 322 American Indian Philosophies 3

Economics, Politics, and Law (minimum 2 courses):
PS/SOC 400 Native American Law and Politics
SOC 250R Social Issues - Native Society 4
SW 323 Southwest Indian History 3
SW 450 Tribal Preservation 3
NOTE: SW 190/191 or SW 390/391 courses may be used to fulfill Distribution Requirements with the approval of the American Indian Studies Coordinator.

| Subtotal Distribution Requirements | 21-24 |
| :--- | :--- |
| Total Departmental Requirements | $\mathbf{4 5}$ |
| Free Electives (Variable) |  |
| TOTAL REQUIRED FOR GRADUATION | 120 |

TOTAL REQUIRLD GR GRADUAION 120

A minimum of 45 credits are required for the major, at least 27 credits of which must be at the 300 and 400 level.

Students may double major in American Indian Studies and another major or combine the major with a minor, but all coursework must be discrete and unique.

Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN SOUTHWEST STUDIES:



See page 25 for General Education requirements.
** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

Specific Departmental Requirements:
**SW 131N Southwest History and Culture
*SW 135R The Southwest
3
SW 301W Writing in the Southwest Discipline
3
SW 384 Southwest History 1868 to Present 3
SW 496 Senior Seminar 3

Subtotal Specific Departmental Requirements
Other Departmental Requirements:
Two of the following courses in the Historic and Contemporary Southwest:
SW 125 History of Hispanos in the Southwest 3
ican in the Modern World
SW 323 Southwest Indian History 3
SW 342 Interpretation of Cultural Resources
**SW/HIST 181N U.S./Southwest Environmental Hist
SW 333 Wilderness in America 3
SW 335 National Parks: America's Best Idea
$\begin{array}{ll}\text { ART/SW } 265 \text { Art History of the Southwest } & 3 \\ \text { SW } 282 \text { Hispano Culture of the Southwest } & 3\end{array}$
SW 317 History of American Indians in Film 3
SW 326 West and Southwest in Film and Fiction 3
SW 330 Cowboys, Cattlemen, and Pop Culture 3

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# SOUTHWEST STUDIES AND AMERICAN INDIAN STUDIES - NATIVE AMERICAN STUDIES MINOR 

Coordinator - Richard M. Wheelock, Associate Professor

Native American Studies is an interdisciplinary minor that is intended to provide important support for any major a student might select that could lead to a career in or near Indian Country. For those who live and work there, the unique conditions created by the long history of Indian affairs and the present policy of Indian self-determination warrant a special orientation to the cultural, social, political, and economic aspirations and potential of America's indigenous people.

Students who minor in Native American Studies will be required to take a total of 18 credits, including the core courses for the minor listed below and at least one course from each of the study areas listed below. In doing so, they may select courses that complement their major and contribute to their preparation for careers that demand an understanding of the dynamics of Indian communities.

Students who wish to complete a minor in Native American Studies should consult their advisor and a member of the Department of Southwest Studies and American Indian Studies.

A total of 18 credits are required; at least 9 credits must be upper division.

Note: No more than one course from your major department will count toward this minor.

## TWO REQUIRED COURSES:

| **SW 123R American Indian History | 3 |
| :---: | :---: |
| AND one of the following two: |  |
| **Soc 250R Social Issues in Contemporary |  |
| Native American Societies | 4 |
| OR |  |
| ${ }^{* *}$ SW 280S Native American in the Modern World | 3 |
| Choose at least one Course (literature, arts, \& media): |  |
| SW 115 Native American Newsletter | 3 |
| ART/SW 154 Indian Arts/Crafts I | 3 |
| SW 317 History of American Indians in Film | 3 |
| SW 327 American Indians and the Mass Media | 3 |
| SW 315 Native American Newswriting | 3 |
| SW 365 Mesoamerican Art History | 3 |
| SW 368 Native North American Art History | 3 |
| SW 380 Native American Literature: Topics | 4 |
| Thea 382 American Indian Theatre | 4 |
| Choose at least one Course (culture, language, \& cosmology): |  |
| **Anth 120S Anthropology of the Southwest | 4 |
| Anth 330 Archaeology of the Southwest | 4 |
| Anth 348 North American Archaeology | 4 |
| Anth 388 Ethnology of the Southwest | 4 |
| Anth 406 Ethnobotany of the Southwest | 4 |
| Ed 331 Southwest Minority Child in the Classroom | 3 |
| SW 100 Fundamentals of Navajo Language I | 3 |
| SW 101 Navajo Language II | 3 |
| SW 322 American Indian Philosophies | 3 |
| SW 361 Cultural Ecology of the SW | 3 |
| SW 425 Hispanic Civilization |  |

Choose at least one Course (economics, politics, \& law):
PS/SOC $400 \quad$ Native American Law and Politics 4
**Soc 250R Social Issues in Contemporary Native Societies 4
SW 323 Southwest Indian History
SW 355 Development of United States Indian Policy 3
**SW 280S Native American in Modern World
TOTAL CREDITS REQUIRED FOR NATIVE AMERICAN STUDIES MINOR

## SPANISH MINOR

(See Modern Languages on page 80. Course listings begin on page 149.)

## STUDENT CONSTRUCTED MAJOR

Contact the Director of the Academic Advising Center, Beverly Chew, Professor.

The Student Constructed Major (SCM) allows a student to design a major to meet specific needs and purposes that cannot be met in any other way. The SCM is interdisciplinary in nature and differs substantially from established curriculum course combinations and emphases already available through major, minors and electives. The major may include course offerings from any of the schools (Behavioral and Natural Sciences, Arts, Humanities and Social Sciences, or Business Administration) and courses from the Teacher Education Department.

The Student Constructed Major is designed in consultation with the SCM Coordinator in the Academic Advising Center, who will guide the student to the appropriate faculty advisor depending on subject and/or course content of the major. The formal contract for the Student Constructed Major needs to be submitted prior to petitioning for graduation ( 80 credits, approximately the end of the first term of the junior year). The SCM contract must be approved by the student's faculty advisor, the Registrar (or designee), the Dean of the appropriate school, and the Vice President for Academic Affairs (or designee). On the final transcript, the major will appear as "Student Constructed Major - " followed by the title of the Student Constructed Major.

Student Constructed majors are comprised of a minimum of 44 credits of course work. The coursework must include an appropriate Writing Intensive course (W) and at least two credits of an appropriate departmental senior seminar (496) or a senior year independent study (499). Forty percent of courses must be numbered 300 or above. Courses taken to satisfy TSI, Q and W requirements may be included in the list of major courses if appropriate. Courses taken to satisfy TS2 general education requirements may not be included as
required courses in the major; however, a SCM may include one or more TS2 courses within a list of course options from which the student will choose one course. TS2 courses listed in this way can count both for the major requirements and for the TS2 requirements.

Students interested in a Student Constructed major must begin the process through the Academic Advising Center, 140 Miller Student Center, 970-247-7085.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A STUDENT CONSTRUCTED MAJOR:

General Education<br>35-46<br>See page 25 for General Education requirements.<br>Specific Requirements for the Major:<br>Minimum of 44 credits of course work (must include Group W writing course and at least two credits of a 496 Senior Seminar or a 499 Independent Study taken during the senior year)<br>44

**Note that Thematic Studies 1 courses may also count toward the major. 1216 credits of Thematic Studies 1 could be counted toward major requirements.

## Free Electives (variable)

TOTAL REQUIRED FOR GRADUATION
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## TEACHER EDUCATION

Education course listings begin on page 130.
Director of Teacher Education - David Hayes
Professor - Stephen A. Roderick
Associate Professors - Maggie Cason, Joe Lounge and Gene Taylor
Assistant Professors - Jennifer Trujillo and Troy Webb
Visiting Instructors - Toi Creech and Susan Martinez

Fort Lewis College offers a Teacher Education Licensure Program designed to enable students to qualify for a Colorado teaching license. The program makes it possible both to complete a bachelors degree and qualify for a teaching license within four academic years. All students are encouraged to schedule a meeting with the Director of Teacher Education as early as possible regarding the Teacher Education Licensure Program, approved majors, and requirements necessary for licensure. The Teacher Education Department is located on the top floor of Education and Business Hall (EBH). Students may also visit the Teacher Education website at http://extended-campus.fortlewis.edu.

The Fort Lewis College Teacher Education Department endeavors to attract individuals with a high potential for successfully completing teacher preparation courses and fieldwork. The Director of Teacher Education serves as the contact person for curriculum advising.

## STEPS TO BECOMING A LICENSED TEACHER AT FORT LEWIS COLLEGE

Undergraduate Students: Undergraduate students interested in seeking teaching licensure at Fort Lewis College should fully understand that there are several steps in the process. The Director of Teacher Education can answer any questions about the process. Interested students are encouraged to schedule an appointment with the Director (top floor, EBH) for this purpose. The steps to teaching licensure for undergraduate students are as follows:

1) Students must select the approved major for their chosen licensure area, as indicated below under Teacher Licensure Programs Offered at Fort Lewis College and Approved Corresponding Majors.

In consultation with an academic advisor in the appropriate major, and during their first term, students should plan a program of studies that will qualify them to graduate and meet licensure requirements in a four year period, if that is their goal. Interdisciplinary Studies majors seeking elementary education or early childhood education licensure should be advised by a Teacher Education faculty member. Students must meet with their academic advisor prior to registration each term.

Students seeking licensure in a K-12 or 7-12 area will be advised by a faculty member in their major. These students also should meet with the Director of Teacher Education during their first term at Fort Lewis College to be assigned to a Teacher Education advisor. The Teacher Education advisor will help the student understand the requirements and policies leading to licensure, and will help them in developing their program of studies. Students must meet with their academic advisors prior to registration each term.
2) Upon earning at least 30 credits, students may apply for admission to the Teacher Education Licensure Program. To do so, students must secure an application from the Teacher Education Department (Top Floor, EBH), complete the application, and return it to the Teacher Education Department. Admission requirements are indicated below. Applicants who meet these requirements will receive a letter indicating their admission. Students who have not been admitted to the Teacher Education Licensure Program are not eligible to take the 400 level methods courses needed for licensure.
3) Students who have been admitted to the Teacher Education Licensure Program must apply for student teaching by the third Friday of the first month of the term that precedes their student teaching term. Requirements for admission to student teaching are indicated below.
4) Students who complete student teaching must apply to the Colorado Department of Education for Colorado licensure. Requirements for being recommended for licensure are indicated below.

Post-baccalaureate Students: Students who have already earned a bachelors degree typically seek teaching licensure and not a second degree. Therefore post-baccalaureate students are admitted to Fort Lewis College as unclassified students, and do not choose a major. Post-baccalaureate students interested in seeking teaching licensure at Fort Lewis College should fully understand the several steps in the process prior to applying for admission to Fort Lewis College. The steps to teaching licensure for post-baccalaureate students are as follows:

1) Potential students should submit a letter to the Director of Teacher Education, Fort Lewis College, Durango CO 81301. In this letter potential students should specify the licensure program of interest (programs are listed below) and should include in the same mailing copies of transcripts from all colleges attended. The transcripts may be unofficial at this point. The Director of Teacher Education will then review the transcripts and send information to the potential student on the courses he/she needs to complete in the chosen licensure program and other information about the program.
2) Following this transcript evaluation process, interested postbaccalaureate students should schedule an appointment with the Director of Teacher Education to address concerns or questions, to establish a GPA for the purpose of later admission to teacher education, and to plan a program of studies. Note: Establishing the GPA is based on several factors and will be explained to potential students in information sent to them in step one above.
3) Following this appointment, interested post-baccalaureate students should apply for admission to FLC.
4) Post-baccalaureate students admitted to Fort Lewis College are advised by the Director of Teacher Education. Students should meet with their advisor each term prior to registration.
5) Post-baccalaureate students may apply for admission to the Teacher Education Licensure Program once they have met the requirements indicated below. Post-baccalaureate students must secure an application from the Teacher Education Department (Top Floor, EBH), complete the application, and return it to the Teacher Education Department. Students who have not been admitted to the Teacher Education Licensure Program are not eligible to take the 400 level methods courses needed for licensure.
6) Post-baccalaureate students who have been admitted to the Teacher Education Licensure Program must apply for student teaching by the third Friday of the first month of the term that precedes their student teaching term. Requirements for admission to student teaching are indicated below.
7) Post-baccalaureate students who complete student teaching must apply to the Colorado Department of Education for licensure. Requirements for being recommended for licensure are indicated below.

## TEACHER LICENSURE PROGRAMS OFFERED AT FORT LEWIS COLLEGE AND APPROVED CORRESPONDING MAJORS

Undergraduate students interested in being licensed as teachers in Colorado must choose both a specific licensure program and the academic major required for that licensure program. The licensure programs and corresponding academic majors follow:

- Early Childhood Education (Preschool-3rd grade) and Elementary Education (grades $\mathrm{K}-6$ ) licensure students must choose the Interdisciplinary Studies major (ISM) and either ISM's Early Childhood Education (ECE) option or its Elementary Education (El Ed) option. See page 75 for information on the ISM major.
- Secondary English (grades 7-12) licensure students must choose the English major and its English Education Option. See page 58 for information on the English major.
- Secondary Mathematics (grades 7-12) licensure students must choose the Mathematics major. See page 78 for information on the Math major.
- Secondary Science (grades 7-12) licensure students must choose one of four majors:

1. Biology and its Biology for Biology Education Option. See page 38 for information on the Biology major.
2. Chemistry and its Chemistry for Secondary Teachers Option. See page 51 for information on the Chemistry major.
3. Geosciences and its Earth Science for Secondary Teachers Option. See page 68 for information on the Geosciences major.
4. Physics and its Physical Science for Secondary Teachers Option. See page 89 for information on the Physics major.

- Secondary Social Studies (grades 7-12) licensure students must choose one of two majors:

1. History. See page 71 for information on the History major.
2. Humanities with history as the primary concentration. See page 74 for information on the Humanities major.

- Secondary Spanish (grades 7-12) licensure students must choose the Spanish major. See page 79 for information on the Spanish major.
- Art (grades K-12) licensure students must choose the Art major. See page 33 for information on the Art major.
- Music (grades K-12) licensure students must choose the Music major and its Music Education option. See page 85 for information on the Music major.
- Physical Education (grades K-12) licensure students must choose the Exercise Science major and its K-12 Teaching Option. See page 63 for information on the Exercise Science major.


## ADDITIONAL LICENSURE OPTIONS

With additional coursework, students have an option of seeking licensure in two other areas. These options are called add-on endorsements. The add-on areas are:

Linguistically Diverse Education (LDE) Licensure<br>Linguistically Diverse Education Specialist: Bilingual (LDES) Licensure

With additional coursework, students seeking licensure in any area shown above may also seek licensure in the Linguistically Diverse Education (LDE) curriculum. With additional coursework, students licensed in LDE may also seek licensure in LDES. The state of Colorado currently is making modifications to the requirements for these licensures. These two add-on licensure programs are replacing the currently available ESL and Bilingual programs. Interested students should contact LDE coordinator Dr. Jennifer Trujillo for specific information and to determine whether they may complete the current programs.

## Early Childhood Education (ECE) Licensure

With additional coursework, students seeking licensure in Elementary Education above may also seek licensure in Early Childhood Education. Interested students should contact the Director of Teacher Education for specific information.

## REQUIREMENTS FOR ADMISSION TO THE TEACHER EDUCATION LICENSURE PROGRAM

## Undergraduate Students

To be admitted to the Teacher Education Licensure Program, the undergraduate student must submit to the Teacher Education Department the following documentation:

- A completed Teacher Education application along with a current Fort Lewis College transcript that shows that the applicant is currently enrolled at Fort Lewis College, is in the approved major for the licensure area, and has completed a minimum of 30 credit hours.
- Verification of submission of fingerprints for a Colorado Department of Education background investigation (documentation of fingerprint card submission or copy of Colorado substitute teaching license).
- Verification of having completed ED200R (Introduction to Education in America) with a minimum grade of B - (verification by transcript).
- Verification of having completed Comp 150 or Comp 126 or Comp 250 with a minimum C grade. (verification by transcript).
- Verification of having completed one course designated as fulfilling a college $Q$ (quantitative Reasoning) requirement with a minimum grade of C. (verification by transcript).
- Verification of having attained a cumulative GPA of at least 2.75. (verification by transcript).
- Applicants who deviate from the above requirements may petition for admission to the Department's Professional Education Review Committee (PERC) The PERC is composed of three Teacher Education Department faculty members who will review the applicant's petition. The PERC will review each case on its merits and will consider admission to the program with certain conditions prescribed. Students should see the Director of Teacher Education to discuss the PERC process.


## Post-baccalaureate students

To be admitted to the Teacher Education Licensure Program, the post-baccalaureate student must submit to the Teacher Education Department the following documentation:

- A completed Teacher Education application along with a current Fort Lewis College transcript showing that the applicant is currently enrolled at Fort Lewis College, and an official transcript from the degree granting institution.
- Verification of submission of fingerprints for a Colorado Department of Education background investigation (documentation of fingerprint card submission or copy of Colorado substitute teaching license).
- Verification of having completed ED200R (Introduction to Education in America) with a minimum grade of $B$ - or current enrollment in the course. NOTE: Applicants currently enrolled in the course who fail to earn a minimum grade of $B$ - will have their admission rescinded at the end of the term, and will not be eligible to take 400 level education courses the following term.
- Demonstrate potential for academic success in ONE of the following two ways:

1. Verification of having attained a cumulative GPA of at least 2.75 (based on course work at Fort Lewis College and the GPA established with the Director of Teacher Education as indicated at the time of admission to Fort Lewis College).
2. Applicants who have not attained the minimum GPA requirement may petition for admission to the Department's Professional Education Review Committee (PERC) The PERC is composed of three Teacher Education Department faculty members who will review the applicant's petition. The PERC will review each case on its merits and will consider admission to the program with certain conditions prescribed. Students should see the Director of Teacher Education to discuss the PERC process.

## REQUIREMENTS FOR ADMISSION TO STUDENT TEACHING

To be admitted to student teaching, the student must submit an application to the Department of Teacher Education no later than the second Friday of the fall term for winter student teaching, or no later than the second Friday of the winter term for fall student teaching. The application and supporting documents must demonstrate the following:

- Senior or post-baccalaureate standing.
- Having passed the approved PRAXIS II or PLACE content exam. Students who are awaiting their test results may apply but will not be placed into student teaching until they have passed the test. See below for specific test information
- Having earned a minimum B- in an upper-division (300-400 level) writing course. For the ISM major, this requirement is fulfilled only in the required ED 317 course.
- Having completed 100 percent of coursework
- Having earned minimum grades of $C$ in all courses with an ED prefix
- Having achieved a minimum cumulative grade point average (GPA) of 2.75 .

In addition, to be admitted to student teaching, applicants must have the support of the majority of the Teacher Education faculty. Such support may be withstanding for violations of academic integrity or irresponsible actions in field experiences or course work. Applicants must also be willing to commute to an area outside of Durango as not all student teachers can be placed in the Durango 9R school district. Reasonable attempts will be made to approve students' request to student teach out of area. Students who student teach out of area (more than 70 miles from Durango) are charged a fee of $\$ 250$ or more to compensate out-of-area college supervisors.

## PERC Petition

Students not meeting the above requirements may petition for a review by the Professional Education Review Committee (PERC). The PERC may deny the petition or specify stipulations that the applicant must fulfill prior to or in conjunction with students teaching. In no case may a student be allowed to student teach without having passed the approved content test. Students should see the Coordinator of Field Experiences to discuss the PERC process.

## Content Tests

To be admitted to student teaching the applicant must have passed the approved content test for his/her licensure program. Thus, students should take their test in ample time for them to receive their passing scores before they make application to student teach. Students who delay taking their content test may find that their student teaching term is also delayed. Students should be aware that the state of Colorado changes its testing requirements from time to time and what is published in this catalog could change. Prior to taking their content test, students would be wise to check with the Director of Teacher Education for current information. In some programs, students currently have the option of taking either the PLACE or the PRAXIS II content test. In other programs, taking the PLACE test is the only option. Study guides for the tests are on reserve at Fort Lewis College Reed Library and students may find other information about these tests at www.ets.org/praxis for the Praxis Test, and at www.place.nesinc.com for the Place Test.

## THE PARTNERSHIP PROGRAM

The Partnership Program is available for students seeking elementary education licensure. The Partnership Program spans the academic year of the school district in which partnership students are placed. Therefore, Partnership students enroll in courses and field experiences in Fall, Winter, and Summer terms. Education methods courses are integrated into the field experiences. At times students practice teach in their assigned school, and at other times they travel to campus to take required courses. Students submit an application for the Partnership Program to the Teacher Education Department. The requirements for admission are the same as for admission to student teaching with one major exception. Partnership students take their education methods courses during the partnership year, so must earn the minimum $C$ grade in each course as a requirement for recommendation for licensure.

## COMPLETION OF STUDENT TEACHING

To complete the Teacher Education Licensure Program, all students must receive a satisfactory grade in student teaching. Students must demonstrate satisfactory performance in their student teaching (or Partnership) placement, and must also complete a successful summative porifolio presentation as a condition for completing student teaching.

## The Summative Porifolio Presentation

The portfolio presentation represents verification that the student has gained proficiency on each of the 45 elements of the eight Performance Based Standards for Colorado Teachers (PBSCTs). A summative porffolio developed by the student teacher must be presented during the student teaching term. A porffolio includes examples of the candidate's best work and illustrates the teaching skills acquired. Students are advised to keep samples of work completed during the professional education classes as well as during student teaching for possible inclusion in their porffolio. A current collection of portfolio assessment rubrics, detailing the expected content and format of the porffolio presentation, is included in the student teacher handbook.

A three-member portfolio panel evaluates the presentation and determines whether the student has passed the porffolio presentation. The panel consists of members of Fort Lewis College faculty and staff, K-12 educators, and community members. The student teacher is responsible for choosing one panelist for the portfolio review. Students who fail the portfolio are required to consult with a designated Teacher Education faculty member for remediation and subsequently schedule a second presentation. Students who fail the summative portfolio presentation a second time will be given the opportunity for more substantial remediation, which could include repeating coursework or student teaching.

## RECOMMENDATION FOR LICENSURE

Upon successful completion of the Teacher Education Licensure Program, students may apply for a Colorado Teaching License. The Teacher Education Department will recommend students for Colorado licensure if they meet the following requirements:

- Successful completion of a Bachelor's Degree in the approved major (undergraduate students) or completion of all content and teaching education licensure course requirements (post-baccalaureate students).
- Successful completion of student teaching (which includes passing the summative porffolio as described above).
- Passing the approved PRAXIS II or PLACE content test.
- Submission of required materials to the Director of Teacher Education.

Students wishing to apply to another state are advised to contact the appropriate Department of Education for information about specific requirements.

## FIELD EXPERIENCES

Field experience activity is a vital part of the preparation program. These experiences are conducted in authentic, supervised school settings. Students attend college courses that include direct instruction of methods, practices, and procedures in their content. These courses include specific assignments for field experiences associated with predetermined learning standards. Students work in area schools to complete specific assignments that address a variety of standards including Colorado K-12 Model Content Standards, CDE Performance-Based Standards for Colorado Teachers, and Section 8 in rules for the Administration of the

Educators Licensing Act of 1991. All students are required to submit fingerprints to the Colorado Department of Education before participating in field-based study. Students may be withdrawn from field study at the discretion of the Teacher Education Licensure Program faculty.

Candidates of the Teacher Education Licensure Program are required to adhere to professional standards and ethics in their academic work and field study experience. Professional behaviors and actions include but are not limited to the following examples:

- Candidate's academic work must reflect integrity and honesty.
- Candidates are expected to use appropriate language and professional discourse with students, supervising teachers, and professors.
- The candidate's field study logs must be an accurate, valid, and concise representation of the time spent participating in field study experiences.
- Candidates are expected to dress appropriately for the contemporary traditional classroom. Dress codes should be modeled after supervising teachers and /or Teacher Education Department professors.

Candidates who display unprofessional or unethical behavior will be subject to disciplinary actions, which could result in the candidate's removal from the Teacher Education Program. Finally, any illegal conduct, amoral actions, or violations deemed seriously negligent on the part of a student teacher candidate, will result in the immediate removal from the Teacher Education Program and possible notification of legal infraction to local/state authorities.

## EARLY CHILDHOOD (ECE) LICENSURE PROGRAM (Preschool-3rd Grade)

Undergraduate students seeking ECE licensure choose the Interdisciplinary Studies Major (ISM) and follow the ECE Option. For graduation in the ISM, students must earn a minimum total of 120 credits, including completion of 35-46 general education credits. Fort Lewis College undergraduate students should refer to ISM, page 75, for full information and for elective course options.

In order to obtain ECE licensure, post-baccalaureate and Fort Lewis College graduates must have Completed the following required courses in the teacher education licensure program:

## Ed 200R Introduction to Education in America

4
Ed 210S Culture of Childhood and Youth
4
Content Course Requirements ( 45 credits)
Language Arts (18 credits)
ED 317 Professional Writing for Educators 3
ED 327 Children's Literature 3
ED 335 Linguistics for Educators
Electives: See Interdisciplinary Studies Program for options
Mathematics ( $3-4$ credits)
May also count for Gen ED Q course
See Interdisciplinary Studies Program for options
Science ( 3 credits)
See Interdisciplinary Studies Program for options

Social Sciences ( 20 credits)
Psyc 254 Life Span Human Development
Ed 353 Child Growth \& Development OR
Psyc 354 Topics in Child Psychology 3-4
Electives: See Interdisciplinary Studies Program for options 12-13
400-level education courses ( 36 credits) are restricted to students admitted to the Teacher Licensure Program

Ed 421 Individualized Instruction in a Pluralistic Society 6
Ed 423 Language Arts, Music, Art and Movement 4
Ed 427 Language Arts Methods
4
Ed 453 Cognitive Skills for the Young Child
Ed 456 Early Childhood Administration/Parent, Community Relations

3
Note: Ed 456 should be taken the semester prior to student teaching.
Ed 492 Lab Experience and Seminar in the
Kindergarten/Primary School Setting
Other course requirements:
Psyc 110 (Human Relations) or Psyc 157 (Intro Psyc)
3
GS 496 Interdisciplinary Senior Seminar
2

## ELEMENTARY EDUCATION LICENSURE PROGRAM (Grades K-6)

Undergraduate students seeking Elementary Education licensure choose the Interdisciplinary Studies Major (ISM) and follow the Elementary Education option. For graduation in the ISM Major, students must earn a minimum total of 120 credits, including completion of 35-46 general education credits. Students should refer to ISM, page 75) for full information and for elective course options.

In order to obtain Elementary Education Licensure, postbaccalaureate and Fort Lewis College graduates must have completed the following required courses in the Teacher Education licensure program:

## Ed 200R Introduction to Education in America <br> 4

$$
\text { Ed 210S Culture of Childhood and Youth } 4
$$

## Content Course Requirements (45 credits)

Language Arts ( 12 credits)
ED 317 Professional Writing for Educators 3
ED 327 Children's Literature 3
ED 335 Linguistics for Educators
Electives: See Interdisciplinary Studies Program for options 3
Mathematics ( $9-10$ credits): One course may also count for Gen ED Q course
Math 215Q: Math for Elem I 3
Math 318Q: Math for Elem II 3
Electives: See Interdisciplinary Studies Program for options 3-4
Science ( 10 credits, must include a lab course)
See Interdisciplinary Studies Program for options 10
Social Sciences ( 10 credits)
Psyc 254 Life Span Human Development 4
One United States History course (See Interdisciplinary
Studies Program for options) 3
Electives: See Interdisciplinary Studies Program for options 3
400-level education courses ( 37 credits) restricted to students admitted to the Teacher Licensure Program.

| Ed 421 | Individualized Instruction in a Pluralistic Society | 6 |
| :---: | :---: | :---: |
| Ed 423 | Language Arts, Music, Art and Movement 4 |  |
| ED 425 | Science Methods | 4 |
| ED 426 | Social Studies/Math Methods | 4 |
| Ed 427 | Language Arts Methods | 4 |
| Ed 494 | Lab Experience and Seminar in Elementary School | 15 |
| Other Requirements: |  |  |
| Psyc 110 | (Human Relations) or Psyc 157 (Intro Psyc) | 3 |
| GS 496 | Interdisciplinary Senior Sem | 2 |

## SECONDARY EDUCATION LICENSURE PROGRAMS (Grades 7-12)

Students may seek licensure in secondary education (grades 7-12) in any of the following subject areas: English, Mathematics, Science, Social Studies, or Spanish. Undergraduate students must select the approved major or majors that correspond to their chosen licensure program (See Teacher Licensure Programs at Fort Lewis College and approved corresponding majors, above). For graduation in any major, students must earn a minimum total of 120 credits, including completion of 35-46 general education credits. Students should refer to their approved majors in this catalog for full information.

In order to obtain Secondary Education Licensure, postbaccalaureate and Fort Lewis College graduates must have completed the following required courses in the teacher education licensure program:
$\begin{array}{ll}\text { Ed 200R Introduction to Education in America } & 4 \\ \text { Ed 210S Culture of Childhood and Youth } & 4\end{array}$
4
Major Courses: (Total credits vary - see the approved major for information on specific course requirements)

400-level education courses ( 25 credits) restricted to students admitted to the Teacher Licensure Program.

Ed 421 Individualized Instruction in a Pluralistic Society 6
Ed 424 Lang and Math Literacy in the Secondary School 4
Ed 495 Lab Experience and Seminar
in the Secondary School

## K-12 LICENSURE PROGRAMS

Students may seek licensure in K-12 Education in any of the following subject areas: Art, Music, or Physical Education. Undergraduate students must select the approved major that corresponds to their chosen licensure program (See Teacher Licensure Programs at Fort Lewis College and approved corresponding majors, above). For graduation in any major, students must earn a minimum total of 120 credits, including completion of $35-46$ general education credits. Some programs require more credits for graduation. Undergraduate students should refer to their approved majors in this catalog for full information.

In order to obtain K-12 Education Licensure, postbaccalaureate and FLC graduates must have completed the following required courses in the teacher education licensure program:


## ADDITIONAL LICENSURE OPTIONS

With additional coursework, students have an option of seeking licensure (add-on endorsements) in two other areas.

## Early Childhood Add-On Endorsement

Students who complete the Elementary Education Licensure Program must complete the following courses to add an Early Childhood Endorsement.

Specific Departmental Requirements:
Ed 353 Growth and Development of the Young Child 3
Ed 453 Cognitive Skills for the Young Child 4
Ed 456 Early Childhood Administration/Parent, Community Relationships
Ed 492 Lab Experience and Seminar in the Kindergarten/Primary (K-3) School setting 151
${ }^{1}$ Students who completed K-3 student teaching are not required to complete additional student teaching.

Additional coursework required in special topics in
Early Childhood literacy and creative art
Early Childhood Endorsement Total
27

## Linguistically Diverse Endorsements: Bilingual or ESL

(Available to all students seeking licensure.)
Note: This program is changing and the requirements may change as well. Contact a Teacher Education advisor for more information.

Core Requirements:
**Ed 210S Culture of Childhood and Youth 4
Ed 421 Individualized Instruction in a Pluralistic Society 6
Ed 333 Southwest Language Immersion for Teachers 3
Ed 335 Educational Linguistics
OR
Eng 462 Linguistics
3
Cultural Emphasis: Culturally based art, literature,
or social science courses
9
ESL students must also take:
Ed 334 Methods of Teach English as a Second Lang 3
Pass the ESL PLACE exam

Bilingual students must also take:
Ed 332 Materials \& Methods Bilingual Education
Pass the Bilingual PLACE exam and pass a language proficiency test.
ESL and Bilingual students must complete 30 hours of documented field experience with linguistically different children.

Linguistically Diverse Endorsement Total
28-31

## THEATRE

Course listings for Theatre begin on page 172.

Department Chair - Kathryn Moller
Professor - Kathryn S. Moller
Assistant Professors - Ginny A. Davis and Nathan Lee
Visiting Instructors - Anne Berg, Theresa Carson and Lisa Kramer
The Theatre major enables students to fully explore their potential as literate, articulate, and humane members of society through a close study of the theory and practice of theatre. Students so trained are able to bring highly developed communication skills, flexibility, and creativity to a wide range of career opportunities.

The academic program in the Thearre Department is supported by a strong production program, which is the cornerstone of our work. Performing, technical theatre, and administrative opportunities are open to all students. Auditions and technical theatre interviews are held at the beginning of each term. Participation in production is considered an academic endeavor with course credit available.

Requirements for a minor in Theatre are listed at the end of this section.

## REQUIREMENTS FOR A BACHELOR OF ARTS DEGREE WITH A MAJOR IN THEATRE:

General Education ..... 35-46
See page 25 for General Education requirements.** Courses marked with double asterisks may also be counted toward TSI or$Q$ requirements.
Specific Departmental Requirements:
**Thea 126R Intro to Dance ..... 4
Thea 135 Acting Techniques ..... 4
Thea 230 Stage Technology ..... 4
**Thea 240R Ancient and Classical Theatre ..... 4
Thea 336 Creating Performance: Directing ..... 4
Thea 340W Modern Theatre ..... 4
Thea 496 Senior Seminar ..... 2
Thea 497 Senior Seminar ..... 2
Subtotal Specific Departmental Requirements ..... 28
Theatre Studies Electives:
A total of 14-16 credits chosen from the following courses:
Thea 231 Makeup for Stage2
Thea 233 Audition Techniques ..... 2
Thea 236 Styles in Acting ..... 4
Thea 310 Design for Stage ..... 4
Thea 322 Creative Dramatics ..... 4
Thea 323 Children's Theatre ..... 4
Thea 366 Dance Techniques ..... 2
Thea 369 Playwriting ..... 4
Thea 381 Special Topics in Dramatic Lit ..... 4
Thea 382 American Indian Theatre ..... 4
Thea 460 Internship in Theatre ..... 4
Thea 190/390 Special Topics ..... 4
**TS2R 409 Non-Western Theatre ..... 4
**TS2R 411 Performance Art ..... 4
**TS2R 413 Gender and Performance ..... 4
Subtotal Electives ..... 14-16
Other Department Requirements:
A total of 6 credit hours chosen from Thearre Ensemble and Performance
Studies. At least 2 of these credits should be in technical theatre and 2 inperformance.
Thea 300 Theatre Ensemble ..... 2-4
Thea 400 Performance Studies ..... 2-4
Subtotal Other Departmental Requirements ..... 6
TOTAL MAJOR REQUIREMENTS ..... 48-50
Free Electives (variable)
TOTAL REQUIRED FOR GRADUATION120
Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

## THEATRE MINOR

## REQUIREMENTS FOR A MINOR IN THEATRE:

Departmental Requirements: One of the following two courses:
**Thea 240R Ancient and Classical Theatre 4
Thea 340W Modern Thearre4
One of the following two courses:
Thea 135 Acting Techniques ..... 4
Thea 230 Stage Technology ..... 4A total of 4 credits from Thea 300 (Theatre Ensemble) and Thea 400(Performance Studies). Both courses are variable credit from 1-4.
Thearre Electives:
A total of 8 credit hours from:
${ }^{* * T h e a ~ 126 R ~ I n t r o d u c t i o n ~ t o ~ D a n c e ~}$ ..... 4Thea 135 Acting Techniques4
Thea 190/390 Special Topics ..... 4
Thea 230 Stage Technology ..... 4
Thea 231 Stage Makeup ..... 2
Thea 233 Audition Techniques ..... 2
Thea 236 Styles in Acting ..... 4
Thea 310 Design for the Stage ..... 4
Thea 322 Creative Dramatics ..... 4
Thea 323 Children's Theatre4
Thea 336 Creating Performance: Directing ..... 4
Thea 366 Dance Techniques ..... 2
Thea 369 Playwriting ..... 4
Thea 381 Special Topics in Dramatic Literature ..... 4
Thea 382 American Indian Theatre ..... 4
Thea 460 Internship in Theatre ..... 4
Thea 496 Senior Seminar ..... 2
Thea 497 Senior Seminar ..... 2
TOTAL REQUIRED FOR THEATRE MINOR ..... 20

## SPECIAL ACADEMIC PROGRAMS

## ACADEMIC EXPLORERS

Course listings for the Academic Explorers Program begin on page 142.

Program Coordinator - Lauren Delle
The Academic Explorers Program is available to students who are undecided about a major and want to explore academic options.

The program offers:

- GS 105, Exploring the Liberal Arts, a 2 -credit elective course that provides undecided students with the tools necessary to narrow down options in their major exploration.
- Advisors who are specially trained to work with and guide undecided students.
- Informational events, planned in conjunction with the Career Services Office, about major and career options.

The program is open to all students who are undecided about their major.

## COOPERATIVE EDUCATION PROGRAM

Course listings for the Cooperative Education Program begin on page 126.
Program Coordinator - Allyn L. Talg
The Cooperative Education Program, housed in the Career Services Office, offers opportunities for students to apply the skills and knowledge learned in the classroom to the work environment. Students are highly encouraged to integrate a cooperative education experience into their academic plan. This allows for greater development of knowledge and skills, and assists in academic and career decision making and planning. It also helps students compete more effectively in the job search as they graduate.

## ENROLLING

The first step for a student to take is to schedule an appointment with a career counselor or attend a seminar through the Career Services Office. Minimum eligibility requirements are a cumulative 2.5 GPA and 30 credits earned. Information about additional requirements and how to enroll are on the Career Services Office website: CSO.fortlewis.edu, click on "Internships/Coop."

CREDIT INFORMATION
Students can earn credits at the 200, 300 and 400 levels. Minimally there is a requirement of 50 hours worked for 1 credit hour earned. The maximum number of credits that apply toward graduation is 12. Cooperative Education credits are electives.

## GRADING

Students must complete all of the requirements set forth in the course syllabus and by the employer in order to receive the credits. Credits are awarded as Satisfactory (S) or No Credit (NC).

## ENRICHMENT PROGRAM

Enrichment courses are one- or two-credit "mini-courses" that are numbered 190 and/or 390 and are announced after Census Date each semester. Enrichment courses are elective courses only, and are graded pass/fail. Students are limited to a total of 12 pass/fail elective credits and are limited to two Enrichment courses per term. Enrichment courses may not be applied to the major, minor, or general education requirements.

## EXTENDED STUDIES

## Innovative Months

Each year, a selection of "Innovative Month" courses offer focused and in-depth study. These are typically six-credit courses that include travel, either regional or international, and immersion in other cultures. Travel classes are an increasingly important part of a complete education for the growing interactions of world cultures and markets. Whether a student's interest is business, education, government, or social commitments, these opportunities for travel study may be an important part of a student's total educational program.

Recent courses have included a field study of environmental politics in the Southwest; a field study experience in animal behavior in Kenya; a van tour of Mexico for immersion in Mesoamerica language and culture; and travel to nations as divergent as Ladakh, France, Spain, and Guatemala focusing on political, cultural, and economic change. These courses are announced during the fall and winter terms for the coming summer.

For more information regarding Fort Lewis College Extended Studies, visit the Extended Studies website www.fortlewis.edu/ community_culture/extended_studies/.

Course listings for the John F. Reed Honors Program begin on page 147.
Program Coordinator - Katharine F. Niles
Honors Council Chair - Dugald L. Owen
The John F. Reed Honors Program is an academic enrichment program available to a select group of students. Students who participate in the program complete a special curriculum; propose, research, write, and present an Honors thesis; show academic leadership through being tutors or teaching assistants; and participate in program-sponsored events with Honors Program students and faculty.

Students who complete the requirements of and expectations of the program will receive a notation on their transcripts that they are John F. Reed Honors Program Scholars and receive special recognition at Honors convocation and graduation.

The John F. Reed Honors Program is overseen by the Honors Council, a group of faculty committed to providing an extraordinary academic experience to the high-achieving students at Fort Lewis College.

## Requirements for Admission to John F. Reed Honors Program

Applications for the John F. Reed Honors Program are accepted the first Monday in March for Fall semester and the first Monday in November for Winter semester each year.

To be eligible to apply, students must:

- Complete at least one Hon 220-Honors Forum course.
- Complete at least 15 , but no more than 80 , credits at Fort Lewis College.
- Have at least a 3.0 cumulative GPA.
- Submit a completed application form, including its three required attachments of unofficial transcript, admission essay, and academic writing sample. Application forms are available at the Division of General and Exploratory Studies administrative office, Sage 104.
- Request letters of recommendation, addressed to the Honors Program coordinator, from two faculty members. Letters must be received by the application deadline.
- Be interviewed by the Honors Council.

Admission decisions are announced the first Monday in April and the first Monday in December each year.

## Requirements to Graduate as a John F. Reed Honors Program Scholar

## Course Requirements

Comp 250 Academic Inquiry \& Writing 4
Hon 220/420 Honors Forums 5
Students must complete 5 forums. At least 2 of the forums must be taken at the 420 level.

Hon 499 Honors Thesis
3
Students must complete 2 credits of Hon 499 in the proposal semester and a minimum of 1 credit in the presentation semester.

ED 488 Seminar \& Practicum in College Teaching OR
ED 489 Practicum in College Teaching

## Other Requirements

- John F. Reed Honors Program Scholars must propose, submit, and make a public presentation of an Honors thesis in their senior year. John F. Reed Honors Program designation will not be granted without a memorandum from the Program Coordinator to the Registrar indicating that the thesis and its presentation were satisfactory.
- Cumulative GPA of 3.4 or higher
- Honors curriculum GPA of 3.0 or higher


## Expectations

John F. Reed Honors Program scholars are expected to participate in 2 Honors Program-sponsored events each semester they are on campus.

## INTERNATIONAL PROGRAMS

Coordinator: Susan Holgate
Fort Lewis College offers Exchanges, Direct Enrollments and Study Abroad opportunities around the world to individual student participants through the International Programs Office. GS 250 and GS 251 (International Studies) are pre-departure courses required before participation in any of these programs.

## International Exchanges

Fort Lewis College has a number of reciprocal exchange agreements with partner institutions in Europe, Asia and Latin America. Students participating on these exchanges pay their home school tuition and fees and receive transfer credit for their semesters abroad. Students are responsible for their individual travel and living expenses. Financial aid is available to eligible Fort Lewis students. Tuition waivers may also be used. Incoming international students from partner schools must apply through their own international programs offices for any financial assistance.

## Direct Enrollments and Study Abroad

Direct enrollments and Study Abroad programs offer alternative locations and curriculum choices to Fort Lewis students when our current exchange schools do not meet their needs. While participating on these programs, students pay their tuition directly to approved institutions or third party providers.

Faculty-run international programs are offered through individual departments, and Innovative Month programs are offered through the Extended Studies Office.


## COURSE LISTINGS AND DESCRIPTIONS

FORT LEWIS COLLEGE<br>2006-2007



## KEY TO COURSE DESCRIPTIONS

Fort Lewis College does not offer all the classes listed in this catalog every semester or every year.

The following pages provide brief descriptions of course offerings open to all students. Course listings are subject to change.

Each semester the college publishes a schedule of courses that provides a detailed list of courses offered and the times and places of instruction. Courses listed in the schedule of courses are subject to change.

## EXPLANATORY NOTES

## Number of courses:

Course numbering is based on the contents of the material
presented in courses.

## Course number:

100-299 primarily for freshmen and sophomores 300-499 primarily for juniors and seniors

Entry to all courses is limited to students who have completed published prerequisites or to those with instructor's consent. Courses numbered below 100 do not count toward graduation. Courses numbered below 300 are called lower-division courses, while those 300 or above are known as upper-division courses.

Prerequisite. A requirement that must be fulfilled before a student can enroll in a particular course. Consent of the instructor for a student to attend a class is implied when the student has met the specified course prerequisite.

Corequisite. A requirement that must be taken concurrently with another course of instruction.

Cancellation of courses. The College reserves the right to cancel courses not selected by an adequate number of students or for which qualified faculty are not obtainable.

Variable credit courses. 1-4 indicates variable credit; the minimum and maximum credit limitation per term are shown. An example:

## THEA 100 Dramatic Theatre

1-4
This course involves initial participation in theatrical production. It includes limited involvement in various areas of theatre from inception to presentation. Students with little or no theatre experience will gain a working knowledge of performance. Repeatable for up to 12 credits.

## SYMBOLS

Course descriptions include a variety of symbols that convey essential information. The following standard course description with explanation of symbols is an example.

## BA 407W Management Consulting 4

The study of the concepts and models of management consulting and their application in business organizations. Emphasis is on practical application and the use of relevant tools and techniques. Students are required to engage in consulting services. (2-4)
Prerequisites: BA 340 AND BA 353 AND BA 380 AND BA 221

BA department designator
407 course number
W suffix indicates course meets General Education W requirement

Management Consulting - Course title
4 number of credits awarded for successful completion of the course
"The study of the concepts...." - Explanation of course content, or course description
(2-4) (clock hours in lecture per week - clock hours in laboratory experiences per week)

Prerequisites - Requirements that must be fulfilled before enrolling in the course. NOTE: Some class prerequisites must be completed with at least a grade of C - or better. Please check the current Web catalog for minimum prerequisite grade requirements.

Note: Not all of the above information may be noted in each description.

Additional symbols include:
$N$ - Suffix indicates course meets group $N$ general requirements
$Q$ - Suffix indicates course meets group $Q$ general requirements
$R$ - Suffix indicates course meets group $R$ general requirements
$S$ - Suffix indicates course meets group $S$ general requirements
T - Suffix indicates course meets group $T$ general requirements
Tx - Suffix indicates course meets group Tx general requirements
$N x$ - Suffix indicates course meets group $N x$ general requirements
W - Suffix indicates course meets group W general requirements
A course with two or more letters after the number may qualify for each of the general education requirements indicated. However, courses identified with more than one letter can be used to satisfy only one general education requirement.

ACC 225 Intro to Financial Accounting 4 Concepts related to the preparation of financial statements and reports for parties external to the firm, such as stockholders, creditors, and labor unions will be introduced. Understanding the information presented in the financial statements, the balance sheet, the income statement, and the statements of changes in financial position will be the major emphasis of the course. Sophomore standing required. (4-0)

ACC 226 Intro to Managerial Accounting 4 Concepts related to the preparation of reports useful to management in planning and controlling the operations of a business will be introduced. The primary emphasis in this course will be on using accounting information for management planning, control and decision-making. Topics include: behavior of costs, budgeting and planning, cost-volume-profit analyses and analysis of financial statements. (4-0)
Prerequisites: ACC 225 AND (COMP 150 OR GS 151 OR COMP 126 OR COMP 250)

ACC 323 Intermediate Accounting I 4
The fundamental process of accounting is analyzed. The proper treatment of business transactions in the recording and analyzing phases is reviewed. Financial accounting theory and problems are studied along with financial statement presentation. (4-0)
Prerequisites: ACC 226
ACC 324 Intermediate Accounting II 4
Continuation of financial accounting theory and problems. In addition, partnership accounting and an introduction to business combinations are covered. (4-0)
Prerequisites: ACC 323

## ACC 370 Topics in Accounting <br> 1-6

An examination of selected topics and issues pertaining to the study of accounting. Topics might include current accounting pronouncements and legislation, accounting software, not-for-profit accounting, fraud auditing, financial statement analysis, SEC reporting or other current topics. Course may be repeated to an accumulated maximum of 6 credits provided the subject is different each time.
Prerequisites: ACC 226
ACC 426 Advanced Accounting 4
A study of topical advanced accounting issues such as business combinations and consolidation accounting, international accounting standards, foreign currency transactions, translation of foreign financial statements and other advanced topics. (4-0)
Prerequisites: ACC 323

## ACC 430 W Income Tax Accounting

A brief history of the income tax, income tax accounting and a study of current federal income tax provisions are presented. (3-0)
Prerequisites: ACC 323 AND BA 221
ACC 431 Income Tax Accounting II 3
Federal income taxation of partnerships, corporations, S-corporations, estates and trusts, and gifts. (3-0)
Prerequisites: ACC 430

## ACC 436 W Auditing-Theory and Practice

Functions of the independent public accountant are stressed. The course includes audit reports and options, account analysis, audit programs, working paper content and form, professional ethics, applications of accounting and auditing standards, SEC stock exchange regulations, investigations for purchase and financing and current literature on auditing. (4-0)
Prerequisites: ACC 323 AND BA 221

ACC $\quad 470 \quad$ Gov ${ }^{\prime}$ Not for Profit' Accountng 3
This course covers accounting standards and principles applicable to local and state governments and other not-for-profit entities. (3-0)
Prerequisites: ACC 323

## AGRICULTURE

AG 101 TX Introductory Animal Science 4
Basic introduction to the aspects of animal science, concentrating on products, reproduction, genetics, anatomy, basic production in cattle, sheep, swine and dairy. (3-3)

AG 102 Principles of Crop Production 4
Basic principles of crop production, concentrating on growth, development, management, utilization and cultural practices dealing mainly with the crops of Colorado. (3-3)

AG 150 Farm Records and Accounts 3
This course is designed to give proficiency in keeping farm records for income tax and management purposes. (3-0)

## AG 180 N Sustainable Agriculture

This course will introduce students to the theoretical and practical dimensions of sustainable agriculture. The major topics of discussion will include current issues in sustainable agriculture, sustaining soil fertility, environmentally friendly pest control, and case studies in sustainable agriculture. (3-0)

## AG 202 IPM/Weed Control

Principles and practices of weed control and integrated pest management. The recognition of important weed and insect pests. (3-3)

AG 203 T Intro to Medicinal Crops 3 An introduction to the topic of medicinal crops. A study of selected medicinal crops with regard to their production, medical usage and scientific basis for reported benefits. (3-0)

AG 204 Forage Production \& Mngmt 3
Principles and practices of forage production and management in the United States. (3-0)
AG 235 Soils and Soil Fertility 4
A basic course dealing with soil formation, physical and chemical properties, fertility, management and conservation. (3-3)

## AG 240 Principles of Animal Nutrition 4

Digestive anatomy nutrient sources and requirements of livestock, including ration-balancing and analysis of feedstuffs. (3-3)
Prerequisites: AG 101

AG 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## AG 301 Range Management

Application of range science principles in managing rangelands. Major topics include ecology, grazing systems, management principles, range improvements, and range utilization. (3-3)

## AG $325 \quad$ Beef Science 3

A comprehensive course in beef cattle production, including topics in breeding and selection, reproduction, nutrition, herd health and marketing. Commercial beef cattle production enterprises will be emphasized. (3-0)
Prerequisites: AG 101
AG 346 Agricultural Marketing 3 An introduction to applied grain, livestock, and agricultural product marketing in the U.S. Basic marketing principles and practical marketing strategies using the futures market will be discussed. (3-0)

AG $370 \quad$ Internship in Ag 3 Directed work experience in agricultural production and agribusiness. Minimum requirements are that students maintain a detailed journal and complete at least 80 hours of directed experience. Sophomore standing and minimum 2.5 cumulative GPA required.

## AG 499 Independent Study 1-6

 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.
## ANTHROPOLOGY

ANTH 120 S Anthropology of the Southwest
This course explores the interacting systems of the Greater Southwest from the perspectives of historical, applied, ethnological, and archaeological anthropology. Students will examine not only the ways in which the varied southwestern ecosystems have shaped political-economic activities, cultural practices, and geopolitics over time, but also the ways in which long-term field studies of the Southwest have shaped the discipline of anthropology. (3-0)

ANTH 151 S Introduction to Anthropology 3 A comprehensive, systems-oriented study of general anthropology covering the four major subfields (archaeology, biological anthropology, linguistic anthropology and ethnology). This course is recommended as a beginning course for students who have had no previous background in anthropology. (4-0)

## ANTH 171 T World Archaeology 4

An introduction to cultures of the past. Students study the fundamental role that technology, as evidenced in the archaeological record, has played in the evolution of humans, from the earliest hominids to the rise of states in the Old and New Worlds. The interconnection between technology and society is emphasized, as is the scientific method and its historical and cultural contexts. (4-0)

ANTH 201 T Introduction to Archaeology 4
This course is designed to introduce the beginning student to the basic techniques, concepts and theories of archaeology and its relation to the wider field of anthropology. (4-0)

## ANTH 208 N Trad Eco Knowldge \& Cult Surv

Traditional Ecological Knowledge (TEK) is an integrated body of spiritual and practical knowledge that has evolved over vast stretches of time through the successful adaptation of a culture to its local environment. In this course, students will be introduced to the ways in which different cultures organize and categorize domains of TEK, including plants, animals, landscapes and kin. The class will also address the growing question of cultural survival in relation to environmental loss, as it is increasingly apparent that cultural diversity is directly related to biological diversity. (4-0)

## ANTH 210 R Intro Sociocult Anthro

Sociocultural anthropology (also known as ethnology) deals with the relationship of culture to society and the individual. This course is designed for the beginning student and introduces the basic concepts, theories and methods of this broad field. It also looks at the application of ethnological thought in considering modern human realities and problems and in understanding the relationship of cultural and expressive forms to identity. (4-0)

## ANTH 212 Applied Anthropology

Applied and practicing anthropologists directly serve the needs and interests of communities and organizations around the world. This course provides an introduction to the ways in which anthropology and anthropologists work toward finding solutions to real world problems. A case study approach provides the student with methods for seeing how social and environmental problems are defined, solutions generated, and outcomes evaluated. (4-0)

## ANTH 213S Peasant Societies

This course provides a study of agricultural societies throughout the world and the position of these societies within more complex systems. The instructor may select a specific area for in-depth study to complement a more general, systemic perspective on world peasantries. (4-0)

## ANTH 215 R Magic and Religion

This course provides an inquiry into the forms that spiritual and religious beliefs take cross-culturally and investigates the various practices and symbols through which these beliefs are expressed and enacted in public life. (3-0)

## ANTH 217R Cultural Images of Women \& Men 4

This course examines the images of gender and sexuality that permeate our society and contribute to the definition and delimitation of identity and autonomy. Special attention is given to examining social hierarchies that underlie and are modified by the discourse involving male and female behavioral expectations. Any and all cultural products will be our objects of inquiry and analysis, from film and advertising to autobiographies and other self-portraits. Our goal is to arrive at a coherent understanding of the relationship of images to social power, equality and inequality. (4-0)

ANTH $220 \quad$ Colorado Archaeology 3
This course covers the prehistoric and historic archaeology of Colorado. It examines the historical development of archaeology in our state, our current state of knowledge and how Colorado archaeology has developed in relation to the wider goals of archaeology. (3-0)

ANTH 225 Intro to Population Issues 1

Global population issues are important in a world of increasing human numbers and dwindling availability of resources. Course topics include demographic terminology, growth dynamics and reasons for change, family planning policies and technology, the environmental impact of people and their consumption practices, perspectives on food supply and "sustainability" for understanding population issues. Anthropology 225 offers students a one-hour, internet-based course meeting three times in the fall semester and a commitment to three Population Awareness Week programs (evenings) for writing a paper. Students progress at their own pace through the readings (Internet and texts) in preparation for the final exam. (1-0)

ANTH 236 TX Intro Phys \& Bio Anthro 4
This course provides a study of the biological development of humankind and the modern understanding of human variation from a technological, critical, ethical and evolutionary perspective. Topics to be explored in the classroom and laboratory contexts include the biological basis of the race concept, the workings of Mendelian genetics, forensic anthropology and the basics of primate evolution. (3-3)

ANTH 243 S Food:Systems of Production
This course explores the centrality of food systems in local and global contexts. It examines the interrelated historic, economic, political and gendered features of food production, distribution and consumption via cross-cultural comparison. Special attention is paid to the dialectic of material and symbolic elements where our goal is to understand the place of food in systems of power that include familial, cultural, industrial and institutional forms. (4-0)

ANTH 259 Field Training in Archaeology 4-8 Actual on-site training in the techniques of archaeological survey and excavation. Students spend full days, five days a week, in the field for seven weeks. They receive intensive instruction in field survey, remote sensing and all aspects of excavation, recording, mapping, photography, artifact classification, field laboratory techniques and site interpretation. A written description of the field school for each year will be furnished to prospective students.

ANTH 299
Individual Study
1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

ANTH 302 Resrch Issue Evolutionary Anth . 2 An exploration of the changing knowledge base of hominid and primate evolution. (2-0)
Prerequisites: ANTH 236

ANTH 303 W Anthropological Debates
This course fulfills the anthropology major's Group W composition requirement. It is organized around a controversial theme and debate within the discipline. The student will enter into this debate by reading, writing and speaking. Course debate themes will alternate from semester to semester. Examples of course themes include the "race" concept, indigenous rights, ethics, repatriation, archaeological theory and food and nutrition, among others. (4-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND (ANTH 210 OR ANTH 201)

ANTH 309 Archaeology of Britain 4
This course provides a survey of the cultural history of the British Isles from the Paleolithic to the Medieval period as seen from the archaeological record. (4-0)

ANTH 310 Geoarchaeology
This course offers an interdisciplinary approach to the study of archaeology. The conceptual foundations and historical relationships between archaeology and the geosciences are explored. The major focus of this course is on the methods and techniques borrowed from the geosciences (geology, geography, geomorphology) that relate to the reconstruction of the archaeological landscape. (4-0)

## ANTH 313 Arch of Ancient Greece \& Rome 4

This course examines the past of Greece and Rome from the Bronze Age to the end of the Classical and Imperial periods, drawing on both archaeology and other relevant disciplines. The course situates the development of classical archaeology in its historical and socio-political context and addresses some current issues of relevance to both classical archaeology and archaeology in general. This course counts toward the research and non-New World requirements in the major. (4-0)

## ANTH 314 Greece: Culture, Archaeology

This off-campus course introduces students to the rich culture, archaeology and history of Greece through an intensive study of some of the major archaeological, historical and cultural sites and locations in Greece and the Aegean Islands. Students will be expected to participate in all activities and also conduct independent research on topics of their choice. This course requires that the class travel to Greece and the Greek islands and, therefore, requires additional fees.

ANTH 316 Internship in Anthropology 1-6 This course offers a guided framework for practical experience for work carried out by students in discipline-related governmental and non-governmental agency projects. Interns will be involved in effective public service in order to promote student understanding of complex social, political, economic, scientific and philosophical issues. Internship examples include, but are not limited to, work in archaeological, museum and public health contexts. Course credit is based on 1) satisfactory performance of 30 hours of work for each credit earned; 2) fulfillment of a learning contract with a faculty sponsor; and 3) the satisfactory completion of a final project, usually a paper.

ANTH 320 Archaeological Lab Techniques 4 This lecture course covers laboratory techniques and the analysis of prehistoric artifacts, with special emphasis on lithic, ceramic and bone technologies. This course also introduces the student to the preparation of technical reports. (4-0)
Prerequisites: ANTH 201

ANTH 330 Archaeology of the Southwest
This course provides a comprehensive survey of the major archaeological traditions of the prehistoric Southwestern United States, and the environmental and cultural influences that made them distinct. (4-0)

## ANTH 340 Ancient Egypt

 3Using archaeological data, this course examines the development of a major civilization and its relationship to both the earlier civilizations of Mesopotamia and the later developing civilizations of the Mediterranean. (3-0)

ANTH 341 Prehistory of Europe 4
This course provides a survey of early cultures of Europe from the earliest evidence of humans until the development of civilizations. (4-0)

ANTH 348 North American Archaeology 4 This course traces the development of the aboriginal cultures of North America. Emphasis is placed on evaluating the degree to which our understanding of the past is influenced by both the discipline of anthropology and by contemporary Western values. (4-0)

## ANTH 350 Ethnology of Mesoamerica 4

This course provides a comparative study of major cultural topics concerning contemporary ethnic groups of central Mexico and northern Central America. Geography, demography, ecology and prehistory will be touched upon, while social, economic and political systems will be studied in more depth. (4-0)

## ANTH 351 Ethnology of Andean So America 4

 Indigenous peoples and peoples of mixed descent are studied in terms of their past and present cultural and political-economic experiences. Particular emphasis is given to understanding the ways the North American and Andean worlds intersect, as well as to the ways that Andean studies reflect and influence trends in anthropological thought. (4-0)
## ANTH 353 Ethnology of India

While we are overwhelmed by the cultural diversity of the Indian subcontinent, this course focuses on the unity of cultures in the area. Topics include the caste system, contemporary economic and political systems and a brief look at geography, demography, ecology and prehistory. Tribal peoples will be studied in addition to peasantries. (4-0)

ANTH 355 Anthropology of Gender 4 This course offers an in-depth, interdisciplinary analysis of the nature and origin of gender concepts cross-culturally, particularly as they relate to explaining gender hierarchy. Topics to be covered include the contributions of feminist thought to social scientific theories, the cultural construction of gender categories and the relationship of gender to power. This course is the same as WS 355 ; credit will be given for only one of these courses. (4-0)

ANTH 356 Ecological Anthropology 4 This course provides a comparative study of human populations in ecosystems, stressing the relationship between culture and the biophysical environment with the focus on cultural adaptations. Implications for anthropological theory, sociocultural evolution and contemporary problems will be investigated. (4-0)

ANTH 357 Medical Anthropology
The medical systems of indigenous peoples are analyzed cross-culturally from the perspectives of epidemiology, symbolism, history and a political economy. Topics will include the development of medical anthropology, the medical traditions of Ayurvedic, humoral, shamanic and biomedical practitioners, theories of cause and cure and applied practice. This course is recommended for pre-health and social science majors. (4-0)

ANTH 365 Language and Culture 4 This course introduces students to the relationship between language and culture. Attention will be paid to a diversity of human communicative behavior, both spoken and unspoken, with a focus upon aspects of communication as the structural properties of language, cross-cultural variations in language use, the contextualization of meaning, and how language is affected by such variables as gender identity and group affiliation. (4-0)

## ANTH 370 Quantitative Methods in Anthro 4

This course will examine the use of quantitative methods in anthropological research, through the application of traditional statistical techniques, exploratory data analysis, and GIS. Students will be introduced to various archaeological and ethnographic examples using the tools of SPSS statistical software, GIS, and ArcView. (4-0)
Prerequisites: ANTH 201 AND ANTH 210 AND (MATH 110 OR MATH 201 OR PSYC 241 OR ES 242)

## ANTH 371 Ethnology of Amazonian S Amer 3

Selected societies of the Amazon region are studied in this comparative survey, which opens with consideration of the ways that the region and its peoples have played a large role in European expansion. The major focus of the course is on the relationship of Amazonian peoples to their ecosystem and the ways they continue to struggle to achieve autonomy over their threatened territories and ways of life. (3-0)

## ANTH 388 Ethnology of the Southwest 4

This course provides a comparative overview of selected American Indian cultures of the American Southwest in terms of their history, social organization, belief systems, oral traditions, political economy and responses to change as they intersect with non-Indian peoples. (4-0)

## ANTH 395 Hist Anthropological Thought

This course provides a genealogical and critical look at the major philosophical, historical and scientific elements that have contributed to anthropological thought and practice--both archaeological and ethnological--since the early 19th century. Although this course is specifically required for the anthropology major, it is recommended for any student interested in the development of social scientific thought and the ways it plays out in students' own intellectual autobiographies. (4-0)
Prerequisites: (ANTH 201 AND 210)
ANTH 402 Adv Archaeological Lab Techniq 4
This lecture course covers advanced laboratory techniques and the analysis of prehistoric artifacts, with special emphasis on lithic, ceramic and bone technologies. The course also further develops the student's ability in the preparation of technical reports. (4-0)
Prerequisites: ANTH 201 AND ANTH 320

ANTH 403 Adv Archaeological Field Tech 4-8
This course provides advanced training in the techniques of archaeological survey and excavation. Students spend full days, five days a week, in the field for a total of seven weeks. In addition to intensive instruction in all aspects of field survey and excavation, training includes research design preparation, hypothesis generation, field test propositions and excavation sampling design. Students may serve as crew chiefs and direct field laboratory sessions. A written description of the field school for each year will be furnished to prospective students.

## Prerequisites: ANTH 259

ANTH 406 Ethnobotany of Southwest 4
This class offers students the opportunity to conduct in-depth research regarding traditional plant knowledge unique to the various cultures of the Greater Southwest and to become familiar with the important and useful plants of the region. (4-0)
Prerequisites: COMP 150 OR COMP 250 OR COMP 126

## ANTH 412 Advanced Topics in Applied Ant 4

Students will work on an applied community project. The course will emphasize first-hand experience in research design, rapid social impact assessment, ethics, advocacy, interviewing and community-based participatory methods. Theoretical and methodological readings will ground the experiential portion of the course. May be repeated once for an additional 4 credits. (4-0)

## Prerequisites: ANTH 210 AND ANTH 212

ANTH 430 Adv Studies, SW Archaeology 4
This course provides detailed study and research on current topics in the archaeology of the Southwestern United States, with special emphasis on the theoretical and empirical contributions of major archaeologists and archaeological projects. Individual projects will focus on current topics in archaeology. (4-0)
Prerequisites: ANTH 330
ANTH $450 \quad$ Adv Research-Latin Amer Anth 2 Students will work all term on a focused research project that requires previous knowledge and expertise in Latin American sociocultural systems. Common course readings and class discussions will center around research methods appropriate to work in the broad region of Latin America, to ethical implications for such research and to possible applications of research. Guidance will be provided to those students who wish to formulate their research into a post-baccalaureate Fulbright grant proposal. Instructor permission required. (2-0)

## ANTH 455 Adv Research in Anth of Gender

Students will work all term on a focused research project that requires familiarity with gender theory and discourse in the social sciences, history, literature or philosophy. Common course readings and discussions will center around feminist research methods and the ethical implications and applications of such research. Guidance will be provided to those students who wish to formulate their research into a post-baccalaureate Fulbright grant proposal. Instructor permission required. (2-0)

ANTH 496 Senior Capstone Sem in Anthro
This course provides a context for advanced reading, writing and seminar discussion centered on integrating the undergraduate anthropological focus in the student's life beyond college. As a capstone course, the Senior Seminar provides a rich opportunity to reflect upon and synthesize, through various written and oral projects, the many dimensions of the anthropological intellectual experience. (4-0)
Prerequisites: ANTH 303AND ANTH 395

## ANTH 499 Independent Study 1-6

 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour. This course may not be used to meet major requirements in lieu of an existing course offered by the department.
## ART

ART 101 Drawing 4
Introduces students to the fundamentals of drawing. Includes traditional representational and imaginative drawing problems, perspective, spatial illusion and composition. (1-6)
ART 109 Basic Design 4
This course introduces design principles and color theory. Twoand three-dimensional design problems are explored. (1-6)

## ART 154 Indian Arts/Crafts I

This course may include basketry, pottery, weaving, dyeing and other crafts media. Whenever possible, the projects are started with the raw material. This course is the same as SW 154; credit will be given for only one of these courses. (0-6)

## ART $\quad 162 R \quad$ Art in the Humanities

3
Art in the Humanities examines art from diverse cultures and time periods, focusing on how human endeavors in the visual arts arise from and are related to broader historical and cultural contexts. NOTE: This course does not count toward the ArtMajor. (3-0)

ART 201 Figure Drawing 3 A studio experience designed to allow an in-depth study of the human figure in drawing. Live models will be used exclusively. May be repeated once for an additional 3 credits. Instructor permission or pre-reqs required. (0-6)
Prerequisites: ART 101 AND ART 109

## ART 205 Experimental Drawing

A studio course designed to link the development of drawing skills to expressive and conceptual content via a variety of experimental approaches to drawing. (0-6)
Prerequisites: ART 101 AND ART 109
ART $210 \quad$ Graphic Design-Desktop 3 An introduction to graphic design and desktop publishing with the computer, using software such as Quark for page layout and Adobe Photoshop and Adobe Illustrator for graphics. Emphasis will be placed on creating print-ready documents. (0-6) Prerequisites: ART 109

ART $213 \quad$ Basic Sculpture
A course in three-dimensional and bas-relief sculpture. Consists of modeling, carving and shaping rigid and pliable material. Some work will use the human form. Pre-requisites or instructor
permission required for Art majors. (0-6)
Prerequisites: ART 101 AND ART 109

## ART 224 Basic Painting <br> 3

Instruction in various painting media. Students will concentrate on compositional and color problems while working from still life, landscape and figures. (Coursework in this area offered at beginning and advanced levels.) (0-6)
Prerequisites: ART 101 AND ART 109

## ART 226 Watercolor Painting

This course deals with traditional and contemporary watercolor techniques. Subject matter will be landscape and still life. Instruction in the various types and uses of papers, tools, techniques, brushes and paints will be given. Suggested pre-reqs, Art 101 and Art 109. (0-6)

ART 227 Beginning Mural Painting 3
Mural design and execution will be experienced on an actual location in or near Durango. The processes and problems relating to scale and enlargement will be employed. All paint, brushes and supplies are furnished by the business or client contracted for the mural site. May be repeated once for an additional 3 credits. (0-6)

ART 231 Introduction to Printmaking 3 A studio experience exploring the materials and methods basic to making prints. Relief, etching, collographic and silk-screen techniques will be emphasized. (0-6)
Prerequisites: ART 101 AND ART 109

## ART 243 Basic Photography

A basic studio course supplemented with lectures presenting an overview of photography. A creative approach designed to introduce students to shooting and printing techniques with silver and non-silver media. (0-6)

## ART 250 Ceramics 3

 Individual projects and forming of pottery of varied styles. Emphasis will be placed on expressive forms. Practice in ceramic procedures and use of materials: throwing, slab, molding, glazing and firing. ( $0-6$ )
## ART 253 Jewelry and Metalwork I 3

 This course covers the use of basic jeweler's tools such as saws, files, flexible shaft and buffers. Students will work with a variety of jewelry techniques such as overlay, bezel set stones, pieced metal and metal forming. Supplemental processes such as enameling, etching and metal patinating may also be included. (0-6)ART 262R Art Hist I:Ancient Wrld/Mid Ag 4
This course is a broad introduction to painting, sculpture and architecture in both the Western and Non-Western traditions from the prehistoric era up to the end of the Medieval period. As such, art works will be considered in their stylistic, cultural and historical contexts. (4-0)

ART 263 R Art Hist II:Renaisance-Mod Wrl 4
This course is a broad introduction to painting, sculpture and architecture in both the Western and non-Western traditions from the early Renaissance to the present. As such, art works will be considered in their stylistic, cultural and historical contexts. (4-0)

## ART 265 Art History of the Southwest

A comprehensive study of the art forms developed in the Southwest, starting with Mesoamerica and ending with contemporary Southwest artists. The course emphasizes the cultural impact upon design transitions as it traces contemporary designs to their roots. The course is the same as SW 265; credit will be given for only one of these courses. (3-0)

ART 271 Art Institutions 4
This course combines lecture, discussion, student research and writing to help students develop an understanding of the significant institutions and systems that make up the art world, such as museums, corporate collections, public and private patronage, sales galleries, auction houses, art publications and art schools and programs. (4-0)

## ART 273 Art for Elementary Teachers 3

Contemporary concepts, practices, materials and methods used in the elementary school art program. (2-2)

## ART 292 Independent Media/Research 1-6

 In this course students will work independently on a variety of self-directed projects and/or research. Students may work with any Art faculty member, but must have that faculty member's permission. Students must have successfully completed at least one Fort Lewis College Art Department course. This course is repeatable up to 3 times.
## ART 296 Sophomore Seminar

Art majors must take Sophomore Seminar after the completion of 17 art credits. The course addresses career planning, health and safety with art materials, and porffolio preparation. A portfolio presentation and review is required ( $1-0$ )

## ART 299 Individual Study

1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

ART 301 Advanced Figure Drawing 3
A continuation of Art 201. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 201
ART 312 Advanced Design
Problems and theory of design topics. (0-6)
Prerequisites: ART 109
ART 313 Advanced Sculpture I 3 A continuation of Art 213. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 213

ART Electronic Imaging 314 Beginning and advanced techniques with Adobe Photoshop. Special effects projects will include photo retouching, scanning, special texturing effects, digital photo capture and other electronic printing technologies. This course may be repeated once for an additional 3 credits. (0-6)

ART $315 \quad$ Gallery Management Internship $\quad$ 2-4 This course/internship is designed to introduce students who have a strong interest in and commitment to art to the fundamentals of gallery management. Students will gain an understanding of gallery management through course activities which include assigned readings, seminars and practical, hands-on experience. Students will study how social, political, historical and institutional dimensions shape exhibitions and reflect or challenge societal perceptions. In addition, students will learn about the complexities of directing and managing the daily operation of an ambitious exhibition schedule. Student experiences will be varied to include facets of gallery organization from public relations and publicity to installing an exhibition with emphasis on design and installation. Consent of instructor required.

## ART 324 Advanced Painting I

3
Students will continue to develop their technical knowledge and skills. They will concentrate on color and compositional problems while working with their choice of subject matter. The primary teaching concern will be directed toward the discovery and selection of meaningful subject matter. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 224
ART 326 Advanced Watercolor Painting 3
Continuation of Art 226. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 226

## ART 327 Advanced Mural Painting 3

Continuation of Art 227. Pre-requisites or consent of instructor required. (0-6)
Prerequisites: ART 227
ART 331 Advanced Printmaking I 3
Advanced development of printmaking skills with opportunity to do specialized work in one or more areas. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 231

## ART 343 Photographic Design 3

A creative approach to photography generated in basic design principles. A studio course allowing for individual specialization and refinement of basic skills. Experimentation in both black-and-white and color media will be introduced. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 243
ART 350 Advanced Ceramics I 3 A continuation of Art 250. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 250

ART 353 Jewelry and Metalwork II
Students will work with a variety of advanced jewelry techniques such as overlay, bezel set stones, pieced metal and metal forming. Supplemental processes such as enameling, etching, casting and metal patinating may also be included. May be repeated once for credit. (0-6)
Prerequisites: ART 253
ART 363 Mod Painting/Sculp 1863-1945 4 This course is the first half of a two-term survey of the history of modern art, covering the major artistic movements and artists in Europe and the United States from the late 19th century, about 1863 , to the second World War, about 1945. While the emphasis will be on painting and sculpture, architecture and photography will be considered. (4-0)

## ART 364 Mod Paintng/Sculp 1945-Present 4

 This course is the second half of a two-term survey of the history of modern art, covering the major artistic movements and artists in Europe and the United States from the second World War, about 1945, to the present. While the emphasis will be on painting and sculpture, architecture, photography and other new media will also be considered. (4-0)
## ART 365 Mesoamerican Art History <br> 3

Mesoamerican Art History is an overview of the prehistoric civilizations of Mesoamerica. It examines, in detail, culture, art and architecture of the area, including Maya, Olmec, Mixtec, Zapotec, Haustec, Colima and Aztec. This course is the same as SW 360; credit will be given for only one of these courses. (3-0)

ART 366 Women, Art and Visual Culture 4
This course provides an overview of contemporary art theory, representations of women and the feminist critique of art. Students will read, research and write about art and discuss the idea of "visual culture." This course is the same as WS 366; credit will be given for only one of these courses. (4-0)

ART 367 AmerArt Hist: Col Era to 1930s 3
This course surveys the major issues and developments in American painting, graphic arts, photography and scu lpture from the early Colonial period to the 1930s. The aim is to provide a functional knowledge of schools, styles and individuals within their historical and cultural contexts as well as introduce important critical issues surrounding the subject of American art in general. (3-0)

ART 368 Native N. American Art History 3
Using a regional approach, this course examines art by Native Americans from Alaska, the Northwest Coast of North America, Plains, Woodlands, California, Northeast, Southeast and Southwest regions of the United States. The influence of tourism, photography, and museums on art, as well as Native American influence on these forces is also examined. Art surveyed ranges from the archaic to the contemporary. This course is the same as SW 368; credit will be given for only one of these courses. (3-0)

## ART 385 W Contemp. Art:Process,Theo,Crit

This course will engage students in the contemporary dialogue about art. Reading, class discussion and writing will focus on contemporary art process, theory and criticism. Students must have junior standing. (4-0)
Prerequisites: ART 101 AND ART 109 AND ART 262 AND ART 263 AND (COMP 150 OR COMP 126 OR COMP 250) AND LIB 150

ART 401 Interpretive Drawing 3
A class of interpretive drawing using skills acquired in previous drawing classes and based on a concept approach to drawing. All media and materials used. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 201

## ART 413 Advanced Sculpture II <br> 3

A continuation of Art 313. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 313
ART 424 Advanced Painting II 3
A continuation of Art 324. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 324
ART 425 Adv Painting Portrait \& Figure 3
Advanced studies in painting as related to the human portrait and figure. Traditional and contemporary philosophies will be explored. Models will be used. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 224 AND ART 201

## ART 431 Advanced Printmaking II 3

Continuation of Art 331. May be repeated once for an additional 3 credits. (0-6)
Prerequisites: ART 331
ART 443 Advanced Photographic Design 3
Continuation of Art 343. May be repeated for an additional 3 credits. (0-6)
Prerequisites: ART 343
ART 450 Advanced Ceramics II 3
Continuation of Art 350. May be repeated for an additional 3 credits.(0-6)
Prerequisites: ART 350
ART 492 Independent Media/Research 1-6 In this course students will work independently on a variety of self-directed projects and/or research. Students may work with any Art faculty member, but must have that faculty member's permission. Students must have successfully completed at least one Fort Lewis College Art Department course. This course is repeatable up to 3 times.

ART 496 Senior Seminar
Advanced study and research in selected topics. Completion of senior portfolio and statement. Senior standing is required. (3-0)
Prerequisites: ART 296
ART 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

BIOLOGY
BIO 105 TX Issues in Genetic Engineering
During this course, students will study what genetic engineering is, how this relatively new biotechnology works and key examples of genetic engineering in both agriculture and medicine. The foci of this course are 1) the societal, ethical, political and economic issues that arise due to the use of genetic engineering technology and 2) the basic science of genes, gene expression and recombinant DNA technology that makes genetic engineering possible. Students will analyze and discuss genetic engineering issues with an eye toward making informed personal decisions about the use of this technology. During the laboratory element of this course, students will engage in genetic analysis, genetic engineering of cells and a self-designed project related to genetic engineering. (3-3)

BIO 110 TX Modern Biological Issues
An introductory biology course providing the non-science major with a comprehensive view of modern biology, especially how it affects man. Concepts of scientific method will be covered in this course to give the non-major a feeling for processes that are carried out in biological research. Credit not applicable to the Biology major. (3-3)

BIO 112 N Intro to Organismic \& Evol Bio 4 This course covers the nature of biological inquiry, basic ecology, cellular reproduction, Mendelian genetics and basic evolution theory. Using these basic topics, the course will also incorporate reading and interpreting the biological literature, hypothesis testing, data analysis and current social and ethical issues surrounding biology. Required for all biology majors and should be seriously considered by those contemplating majoring in any science. (4-0)

BIO 113 Intro to Cell \& Molecular Bio 4 This course covers basic biochemistry, energetics, cell biology, gene expression and basic cellular plant and animal physiology. The laboratory will include experiments such as basic cell fractionation, enzymology and osmosis/diffusion. This term will culminate in a guided, student-designed experiment. (3-3)

## Prerequisites: BIO 112 OR concurrent enrollment in CHEM 150

## BIO 125 NX Conservation Biology

An introduction to issues related to species and ecosystem preservation with particular reference to mechanisms of change and human impacts on the environment. This course will focus on biodiversity, habitat loss, species extinction, exotic species and their impacts, and opportunities for human intervention in alleviating trends in species loss and ecosystem degradation. (3-3)

BIO 132 T Human Sexuality 3 Biological aspects of human reproduction supplemented by discussion of medical, societal, psychological and ethical issues. Credit not applicable to the Biology major. (3-0)

BIO $\quad 141 \mathrm{~N} \quad$ Global Ecological Issues
This course examines population growth, the availability of food and water and human-influenced environmental change, particularly global warming and ozone depletion, from various cultural perspectives. The current scientific understanding and policy responses to these issued are discussed. The concept of "sustainability" is introduced and examples of its application are presented. (3-0)

BIO 202 NX Plant and Human Affairs
This course reviews the way humans have used plants for food, fiber, drugs, building products, etc., as well as how plants in turn have affected the human race. This course is designed for non-Science majors. Credit not applicable to the Biology major. (3-3)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND LIB 150

BIO 206 General Botany 4 This course has two parts. Part one addresses the structure, development and physiology of vascular plants. Part two presents a survey of the structure, reproduction, evolution and relation to humans of the fungi, algae, bryophytes, ferns, gymnosperms and angiosperms. (3-3)
Prerequisites: BIO 113
BIO 207 General Zoology
A survey of the field of zoology and its major subdivisions. It includes an overview of the evolutionary relationships of animal groups from protozoa through vertebrates. (3-3)
Prerequisites: BIO 113

## BIO 210 Survey of Organismic Diversity 4

Topics will include the Three Domain System, mitosis and meiosis, life cycles and representative groups from the major kingdoms. Labs will focus on observation of many representative organisms, major tissue types and organ systems and comparative morphological and reproductive characteristics in those groups. Intended for the Cellular and Molecular Biology option. (3-3)
Prerequisites: BIO 113

## BIO 220 Fundamentals of Ecology <br> 4

A study of the fundamental relationships among organisms and their environments. Lab will include an introduction to field methods, sampling, analyses of data and problem solving in ecology. (3-3)
Prerequisites: (BIO 206 OR BIO 207) AND MATH 121 AND (MATH 201 OR PSYC 241 OR BA 253)

BIO 230 Current Topics in Medicine 2
Students interested in health professions will be provided with background information in specific medical therapies. They will then meet with practitioners who will talk about practical use of the therapy. Biology majors may take this course once at the 230 level and once at the 330 level and apply all 4 credits for a major elective requirement. Biology minors may use only 2 credits of 230 or 330 towards minor requirements. (2-0)
Prerequisites: BIO 113
BIO 233 Human Anatomy 3
An introduction to the structure of the human body at the cell, tissue, organ and system levels. (2-3)

BIO 234 Human Physiology 3 This course will examine the physiological function of selected organ systems in the human body. Using the basic sciences of biology, chemistry, and anatomy, the structure and function of the human nervous, muscular, cardiovascular, and respiratory systems will be examined. The course will also explore the technologies used to study and describe the function of these body systems (2-3)
Prerequisites: BIO 233

BIO 250 NX Ecology of the Southwest 4
This course provides an understanding of the scientific method by investigating the ecology of the Southwest. Through field trips and research projects, students learn to recognize major plant and animal species and ecological factors that limit species distribution and abundance. Lectures and readings provide insights into major ecological processes, e.g., population growth, food webs and natural disturbances. This course is the same as SW 250; credit will be given for only one of these courses. (3-2)

## BIO 260 Genetics

A survey of basic genetic processes. Topics include transmission, population and evolutionary genetics as well as basic molecular processes such as DNA replication, transcription and translation. (3-3)

## Prerequisites: BIO 113 AND CHEM 151

BIO $270 \quad$ Foundations of Molecular Bio 4
This course is a foundational course for students interested in molecular and cellular biology. Students will examine the key paradigms of molecular cell biology such as mechanisms of gene expression, regulation of gene expression and the relationship between molecule structure and function. The laboratory will introduce students to the molecular approaches and techniques used to study gene expression. Methods used in lab will include recombinant DNA technology, transformation techniques, nucleic acid isolation and analysis and protein analysis. (3-3)
Prerequisites: BIO 260 AND BIO 210
BIO 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## BIO 302 Systematic Botany 4

A study of the identification, classification and relationships of the vascular plants with emphasis on temperate flowering plant families. Major emphasis will be given to the origin of flowering plants and especially the nature of species as revealed by modern techniques. Laboratory work will focus on the use of keys and terminology, the identification of species and the recognition of family characteristics. (2-6)

## Prerequisites: BIO 206

## BIO 303 Histology 4

Study of the microscopic structure of the major tissues and organs of the vertebrate body. The relationship between structure and function of these tissues and organs will be examined. (3-3)
Prerequisites: BIO 207 OR BIO 210

## BIO 304 Field Zoology

A study of primarily vertebrate animals with emphasis on taxonomic and ecological relationships, and with an introduction to various wildlife management and field study techniques. Laboratory work includes identification and occasional collection and museum preparation. (4-3)
Prerequisites: BIO 207
BIO 305 Entomology 4
A study of insect anatomy, physiology, identification, ecology and behavior. Laboratories will emphasize field work and insect family identification. (3-3)
Prerequisites: BIO 207

BIO 310 Pollination Biology
A study of the principles of pollination biology including abiotic and biotic syndromes. Topics will cover primary and secondary attractants of plants, adaptations of pollinators, effect of pollination systems on plant population structure, competition among plant species for pollinators and pollination strategies of agricultural crops. (3-3)
Prerequisites: BIO 206 OR BIO 207

## BIO 315 Ichthyology

Study of freshwater and marine fishes with emphasis on diversity, adaptations, evolution, ecology and species interrelationships. Laboratory work includes identification of important freshwater and marine species and investigation of behavioral and ecological mechanisms. (3-3)
Prerequisites: BIO 207
BIO 321 General Physiology
Examination of basic physiological concepts from the cellular through the systemic level. Topics include energy metabolism and its control, nerve function, movement, cardiovascular physiology, immune response, water regulation and integrative control systems. (3-3)
Prerequisites: (BIO 206 AND BIO 207 AND BIO 260) OR (BIO 210 AND BIO 260 AND BIO 270) AND (BIO 113 AND CHEM 151)

## BIO 324 Mammalogy

The course will examine the zoology (i.e., characteristics, origin, evolution, zoogeography, systematics, ecology, behavior, physiology and conservation) of mammals (Class Mammalia). These topics will be covered by emphasizing both classical (or historical studies) and recent (or contemporary) research. Laboratory work will involve both field identification of mammals from field trips and laboratory work concerning taxonomic and morphological studies. (3-3)
Prerequisites: BIO 207
BIO $330 \quad$ Current Topics in Medicine
Students interested in health professions will be provided with
Students interested in health professions will be provided with background information in specific medical therapies. They will then meet with practitioners who will talk about practical use of the therapy. Biology majors may repeat this course at the 230 level and use all 4 credits for the major elective requirements. Biology minors may use only 2 credits of either 230 or 330 . (2-0)
Prerequisites: BIO 113

## BIO 331 Microbiology

A survey of the microbial world with emphasis on ecology, physiology and genetics of prokaryotes. Laboratory activities emphasize staining, culturing and biochemical identification techniques as well as experimental exercises with bacteria of medical, economic and agricultural importance. (3-3)
Prerequisites: (BIO 206 AND BIO 207 AND BIO 260) OR (BIO 210 AND BIO 260 AND BIO 270) OR (BIO 113 AND CHEM 250)

BIO 334 Ornithology
Ornithology is the study of birds. In this course, we will study a variety of ornithological topics, such as morphology, physiology, ecology, populations, reproduction, behavior, migration, systematics, and evolution. Additionally, we will investigate current and pressing avian conservation issues and policy with a participatory approach. In the laboratories and on field trips, we will concentrate on morphology, flight, adaptations, identification, and systematics. (3-3)
Prerequisites: BIO 207

## BIO 341 Vertebrate Comparative Anatomy 4

A comparative study of the morphology of representative vertebrates with the objectives of understanding their evolutionary relationships and the functional basis of their variations on a common plan. (3-3)
Prerequisites: BIO 207
BIO 342 Embryology \& Dev Bio of Vert 4 A detailed study of reproduction and development in representative vertebrates. The laboratory work explores the anatomy of the development in depth, and the lecture correlates this development with and explains on the basis of cellular and molecular events during ontogeny. (3-3)
Prerequisites: BIO 207
BIO $360 \quad$ Bryophytes \& Lichens
A course treating the taxonomy, morphology, ecology, reproduction and evolution of the Bryophytes and Lichens. (3-3) Prerequisites: BIO 206

## BIO 375 Ecology Symposium

This course prepares students to participate in the Ecology Symposium at Colorado State University. All students who take this course will give an oral poster presentation at the Ecology Symposium in March. Students registering for the course must have a sound ecological project to present. These projects can be summer research projects or senior thesis projects. Instructor permission is required. May be repeated once for an additional 1 credit. (1-0)

## BIO 380 W Issues/Evolutn \& Biol Thought 4

This course will address the critical issues of writing in the biological and/or agricultural sciences using the topics of evolution and patterns of biological thought as a basis for writing, reading and discussion. Many aspects of evolution in a variety of sub-disciplines of biology and agriculture will be covered. (4-0)
Prerequisites: BIO 112 AND BIO 113 AND (BIO 206 AND BIO 207) OR BIO 210

## BIO 385 Desert Biology

This course covers all aspects of desert biology - ecology, physiology, organismic biology, etc.- of all deserts around the world, with a special emphasis on adaptations and natural history of organisms in North American deserts. (3-0)
Prerequisites: BIO 206 AND BIO 207 AND CHEM 150 AND CHEM 151

BIO 407 Evolution 3
A survey of the current explanations of evolutionary mechanisms. (3-0)
Prerequisites: BIO 260

BIO 455 Cellular \& Molecular Biology 4
This course will focus on the examination of gene expression mechanisms and their regulation, organelle compartmentalization of the eukaryotic cell and the functional relationships of cell molecules, organelles and other cellular structures such as the cytoskeleton. (3-3)
Prerequisites: CHEM 251AND BIO 270
BIO 456 Cell Physiology 4
Examination of physiological control mechanisms at the molecular level. Cell communication, receptor-ligand interactions and control of cell growth and development will be examined, as well as the lab techniques used to study them. Laboratory will use molecular cloning and cell culture techniques to examine cell physiology. (3-3)
Prerequisites: BIO 321 AND BIO 270 AND BIO 455 AND (CHEM 251 OR CHEM 311)

## BIO 460 Immunology

A comprehensive introduction to the mechanisms of disease resistance and immunopathology. Topics include self/non-self discrimination, inflammation and innate immune mechanisms, antibody structure and function, immune cells/cell subsets and the consequences of immune system failure. Application of immunochemical techniques and the immune mechanisms involved in vaccination, pregnancy and fetal development, allergy, autoimmunity, cancer, organ transplantation and AIDS are also discussed. (3-3)
Prerequisites: BIO 270 AND BIO 331 AND CHEM 251
BIO $470 \quad$ Wildlife Management 4
This course examines the current principles of wildlife management, including populations, managing habitat, wildlife resources, behavior, wildlife diseases, predators, brood parasites, mitigation, hunting, introduced and endangered species, farming, grazing, laws and policies, balancing opposing views, and learning from mistakes of the past. A hands-on participatory approach is taken, and visits are made to on-the-ground projects with state and federal agencies. (3-3)
Prerequisites: BIO 206 AND BIO 207 AND BIO 220

## BIO <br> 471 Field Ecology <br> 5

An advanced, project-based ecology course that emphasizes sampling methods, description of local plant and animal communities and techniques of environmental monitoring in terrestrial and aquatic ecosystems.
Prerequisites: BIO 220 AND BIO 302 AND BIO 304

## BIO 480 Internship in Biology

1-3
Directed work experience in the biological sciences. Minimum requirements are that the students maintain a detailed journal and complete a term paper. Requires at least 125 hours of directed experience. Credit for this course cannot be applied toward the Biology major.

BIO 496 Senior Seminar
Advanced study and individual field/lab research in a topic of the student's choosing. This course must be taken in sequence with Bio 497 in the following semester. Junior or senior standing. (2-0)
Prerequisites: MATH 201 OR MATH 205

BIO 497 Senior Thesis 2
Advanced study and individual field/lab research in a topic of the student's choosing. This course is a continuation of Bio 496. (1-3)
Prerequisites: BIO 496
BIO 499 Independent Study $\quad$ 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## BUSINESS ADMINISTRATION

BA 101 Business World 4 This course introduces students to the world of business and how business is influenced by a dynamically changing global environment. It will show how individuals operating within the business environment are impacted by society, politics and the economy. It will also show how business has and is likely to impact society, politics and the economy. (4-0)

## BA 205 New Business Venturing

This course introduces students to starting and operating a business. At the macro level, students are exposed to how business interacts with government, financial institutions and society. At the micro level, students are exposed to customer psychology, basic economics, data analysis and interpretation. Individual research, writing a business plan, and operating a business are required. Other topics covered include franchising, home-based businesses and e-commerce. (3-0)

## BA 221 Writing in the Business World

This course orients students to the writing practices of business professionals. Students will examine the different kinds of writing required in the decision-making process and how that writing relates to the intellectual practices, values and social relationships of business professionals. Although the course addresses issues of conceptualization, inquiry and reasoning in decision-making, the emphasis of the course is on learning the language conventions for administrative writing analyses and persuasive communications. (3-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND ACC 225

## BA 240 Business Creativity \& Innovatn 2

 The business person's secret for creating value in the market place is applying creativity and innovation to solve problems and to make use of opportunities that people face every day. Course objectives are to (1) develop skills in generating new and original ideas, (2) increase ability to move ideas into action and success, and (3) increase knowledge and skill in creative problem solving as applied to business settings. The course is a "hands-on" experiential format where students learn through "doing" the concepts. (2-0)BA 253 Q Business Statistics 4 An introductory course covering the collection and analysis of numerical data for decision-making purposes. Topics to be covered include descriptive statistics, measures of central tendency and dispersion, probability, sampling distributions, estimation, hypothesis testing and regression and correlation. This course is the same as Math 201Q and Psyc 241Q; credit will be given for only one of these courses. (4-0)
Prerequisites: (MATH 110 OR MATH 121 OR MATH 210 OR MATH 221) OR Computed Math Placement Score MA121

BA 255 Statistical Infer Computer App 1 This course is designed as a follow-up to a three-hour basic statistics course from another school. The course, coupled with a three-hour basic statistics course, will meet the requirements of BA 253-Business Statistics. Course content includes topics in hypothesis testing and regression as well as application of computer programs to statistical inference. This course may not be taken for credit by students who have received credit for BA 253. (1-0)

BA 260 S Legal Environment of Business 3 An examination of the primary lawmaking and adjudicatory processes with a substantial emphasis upon the role that economic, social, political and ethical forces play upon the shaping of domestic and international legal rules. (3-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250)

## BA $\quad 271$ R Principles of Int'l Business $^{\prime}$

An introductory course addressing physical and human characteristics and interactions that shape the nature of international business relationships and movement of resources across geographical and cultural boundaries. Trade patterns are examined in light of the world's present cultural patterns, which are a reflection of the major human accomplishments of the past. (3-0)

BA 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

BA 301 Managmnt \& Organizatnl Behavor 4 A study of the principles, practices and processes of administration: the organization of a system, the behavior of people in the organization and the development of organizational effectiveness. Both domestic and international aspects of management theory and practice will be considered. (4-0)

## BA 302 W Human Resource Management 4

Human resource system makeup within an organization. Topics include, but are not limited to, recruitment and selection, training and development, performance appraisal, wage and salary administration, discipline, labor relations, union management relations and the role of government in human resource administration. (4-0)
Prerequisites: BA 301 AND BA 221
BA 308 Office Management
The principles of office management and office management technology. The responsibilities of managing office services, layout and space utilization, office furniture and equipment, machines and appliances, personnel issues, controlling costs and office methods and procedures are included. Individual research required. (3-0)

BA 311 Business Law I 3
Basic principles of law as applied to business transactions. Study of the law of contracts, sale of goods, warranties and negotiable instruments and secured transactions. These topics are tested on the Business Law portion of the C.P.A. exam. The interactions between social, political and economic factors with law are considered. (3-0)
Prerequisites: BA 221

## BA 312 Business Law II 3

Study of the law of agencies, business associations, bankruptcy, property, employment law and environmental regulatory law are examined. These topics are tested on the Business Law portion of the C.P.A. exam. (3-0)

## Prerequisites: BA 221

## BA $\quad 313 \quad$ Ethical Issues in Business

This course will examine ethical issues which arise and are unique to managerial decision-making in business settings. The course will proceed developmentally with ethical systems commonly used in business, personal ethics and, finally, ethics in business through case studies. (3-0)

## BA 315 W International Business Law

An introduction to public international law with emphasis on international commerce and an examination of national laws and practices that states apply to international commercial transactions. (3-0)
Prerequisites: BA 260 AND BA 221

## BA 316 Tourism \& Recreation Law 3

Students apply legal principles to recreation, hotel, travel, restaurant and entertainment contexts. Students complete risk management oral and written reports on actual enterprises based on extensive legal research using Lexis Nexis to check compliance with the Americans with Disabilities Act, civil rights legislation, state and federal statutes and precedents. This course can be used to fulfill upper-division electives in International Business, Management or Tourism and Resort Management options. (3-0) Prerequisites: (COMP 150 OR COMP 126 OR COMP 250)

## BA 317 Technical Analysis Securities

This course teaches the practical application and theoretical principles of technical analysis techniques. Technical analysis is the study of market action, primarily through the use of charts and indicators for the purpose of forecasting future price trends. The course is focused on equity markets. (3-0)

## Prerequisites: BA 380

## BA 330 Tourism and Resort Management 4

An introductory course covering the scope, organization and environment of the domestic and international tourism and resort industry. Topics to be covered include industry components, supply and demand, motivation and sociology, economics, public policy and environmental issues and current leadership and management challenges facing the industry. (4-0)

## BA $339 \quad$ Selling

This course focuses on the relationship between buyer and seller, the selling process, buyer behavior, negotiations and the communication process. (3-0)
Prerequisites: BA 340

BA 340 Marketing
The course stresses marketing activities from a managerial perspective. It includes the marketing of goods and services and ideas in both business and non-business organizations. There is an emphasis on concepts of marketing and application of these concepts in decision-making and managing marketing variables in a dynamic domestic and international environment. Marketing principles are applied in a computerized industry game and/or cases. (4-0)

## BA 342 Retailing

An introduction to retailing from the management point of view: study of retail policies and organization, the operation of the buying and selling functions, merchandise control, store systems, personnel management, retail accounting and expense control. (3-0)
Prerequisites: BA 340
BA 344 Advertising
This is an introduction to advertising that covers the structure and role of advertising agencies and the interaction between client and agency. The process of creating and placing advertising is explored including: advertising objectives, budgeting, media planning and mix, creative objectives and strategies, copy execution, production, and testing. This course presents a basic understanding for those students pursuing a career in advertising and enables those pursuing other career paths to effectively evaluate and use the services provided by advertising specialists. (3-0)
Prerequisites: BA 340

## BA $\quad 346 \quad$ Managing Customer Value

This course establishes the strategic marketing structure for a firm's ability to combine and manage the dimensions of product/ service quality, customer service and price in a way to create an enduring competitive advantage. The course uses lectures, discussions, cases and spreadsheet analyses to achieve its objective. (4-0)
Prerequisites: BA 340

## BA 347 Consumer Behavior 3

This course explores behavioral theory as it relates to consumer and industrial decision processes. Relevant concepts and recent research findings are drawn from the fields of marketing, psychology, sociology and communications. Applications of these ideas is directed toward improving marketing management and decision-making. (3-0)
Prerequisites: BA 340

## BA 348 Public Relations <br> 3

This course will introduce students to the marketing and managerial functions of public relations, the public relations process and techniques of message preparation for a variety of media. (3-0)
Prerequisites: BA 340

## BA 353 Operations Management

Concepts and methods for economical planning and control of activities required for transforming a set of inputs into specified goods or services. Emphasis is given to forecasting, decision analysis, cost analysis, design of production systems, production/ marketing relationships, operations planning and control and the importance of global comperitiveness. (4-0)
Prerequisites: (BA 253 OR PSYC 241 OR MATH 201) AND BA 221 AND (BA 301 OR CSIS 110)

BA 356 Business of Gaming
This class/study tour will investigate the history of world, United States, and Las Vegas gaming as a business and tourist attraction. Students will be exposed to how the different games of Las Vegas relate to probability theory, the sociology of gaming including gambling as an addiction, and the business and marketing of gaming. (3-2)

## BA $370 \quad$ Topics in International Bus 1-6

An examination of selected topics and issues pertaining to the international marketplace. Students may take this course one or more times for credit.

## BA 372 W Global Business Seminar <br> 4

Addresses the unique issues, challenges and opportunities in the global business community. The strengths and weaknesses of current developments and trends of business globalization are examined in a context of social, cultural, political, economic and environmental concern. (4-0)
Prerequisites: BA 221

## BA 380 Financial Management 4

An introductory course focusing on financial analysis and decision-making, including time value of money, valuation of stocks, bonds and other securities, investment risk management, capital budgeting, cost of capital and long- and short-term financing for firms competing in a global business environment. (4-0)
Prerequisites: ACC 226 AND BA 221 AND (ECON 266 OR (ECON 262 AND ECON 272)

BA 382 Money, Banking \& Finance Institutions 4 Provides a descriptive and analytical understanding of the structure and operation of financial institutions and markets using both historical and international perspectives. Topics examined include the major categories, the role of the central bank and interest and exchange rate theories. This course is the same as Econ 382; credit will be given for only one of these courses. (4-0)
Prerequisites: BA 380
BA 386 Insurance 4
A study of the types of coverage, buying strategies and various types of insurance companies. Emphasis is placed on insurance contracts, risk management programs, fire, marine, casualty, business property and liability, life and other types of insurance. (4-0)
Prerequisites: BA 380
BA 387 Real Estate 4
An introductory course providing a foundation for those interested in real estate as a professional career, an investment mechanism or simply as home ownership. Topics covered include legal considerations for listing, sale and transfer of real property rights, the regulation, practices and legal ethics of real estate agents and the appraisal, investment analysis and financial techniques of real property. (4-0)

## BA 389 International Finance

4
This course is concerned with the financial management of a multinational corporation. Special consideration is given to foreign exchange risk management, investment analysis, capital budgeting, capital structure and working capital management.

## (4-0)

Prerequisites: BA 380

BA 392 Research Topics 1-3
Students will conduct an organizational study or do research intended for publication. Research projects will be supervised by a School of Business Administration professor. Projects will be designed to extend students' knowledge in one or more of the following areas: Accounting, Agricultural Business, Business Administration, Economics, Finance, Information Management, International Business, Management, Marketing, and/or Tourism and Resort Management. Students wishing to use this course to meet specific departmental requirements must receive permission from the Dean's Office. Course may be repeated for up to 9 credits.
Prerequisites: BA 253 OR BA 353 OR ECON 361
BA 402 Electronic Commerce 4
This course introduces the student to the technical and business considerations for creating a business website. Technical considerations include website design and structure strategies, web security, EDI and payments system implementation and development of business strategy and digital nervous systems within the business environment. This course is best suited to upper-level Business or Computer Science majors. This is the same course as CSIS 402; credit will be given for only one of these courses. (4-0)
Prerequisites: CSIS 322 AND (CSIS 106 OR CSIS 110)

## BA 407 W Management Consulting <br> 4

 The study of the concepts and models of management consulting and their application in business organizations. Emphasis is on practical application and the use of relevant tools and techniques. Students are required to engage in consulting services. (2-4)Prerequisites: BA 340 AND BA 353 AND BA 380 AND BA 221
$\begin{array}{ll}\text { BA } 437 & \text { Internship in Business } \\ \text { Directed experience working in a business organization }\end{array}$ performing professional duties and responsibilities. Specific requirements will depend on the supervising college faculty member but include, as a minimum, the keeping of a detailed journal and the completion of a term paper. A minimum of 150 hours of directed experience will be required, however, normally students complete 200-300 hours. The student's performance will be evaluated by his/her supervisor in the business organization as well as the assigned college faculty member. Students wishing to use the course to meet specific departmental requirements must receive permission from the Dean's Office.

## BA 439 Marketing \& Mgmnt of Services 4

The integration and application of relevant business theories, techniques and skills to industry issues and problems through lectures, cases and a major project. Areas of emphasis will include the strategic service vision, operational strategies and operations management, law, service delivery systems, marketing, people and the service culture, quality control, management accounting, financial management as well as the global implications of services management. (4-0)
Prerequisites: BA 340 AND BA 353
BA 445 W Marketing Strategy and Policy 4 An integrated course in marketing strategy and policy, employing comprehensive case problems in the formulation of marketing action programs and business policy. Heavy emphasis is placed on the writing and presentation of marketing plans. (4-0)
Prerequisites: BA 340 AND BA 221

BA 446 W Marketing Research
This course provides students with a knowledge base and skills for planning and conducting a research project as the basis of making efficient, effective and ethical marketing decisions. A special emphasis is placed on the marketing research process to study behavior in the marketplace via exploratory approaches such as focus groups and more systematic approaches such as surveys. (4-0)
Prerequisites: BA 340 AND (BA 253 OR MATH 201 OR PSYC 241)

## BA $\quad 481 \mathrm{~W}$ Cases in Financial Management 4

This course will apply the tools learned in BA 380 to a variety of business problems and cases. Areas of analysis will not be confined to finance, but will include decision making in marketing, management, etc., realizing the interdisciplinary reality of business. (4-0)
Prerequisites: BA 380 AND BA 221

## BA 485 Investments \& Porffolio Mgmnt 4

Analysis of various investment theories is accompanied by a study of the securities markets. Areas of emphasis would include analysis and valuation of stocks and derivative securities, implications of diversification for return and risk of a portfolio, and strategies for the management of poriffolio risk. (4-0) Prerequisites: BA 380

## BA 496 Senior Sem in Strategic Mngmt 4

 The integration of managerial theories, techniques and skills provides vicarious experiences and research in administrative decision making, policy, strategy and tactics. Emphasis is on the total organization and its internal and external relationships and responsibilities. Cases analyzing firms ranging from small to large, local to international and profit to not-for- profit are covered. An appropriate term paper is required. (4-0)Prerequisites: BA 221 AND BA 260 AND BA 301 AND BA 340 AND BA 353 AND BA 380 AND (BA 446 OR ECON 361 OR BA 485 OR MATH 210 OR MATH 221 OR MATH 350 OR MATH 360)

BA 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## CHEMISTRY

CHEM 100 Intro to College Chemistry 1
An introduction to fundamental ideas in chemistry for people who are not ready for Math 110 College Algebra. Study will emphasize the atomic and molecular nature of matter, and will include development of quantitative skills for chemistry study. This course provides suitable preparation for Chem 150 Fundamentals of Chemistry I. (1-0)

## CHEM 123 T Chemistry for Consumers

Topics of interest to the consumer, with focus on making personal choices of everyday chemicals. Topics include food additives and nutrition, cosmetics, drugs, pesticides, fertilizers, soaps, detergents, fabrics and plastics. The course presents basic principles leading to a practical understanding. This is a "humane" chemistry course for people afraid of science and mathematics. Credit will not be given for both Chemistry 123 and 323. (3-0)

CHEM $125 \mathrm{~N} \quad$ Environmental Chemistry
Chemical terminology and models will be developed and applied to understanding the impacts of Homo sapiens on the natural world. Topics include natural ecosystems, anthropogenic influences on those ecosystems and application of fundamental chemical principles to our understanding of environmental issues. Students will work with modern chemical instrumentation on student-designed field projects throughout the semester to explore local environmental issues. This is a chemistry course for people concerned about environmental issues but who are not Science majors. (4-0)

CHEM 150 NX Fund of Chem I Atoms/Molecules 4 A study of the fundamental principles guiding current thought on atoms and molecules and their relation both to the microand macro-scale world in which we live. This includes the traditional uses of mass, energy, and intermolecular forces to model our current understanding of diverse topics, including materials and environmental concerns. The laboratory emphasizes the properties of materials and chemicals in the environment. (3-3)
Prerequisites: TRS 92 OR MATH 110 OR Computed Math Placement Score MA1 10 OR MATH 121 OR MATH 201 OR MATH 210 OR MATH 221 OR MATH 222

CHEM 151 TX Fund of Chem II Chem Reaction 4 An integrated study of the fundamental kinetic and thermodynamic principles guiding chemical change and equilibrium. These principles are applied to the acid-base and electron chemistry of aqueous systems with important applications for living systems, geological processes and environmental issues such as air and water quality, climate, energy use and nuclear hazards. The laboratory includes various techniques in chemical analysis in aqueous systems as well as applications of reaction principles. (3-3)
Prerequisites: CHEM 150AND (MATH 110 OR MATH 121 OR MATH 201 OR MATH 210 OR MATH 221 OR MATH 222)

CHEM 152 Fund of Chem I:Problem Solving 1 Supplement to Fundamentals of Chemistry I for students who wish to explore the concepts in greater depth. (1-0)
Corequisites: CHEM 150
CHEM 153 Fund of Chem II:Problem Solvin 1
Supplement to Fundamentals of Chemistry II for students who wish to explore the concepts in greater depth. (1-0)
Corequisites: CHEM 151

## CHEM 250 Org Chem I:Organic Compounds 4

Fundamentals of bonding, structure and nomenclature of carbon compounds. Principles of stereochemistry and reaction mechanisms are introduced and illustrated with alkanes, alkenes, alcohols and alkyl halides. Acid-base, nucleophilic substitution, electrophilic addition, and elimination reactions are discussed. The laboratory addresses techniques of synthesis, separation and analysis of organic compounds. (3-3)
Prerequisites: CHEM 150 AND CHEM 151

CHEM 251 Org Chem II:Biological Chem 4
Fundamentals of structure and reactivity of alcohols, ethers, aldehydes, ketones, acids, amines, aromatic compounds and acid derivatives. Introduction to the chemistry of biological compounds including sugars, lipids, proteins and coenzyme catalysts. The laboratory emphasizes FT-IR and FT-NMR analysis of organic compounds, multi-step synthesis and identification of unknown compounds by chemical and spectroscopic methods. (3-3)
Prerequisites: CHEM 250

## CHEM 252 Org Chem I:Discussion Sec 1

Supplement to Organic Chemistry I for students who wish to explore the concepts in greater depth. (1-0)
Corequisites: CHEM 250

## CHEM $253 \quad$ Org Chem II:Discussion Sec 1

Supplement to Organic Chemistry II for students who wish to explore the concepts in greater depth. (1-0)
Corequisites: CHEM 251
CHEM 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## CHEM 300 W At the Forefront of Chem Rsrch 3

 Survey of the chemical and biochemical literature to become familiar with the newest and most exciting research topics. Papers from the secondary scientific literature on these topics will be selected for discussion and for critical analysis of ideas, writing styles and conventions. Further investigation of topics through the use of electronic bibliographic tools will extend these topics into research projects reaching to their roots in the primary research literature. Students will write extensively and give well-organized oral presentations on chemical topics. Instructor consent. (3-0)Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND (LIB 150 OR LIB 150 equivalent) AND CHEM 250

## CHEM 305 Nat Prod From Plant

A comprehensive study of the biologically active constituents of plants of the Southwest and elsewhere. Medicinal compounds and poisons are emphasized. Chemical structures, physiological activity, plant sources and biosynthetic pathways are discussed. Lab work includes field gathering, isolation and identification of compounds. (1-4)
Prerequisites: CHEM 303 OR CHEM 250

## CHEM 311 General Biochemistry I <br> The basi prinipen 3

 The basic principles of biochemistry are covered. Emphasis is on the structure and function of biological molecular building blocks, proteins, carbohydrates, lipids and nucleic acids. Fundamental aspects of kinetics, thermodynamics and central metabolic processes are covered. (3-0)Prerequisites: CHEM 251OR CHEM 304

## CHEM 312 General Biochemistry Lab 1

Basic biochemical techniques are covered in this course. The techniques include UV-VIS spectroscopy, column chromatography, protein purification, enzyme kinetics, electrophoresis, enzyme assays, DNA/RNA isolation, DNA restriction digestion and PCR. (0-3)
Corequisites: CHEM 311

CHEM 313 General Biochemistry II
As a continuation of CHEM 311, additional principles of biochemistry will be covered. Emphasis is placed on photosynthesis, catabolic and anabolic metabolism, hormonal control of metabolism, replication and DNA repair, transcription and transcriptional control, and translation and protein localization. (3-0)
Prerequisites: CHEM 311
CHEM 323 T Chemistry for Consumers
3
Topics of interest to the consumer, with focus on making personal choices about the use of everyday chemicals. Topics include food additives and nutrition, cosmetics, drugs, pesticides, fertilizers, soaps, detergents, fabrics and plastics. For upper division credit, this course will require extensive writing exercises culminating in a major research paper on a consumer topic. Credit will not be given for both Chemistry 123 and 323. (3-0)

CHEM 351 Pharmacology 3
Studies of the effects produced by drugs and of their administration, absorption, distribution and excretion. Special emphasis is placed on the theories of the mechanism of action of drugs. (3-0)

CHEM 356 Phys Chem I:Quantum Mechanics 3 A study of the quantum theory of atoms and molecules. Includes fundamentals of quantum mechanics, electronic structure of atoms and molecules, molecular symmetry, molecular and reaction dynamics and the interaction of matter with light. (3-0)
Prerequisites: CHEM 151AND (PHYS 201 OR PHYS 217) AND MATH 222

CHEM 357 Phys Chem II:Thermodynamics 3
An introduction to thermodynamics and its application to chemical processes. The course explores why chemical reactions occur, the nature of chemical equilibrium, the factors determining the speed of reactions and the role of temperature in reactions and equilibria. Includes elementary kinetic gas theory and the Boltzman distribution, energy, entropy, free energy and equilibrium, ideal solutions, colligative properties and reaction rate theory. (3-0)
Prerequisites: CHEM 356
CHEM 360 Physical Measurements 2
Instruction in design of experiments to measure physical properties and the analysis of data. These general techniques are applied in studies of kinetics, thermochemistry, electrochemistry, spectroscopy and molecular structure. (0-6)
Prerequisites: CHEM 356
CHEM 363 Inorganic Chemistry 3
This course builds a descriptive and theoretical framework for understanding inorganic systems. Advanced atomic structure and bonding theories will be applied to understanding the properties and reactions of inorganic compounds. Special topics such as main group and solid state chemistry will be addressed. (3-0)
Prerequisites: CHEM 251
CHEM 365 Analytical Chemistry
Introduction to quantitative analytical chemistry. A rigorous development of the theory of chemical equilibria is presented to guide the development of laboratory skills, the rational design of experimental methodologies, and the use of instruments. Major topics include chemical and chromatographic separations, spectroscopic analysis and electrochemical methods. (3-3)
Prerequisites: CHEM 151

CHEM 380 Intro to Chemical Research 1
This course consists of undertaking a project of an advanced nature. As a class, all aspects of the project will be discussed, including choosing an appropriate project, performing a literature search, defining a project, setting goals, planning experiments and reporting results. Individually, each member of the class will be working on their project once that project has been selected in consultation with the instructor. (1-0)

CHEM 381 Intro to Chemistry Research Lb 1-3 This is the laboratory to accompany Chem 380, Introduction to Chemical Research. This course must be taken along with Chem 380. Repeatable for credit up to a maximum of 15 hours.

## CHEM 411 Advanced Biochemistry

Advanced studies of biochemical concepts will be done in this class. The primary literature and other readings will be used for more advanced study of biochemical topics that include, but are not limited to: macromolecular structure and function, catabolic and anabolic metabolism and control, nucleic acid metabolism and control, and signaling pathways. (3-0)
Prerequisites: CHEM 313 or instructor permission

## CHEM 431 Advanced Organic Chemistry

Advanced studies of organic reactions and reaction mechanisms. Strategies of stereoselective synthesis of complex organic molecules will be studied. (3-0)
Prerequisites: CHEM 304 OR CHEM 251
CHEM 454 Adv Topics in Chemistry 1-4 Examples of offerings include FT NMR techniques, bio-organic and bio-inorganic chemistry and advanced topics in analytical, physical and organometallic chemistry. Instructor consent is required.

CHEM 460 Synthesis and Spectroscopy 3 A laboratory course in advanced synthesis techniques, with emphasis on the synthesis of organic and organometallic compounds. Advanced methods of purification and structure elucidation will be employed. Students will be familiarized with the primary synthesis literature. Spectroscopic methods will emphasize FT-NMR techniques. Student-designed research projects will allow for directed exploration of synthesis techniques and identification of reaction products. (1-6)
Prerequisites: CHEM 251
CHEM 464 Advanced Inorganic Chemistry 4 This course covers advanced inorganic chemistry concepts, including modern bonding theories and coordination chemistry of transition metals. Special topics, including catalysis, organometallic, environmental and bioinorganic chemistry will be addressed. The laboratory focuses on advanced synthetic techniques employed by inorganic chemists, including solid state, metal coordination and air-sensitive organometallic reactions. (3-3)

## Prerequisites: CHEM 363 AND CHEM 356

## CHEM 465 Instrumental Analytical Chem

Advanced instruction in state-of-the-art instrumental analysis, including separations methods, spectroscopic analysis and electrochemical methods of detection. Emphasis is placed upon analytical decision-making, instrumental design and analysis of "real world" samples. Technical report writing is emphasized. Aspects of environmental analysis, pharmaceutical analysis and bioanalytical chemistry are also included. (3-3)
Prerequisites: CHEM 365 AND CHEM 360 AND CHEM 300W

Preparation of library thesis on significant research topic from recent primary literature. Includes chemical abstracts instruction, online literature searching, advanced library techniques and advanced technical writing and oral presentations. Also career preparation activities and participation in seminars by visiting scientists. (1-0)
Prerequisites: CHEM 300W
CHEM 497 Seminar 1
Continuation of Chem 496 with emphasis upon oral presentation of senior thesis to the chemistry community. (1-0)
Prerequisites: CHEM 496
CHEM 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## COMPOSITION

COMP 115 Speech: A Rhetorical Act 3
Composing messages appropriate for the occasion, purpose and audience is critical to being a successful speaker. In this course that combines the rhetorical arts of writing and speaking, students analyze others' presentations and compose and deliver presentations of their own. (3-0)

## COMP 125 Reading in College

This course introduces students to the purposes and practices of scholarship, with an intensive emphasis on the interplay of reading and writing in academic work. This course is designed for students who need a more closely guided and intensive introduction to academic reading and writing. Comp 125 and Comp 126 are college-level courses; students who need remedial instruction should complete TRS 90 and/or TRS 91 (C- or better), as recommended, before enrolling in Comp 125. Completion of Comp 125 and Comp 126 will fulfill the first-year academic writing requirement; a student may not receive credit for Comp 150 if s/he has received credit for Comp 125 and Comp 126. (3-0)
Prerequisites: FLC Reading Placement Score C125 OR FLC Reading Placement Score C150 OR FLC Reading Placement Score C250 OR TRS 90 OR TRS 91

## COMP 126 Writing in College

In this course, students analyze a variety of academic texts in different research literatures and complete an intensive series of writing assignments to teach them how to interpret arguments, identity constraints and bias, organize and present evidence and compose their own contributions to intellectual dialogues. This course is designed for students who need a more closely guided and intensive introduction to academic writing. Completion of Comp 125 and Comp 126 will fulfill the first-year writing requirement; a student may not receive credit for Comp 150 if s/he has received credit for Comp 125 and Comp 126. (3-0) Prerequisites: COMP 125

COMP 150 Reading and Writing in College
This course emphasizes the interplay of reading and writing in an academic environment. Students will analyze a variety of academic texts and complete a series of writing assignments designed to teach them how to interpret arguments, identify constraints and bias, organize and present evidence and compose their own contributions to intellectual dialogues. (4-0)
Prerequisites: FLC Reading Placement Score C150 OR FLC Reading Placement Score C250

## COMP 250 Academic Inquiry and Writing 4

This course guides students through the process of proposing, conducting, and presenting an independent academic research project. (4-0)
Prerequisites: COMP 150 OR COMP 126

## COOPERATIVE EDUCATION

## COOP 200 Cooperative Education 1-10

A first-time cooperative education work experience by underclassmen.

COOP 300 Cooperative Education 1-12 A cooperative education work experience by upperclassmen. A maximum number of credits is allowed toward a degree.

## COOP 400 Cooperative Education

An advanced cooperative education work experience by upperclassmen who have completed one or more Co-op terms. A maximum number of credits is allowed toward a degree.

## COMPUTER SCIENCE INFO SYSTEMS

CSIS 103 Computer Literacy 2
Computer skills are essential for successful learning in college. This course teaches students how to operate a computer, use email and navigate the internet, and use word processing, spreadsheet, database, and presentation software. This course will not count for CSIS majors or minors. (0-4)

CSIS 105 The Computer as a Tool 4
Introduction to personal computer productivity tools using Microsoft Windows and MS Office Suite (Word,Excel, Powerpoint, and Access), creation of documents that require the integration of applications using multi-tasking and object linking and embedding, and creating websites. Credit may not be received for both CSIS 322 and CSIS 105. (2-4)

CSIS 106 Intro to Prog Visual Basic 4
Point-and-click methods will be combined with elementary programming concepts to develop Microsoft Windows applications using Visual Basic.NET with a graphical user interface. Topics include input and output controls, control structures, debugging techniques and file manipulation. (2-4)

## CSIS 110 Intro to Programming in Java 4

Introduction to programming in Java, problem-solving methods, algorithm development, program design, testing, debugging, and documentation. This course is required for students who wish to pursue further study in computer science. (2-4)
Prerequisites: MATH 110 OR MATH 121

CSIS 206 Adv Prog in Visual Basic
A second course in Visual Basic. NET programming. Topics include: .NET architecture, object-oriented programming, exception-handling, multi-tier applications, database applications using ADO.NET, web programming using ASP.NET, web services and Crystal Reports. (2-4)
Prerequisites: CSIS 106

## CSIS 230 Object-Oriented Programming 4

Introduction to object-oriented software development, using the Java programming language. Topics include objects and classes, inheritance, input/output streams, exception handling, collections, graphical user interfaces, threads, and graphics programming. Group programming projects. (2-4)
Prerequisites: CSIS 110 OR ENGR 104

## CSIS 238 Computer Logic Design 4

Introduction to the building blocks of digital computer design. Application of Boolean algebra to the synthesis of logic circuits from logic elements. The design and implementation of combinational and sequential circuits. Understanding of hardware operations in a simple computer in terms of register transfer language. This course is the same as Engr 238; credit will only be give for one of these courses. (3-3)

CSIS 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## CSIS 305 Discrete Structures

Discrete Structures, core to many areas of computer science, involves concepts and objects divisible into separate parts. Topics investigated in this course include: time-complexity, random-number generation, hashing, public-key cryptography, applications of matrix operations, recursively defined functions and solving recurrence equations to analyze running time, permutations, combinations, probability, graphs, trees, finite-state machines, logic, and Boolean algebra. (4-0)
Prerequisites: CSIS 310
CSIS 310 Data Structures
Design and implementation of classic data structures such as stacks, queves, lists, trees and graphs. Application of these data structures to searching, sorting, memory management and other problem domains. Recursion and algorithm complexity analysis are also emphasized. (3-2)
Prerequisites: CSIS 230 AND MATH 305
CSIS 321 Computer Architecture \& Organ 4 Organization of computer systems, including operating characteristics of and interfaces between processors, control units, busses and memory. Studies and comparisons among modern computer architectures including the Intel and Sun families of microprocessors. Additional topics include assembly language, Boolean algebra and digital logic circuits, RISC machines and parallel architectures. (4-0)
Prerequisites: CSIS 230 OR CSIS 206

CSIS 322 Management Information Systems 4
A study of information processing, the systems concept, the analysis and design of information systems and database technology as they apply to producing information to be used in business decision-making. Advanced applications of word processing, spreadsheet and database software will be included. NOTE: THIS COURSE DOES NOT COUNT FOR CREDIT TOWARD THE CSIS MAJOR. CREDIT MAY NOT BE RECEIVED FOR BOTH CSIS 322 AND CSIS 105. (4-0)

## Prerequisites: ACC 226

## CSIS 330 Windows Programming in .NET 4

A course in creating Microsoft Windows applications on the .NET plafform using the C\# programming language, for students with a background in object-oriented programming. Topics will include Windows forms, menus, dialog boxes, keyboard and mouse events, pages and transforms, multithreading, images and bitmaps, metafiles, clipboard access, fonts, and printing. (2-4)

## Prerequisites: CSIS 230

## CSIS 332 Java Programming for Internet 4

Creating server-side web applications is the central topic of this course. Topics include: HTTP servlet basics, servlet lifecycle, sending HTML information, sending multimedia content, session tracking, security, database connectivity, Applet-servlet communication, and java server pages. (2-4)
Prerequisites: CSIS 230

## CSIS 333 Web Programming with .NET <br> 4

A course in the creation of web applications using the Microsoft .NET plafform. Active server pages with embedded scripts written in C\# will be created. Topics covered: web forms, web controls, user controls, cookies, custom controls, server controls and client-side scripting, security, XML processing, and multithreading. (2-4)
Prerequisites: CSIS 230

## CSIS 335 Accounting Information Systems 3

An analysis of the effects of information technology on the control and maintenance of accounting information systems. Included is the application of contemporary accounting/business software tools in accounting information systems. NOTE: This course does not count for credit toward the CSIS major. (3-0)
Prerequisites: ACC 225

## CSIS 340 Comparative Programming Lang 4

Basic notions of syntax (BNF grammars, derivation trees) and semantics (data types, control structures, parameter passing mechanisms, scope and lifetime of names) of programming languages. Comparison of logic, functional, object-oriented and procedural languages. Programming projects using various programming languages. (4-0)
Prerequisites: CSIS 310

CSIS 350 Database Management Systems 4
A study of the basic concepts, models, internal mechanisms and language aspects of database management systems (DBMS). The primary emphasis is on the definition, organization and manipulation of data at the logical level. Topics include: conceptual modeling, the relational model, transformation of conceptual to relational models, normalization, physical database design, SQL and GUI query languages, recovery, concurrency, security and integrity, distributed databases, internet database interfaces, client/server databases, database administration and feature analysis of DBMS. Students will design and implement relational database applications. (4-0)
Prerequisites: CSIS 206 OR CSIS 230

## CSIS 352 Project Management

Issues surrounding business and software development projects; plan development and execution; cost estimation, sequencing, scheduling, and controlling activities for timely completion of projects; and collection and dissemination of project-related information. This course will utilize popular project management software. (4-0)
Prerequisites: CSIS 105 OR CSIS 322
CSIS $360 \quad$ Software Engin 1: Syst Anal
This is the first course in a recommended fall/winter sequence (with CSIS 370). Topics include software life cycle models, human factors, feasibility analysis, project scheduling, requirements analysis methodologies, preparing systems proposals, CASE, software project management and software quality assurance (technical reviews and inspections). Systems Analysis models are constructed using the Unified Modeling Language (UML). This is a project-intensive course. The student's performance in a team environment is a major component of the final grade. (4-0)
Prerequisites: CSIS 230 OR CSIS 206

## CSIS 361 W Computers and Human Issues

A study of the broad social, political, ethical and philosophical issues raised by the existence and use of the computer. Topics can include artificial intelligence, human/computer interaction, computer interface issues, computer ethics, ergonomics and the internet. The course is conducted in a seminar format with discussion and analysis of articles that pertain to the previously mentioned topics. Students will become familiar with the various forms of writing used in the discipline of Computer Science (scientific technical writing, soffware documentation and help screens, progress reports, proposals, journal articles). Students will use presentation software, internet publishing tools and state-of-the-art word processing software in comprehensive writing exercises. Hands-on experience with the internet and related components is also an integral part of this course. (4-0) Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND (CSIS 230 OR CSIS 206) AND (LIB 150 OR LIB 150 equivalent)

## CSIS 370 Software Engin 2: Syst Design

This is the second course in a recommended fall/winter sequence (with CSIS 360). Topics include systems design methodologies, implementation technologies, selection of hardware and software, CASE, software configuration management, software project management, software quality assurance (inspections and testing). Systems Design models are constructed using the Unified Modeling Language (UML). This is a project-intensive course. The student's performance in a team environment is a major component of the final grade. (4-0)
Prerequisites: CSIS 360

CSIS $380 \quad$ Computer Graphics 4
Concepts relating to the graphical display of data. Techniques in two- and three-dimensional displays. Hardware and software of graphics systems will be discussed with hands-on experience using available tools. (3-2)
Prerequisites: CSIS 230

## CSIS 402 Electronic Commerce

This course introduces the student to the technical and business considerations for creating a business website. Technical considerations include website design and structure strategies, web security, EDI and payment system implementation, development of business strategy, and digital nervous systems within the Business or Computer Science majors. This course is the same as BA 402; credit will be given for only one of these courses. (4-0)
Prerequisites: CSIS 322 AND (CSIS 110 OR CSIS 106)
CSIS 421 Operating Systems 4
A study of basic concepts of operating system design. Topics include process management, memory management, file systems, protections and security, process coordination, interprocess communication, distributed systems. Programming assignments leading to the construction of a simple operating system. (2-4) Prerequisites: CSIS 310

## CSIS 428 Computer Networks \& Internets 4

 A detailed study of local- and wide-area networks and of the internet's underlying protocols. Topics include: internet protocol addresses, address resolution, datagrams, IP encapsulation, fragmentation and reassembly, transport control protocol, client-server interaction, socket interface, domain name system, security and firewalls, electronic mail transfer, web pages and browsers. (2-4)CSIS 431 Computer Netwk Administration 4 The class focuses on emerging network technologies as problem solutions. Examines such networked solutions as intranets, extranets, e-commerce and knowledge management applications. Network components and designs are compared in terms of performance, reliability and cost. Communication protocols and network connectivity are presented in the light of current standards. Network management is discussed in relation to technical and economic strengths and security needs. (4-0) Prerequisites: CSIS 106 OR CSIS 110

CSIS 450 Parallel Programming 4 Algorithm and program evaluation and development for computer architectures with multiple processors. Topics include multi-computer and multi-processor architectures and programming languages that support parallelism on such architectures. (3-2)
Prerequisites: CSIS 310
CSIS 495 Internship in Computer Science 4
Detailed work experience in the computer industry. Minimum requirements: formal written proposal specifying internship duties, detailed weekly journal, final report and formal presentation summarizing the internship experience. A minimum of 150 hours (approximately 10 hours/week) of work is required. Students are evaluated by their employment supervisor and their CSIS professor.

CSIS 496 Senior Seminar
Advanced study and research in selected topics. (2-0)
CSIS 499 Independent Study
Individual study conducted under the supervision of a faculty member. Topic and format must be approved by the Department Chairperson and Dean. 50 contact hours are the equivalent of 1 credit hour.

## ECONOMICS

ECON 170 S Current Economic Issues 4
Explores current economic issues in society by developing a set of basic tools of economic analysis and then applying those tools to contemporary economic questions. Issues to be covered will include topics such as inflation, unemployment, the farm problem, U.S. economic leadership, poverty, environmental standards, our financial system and worldwide economic growth. Recommended for NON-BUSINESS MAJORS who are interested in taking only one course in economics. (4-0)

## ECON 201 Q Personal Finance

Managing personal finances including budgeting, insurance, taxes, home ownership, investments, retirement and estate planning. This course is designed for majors outside the School of Business Administration. (3-0)
Prerequisites: (Computed Math Placement Score MA1 10 OR TRS 92)

ECON 262 Principles of Econ-Micro
An introductory course in price theory. Topics include opportunity cost, demand, supply, markets, elasticities and the organization of markets. This is a half semester course for which credit is earned by completing the first half of Econ 266S. For transfer students who have only had macro. Consent of instructor. (2-0)

## ECON 266S Principles of Economics 4

An introductory course covering microeconomics and macroeconomics. The micro section includes opportunity cost, demand and supply analysis, elasticities, market behavior, market structures and international trade theory. The macro section includes national income theory, income flows, macroeconomic equilibrium and how these concepts are applied to examine economic growth, inflation, unemployment, monetary and fiscal policy, deficits and the national debt and balance of payments. (4-0)

## ECON 272 Principles of Econ-Macro

An introductory course on national income analysis. Included are income flows, macro economic equilibrium, monetary and fiscal policy and balance of payments. This is a half semester course for which credit is earned by completing the second half of Econ 266 S . For transfer students who have only taken micro. Consent of instructor. (2-0)

ECON 307 Evolution of Economic Thought 4
Traces the evolution of economic thought from the 1600's to the present. Each major school of thought, e.g., Mercantilist, Classical, Marxist, Keynesian, etc., will be analyzed to see how it met the conditions of its time, which concepts were relevant only to that period and which have had enduring relevance. (4-0)

ECON 310 Economic History of US
A study of the origin and development of the economic institutions of the United States from Colonial times to the present. U.S. economic development is considered in relation to theories of economic growth and development. (4-0)

## ECON 335 Environmental Economics 4

This course presents the application of economic theory and analytical tools to a variety of environmental and resource problems. Economic reasoning is used to gain insights into the causes of, consequences of and ways of dealing with environmental problems. The economic tools of cost/benefit analysis are developed and applied to environmental costs and benefits associated with a variety of private and public projects/ policies. The ethical implications of these tools are also considered. Students will be expected to conduct an economic analysis of some proposed project/policy. (4-0)
Prerequisites: ECON 266 OR (ECON 262AND ECON 272)

## ECON 356 Microeconomic Theory

This course deals with the price system as it directs resources to more efficient use. It deals with pricing under the various degrees of competition and stresses demand analysis. The principles of production economics are explored. (4-0)
Prerequisites: ECON 266 OR (ECON 262AND ECON 272)

## ECON 361 Managerial Economics

A course designed to connect economic theory with business decision-making. The course deals with the application of economic models to business decisions, quantitative methods for decision-making, cost-benefit and cost-effectiveness analysis. (4-0)

## Prerequisites: ECON 266 OR (ECON 262AND ECON 272) AND (BA 253 OR MATH 201 OR PSYC 241)

## ECON 364 W Macroeconomic Theory

A course that examines the economy as a whole. Included are an analysis of national income accounting, consumption, investment, government spending, the level of employment, monetary theory, monetary and fiscal policy and international economic policy. (4-0)
Prerequisites: ECON 266 OR (ECON 262AND ECON 272)

## ECON 369 Public Finance

An analysis of the financing of federal, state and local units of government. Emphasis given to problems of taxation, expenditures and debt management. (4-0)
Prerequisites: ECON 266 OR (ECON 262AND ECON 272)

## ECON 370 Topics In International Econ

An examination of selected topics in the area of international economics. Students may take this course one or more times for credit provided the subject is different on each occasion.
Prerequisites: ECON 266 OR (ECON 262AND ECON 272)

## ECON 371 International Economics

Classical, neoclassical and modern trade theory. Comparative analysis of marketing functions, institutions and structures in different national environments. Exchange rates, import/export monopolies, quotas, tariffs and other foreign fiscal policies. (4-0) Prerequisites: ECON 266 OR (ECON 262AND ECON 272)

ECON 382 Money, Banking \& Finance Insti 4
This course is the same as BA 382 . See BA 382 for description. Credit will be given for only one of these courses. (4-0)
Prerequisites: ECON 266 OR (ECON 262AND ECON 272)
ECON 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## EDUCATION

ED $\quad 200$ R Intro to Education in America
A study of the history, role and governance of education in the United States, the role of schools in our society, the role of society in our schools and basic foundations in educational thought. Students are introduced to basic methods and planning strategies. The course is prerequisite to acceptance into the Teacher Education licensure program and includes a minimum of thirty hours of field study. Field study will focus on the "career exploration" theme of the course, exposing students to the breadth of organizations, roles and functions involved with the concept of schooling. This course requires 30 field study hours. (3-2)

## ED 210 S Culture of Childhood \& Youth

This course examines the experience of children and youth in America in the 21 st Century and in American schools. It will explore the behaviors, beliefs and influences of childhood and adolescence as young people mature into adulthood. Of prime importance are influences such as health care, nutrition, infectious disease, substance abuse, family influence, educational opportunity, social and ethnic status, juvenile justice, popular culture and access to technology. The course requires a minimum of 30 hours of field study. (3-2)

ED 289 Practicum in College Teaching 1-3 Students establish a mentor relationship with a Fort Lewis College faculty member and assist in teaching a course. At least 30 hours of work are required for each credit. All work must be carefully monitored and discussed with the mentor.

## ED 299 Individual Study

1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## ED $\quad 317 \mathrm{~W}$ Prof Wrig \& Editing for Educat 3

A course designed to teach writing and editing techniques common to the field of education. Through individual and collaborative activities, students explore philosophical issues related to their future roles in the field. Emphasis is placed on effective communication and critical thinking activities. (3-0)
Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND (LB 150 OR LIB 150 equivalent)

ED 327 Children's Literature 3 A study of all types of literature for children, development of criteria for evaluating books and methods of creating in children a love of good books through a sound literature program for early childhood and elementary schools. (3-0)

Designed to increase teacher effectiveness in the realm of interpersonal relations and group dynamics; analysis of individual and group behavior in a classroom setting; theoretical concepts and skill training in classroom management. (3-0)

## ED 331 Southwest Minority Child Clsrm

Course is designed to provide a systematic analysis of the forces that shape the behavior of the Native American, Hispanic and other minority children in an educational setting. Major emphasis will be placed on the development of an understanding of the differences in culture, value systems, attitudes and feelings of these minority students as they relate to the education system. The goal is a change in teacher behavior given adequate information to reflect upon education from the minority perspective. (3-0)

## ED $332 \quad$ Materials \& Meth Bilingual Ed 3

This course covers specialized methodology and materials to empower teachers to serve the needs of linguistically different students in bilingual settings. Current methods for teaching cognitive areas in other languages and English as a second language are covered. Students make specialized materials to meet future classroom needs. Some facility in a non-English language is expected. (3-0)

ED 333 SW Lang Immersion for Teachers 1-3 Language immersion is designed for prospective teachers who may encounter Native American languages and/or southwest Spanish dialects in the school community. It provides the student with basic oral skills in the languages and the respective course is taught almost entirely in the target language. Students may enroll for one, two or all of the courses for a total of 3 credits.

## ED 334 Meth of Teach Engl as Sec Lang 3

This course is designed to provide specialized techniques and materials to appropriately teach students whose first language is not English, either in special programs or in the regular classroom. Diagnosis of need and reflective prescription are emphasized. Students make materials fitting their ESL teaching goals. (3-0)

## ED 335 Linguistics for Educators 3

This course is designed for teachers, particularly bilingual and ESL teachers, who need to convert the science of language to practical classroom application. The student will become familiar with the three types of grammar, will explore how language is learned and will apply the science to reading, writing, spelling, vocabulary and grammar instruction. Further, the student will explore the phenomenon of dialect and improve personal language skills. (3-0)
Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND (LIB 150 OR LIB 150 equivalent)

## ED $353 \quad$ Growth \& Dev of Young Child <br> 3

A critical study of the whole child (the physical, emotional, cognitive and social development) conception through early childhood. A special emphasis is placed on analyzing developmental stages as they relate to children in the school setting. This course requires 15 hours of field study. (2-1)

ED 359 Creative Arts for Young Child 2 Designed to acquaint the student with creative arts for young children with emphasis given to visual arts, creative movement, music and physical education. The process of creative arts and its relationship to the development of young children is considered as developmentally appropriate practices are stressed. (2-0)

ED 421 Individual Instruct/Plural Soc
This course focuses on teaching in America's ever-increasing pluralistic society. Emphasis is placed upon learning to honor, understand and celebrate gender, ethnic, linguistic, socioeconomic, physical, intellectual and emotional differences among students. Students examine theory, instructional practice and classroom management proven successful in educating students from diverse settings with unique needs. Sixty hours of field study are required for this course. (4-4)

ED 423 Language Arts,Music,Art, Movem 4
Students will create a literature-based thematic unit integrating art, music, and movement. Unit goals will be selected to support Colorado Model Content Standards (K-12), Colorado Building Blocks (birth-5 years) and local school districts' goals. Students are encouraged to use multiple teaching strategies to integrate the arts with the language arts. Thirty hours of field study are required for this course. (3-2)

## ED 424 Lang/Math Literacy inSecondary 4

 The course provides secondary school teachers with the skills to teach reading, writing and math across the various secondary disciplines. Emphasis will be placed on helping teachers recognize the opportunities in their classes where they can highlight improving basic skills in math and reading. Sixty hours of field study are required for the course. (3-2)
## ED 425 Science Tech Meth Elem Teach

## This course focuses on the use of the Colorado Performance Based

 Standards for Teachers as well as Colorado Content Standards as they apply to teaching science and technology in an elementary school setting. In this course, students will learn exciting and challenging strategies for teaching science and technology concepts and skills; focusing on critical thinking, problem solving, inquiry, constructivism and reflective practice. Students will plan, implement and assess science and technology lessons in an elementary school setting. The culminating assignment will be a well-developed unit plan for implementation in an elementary school setting. There are 30 hours of field study required for the course. (3-2)
## ED 426 Math\& Soc Stds Meth Elem Teach 4

 This course focuses on the use of the Colorado Performance Based Standards for Teachers as well as Colorado Content Standards as they apply to teaching mathematics and social studies in an elementary school setting. Students will plan, implement and assess mathematics and social studies lessons in an elementary school setting. This course has 30 hours of required field study. (3-2)
## ED 427 Language Arts Methods

 4This course focuses on the use of the Colorado Performance Based Standards as well as Colorado Content Standards as they apply to teaching language arts (reading, writing, speaking, listening and viewing) in an elementary school setting. Students will plan, implement, and assess language arts lessons. Thirty hours of field study are required for this course. (3-2)

ED . 451 Preschool, Practicum, Seminar 3 A minimum of 30 hours in a teaching role is spent in the preschool setting coupled with an on-campus seminar stressing multicultural education. Attention is given to developing the knowledge and skills needed to plan multicultural curriculums for young children. (2-2)

## ED 452 Nutrition for Young Children

The focus of this course is the health and nutrition of young children through providing adequate, appropriate and appealing meals and snacks in group settings. The course includes a study of Colorado DSS licensing requirements, special nutrition needs, food inventories and planning a nutrition program (birth-8 yrs). (3-0)

## ED 453 Cognitive Skills

A critical evaluation of teaching strategies for integrating mathematics, social studies and science in early childhood classrooms. Learning experiences and materials are designed to develop sensory awareness as Piagetian theory of cognitive development is analyzed. Students become familiar with activities such as cooperative learning, thematic unit planning, direct teaching, Piaget's teaching-learning cycle and the integrated teaching approach. This course requires 30 hours of field study. Admission to Teacher Education program required. (3-2)
Prerequisites: MATH 215

## ED 456 Early Childhood Administration

An analysis and evaluation of current educational programs for young children as well as emphasis on development of skills to develop programs commensurate with the needs of children, curriculum, staffing, administration and more. Also explores important and complex roles of parents in the educational development of young children. Assists prospective teachers in developing skills to aid parents in guiding their children. Community resources and services are included. This course requires 15 hours of field study. Admission to theTeacher Education program is required. (2-1)
ED 459 Nutr,Health,Safety Young Chldr 3 The focus of this course is the nutrition and health of children through providing adequate, appropriate and appealing meals and snacks in group settings. The course includes a study of Colorado Department of Social Services licensing requirements, special nutritional needs, food inventories and planning a nutrition program (birth-8 years). In addition, safety needs and common safety issues for young children will be explored. This course requires 15 hours of field study. (2-1)

## ED 470 Mid School Histry \& Philosophy 2

This course will provide the prospective middle school teacher with knowledge about the philosophy, historical development and characteristics of the middle school. (2-0)

ED 488 Seminar \& Pract College Teach 2-3 A course designed for students in all academic disciplines who are interested in gaining knowledge and experience in teaching at the college level, especially students planning to attend graduate school with a teaching assistantship. The seminar portion of the course includes discussion of such topics as: learner/student characteristics, characteristics of good teaching, course outline of syllabus, lesson planning, goals and objectives, teaching techniques and methods, instructional aids, testing and grading. The practicum portion of the course consists of a mentor relationship with a Fort Lewis College faculty member in which the student arranges to assist the instructor with a course in his/ her academic discipline. The student spends a minimum of 40 hours during the term working with the instructor in all aspects of that course. Repeatable once with consent of instructor.

ED 489 Adv Practicum in College Teach 1-3 Students establish a mentor relationship with a Fort Lewis College faculty member and assist in teaching a course. At least 30 hours of work are required for each credit. All work must be carefully monitored and discussed with the mentor.
Prerequisites: ED 289 OR ED 488

## ED $490 \quad$ Advanced Topics in Education

1-3
Designed to accommodate the needs or requests of school systems, teachers or Fort Lewis College students who seek credit for topics of immediate concern. Course topic will be one not normally or regularly available through another course offering. (1-3)

ED 492 K-Primary School, Lab Exp 15 Includes observation, participation, teaching and allied activities under the direction of a selected, regular teacher in an elementary school in consultation with college consultants. Periodic seminars are offered.

## ED 494 Lab Exper \& Seminar Elem Schol 7-15

 Includes observation, participation, teaching and allied activities under the direction of a selected regular teacher in an elementary school in consultation with college consultants. Periodic seminars are offered. (1-15)ED 495 Lab Exper \& Sem Secondry Schol 7-15 Includes observation, participation, teaching and allied activities under the direction of a selected regular teacher in a secondary school in consultation with college consultants. Periodic seminars are offered.

ED 499 Independent Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department director. 50 contact hours are the equivalent of one credit hour.

## ENGINEERING

ENGR 101 Introduction to Engineering 1 Explore the engineering profession by discussing the different types of engineering, engineering duties and the job market. Complete several simple hands-on design and analysis projects. Discuss what is required for a student to get a degree in engineering and how to achieve this goal. (1-0)

ENGR 103 Computer Aided Drafting
A basic course in engineering graphics, including three dimensional modeling, geometric constructions, orthographic projection, sectional views, dimensioning, layout, working drawings and elementary descriptive geometry. (3-0)

## ENGR 104 Comp Prog For Sci \& Engr

Introduction to programming, problem-solving methods, algorithm development, program design, debugging, documentation and computer solution to mathematical/ engineering problems. (2-2)
Prerequisites: MATH 121 OR MATH 221
ENGR $105 \quad$ Engineer'g Principles \& Design 3 Solution of fundamental engineering and design problems. Topics include graphical and numerical mathematics, engineering statistics, computer applications, problem- solving and design projects. (3-0)

## Prerequisites: ENGR 104

## ENGR 201 Electric Networks I

An introduction to engineering circuit analysis. Topics include the study of linear circuit elements (resistors, capacitors, inductors, operational amplifiers), linear circuits, Kirchoff's laws, methods of analysis, RL, RC and RLC circuits, phasors, sinusoidal steady state response, average value RMS values and power in AC circuits. (4-0)
Prerequisites: MATH 222
ENGR 202 Electric Networks II 4
Topics include polyphase circuits, complex frequency and frequency response of linear networks, magnetically coupled circuits, łwo-port networks, Fourier analysis, Laplace transform techniques, operational amplifiers. Includes engineering design applications. (3-2)
Prerequisites: ENGR 201
ENGR 205 Surveying I . 4 Plane surveying methods in engineering that emphasize the measurements, theory and calculations associated with distances and angles measurements. Modern electronic equipment including total stations and Global Positioning Systems are used. Topics include distance measurement, leveling, traversing, topographic mapping, error analysis and others. (2-4)
Prerequisites: MATH 121
ENGR 217 Statics
Vectors, forces and moments. Static equilibrium of particles and rigid bodies. Trusses, frames and machines. Internal forces, shear and bending moment diagrams. Centroids, moment of inertia, friction and virtual work. Includes engineering design applications. (3-0)
Prerequisites: MATH 221
ENGR 221 Dynamics
Kinematics and kinetics of particles and rigid bodies. Includes the applications of Newton's laws, work-energy and impulse-momentum and their applications to determine the motion of rigid bodies in two and three dimensions. (3-0)
Prerequisites: ENGR 217

ENGR 238
Digital Logic Design
Introduction to the building blocks of digital computer design. Application of Boolean algebra to the synthesis of logic circuits from logic elements. The design and implementation of combinational and sequential circuits. Understanding of hardware operations in a simple computer. This course is the same as CSIS 238; credit will only be given for one of these courses. Includes engineering design applications. (3-3)
Prerequisites: ENGR 104OR CSIS 110
ENGR 270 Engineering Thermodynamics 3
Fundamental concepts and basic theory of classical thermodynamics including study of the first and second laws of thermodynamics, properties of pure substances, thermodynamic states and functions, applications to engineering. (3-0)
Prerequisites: PHYS 217
ENGR 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## ENGR 305 Surveying II

Stresses the application of surveying techniques and theory to topics that include mapping and map projections, the Global Positioning System, Geographic Information Systems, boundary surveys, the Public Land Survey system, coordinate systems and control surveys, photogrammetry, astronomic observations and route surveys. Includes engineering design applications. (2-4) Prerequisites: ENGR 205

## ENGR 317 Mechanics of Materials

Stresses and deformations in structural members and machine elements, combined stresses, and stress transformations. Deflection by integration, superpositions, and moment area method. Strain energy concept, impact loading and column design. Includes engineering design applications. (3-0)
Prerequisites: ENGR 217

## ENGR 321 Fluid Mechanics

Fluid properties, statics, kinematics and kinetics of fluids including gravitational and viscous effects. Differential analysis of fluid motion. Incompressible inviscid flow, dimensional analysis and similitude. Flow measurements, boundary layers, flow about immersed bodies and flow in open channels. Includes engineering design applications. (3-0)
Prerequisites: ENGR 221
ENGR 397 W Tech Writing and Engr Projects
A course designed to train students in preparing technical documents such as engineering reports, technical descriptions, and proposals in the field of engineering. Subjects such as project management, engineering economics, and statistical analysis are studied and used as writing topics. Modern techniques and software tools are used. This course may not be substituted for Phys 397. (3-0)

ENGR $405 \quad$ Engineering Design \& Practice
Students study the engineering design process and complete one or more design projects. The course is intended to show how engineers integrate technical knowledge with design concepts, teamwork, economics, project management, oral and written communications. Ethics and professionalism in engineering are also explored. Students prepare a detailed design project proposal that may be used as their Senior Seminar design project. (3-0)
Prerequisites: ENGR 105 and junior standing.

## ENGR 454 Special Topics in Engineering

Special topics in various areas of engineering. The course will address one area such as heat transfer, hydraulics, or control system. The specific topic will be listed on the class schedule. The course can be repeated for up to 6 credits if the topics are different. (3-0)

ENGR 496 Senior Seminar - Design 2
Students experience the integration of technical knowledge through an open-ended, comprehensive design project which simulates an engineering project environment, including design, building or simulations, testing and verifications, project management and oral and written reports. Students are required to take the Fundamentals of Engineering exam. (2-0)
Prerequisites: ENGR 405

## ENGR 499 Independent Study

 member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.
## ENGLISH

## ENGL 116T Introduction Mass Communicatns

An examination of the development, organization and functions of mass media. This course covers seven mass media: books, newspapers, magazines, movies, recordings, radio and television. It provides both some coverage of current issues and some historical overview of mass media. (4-0)

## ENGL 128 R The Bible as Literature

A study of both the Old and New Testaments of the Christian Bible, as literature itself and as a major influence upon literature. Course will cover mythological, historical, archaeological, and cultural contexts and backgrounds. The course takes no doctrinal position, and doctrinal debates are only appropriate as explorations of the manifold interpretive possibilities of the text. (4-0)

## ENGL 174 R African-American Literature 4

A study of selected 19th and 20th century works by African-American writers. (4-0)

ENGL 175 R Women's Literature
4
A study of literature by and about women. (4-0)
ENGL 176R Native American Literature 4
This course is a survey of the contribution of Native American writers to American literature. Students will study Native writers within historic contexts and tribal worldviews. (4-0)

ENGL 177 R U.S. Latina/o Literature
This course introduces students to the literatures of the three major Latina/o groups residing in the U.S. (Cubans, Chicana/os, and Puerto Ricans). Not intended to be exhaustive, the course acquaints students with major writers, movements, and historic contexts. (4-0)

## ENGL 180 N Literature of the Environment

This course is a survey of environmental literature that focuses on North America. This course includes both global and local (Southwestern) perspectives. It is designed to further students' understanding of the principles of interconnectedness and sustainability and how those principles have been presented both historically and in literature. (4-0)

## ENGL 215 News Media Writing

 4This course will cover news writing and reporting for print media. The course will address interviewing, ethics and law. Analysis and story types are often part of this course. (4-0)

ENGL 217 Media Literacy 4
The course will help students develop media literacy; skills that will help them critically consume and create media. (4-0)

ENGL 221R Classical Literature
A study of ancient Greek (Hellenic) and Roman (Italic) literature and at least one of the following ancient literatures in rotation: Germanic, Celtic, Balto-Slavic, Indo-Iranian, or Albanian. (4-0)

ENGL 230 R Survey of British Literature 4 An overview of representative British writing from its beginnings to the present. ( $4-0$ )

ENGL 240 R Survey of American Lit
An overview of representative American writing from its beginnings to the present. (4-0)

ENGL 250 Practicum - Newspaper 1-6 Directed experience for lower-division students in newspaper work on the Fort Lewis College Independent. Credit is based on the ratio of 30 hours of work for each credit earned. English 250 is repeatable for a maximum of 6 credits. Consent of instructor is required.

ENGL 251 Practicum-Radio 1-6
Directed experience for lower-division students in radio broadcasting on KDUR. Credit is based on the ratio of 30 hours of work for each credit earned. Students will be directed by the professor who will supervise and evaluate their work. Engl 251 is repeatable for a maximum of 6 credits. Consent of the instructor is required, and there is an additional fee for the course.

## ENGL 258 Practicum - Service Learning 1-6

Directed experience for lower-division students in service learning with placements in local schools or community organizations. Credit is based on the ratio of 30 hours of work for each credit earned. Students will be directed by the professor who will assign, monitor and evaluate their work. Engl 258 is repeatable for a maximum of 6 credits. Consent of the instructor is required.

## ENGL 265 S Semantics

A study of the meaning of language, emphasizing its social and psychological uses and abuses. (4-0)

ENGL 267 Persuasion: Hist, Theory, Prac 4
This course will introduce students to texts representing Western rhetorical theory and practice. Additionally, this course will focus on developing student writing skills and understanding the role of rhetoric in shaping intellectual, academic, political, and professional domains. (4-0)

## ENGL 268 W Reading Texts/Writing Texts

This course, which includes a brief introduction to the Western rhetorical tradition, as well as an exploration of various forms of textual and critical analysis, introduces students to ways in which reading and writing are used in literary and media studies. (4-0)

## ENGL 270 R History of the Film

An overview of the history of international and Hollywood narrative films. Students will be expected to attend scheduled film screenings each week. (2-2)

## ENGL 273 Intro to Literary Types 2

This course will focus on a type or genre of literature, such as poetry, fiction, the short story or the essay. Students may repeat the course for credit provided the subject is different on each occasion. (2-0)

ENGL 280 R Literature of the Southwest 4
The American Southwest seen through fiction, poetry, biography and other works by European Americans, Native Americans and Chicanos/as. (4-0)

ENGL 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## ENGL 304 Digital Video Production <br> 4

Students will learn the technical aspects, conventions, and aesthetics of digital video production. Consent of the instructor is required, and there is an additional fee for the course.(4-0)

## ENGL 306 Radio Broadcasting

An introduction to radio broadcasting through its history, economics, industry, programming and legal issues, with considerable emphasis on production. Consent of the instructor is required, and there is an additional fee for the course. (4-0)

ENGL 315 Media Writing:Topics
This course should be considered an advanced writing course that builds on the writing students have been exposed to in 215 and may have been exposed to in 304, 306 and the practica. Topics will include, but are not restricted to, magazine writing/ long-form journalism, editorial writing and screenplay writing. Students may repeat the course for credit provided the subject is different on each occasion. (4-0)

## ENGL 317 Mass Communications:Topics

## This course teaches students at an advanced level fundamental

 elements of the industries (including academe) attached to the discipline. This course will treat in some depth a topic essential to communication students. Topics will include, but are not restricted to, stereotyping in the media and media law and ethics. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)ENGL 320 The Novel
An in-depth study of selected European, British and American novels. (4-0)

ENGL 340 19th Cen British Lit: Topics 4 An in-depth study of British literature from the Romantic and/or Victorian periods. Course content will vary. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)

ENGL 341 Early Modern Literature:Topics 4 An in-depth study of selected British writings from the Early Modern Period. Course content will vary. Students may repeat the course for credit provided the subject is different on each occasion. (4-0)

ENGL 345 American Literature:Topics I 4 An in-depth study of selected American writings from the beginnings to about 1865. Course content will vary. Students may repeat the course for credit, provided that the subject is different on each occasion. (4-0)

ENGL 346 American Literature: Topics II
An in-depth study of selected American writings from 1865 to the present. Course content will vary. Students may repeat the course for credit, provided that the subject is different on each occasion. (4-0)

## ENGL 350 Practicum - Newspaper 1-6

Directed experience for upper-division students in newspaper work on the Fort Lewis College Independent. Credit is based on the ratio of 30 hours of work for each credit earned. English 350 is repeatable for a maximum of 12 credits. Consent of the instructor is required.

## ENGL 351 Practicum-Radio

1-6
Directed experience for upper-division students in radio broadcasting on KDUR. Credit is based on the ratio of 30 hours of work for each credit earned. Students will be directed by the professor who will supervise and evaluate their work. English 351 is repeatable for a maximum of 12 credits. Consent of the instructor is required.

ENGL 358 Practicum - Service Learning 1-6 Directed experience for upper-division students in service learning with placements in local schools or community organizations. Credit is based on the ratio of 30 hours of work for each credit earned. Students will be directed by the professor who will assign, monitor and evaluate their work. Engl 358 is repeatable for a maximum of 12 credits. Consent of the instructor is required.

ENGL 363 Advanced Composition
This class can accommodate the needs of students from a diversity of majors from the sophomore level up in practicing advanced writing. It provides significant practice of rhetorical techniques and ways to integrate creative thinking, such as poetic language and storytelling techniques, into academic inquiry to enhance academic writing skills. (4-0)

ENGL 366 Teaching Writing 4
In this course, students will study writing from a theoretical/ disciplinary perspective. We will examine the history of writing instruction, differing philosophies currently at play, the research and assumptions from whence these philosophies derive and practical classroom strategies resulting from the philosophies. Students will be required to write, both formally and informally, for a variety of purposes in this course. (4-0)

ENGL $378 \quad$ Young Adult Literature
This course is a study of all types of literature for adolescents and young adults. Evaluative criteria for book selection will be considered. Emphasis on minority and ethnic literature. (4-0)

ENGL 380 Native American Lit:Topics 4 A study of traditional and contemporary Native American expression as seen through oration, tales and legends, chants and songs, poetry, drama, autobiography, and the novel. Course content will vary. Students may repeat this course for credit, provided the subject is different on each occasion. Note: This course is the same as SW 380; credit will be given for only one of these courses. (4-0)

## ENGL 404 Advanced Video Production

Students will concentrate on a particular video topic that may vary from semester to semester. Topics include video activism, documentary, news, short fiction, class-created feature video film, experimental and web video. Repeatable up to 12 credits. Consent of the instructor is required, and there is an additional fee for this course. (4-0)

ENGL 416 Media Theory And Criticism 4
This course is designed to acquaint students with the major contemporary theories of mass communication; students will also become acquainted with critical theory and primary texts. (4-0)

## ENGL 417 Media Theory: Topics

4
Using the topic as a vehicle, this course will expand on and develop a theoretical tradition. Students will apply their understanding of the tradition in research projects. Course content will vary. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)

## ENGL 423 Genres: Topics

An in-depth study of a specific genre of literature. Course content will vary. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)

## ENGL 424 Comparative Literature: Topics 4

A comparative study of literature. Course content will vary. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)

ENGL 430 Medieval Lit \& Chaucer: Topics 4 An in-depth study of selected British writings from the beginnings to about 1500. Course content will vary. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)

ENGL 432 Shakespeare 4
A study of Shakespearean drama. (4-0)

## ENGL 450 Internship in Newspaper

Directed experience working on newspapers, performing professional duties and responsibilities. Specific requirements will vary but include, as a minimum, keeping a detailed journal and writing a 15 -page paper analyzing the organization and what the student learned. A minimum of 100 hours of directed experience must be documented, but interns usually work to complete tasks. Credit and evaluation are normally based on achieving written goals. Strongly recommended: substantial communications coursework, a competitive portfolio, 80 hours of work toward graduation, and completed internship arrangements. Consent of the instructor is required.

ENGL 451 Internship in Radio 1-6 Directed experience working at radio stations, performing professional duties and responsibilities. Specific requirements will vary but include, as a minimum, keeping a detailed journal and writing a 15 -page paper analyzing the organization and what the student learned. A minimum of 100 hours of directed experience must be documented, but interns usually work to complete tasks. Credit and evaluation are normally based on achieving written goals. Strongly recommended: substantial communications coursework, a competitive portfolio, 80 hours of work toward graduation, and completed internship arrangements. Consent of the instructor is required.

## ENGL 452 Internship in Television <br> 1-6 <br> Directed experience working in television, performing

 professional duties and responsibilities. Specific requirements will vary but include, as a minimum, keeping a detailed journal and writing a 15 -page paper analyzing the organization and what the student learned. A minimum of 100 hours of directed experience must be documented, but interns usually work to complete tasks. Credit and evaluation are normally based on achieving the goals in a written contract signed by the student, the supervisor and the practicum instructor, on the journal and on the analytical paper. Strongly recommended: substantial communications coursework, a competitive portfolio, 80 hours of work toward graduation, and completed internship arrangements. Consent of the instructor is required.
## ENGL 453 Internship in Communications 1-6

Directed experience in media writing/production that does not directly involve newspaper, radio or television. The internship will be described in ways appropriate to the work, such as "Public Relations," "World Wide Web," "Advertising," "Layout and Design," "Magazine," "Newsletter," and "Video Production." Credit and evaluation are based on achieving the goals in a written contract signed by the student, the supervisor and the practicum instructor, on a journal documenting at least 100 hours of directed experience and on a 15 -page analytical paper. Strongly recommended: substantial communications coursework, a competitive porffolio, 80 hours of work toward graduation, and completed internship arrangements. Consent of the instructor is required.

ENGL 461 History of English Language 4 An examination of the dramatic ways in which the English language has changed over the past 1500 years, from its origins as an obscure Germanic dialect to its present state as a distinct, global language spoken by hundreds of millions of people. (4-0)

## ENGL 462 Linguistics

An introduction to the study of language, covering the many systems - from sounds to words to sentences to discourse - working in language. While the focus will be on English, those features shared by all languages will be emphasized. (4-0)

ENGL 464 Creative Writing 4 An advanced writing course with concentrations in poetry and/ or short fiction. Students may repeat the course for credit, but may apply it only once toward the major. Consent of the instructor is required. (4-0)

ENGL 477 20th Cen Literature: Topics
An analysis of selected European, British or American writings from the 20th century. Course content will vary. Students may repeat the course for credit, provided the subject is different on each occasion. (4-0)

## ENGL 483 Meth \& Mat for HS English

Introduces and expands on materials and methods for teaching literature, language and composition in the secondary schools. Includes principles for the selection of literature for high school students and the relationship of language and composition to the total secondary program. Teaching techniques are a point of emphasis. To be taken in the fall trimester, prior to student teaching. Senior standing required. (4-0)

## ENGL 496 Senior Seminar

Advanced study and research in selected topics. Students enrolling in Engl 496 must have completed at least one survey course and at least one topics course, and any Group W course. Consent of the instructor is required. (4-0)

ENGL 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## EXERCISE SCIENCE

ES $100 \quad$ Fitness and Wellness 1 A 7 1/2-week course that examines the basic physiological principles of exercise and nutrition. Students will acquire strategies for the developments of a personal fitness plan, effective weight management, stress management and how to make healthy lifestyle choices. (1-0)

## ES $\quad 150$ R Sociocult Foundtn Human Movmnt 3

An introductory study of the historical, cultural, sociological and philosophical aspects of exercise, sport and human movement. (3-0)

ES 165 Community First Aid \& Safety 2 Study and practice of American Red Cross first aid/CPR procedures in handling common injuries, accidents and medical emergencies. (2-0)

ES 185 Intro to Coaching - ASEP 2
This introductory course is the American Sport Education Program's "Sport Science Coaching Course." It covers the areas of coaching philosophy, sport psychology, sport pedagogy, sport physiology, sport management and port-specific planning. The course covers what is important for a coach to know and presents the material in a manner that is of practical value to a coach. A series of videotapes helps create an atmosphere of discussion that gives students practical ways of handling coach/player relationships and situations. The student who passes the ASEP exam will receive certification which is rapidly becoming the required coaching certification. (2-0)

ES $205 \quad$ Amer Red Cross Emergency Resp 2 This class will train those individuals who have a duty to respond in emergency situations (first responders) with the knowledge and skills necessary to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until advanced medical help arrives. The course will prepare students to make appropriate decisions about the care to provide in an emergency. (2-0)

## ES $220 \quad$ Clinical in Athl Training I

This course is designed to provide the student with an introduction to the clinical aspects of the athletic training profession. The student will observe athletic training in the collegiate setting for a minimum of 75 hours. Students will be instructed in common taping applications, emergency procedures, basic modality applications, and athletic training room management. Instructor permission is required. (2-0)
Prerequisites: ES 224 AND ES 205
ES 223 Techniques in Conditioning 1
This course introduces the student to methods and techniques in the area of physical conditioning. This course will emphasize three major areas: power development, speed enhancement, and aerobic/anaerobic conditioning. Emphasis will be placed on the student to instruct in these areas. (2-0)

ES 224 Basic Prin Athletic Training 3 An introduction to the field of athletic training. Professional opportunities in this field are discussed. Students will develop a basic understanding of athletic injuries as they relate to prevention, nature and causes. (3-0)

## ES $225 \quad$ Techniques Coaching Football 2

Classroom instruction directed toward the various phases of American football; history, defensive theory, strategy, personnel, offensive theory, the kicking game, practice organization, relationship and influence of teachers, parents, booster clubs and news
media. (2-0)
ES 226 Techniques Coaching Volleyball 2
The study of history, strategies, rules, methods and organization involved in coaching volleyball. Both theoretical and practical applications will be developed. (2-0)

## ES 227 Techniques Coaching Basketball 2

The analysis of the game of basketball in theory and application with special emphasis upon teaching and coaching the game. Development of offense, defense and special situations for both prospective coaches and enthusiasts. (2-0)

ES 229 Tech Coaching Track \& Field . 2 Designed to teach methods, techniques, and principles of coaching all events in track and field at both the high school and college levels.

ES 230 Tech of Coaching Softball 2
The study of history, strategies, rules, methods and organization involved in coaching softball. Both theoretical and practical applications will be developed. (2-0)

ES 231 Tech of Coaching Soccer 2
The study of principles, methods, techniques and strategies involved in coaching soccer. (2-0)

ES 233 Officiating of Football 1
Designed to provide individuals with the rules, skills and mechanics of officiating. Includes rules of the National Federation of High Schools, National Association of Intercollegiate Athletics and National Collegiate Athletic Association. (1-0)

## ES $234 \quad$ Officiating of Volleyball

Instruction in the rules and practice of the mechanics and skills of officiating volleyball at the high school and college levels. (1-0)

ES 235 Officiating of Basketball 1
Designed to teach the student the rules, skills and mechanics of officiating basketball. (1-0)

ES 237 Officiating Softball 1 Designed to provide students with the rules, skills and mechanics for umpiring soffball. (1-0)

## ES 238 Officiating Soccer 1

Designed to provide students with the rules, skills and mechanics for officiating soccer. (1-0)

## ES $240 \quad$ Clinical in Athl Training II 1

 This course is designed to provide the student with clinical opportunities to review and evaluate the clinical proficiencies associated with the pre-requisites and co-requisites of this course as required by the National Athletic Trainers' Association. This course includes a 150 hour minimum clinical rotation component to allow for the athletic training student to become proficient in the clinical skills. Student must be accepted into the Athletic Training Education Program and instructor permission is required. (2-0)Prerequisites: ES 220 AND ES 223 AND ES 224 AND ES 283
ES 242 Q Testing and Statistics 3 Basic statistical procedures necessary to analyze and interpret data collected from tests in exercise science. Descriptive and inferential statistics are taught as well as introduction to basic research techniques. The selection and administration of testing instruments that measure objectives from the three domains of human performance are also examined in the course. (3-0)
Prerequisites: (TRS 92 OR Computed Math Placement Score MA110)

## ES 243 S Personal Health

This course is a study of personal health and wellness. Every effort will be made to create a practical approach toward developing awareness, education and growth that will allow for enhanced personal wellness. The responsibility for our health and personal well-being belongs to each of us individually. This course will allow students to gain an understanding of how they as individuals fit into a complex system of interconnectedness. Various theories of wellness will be presented to emphasize the importance of balancing the connection of body, mind and spirit for intrapersonal health, interpersonal health, community health and global health. (3-0)

ES 250 Tch Comp Tumbling,Aquatic Skls 1 A course designed to develop teaching competencies for planning, instruction, behavior management and assessment in tumbling, aquatics and fundamental skills. (0-2)

ES 251 Tch Comp Dance,Games,Non Trad 1 A course designed to develop teaching competencies for planning, instruction, behavior management and assessment in dance, recreational games and non-traditional sports. (0-2)

ES 252 Tch Comp Bkball,Soc,Softb,Vbal 1 A course designed to develop teaching competencies for planning, instruction, behavior management and assessment in basketball, soccer, soffball and volleyball. (0-2)

ES 253 Tch Comp Fitness,Golf,Rac Spts 1
A course designed to develop teaching competencies for planning, instruction, behavior management and assessment in fitness, golf and racquet sports. (0-2)

ES 260 Lifeguard Training 2
Students will learn American Red Cross professional lifeguard skills and gain knowledge needed to prevent and respond to aquatic emergencies. (1-2)

ES 261 Water Safety Instructor 2 Water safety instructor's course designed to train and certify (Red Cross) teachers of swimming. (1-2)

ES 262 Lifeguard Training Instructor 2
This course will train and certify instructors to teach American Red Cross Lifeguard Training, CPR for the professional rescuer, community water safety, life- guarding instructor aid and other water safety courses. (1-2)
Prerequisites: ES 260

## ES $283 \quad$ Evaluation of Injuries I

This course will provide the student with the evaluative techniques and skills necessary in the recognition of athletic injuries and an understanding of the mechanism of various athletic injuries involving the lower extremities, lumbar and thoracic spine. (3-0)
Prerequisites: ES 224 AND BIO 233
ES 285 Evaluation of Injuries II 3 This course will provide the student with the evaluative techniques and skills necessary in the recognition of athletic injuries and an understanding of the mechanism of various athletic injuries involving the upper extremities, cervical spine and head. (3-0) Prerequisites: ES 283

ES 299 Individual Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.
$\begin{array}{ll}\text { ES } \quad 300 & \text { Sport in Film } \\ \text { This course will take a conceptual and sociological look at spor }\end{array}$ This course will take a conceptual and sociological look at sport through its films both contemporary and classic. Viewings, discussions, debates, critical reviews and writings will be used to explore the themes, issues and methods used in selected films and the interrelationships of sport, human movement, society and film. (1-2)

ES $\quad 301 \mathrm{~W}$ Current Issues in Sport
This course will address critical issues in writing in exercise science using issues in sport as a basis for writing, reading and discussion. Special emphasis is placed on developing skills necessary for becoming successful writers in the field. Instruction and evaluation focuses on the writing of research papers, poster presentations, journal article reviews, laboratory reports, essays and oral presentations. (3-0)
Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND (LIB 150 OR LIB 150 Proficiency Score 1)

## ES 302 W Issues in Health \& Well-Being

This course will address issues in writing in exercise science using the topics of Health and Well-Being as a basis for writing, reading and discussion. Students will explore and critically analyze these topics and share their perspectives through discourse mediums used by professionals in the fields of health and Exercise Science, such as research papers, poster presentations, journal article reviews and proposals, computer/video presentations and oral presentations. (3-0)
Prerequisites: (COMP 150 OR GS 151 OR COMP 126) AND (LIB 150 OR LIB 150 equivalent)

## ES $\quad 320 \quad$ Clinical in Athl Training III

1
This course is designed to provide the student with clinical opportunities to review and evaluate the clinical proficiencies associated with the pre-requisites and co-requisites of this course as required by the National Athletic Trainers' Association. This course includes a 150 hour minimum clinical rotation component to allow for the athletic training student to become proficient in the clinical skills. Student must be accepted into the Athletic Training Education Program, and instructor permission is required. (2-0)
Prerequisites: ES 240 AND ES 283 AND ES 285

## ES 335 Kinesiology \& Biomechanics

An in-depth study of the basic body movements, osteology, applied myology, spatial relations of muscles and joints, aggregate muscle action, kinesiologic constructs of summation of internal forces, aerodynamics and hydrodynamics, techniques for cinematographical and noncinematographical analysis of sport skills. The study of methods, mechanics and analysis of movement as applied to the structure and function of the human organism will also be discussed. (4-0)
Prerequisites: BIO 121 OR (BIO 233 AND BIO 234)

## ES 337 Sport Ethics

An inquiry into ethics and morality as these apply to sport physical education. Students will engage in critical and reflective thinking about what values they believe should characterize competitive sports and the professions of athletics and physical education. Students will explore how they will respond to ethical dilemmas in sport and continue to develop their own moral reasoning ability. (3-0)

## ES $339 \quad$ Practicum in Sports Admin 1

The implementation of theories and practices in a professional setting under the direction of a qualified practitioner. Students will participate in a part-time experience in an agency, corporation or other sport-related entity for exposure to various professional areas of employment. Minimum requirement: 50 clock hours. Instructor permission required.

ES $340 \quad$ Motor Learning And Control 3
Concepts involved in learning motor skills, the individual variables which affect this learning and the practice and techniques for improving motor performance. (3-0)
Prerequisites: PSYC 157
ES $345 \quad$ Legal Aspects of Sports/Phy Ed 3 This course will introduce the student to legal regulations and issues in sport and physical education. The principles of risk management and the recognition and reduction of potential legal issues and their consequences will be emphasized. (3-0)
Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND BA 260

## ES $353 \quad$ Nutrition Fitness \& Sport

This course is a study of the principles of nutrition as a science with special emphasis on the importance of nutritional decisions for the physically active individual. Metabolism, energy systems, food choices, energy sources, nutritional analysis, body weight and composition, weight management and optimal nutrition for physical performance are topics to be discussed. (3-0)
Prerequisites: BIO 121 OR (BIO 233 AND BIO 234)

## ES $354 \quad$ Adapted Exercise

 3Course includes an overview of the legislation impacting adapted exercise programs; exceptional conditions and disabilities affecting individuals in exercise programs, assessment tests and diagnostic instruments. It includes practical experience in teaching exceptional students in diverse exercise settings and arranging and prescribing a program to meet the needs of students with specific disabilities. (2-2)

ES $356 \quad$ Adapted Aquatics 3
An overview of the benefits of movement in an aquatic environment, the properties of water, the dynamics of moving in water, as well as aquatic skills, therapy, fitness and games for special populations. Students will gain practical experience in teaching individuals with varying levels of abilities. They will also assess needs, prescribe, design and instruct in an aquatic program to meet the needs of persons with disabilities. Instructor permission is required. (3-0)

ES $360 \quad$ Exercise Physiology
This course deals with the physiological principles underlying specific aspects of physical fitness and human exercise performance. Emphasis is placed on the nature of the metabolic, muscular, cardiovascular and pulmonary responses to various forms of short- and long-term exercise workouts as well as specific adaptations to exercise training. Where possible, the potential health-related aspects of exercise training will be explored. (4-0)
Prerequisites: BIO 121 OR (BIO 233 AND BIO 234)
ES $361 \quad$ Advanced Exercise Physiology 3
This course is an examination of advanced topics in exercise physiology, lab procedures and clinical protocols. Advanced fitness/diagnostic testing and exercise prescription will be the focus of this course. Topics to be studied include, but are not limited to, environmental extremes and physiological adaptations during exercise protocols for various clinical populations. The development of the exercise prescription for various sub-clinical populations will also be discussed. Each topic will have an accompanying laboratory experience. (2-2)
Prerequisites: ES 360

ES $\quad 363 \quad$ Computer Appl in Ex Science
This course is designed to provide students with a general introduction to computer use in Exercise Science including a hands-on experience. Open to Exercise Science majors only. (2-2)

ES $375 \quad$ Sport \& Exercise Psychology 3 A study of psychological phenomena that influence sport and exercise performance, i.e., personality, anxiety, stress, motivation, aggression, group dynamics, concentration, imagery, arousal regulation, self-confidence, leadership, communication, addictive or unhealthy behaviors and aggression. (3-0)
Prerequisites: PSYC 157
ES $381 \quad$ Methods/Curric for K-12 Phy Ed 4 A course in pedagogy for the entry-level K-12 school physical educator. Emphasis will be placed upon values, curriculum construction, content standards, instructional techniques, professional responsibilities and evaluation as related to teaching through physical activities. (4-0)

ES 385 Therapeutic Modalities 2
The theoretical basis of therapeutic modalities will be explored as well as the clinical application of those modalities in the treatment of athletics injuries. (2-2)
Prerequisites: ES 224 AND ES 283

## ES 387 Reconditng Athletic Injuries

Students will examine the theory and physiological basis of rehabilitating athletic injuries. Practical experience in a clinical-type setting will be used to help students develop skills of exercise testing, manual testing, PNF, goniometry and program planning. (3-0)
Prerequisites: ES 285 AND ES 360 AND ES 385
ES $389 \quad$ Coaching Internship 2
This course satisfies the coaching internship requirement for the Exercise Science Department Coaching minor. It consists of the student securing and completing a coaching position that will consist of 100 hours of work. These hours may include: practices, practice planning, games, travel and any other organizational or related tasks. A supervisor must be involved who can evaluate the student's performance. Instructor permission required.

ES $420 \quad$ Clinical in Athl Training IV 1
This course is designed to provide the student with clinical opportunities to review and evaluate the clinical proficiencies associated with the pre-requisites and co-requisites of this course as required by the National Athletic Trainers' Association. This course includes a 150 hour minimum clinical rotation component to allow for the athletic training student to become proficient in the clinical skills. Student must be accepted into the Athletic Training Education program, and instructor permission is required. (2-0)
Prerequisites: ES 320 AND ES 353 AND ES 360 AND ES 375 AND ES 385 AND ES 387

## ES $424 \quad$ Advanced Athletic Training

3
This course deals with the knowledge, skills, and values an athletic trainer must possess in pharmacological applications and general medical conditions, and other advanced athletic training principles. (3-0)
Prerequisites: ES 285 AND ES 385 AND ES 387

ES $440 \quad$ Clinical in Athl Training V 1 This course is designed to provide the student with clinical opportunities to review and evaluate the clinical proficiencies associated with the pre/co-requisites of this course as required by the NATA. This course includes a 150 hour minimum clinical rotation component to allow for athletic training students to become proficient in their clinical skills. Student must be accepted into the Athletic Training Education Program, and instructor permission is required.(2-0)
Prerequisites: ES 361 AND ES 363 AND ES 420 AND ES 424 AND ES 480

ES 450 Internship Exercise Specialist 3 Directed clinical experiences performing professional duties in fitness, health promotion, cardiac rehabilitation, clinical exercise technology or leisure organization settings. Specific requirements will depend upon the supervising Fort Lewis College faculty member. The intern's performance will be evaluated by both the organization's supervisor and the faculty member. Instructor permission is required. (3-0)

ES $455 \quad$ Internship in Sport Admin 8-12 Full-time application of previous theoretical and applied knowledge and skills in a professional setting, supervised by a qualified sport administrator. Instructor permission required.
Prerequisites: ES 339
ES $480 \quad$ Admin Program Exercise Science 3
Relationships, procedures and problem-solving approaches in effective organization and administration of exercise, fitness and sport programs. Budget, use of facilities and equipment, legal responsibilities, public relations, policy development and supervision are analyzed. (3-0)

ES $495 \quad$ Research Design \& Development 1 Studies methods and techniques of research used in Exercise Science and analyzes examples of their use. Students will complete a formal research proposal, participate in a formal proposal hearing and complete Institutional Review Board requirements for student research. Instructor permission required. (1-0)
Prerequisites: (ES 242 OR ES 350)
ES 496 Sen Sem Research Exercise Sci 2
Discussions and inquiries dealing with contemporary issues, trends and problems in exercise science. Completion of data collection and synthesis for the senior research project proposed in ES 495. (2-0)
Prerequisites: ES 495
ES 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by a Department Chairperson and Dean. 50 contact hours are the equivalent of one credit hour.

GEOGRAPHY
GEOG 250 T Intro Computer Mapping \& GIS
An introduction to basic mapping concepts and technologies using Geographic Information Systems (GIS). Lecture sessions will discuss map use and analysis, principles of mapmaking, cartographic communication and geographic visualization. Lab assignments will focus on map skills and interpretation, the use of Global Positioning Systems (GPS) and map construction using PC-based GIS software. (3-3)

## GEOG 271 R World Regional Geography

An introduction to the major regions of the world and their physical, environmental, cultural, geopolitical and economic characteristics. This course will provide students with a thorough understanding of current events that are changing the world map and causing the globalization of world society. (4-0)

GEOG 299 Individual Study 1-3
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

GEOG 300 Intermediate GIS: Vector
3
This course focuses primarily on vector-based GIS analysis and the applications of GIS in the physical sciences, social sciences and business. Lab sessions will introduce students to the use of GIS in spatial querying and database management, site suitability analysis, proximity analysis, geocoding, CAD theme analysis, overlay operations, etc. (2-3)
Prerequisites: GEOG 250
GEOG 320 The North American Landscape 3
A study of the physical and cultural landscapes of North America, particularly the United States and Canada. Emphasis is placed on the relationships between the natural and physical environment, land use patterns, resources, economics, geopolitics, populations, and human activities that modify the landscape. Regional field trips and map work required (3-0)

## GEOG 335 Weather and Climate

An introduction to the atmospheric processes that produce our daily weather patterns and climates. Paleoclimates and potential future climate changes will also be discussed in detail. Special emphasis will be placed on the human impact of severe storms, climatic variations and global warming. (3-0)

GEOG 400 Advanced GIS: Raster 3

This course focuses primarily on network analysis and grid- based spatial analysis using GIS. Programming for GIS will also be investigated. Lab sessions will focus on route finding, travel cost analysis, traffic modeling, digital elevation models (DEMs), surface interpolation, hydrologic modeling and viewshed analysis. (2-3)
Prerequisites: GEOG 300

## GEOG 480 Internship in GIS

Directed work experience using Geographic Information Systems as a major component of the internship project. Minimum requirements are that students complete a term paper, and an oral or poster presentation describing their internship project. Requires at least 150 hours of directed experience.
Prerequisites: GEOG 300 member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## GEOLOGY

## GEOL 107 NX Earth Systems Science

This course explores the solid earth, the oceans and the atmosphere as an integrated set of systems that act together to control climate, topography and other physical aspects of the natural environment. The lab work includes field trips and the study of rocks, minerals, plate tectonics, ocean systems and weather. There is one semester-long independent project in which students apply the scientific method to understand a local environmental issue. (3-3)

## GEOL 113TX Physical Geology

The study of geologic processes and materials within the Earth's interior and on the Earth's surface. Laboratory work on minerals, rocks and maps. Field trips. (3-3)

## GEOL 114 Historical Geology 4

The geologic history and development of life on Earth. Laboratory work on rocks, fossils and maps. Field trips. (3-3)
Prerequisites: GEOL 113 OR GEOL 107

## GEOL 150 N Geology of the Southwest 3

 A survey of the historical, economic and structural geology and geomorphology of the Southern Rockies, Colorado Plateau and the Basin and Range provinces. Emphasis is on classic geologic areas, national parks, natural resource development and problems associated with human activity in this delicate environment. (3-0)
## GEOL 170 N Earth Shock

This course focuses on some of the phenomena that give rise to the unpredictable, violent and calamitous events that cause enormous destruction of life and property and shape our view of natural disasters. Major concepts and topics are explored to give a basic understanding of the causes and effects of these catastrophic phenomena. The impacts of these events on humankind will be addressed, as well as case histories of natural disasters. This course is intended for students of any major and has no prerequisites. (3-0)

## GEOL 180 N Intro to Oceanography

 3 All of Earth's residents, even those of us in landlocked Colorado, are profoundly influenced by the word's oceans. Using a multidisciplinary science approach, this course looks at the physical aspects of oceans, their aquatic life and environmental pressures on the oceans affecting us all. (3-0)GEOL 202 Geologic Methods 2
An introduction to basic field and computer techniques used in geology. (1-3)
Prerequisites: GEOL 113 OR GEOL 107
GEOL 207 Mineralogy 3
The elements of crystallography and the classification and identification of minerals. (2-3)
Prerequisites: CHEM 150AND (GEOL 107 OR GEOL 113)

GEOL 208 Optical Mineralogy
Procedures for identification of minerals in thin section, with emphasis on the optical determination of rock-forming minerals. (2-6)
Prerequisites: GEOL 207
GEOL 210 Petrology
4
The megascopic study of igneous, sedimentary and metamorphic rocks with emphasis on the physical and chemical conditions governing the origins, occurrences and associations of various rock types. (3-3)
Prerequisites: GEOL 207
GEOL 299 Individual Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

GEOL 305 Volcanism of Hawaii 2
Perhaps nowhere on earth can students experience the primal force of earth processes than on the island of Hawaii. This course travels to Hawaii to witness first-hand the formation of new land. Consent of instructor required. (2-0)

GEOL 323 Geomorphology 4
The classification, description, nature, origin and development of present landforms and their relationships to underlying structures. Field trips. (3-3)

## Prerequisites: GEOL 202

GEOL 325 Introduction to Remote Sensing 4
Remote sensing is the study of the earth's land, water, atmospheric and human-made features using imaging devices on both airborne and spaceborne plafforms. The course includes the study of electromagnetic energy and the application of remote sensing in geology, urban geography, meteorology, archaeology, agriculture, hydrology, etc. Lab work involves image interpretation using aerial photographs and computer-based digital image processing. (3-3)
Prerequisites: (GEOL 113 OR GEOL 107) AND MATH 110
GEOL 332 Plate Tectonics
An introduction to crustal plates, their boundaries and their interactions given in terms of classic geological settings throughout the world. (3-0)
Prerequisites: (GEOL 107 OR GEOL 113) AND MATH 121
GEOL 333 Introductory Paleontology 3
The systematic study of fossils, primarily invertebrate fossils, used in the identification and correlation of geologic formations. (2-3) Prerequisites: GEOL 114

## GEOL 337 Structural Geology 4

The geometric, kinematic and dynamic analysis of structural features in the Earth's crust. Techniques in field mapping will be emphasized throughout the course. (3-3)
Prerequisites: MATH 121 AND GEOL 202 AND GEOL 113
GEOL 361 Stratigraphy and Sedimentation 4
Sediments and sedimentary rocks--their characteristics and classification; sedimentary processes, tectonics and sedimentation. Stratigraphy-its history, stratigraphic nomenclature, facies relationships and correlation. (3-3) Prerequisites: GEOL 207 AND GEOL 210

GEOL 364 Igneous/Metamorphic Petrology 4
The origin, occurrence, classification and petrography of igneous and metamorphic rocks. (3-3)
Prerequisites: GEOL 210 AND GEOL 208
GEOL 380 W Technical Writing in Geology 3 Technical writing in the geological sciences will focus on the preparation of geological reports, analysis of data, resumes, proposals and bibliographic documentations. (3-0)
Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND (LIB 150 OR LIB 150 equivalent)

GEOL 401 Natural Resources \& Environmnt 3 A critical study of the need for development of fossil fuel and industrial mineral deposits and the need to preserve regions in their natural state. (3-0)

GEOL 405 Geol Data Analize/Model-Comptr 4 Use of the computer to help transform geologic data into information. Covers computer fundamentals, univariate and multivariate statistics, contouring/mapping algorithms, trend surface analysis, variograms and kriging. Alternates with Geol 420. (2-6)

Prerequisites: GEOL 202
GEOL 420 Introduction To Geochemistry 3 Behavior of the common rock-forming oxides in edogenic and exogenic processes; isotope geochemistry; geochemical exploration. Alternates with Geol 405. (3-0)
Prerequisites: GEOL 207 AND GEOL 210
GEOL 430 Engineering Geology 3
Application of geological sciences to the location, design, construction, operation and maintenance of engineering works.
Alternates with Geol 435. (3-0)
Prerequisites: GEOL 210 AND MATH 121
GEOL 435 Groundwater 4
The qualitative and quantitative aspects of the occurrence of water in the ground. Alternates with Geol 430. (3-3)
Prerequisites: GEOL 361
GEOL 441 Field Geology 6 The fundamental procedures and practices in geologic mapping. Summer term. (0-15)
Prerequisites: GEOL 210 AND GEOL 337
GEOL 442 Field Studies 3
Intensive field work, research, interpretation and background studies on various geological problems related to structural and sedimentary geology, petrology, or geomorphology. (0-7.5)
Prerequisites: GEOL 323 AND GEOL 337 AND GEOL 361

## GEOL 496 Senior Seminar I

Preparatory to Geol 497, students initiate and conduct independent, original research as part of a senior thesis project. Students work with faculty advisors and produce written and oral progress reports. (1-0)
Prerequisites: GEOL 380
GEOL 497 Senior Seminar II Thesis 2
Emphasis on the preparation, writing and public presentation of the senior thesis project. A component of original research is central to the project and must be completed prior to the course. (2-0)
Prerequisites: GEOL 496

GEOL 499 Independent Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## GENERAL STUDIES

GS 100 Freshman Seminar $\quad \mathbf{1 - 2}$
The purpose of this course is to engage students intellectually through rigorous academic study in small class settings and to connect them to faculty, other students, and Fort Lewis College.

## GS $\quad 101$ R Human Heritage I

This two-term course is a study of Western, Chinese and Native American intellectual traditions. The course is designed to help students understand how our cultural traditions influence our ways of looking at the world and how studying cultures other than our own expands and challenges our frame of reference. The course emphasizes intellectual, artistic, political, scientific, religious and economic aspects of the three cultures from selected periods in history. Human Heritage II is a continuation of Human Heritage I. (4-0)

GS $102 \mathrm{~S} \quad$ Human Heritage II
Continuation of GS 101. (4-0)

## GS 105 Exploring the Liberal Arts

This course helps students realize the possibilities of a liberal arts education. The course includes a historical component in which students consider the tradition of the liberal arts college, an introspective component in which students look at their interests, talents, and passions, and a research component in which students investigate the knowledge and abilities developed in selected disciplines. (2-0)

## GS 250 International Studies

This course is required for students who intend to study abroad while at Fort Lewis College and is directed to students who will be independently participating on international exchanges, study abroad programs, or through direct enrollment agreements at foreign institutions. This course may be taken any semester before studying abroad and is designed to help students investigate the numerous destinations and programs available to them, as well as how these programs fit within the Fort Lewis College curriculum and credit transterability guidelines. General information on foreign academic systems and teaching methodologies, passports, visas, financial aid, and health and safety issues are also covered to help students make informed decisions on their program choices. It is during this section that students will evaluate how this experience will or will not fit into their academic plan. Students participating on FLC faculty run programs are not required to take this course, but are welcome. The course is graded Pass/Fail. (1-0)

GS 251 International Studies
This course is required for students the semester directly preceding a study abroad experience. Admission requirements, housing information, travel arrangements and visa procedures change frequently and information is time-sensitive. Students will be required to research their prospective programs, becoming informed on the current political, cultural and bureaucratic specifics of their chosen country and region. While enrolled in this course, students will complete the application process for their selected programs, as well as a pre-departure orientation. The International Programs Office will only process student applications submitted through this class. Students must be enrolled in this course in order for the International Programs Office to work as their advocate and liaison between FLC administrative offices, faculty, staff and international partners. This course is graded Pass/Fail. (1-0)

## Prerequisites: GS 250

GS $310 \quad$ Leadership in Intl Education 2-4 Students have the opportunity to work in the International Programs Office on a variety of projects associated with study abroad, foreign student advising, and website design. Students who have returned from an overseas experience, or who are here as visiting international students, will find the experience especially relevant when pursuing post-graduation job opportunities. Prospective international students will have the opportunity to explore the various aspects of international education and program development. Pass/Fail credit.
Prerequisites: GS 250 AND GS 251
GS $375 \quad$ International Studies-Exchange 3-18 This course provides appropriate credit for studies completed in one of FLC's exchange programs with European Postsecondary schools. It may be repeated once for credit. The exact number of credit hours will be determined by the appropriate Dean after review of the study program completed. (3-18)
Prerequisites: GS 250 AND GS 251
GS 376 USAC 12-18 Students participate in programs offered through the University Studies Abroad Consortium (USAC), of which Fort Lewis College is a member. Students pay tuition and fees to USAC. Instructor permission. Repeatable. Pass/Fail grading.
Prerequisites: GS 250 AND GS 251
GS 377 International Studies-Direct
1-18
Students enroll directly into affiliated international institutions worldwide. Students pay equivalent of Fort Lewis College in-state tuition plus foreign program fee. Pass/Fail grading. Repeatable. Prerequisites: GS 250 AND GS 251

GS 378 International Study Abroad 12-18
Students participate in programs offered through other U.S. institutions or accredited third party providers. Students pay tuition and fees directly to the program provider. Pass/Fail grading. Instructor Permission required. Repeatable.
Prerequisites: GS 250 AND GS 251

This course, which is a capstone course for the Environmental Policy Minor, involves conducting and reporting on an integrative project in weekly meetings involving several faculty members from across the academic disciplines. The project can involve research, assessment or analysis of ongoing programs, policy or proposals for action. This student-constructed project provides a Service Learning opportunity for students. (4-0)
Prerequisites: PSYC 241 OR MATH 201 OR BA 253

## GS 496 Interdisciplinary Senior Sem

An interdisciplinary seminar for graduating seniors, this course provides a capstone experience of broad intellectual inquiry, including a focus on critical reading and thinking, problem solving and the written expression of ideas.

## HISTORY

HIST $\quad 140$ R Survey of African History I
An overview of important historical trends in Africa from ancient times to the 19th century. Themes of technological innovation, social change, state and empire building, the spread of Islam, international commerce and the slave trade receive emphasis. (3-0)

HIST $\quad 141 \mathrm{R} \quad$ Survey of African History II
A study of 19th and 20th century Africa. Special attention is paid to the growing importance of Africa in world affairs and to links with the peoples of African descent in the Americas. (3-0)

## HIST $\quad 160$ R Surv of Western Civilization I

Examines the origins of the institutions and beliefs of western civilization from the earliest civilizations in Mesopotamia and Egypt, tracing the development of these beliefs and institutions through Greece and Rome and their preservation and enhancement in the early medieval period of European history. (3-0)

## HIST 170 R Survey East Asian Civ I

3
This course surveys the history of East Asia (China, Japan and Korea) from ancient times to the mid-nineteenth century. It includes an introduction to Asian philosophies, religions, cultures, politics and societies. Students will gain a general understanding of a region that is the longest surviving human civilization still in existence. (3-0)

## HIST 171 R Survey East Asian Civ II

This course studies modern East Asia from the mid-19th century to the present. It examines the interactions between Western power and influence and Asian nationalism. An important theme is to discover why Japan and China took different paths in modern times. (3-0)

HIST 175 Intro Latin American History 3
A broad survey of key issues essential to an understanding of Latin American history from the 15 th century unto the present: the conquest, ethnic relations, African slavery, Creole nationalism, mercantilism, scholasticism, the Church, the Bourbon reforms, political independence, liberalism, caudillaje, the military, economic dependency, revolutionary movements and inter-American relations. The course is designed as an introduction to Latin America for both those who intend to continue to study the subject and those who want a general knowledge of the history of the region. (3-0)

HIST 181 N US/SW Environmental History
This course explores the environmental history of the U.S. from pre-European contact through today. The course will look at how the land and culture(s) interacted to reorganize and redefine one another, the relationship between environmental and cultural change and how the present is linked to the past. This course is the same as SW 181; credit will be given for only one of these courses. (3-0)

HIST 261 S West Civ II: 1350 to Present
3
A study of the transition of European society from medieval times through the Renaissance to the modern era, noting the profound economic, social and political changes that are expressed in cultural, political and intellectual revolutions, dominance of Europe and America in the world and devastating war on a scale unknown before. (3-0)

## HIST 262 S Toler/Persecuti in Middle Ages 4

Is persecution an ever-present function of organized society, or does it have specific historical catalysts? We will investigate this question using examples from early Europe, looking closely at the development of anti-Semitism as well as changing attitudes in authorities' and "ordinary" people's perceptions of marginal groups--such as gays, heretics and witches--from the rise of Christianity to the Reformation. (4-0)

## HIST 263 R Medieval Life-Mod Film \& Liter 4

 This course covers aspects of the historical European Middle Ages (nobility, knighthood, religion, gender relations, etc.) through modern films and texts, using these resources to pose questions both about the medieval past and our modern need to revisit it in our own media. (4-0)
## HIST 270 R Colonial Latin America 3

 An overview of important historical trends in the Spanish and Portuguese empires in the Americas. The course will focus on the cultural developments that resulted from the contact and integration of the European and American civilizations in the 16 th century, and it will give particular emphasis to those sectors of colonial society that have continued to play a vital role unto the present, thus setting the stage for an examination of the events and conditions that led to the movements for independence in the early 19th century and the formation of the modern nations of the region. Recommended as a foundation course in Latin American history. (3-0)
## HIST 271 S Latin Amer Since Independence 3

An examination of the major cultural and political developments in Latin America from the late 18th century to the present. The course will focus, by necessity, on the larger and more influential countries of the region in an attempt to identify and understand historical patterns common to all areas. Recommended as a foundation course in 19th and 20th century Latin American history. Recommended preparation: Hist 270. (3-0)

HIST 280. Surv of US History, 1600-1877 3 A survey of topics in American history from the founding of the first successful English colony through Reconstruction. The course will explore the European settlement of North America, the Revolution, the creation of the republic, the reforms and cultural renaissance of the 1840's, the Civil War, Reconstruction and the Indian wars of the 1860's and 1870's. (3-0)

HIST 281 R Surv US History, 1877-Present 3
A survey of American History from the age of enterprise to the present. The topics covered include the modernization of the economy, the development of American foreign policy, the evolution of the liberal state, the emergence of modern conservatism, and the cultural and social movements that have shaped contemporary America. (3-0)

HIST 299 Individual Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## HIST 302 Ancient Rome 4

Introduction to ancient Rome from its Etruscan beginnings to the end of the Empire. Topics include republican governmentimperial expansion, daily life, Roman ideas about morality and sexuality, education, and the arts. We will also look at the "lighter" side of Rome, including gladiators, baths and brothels - pastimes that characterized ordinary life in the Eternal City and its provinces. (4-0)

## HIST 308 Rise of Christianity

A study of the historical Jesus of Nazareth, Judaism and the first century Jewish Palestine under Roman domination. The development of Pauline Christianity and the struggle between orthodox and Gnostic Christians culminating in the final orthodox victory around 400 A.D. will be studied in depth. This course is the same as RS 308; credit will be given for only one of these courses. (4-0)

## HIST 311 Colonial \& Revl Amer 1492-1789 4

The course focuses on colonial America from European exploration to the revolutionary era. It will deal with patterns of conflict and cohesion, the creation of a distinctly American people, and the consequences of the American Revolution. (4-0)

HIST 314 Inventing America 1789-1850 4
This course will explore the economic, political, social, religious, cultural and environmental changes that made this such a period of transformation, and how this foundational era gave shape to the rise of modern America. (4-0)

## HIST 315 Irish, Catholic, American 4

This course will use the Irish experience in America to highlight the general course of United States history, and the complex way in which ethnic and religious identity both shaped the American landscape while being in turn shaped by the American environment. The course will consequently explore immigration, politics, religion, education, women, family and urban history, and grapple with important issues like nativism, acculturation, cultural maintenance and identity. (4-0)

HIST 316 Civil War America
The 20 years that changed America, 1848-1868. The causes, campaigns, people and significance of the Civil War era. (4-0)

HIST 318 Emergence/Modn Amer 1893-1939 4 In these colorful and sometimes desperate decades, modern America was forged. The topics covered will include the Populist and Progressive movements, World War I, the cultural tumult of the 1920's, the Great Depression and the New Deal. (4-0)

HIST $322 \quad$ Western American Mining 3 Starting with the Spanish explorations, the course sketches the history of the industry and its impact on the region and people through the early 20th century. This course is the same as SW 482; credit will be given for only one of these courses. (4-0)

## HIST 324 Colorado History 3

This course traces the story of Colorado and its people from the Anasazi to the present day. This course is the same as SW 481; credit will be given for only one of these courses. (3-0)

## HIST 326 Baseball \& the American Dream 4

Examines the impact of baseball on such varied topics as urbanization, literature, business and racial relations. Baseball from the inside and outside. (4-0)

## HIST $328 \quad$ Christianity in US History 4

This course covers the role of Christianity in the United States history from the nation's creation until today. The class will look at how mainline Christian denominations have shaped U.S. history and been in turn shaped by the American experience. Within this broad historical sweep of linking the past to the present, important issues like the separation of church and state and how the nation has gone from Protestant establishment to secularism, as well as how law and politics have come to impact religion, will be examined. This course is the same as RS 328; credit will only be given for one of these courses. (4-0)

## HIST $331 \quad$ Politics of Poverty in U.S. 4

Examines poverty in the United States from the colonial period to the present, focusing on the evolution of social policy, poverty knowledge, and worker and community organizing against poverty. The course will also focus on poverty debates as they relate to structures of racial, economic, and gender inequality and the meaning of democracy and citizenship. (4-0)

## HIST 332 Women in American History 4

An analysis of women's experience from the colonial period to the present. Focusing on the way gender has been defined and redefined, the course considers such issues as work, friendship and marriage, reproduction, the struggles for equality and women's culture. The influence of class, race and ethnicity on women's experiences will also be considered. This course is the same as WS 332; credit will be given for only one of these courses. (4-0)

## HIST 333 America Since 1945

An exploration of the forces that have shaped America since the end of World War II. Topics include the history of the Cold War from the dropping of the atomic bomb and the war in Vietnam to the uncertain interventions of today, the contest between liberals and conservatives over the national identity and the role of government, the Civil Rights movement, the women's movement and environmentalism. (4-0)

## HIST $334 \quad$ United States \& Vietnam 4

No conflict so dramatizes the contradictions of the Cold War or so exposes the dynamics of government policy-making as the United States' involvement in the conflict in Southeast Asia. The course analyzes the history of America's intervention, the struggle of the Vietnamese people for control of their land, and the domestic turmoil that was an essential accompaniment to this war. (4-0)

HIST 335 Work and Workers in the U.S. 4 Examines the history of work and workers in the United States from the colonial period to the present, focusing on the evolution of management techniques, government actions and legislation, and worker organizing and culture. The course will also relate the labor movement to debates over the meaning of democracy, citizenship, and equality. (4-0)

## HIST $337 \quad$ Cult \& Intell Hist of Amer 20C 4

This course explores the shifting currents of American thought and belief from pragmatism to postmodernism. Topics include the Darwinian revolution, the culture and cult of science, literary and political radicalism, the culture and crisis of capitalism, feminist theory, and postmodernism. (4-0)

## HIST 342 West Africa

Basic trends and selected issues in the history of the region bounded by the Sahara and the Atlantic seaboard. Themes include commercial networks and urbanization, the influence of Islam, slavery and the slave trade, European colonization, nationalism and the environmental crisis. (4-0)

## HIST 343 Ancient Nile Valley 4

Survey of developments in Ancient Egypt and Nubia from the origins of agriculture through the Pyramid Age, Egyptian imperialism, Nubia's golden era, the impact of Hellenism and down to the extinction of the last outpost of Pharaohic civilization at Meroe. (4-0)

## HIST $344 \quad$ Northeast Africa

Historical trends and questions affecting the Nile Basin and the Horn, with emphasis on the period since 1800. Topics include the shaping of ideologies (nationalism, socialism, Islamic fundamentalism,) the Ethiopian Revolution, hydropolitics, the roots of famine, social change, the Somali civil war. (4-0)

## HIST 346 South Africa

A survey of the present Republic of South Africa from Iron Age culture through European settlement, the 19th century Mfecane upheaval, the gold rush and apartheid to the election of 1994. (4-0)

HIST 348 Africans in the Americas
The dispersion of Africans to the Americas during the slave trade and the subsequent history of people of African descent in the Western Hemisphere, with particular reference to cultural developments and to the pan-African movement. (4-0)

## HIST 349 Islam in History

4
The emergence of the Islamic religion in 7th century Arabia, the development of Islamic institutions and civilization in Asia and Africa, and the significance of Islamic cultures in the history of sciences, arts, literature, technology and historiography. (4-0)

## HIST 351 US-East Asian Relations

This course examines the ever-changing relationship between the United States and East Asia. It analyzes American motivations and policies toward East Asia and explains the purposes and actions taken by East Asian nations in their efforts to deal with the United States. (4-0)

HIST 352 Modern China 4
This course concentrates on 20th century China. It explores the social issues that led to the rise of Chinese Nationalism and Communism. It analyzes the current changes that are making China a world economic power. (4-0)

HIST 354 WomenFamilyGender/ChineseHist 4 In this course we explore the Chinese family structure and gender roles, in theory and practice, over the past millennium. Readings range from memoirs and biographies, to scholarly essays, to fictional writings by men and women. Paintings, crafts and films will also provide important sources as we examine the visual images of women and men throughout this period. (4-0)

## HIST 355 East Asian Popular Religion

This course examines East Asian popular religious practices in their historical, social and economic contexts. We begin with theoretical works and introductory lectures on ritual, sacred space, pilgrimage, and various East Asian philosophical and religious traditions, including Confucianism, Daoism, Buddhism and Shinto. We will then focus on specific East Asian pilgrimages, sacred sites, rituals and myths, progressing from ancient to modern periods. This course is the same as RS 355; credit will be given for only one of these courses. (4-0)

HIST 356 . History of Japan 4

This class examines institutional and cultural developments in Japan from the development of a centralized state to the present. We will particularly focus on the Tokugawa period, Japans' reaction to Western encroachment, its meteoric rise as an imperial power, the post-WWII economic miracle and Japan's role in the contemporary world. In addition to political changes, we will also examine changing social and gender roles, religious developments and the importance of arts and crafts. (4-0)

## HIST 359 Medieval Europe

An examination of culture, society, politics, religion and gender in the historical development of medieval Europe using both primary and secondary written source material with reference to the art, music and philosophy of the period as well. (4-0)

## HIST 360 Renaissance Europe

Using the history of Europe from 1400-1600 as a framework, students of Renaissance Europe will consider the further development of western society through the examination of primary written source material with reference to the art, music and philosophy of the period as well. (4-0)

## HIST $361 \quad$ Czarist Russia

A study of the Russian past before the revolutions of 1917 in order to understand the events, personalities, ideas and key challenges of ruling the sprawling Russian Empire. Topics include Kievan Rus, the legacy of the Mongol invasion, and the rise and fall of the Romanov dynasty. (4-0)

## HIST 362 Rise \& Fall of Soviet Union 4

A study of the Soviet Union seeking an understanding of why and how it arose, and ultimately collapsed, the nature of the state and society of the Soviet Union, and its relationship with the rest of the world. (4-0)

## HIST 364 Germany: Roman Times to 19194

A study of the German past focusing particularly on the efforts of Germans and others to define Germany: who are Germans, where is Germany and what is Germany politically and culturally. (4-0)

HIST 365 Germany: 1919 to Present 4
Study of German history seeking an appreciation of German achievements and an understanding of the disaster of German politics in the first half of the 20th century. (4-0)

HIST 366 Hitler and the Holocaust 3
A study of the racial ideology of National Socialism and how it became state policy in Germany, 1933-45, and resulted in the Holocaust. (3-0)

## HIST 368 Medieval Women

 4This course explores the frustrations as well as the power women had in Western Europe between the 6th and 14th centuries. (4-0)

## HIST 371 History of Central America

A close examination of important historical trends in the areas known today as Belize, Guatemala, El Salvador, Nicaragua, Honduras and Costa Rica since the late 15 th century. Some time will be spent on the pre-conquest period, but most of the course will focus on those aspects of colonial society that have remained vital unto the present, the aftermath of political independence from Spain, the prominent role of British and North American interests in the region, the unique economic developments within each country and the revolutionary turmoil of the late 20th century. (4-0)

## HIST $372 \quad$ U S - Latin American Relations

An overview and analysis of the historical developments of political and economic relationships between the United States and Latin America since the late 18th century. The course focuses on United States policy toward the rest of the western hemisphere and the reactions of various countries and regions of those policies. Particular emphasis is given to the Latin American movements for independence, United States-British rivalry in the Caribbean, the Mexican War, United States economic expansion in the late 19th century, the Spanish-American War, the Panama Canal, United States involvement in the Mexican and Cuban revolutions and the effects of the Cold War on relationships among the countries of the Americas. (4-0)

## HIST 373 History of Mexico

An analysis of important trends in the history of Mexico since the late 15 th century. Although some time is spent on the pre-conquest era, the bulk of the class focuses on those aspects of colonial society that have remained significant into the present, the peculiar development of Mexican Independence, the disastrous clash between Liberals and Conservatives in the 19th century, the Mexican revolution and the turbulent years after the Second World War. (4-0)

## HIST 382 Reformatn Euro \& Wars of Relig 4

 An examination of culture, society, politics, religion and gender in the historical development of 16 th and 17th century Europe using primary written source material with reference to the art, music and philosophy of the period as well. (4-0)
## HIST 396 W Philosophy and Methods

An introduction to the study of history, this course serves as the Writing Course for the History Department. The course explores the ways historians, past and present, think about and practice the craft of writing history. It introduces students to new fields of historical research and multi- disciplinary approaches to the past. Special emphasis is placed on developing skills necessary for becoming successful writers in the field. This course is required for all majors and should be taken in the second term of the sophomore year or during the junior year. (4-0)

HIST 440 Adv Studies in African History 3 A consideration of fundamental themes in African history through the study of primary and secondary written sources, oral accounts and other types of evidence, and the application of different historiographical approaches. (3-0)

## HIST 446 Ancient Israel and Judah

 3This seminar covers ancient Israel from its beginnings around 1250 B.C. to the execution of Jesus of Nazareth around 35 A.D. Major topics include the origins of Israel and Judah, biblical composition and authors, relations with Egypt and Assyria, the Dead Sea Scrolls and Jesus in Jewish historical context. An historiographical approach is emphasized. This course is the same as RS 446 ; credit will be given for only one of these courses. (3-0)

## HIST 450 Adv Studies in East Asian Hist 3

An examination of selected historical topics and issues pertaining to the East Asian world. A senior-level research paper will be required. Course content will vary. Course may be repeated for credit provided the subject matter is different on each occasion. (3-0)

## HIST 465 Adv Studies in European Hist

 3A research seminar that examines topics in European history. The seminar will explore historiographical issues and research strategies. Students will write a research paper. Course content will vary. Topics will include, but are not restricted to, the Reformation and Modern Europe. Course may be repeated for credit provided the subject matter is different on each occasion. (3-0)

## HIST 475 Adv Studies in Latin Amer Hist 3

A research seminar that examines selected topics in Latin American history and may include "Spanish Frontier in North America" or "Colonial New Mexico." The seminar will explore historiographical issues and research strategies. Students will write a research paper. Course content will vary. Course may be repeated for credit provided the subject matter is different on each occasion. (3-0)

## HIST 485 Adv Studies in U.S. History 3

A research seminar that examines selected topics in United States history. The seminar will explore historiographical issues and research strategies. Students will write a research paper. Course content will vary. Course may be repeated for credit provided the subject matter is different on each occasion. (3-0)

## HIST 496 Research Senior Seminar

A capstone course in the preparation of a senior history research paper with a public presentation and defense. (4-0)
Prerequisites: HIST 396
HIST 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## HONORS

HON 220 Honors Forum 1

The purpose of this course is to facilitate critical evaluation and discussion of selected works having broad intellectual importance and accessibility to students of varied academic interests and backgrounds. Course is repeatable for credit for freshman- and sophomore-level students. (1-0)

## HON 420 Honors Forum

This course continues the series of Honors Forums required for John F. Reed Honors students. Course is repeatable for credit for junior- and senior-level students. (1-0)

## HON 499 Honors Thesis 1-2

The Honors Thesis is the result of an independent study project undertaken during the senior year. The topic of the thesis must draw significantly on at least two academic disciplines. The student should choose a topic for the thesis in consultation with a faculty advisor, a reader from the second discipline, and the Honors Coordinator. At the end of the first term, the student must submit evidence of substantial work accomplished. During the second term, the student will complete the thesis and make a public presentation of the results. Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## LIBRARY RESEARCH METHODS

LIB 150 Academic Library Research 1 Students in this course locate, evaluate and cite information sources approprate for supporting college level research assignments, papers and projects. Material covered emphasizes developing general, transferable research concepts and skills and applying effective and ethical research strategies. Students learn when and how to cite sources of information according to ethical academic research practice. (1-0)

## MATHEMATICS

MATH 105 Q College Mathematics
This course is intended for students who do not intend to pursue upper-level mathematics courses. Survey of statistics and probability, critical examination of quantitative data in the media, consumer applications, environmental mathematics, and other "real world" applications. (3-0)
Prerequisites: Computed Math Placement Score MA1 10 OR TRS 92

MATH 110 Q College Algebra
This course covers the topics in algebra necessary for students who plan to enroll in Math 210Q Survey of Calculus or Math 121Q Precalculus. The use of technology to aid in problem solving is an integral part of the course. Specific topics covered are simplifications of algebraic expressions, complex numbers, solutions of equations (including systems of linear equations) and inequalities, and functions, including polynomial, root, rational, exponential, and logarithmic. (4-0)
Prerequisites: Computed Math Placement Score MA1 10 ORTRS 92

MATH $121 Q$ Pre-Calculus
This course covers the topics in algebra and trigonometry necessary for students who plan on enrolling in Math 221Q Calculus I. Technological methods, in addition to symbolic methods, are essential in solving problems. The course will include an in-depth analysis of the topics covered in Math 110Q, with additional emphasis on symbolic methods. In addition, other topics include trigonometric functions, vectors, polar coordinates, parametric equations, and the conic sections. The concept of function, with its multiple representations, will be emphasized. (4-0)
Prerequisites: MATH 110 OR Computed Math Placement Score MA121

## MATH 201 Q Elementary Statistics

An introduction to basic ideas in statistics including descriptive statistics, measure of central tendency and dispersion, probability, sampling distributions, estimation, hypothesis testing, regression and correlation, and statistical software application. This course is equivalent to BA 253Q and Psyc 241Q. Credit will be given for only one of these courses. ( $4-0$ )
Prerequisites: MATH 110 OR Computed Math Placement Score MA1 21 OR MATH 121 OR MATH 221 OR MATH 222 OR MATH 210

## MATH 210Q Survey of Calculus

This course is intended as a survey of calculus for students who do not intend to continue their study of calculus. Topics include limits, differential and integral calculus of one variable and an introduction to calculus of two variables. Math 210 does not satisfy the prerequisite for Math 221 and Math 222. Students who require a more rigorous treatment of calculus should take Math 221 and Math 222. (4-0)
Prerequisites: MATH 110OR MATH 121 OR Computed Math Placement Score MA121

## MATH 215 Q Math for Elem School Teacher I

This course is designed primarily for the elementary school teacher. It includes a study of sets, set operations, construction of numeration systems, whole and integer and rational number arithmetic, ratio and proportion, decimals, percent, selected topics in geometry, the metric system, and an introduction to the real number system. (2-2)
Prerequisites: (TRS 92 OR Computed Math Placement Score MA1 10) AND ED 200

MATH 221 Q Calculus I 4
Limits, continuity, derivatives and integrals of functions of one variable including polynomial, root, rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Applications of calculus are included. (4-0)
Prerequisites: MATH 121 OR Computed Math Placement Score MA221

## MATH 222 Q Calculus II 4

A continuation of Math 221Q. Techniques and applications of integration, introduction to differential equations and applications, sequences and series, and applications using polar and parametric coordinate systems. (4-0)
Prerequisites: MATH 221 OR Computed Math Placement Score MA222

MATH 223 Q Calculus III

MATH 299 Individual Study 1-6
Individual research if conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

MATH 301 W Foundations for Advanced Math 4
A study of mathematical systems and the forms and techniques of proofs. Included are logic, set theory, and an introduction to elementary number theory. These are studied in some depth and with careful attention to forms of proofs. The writing of these proofs in a standard mathematical form is emphasized. (4-0) Prerequisites: MATH 221

MATH 310 Q Math for Secondary Teachers 3 This course is for students who are planning to be secondary or middle school teachers. It will include concept from discrete math, geometry, algebra, and data collection and analysis. It will include uses of technology, in particular the graphing calculator and soffware used in geometric investigations. Note: Students enrolling in Math 310 must have placement into the teacher education program. (3-0)

## MATH 311 Q Matrices \& Linear Algebra

A study of the properties and applications of matrices, including systems of equations, determinants, similarity, and eigenvalues. An introduction to the theory of vector spaces and linear transformations. (4-0)
Prerequisites: MATH 221
MATH 316 Q Topics in Number Theory
Some of the topics to be presented in this course are: modular arithmetic, finite fields, basic prime number theorems, congruences, and combinations. (3-0)
Prerequisites: MATH 221
MATH 318 Q Math for Elem Sch Teacher II
A continuation of Math 215Q. Topics will include the use of calculators and computers, discrete math, data analysis, and an introduction to algebra. (2-2)

## Prerequisites: MATH 215

## MATH 320 Q Numerical Analysis

An introductory course in developing and using numerical techniques for solving problems in mathematics, the physical sciences, engineering, and in other quantitative fields. Topics include approximation of functions by computable functions, zeros of functions, linear algebra and matrix calculations, and difference equations. The use of the computer will be included. (3-0)
Prerequisites: MATH 222OR CSIS 110
MATH 325 History of Mathematics 3
The development of selected mathematical concepts will be traced from the Greek era. The course will focus on mathematical creation as a human endeavor done within a cultural context. (3-0)
Prerequisites: MATH 121 OR MATH 221 OR MATH 222 OR MATH 223

MATH 327 Q Differential Equations
An introduction to ordinary differential equations. Topics will include methods of solving first-order nonlinear equations, basic theory and methods of solving nth-order linear equations, including infinite series methods. Further topics will include an introduction to systems of linear ordinary differential equations and the Laplace transform. Applications will be emphasized. (4-0)
Prerequisites: MATH 222
MATH 342 Q Modern College Geometry
A course in college geometry that includes topics in Euclidean and non-Euclidean geometries. (3-0)
Prerequisites: MATH 301

## MATH 424 Q Advanced Calculus

Topics include structure of the real number system and Euclidean spaces, general theory of limits, continuity, derivatives, Riemann integrals, series and sequences, coordinate systems transformations, physical fields, and Divergence and Stokes theorem. (4-0)
Prerequisites: MATH 223AND MATH 301

## MATH 430 Q Complex Variables

This course will cover topics in complex numbers, analytic functions, elementary functions and associated mappings, integrals, series, residues and poles, and conformal mappings. (3-0)
Prerequisites: MATH 223

## MATH 487 Q Algebraic Structures

A course in abstract algebra including topics from the theories of groups, rings, and fields. Applications will be discussed. (4-0)

## MATH 496 Mathematics Senior Seminar 3

Advanced study and research in selected topics that will include written and oral presentations of a project involving library research. Activities relate to various mathematical careers, and students participate in seminars given by visiting mathematics instructors. Consent of instructor is required. (3-0)

MATH 499
Independent Study
1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## MODERN LANGUAGE

ML 100 Fund of Navajo Language 3 A course in the basic fundamentals of the Navajo language on the oral-aural approach. The instructor is a native speaker, and much use is made of tapes, etc. This course is the same as SW 100; credit will be given for only one of these courses. (3-0)

ML 101 Navajo Language II 3
Continuation of Navajo I. Whereas Navajo I emphasized speaking, this course will center on reading and writing the Navajo language. This course is the same as SW 101; credit will be given for only one of these courses. (3-0)
Prerequisites: ML 100 OR SW 100
ML 109 Introductory Latin I

ML 110 Introductory Latin II
Continuation of ML 109. (4-0)
Prerequisites: ML 109
ML 115 Elementary Spanish I 4 A course in grammar, prose composition, reading, and conversation. Beginning Spanish is for students with no previous exposure to the Spanish language. Development of all four language skills, especially listening and speaking. (4-0)

ML 116 Elementary Spanish II 4
Continuation of ML 115. (4-0)
Prerequisites: ML 115 OR Spanish Language Placement Score S116

ML $\quad 118 \mathrm{R} \quad$ Spanish of the Southwest
This course will teach Spanish by studying the Spanish language and culture of the Southwest. It is especially appropriate for students who have lived in a Spanish-speaking or bilingual environment. Students will be prepared in reading, prose composition, speaking, and grammar. (4-0)
Prerequisites: ML 115

## ML 123 Elementary German I

A course in grammar, pronunciation, reading, and conversation. (4-0)

## ML 124 Elementary German II

Continuation of ML 123. (4-0)
Prerequisites: ML 123 OR German Language Placement Score G124

ML 128 Conversation I-German 1
Instruction in everyday German conversation. Optional. (1-0)
Prerequisites: ML 123
ML 129 Conversation II - German
Continuation of ML 128. Optional. (1-0)
Prerequisites: ML 124
ML $130 \quad$ Beginning Mexican Readings
4
This course is offered as part of the Human Service program in Mexico, which is offered through the Sociology Department. Students read, discuss, and write about Mexican literature and poetry as well as newspaper and magazine articles while they live and do human service work in Mexico. Students enroll at the appropriate level. (4-0)

ML 135 Introductory Japanese I
4
An introduction to the Japanese language. Development of all four language skills. A course in pronunciation, listening, prose composition, reading, and writing in Hiragana, Katakana, and Kanji. (4-0)

ML 136 Introductory Japanese II 4
Continuation of ML 135 with emphasis on grammar, reading, writing, and speaking. (4-0)
Prerequisites: ML 135
ML 147 Elementary French I 4 A course in grammar, prose composition, reading and conversation. (4-0)

ML $148 \quad$ Elementary French II
Further study of French with emphasis on reading, composition,
U
and conversation. (4-0)
Prerequisites: ML 147 OR French Language Placement Score F148

ML 215 Intermediate Spanish I
A course in second-year Spanish with emphasis on grammar review, reading, and conversation. (4-0)
Prerequisites: ML 116 OR Spanish Language Placement Score S215

ML 216 R Intermediate Spanish II 4 Continuation of ML 215, with greater emphasis on reading and writing. (4-0)
Prerequisites: ML 215 OR Spanish Language Placement Score S216

ML 219 Interm Spanish Conversation 4
Students will engage in practical every day situations, as well as discussions on current issues and events through interaction. (4-0) Prerequisites: ML 215 OR ML 216

ML 223 Intermediate German I 3
Second-year German with emphasis on reading, composition, and conversation. (3-0)
Prerequisites: ML 124 OR German Language Placement Score G223

ML 224 R Intermediate German II 3 Study of German as a multicultural society. Continuation of ML 223. (3-0)

Prerequisites: ML 223 OR German Language Placement Score G224

ML 235 Intermediate Japanese I 4
Second-year Japanese with emphasis on grammar, composition, reading, listening, speaking, and writing in Hiragana, Katakana, and Kanji. (4-0)
Prerequisites: ML 136
ML $236 \quad$ Intermediate Japanese II 4
Continuation of ML 235 with greater emphasis on grammar, composition, reading, listening, and speaking. (4-0)
Prerequisites: ML 235
ML $\quad 247$ R Intermediate French I
4
A course in second-year French with emphasis on grammar review, reading, writing, and conversation. (4-0)
Prerequisites: ML 148 OR French Language Placement Score F247

ML 248 Intermediate French II
Continuation of ML 247. (4-0)
Prerequisites: ML 247 OR French Language Placement Score F248

ML 299 Individual Study
1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chair and dean. 50 contact hours are the equivalent of one credit hour.
(3-0)
Prerequisites: ML 248
ML 303 French Conversation 3
Emphasis on speaking everyday French to increase students' abilities in maintaining ordinary conversations concerning current events and French culture. (3-0)
Prerequisites: ML 248
ML $305 \quad$ Survey of French Literature 3
An historical and literary survey of the principal French works of literature from the Middle Ages to the 20th century. (3-0)
Prerequisites: ML 248
ML 308 Topics in French Literature 3
Topics will vary; the course may be repeated for credit as long as a different topic is presented. (3-0)
Prerequisites: ML 248
ML 318 Advanced Spanish of Southwest 4
This course will teach Spanish by studying the Spanish language and the culture of the Southwest. It is especially appropriate for students who have lived in a Spanish- speaking or bilingual environment. Students will be prepared in reading, prose composition, speaking and grammer. Students at this level will do extensive reading and writing of literature of the Southwest in Spanish. They will also do oral presentations in Spanish on selected class themes. (4-0)
Prerequisites: ML 216

## ML 319 Adv Spanish Convers \& Comp I 4

A course designed to develop a higher level of proficiency in spoken Spanish based on critical analysis of literary works, cultural aspects, and current issues. May be repeated for credit. (4-0)

## Prerequisites: ML 216

## ML 320 W Adv Spanish Composition <br> 4

A course designed to improve the student's writing skills in Spanish through the use of original essays, description, composition, letters, and the organization and delivery of research papers. This cannot be taken concurrently with ML 496. The course must be taken at Fort Lewis College to count toward the degree in Spanish. No exceptions. (4-0)
Prerequisites: ML 216 AND ML 319

## ML 330 Advanced Mexican Readings 4

This course is offered as part of the human service program in Mexico, which is offered through the Sociology Department. Students read, discuss, and write about Mexican literature and poetry as well as newspaper and magazine articles while they live and do human service work in Mexico. Students enroll at the appropriate level. (4-0)

## ML 331 Chicano Literature 4

A course on the essays, novels, poetry, and theater of Chicanos in the Southwest. Literature is included from both rural and urban areas with an emphasis on contemporary literature. (4-0) Prerequisites: ML 216

ML 332 German Culture
This is an inquiry course exploring the question of German national identity through an examination of German culture. The course includes a historical overview of important trends in German culture and politics, but concentrates on present-day unified Germany. (3-0)

ML 333 Adv German Comp and Conversatn 3
Emphasis on advanced reading and conversation as well as on grammar and composition. (3-0)
Prerequisites: ML 224
ML 334 Topics in German Literature 3
Topics will vary; may be repeated for credit as long as a different topic is presented. (3-0)
Prerequisites: ML 224
ML 335 Seminar in German 3
Advanced reading and research in selected areas of German studies. (3-0)
Prerequisites: ML 224

## ML 336 Survey of Spanish Lit 4

A survey of Spanish Peninsular literature from the 10th century to the present. (4-0)
Prerequisites: ML 319 AND ML 320

## ML 337 Survey Spanish American Lit

A course in the literature of Spanish America from the colonial period through Romanticism, Realism, Naturalism, Modernism, and 20th century literature with emphasis on the Mexican Revolution and the contemporary Spanish American writers. (4-0) Prerequisites: ML 319 AND ML 320

ML 345 Hispanic Culture \& Civ I 4
An integrated, interdisciplinary study in Spanish of the cultures of Spain and the Spanish-speaking Americas as reflected in their histories, languages, philosophies, religions, and arts. This course gives students an appreciation of the ways of life and attitudes of contemporary Hispanic people. (4-0)
Prerequisites: ML 319 AND ML 320
ML 346 Hisp Culture \& Civilization II 4
An in-depth study of a specific topic related to the cultures of Spain and the Spanish-speaking Americas as reflected in their histories, languages, philosophies, religions and arts. This course gives students an appreciation of the ways of life and attitudes of contemporary Hispanic American people. (4-0)
Prerequisites: ML 319 AND ML 320
ML 350 Spanish for the Professions 4
The goals of this course are to familiarize students with the forms and vocabulary of Spanish for the professions such as Business Spanish, Spanish for Education, Spanish for the Sciences, Spanish for the Social Sciences, or other professions. Repeatable for credit as long as a different topic is presented. (4-0)
Prerequisites: ML 215 AND ML 216
ML 405 Seminar in French 3
Advanced reading and research in selected areas of French Studies. Students may repeat the course for credit, provided the subject is different on each occasion.
Prerequisites: ML 247 OR ML 248

ML 496 Senior Seminar in Spanish
Advanced study and research in selected topics. (4-0)
Prerequisites: ML 320 AND ML 336 AND ML 337
ML 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## MOUNTAIN STUDIES

MS $350 \quad$ Mountain Studies Internship $\quad$ 1-4
This course provides a framework for service learning for students with governments, non-governmental organizations (NGOs), or businesses that deal with mountain ecosystems. Intern interests and organizational needs will be matched for mutual benefit. Course credit based on: 30 hours of work for each credit hour earned, completion of a learning contract, and completion of a final project. Instructor permission is required to register for this course.

## MS $496 \quad$ Mountain Studies Colloquium 2 or 4

An interdisciplinary course, which offers a capstone experience for the Mountain Studies Minor, it is intended to engage students in an integrating project that synthesizes what they have learned in Mountain Studies coursework, field, internship, and service learning contexts. The project is student-constructed in consultation with several Mountain Studies faculty members and can be theoretical, applied or service oriented. Instructor permission is required to register for this course.

## MUSIC

MU $\quad 101$ R The Musical Experience
A course in music appreciation designed for the general student. The intent of the course is to prepare students for informed and active listening experiences. (3-0)

MU 102 R Blues/Jazz/Rock
This course is designed to be an introduction to popular music, which will lead the student toward intelligent, meaningful listening. It is assumed that listening to and understanding the content and structure of music as an art form will be beneficial in the development of a better understanding of music as part of human culture heritage. The format of the course is to survey varied examples of popular music while investigating the circumstances surrounding the performers and their composers. The course is intended to develop those aural skills that can provide a basis for critical and intelligent listening. (3-0)

## MU 103A Class Instr - Piano 1

This class is designed to provide the student with the basic elements and techniques of performance in piano. MU 103A (Piano) is specifically designed for the music major lacking in keyboard skills. Emphases include fluent reading of simple piano music and elementary technique. Successful completion with a grade of A or B satisfies Part II of the Piano Proficiency Requirement. Piano class instruction includes group activities and individual instruction. Consent of the instructor is required. (0-2)

MU 103B Class Instr - Voice
This class is designed to provide the student with the basic elements and techniques of performance in voice. (0-2)

MU 103C Class Instr - Brass 1
This class is designed to provide the student with the basic elements and techniques of performance in brass. (0-2)

## MU 103D Class Instr - Woodwinds

This class is designed to provide the student with the basic elements and techniques of performance in woodwinds. (0-2)

## MU 103E Class Instr - Percussion

This class is designed to provide the student with the basic elements and techniques of performance in percussion. (0-2)

MU 103F Class Instr - Strings 1
This class is designed to provide the student with the basic elements and techniques of performance in strings. (0-2)

## MU 104 Piano Class Instruction II

Continuation of MU 103 Piano and mandatory for Music majors who desire to complete the Piano Proficiency Requirement in this manner. Emphases include performance of easier piano music, scales, triads, sevenths, and harmonization of simple melodies. Successful completion with a grade A or B satisfies part II of the Piano Proficiency Requirement. Piano class instruction includes group activities and individual instruction. Consent of the instructor is required. (0-2)
Prerequisites: MU 103A
MU 105 Concert Choir 1
Thorough study and performance each trimester of larger choral compositions. Open to all students. Course is repeatable. (0-3)

MU 106 Chamber Choir 1 An ensemble specializing in the performance of small scale choral works. Enrollment is by audition only. Course is repeatable for credit. Consent of the instructor and enrollment in concert choir required. (0-2)

## MU 107 Special Choirs

Requests for developing special choirs will be considered, upon written request to the Department of Music, as adjuncts to any on-campus organization. Under competent, organized supervision these choirs may meet and receive one credit during any one term. Open to all students. Course is repeatable. (0-2)

MU $108 \quad$ Intro to Guitar Instruction 2
This course is designed to give every student, from absolute beginner to more experienced, a broad and thorough introduction to guitar playing. While emphasizing the reading of a variety of notation types, we explore proper playing technique, basic chord (including major, minor, and pentatonic) and some arranging techniques. We will work to read, practice, arrange and play/ perform music. (1-3)

MU 109, 209, 309, 409 Applied Music
Individual instruction scheduled, at the discretion of the instructor, either privately or in a small class. The course is open to all students. Students may register for two credit hours only with approval of the music faculty. Two credit hours are required for a Performance Concentration. Students who register for two credit hours will receive longer lessons in proportion to the amount of time spent in preparation. Placement audition, enrollment in Band, Concert Choir, or Orchestra (the large ensemble appropriate to the applied area) and consent of instructor required.

MU 110 Band 1 Designed to provide every student who plays a musical instrument the opportunity to pursue his or her musical interests. A variety of musical literature will be provided as well as the opportunity to perform in concert both on campus and on tour. Open to all students. Course is repeatable. (0-4)

## MU 111 Brass Ensemble

A survey, through performance, of the literature written for this medium. Literature from the baroque period through the contemporary period will be studied and performed. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 112 Woodwind Ensemble 1 A survey, through performance, of the literature composed for woodwind instruments from the Renaissance through avant-garde schools of composition. May include the use of ancient instruments where applicable. Course is repeatable. Consent of instructor and enrolment in band required. (0-3)

## MU 113 String Ensemble 1

A survey, through performance, of the literature written for the medium. Literature from the baroque period through the contemporary period will be studied and performed. Course is repeatable. Consent of instructor and enrollment in symphony orchestra required. (0-3)

## MU 116 Accompanying

A course designed to provide ensemble and accompanying experience for piano students. Consent of piano instructor required.
(0-3)
MU 117 Symphony Orchestra 1
Offered in conjunction with the San Juan Symphony Orchestra at no extra fee. This course provides an opportunity for the study and performance of major orchestral works. Two hours of rehearsal are held on Tuesday evenings and the third is arranged at the convenience of the instructor and students. Open to all string students; wind and percussion students by audition only. Course is repeatable. Consent of instructor. ( $0-3$ )

MU 118 Percussion Ensemble 1 A survey, through performance, of the literature written for this medium. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 119A Jazz Ensemble - Big Band 1 A survey, through performance, of the literature written for this medium. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 119B Jazz Ensemble - Combo
A survey, through performance, of the literature written for this medium. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 120 S Fundamentals of Music
Open to all students. A course in musical literacy intended to help laymen acquire the basic skills necessary to participate fully in musical activities. No prior musical background is assumed. (3-0)

## MU 123 Introd to Jazz Improvisation

The introduction to jazz improvisation course will focus on scale, melody, and chord studies and how they relate to a number of jazz standards. Implications of chord symbols and appropriate scale forms are developed. Ability to read music and/or chord symbols is required. Repeatable once for credit.

## MU 128 Theory and Musicianship I

A course in basic musicianship designed to teach aural, analytical, and compositional skills. Daily sight-singing and ear-training activities will supplement study of scales, key, modes, triads, melody, tonality, cadences, functional harmony, and basic four-part writing including figured bass. Theory Placement Examination is required for admission. Open to music majors and minors only. Others must have consent of instructor. (5-0)

## MU 129 Theory and Musicianship II

Continuation of Theory and Musicianship I, expanded to include nonharmonic tones, dominant sevenths, secondary dominants, and modulation. Formal analysis will include binary, ternary, rondo, theme and variations, chaconne/passacaglia, fugue, and sonata-allegro. Open to music majors and minors only. Others must have consent of instructor. (5-0)
Prerequisites: MU 128

## MU $203 \quad$ Piano Class Instruction III 1

Continuation of MU 104 and mandatory for music majors who desire to complete the Piano Proficiency Requirement in this manner. Emphases include expanded performance of piano literature and elementary sight reading. Successful completion with a grade A or B satisfies Part III of the Piano Proficiency Requirement. Piano class instruction includes group activities and individual instruction. (0-3)
Prerequisites: MU 104

## MU 204 Piano Class Instruction IV 1

Continuation of MU 203 and mandatory for music majors who desire to complete the Piano Proficiency Requirement in this manner. Students will be expected to perform compositions at the level of Clementi: Sonata, Op. 36 \#1; Bach: Two Part Inventions, all scales, arpeggios, and cadences. Successful completion with at grade A or B satisfies Part IV of the Piano Proficiency Requirement. Piano class instruction includes group activities and individual instruction. (0-3)
Prerequisites: MU 203

## MU 206 Vocal Diction 1

This course is designed for vocal music students to learn IPA (international phonetic alphabet) and use it to improve English, Italian, French, and German pronunciations. Students must be enrolled concurrently in MU 109B, 209B, 309B, or 409B. (0-2)

MU 228 Theory and Musicianship III 5
Extensive study of chromatically altered chords typical of the 19th century. Harmonic analysis, formal analysis, ear training, and compositions incorporating altered chords are primary emphases. Open to music majors and minors only. Others must have consent of instructor. (5-0)
Prerequisites: MU 129
MU 229 Theory and Musicianship IV 5 Exploration of 20th century theoretical and compositional techniques. Examples will include derivatives from the end of the 19th century, nationalist influences, and serial and aleatoric music, extended techniques, and electronic music. Open to music majors and minors only. Other must have consent of instructor. (5-0)
Prerequisites: MU 228
MU 299 Individual Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## MU 300 Men's Choir

A survey, through performance, of the literature for male vocal ensemble. Course is repeatable. Consent of instructor and enrollment in Concert Choir required. (0-2)

## MU 305 Concert Choir

Thorough study and performance of larger choral compositions. Students are expected to take responsible roles in the ensemble such as: soloists, section leaders, conductor/managers, or accompanists. Course is repeatable. Open to all students. (0-3)

## MU 306 Chamber Choir

An ensemble specializing in the performance of small scale choral works. Students are expected to take responsible roles in the ensemble such as: soloist, section leaders, conductor/managers, or accompanists. Course is repeatable. By audition only. Consent of instructor and enrollment in Concert Choir required. (0-3)

## MU 310 Band

Designed to provide every student who plays an instrument the opportunity to pursue his/her musical interests. A variety of musical literature will be provided as well as the opportunity to perform in concert both on campus and on tour. Students are expected to take responsible roles in the ensemble such as soloist, section leaders, or conductor/managers. Course is repeatable. (0-4)

MU 311 Brass Ensemble 1 A survey, through performance, of the literature written for this medium. Literature from the baroque period through the contemporary period will be studied and performed. Students are expected to take responsible roles in the ensemble such as: soloists, section leaders or conductors/managers. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 312 Woodwind Ensemble
A survey, through performance, of the literature composed for woodwind instruments from the Renaissance through avant-garde schools of composition. May include the use of ancient instruments where applicable. Students are expected to take responsible roles in the ensemble such as: soloists, section leaders, or conductors/ managers. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 313 String Ensemble 1 A survey, through performance, of the literature written for this medium. Literature from the baroque period through the contemporary period will be studied and performed. Students are expected to take responsible roles in the ensemble such as soloists, section leaders, or conductors/managers. Course is repeatable. Consent of instructor and enrollment in symphony orchestra required. (0-3)

## MU 314 Meth \& Prin Teach Vocal Music

 3A course designed to provide music majors with contemporary teaching skills and techniques for secondary vocal/choral music, including vocal pedagogy, classroom management, rehearsal preparation, and audition and placement procedures. This course includes practicum experience. (3-0)

MU 315 Meth Prin Teach Instrmtl Music 3
A course designed to provide Music majors with contemporary teaching skills and techniques in the teaching of instrumental music in the public schools, including program development, classroom management, rehearsal preparation and use of audio/ visual materials. This course includes practicum experience. (3-0)

## MU 316 Music in the Elementary School

3
A course designed for music teachers to provide practical skills in pedagogy, lesson planning, folk music, dance/movement, musical literacy, and classroom management. Attention will be given to the philosophies of Kodaly, Orff, and Dalcroze within a laboratory setting often involving elementary-age children from local schools. Open to non-majors by instructor permission. This course includes practicum experience. (3-0)

## MU 317 Symphony Orchestra 1

Offered in conjunction with the San Juan Symphony at no extra fee. This course provides an opportunity for the study and performance of major orchestral works. Two hours of rehearsal are held on Tuesday evenings and the third is arranged at the convenience of the instructor and students. All string students are invited; wind and percussion students by audition only. Students are expected to take responsible roles in the ensemble such as soloists, section leaders, or conductors/managers. Course is repeatable. Consent of instructor. (0-3)

## MU $318 \quad$ Percussion Ensemble 1

A survey, through performance, of the literature written for this medium. Students are expected to take responsible roles in the ensemble such as soloists, section leaders, or conductors/ managers. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

## MU 319A Jazz Ensemble - Big Band 1

A survey, through performance, of the literature written for this medium. Students are expected to take responsible roles in the ensemble such as soloists, section leaders, or conductors/ managers. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 319B Jazz Ensemble - Combo 1 A survey, through performance, of the literature written for this medium. Students are expected to take responsible roles in the ensemble such as soloists, section leaders, or conductors/ managers. Course is repeatable. Consent of instructor and enrollment in band required. (0-3)

MU 320 Mallet Ensemble
Keyboard Mallet Ensemble is a class in which repertoire, specifically written for mallet ensemble, will be rehearsed, learned, and performed. Transcriptions from the Baroque, Classical, Romantic, Contemporary, and Jazz periods will be assimilated with particular attention devoted to music of the ragtime era, post World War I through the 1940s. We will also perform music from Africa, Mexico, and Guatemala where the marimba is the national instrument. Consent of instructor and enrollment in band or choir required. (0-3)
Prerequisites: MU 105 OR MU 110

## MU 323 Advanced Jazz Improvisation

The advanced jazz improvisation course will focus on scale and chord studies and how they relate to a number of jazz standards. The class will listen and transcribe solos of famous artists to develop the language and facility, while increasing the student's understanding of jazz and its history. Knowledge of major, minor, and dominant scales is required. Repeatable once for credit. (0-2)

## MU 324 Baroque Ensemble

A survey, through performance, of music written during the 17th and 18th centuries. Baroque performance practices will be studied through the performance of both instrumental and vocal repertoire. Special attention will be given to literature, style, ornamentation, improvisation, and basso continuo. Repeatable for credit. (0-2)

MU 331 Music History I 3
Study of the history of music from classical antiquity to 1750 . (3-0)

MU 332 Music History II 3
Study of the history of music from 1750 through the 21 st century. (3-0)

## MU 336 Jazz History

An in-depth look at jazz history from its early roots in brass band, blues, classical and dixieland to modern styles. Explores major jazz trends, and contributors to each style. Extensive listening and analysis will be required to develop an understanding of improvisation techniques and harmonic trends. (3-0)
Prerequisites: MU 102 OR MU 129

## MU 337 Survey of Non-Western Music 3

This course is designed to acquaint students with the vast amount of music from non-Western cultures. Topics include the music of Africa, India, China, Japan, Southeast Asia, South America and the American Indians. Open to all students.

MU 342 Topics in Music Business 2
Topics in Music Business will introduce students to the business aspects of the music industry including profit and non-profit arts organizations, grant writing, fund-raising, management, concert production, and the recording industry. Area arts professionals will be invited as guest lecturers. Students will create a mock organization and develop all aspects of the business for a final project. (2-0)

MU 343 Technology \& Music Industry 2 Student musicians will be made aware of current technology by receiving hands-on instruction in topics such as sound reinforcement, recording, editing, MIDI, composition tools, web development and computer teaching aids. The material will be approached from many points of view so that the students involved will become more adept at using music technology. (2-0)
Prerequisites: MU 229
MU 349 Conducting I
2
A course in basic instrumental and choral conducting including baton technique, score reading, and various cueing and rhythmic aspects concerned with ensemble control. Piano proficiency requirement. (3-0)
Prerequisites: MU 129

## MU 350 Conducting II

Continuation of Conducting I. Conducting techniques in addition to directing larger musical scores and advanced techniques. (3-0)

## Prerequisites:

MU 349
MU 415 W Lit/Converstn:Writ About Music 3
The purpose of this course is to help students develop an understanding of what constitutes literacy within the discipline of music, and to integrate critical analysis with writing and creative performance. Students will be required to read and discuss examples of scholarly writing that will include program notes, journal articles, grant proposals, and concert reviews. They will then be required to practice and refine their own writing skills using these formal models. The process will include multiple drafts and extensive feedback as well as individual guidance and instruction. The course will fulfill the Group W Writing requirement for music majors. (3-0)

MU 423 Orchestration 1 A technology-based course designed to equip music majors with the skills and techniques necessary for arranging for instrumental ensembles. Piano proficiency requirement. (2-0)
Prerequisites: MU 229

## MU 436 Jazz Arranging

This course is designed for the student majoring in Jazz Studies. Specific arranging techniques for small combos and big band styles will be explored, culminating in live performance of student compositions. (2-0)
Prerequisites: MU 423
MU 496 Senior Seminar 2 Advanced study and research in music and musical performance. The student will prepare and perform a senior recital approved by the applied area instructor and the department chair. (2-0)

MU 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chair and dean. 50 contact hours are the equivalent of one credit hour.

## NATIONAL STUDENT EXCHANGE

NSE 375 National Student Exchange
12-18
The National Student Exchange is an association of 170 colleges and universities that have joined together to provide exchange opportunities for their students within the United States, Canada, Puerto Rico, the Virgin Islands, and Guam. In-state Fort Lewis College students have option of either paying home school tuition and fees or in-state tuition of host institutions. Out-of-state students pay Fort Lewis College tuition and fees. Instructor permission. Repeatable.

## PHYSICAL EDUCATION

## PE 1110F Aquacize

Aquacize is a fun 45 -minute exercise activity class performed to music that is designed to enhance the student's cardiovascular endurance, strength and flexibility. Basic aquatic fitness concepts and techniques will also be presented. (0-2)
Prerequisites: ES 100
PE 1120 S Swimming-Beginning 1 The course will introduce the student to techniques required to swim a number of basic strokes. Steps will be taken to set aside the fear of water and introduce the student to safety procedures. (0-2)
Prerequisites: ES 100
PE $11215 \quad$ Swimming-Intermediate 1 This course is designed to improve your skill and fitness through a series of varied swim instruction sessions, practice and workouts. (0-2)
Prerequisites: ES 100
PE 1122F Swimming for Fitness 1
Swimming for fitness is a fun aquatic activity class designed to enhance the student's cardiorespiratory endurance, strength, and flexibility while moving through water. Students will learn various aquatic training techniques that can be used to improve or maintain their current level of physical fitness. (0-2)
Prerequisites: ES 100
PE 1210S Dance - Ballroom 1
This course is designed to introduce the students to the basic steps, courtesies, etiquette, music and rhythm of ballroom dance. (0-2)
Prerequisites: ES 100

## PE 1211 D Dance - Country \& Western 1

This course is designed to introduce the students to the basic steps, courtesies, etiquette, music and rhythm of Country \& Western dance. (0-2)
Prerequisites: ES 100
PE 1215 S Dance Swing 1
This course is designed to introduce the students to the basic steps, lifts, throws, etiquette, music, rhythm and style of ballroom swing. (0-2)
Prerequisites: ES 100

## PE 1216S Social Dance

This course is designed to introduce students to the basic steps, turns, etiquette, music, rhythm and style of social dance. (0-2)
Prerequisites: ES 100

PE 1310F Fitness - Circuit Training
1
A course designed to develop cardiovascular fitness levels via walking, running, circuit training, rope jumping, interval training, plyometrics, swimming and other exercises. (0-2)
Prerequisites: ES 100
PE 1315F Stretching for Flexibility
1
This course is designed to provide the student with an understanding of the principles of stretching for full-body flexibility and active participation in a total body personalized stretching program. (0-2)
Prerequisites: ES 100
PE 1330F Fitness - Running 1
The course will provide the student with introductory concepts of an aerobic running exercise program to satisfy their individual fitness and activity needs. (0-2)
Prerequisites: ES 100

## PE 1340F Fitness - Ski Conditioning 1

A course designed to help with cardiovascular and muscle conditioning and to prepare you for alpine and cross-country skiing. (0-2)
Prerequisites: ES 100
PE 1350F Fitness - Step Aerobics 1
A 45-minute exercise class performed to music that is designed to enhance the student's cardiovascular endurance, strength and flexibility. Basic aerobic conditioning and fitness techniques will also be presented. (0-2)
Prerequisites: ES 100

## PE 1360F Fitness - Triathlon Training 1

This course is designed to instruct students in the basics of triathlon training and competing. (0-2)
Prerequisites: ES 100
PE 1370F Fitness - Walking 1
The course will provide the student with introductory concepts of an aerobic walking program to satisfy their individual fitness and activity needs. (0-2)
Prerequisites: ES 100
PE 1380F Fitness - Weight Training 1 The course will provide the student with knowledge of current strength training techniques applied to personnel fitness goals and methods to build an appropriate weight training program to satisfy their individual needs. (0-2)
Prerequisites: ES 100
PE 1390F Fitness - Yoga 1
To explore the practice of Hatha Yoga at a beginning level and cultivate the balance between flexibility, strength, and endurance in body, mind, and spirit. (0-2)
Prerequisites: ES 100

## PE 1391F Fitness - Intermediate Yoga

To explore the practice of Hatha Yoga at an intermediate level and cultivate the balance between flexibility, strength, and endurance in body, mind, and spirit. Instructor permission is required. (0-2)
Prerequisites: ES 100

PE 1410 S Backpacking \& Camping 1
The course will provide the student with basic campcraft skills (camp selection, hygiene, cooking, stoves, leave no trace (LNT) principles, shelters), hiking, route finding, map and compass skills, and safery and equipment review. Students must also be able to hike with a 45 lb . pack up to 6 miles/day. (0-2)
Prerequisites: ES 100
PE 1420F Cycling 1 The course will provide the student with introductory concepts of a cycling exercise program to satisfy their individual fitness and activity needs. (0-2)
Prerequisites: ES 100
PE 1421F Competitive Mountn Bike Train 1
This course covers medium to advanced biking skills. (0-2)
Prerequisites: ES 100

## PE 1422F Desert Mountain Biking

This course covers basic to mid-level mountain bike riding techniques, including, but not limited to, bike handling, climbing, descents, riding position, diet, endurance, stretching, safety and bike maintenance. (0-2)
Prerequisites: ES 100
PE 1423F Local Mountain Biking 1
This course covers basic to mid-level mountain bike riding techniques, including, but not limited to, bike handling, climbing, descents, riding position, diet, endurance, stretching, safety and bike maintenance. Biking on local trails only. (0-2)

## Prerequisites: ES 100

PE 1430F Day - Hiking
An opportunity to explore the local area as it applies to the hiking trails near the Fort Lewis College campus and Durango. (0-2) Prerequisites: ES 100

PE 1440S Flycasting 1
This course will introduce the student to the sport of fly-fishing, including equipment and techniques. (0-2)
Prerequisites: ES 100
PE 1450S Kayaking-Beginning 1 Basic kayaking skills including, but not limited to, paddling strokes, rolling and assisted rescues, self-rescue, basic hydrology and river safety, and equipment review. (0-2)
Prerequisites: ES 100
PE 1451S Kayaking-Intermediate
1
This course will review kayak rolling and paddling skills in the pool, then will concentrate on applying these skills on the river. Reading whitewater, identifying river features, safety review, kayak ferry angles, eddy turns, peel outs, surfing, hole riding/ bracing will be covered. Precise boat control will be emphasized. Instructor permission is required. (0-2)
Prerequisites: ES 100

## PE 1460S Rock Climbing

This course covers basic beginning rock climbing skills including, but not limited to, knots, anchor systems, belay/climbing commands, rock climbing techniques (face, friction, crack), belaying (mechanical, hip, lowering) rappelling, equipment review, and related safety issues. (0-2)
Prerequisites: ES 100

PE $1470 S$ SCUBA Diving
In this half-semester course, students acquire the knowledge and skills needed to safely explore the underwater world. The class has both a classroom and pool component, and finishes with two days of diving in one of our local lakes. Students who successfully complete the course are eligible for certification by the Professional Association of Diving Instructors (PADI). (0-2) Prerequisites: ES 100

PE 1481F Skiing - Cross Country 1 This course introduces the student to the fundamentals and techniques of Nordic skiing and will provide an opportunity for students to enhance their Nordic skiing skills and overall physical condition. (0-2)
Prerequisites: ES 100

## PE 1490F Run/Cycle/Swim <br> 1

This is a fitness class designed to be accomplished on the students' individual schedules, utilizing the three activities, running, cycling, and swimming. Students will pretest and post test their fitness levels to determine the change in personal fitness over class duration. (0-2)
Prerequisites: ES 100

## PE 1520 S Badminton <br> 1

The course will provide the student with basic knowledge and techniques of the game of badminton as an exercise program to satisfy their individual fitness and activity needs. (0-2)
Prerequisites: ES 100
PE 1530S Basketball 1
This course introduces the student to the basic skills, rules, and strategies of basketball. (0-2)
Prerequisites: ES 100
PE 1555S Golf-Beginning 1 Develop the basic fundamentals of your golf swing. Develop a basic swing pattern. Learn a basic knowledge of the rules of golf. Learn the basic etiquette of golf. Develop an awareness of fundamental strategies in course management. (0-2)
Prerequisites: ES 100
PE 1560S Gymnastics \& Tumbling 1
Gymnastics is designed to teach basic skills on all six apparatus (men's and women's). (0-2)
Prerequisites: ES 100

## PE 1571S Recreational Games

This course is designed to expose students to a variety of recreational games that are generally not covered in our regular physical activity class offerings. Activities to be included are: deck tennis, indoor hockey, cageball, bowling, horseshoes, whiffle softball, dodgeball, croquet, ping-pong, shuffleboard, billiards, darts, hopscotch, pickleball, etc. Some competitive and cooperative activities will be introduced. (0-2)
Prerequisites: ES 100

## PE 1580S Self Defense

Active participation in basic self-defense skills, prevention and awareness. (0-2)
Prerequisites: ES 100
PE 1590S Softball 1
To learn the fundamental skills involved in the game of sofftball. (0-2)

PE 1610S Soccer - Beginning 1
A course designed to develop the basic skills, rules knowledge, and strategy involved with soccer. (0-2)
Prerequisites: ES 100

## PE 1620S Tennis - Beginning 1

 This course will introduce the student to the game of tennis. This format will include instruction and practice in skills, knowledge of rules and scoring. (0-2)Prerequisites: ES 100

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\text { PE 1621S Tennis - Intermediate } 1
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Advanced skills in the game of tennis. (0-2)
Prerequisites: ES 100

## PE 1630S Volleyball - Beginning

This course will provide student with the fundamental skills in volleyball, including knowledge of volleyball rules through game-play and written exams.
Prerequisites: ES 100

## PE 1631S Volleyball-Intermediate 1

This course will provide student with a comprehensive explanation and practice of fundamental skills in volleyball and with intermediate understanding and practice of team skills. (0-2)
Prerequisites: ES 100

## PE 1635F ACT/Students/Phys Disabilities 1

Individualized physical activity programs for students with physical disabilities in physical and motor fitness, fundamental motor skills and patterns, sports skills and aquatics. Instructor permission is required. (0-2)
Prerequisites: ES 100
PE 1636S ACT/Students/Phys Disabilities 1
Individualized physical activity programs for students with physical disabilities in physical and motor fitness, fundamental motor skills and patterns, sports skills and aquatics. Instructor permission is required. (0-2)

## Prerequisites: ES 100

PE $1710 \quad$ Varsity Basketball - Men 1
Students must be on a varsity athletic roster. Instructor permission required. (0-2)

PE 1711 Varsity Basketball - Women 1
Students must be on a varsity athletic roster. Instructor permission required. (0-2)

PE 1720 Varsity Crosscountry - Men 1 Students must be on a varsity athletic roster. Instructor permission required. (0-2)
PE 1721 Varsity Crosscountry - Women 1 Students must be on a varsity athletic roster. Instructor permission required. (0-2)
PE 1730 Varsity Football 1
Students must be on a varsity athletic roster. Instructor permission required. (0-2)

## PE $1740 \quad$ Varsity Golf <br> 1

Students must be on a varsity athletic roster. Instructor permission required. (0-2)

PE $1750 \quad$ Varsity Soccer - Men 1
Students must be on a varsity athletic roster. Instructor permission required. (0-2)

PE $1751 \quad$ Varsity Soccer - Women
Stur
Students must be on a varsity athletic roster. Instructor permission required. (0-2)

PE $1755 \quad$ Varsity Softball 1
Students must be on a varsity athletic roster. Instructor permission required. (0-2)

PE 1760 Varsity Volleyball 1

Students must be on a varsity ath letic roster. Instructor permission required. (0-2)

## PHILOSOPHY

## PHIL 141 S Introduction to Philosophy

An introduction to the philosophical enterprise through discussion and analysis of representative readings from the history of philosophy. Issues considered include the nature of reality, the relation of mind and body, the possibility of proving that God exists, the nature and origin of morality and beauty, and the relation of knowledge to experience. (4-0)

## PHIL $151 \quad$ Film and Philosophy

An examination of the ways in which philosophy is manifested in the making and content of film. This course will include the viewing of several films that portray philosophical themes on the nature of humor, drama, and the fear in contemporary film and attempt to answer questions regarding the nature of voyeuristic emotional catharsis in the making of the human being. Finally, the course hopes to address issues of cultural diversity by looking at the way various Western and non-Western cultures address these issues. The course will also include philosophical readings on film and the nature of philosophical problems. (4-0)

## PHIL 244 R Chinese Philosophy <br> 3

A study of Confucianism, Taoism, and Buddhism, with consideration of some dissenting views of these dominant schools of Chinese thought, such as Maoism and Legalism. We will investigate the theories of human nature, knowledge, and reality embraced by these philosophies, as well as their conceptions of ethics and politics. This course is the same as RS 244; credit will be given for only one of these courses. (3-0)
Prerequisites: (COMP 150 OR COMP 250 OR COMP 126)
AND (LB 150 OR LIB 150 equivalent)

## PHIL 251 S Moral Philosophy

A broad review of the history of attempts since classical Greece to identify morality and to establish standards for making and assessing moral judgments. (4-0)

## PHIL 252 N Environmental Ethics

This course offers an overview of world environmental problems, focuses on conceptual investigations into their historical, social, political and cultural sources, examines various methods of resource conversation, and finally attempts to envision a philosophy of nature based on "land ethic." (4-0)

PHIL 261 R Philosophy of Religion
An examination of different philosophical approaches to problems raised by religion. Reading are selected from sources representing widely differing points of view, e.g., those of phenomenology, feminism, and liberation theology. This course is the same as RS 261; credit will be given for only one of these courses. (4-0)

PHIL 264 Social \& Political Philosophy . 4
This course offers an introductory, selective review of major theories and empirical studies, from classical to contemporary, of social relations and human interactions while exploring the political contexts in which social philosophies emerge. It also provides an overview of how organization of governments has been conceptualized and practiced, how law and policy originate and evolve, and how social and political ideals are formulated, transformed, and institutionalized. (4-0)

## PHIL 271 Logic

A broad treatment of different methods of assessing the validity of deductive and inductive arguments. The course covers syllogistic logic, elementary truth-functional logic, quantification and brief discussions of informal logic and inductive logic. (4-0)

## PHIL 274 R Ancient/Medieval Philosophy

An examination of the history and philosophy from the origins of scientific thought in Asia Minor through the synthesis of Christianity and Greek philosophy in the thought of St. Augustine and the medieval scholastics. A major emphasis of the course will be the systems of Plato and Aristotle, which provide many of the roots of modern thought. This course is a suitable beginning course in philosophy. (4-0)

## PHIL 281 Theory of Knowledge

This course explores philosophical controversies concerning knowledge and skepticism: What is truth? What is it for a belief to be justified? Do we know anything? Does knowledge represent objective reality or merely a culturally constructed conception of reality? Traditional and current answers to these and related questions are scrutinized. (4-0)

PHIL 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## PHIL 305 W Writing Philosophy

An introduction to the techniques, conventions, and styles of philosophical writing through the critical reading and analysis of selected books and journal articles on a topic central to the field. (4-0)

## Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND (LIB 150 OR LIB 150 equivalent)

## PHIL 320 Indigenous Worldviews 4

A survey of selected regional belief systems outside the major religious traditions treated in Phil 321. Emphasis is on philosophical foundations of religious cultures native to the Americas, Africa, Asia, Australia, and Old Europe. Special attention is given to the mythic and other symbolic expressions of "archaic" consciousness in contemporary societies. This course is the same as RS 320; credit will be given for only one of these courses. (4-0)

PHIL 321 World Religions
A study of the nature and history of the major contemporary religions of the world. This course is the same as RS 321; credit will be given for only one of these courses. (4-0)

## PHIL 328 Philosophy Of Science

An examination of the scope, structure, methodology, and spirit of science with special attention to such topics as the relation between the presuppositions and the conclusions of science, the nature of scientific revolutions and the social responsibilities of the scientist. Consent of instructor. (4-0)

## PHIL 352 Ecology \& Morality

An in-depth focus on contemporary theories and practices, including myth and ritual, which cosmologically integrate moral, social, political, and cultural philosophies with scientific ecologies. Recent academic efforts by regional thinkers and scholar/activists of color will also be reviewed. Consent of instructor. (4-0)
Prerequisites: PHIL 252

## PHIL 361 Philosophy Of Art 4

An examination of nature and purposes of art through the study of several traditional and contemporary philosophies of art such as those of Plato, Aristotle, Marx, Tolstoy, Collingwood, and Merleau-Ponty. Topics include nature of the art object, the distinction between art and craft, the role of imitation, representation, expression and creativity, the social function and responsibility of the artist, and the nature of aesthetic experience. (4-0)

## PHIL 363 Philosophy, History \& Culture 4

An examination of the nature and methodology of historical knowledge and various conceptions of culture through the study of several traditional and contemporary philosophies of history and culture. Readings will include recent work from Africa and the Americas as well as traditional European perspectives. Consent of instructor. (4-0)

## PHIL 365 Philosophies of Feminism 4 <br> An examination of gender bias in its various guises, such as

 androcentrism, gender polarization, and biological essentialism. Explanations of the source and maintenance of sexism are explored through feminist theories: liberal, radical, Marxist, existential, psychoanalytic, and postmodern. Feminist theory itself is critically evaluated. Consent of instructor. (4-0)Prerequisites: (COMP 150 OR COMP 250 OR COMP 126) AND (LIB 150 OR LIB 150 equivalent)

## PHIL 377 Contemp European Philosophy 4

An examination of trends and issues in 20th century continental philosophy. Readings will focus on the development of phenomenology and existentialism, and on their contributions to existential Marxism, structuralism, and deconstructionism. Consent of instructor. (4-0)

## PHIL 379 Modern Phil:17 \& 18 Centuries 4

An examination of the roots of the Enlightenment, including studies of rationalism, the origins of scientific thought, ethical modes of thought grounded in reason and empiricism, and social and individual notions of self-identity. This course examines the origins of enlightenment as a rebirth of the Renaissance and as the beginnings of contemporary Western notions of metaphysics, epistemology, and ethics. Thinkers to be discussed will include Descartes, Spinoza, Hume, Locke, Berkeley, Kant, Rousseau, and others of the period. Consent of instructor. (4-0)

PHIL 380 19th Century Philosophy 4
In this course students will examine the major movements in 19th century European and American philosophy. The course will focus on the work of Hegel and its influence on Marx, Nietzsche, and Kierkegaard. In addition, some attention will be given to the developments of American pragmatist philosophy. (4-0)
Prerequisites: PHIL 274 OR PHIL 379

## PHIL 381 Metaphysics

An examination of traditional and contemporary attempts to understand the nature of reality. Consent of instructor. (4-0)

PHIL 382 Philosophies of the Southwest 3 An examination of the various philosophical underpinnings of multicultural Southwest. The course will also examine the kinds of misunderstandings which can emerge from the interactions of these cultures when cultural philosophical assumptions go unexamined. (3-0)

## PHIL 384 Philosophy of Mind \& Language 4

This course explores puzzles raised by the existence of minds, making special use of contemporary theories of meaning in order to address them. What is a mind? How are minds related to bodies? What is it to have thoughts? Is language necessary for thinking? How does language represent reality? How do we know what others mean by their words? Consent of instructor. (4-0)

## PHIL $451 \quad$ Studies in Great Philosophers

An examination in depth of the writings of a major philosopher such as Plato, Aristotle, Kant, Marx, Heidegger, or Sartre. This course may be repeated as long as the topics are different. Consent of instructor. (4-0)

## PHIL 480 W Contemporary Political Thought 4

An examination of the philosophical and political origins of the political formation of the self, interaction between dominant and minority cultures, and legitimation and consensus in a post-Marxist, post-Capitalist, and post-Colonial world. Focuses on 20th century thinkers such as Foucault, Deleuze and Guattari, Said, Lyotard, Braidotti, and others. PS 387 recommended. This course is the same as PS 480W; credit will be given for only one of these courses. Consent of instructor. (4-0)

## PHIL 496 Senior Seminar

Advanced study and research in selected topics. Consent of instructor. (4-0)

PHIL 499 Independent Study $1-6$
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## PHYSICAL SCIENCE

PHSC 100 Physical Science Laboratory 1
Work covers experiments in the fields of physics. Laboratory techniques and scientific processes are emphasized. Students cannot receive credit for both PhSc 100 and PhSc 106Tx. (0-2)

History, processes, and methods of science. Study is made of the development of some of the most important concepts of science, modern developments, problems in science, and problems from science. Students cannot receive credit for both PhSc 105T and PhSc 106Tx. (3-0)

## PHSC 106 TX Physical Sciences 4

History, processes, and the methods of science. Study is made of the development of some of the most important concepts of science, modern developments, problems in science, and problems from science. Students cannot receive credit for both PhSc 105T and PhSc 106Tx or for both PhSc 100 and PhSc 106Tx. (3-2)

## PHSC 115 NX Environmental Phys Science

Students will explore foundational concepts in the physical sciences, focusing on how these concepts provide a better understanding of current environmental issues. The accompanying laboratory will stress scientific methodology and reinforce concepts learned in class. It is required that it be taken at the same time as the lecture. (3-2)

## PHSC 200 Introduction to Astronomy Lab

 1Work is aimed toward a greater appreciation of the universe through selected observational laboratory experiments in astronomy. Students cannot receive credit for both PhSc 200 and PhSc 206T. (0-2)

PHSC 205 T Introduction to Astronomy 3 A course for students interested in elementary astronomy. A survey of modern observations of astronomy including the moon, planets, stars, and their formations. The history and social implications of astronomy are also addressed. Students cannot receive credit for both PhSc 205T and PhSc 206Tx. (3-0)

## PHSC 206 TX Introduction to Astronomy

A course for students interested in elementary astronomy. A survey of modern observations of astronomy including the moon, planets, stars, and their formations. The history and social implications of astronomy are also addressed. PhSc 206 has a required lab. Students cannot receive credit for both PhSc 205T and PhSc 206Tx or for both PhSc 200 and PhSc 206Tx. (3-2)

## PHYSICS

## PHYS 201 Physics - Non Calculus I

An introductory course in physics, covering the basic concepts of mechanics (motion, energy, fluids, materials), heat and thermodynamics, wave motion and sound. Calculus is not used. The course is intended to meet college physics requirements and also satisfy the curiosity of all students whose major interest is not in engineering, physical science or mathematics. Students who take Physics 217Tx will not receive credit toward graduation for Phys 201. This course includes an introductory physics laboratory with experiments in mechanics, heat and sound. (3-2)

## PHYS 202 Physics - Non Calculus II 4

An introductory course in physics covering the basic concepts of electricity, magnetism and optics. Calculus is not used. Students who take Phys 218 will not receive credit toward graduation for Phys 202. This course includes an introductory physics laboratory with experiments in optics, electricity, electronics and magnetism. (3-2)
Prerequisites: PHYS 201

PHYS 217 TX Physics - Science \& Engr I
An introductory course in physics covering the basic concepts of classical mechanics (motion, energy, fluids, materials), heat and thermodynamics, wave motion and sound. Differential and integral calculus is used throughout the course. Phys $217 T x$ is required of engineering students and strongly recommended to all science majors. This course includes an introductory physics laboratory with experiments in mechanics, heat and sound. (4-2)
Prerequisites: MATH 221
PHYS 218 Physics - Science \& Engr II 5
An introductory course in physics covering the basic concepts of electricity, magnetism and optics. Phys 218 is required of engineering students and strongly recommended to all science majors. This course includes an introductory physics laboratory with experiments in optics, electricity, electronics and magnetism. (4-2)
Prerequisites: PHYS 217 AND MATH 222

## PHYS 299 Individual Study <br> 1-6

 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chair and dean. 50 contact hours are the equivalent of one credit hour.PHYS 301 Introduction to Electronics 3 A survey course of the theory and design of analog circuits with discrete and integrated elements, and devices used in scientific instrumentation. Includes the study of linear op-amp circuits, comparators and controls, oscillators, active filters, diode applications, transistors, and transducer circuits. (2-2)
Prerequisites: PHYS 218
PHYS 320 Modern Physics 3
A study in the modern theories of atomic, nuclear and particle physics that have developed since 1900. An introduction to special relativity and elementary quantum mechanics is included. (3-0)
Prerequisites: PHYS 202 OR PHYS 218

## PHYS 340 Optics

4
A study of classical and modern theories of geometrical and physical optics including matrix methods for optical systems, diffraction theory and an introduction to Fourier optics. (3-3) Prerequisites: MATH 222AND (PHYS 202 OR PHYS 218)

## PHYS 354 Theoretical Mechanics 3

The theoretical formulation of the kinematics and dynamics of particles and rigid bodies with an introduction to Lagrangian and Hamiltonian mechanics. An introduction to vector and tensor analysis is also included. (3-0)
Prerequisites: MATH 223AND (PHYS 202 OR PHYS 218)

## PHYS 361 Prin Electricity \& Magnetism 4

The mathematical theory of static electric and magnetic fields, time-dependent fields and electromagnetic radiation. (4-0)
Prerequisites: (PHYS 202 OR PHYS 218) AND MATH 327
PHYS 370 Heat and Thermodynamics 3
A study of classical and statistical thermodynamics. Includes the first and second laws of thermodynamics and their applications, and classical and quantum statistics. (3-0)
Prerequisites: MATH 223AND (PHYS 201 OR PHYS 217)

PHYS $380 \quad$ Advanced Physics Laboratory I 1
Work will stress experiments in modern physics with emphasis on electronic instrumentation and subsequent data analysis. (0-3) Prerequisites: PHYS 320

PHYS 381 Advanced Physics Laboratory II 1 Work will stress experiments in electricity and magnetism with emphasis on data collection and analysis. ( $0-3$ )
Prerequisites:
PHYS 320
PHYS 397 W Writing Techniques in Physics 3 Advanced study, research and writing in selected topics. Designed to train students to write proposals, research reports and semi-technical description in the field of physics. (3-0)

## PHYS 400 Science and Human Values

A course designed to investigate the interaction between science, technology, and society. The course includes interdisciplinary material. Scientific, social, and human values will be discussed. (2-0)

PHYS 420 Quantum Mechanics I
An introduction to the formulation of wave mechanics including potential wells, the harmonic oscillator, the hydrogen atom, angular momentum and spin, and operator methods. (3-0)
Prerequisites: MATH 223AND (PHYS 202 OR PHYS 218)

## PHYS 421 Quantum Mechanics II

A continuation of the study of quantum systems via approximation techniques, theory of many electron atoms, identical particles and spin. (3-0)
Prerequisites: PHYS 420
PHYS 454 Advanced Topics in Physics 1-4 Advanced material in various areas of physics at the senior level. The course will treat one area of physics, such as nuclear physics, thermal physics, statistical physics or solid state physics. Class schedules will indicate the area. This course may be repeated for credit if topics are different.

## PHYS 496 Senior Seminar

2
Advanced study and research in selected topics. Consent of instructor. (2-0)

PHYS 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## POLITICAL SCIENCE

PS 1015 Intro to Political Science 4
An introduction to the study of politics; an examination of the relationship of society and government; and a study of the nature of the state, of the forms of rule evolved from the past and of contemporary political systems. (4-0)
$\begin{array}{lll}\text { PS } 110 \mathrm{~S} & \text { U. S. National Government } 4\end{array}$ A study of the policies, procedures, politics and problems of the U.S. national government. (4-0)

PS 120 S State and Local Government

PS 140 Intro Law \& Legal Systems
An introduction to legal systems' treatment of disputes between citizens, citizens and business and citizens and government, with special emphasis on disputing in the legal system of the United States. Consideration given to the influence of legal systems on competition for a society's benefits. (4-0)

## PS $\quad 205 \mathrm{~N} \quad$ Environmental Politics

An introduction to a wide range of global environmental issues. Global warming, overpopulation, natural resource depletion, deforestation in Latin America, Africa and Asia, potable water crises in Asia and desertification in Africa are all indicators of ongoing major environmental changes. Global environmental change raises profound moral, political and economic questions with which society has only begun to grapple. This course addresses regional and international environmental problems and proposes solutions. (3-0)

PS $241 \quad$ Intro Criminal Justice Systems 4
The nature of crime, the role of police, attorneys, courts and corrections in our criminal justice system. (4-0)

PS 250 W Intro to Political Analysis 4 Analysis of contemporary behavioral theories and research methods of politics and preparation for critical reading of professional literature. Writing intensive course. ( $4-0$ )
Prerequisites: PS 101 AND (COMP 150 OR COMP 126
OR COMP 250) AND (LIB 150 OR LIB 150 equivalent)
PS 251 W Advanced Research Methods 4 An advanced course in the methods and tools of research including both qualitative and quantitative approaches. Emphasis is on the design of political research, data collection techniques, statistical analysis and interpretation. Writing intensive course. (4-0)

## Prerequisites: PS 250

## PS 280 S Intro to Comparative Politics 4

A comparative study of the political systems of selected modern states. An emphasis is placed on the historical, cultural, social and economic environments as well as on political structures, participation, policymaking and evaluating the effectiveness of political action. (4-0)

## PS 299 Individual Study 1-6

 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.PS 300 Religion and Politics 4
A comparative exploration of dominant and minority political interactions in social and cultural settings. This course examines how, and with what consequences, religion and politics interact as frameworks for freedom and oppression in Central America, Asia and the United States. (4-0)

## PS $\quad 310 \quad$ Public Opinion and Action

An empirical inquiry into the dynamics of political activity in the United States, with emphasis on the electorate and roles of political parties, the news media, public opinion and political interest groups. (4-0)

PS $320 \quad$ International Politics
An examination of the international struggle for power, with special emphasis on nationalism, economic objectives, armaments, multinational corporations and North-South issues. (4-0)
Prerequisites: PS 101
PS 322 International Political Econom 4
A study of the interplay of economics and politics in the world arena. The course covers a wide range of political and economic issues and concepts, and introduces students to the many players at the international level (financial institutions, multinational organizations, nation-states, etc.). The course also provides a theoretical background to issues of political and economic interaction at the international level. PS 320 recommended. (4-0)

## PS $325 \quad$ Middle East Politics <br> 4

An examination of the forces shaping the governments and politics of modern Arab states in North Africa and Southwest Asia, with emphasis on Islam, Islamist politics, regional geopolitics and current economic, natural resource and social issues affecting the Arab world. (4-0)

PS 330 Government Performance 4
Examines the importance of government agencies in the political system with a special emphasis on their performance. Examines the key differences in public and private organizations and how government performance can be enhanced. (4-0)
$\begin{array}{llll}\text { PS } & 337 & \text { U. S. Foreign Policy } & 4\end{array}$
A study of the United States' foreign policy from the American Revolution to the present day, with emphasis on current policy and how it is made. (4-0)

## PS 340 Constitutn Law:Bill Of Rights 4

Rights of citizens as elaborated through the Bill of Rights and Fourteenth Amendment to include freedom of speech and press, freedom of religion, privacy, discrimination and criminal rights. Recommended For Political Science majors and advanced general students. (4-0)

PS 341 Const Law:Fedrlsm Separatn Pwr 4 Powers and limitations of the national judiciary, Congress and the presidency. Course also addresses the relationship between the national government and state governments. (4-0)

PS 360 Revolution \& The Modern World 3 Analyzes the origins, tactics, ideologies and results of leffist, bourgeois and rightist revolutionary movements, stressing a comparative and historical approach. (3-0)

PS 365 Women and Development
An overview of the central role women play in the development process in non-Western societies, and of their struggle to gain access to the most basic levels of power and governance around the world. The focus will be on women in developing countries, but reference to women in developed countries will also be made. PS 280 recommended. This course is the same as WS 365; credit will be given for only one of these courses. (3-0)

PS 370 Latin-American Politics
An inquiry into specific political problems shared by many nations in contemporary Latin America. Emphasis will be placed on such issues as forms of government, i.e., populism, military dictatorships, bureaucratic- authoritarianism, economic development and social movements. (4-0)

PS $372 \quad$ African Politics \& Development 4
A general survey of the forces shaping the governments and politics of African nations. While the emphasis will be on sub-Saharan Africa, Northern Africa will also be included in the course. Recent attempts at democratization, regional military conflicts, environmental challenges and the AIDS epidemic will all be covered in the course. PS 280 S is recommended. (4-0)

## PS $374 \quad$ Pacific Rim Politics \& Issues 4

 An exploration of the concept of a "Pacific Rim" region. The course explores the intersection of economic, political, cultural and environmental issues that affect the region. Historical and current relationships between areas as diverse as Seattle, Singapore and Santiago are addressed. PS 280 S is recommended. (4-0)PS 380 Comparative Communist Systems 4 A comparative study of the dynamics of communist systems focuses on the Soviet Union and Peoples' Republic of China, including dimensions of continuity and change in pre- and post-communist environments. Similarities and differences are analyzed, along with an examination of factors working for and against decentralization. (4-0)

## PS 385 Twentieth-Century Socialisms 3

An inquiry into the place of modern socialist thought in the Western intellectual tradition. Intellectual and historical influences on Marxism are clarified, along with the ambiguities in the legacy left by Marx and Engels. The stillbirth of Marxism is traced from these ambiguities through the major discrepancies in the thought of Lenin, Bernstein, Kautsky and Mao. (3-0)

## PS 386 Ancient Political Thought <br> 4

A study of western political thought from pre-Socratic Athens to the 16 th century. Readings in the works of philosophers including Plato, Aristotle, Machiavelli, Luther and others. (4-0)
Prerequisites: PS 101

## PS 387 Modern Political Thought 4

 An examination of the main currents of western political thought from the 17th century to the present. Readings in the works of philosophers including Hobbes, Locke, Rousseau, Marx and others. (4-0)Prerequisites: PS 386
PS 400 Native American Law \& Politics 4 A study of political and legal issues that involve American Indians, both from a historical and contemporary perspective. This course is the same as SOC 400; credit will be given for only one of these courses. (4-0)

PS 421 The American Presidency 4 Study of the American presidency, including historical development and current structure, organization, behavior, processes and policy implications. (4-0)

PS 422 Legislative Process 4
Study of American legislatures at the federal and state level including structural, behavioral and policy implications of the legislative process in contemporary American government. (4-0)

PS 423 Philosophy of Law
4
Explores the debate about the role of the courts, the nature and limits of law and the meaning of concepts such as justice, liberty, morality and responsibility in a constitutional republic. The impact of judicial processes on this debate is analyzed. (4-0)

An inquiry into imprisonment as a punishment for criminals. Historical perspectives on crime and punishment and contemporary issues facing prisons and prisoners are clarified and analyzed. (4-0)
Prerequisites: PS 241
PS 437 Nat. Sec. Strategy and Policy 4 An examination of the domestic and international contexts in which national security is developed, the relevant organizations and decision-making process, and the actual formulation and implementation of national security strategy and policy. (4-0)
Prerequisites: PS 337
PS 480 W Contemporary Political Thought
An examination of the philosophical and political origins of the political formation of the self, interactions between dominant and minority cultures and legitimization and consensus in a post-Marxist, post-Capitalist and post-Colonial world. Focuses on 20th century thinkers such as Foucault, Deleuze and Guattari, Said, Lyotard, Braidotti and others. PS 387 is recommended. This course is the same as Phil 480; credit will be given for only one of these courses. (4-0)

PS $492 \quad$ Political Science Internship 3-16 Practical intern work at a local, state, or national governmental or other politics-related organization. Requires keeping a detailed journal and completing a substantial research paper. May be repeated once for a cumulative total of 16 credit hours.
Prerequisites: PS 101 OR PS 110

## PS 495 Proseminar Political Science

This course provides an opportunity to engage in a critical examination of the discipline of political science and its relationship to career opportunities. It encourages students to think seriously about political science as a component of liberal arts education as well as a vocation. It devotes time to preparing an assessment poriffolio and identifying a research topic for the senior seminar. (2-0)
Prerequisites: PS 251

## PS 496 Senior Seminar

Advanced study and research in selected topics. (2-0)
Prerequisites: PS 495 AND PS 251
PS 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chair and dean. 50 contact hours are the equivalent of one credit hour.

## PSYCHOLOGY

## PSYC 110 S Human Relations 3

This psychology course focuses on the relationship between the self and the social world. We begin by looking at the person as a system, exploring topics such as personality, motivation and stress. We will link these concepts to an understanding of how the intrapersonal system interacts with interpersonal systems such as social groups, the family and the workplace. This course is concerned with how we create and are created by our social contexts and how we maintain and change them. This course is intended for students seeking a general studies class. Psychology majors are encouraged to take Introduction to Psychology instead. (3-0)

PSYC 157 Introduction to Psychology . 3
An introduction to the scientific study of behavior, including the concepts of learning, motivation, perception, emotions, personality and sexuality. Abnormal, social, developmental, cognitive and physiological psychology will also be discussed. (3-0)

## PSYC 218 Psych Foundation of Education

An introduction to the psychological principles relevant to education. topics include learning theories, teaching-learning processes, individual differences, human intelligences and issues of educational and cultural diversity. The psychological principles underlying educational practices (e.g. cooperative learning, testing, performance assessments, etc.) are also discussed. Note: This course lasts 7 weeks - half of the semester. (2-0)

## Prerequisites: PSYC 157

## PSYC 233 Personality 4

This course provides an introduction to the major theories of personality, including psychoanalytical, learning, humanistic, biological, cognitive and trait theories. Emphasis will be placed on an understanding of personality structure and the ways that personality is manifested in behavior. (4-0)
Prerequisites: PSYC 157

## PSYC 241 Q Basic Stats for Psychologists

An introduction to the collection, organization and analysis of data from human and animal populations. Methods of sampling, treatment of data and reporting are covered. Descriptive statistics and statistical inference are taught, as are decision factors and error analysis. Students are introduced to the use of statistical computer software. This course is the same as Math 201Q and BA 253Q; credit will be given for only one of these courses. Not recommended for first semester freshmen. (4-0)
Prerequisites: TRS 92 OR Computed Math Placement Score MA1 10

## PSYC 254 Life Span Human Development

This course applies psychological principles to human perspectives of development. The first portion of the course is devoted to studying principles, processes, theories and research methodology. The second part applies these concepts to each stage of the human life span from conception through aging and death and dying, with emphasis on child, preadolescent and adolescent development. Community resources are used for field trips, guest speakers, etc., throughout the second part of the course. (4-0)
Prerequisites: PSYC 157 OR PSYC 110

## PSYC 260 NX Environmental Psychology

This course examines the relationship between human behavior and the environment in which it occurs. Both natural and built environments will be studied. Topics will include crowding, noise, climate, pollution, and disasters; aesthetics of place and landscape; the influence of historical period, culture and gender on perception of environment; cognitive mapping and wayfinding; territoriality and the psychology of environmentalism. (3-2)

PSYC 265 S Global Community Psychology 4
This course will explore the impact of Western glabalization on indigenous cultures. Specifically, we will examine how Western psychology, technology and free market economic systems affect traditional and collective lifestyles and sustainable ecologies of people around the world. Student activities will be evaluated to determine their level of competence in communication, critical thinking and holistic views toward community development. This course will enhance the students' abilities to critically evaluate the cultural and psychological implications of Western globalization and will provide opportunity to expand experiences with culture and systems aspects of general education. (4-0)

## PSYC 270 Psychology of Gender

An investigation of women's and men's experience of gender as well as the ways that gender influences how people are perceived by others. We will explore a variety of explanations for the similarities and differences between females and males. These will include cultural, social, cognitive, developmental and biological approaches. The application of psychological theory to current gender issues will be considered. The course will include a critique of psychological theory and research on gender. (4-0) Prerequisites: PSYC 157

## PSYC 296 W Psychological Research Methods 4

Introduction to the basic assumptions, concepts and methodology of experimental and non-experimental psychological research. Includes the study of scientific principles, critical evaluation of published research and discussion of research ethics. Technical topics such as operational definitions, independent and dependent variables, measurement, techniques of observation and experimental design are presented. The laboratory is designed to provide skill in implementing experiments in a variety of psychological fields. This course also introduces students to the discourse and written conventions of APA-style experimental reports. (3-2)
Prerequisites: PSYC 157 AND (PSYC 241 OR MATH 201
OR BA 353) AND (COMP 150 OR COMP 126 OR COMP 250) AND (LIB 150 OR LIB equivalent)

## PSYC 299 Individual Study

1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chair and dean. 50 contact hours are the equivalent of one credit hour.

PSYC $300 \quad$ Methods of Inquiry
4
This course emphasizes qualitative research skills and methods of inquiry. Topics include case studies, observational methods, interview techniques, questionnaires and surveys. Students will also be exposed to information about self-assessment, creating and maintaining client files, confidentiality, legal concerns, minority and affirmative action issues, demographic trends and actuarial systems, agency policies, advocacy and interfaces of service agencies with other community resources. Students will learn inquiry and writing skills and hermeneutic research approaches via laboratory experiences, community agency activities and cross-disciplinary collaborations. Methods of inquiry for use with culturally diverse groups will also be addressed. (4-0)
Prerequisites: PSYC 296

PSYC 305 Psychology of Intuition 4
Students will study and write about the psychology and philosophy of intuition. This writing intensive interdisciplinary course applies the methods of psychological science with a cross-cultural approach to examine intuition. Students are expected to participate in an experiential exploration of intuition. (4-0) Prerequisites: PSYC 157 AND COMP 150 OR COMP 126 OR COMP 250

## PSYC 310 Psychology of Religion

In this course, we will explore the psychology of spirituality and religious experience. Topics will include: the history of the psychology of religion; the motivational basis of religious participation; the relationship between mental health and religion; development of religious ideas across the lifespan; and social-psychological factors in religious conversion and commitment. This course is the same as RS 310 ; credit will be given for only one of these courses. (4-0)
Prerequisites: PSYC 110 OR PSYC 157

## PSYC 325 Group Dynamics

In this course we will explore the psychology of groups. Topics will include group structure, interpersonal communication, leadership and group decision making. Students will participate in a variety of group exercises and will relate their experiences to the theory and research of the field of group dynamics. (4-0) Prerequisites: PSYC 157

## PSYC 327 Physiological Psychology <br> 4

This course will focus on establishing a basic understanding of physiological mechanisms that influence behavior. Introductory neuroanatomy, neurophysiology, and neuropsychology will be presented. Current findings that emphasize neurotransmitter and endocrine influences on behavior will be discussed. Laboratory experiences will include dissection, physiological modeling, and experimental demonstration. (3-2)
Prerequisites: PSYC 296

## PSYC 328 Industrial/Organizational Psyc

This course explores the ways that psychology can help us to understand the behavior of people in the workplace. It includes study of the motivation and development of the individual employee as well as the group dynamics of the organization in which the employee functions. Equal emphasis will be placed upon understanding relevant psychological theory and learning how to apply psychology in practical situations. (4-0)
Prerequisites: (COMP 126 OR COMP 250 OR COMP 150) AND PSYC 157

## PSYC 330 Animal Behavior

This course emphasizes the field of ethology. The course will describe the behavior of a wide range of animal species (including various insects, birds, reptiles, amphibians, and mammals). Human behavior will not be emphasized. The course will require students to understand and implement various behavioral techniques such as estimation, classification, and analysis. Theoretical orientation will be based on historic ethological and evolutionary perspectives. The lab will require both laboratory and field work. Instructor permission. (4-0)
Prerequisites: PSYC 296

PSYC 333 Expressive Arts Therapy-Commun 2
This course is for juniors and seniors who are interested in and/ or have experience with special needs populations. After training, art, dance and movement processes will be developed with a group of adults with chronic mental illness. This course is repeatable once for credit. Instructor permission. (2-0)

## PSYC $340 \quad$ Creativity

An interdisciplinary inquiry course exploring biopsychosocial expressions of creative process through study of theory and applications to current social issues. Areas for exploration include the creative brain, paradigm shifts, the creativity of change, and specific student interest in creativity through movement, visual arts, improvisation, free writing and dialogue. Instructor permission. (4-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250 OR GS 151) AND (LIB 150 OR LIB 150 equivalent)

## PSYC $342 \quad$ Psychological Testing <br> 4

A course designed to introduce the student to the area of psychological tests and measurements, providing training in the concepts and applications of intelligence tests, personality inventories, and projective techniques, as well as aptitude and interest scales. Students take, score, interpret and discuss some of the most commonly used psychological tests. (4-0)
Prerequisites: PSYC 233 AND (PSYC 241 OR MATH 201 OR BA 253)

## PSYC $350 \quad$ Psychology of Globalization 6

This course will examine the development, change and ecology of selected countries typically located in Asia, Africa, and South America. Students will gain insights into the indigenous technologies and lifestyles of the people we visit. (6-0)

PSYC 354 Topics in Child Psychology 4
This course offers a more concentrated focus on child psychology than Psyc 254 (Life Span Human Development). The course will cover interesting aspects of developmental psychology including biosocial, socioemotional and cognitive growth. Current methods, theories and empirical findings on child development will be examined with a focus on child and adolescent psychopathology. The course explores how factors such as genetics, culture and parenting influence various dimensions of infancy, childhood and adolescence. (4-0)
Prerequisites: PSYC 254
PSYC $364 \quad$ Family Dynamics
This course examines empirical, clinical, applied, theoretical and policy issues concerning family life, family development and family dynamics. The course includes themes related to the changing concept of the family, family demography, family ethnicity and values, family functioning and selected therapeutic interventions. The principal focus may vary among themes of clinical family systems, family development and applied interventions with families. (4-0)
Prerequisites: PSYC 157

## PSYC 372 Language, Mind and Brain

This interdisciplinary course focuses on the unconscious processes occurring in our minds that allow us to understand and produce language. Topics include animal communication, evolution of language, dyslexia, use of sign language, bilingualism, childhood language acquisition, language disorders caused by brain damage, and hemispheric differences in language processing. (4-0)
Prerequisites: PSYC 157

PSYC 375 Multicultural Psychology 4
This course will present an overview of multicultural viewpoints in developmental, clinical and research psychology. Predominant western Europe psychological theory will be compared and contrasted with thinking from non-Western constructs and ideology. Multiculturalism as a psychology of people will be explored from a global perspective and from the perspective of various ethnic and minority groups within the United States. Students will attempt to integrate culturally diverse thinking and research to explore ways to increase cultural sensitivity and tolerance of difference in community, workplace and human service contexts. (4-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND PSYC 157

## PSYC 383 History of Psychology

Classroom activities make this course a hands-on experience. We focus on the people who have created clinical and experimental psychology, including Wundt, James, Skinner, Chomsky, Piaget, Freud, Jung, Erikson, Maslow, and Rogers, to name only a few. We also consider the systemic context within which different schools of thought emerged, which helps to integrate different areas of psychology. (4-0)
Prerequisites: PSYC 157
PSYC 386 Psychology of Fatherhood
This course will examine fathers' roles in the family within a cross-cultural perspective. Initially, we will look at various theoretical views to understand fathers; we later focus on the importance of studying fathers; socioeconomic, intellectual, and clinical implications of fathers' roles; cultural belief structures in fathering; and level of fathers' participation in the family. Finally, we will conduct a cross-cultural examination of fathering behaviors and discuss the degree of fathers' participation in childrearing and other household tasks. (4-0)

## Prerequisites: (PSYC 241 OR MATH 201 OR BA 253)

## PSYC 387 Abnormal Psychology

A study of historical, cultural, and contemporary approaches to understanding and treating psychopathology. Use of the DSM IV classification system is taught and case studies of psychopathology are analyzed. (4-0)
Prerequisites: PSYC 233

## PSYC 392 Foundations of Clinical Psych

The course provides a foundation in the applications of psychological theory and research, toward a variety of intra-psychic, interpersonal and organizational problems in our society. (4-0)
Prerequisites: PSYC 387

## PSYC 393 Health Psychology 4

A study of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of diagnostic correlates of health, wellness and illness, and the interaction of personal, interpersonal and community aspects of wellness. Topics covered include the biopsychosocial model, family and community systems, the health care system and alternate methods of health care delivery. (4-0) Prerequisites: PSYC 157

PSYC 394 Field School in Clinical Psych
A one-month participation with a psychiatric team at a state hospital for mentally disturbed persons. Experiences include admission interviews, staffings, diagnostic techniques, treatment planning and implementation including occupational and recreational therapy. Offered in the first summer term. Instructor permission.
Prerequisites: PSYC 387
PSYC 395 Sem \& Pract in Clinical Psych
The course provides an opportunity for students to engage in a supervised practicum in cooperation with an area health or human services organization. Weekly seminars will deal with professional issues and ethics common to all settings. Consent of instructor. (4-0)
Prerequisites: PSYC 392 AND PSYC 420
PSYC 406 Case Studies in Neuropsyc 4
This course explores the world of cognitive neuropsychology by looking into true stories of individuals who have suffered brain injuries or disorders that lead to very specific deficits. For example, we consider the artist whose visual world turned grey overnight, the amputee whose phantom arm sensations were remapped onto his cheek, the hippie whose memory left him stranded in the 60s, the attorney who couldn't recognize her own face in the mirror, and the surgeon who twitched uncontrollably with Tourette syndrome. Cases like these deepen our understanding of the inner workings of the human brain. (4-0)
Prerequisites: PSYC 157

## PSYC 420 Counseling Skills

This course develops various counseling skills, processes, and abilities in students through academic and applied instruction. Consent of instructor.
Prerequisites: PSYC 387

## PSYC 425 Social Psychology 4

This course provides an introduction to the many ways in which our thoughts, emotions and behavior are influenced by the people around us. We will explore topics such as aggression, attitude change, group dynamics and self-presentation. Emphasis will be placed upon theories of social behavior and the scientific research that supports them. (4-0)
Prerequisites: PSYC 296

## PSYC 426 Sensation and Perception

This course examines human vision, hearing, smell, taste, and touch. While studying these sensory systems, we also consider the perception of art, music, illusions, speech, and pain. Numerous demonstrations and experiments are included in the lab and lecture so that abstract principles can be applied in meaningful, interesting ways. (4-0)
Prerequisites: PSYC 157

## PSYC 441 Human Memory and Cognition 4

Principles of cognitive psychology explain how humans remember, learn, and think. Topics include attention, working memory as consciousness, autobiographical memory, remembering in infancy and childhood, semantic frameworks for learning, memory disorders and amnesias, problem-solving, creativity, and cognitive ways to improve learning, as well as the effects of emotion and trauma on memory for events. Class activities and demonstrations illustrate many concepts. (4-0)
Prerequisites: PSYC 157

PSYC 444 Evolutionary Psychology
Students in this course will examine the influence of evolutionary theory on the field of psychology. Students will review the historical impact of evolutionary theories upon societal values, practices, therapies, and our understanding of human nature. Contemporary findings in the area of behavioral genetics will be incorporated into a model of human nature (4-0)
Prerequisites: PSYC 300
PSYC 496 Senior Seminar 4
Advanced study and research in selected topics. Consent of instructor. (4-0)
Prerequisites: PSYC 296 AND PSYC 300

## PSYC 498 Senior Research/Thesis 1-6

Each student completes a quantitative research project, a qualitative research experience, a comprehensive literature review, or a Community-based agency experience. The course provides students with an opportunity to pursue individual interests under the direct supervision of a member of the Psychology faculty; Repeatable up to a maximum of 6 credits. Senior standing and consent of the instructor.
Prerequisites: PSYC 296 AND PSYC 300

## PSYC 499 Independent Study <br> 1-6

Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## RELIGIOUS STUDIES

RS 244 R Chinese Philosophy 3 A study of Confucianism, Taoism, and Buddhism with consideration of some dissenting views to these dominant schools of Chinese thought, such as Maoism and Legalism. We will investigate the theories of human nature, knowledge, and reality embraced by these philosophies, as well as their conceptions of ethics and politics. This course is the same as Phil 244; credit will be given for only one of these courses. (3-0)

## RS 261R Philosophy of Religion 4

An examination of different philosophical approaches to problems raised by religion. Readings are selected from sources representing widely differing points of view, e.g., those of phenomenology, feminism and liberation theology. This course is the same as Phil 261 ; credit will be given for only one of these courses. (4-0)

## RS 308 Rise of Christianity 4

 A study of the historical Jesus of Nazareth, Judaism, and first century Jewish Palestine under Roman domination. The development of Pauline Christianity and the struggle between orthodox and Gnostic Christians culminating in the final orthodox victory around 400 A.D. will be studied in depth. This course is the same as Hist 308; credit will be given for only one of these courses. (4-0)RS 310 Psychology of Religion 4 In this course we will explore the psychology of spirituality and religious experience. Topics will include the history of the psychology of religion; the motivational basis of religious participation; the relationship between mental health and religion; development of religious ideas across the lifespan; and social-psychological factors in religious conversion and commitment. This is the same course as Psyc 310 ; credit will be given for only one of these courses. (4-0)
Prerequisites: PSYC 110 OR PSYC 157

## RS 320 Indigenous Worldviews

A survey of selected regional belief systems outside the major religious traditions treated in Phil 321. Emphasis is on philosophical foundations of religious cultures native to the Americas, Africa, Asia, Australia, and Old Europe. Special attention is given to the mythic and other symbolic expressions of archaic consciousness in contemporary societies. This course is the same as Phil 320; credit will be given for only one of these courses. (4-0) these courses.

RS 321 World Religions
A study of the nature and history of the major contemporary religions of the world. This course is the same as Phil 321; credit will be given for only one of these courses. (4-0)

RS $328 \quad$ Christianity in US History
This course covers the role of Christianity in United States history from the nation's creation until today. The class will look at how mainline Christian denominations have shaped U.S. history and been in turn shaped by the American experience. Within this broad historical sweep of linking the past to the present important issues like the separation between church and state, and how the nation has gone from Protestant establishment to secularism as well as how law and politics have come to impact religion, will be examined. This course is the same as Hist 328 ; credit will be given for only one of these courses. (4-0)

RS 382 Dead Sea Scrolls 3
This course examines the Dead Sea Scrolls in the context of Jewish history, the historical Jesus, and earliest Christianity. (3-0)

RS 385 Historical Jesus 3
This course investigates Jesus as an historical figure in the context of the religion, politics, economic, and culture of his time in Roman dominated Jewish Palestine. Historical critical methods will be employed to evaluate the major scholarly debates among secular, Christian, and Jewish scholars. (3-0)

## RS 446 Ancient Israel and Judah

 3This seminar explores ancient Israel from its beginnings around 1250 B.C. to the crucifixion of Jesus of Nazareth around 33 A.D. Topics include the historical and archaeological origins of Israel and Judah, Biblical composition and authors, the Babylonian exile, the Dead Sea Scrolls, and Jesus in Jewish and Christian historical context. Historiography and critical scholarship are emphasized. This course is the same as HIST 446; credit will only be given for one of these courses. This course is recommended as a senior capstone course in religious Studies. (3-0)

## RS 499 Independent Study

1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

SOCIOLOGY
SOC 100 S Introduction to Sociology
This introductory course seeks to examine the extent to which the crisis of institutions creates personal problems in our everyday lives. Conversely, it will explore the degree to which our personal troubles foster institutional contradictions. The field of Sociology explores such topics as stratification, institutions, work and authority, criminology, the environment and health and welfare delivery systems. (4-0)

## SOC 101 American Society

This course introduces international students to contemporary American society through a sociological analysis of thechanging patterns of family, community, work, gender, and education in the U.S. and Japan. This sociological perspective on U.S. society will deepen students' understanding of the society in which they will be living and attending college. This course is taught in English. This course is repeatable for up to 2 credits. Consent of instructor. (1-0)

SOC 200 Social Change \& Human Services 4
This course is designed to facilitate critical understanding of, and commitment to, processes of social change in modern society. Using historical and theoretical analysis of social change efforts, students are encouraged to embrace and develop models of change that take seriously the personal and social dimensions of human struggle. The role and responsibility of human service agencies in social change/community development is also considered. Field work is required. ( $4-0$ )

## SOC 210 W Soc Inquiry \& Research Methods 4

An introduction to quantitative methods used in social science this course serves as one of the Writing Courses for the Department of Sociology/Human Services. The appropriateness and application of various methods will be emphasized. Data collection, reduction, analysis and interpretation will be covered. Emphasis will also focus on interviewing, participant observation, and ethnographic approaches to data collection, and the development of descriptions and interpretations of social settings. Consent of instructor. (4-0)

SOC $250 \mathrm{R} \quad$ Social Issues - Native Society 4
An examination of the social, political, and economic circumstances of both urban and rural native societies worldwide. Emphasis will be on the United States. Topics may include indigenous peoples in cities, tribal councils, environmental racism, criminal justice, social services, youth, international indigenous issues and networks. (4-0)

SOC 275 S Family Marriage \& Sex-Role Sys 4 Analysis of changing patterns of family life and sex roles in contemporary society, of the social sources of these changes, and of their societal and individual consequences. (4-0)

## SOC 279 R Ethnicity Gender \& Class In SW 4

A descriptive analytic inquiry into the historical, social, and economic position of the Hispanics, Native Americans, and women of the Southwest. (4-0)

SOC 280 S Pop Cult \& Mass Communications 4 An inquiry into both the production and the consumption of popular culture. Attention will be paid to cultural power as a force for domination as well as a condition for collective affirmation and struggle. Topics include popular music, radio and television programs, news media, comic strips, and pulp fiction. (4-0)

SOC 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## SOC 300 W Theo of Social \& Personal Life

This course will critically examine the classical and contemporary theories of self and society. The major paradigms of functionalism, Marxism, symbolic interactionism, structuralism, ethnomethodology, and critical and feminist theory will be evaluated. This course serves as the Writing Course for Humanities majors seeking a primary concentration in Sociology/ Human Services. (4-0)

## SOC $301 \quad$ Comparative Societies

A comparative study of the social structures of selected countries and regions within the first, second, and third worlds. Comparisons will be made of societies within selected regions as well as their relationships to U.S. society. Selected countries and regions will include: Cuba and the Caribbean, the Andean countries, China, Japan, etc. Students may repeat the course for credit provided the topic is different on each occasion. (4-0)

SOC 310 Ecology and Society
This course will examine environmental issues and the natural world from a cultural and socioeconomic perspective. It will attempt to study the ideas, conceptions, practices, and beliefs that relate people to the land and their collective environment. Finally, it will look at environmental concerns from the perspective of workers, minorities, and rural and urban communities both in America and worldwide. (4-0)

## SOC 311 Ecology \& Society Field Sch

This course offers a field experience in the relationship between people and the land. Students will work on farms and in the U.S. National Forest. They will meet with Anglos, Hispanics, and Native Americans in rural communities. One week will be spent in the National Forest learning to identify wildlife and its habitat.

## SOC 320 Community Service Practicum <br> 1-16

This course provides the student with experience in applied sociology. Students will be involved in human services, applied social research or other activities approved by the advisor and practicum coordinator. The emphasis is on gaining experiential knowledge through active participation in sociological practice and sharing this in a classroom experience. Practicum may be taken for 4 or 8 credits per term and for a maximum of 16 credits. A maximum of 8 credits can be applied toward the major in Sociology. Consent of instructor.

## SOC $330 \quad$ Mind, Self and Society

4
An examination into the ways in which society influences the self and the individual produces society. The relationship between consciousness and social structure will be discussed. Theoretical focus may include symbolic interactionism, ethnomethodology and/or a Marxist perspective. (4-0)

SOC 340 Religion and Social Life
An examination of, principally, contemporary religious phenomena from the viewpoint of social science. The course will also examine the significance of religious studies in the development of reasoning about society. (4-0)

SOC 345 Art and Society
An inquiry into the relationship between any historically specific art and the social setting in which it was created. The idea that art is a way of seeing a world view or a theoretic, will be explored. The focus of the course may be literature, the visual arts, music, theater, or film. (4-0)

## SOC 350 Search for Intimacy

This course will examine the cultural and institutional obstacles to intimacy. Class, gender, and race as historical categories will play their part in discussion and analysis. The idea that intimacy is something that only applies to romantic relations but not to larger social and community concerns will be examined. (4-0)

## SOC 353 Medical Sociology 4

A study of the social practices and beliefs that define and constitute the phenomena of health and illness. The current health care delivery system, including professional roles, patient participation, administration, medical education, and planning, will be critically reviewed, and alternatives will be explored. This course is recommended for Pre-Health as well as Social Science majors. (4-0)

SOC 361 Deviance 4
An examination of the traditional versions of deviance followed by modern critiques that emphasize "labeling" and the more phenomenological approaches to understanding human conduct. (4-0)

SOC 362 Criminology \& Criminal Justice 4 An examination of the major "positivist" theories of crime and criminality (individual, familial, subcultural) followed by the modern critique of positivist criminology emphasizing the part played by the administration of criminal justice as an integral part of the characterizing and structuring of crime. (4-0)

## SOC 363 Juvenile Delinquency

4
A review of contemporary thinking about the development of juvenile delinquency and the linkages between juvenile delinquency and the administration of juvenile justice. (4-0)

## SOC 375 Sociology of Education

Study of the organization and practices of educational institutions and of the transformation these institutions are now undergoing. Special attention to the nature of these changes and their impact on the learning process as well as their consequences for the larger society will be explored. (4-0)

## SOC 376 Language \& Social Behavior

4
A concentrated look at the social function of language use in society. The extent to which languages create social reality will receive scrutiny. Particular topics may include language and social class, language and sex, linguistic politics, language and culture, or language cognition and development. (4-0)

SOC 380 Work and Authority in Society 4
This course will explore the extent to which meaningful work is possible in any society. It will seek to account for the forms of authority in work and describe the impact that hierarchical structures have on the individual. (4-0)

SOC 383 Women in Society
This course focuses on where American women in various class and ethnic categories stand in society now, compared not only to men but also to their mothers and grandmothers. It takes into account economic status, educational and job opportunities, family responsibilities, physical well-being and reproductive rights. It includes a significant portion of feminist theory, which serves as the vehicle for an ongoing analysis of the ways in which political, economic, and other social structures, as well as psychological factors such as gender attitudes, have historically affected the status of women. (4-0)

## SOC 400 Native American Law \& Politics 4

A study of political and legal issues that involve American Indians from a historical and contemporary perspective. This course is the same as PS 400; credit will be given for only one of these courses. (4-0)

## SOC 421 Contemp Social Analysis In SW 4

A seminar in the application of theories of social change, social knowledge, and research into regional issues in the Southwest. Topics may vary but will critically address issues of water, energy, agriculture, urbanization, inequality, public morality, politics, education, and community. Consent of instructor. (4-0)

SOC 496 Senior Seminar 4
Advanced study and research in selected topics. The student will prepare and submit a senior seminar research paper to qualify for graduation. (4-0)

## SOC 499 Independent Study 1-6

 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.
## SOUTHWEST STUDIES

SW 100 Fund of Navaio Language I 3
A course in the basic fundamentals of the Navajo language on the oral-aural approach. The instructor is a native speaker and much use is made of tapes, etc. Same as ML 100; credit will be given for only one of these courses. (3-0)

SW 101 Navajo Language II 3
Continuation of Navajo I. Whereas Navajo I emphasized speaking, this course will center on reading and writing of the Navajo language. Same as ML 101; credit will be given for only one of these courses. (3-0)
Prerequisites: SW 100 OR ML 100
SW 110 Intro American Indian Studies 3
Surveys the concepts, methods, and contents of American Indian Studies, using examples from the indigenous cultures of North America and paying special attention to the ways in which academic disciplines contribute to our understanding of indigenous cultures. (3-0)

SW 115 Native American Newsletter 3 For lower-division students with good writing skills. Students will prepare six stories for publication in the Intercultural News, gaining basic skills in news writing for a specific readership, Macintosh computer format, photo taking, and news layout and design. Coursework will include concepts pertinent to contributing to communications in "Indian Country." May be taken twice for credit. (3-0)

SW 123 R American Indian History
The history of Indians of the United States from contact to the present. (3-0)

SW 125 Hist of Hispanos in Southwest 3 A study of the history of the Hispanos in the American Southwest from the period of exploration to the Chicano Movement in the 1960s and 1970s. For the purposes of this course the Southwest is defined as including the geographic area under Spanish and Mexican sovereignty before 1848. (3-0)

SW 131 N Southwest History and Culture 3
A broad introduction to Southwestern history and cultures with lectures on history, archaeology, literature, art, and other related topics. (3-0)

SW 135R The Southwest I 3
The course will feature an interdisciplinary approach for examining the uniqueness of the Southwest. Students will examine the geological, biological, historical, and cultural diversity of the Southwest. Major problems confronting this region will be explored. (3-0)

## SW 136 The Southwest II <br> 3

This course concentrates on contemporary practical and conceptual problems and issues such as indigenous land rights, the environment, tourism, economic development, water, racism, the U.S./Mexico border, labor, and demographics, among others. Emphasis will also be given to creative problem solving that draws on multicultural and interdisciplinary sources. (4-0)
Prerequisites: SW 135

## SW $154 \quad$ Indian Arts and Crafts I

This course is the same as Art 154; credit will be given for only one of these courses. For description of course, see Art 154. (0-6)

SW $181 \mathrm{~N} \quad$ US/SW Environmental History 3 This course explores the environmental history of the U.S. from pre-European contact through today, with a focus on the West/ Southwest. The course will look at how the land and culture(s) interacted to reorganize and redefine one another, the relationship between environmental and cultural change, and how the present is linked to the past. This course is the same as Hist 181; credit will be given for only one of these courses. (3-0)

SW 241 Public History:Scope \& Methods 3 We will examine the "front end" of history - various ways in which stories of the past are taken outside of the academy's "stone walls" and presented to the general public. Public historians package and convey history to make it come alive. They apply historical knowledge and methods in settings as diverse as archives, museums, historical sites, businesses, and mass media. (3-0)

SW 250 NX Ecology of the Southwest 4
This course provides an understanding of the scientific method by investigating the ecology of the Southwest. Through field trips and research projects, students learn to recognize major plant and animal species, and ecological factors that limit species distribution and abundance. Lectures and readings provide insights into major ecological processes, e.g., population growth, food webs, and natural disturbances. This course is the same as Bio 250; credit will be given for only one of these courses. (3-3)

SW 255 Intro to Heritage Preservation 3 The Introduction to Heritage Preservation course will introduce students to a number of career paths in public history, archives, museums, and interpretation within federal agencies like the U.S. Forest Service, the National Parks Service, the Bureau of Land Management and tribal cultural preservation programs. Field trips, guest speakers, and group projects will be featured. (3-0)

SW 256 Introduction to Museums 3
Introduction to Museums will enable students to learn about a wide facet of museum careers in art, culture, and history museums and in the interpretation of culture and historic sites. Students will get hands-on experience with the numerous collections at the Center of Southwest Studies. Field trips, guest speakers, and group projects will be featured. Consent of instructor. (3-0)

SW 265 Art History of the Southwest 3 This course is the same as Art 265; credit will be given for only one of these courses. For description of course, see Art 265. (3-0)

SW 280 S Native Amer in Modern World 3 This is an introductory study of contemporary affairs in Indian Country. The historical beginnings, development and current significance of today's issues will be studied. Students will learn of these issues from recent materials, many produced by Indian people, and will be encouraged to explore their own interests in Indian affairs in brief writing assignments. (3-0)

SW 282 Hispano Culture of Southwest 3
This course examines the culture of the Hispanos in the Southwest. The material is studied from an ethnohistorical perspective, i.e., how the culture developed from the Spanish colonial period to the present. Ideal culture and real culture are contrasted in the course in order to understand the dynamics of culture and its constant evolution. (3-0)

SW 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## SW 301 W Writing/SW Studies Discipline 3

 This course fulfills the writing requirement for the Southwest Studies major. Students will study methods of writing of established scholars in the field and produce their own written materials appropriate for Southwest Studies. (3-0)Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND LIB 150

SW $315 \quad$ Native American News Writing 3 For upper-division students with good writing skills. In addition to the requirements for the SW 115 level course, students will work with and edit stories for students in the 115 class. May be taken twice for credit. (3-0)

SW $317 \quad$ Histry of Amer Indians in Film 3 An analysis of the treatment of American Indians in film. It also will relate film images to images in literature and other media. (3-0)

SW 318 History of Chicanos in Film 3
This course will focus on the changing treatment of Hispanos/ Chicanos in American commercial film. It will deal with the issue of stereotypes and will relate films to prevailing attitudes at the time in which they were made. It also will evaluate the impact of film on public attitudes. (3-0)

## SW $320 \quad$ West/SW American History

This course will focus on the 19th century American west. Using the theme of expansionism, the course will look at the interaction between cultures and people in the West, the forces that produced a unique section of the country, the creation of the mythic West and its enduring legacy, and how the present is linked to the past in the trans-Mississippi West. (3-0)

## SW 322 American Indian Philosophies

The course will look at the various aspects of American Indian philosophies and the manifestations of those philosophies. The course will study both traditional philosophies and those that have been changed through contact with American society. (3-0)

SW 323 Southwest Indian History 3
Studies the history and culture of Native American groups in the Southwest. (3-0)

SW $326 \quad$ West \& SW in Film and Fiction 3
An analysis of the treatment of the West and Southwest in film and fiction. (3-0)

## SW 327 American Indians \& Mass Media 3

The Native Peoples of North America have been the subjects of a virtual war of misinformation since first contacts with Europeans. American mass media still cast images of Indian people that serve to trivialize their concerns and confound their attempts to remain culturally distinct and sovereign peoples. Students in this course will appraise the process and effects of stereotyping of Indian people in the mass media and learn of the responses of today's Indian media professionals. Issues of cultural dominance and new media technologies will also be examined. Students will evaluate media materials through written research and oral presentations and produce media products to counter the problems created for Indian people by the mass media. (3-0)

## SW $330 \quad$ Cowboys, Cattlemen \& Pop Cult 3

This course focuses upon the cattle industry in the United States. The approach is interdisciplinary and will include history, folklore, music, art, and literature. Contemporary issues such as those related to grazing policies, image of the cowboy, and rodeo will also be included. (3-0)

SW $333 \quad$ Wilderness in America
This course traces the history of the concept of wilderness on American public lands beginning in the Colonial period in the 1600s with wilderness defined as a dangerous, unsettled area, to the establishment of the federal wilderness preservation system in 1964. Students will read history, literature and science and will come to understand difficult issues in managing wilderness areas today. Hiking, camping, and field trips to wilderness areas in the San Juan Mountains will be an integral part of the course. (3-0)
$\begin{array}{ccc}\text { SW } & 335 & \text { Nat'l Parks: Amer's Best Idea } \\ \text { This course will begin with the history of the National Park Service }\end{array}$ and the Organic Act, passed in 1916, that required national parks to remain "unimpaired for future generations" thus creating the paradox of public use versus site preservation. The evolution of the National Park Service will be discussed with equal attention to history and science and the concept of national parks as valuable biotic reservoirs for ecosystems and endangered species and as home to spectacular mountain and canyon Western landscapes. The course will also focus on history, archaeology, and anthropology as those disciplines have been interpreted at units of the National Park Service including national monuments national parks, national recreation areas, and national seashores. Note: field trips will be required. (3-0)

SW 340 Archival Theory and Practice 3
The tools and approaches taught in this course should be useful to anyone who aims at making a difference in today's information age. In addition to learning organizational principles from the archival profession, students will examine and implement effective and efficient ways of storing, accessing, and selectively preserving data. Classes are supplemented by archival work in the Center of Southwest Studies. (4-0)

## SW $\quad 341 \quad$ Oral History; Theory \& Pract

This course uses interactive listening to provide an understanding of the theory and practice of producing oral histories. It will benefit a budding historian, anthropologist, folklorist, sociologist, or archivist, and anyone wanting to improve listening skills and desiring to preserve an otherwise undocumented aspect of our past. Participants practice oral history interviewing and transcription. The final product is transcribed oral history interview of sufficient historical research value to warrant inclusion in the Center of Southwest Studies collection. (3-0)
Prerequisites: COMP 150 OR COMP 126 OR COMP 250

## SW 342 Cultural Resources

This course is designed to prepare students in the interpretation of cultural resources and to create awareness of Western heritage under specific topics such as Indian Heritage; mining heritage; ranching heritage; etc. Each class will have a different cohesive theme that will include readings, research, guest speakers, and field trips. (3-0)

SW 344 Native American Oral Tradition 3
Native American Oral Traditions still offer distinct perceptions of the world. Students in this course will learn of the evolution of tribal oral traditions from early records of their existence to the modern issues surrounding their maintenance. These and other issues will be explored through essay and oral assignments and participation in individual and group activities in recording oral traditions. (3-0)

## SW 355 Dev of US Indian Policy 3

This course traces the development of United State policy toward the American Indians. Beginning with the policies inherited from European colonizers, the federal government developed expedient policies to balance the desires of its own citizens with the Indian peoples' legal rights and hopes for continued tribal survival. The course documents the opposing concepts of assimilation and segregation that have led to the present philosophy of pluralism and self- determination in United States Indian policy. (3-0)

SW $360 \quad$ MesoAmerican Art History $\quad 3 \quad 3$ one of these courses. See Art 365 for course description. (3-0) Prerequisites: (COMP 126 OR COMP 150 OR COMP 250) AND (LIB 150 OR LIB 150 equivalent)

SW 361 Cultural Ecology of the SW 3
A survey of the complex relationships between human and biotic communities in the Southwest from ethnobotany to agriculture to the urban Southwest with an emphasis on technology, culture, and ecology. (3-0)

SW 368 Native N. American Art History 3 Using a regional approach, this course examines art by Native Americans from Alaska, the Northwest Coast of North America, Plains, Woodlands, California, Northeast, Southeast and Southwest regions of the United States. The influence of tourism, photography, and museums on art, as well as Native American influence on these forces is also examined. Art surveyed ranges from the archaic to the contemporary. This course is the same as Art 368. Credit will be given for only one of these courses. (3-0)

SW 380 Native Amer Lit: Topics 4
A study of traditional and contemporary Native American expression as seen through oration, tales and legends, chants and songs, poetry, drama, autobiography and the novel. This course is the same as Engl 380 ; credit will be given for only one of these courses. (4-0)
Prerequisites: LIB 150 AND (COMP 150 OR COMP 250
OR COMP 126)
SW 381 Chicano Literature 3
This course is the same as ML 331. See ML 331 for course description. Credit will be given for only one of these courses. (3-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND (LIB 150 OR LIB 150 equivalent)

SW 382 Hispano Lit, Art, Cult 3 Survey of the re-assertion of Chicano culture in the Southwest with a focus on myth, ritual, symbol and storytelling through art and literature and emphasis upon the relationships between Meso-American, American Indian, and Indo-Hispano cultures (3-0)

## SW 383 Southwest History to 1868 <br> 3

This course will cover the Spanish, Mexican, and early territorial periods in the Southwest, concluding with the end of the Civil War and the Navajo treaty of 1868. (3-0)
Prerequisites: (COMP 126 OR COMP 150 OR COMP 250) AND (LIB 150 OR LIB 150 equivalent)

## SW 384 Southwest Hist 1868 to Present 3

This course will cover the political, social and economic history of the Southwest from 1868 to the present. (3-0)

## SW 402 Contemp Art \& Lit of the S.W. 3

The course will conceptualize the Southwestern artist in terms of spirit and place, or broadly speaking, the effect the landscape has upon art and the artist. In addition, the course will focus on critical issues such as marketing of ethnicity, repatriation, looting of archaeological sites and the artifacts black market, curating major exhibits, and displaying of and writing about the sacred. (3-0)
Prerequisites: (COMP 126 OR COMP 150 OR COMP 250) AND (LIB 150 OR LIB 150 equivalent)

SW 425 Hispanic Civilization 3 Using a global approach, this course examines the histories and cultures of the Indian and Hispanic Southwest by comparing them to the Hispanic cultures in Latin America, Europe, and the Caribbean. (3-0)

SW 450 Tribal Preservation 3 Tribal Preservation will introduce students to all aspects of tribal historic preservation and cultural resource management on Indian lands. Using a case study approach, students will learn how to preserve and protect sacred objects and sacred places and explore career options with native programs. Field trips and guest speakers will be featured. (3-0)

SW 481 Colorado History 3 The history and peoples of Colorado from the preterritorial days through the present. This course is the same as Hist 324; credit will be given for only one of these courses. (3-0)

## SW 482 Western American Mining

 3 From the days of the Spanish to today, a history of mining and its impact, with special emphasis on the Southwest. This course is the same as Hist 322; credit will be given for only one of these courses. (3-0)
## SW 491 Practicum <br> 3

As an integral part of a heritage preservation certificate, the Southwest Studies practicum will provide valuable work-related experience in the Durango area for a minimum of 120 contact hours. Students may work on campus, in area museums, or with federal agencies involved in cultural preservation. This is a formal mentored relationship to allow students to pursue career goals in the preservation field. (0-3)

SW 493 Intern SW Studies 1-6
The internship offers instruction and hands-on experience in museology and archival management. Course is repeatable for up to 6 credits.

SW 496 Senior Seminar 3
Senior seminar in Southwest Studies. (3-0)
Prerequisites: (COMP 126 OR COMP 150 OR COMP 250) AND (LB 150 OR LIB 150 equivalent)

SW 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## THEATRE

THEA 100 Dramatic Theatre
This course involves initial participation in theatrical production. It includes limited involvement in various areas of theatre from inception to presentation. Students with little or no theatre experience will gain a working knowledge of performance. Repeatable for up to 12 credits.

THEA 101 R Introduction to Theatre
This course offers a general introduction to the theatre and to performance in the human experience. Students view and discuss films and live performances, and perform scenes in class. The course emphasizes an understanding of the processes of creating theatre, and of the role of theatre and performance in the context of cultures and contemporary society. Guest speakers from other disciplines introduce a variety of perspectives on performance as a human activity. There is a strong participatory component to the course. (4-0)

## THEA 126 R Introduction to the Dance

This course offers an exploration of the historical/ theoretical basis of dance and its many variant forms. In addition to gaining an historical and theoretical knowledge of dance, this course includes the practical/technical overview of traditional and contemporary dance forms including African dance, folk dance, ballet, jazz dance, musical theatre, performance art, and dance improvisation. Students will gain a general knowledge of technical skills as well as a broad knowledge and appreciation of the art and history of dance. (4-0)

THEA 135 Acting Techniques
This course is the first in the performing sequence (Thea 135 and 236). It introduces students to basic performance techniques including: vocal and physical preparation, alignment and posture, movement for stage, improvisational skills, performance of literature, text analysis, and introductory scene work. (4-0)

## THEA 200 Theatrical Production

This course constitutes involvement of the intermediate level student in theatrical production. Students with a developing dedication to theatre participate in selected areas including but not limited to dramaturgy, technical theatre, performance administration, and performance. Repertoire includes classical, modern, musical theatre, and dance. Repeatable for up to 12 credits.

## THEA 230 Stage Technology

This course provides students with a basic working knowledge of the technical aspects of theatre including scenery construction, costume construction, prop construction, lighting equipment and its uses, and introductory knowledge of the aspects of stage design. (3-2)

## THEA 231 Make-up for Stage

This hands-on course explores stage make-up techniques including old age, stylized, fantasy, disaster, and corrective make-up. In addition to this application, students will also explore make-up design from text to production. (2-0)

## THEA 233 Audition Techniques

An audition is the actor's primary tool for securing employment. This course explores the audition process in terms of text analysis, musical auditions, film auditions, choosing audition materials, and audition trends across the United States. The purpose of this course is to help students compile an audition repertoire in order to be competitive in both the professional and educational world of theatre. (2-0)

THEA 236 Styles in Acting 4
This course is the second in the performing sequence. It further develops the student's performance skills through the theory and practice of various systems of acting. At this level the students will focus primarily on styles in acting. Thea 135 suggested, but not required. (3-2)

THEA 240 R Ancient \& Classical Theatre
This course is the first in the theatre criticism/dramatic literature sequence (Thea 240 and 340W). Students taking this course attain a breadth and depth of foundational knowledge of world theatre/dramatic literature and cultures by examining various styles and traditions of performers, playhouses, plays, and playwrights to 1800 . Focus is placed on reading and analyzing plays and attaining insight into the thinking and theatre conventions of times and places at a greater distance from our own including: Classical Greek and Roman, Asian, Indonesian, Medieval, Italian Renaissance, Elizabethan, Jacobean and Caroline, Spanish, French Neo-classic, Restoration and Enlightenment. (4-0)

THEA 299 Individual Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## THEA 300 Theatre Ensemble <br> 1-4

This course involves participation in a theatrical production, including various areas of technical theatre and performance. The maturing student is actively involved in theatre production(s) during the semester. Repeatable for up to 12 credits.

THEA 310 Design for the Theatre 4 This class provides an in-depth look at design for the stage. Emphasis will be placed on scenery, lighting, properties, and sound design. This course includes research in art history, time periods, and theatrical styles. Students will present a series of designs and models for those designs. (4-0)

## THEA 322 Creative Dramatics

Creative Drama uses a student's innate ability to "play" in the developmental process of becoming a productive well-adjusted human being. This course focuses on using drama as a teaching tool in multiple disciplines, using drama as a socializing tool for children and adults, and understanding drama as an art form. (4-0)

## THEA 323 Children's Theatre 4

 In this performance-based course, students will explore dramatic literature appropriate for child audiences. Students will travel to area schools and perform for and with Durango area children. (4-0)THEA 336 Creating Performance/Directing 4 This course concentrates on the conceptual and practical application of performance in the form of creating a production from initial concept to closure. Students will develop and use the skills of analysis, strategic planning, directing, creating movement, organization, and administration. (4-0)

## THEA 340 W Modern Theatre

This course, the second in the dramatic literature sequence (Thea 240 and 340 W ) surveys developments in theatre practice and dramatic literature from the beginning of the 19th through the mid-20th century. The development of modern drama and the concurrent philosophical thinking in Western theatre history will be the focus of the course. The course will also explore coinciding developments in Asian and African theatre and intercultural influences. May be taken as a "Topics" course for certain English majors. (4-0)
Prerequisites: THEA 240

THEA 366 Dance Technique
In this course the student will be given the opportunity to learn and practice the technique of a specific style while concentrating on personal abilities, awareness, and ways to correctly train his or her body. The type of technique taught each session is predetermined by the department and may be chosen from many forms. Students taking this course to satisfy theatre studies electives will be required to take this course twice so as to experience two kinds of dance techniques. Repeatable for up to 12 credits. (2-0)

## THEA 369 Playwriting

In Playwriting, students develop their own creativity in theatrical forms. Students examine dramatic plots, characters, dialogue, exposition, setting, theme, new and traditional forms and other elements of drama through a series of exercises and writing practices. They will read a number of contemporary plays and attend local performances. All students will write a producible one-act play. (4-0)

THEA 381 Special Topics: Dramatic Lit
This course examines a group of plays chosen from the canon of dramatic literature which relates to a specific theme or topic. The theme or topic is changed regularly, e.g., war, women, marriage, the family, work, political change, etc. Suitable "Topics" course for certain English majors. (4-0)

THEA 382 American Indian Theatre 4
This class will review the literature and history of American Indian Playwrights and theatre artists. Students will first examine the history of Euro-American representations of indigenous peoples; reviewing colonial culture will foreground subsequent readings of Native- centered plays, interviews, and criticism. The class will include videos of Native theatre and performances. (4-0)

## THEA 400 Performance Studies

 1-4This course involves in-depth involvement in theatrical production, performance and technical theatre. The advanced theatre student will have the opportunity to build on his/her theatre skills in areas such as acting, dance, technical theatre, costuming, dramaturgy, and theatre administration in both on and off-campus situations. Repeatable for up to 12 credits.
THEA 460 Internship in Theatre 4
This course provides students the opportunity to apply what they have learned in the classroom to a professional theatre organization. Specific requirements of the internship will be determined by the arts organization, the supervising college faculty, and the student. (0-12)
Prerequisites: THEA 300 OR THEA 400
THEA 496 Senior Seminar
This course gives senior Theatre majors the opportunity to demonstrate their abilities in connecting the analytical academic research process to performance. Significant research, on an approved topic, will result in a substantial paper. Each student's research combined with insightful performance knowledge,problem-solving techniques, and creative thinking, results in a public presentation. This is a full course and 496 must be taken in the fall, followed by 497 in the winter. (2-0) Prerequisites: THEA 340 AND THEA 336

THEA 497 Senior Seminar
This course gives senior Theatre majors the opportunity to demonstrate their abilities in connecting the analytical academic research process to performance. Significant research, on an approved topic, will result in a substantial paper. Each student's research combined with insightful performance knowledge, problem-solving techniques, and creative thinking, results in a public presentation. This is a full course and 496 must be taken in the fall, followed by 497 in the winter. (2-0)
Prerequisites: THEA 340 AND THEA 336
THEA 499 Independent Study 1-6 Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the department chairperson and dean. 50 contact hours are the equivalent of 1 credit hour.

## TRANSITIONAL STUDIES

## TRS 82 Introduction to Algebra

This course provides review and instruction in elementary algebra and offers the opportunity to apply these skills to word problems and critical thinking exercises. (3-0)
Prerequisites: Placement into TRS 82
TRS 83 Intro to Alg: Problem Solving 2 Supplement to Introduction to Algebra (TRS 82) for students who wish to explore the concepts in greater depth and who wish to receive additional assistance with problem solving. Students will receive a Pass/Fail grade. (2-0)

## TRS 90 Reading for Ideas

This course introduces students to strategies for reading the types of texts assigned in entry-level college courses. (3-0)
Prerequisites: Placement into TRS 90
TRS 91 Intro to Academic Writing 3
This course introduces students to the strategies that are fundamental to writing source-based texts. Emphasis is on summary, response, analysis, and synthesis of multiple resources. (3-0)
Prerequisites: Placement into TRS 91
TRS 92 Intermediate Algebra 3

Designed to provide review and instruction in college preparatory mathematics for students with deficiencies in or apprehensions about required entrance level mathematics courses. The course will cover such topics as algebraic expressions, manipulation of signed numbers, solving equations and inequalities, algebraic fractions, polynomials, exponents, radical expression, and graphing. Students who wish to enroll in this course should have successfully completed at least the equivalent of Algebra I. (2-1) Prerequisites: TRS 82 or placement into TRS 92

TRS 93 Inter Algebra: Problem Solving 1 Supplement to Intermediate Algebra for students who wish to explore the concepts in greater depth and who wish to receive additional assistance with problem solving. Students will receive a Pass/Fail grade.(1-0)

## THEMATIC STUDIES 2 ENVIRONMENT

To be eligible for registration in TS2 courses, students must have Junior standing, and have completed the following: Courses in all 4 TS 1 categories, Comp 150 (or equivalent), Lib 150 , and a Quantitative $(Q)$ course.

## TS2N 400 Environmental Science \& Policy 4

This course explores the science behind key environmental issues and policies that have been or are being developed at the local, regional or global level. The role of science in policymaking will receive particular attention. Topics covered may include such issues as energy, ozone depletion, climate change, population growth, and sustainable development. (4-0)

## TS2N 401 Simply Science <br> 4

This course will examine the scientific process, including the strengths and weaknesses of Western science, as a way of learning about natural phenomena and environmental issues. The natural environment serves as the arena for class discussions and exercises. The methods of science form the foundation from which questions about our environment are posed and investigations of possible causes and consequences are conducted. (4-0)

## TS2N 403 Environmental Justice

This course examines ecological, economic, legal and sociopolitical constructions of environmental justice and sustainability. The integration of environmental and social justice concepts and movements, especially regarding natural resource use, stewardship, and consumption are examined along with ecosystem integrity, economic resource distribution, political organization and current environmental law and policy. (4-0)

TS2N $404 \quad 4$ In this course, we will explore the ecology, history, value, and use of wetlands and streams. We will take a global survey of wetlands and discuss pollution and other anthropogenic activities that affect wetlands, wetland protection laws, management, restoration, and local grass-roots conservation efforts. (3-0)

## TS2N 405 <br> Wilderness 4

This course explores the relationship between human beings and wilderness. Topics include attitudes about the environment, wilderness as therapy, ecopsychology, outdoor leadership and group dynamics, and wilderness risk management. Students will consider both local and international issues in wilderness management. Students are required to complete field work in the wilderness as part of this course. (2-3)

## TS2N 406 Water in the West 4

This class explores how biological, geological, political, and economic forces affect and are affected by a limited resource water. Students from different fields participate in analyzing local and global case studies and conducting research. This course uses water in the western United States as a springboard to address the global importance of sustainable water use and resource conservation. (4-0)

TS2N 407 Business \& the Environment
This course examines how businesses both create and can help alleviate environmental problems. Among the topics covered are life cycle analysis, full-cost accounting, closed loop production systems, eco-efficiency, and environmental reporting and labeling. Class assignments will include case analyses and student research of business practices at the local and national level. (4-0)

TS2N 408 EcoTexts
This course examines how historical, scientific, and imaginative texts construct human perceptions of the natural world at both the local and global levels. Sustainability and interconnectedness will provide the organizing principles of this course, which will include activities such as analyzing environmental impact statements, creating education publications, and participating in service learning projects. Students will be expected to gather and analyze a variety of data as they interrogate different ways humans come to know and understand the world. (4-0)

## TS2N 409 Cosmic Origins

3
This course is an interdisciplinary adventure in the origin of life and the universe. The course objective is to provide a scientific description of the history of the universe - from the big bang to our civilization today - as a starting point for contemplating who we are, why we are, and our obligations to the planet. (3-0)

## TS2N $410 \quad$ Fire in the West

This course is an introduction to issues related to fire from a cultural, ecological, political, and management perspective with emphasis on ecosystems in the West. This course will focus on historical and current perceptions of fire, basic fire science, fire ecology, and political and management issues related to fire including ecological restoration and conservation and how these topics are being applied in different western ecosystems. (4-0)

## TS2N 411 Control of Nature

Natural processes such as floods and landslides become disasters when they affect humans. Modern engineering techniques designed to manage natural disasters change the environment and human attitudes, and can cause more problems than they solve. This course will use case studies to discuss whether natural hazards can or should be controlled. (3-0)

## TS2N 412 Resources and the Environment 3

This course is a critical study of the occurrences of renewable and fossil fuels, industrial mineral deposits, and water resources. In addition students investigate the environmental, economic, and social impact of extraction, refining, and waste products associated with these resources. Local and global case studies and research highlight the need for sustainable use of resources and resource conservation. (3-0)

## THEMATIC STUDIES 2 CULTURE

To be eligible for registration in TS2 courses, students must have Junior standing, and have completed the following: Courses in all 4 TS1 categories, Comp 150 (or equivalent), Lib 150, and a Quantitative (Q) course.

## TS2R 400 Forgotten Antilles:Puerto Rico

This interdisciplinary course is designed to deepen students' knowledge of the Latin Antilles, particularly Puerto Rico, through studying Puerto Rican social structures and history. Through readings dealing with historical events, topics of human interest, biographies, artistic expressions, poems, and humorous anecdotes, students will develop an understanding of Antilles cultures and a broader appreciation of different cultural frameworks and infrastructures. (4-0)

TS2R $401 \quad$ Global Migration \& Diaspora
This course looks at cultural aspects of migration as a local, regional, national, and global phenomenon of our age, and at the creation and history of diasporas (commercial, ethnic, cultural, racial, national). A major component of the course will be research and group presentations. (4-0)

## TS2R 402 History of the Book

This course focuses on the book to examine notions of "progress" and the relationships between technological development and intellectual activity. Ancient information recording systems and the development of Western writing will be studied along with writing technologies in non-Western cultures. The most revolutionary book - the computer or "virtual book" - will also be examined. (4-0)

TS2R 403 Spirit of Adventure 4
This course looks at the role of adventure from historic, economic, nationalistic, colonialist, gendered, and individual perspectives. The culture or spirit of adventure is a phenomenon found in all cultures throughout history, where "to adventure" means to challenge the individual physically, emotionally, and intellectually. Attention is given to gender differences, the role of science and nationalism, economic forces, tourism, and the visual and written productions of adventurers. (4-0)

## TS2R $404 \quad$ Ethnic Families in America

This course focuses on how cultural values and belief structures, immigration and adjustment experiences, and other socioeconomic conditions shape current ethnic family compositions and functioning patterns. Students will gain knowledge of selected theoretical perspectives, recent research findings, and future trends pertinent to ethnic families. Ecological socialization and socioeconomic models that address the functioning of ethnic families in the United States will also be explored. (4-0)

## TS2R 405 Non-Western Music \& Culture 4

This course investigates the artistic and imaginative creative processes through which culture and music are expressed in non-Western societies. Various music cultures are studied through readings, audio recordings, videos, student oral presentations, written papers, guest lecturers, and experiential musical performances. Students learn about different cultural ideas of what music is, what its powers are, and how it relates to other aspects of life. (4-0)

TS2R 407 Representations \& Power 4
This course examines representations, particularly of differences as expressed in museum exhibitions, photography, media reports, fiction writing, tourist experiences, National Geographic articles, and even ethnographic descriptions, as constructions of reality that produce both cultural understanding and misunderstanding. Students are challenged to critically analyze commonplace assertions about what is fact, truth, and reality, and to examine what counts as evidence. (4-0)

## TS2R 408 Genius \& Representation

One of the most recurrent depictions in various film genres, television programs, and art historical material is the figure of genius - natural, successful, failed, corrupted, artificial, and subversive. This course investigates the appearance and limits of such representations within film and visual culture. (4-0)

TS2R $409 \quad$ Non-Western Theatre
Non-Western Theatre explores the histories, theories, and practices of traditional Asian theatre forms including those of India, Japan, China, and various Indonesian and Malaysian countries. Students develop historical, critical, analytical, and expressive knowledge of these theatre forms through lecture/ discussion classes and experiential projects. Explorations with mask, shadow, and rod-puppet forms promote sensitivities to non-Eurocentric ways of creating meaning. (4-0)

## $\begin{array}{llll}\text { TS2R } & 410 & \text { U.S. Latino Popular Culture }\end{array}$

This class explores differences between mainstream U.S. and Latino popular cultural expressions. The formation of Latino cultural identity will be examined, as well as U.S. Latino history, in order to understand how sociopolitical and cultural ideologies are established and rebellion against the status quo occurs. Although a bilingual approach will be taken as the class explores films, literature, music, etc., a knowledge of Spanish is not required. (4-0)

TS2R 411 Performance Art 4
Performance Art is a global phenomenon as well as a genre that developed in the 20th century by means of a collaborative effort across dissimilar art and performance disciplines. This course considers creative expression to be an important avenue to understanding the self and the expressions of various individuals, collective groups, and cultures of the world. Through an examination of selected topics in theatre, dance, music, and the fine arts, students will develop historical, critical, analytical, and expressive skills necessary for redefining the boundaries of artistic expression. (4-0)

## TS2R 412 Warrior Dreams 4

Martial arts practices and practitioners come from cross- cultural and interdisciplinary perspectives. Because martial arts play such a predominant, yet varied, global role, students will investigate the history, purposes and meanings of the martial arts for body, mind, spirit, and identity. Students will also explore the ways that martia arts are represented in "popular" culture, such as films and television. (4-0)

## TS2R 413 Gender \& Performance

This is an interdisciplinary course that explores gender issues in a performative environment such as theatre. Students develop historical, critical, analytical and expressive skills in the selected discipline. Focus is on understanding the modes of expression with regard to knowledge of historical and contemporary works and issues from a variety of different genres and cultures. (4-0)

## TS2R 414 Social Poetry

4
This course is based on the premise that literature reflects the society from which it originates, with poetry the genre of focus. Poetry will be explored according to its type, language employed, author's gender, and ethnic origin within the framework of the socio-historical context under which it was written. Theory will be used to explore poetic techniques employed by poets. (4-0)

## TS2R 415 The Maya: Ancient \& Modern

The Maya, the largest Native American ethnicity in the Americas will be the subject of an interdisciplinary analysis employing techniques from archaeology, art, history, ethnohistory, and social anthropology. Each era of the Maya past will involve a distinct mode of analysis focused on urban space and architecture, the production of religious and secular art, and the structure of daily life. (4-0)

TS2R 416 Rationality and Culture
This course investigates the interplay between truth, rationality and the values that shape our lives. Does our knowledge represent an objective reality or is it so imbued with political, economic, religious, and other values as to merely reflect our own cultural standpoint? Can we - and should we - disentangle the demands of reason from the influence of social values? ( $4-0$ )

TS2R 417 Culture Clash
What's behind today's competing civilizations - the West, Islam, China, India, Russia? This course examines the broadest patterns of history and philosophies (Confucius, Mohammed, Jesus Christ, Buddha, Greek philosophy, British empiricism) with provocative theories in order to assess why in the last quarter of a century nation-state conflict has been so decisively replaced by culture clash. (4-0)

## TS2R 418 Global Christianity 3

Global Christianity examines the variety of ways Christian people have understood and lived out their faith in God, as Christian communities interacted with a multitude of cultures and social environments from Antiquity to the present. As a world religion, Global Christianity will necessarily touch on the civilizations of the Middle East, north and east Africa, Asia, the Americas, and Europe. (3-0)

## TS2R 419 American Indian Philosophies

Selected philosophies of many North American indigenous peoples are the focus of this course. Both traditional philosophies and those which have changed through contact with American societies will be studied. Writings and other materials from the perspectives of scholars and Native peoples themselves will provide a basis for discussion, writing assignments and research on aspects of the living traditions of indigenous peoples. (3-0)

## THEMATIC STUDIES 2 SYSTEMS

To be eligible for registration in TS2 courses, students must have Junior standing, and have completed the following: Courses in all 4 TS1 categories, Comp 150 (or equivalent), Lib 150 , and a Quantitative (Q) course.

## TS2S 400 No Gods, No Masters

This course examines the critical arguments anarchists make against the capitalist nation-state system. Popular culture perceptions of anarchy, the ways that political and economic systems construct commonly held beliefs, and presuppositions about human nature, ownership, equality and the roles of laws are studied. The course also examines alternative models of living in the world. (4-0)

## TS2S $401 \quad$ Power \& Privilege in Literacy 3

This course examines literacy as a normative practice embedded in and produced by social, cultural, political, and economic systems. Through theoretical, ethnographic, and historical essays exploring the ways that acts of reading and writing are connected to larger systems, students will practice bringing a historically-informed, systems thinking perspective to social-cultural practices, issues and problems. (3-0)

TS2S 402 Movements of Resistance
This course explores how various modes of resistance are launched, maintained, and sometimes falter in a number of different sociological, historical and cultural contexts. Mainstream corporate media tend to portray resistance movements as trivial or fanatical. This course asks students to examine different modes of resistance to various forces as disparate as nation-states, international policies sponsored by various states, and international organizations. (4-0)

## TS2S 403 Game Theory

Game theory is the formal analysis of strategic situations. This course will provide students with a structured approach to tactical problem solving. It will also consider the interplay between strategic behavior and social structures, norms, and the human psyche. Although the course involves theoretical modeling, no mathematics beyond elementary algebra is required. (4-0)

## TS2S 404 Gender \& the Sciences

This course explores the ways that the socio-cultural systems of sex/gender and scientific production influence one another. Using an interdisciplinary approach informed by sociology, the history of science, and feminist critiques of knowledge, this course examines issues such as the socialization of women into scientific communities; the ways that scientific methodology and questions carry gender bias; and strategies for critically analyzing the cultural assumptions of science. (4-0)

## TS2S 405 Psychology \& Political Thought 3

This course will examine how people make judgments, form opinions, weigh truth claims, evaluate source credibility, use logic, and process and recall political information. The course combines knowledge from political science, logic, and communications. Special emphasis will be on the role of various media outlets, including movies and the Internet, in creating and maintaining perceptions and conspiracy theories about politics. (3-0)

TS2S 406 Odyssey Through Wellness 3
This course will explore historical, cultural, and systemic perspectives on health and wellness. It will focus on paradigm shifts in understanding health and specific health conditions, the influences of technology, religion, culture and politics, and the balance of mind, body, and spirit in understanding health and wellness. (3-0)

## TS2S 407 Gender \& Sport 3

This course will examine the intersection of culturally-based sex-gender system with the system of sport on all levels including play, social recreation, organized recreation, outdoor experiential activity, physical education in schools, high school and collegiate athletics, Olympic competition, and protessional sports. (3-0)

## TS2S 408 America's Sorting Hat

This course explores the system of admissions to U.S. higher education in an historical perspective. Current issues will be examined, including standardized testing, ethnicity, family income, special talents (e.g., athletics, music), and alumni status. Students will develop their own college admissions process evaluating its strengths and weaknesses and inherent values. Unintended systemic consequences will be exposed. (4-0)

TS2S $409 \quad$ Systems Perspectives on Lang 4
This course examines language as a cognitive system and its uses in different forms of human communication. It includes a discussion of language acquisition. In the last part of the course, students will apply knowledge they have gained to the study of language use in a global setting. They will gain insight into the role of language in constructing identity. (4-0)

## TS2S 410 Defining America

This course, through multicultural exploration, brings to light critical issues of the cultural past and its subsequent relationship to the present. Students are expected to participate in an exploration of systems regarding culture, ethnicity, gender and socioeconomics to "Define America" (3-0)

## TS2S 411 Imperialism\&Indigenous Peoples 3

The course examines the impact of Imperialism upon the indigenous peoples and ecology of the Americas. Its focus is upon the cultures and institutions of Spain, England, and United States and their imprint upon people and ecosystems. It focuses on imperialism as a complex system of cultural and biological change (3-0)

## TS2S 412 Catholicism in the West

This course will provide a systemic approach to understanding the influential role that Catholicism as a social system has played in shaping the Western United States, with particular focus on its origins up until the present. This course will explore its complexity in relation to the historical, political, and socio-cultural subsystems as well as the external and internal factors, beliefs, actions, expressions, and practices of Catholicism. (4-0)

## TS2S $413 \quad$ Will of the People

This course examines the dynamic tension between groups of individuals and collective society. Various distinct populations emerge within an otherwise heterogeneous majority. These minority populations practice and attempt to retain their distinct cultural heritage, but are met with resistance. To protect these groups, the right of self-determination is established in international law. But can the international community protect that right? (3-0)

TS2S 414 Systems of Performance 4 We will examine performance as a way of looking at the world. From the presentation of self in everyday life to the election of presidents, life is full of performance. As a system, the performance paradigm is an interdisciplinary tool for examining human behavior. Students will attain an understanding of how performance as a mode enriches their own chosen roles. (4-0)

## THEMATIC STUDIES 2 TECHNOLOGY

To be eligible for registration in TS2 courses, students must have Junior standing, and have completed the following: Courses in all 4 TS 1 categories, Comp 150 (or equivalent), Lib 150, and a Quantitative (Q) course.

TS2T 400 Computers, Energy, \& Ethics 4
This course is a seminar in building an informed sense of individual and social responsibility regarding the development and use of technology. Focusing on computer information representation and solar energy technology, students gain first hand lab experience, explore the historical contexts and underlying scientific principles of these technologies, and critically assess their impacts on society. (4-0)

TS2T $401 \quad$ Ethics \& Biotechnology 4 Students will explore the ethical implications of technology in molecular biology. They will learn to use scientific principles to understand the science underlying new technologies, such as genetically modified organisms in agriculture, genetically engineered human drugs, genetic testing, and gene therapy. The tools of philosophy will provide a way to analyze the moral dilemmas such technologies create. (4-0)

## TS2T 402 Agricultural Issues in Society $\quad 3$

 In this course students examine a number of technological changes in agriculture and their impact on society, culture and the environment. Throughout the course, technological change is examined from scientific, social, and public policy perspectives. (3-0)TS2T 403 Science of Sport Performance 3
What is the science behind record breaking elite sport performances and what are the limits of human athletic performance? This course examines peak and record breaking performances in sport and explains the science behind them. The physics of performance, analysis of motion and technique, new equipment, altitude, and surfaces, plus sociological and psychological factors will be considered. (3-0)

## TS2T 404 Body/Brain Connections

This course examines endocrinological technology and how the endocrine system affects the body and brain. The endocrine system and major hormones involved in the reproductive, digestive, and immune systems are reviewed. The course will examine the development of the technology of hormone measurement and hormone system management. An exploration of the relationship between the mind and body will focus on the field of psychoneuroimmunology. (3-0)

## TS2T 405 Art \& Science of the Book

This course surveys the technology of the book from its mechanical production in pre-modern times through the technological innovations of the printing revolution to the electronic age of virtual text. Taught from an applied art perspective, this course will engage students in a hands-on exploration of the science and craft that make the book an enduring medium for communication and artistic expression. (2-4)

## TS2T 407 Technology\&Ethics in Medicine

This course will explore the ethical use of technology in medicine. This history of the development of technology for medical use will be a major component because along with this development came the formulation of concepts of ethical practice. The association of major social changes with the development of new medical technologies will be examined. (4-0)

## TS2T 408 The Digital Divide

Students examine impacts of technology, including socioeconomic limitations and opportunities associated with modern advancements. Students will use several media to consider the influences on the culture, language, value systems, attitides and feelings of minority students as they relate to educational technology in preparation for the global community. Several topics will be addressed in-context via cultural excursions. (3-0)

TS2T 409 The End of Oil 4
Oil dependence and depletion are critical global issues. Students: 1) study scientific concepts of energy production and use, 2) study oil's geopolitical history, 3) assess impacts of oil extraction and use on complex ecological and social systems, and 4) consider energy conservation and alternative energy sources. Students also consider broad issues regarding the roles of technology in social and natural systems. (4-0)

## TS2T 410 Great Ideas in Computing <br> How does a computer represent music? How do computers

 predict weather accurately? What can't computers do? What is computer science really about? This course provides students a framework for understanding how computer hardware and software work. The focus will include theory that underlies computing, as well as hands-on experience with design and application of computing systems. (4-0)
## GENDER \& WOMEN'S STUDIES

WS 101 S Intro to Women's Studies
This course introduces students to the variety of multidisciplinary questions and practical concerns encompassed by Women's Studies. The course provides an introduction to the history of feminism and seeks to establish a fundamental understanding of how and why feminist theoretical critique has occurred. (4-0)

## WS 280 Issues in Women's Health

This course will examine women's health through the life span. Discussion will focus on the physical and emotional health of the maiden, woman, and crone. The course will also examine social and historical factors that have affected women as health care clients and providers. Although the course materials will concentrate on health in the United States, there will be some comparative readings about women and health in other cultures. Throughout the course particular attention will be paid to the interplay between women's status in society and their role definitions as participants in the health care system. (4-0)

## WS 299 Individual Study 1-6

Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

WS 301 W Feminist and Gender Theories 4 This multidisciplinary course examines the central issues of feminist and gender theories and explores their various strategies. It analyzes the ways in which feminist and gender theories have challenged disciplinary boundaries and contested the traditional assumptions of the humanities, the social sciences, and the sciences. (4-0)
Prerequisites: (COMP 150 OR COMP 126 OR COMP 250) AND LIB 150

This course provides students with experience in a community organization that serves the needs of women. Students will be involved in human services, applied feminist research, or other activities approved by the advisor and practicum coordinator. The emphasis is upon gaining experiential knowledge through active participation in feminist practice and analyzing this experience in a classroom setting. Practicum may be taken for 4 or 8 credits per term. See notes in Women's Studies curriculum. Students must be enrolled in the Sociology Block Program. This course is the same as Soc 320; credit will be given for only one of these courses.

## WS 332 Women in American History 4

An analysis of women's experience from the colonial period to the present. Focusing on the way gender has been defined and marriage, reproduction, the struggles for equality, and women's culture. The influence of class, race, and ethnicity on women's experiences will also be considered. This course is the same as Hist 332; credit will be given for only one of these courses. (4-0)

WS $351 \quad$ Gender and Work
Work - in the paid labor force and in the home - is an important site of 20th-century feminist activism and scholarship because historically grounded notions of what is "women's work" continue to powerfully condition women's and men's "places" in the paid labor force and in the home. Through an exploration of contemporary scholarship from Women's Studies and other disciplines, this course will examine the construct of "women's work" and the broad range of issues related to the gendering of work and work systems. (4-0)

WS 355 Anthropology of Gender 4 An in-depth, cross-disciplinary analysis of the nature and origins of gender concepts cross-culturally, particularly as they relate to explaining gender hierarchy. Topics to be covered include the contributions of feminist thought to social scientific theories, the cultural construction of gender categories, and the relationship of gender to power. This course is the same as Anth 355; credit will be given for only one of these courses. (4-0)

WS 365 Women and Development
An overview of the central role women play in the development process in non-Western societies, and of their struggle to gain access to the most basic levels of power and governance around the world. The focus will be on women in developing countries, but reference to women in developed countries will also be made. This course is the same as PS 365 ; credit will be given for only one of these courses. (3-0)

WS 366 Women, Art and Visual Culture 4
This course provides an overview of contemporary art theory, representations of women, and the feminist critique of art. Students will read, research, and write about art and discuss the idea of "visual culture". This is the same course as Art 366; credit will be given for only one of these courses. (4-0)

## WS Women's Studies Senior Seminar

Advanced reading, writing and seminar discussion centered on integrating the Women's Studies experience with the entire undergraduate liberal arts experience. Emphasis also will be on looking beyond college to incorporating the Women's Studies intellectual experience to practical life arenas. (2-0)
Prerequisites: WS 301

## WS 499

Independent Study 1-6
Individual research is conducted under the supervision of a faculty member. Topic and format must be approved by the Department chairperson and dean. 50 contact hours are the equivalent of one credit hour.

## ADMINISTRATION AND FACULTY

FORT LEWIS COLLEGE 2006-2007


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RICHARD SAX, Dean of Arts, Humanities and Social Sciences
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PEGGY SHARP, Executive Assistant to the President
DAVID PRESZLER, Athletic Director

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CHARLES BLOOMFIELD, Acting Director, Native American Center
BILL BOLDEN, Assistant Vice President of Student Affairs
VALERIE BORGE, Controller
MARGIE DEAN GRAY, Director, Foundation Relations
KEN FRANCIS, Director, Office of Community Services
DAVID HAYES, Director, Teacher Education
WAYNE HERMES, JR., Director of Purchasing
BRADLEY HITTI, Director of Auxiliary Services
DANIEL P. HOFF, Physician's Assistant, Manager of Student Health Center
CHANDLER JACKSON, Director of the Reed Library
HAERYON KIM, Coordinator for Judicial Affairs; Coordinator for Equal Opportunity
JACK KLUMPENHOWER, Senior Director, Marketing and Communications
JULIE LOVE, Director of Student Housing and Conference Services
AL MAGES, Director of Physical Plant and College Engineer
PAUL MARES, Bookstore Manager
SUSAN K. McGINNESS, Director of Counseling and Student Development Center
MICHELE PETERSON, Director of Budget
ELAINE REDWINE, Director of Financial Aid
ANGIE ROCHAT, Director of Grants Management
SANDY SMITH-LLOYD, Director of Leadership Center
ALLYN TALG, Director of Career Services
ARNOLD TRUJILLO, Chief of Police
SHERRI WAGGONER, Registrar
AMELIA YEAGER, Director of Institutional Research
CRAIG E. YOUNG, Director of Computing and Telecommunications

## ACADEMIC FACULTY

*Date after title denotes when appointment began at Fort Lewis College.

ADAMS, EVANS JOSEPH, Professor of Computer Science (1990)*
B.S., Nicholls State University, 1977
M.S., University of Southwestern Louisiana, 1979

Ph.D., University of Southwestern Louisiana, 1982
AGUILAR, KATHLEEN (CATALINA), Assistant Professor of Modern Language (1998)
B.A., University of New Mexico, 1987
M.A., University of New Mexico, 1988

Ed.D., The Fielding Institute, 2003
ANZIANO, MICHAEL CURRAN, Associate Professor of Psychology (1993)
B.A., University of Denver, 1971
M.A., University of Colorado, Denver, 1978

Ph.D., University of Colorado, Boulder, 1984
ARBEENY, PAMELA SIPP, Librarian and Assistant Professor
B.A., Baldwin Wallace College, 1973
M.A., New York University, 1988
M.L.S., Long Island University, 1998

ARMENT, DONNA LOU, Librarian and Assistant Professor (2002)
B.A., Fort Lewis College, 1994
M.L.S., Drexel University, 1997

BARTLETT, WILLIAM R., Professor of Chemistry (1978)
B.A., Luther College, 1965

Ph.D., Stanford University, 1969

BARANSKI, JOHN F., Assistant Professor of History (2004)
B.A., Sonoma State University, 1993
M.A., San Francisco State University, 1996

Ph.D., University of California, 2004
BECKER, KARIN LEIGH, Coordinator, Testing Center and Visiting Instructor of Writing Program
B.A., University of North Dakota, 1998
M.A., Eastern Michigan University, 2002

BELL, KEVIN JACK, Assistant Professor of Art (2004)
B.A., Bowdoin College, 1988
M.F.A., University of Oregon, 2002

BENZ, BRADLEY PAUL, Assistant Professor of English (2001)
B.A., University of Kansas, 1991
M.A., Humboldt State University, 1995

Ph.D., University of Washington, 2001
BERRIER, DEBORAH LANE, Associate Professor of Mathematics (1989)
B.S., New Mexico State University, 1977
M.S., Virginia Polytechnic Institute, 1980
M.S., Clemson University, 1986

Ph.D., Medical University of South Carolina, 1989
BLANCHARD, KENDALL A., Professor of Anthropology (1999)
B.A., Olivet Nazarene College, 1964
M.Div., Vanderbilt University, 1968
M.A., Southern Methodist University, 1970

Ph.D., Southern Methodist University, 1971
BRANDT, KERI JACQUELINE, Assistant Professor of Sociology (2005)
B.A., Fort Lewis College, 1995

Ph.D., University of Colorado, 2005
BROOKS, ROBERT WILLIAM, Assistant Professor of Exercise Science (2002)
B.S., University of Idaho, 1977
M.S., University of Wisconsin, Madison, 1979

Ph.D., Washington State University, 1993

BROWN, ALANE SUSAN, Associate Professor of Psychology and Women's Studies (1990)
B.A., Brandeis University, 1981
M.A., Princeton University, 1988

Ph.D., Princeton University, 1990
BROWDER, CINDY CAROL, Assistant Professor of Chemistry (2001)
B.A., Oberlin College, 1993

Ph.D., University of Utah, 2001
BUCKHOLT, SUSANNE MARIE, Assistant Professor of Biology (2004)
B.A., Our Lady of the Lake University, 1989

Ph.D., University of North Carolina/Chapel Hill, 1994
BUNCH, KENYON DALE, Professor of Political Science (1993)
B.S.E., Central Missouri State University, 1970
M.A., Lincoln University, 1977

Ph.D., University of Missouri, 1985
BUNTING, ROBERT REED, Associate Professor of Southwest Studies (1994)
B.S., Eastern Oregon State College, 1969
M.A., Wichita State University, 1971

Ph.D., University of California, 1993
BUTLER, GREGORY W., Visiting Professor of Computer Science (2005)
A.S., Northern Virginia Community College, 1977
B.S., University of Wyoming, 1984
M.S., Lesley College, 1988

Ph.D., Utah State University, 2003
BYRD, SHERELL KUSS, Professor of Biology (1992)
B.A., Western State College, 1980
M.S., University of Oregon, 1983

Ph.D., University of Oregon, 1987
CAMPI, LISA CLARE, Assistant Professor of Music (2002)
B.M., Indiana University, 1991
M.M., University of Maryland, 1993
D.M.A., Eastman School of Music, 2002

CARDONA, NANCY KAY, Assistant Professor of English (2000)
B.A., St. Mary's University, 1991

Ph.D., Indiana University, 2000
CARRASCO, LOURDES M., Professor of Modern Language (1983)
B.A., University of California/Santa Barbara, 1968
M.A., University of California/Santa Barbara, 1970

Ph.D., Michigan State University, 1979
CARY, JEFFREY ALAN, Visiting Instructor of Geosciences
A.A., Colorado Mountain College, 1979
B.S., Fort Lewis College, 1983
M.S., Western Washington University, 1990

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[^0]:    * This date is also deadline for submitting petitions for in-state residency and documents for Native American Tuition Waivers.
    ** This date is also the deadline for withdrawing from the term (see the Pro-rata schedule in the Tuition and Fee brochure or www.fortlewis.edu)

[^1]:    'Students may not take more than 30 credit hours in accounting, business, and economics.
    ${ }^{2} \mathrm{~A}$ minimum grade of C - must be earned in 300 - and 400 -level business courses to count toward graduation for the Business Art Option.

    Free Electives (variable)
    TOTAL REQUIRED FOR GRADUATION 120
    Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

[^2]:    ${ }^{1}$ Completion of BA 302W or 407W fulfills the Group W requirement for students in this option.
    ${ }^{2}$ Credits used to satisfy an option in Tourism and Resort Management may not be used to satisfy any other major, minor or option within the School of Business Administration.

[^3]:    General Education
    35-46
    See page 25 for General Education requirements.
    ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

    Major Requirements:
    **BA 253Q Business Statistics 4
    BA 221 Writing in the Business World 3
    **Econ 266S Principles of Economics 4
    Econ 361 Managerial Economics 4
    Econ 356 Microeconomic Theory 4
    ${ }^{2}$ Econ 364W Macroeconomic Theory 4
    BA 499 Independent Study 2
    Plus any three of the following courses:
    BA 392 Research Topics - Economics Related 1-3
    Econ 307 Evolution of Economic Thought 4
    Econ 310 Economic History of the United States 4
    Econ 335 Environmental Economics 4
    Econ 369 Public Finance 4
    Econ 371 International Economics 4
    Econ/BA 382 Financial Institutions 4
    Econ 390/391 Special Topics in Economics
    (as approved by the department)

    TOTAL MAJOR REQUIREMENTS
    34-37
    Free Electives (variable)
    TOTAL REQUIRED FOR GRADUATION
    ${ }^{2}$ Completion of Econ 364 W fulfills the Group W requirement for students in the Economics option.

    Note to transfer and former students: If you have taken any of your major requirements and received a different number of credits than listed above, you may need to complete additional major credit requirements.

[^4]:    General Education
    35-46
    See page 25 for General Education requirements.
    ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

    Specific Departmental Requirements:
    **ES 150R Sociocultural Foundations of Human Movement 3
    **ES 242Q Testing and Statistics 3
    ES 301W Current Issues in Sport 3
    ES 337 Sport Ethics 3
    ES 339 Practicum in Sport Administration 1
    ES 345 Legal Aspects of Sport and Physical Education 3
    ES 363 Computer Applications in Exercise Science 3

[^5]:    General Education Requirements
    35-46
    See page 25 for General Education requirements.
    ** Courses marked with double asterisks may also be counted toward TS1 or $Q$ requirements.

    Specific Departmental Requirements
    Language Arts
    Required Courses:
    ED 317W Professional Writing for Educators 3
    ED 327 Children's Literature 3
    ED 335 Linguistics for Educators 3

[^6]:    **Students using Ed 200 \& ED 210 toward Gen Ed may complete in 120 credits**

[^7]:    1. Core Program (ALL required; complete in the order listed): Psyc 157 Introduction to Psychology
    **Psyc 241Q Basic Statistics for Psychologists
    Psyc 300 Methods of Inquiry
    Psyc 496 Senior Seminar
