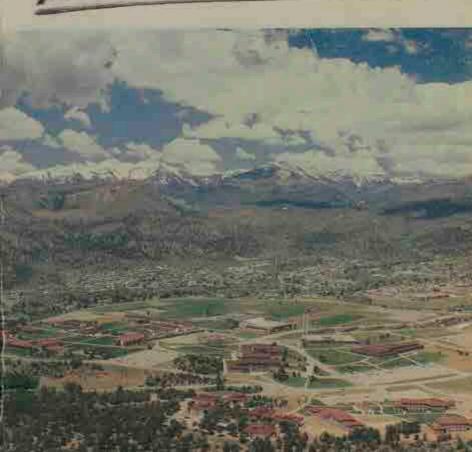
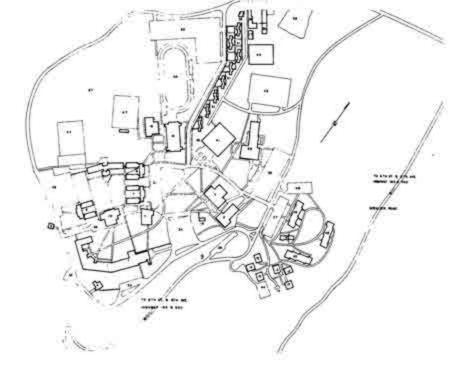
# FORT LEWIS COLLEGE

DURANGO, COLORADO

**CATALOG 1980-81** 

Desk Copy
Please Do
Not Remove





#### FORT LEWIS COLLEGE

#### Durango, Colorado

- 1. Administration/Main Academic Building
- 2. College Union
- 3. Library
- 4. President's Home
- 5. Chapel
- 6. Escalante/Palmer Halls
- 7: CampiSnyder Halls
- 8. Crofton/Mears Halls
- 9. Cooper Hall
- 10. Raman A. Miller Student Center
- 11. Theatre
- 12. Sheridan Halls
- 13. Bader Halls 14. Picnic Shelter
- 15. Buddy Stop
- 16. Health Center
- 17. Industrial Arts Building
- 18. Gymnasium
- 19. Natatorium
- 20. Water Tower
- 21. Married Student Housing Apartments
- 22. Archaeology Field Lab
- 23. Physical Plant
- 24. Supply and Receiving

- 25. Warehouse
- 26. Dennison Memorial Stadium
- 27. Outdoor Recreational Area
- 28. Irrigation Reservoir
- 29. Fine Arts Building
- 36. Parking Lot A 31. Parking Lot B
- 32. Parking Lot C
- 13. Parking Lot D.
- 34. Parking Lot G
- 35. Parking Lot I
- 36. Parking Lot L
- 37. Parking Lot M
- 38. Parking Staff
- 39. Parking Life Science
- 40. Parking Physical Plant
- 41. Classroom Building
- 42. State Forest Service Complex
- 43. Parking Lot H
- 44. Parking Lot P.
- 45. Centennial Apartments
- 46. Parking Lot R
- 47. Tennis Courts

# FORT LEWIS COLLEGE

### **DURANGO, COLORADO 81301**

## CATALOG FOR THE 1980-81 ACADEMIC YEAR

Course offerings and requirements at all Colleges vary with time and demand. The administration of Fort Lewis College reserves the right to after course listings as necessary without notice.

Discrimination on the grounds of race, color, religion, sex, handicap, or national origin is contrary to the purposes and policies of Fort Lewis College and violates the spirit and intent of both state and national Civil Rights and handicap laws.



## CONTENTS

General Description of the College
Accreditation
Admission
Costs and Financial Aids16, 22
Student Services
Housing 19
Student Life
Student Government
Student Code
Academic Programs
The Degrees
Requirements for Graduation
Academic Performance40
Academic Procedures44
The Curriculum
School of Arts and Sciences
School of Business Administration
School of Education149
Center of Southwest Studies
The Register
Index



### The College

#### GENERAL DESCRIPTION

Fort Lewis College is a State-supported undergraduate college offering a broad spectrum of liberal arts based programs. It is accredited by the North Central Association of Colleges and Secondary Schools. The College has been given by its governing body, The State Board of Agriculture, the task of developing a program at least equal to the outstanding undergraduate institutions in the nation.

A steady pattern of growth during the past decade, both in enrollment and financial resources, is a measure of the successful way in which the College has met the challenge of its governing board. In 1962, for example, the College enrolled 720 students; in 1979 the enrollment exceeded 3000. The long-range plan of the College has established a pattern of controlled growth until a maximum of 4000 students is reached.

The College, originally located 16 miles southwest of Durango, moved to its present location in 1956. All of the College buildings were constructed at that time or later.

A library-classroom building and six new residence halls were opened for use in 1967. A new College Union building and a life science addition to the Academic Building were completed in 1968 and 1969. A new physical education building and a new humanities-fine arts structure were opened in 1971. In addition to these new buildings, the College functions in the Academic Building (classrooms, laboratories, and administrative offices), the Theatre-Classroom Building, the Gymnasium, Miller Student Center, the Health Center, Married Students Apartments, the Chapel, and seven additional residence halls.

A Natatorium was completed in 1975. A new complex of playing fields and a new classroom building were opened in 1976. The new Centennial Apartments were opened in the fall of 1978.

The College has a faculty of over 130 persons who are all, along with the administrative staff, dedicated to providing for each student the best possible teaching and the best possible learning environment. Sixty-nine percent of the faculty have earned doctoral degrees.

At Fort Lewis College the needs of the individual student are always the primary concern. To satisfy this concern, the College offers a relatively large variety of programs, yet all are based on the liberal arts tradition.

#### **EDUCATIONAL GOALS**

So it is that the various curricula are designed to provide a broad cultural background that includes a critical awareness of the human heritage, of the challenging requirements and opportunities of the present and the future, and of the complexities and possibilities of the human mind and personality. From this, the College believes that the student will learn how to identify and make use of his or her unique abilities and training.

In this context, the College recognizes the primary importance of, and provides wide opportunities for, preparation for a career whether it be in the arts, in business, in education, in the sciences, or in any of the many ways in which a student may desire to serve mankind and self.

The goals are broadly the same, although individual results are often quite different, for each student whether he or she represents the dominant sectors of the culture or the minority segments. Philosophically, historically, and by virture of its location, Fort Lewis College has, therefore, a clear responsibility to develop the best possible undergraduate education for all students including the American Indians and the Spanish-Americans.

#### CALENDAR

Fort Lewis College operates on a modified trimester plan. The fall and winter trimesters are each approximately 15 weeks in length. The third trimester is also 15 weeks long, but it is divided into three 5-week sessions.

The fall trimester begins early in September and ends in mid-December; the winter trimester begins early in January and ends in late April. The summer sessions extend from about the first of May through mid-August.

Students who choose to attend all three trimesters can graduate in two and two-thirds calendar years. Those who attend only during the winter and fall trimesters graduate in the traditional four years and often find the long summer a valuable time for gainful employment as well as a pleasant vacation period.

#### ACCREDITATION

The College is accredited by the North Central Association of Colleges and Secondary Schools. In addition, the School of Business Administration is accredited by the American Assembly of Collegiate Schools of Business. The School of Education is accredited by the National Council for the Accreditation of Teacher Education. Accreditation by NCATE provides for reciprocal teacher certification in 31 states.

#### SUMMER SESSIONS

The summer sessions at Fort Lewis College offer a rich variety of courses from the regular curriculum for the student who wishes to graduate in less than four years.

In addition, a wide choice of special, innovative courses are provided for those seeking new approaches to learning. Typically these special projects are full-time courses carrying six semester credit hours in which students and instructors concentrate on only one course. More often than not the courses are conducted off campus in non-traditional settings. In the past the projects have ranged from a geology field camp to creative writing in a wilderness situation to an archaeological "dig" to four weeks in Denver studying the management process in metropolitan business firms to a month in the mountains learning the techniques of wilderness living.



### Admission

Fort Lewis College selects for admission those applicants who appear to be best qualified to benefit from and contribute to the educational environment of the College.

Students may apply for admission to Fort Lewis College any time after completion of their junior year of high school. An application should be submitted as early as possible and at least one month prior to registration. The required application form usually will be available at the office of any Colorado High School counselor. It can always be obtained from the Office of Admissions and Records, Fort Lewis College.

#### FRESHMEN

A high school student should:

Obtain an application blank from the high school counselor or from Fort Lewis College.

Fill out the application for admission and mail it with the \$10 application fee to the Admissions Office. Request the high school principal or counselor to send an official transcript. (This transcript is to be forwarded directly to the College.)

Take the American College Test and have the results sent to Fort Lewis College. It is suggested that this test be taken at least by December of the senior year. Complete information regarding the test may be secured from the high school counselor or principal, or by writing to Registration Department, American College Testing Program, P.O. Box 414, Iowa City, Iowa 52240.

The entering freshman class is selected from applicants, who, by their records from high school and the American College Test results, show promise of profiting from the educational opportunities offered by Fort Lewis College. The Director of Admissions and Records and his advisers base their judgment on the high school record, the rank in class, the American College Test results as well as recommendations and other pertinent information.

Those admitted are normally high school graduates (grades 9-12) who have completed 15 acceptable secondary school units, with preference being given to students who have followed a strong college preparatory program. Of the 15 units, at least 10 must be chosen from these academic fields: English, foreign languages, mathematics, science, and social studies and include not fewer than 3 units of English.

#### TRANSFER STUDENTS

A college student wishing to transfer to Fort Lewis College should:

Request a transfer student application form from the Office of Admissions and Records.

Complete the application and send it to the Admissions Office at Fort Lewis College with a \$10 application fee. Persons desiring evaluation of credits (transcripts) for transfer from other institutions must send \$10 with their request. This is not refundable, but is credited as the Application Fee if admission is desired.

Request that an official transcript be forwarded to Fort Lewis College to the attention of the Admissions Office from each college or university attended. Generally, American College Test results are not required for transfer students.

Transfer students who have completed less than one full successful academic year in college should also have a high school transcript forwarded to the Admissions Office.

Applicants with a cumulative scholastic average of "C" and honorable dismissal from other colleges and universities may be admitted at the beginning of any term. College course credits that fulfill the requirements for a degree program at Fort Lewis College will ordinarily be acceptable for transfer.

Normally a maximum of 72 semester credits or equivalent from a junior college may be applied toward a degree. Ordinarily, credit in upper-division courses from junior colleges will not be accepted as upper-level work at Fort Lewis College. Also, if a student attends a junior college after attending a senior college or university, a maximum of only 72 semester hours from all schools may be applied toward a degree. An effort will be made to bring college transfer students into the Fort Lewis College program without loss of previously earned credits.

#### FORMER STUDENTS

Former students are those who officially withdrew or who are returning to the College after an absence of more than one trimester. Former students must petition to resume studies. If the student has attended other collegiate institutions in the interval, complete transcripts of all work taken also must be submitted. Former students may be permitted to resume studies based on their records.

#### FOREIGN STUDENTS

Fort Lewis College is authorized under federal law to enroll nonimmigrant alien students.

In general, applicants from foreign countries are required to qualify for admission as other applicants do. A brief statement concerning the admission policies for foreign applicants may be obtained from the Office of Admissions and Records.

# UNCLASSIFIED STUDENTS

Under special circumstances students are permitted to register without having been admitted formally to the College. Usually these are adults whose objectives may be realized by taking a few courses rather than by pursuing a degree. The privilege of reregistering may be withdrawn at any time when the accomplishments of a student are not deemed satisfactory. Satisfactory performance as an unclassified student may qualify one for regular admission.

#### INDIAN STUDENTS

Fort Lewis College as a matter of policy and in compliance with Federal law allows Indian students as defined below, to attend the institution tuition free.

Fort Lewis College adheres to the following definition:

"The term Indian shall include all persons of Indian descent who are members of any recognized Indian tribe now under Federal Jurisdiction, and all persons who are descendants of such members who were, on June, 1934, residing within the present boundaries of any Indian reservation, and shall further include all persons of one-half or more Indian blood. Eskimos and other aboriginal people of Alaska shall be considered Indians . . . ." (United States Code, 1964 Edition Vol. 6, Title 25, Chapter 14, Section 479, Page 4, 897.)

Fort Lewis College will review all applications of American Indian students to determine if they qualify for the tuition waiver. If an American Indian qualifies according to an appropriate tribal certification, such student will be admitted tuition free.

#### **EARLY ADMISSION**

#### FULL-TIME STUDENTS

Fort Lewis College offers a limited program in early admission for a selected number of well qualified high school students. Under this program an outstanding scholar who has completed 14 acceptable units in high school may apply for admission as a regular freshman full-time student at Fort Lewis College.

Further information may be obtained from the Admissions Office.

#### CONCURRENT STUDENTS

Superior high school seniors who attend a high school within commuting distance of the campus or extension classes may be admitted as part-time freshmen students in order to take one or two courses. Ordinarily such students are expected to meet early admission requirements and must have the approval of the high school administration.

Students wishing to participate in this program should obtain further information from the Admissions Office or the high school counselor.

### COLLEGE CREDIT BY EXAMINATION

#### ADVANCED PLACEMENT

Fort Lewis College participates in the Advanced Placement Program of the College Entrance Examination Board. Under this plan outstanding secondary school students may take certain collegelevel courses in their own high school. Satisfactory scores on an examination administered and graded by the College Board are forwarded to Fort Lewis and may serve as a basis for credit and/or advanced placement.

Anyone interested in additional information may consult his high school guidance counselor or write to the College Entrance Examination Board, Box 592, Princeton, New Jersey.

#### **ACT TESTS**

Superior scores on the ACT Assessment Battery also serve as a basis for credit and/or advanced placement. The decision of the College is final in awarding credit by examination. For further information contact the Office of Admissions and Records.

# COLLEGE LEVEL EXAMINATIONS

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.

Students who obtain at least a standard score of 500 or the 50th percentile in natural sciences, humanities, social sciences, history, and mathematics will receive six semester credits for each examination provided the following stipulations are met:

- The examinations must be taken prior to the end of student's first year at college.
- No credit will be granted if college course work has been taken that covers much of the areas covered by the examinations.

Fort Lewis College also grants additional credits on the basis of appropriate results of The Subject Matter Examinations of the College Level Examination Program. Further information may be obtained from the Admissions and Records Office or from C.L.E.P., Box 1821, Princeton, N.J. 08540.

#### VETERAN STUDENTS

Fort Lewis College is authorized by the state approving agency according to federal law for the training of students receiving benefits through the Veterans Administration. Also, Vietnam era veterans from Colorado who are eligible pursuant to Colorado law are entitled to a reduced tuition. Applications and information may be obtained in the Records Office.

ANY QUESTIONS ABOUT ADMISSION
NOT ANSWERED HERE SHOULD BE
ADDRESSED TO:
OFFICE OF ADMISSIONS AND RECORDS
FORT LEWIS COLLEGE
DURANGO, COLORADO 81301

Phone 303-247-7185



### Costs

Costs for students attending Fort Lewis College will vary in accordance with the number of trimesters they attend. The cost for the Colorado resident who attends two trimesters, an academic year, will amount to approximately \$2200 which includes tuition, fees (including 12-month health and accident insurance coverage), room, and twenty meals per week. Out-of-state-students will pay approximately \$3200. Reference should be made to the current Schedule of Fees card for a listing of all charges.

A student, by the act of registration, automatically incurs an obligation to the College. This obligation must be satisfied by payment to the College.

Personal expenses, such as clothing, travel, social activities, books and supplies will depend upon the individual and are in addition to the scheduled expenses. The State Board of Agriculture, governing body for Fort Lewis College, reserves the right to change any fee at any time without formal notice whenever conditions warrant such change.

PAYMENT OF FEES. All charges including tuition, room, and board are due and payable at the time of registration. Only under certain circumstances will a request for delayed payment of any charge be considered.

REFUND OF TUITION AND FEES. A student withdrawing from College within 6 days from the official registration date may obtain 90% refund of tuition and refundable student fees only. A student withdrawing after the first 6 days and before the 20th day may obtain a refund of one-half tuition and refundable student fees only. No refund will be made twenty days after the official registration date. A student dismissed or suspended from the College as a result of official College action will automatically forfeit all tuition and fees.

#### RESIDENCE HALL RESERVATIONS

Rooms in residence halls are reserved, if space is available, upon receipt of a signed contract and either a \$50 or \$100 security deposit, depending upon the dormitory involved. The security deposit will reserve accommodations for the Fall and Winter Trimester of each academic year, 8 months, or the remaining portion thereof if the entering date occurs after the opening date for the Fall Trimester. The security deposit will be returned approximately thirty (30) days after the close of the Winter Trimester less any damages and/or obligations owing to the College.

For those students reserving space for only the Winter Trimester, a security deposit is required and students will receive their refund according to the above policy procedure.

#### REFUND OF ROOM CHARGES

Refunds of room payments for withdrawals from the residence halls for other than disciplinary action will be based on the following schedule:

During or Before End of the

First Week \$25.00 Charge

During or Before End of the

Second Week 50% Refund

During or Before End of the

Third Week 25% Refund
After Third Week No Refund

#### REFUND OF BOARD CHARGES

Refund of board charges upon receipt of appropriately approved withdrawal notices for reasons other than disciplinary action will be based on the following schedule:

During or Before End of

First Week \$25.00 Charge

Beginning of the Second Week and Continuing Until the

End of the Term \$25.00 Charge

Plus pro rata charge for all meals taken from the beginning of the second week.

#### CLASSIFICATION FOR TUITION PURPOSES

Every student, when admitted to Fort Lewis College, is classified as either an in-state or an out-of-state student for tuition purposes according to the provisions of Title 23, Article 7, Colorado Revised Statutes, 1973, as amended (The Tuition Classification Statute). Additional information is available in the Records Office, Room 132. Academic Building.

The tuition classification of every student is stated on the Permit to Register when admitted to Fort Lewis College. The classification continues while attending Fort Lewis College unless the procedure stated below is followed.

Any student has the right to challenge his or her tuition classification by obtaining a *Petition for In-State Tuition Classification* from the Records Office, completing it, and returning the petition with the required documentation to the Records Office on or before the last date for adding classes in the term in which a change of classification is requested.



### Student Services

To foster the academic, cultural, and personal development of each student, Fort Lewis College provides the best possible social and physical environment. The Office of the Vice President of Student Affairs is responsible for the coordination of the various activities needed to achieve this purpose.

#### HOUSING

The thirteen residence halls and the Centennial Apartments at Fort Lewis College provide many students with an excellent physical environment. The College provides housing for approximately one-half of the student enrollment.

All residence halls are financed in such a manner that they are paid for by the students who occupy them. Because the College has a considerable financial investment in these facilities, it is necessary to manage them efficiently under the terms of a policy established by the State Board of Agriculture that assures a level of occupancy enabling Fort Lewis College to meet its financial obligation.

All new applicants for campus housing are assigned according to date of application. Students who are not accommodated on campus will be assisted by the Housing Office in finding off-campus housing.

After a term in on-campus housing and having proven themselves to be mature, responsible residents, students who wish housing for the next academic year must make application and pay a security deposit by a specified date. He or she is then eligible to request a roommate and room from those available. Detailed information regarding this procedure will be available in the Housing Office.

It is the student's responsibility to make proper application for housing upon receipt of the permit to register or acceptance by the College. The appropriate financial payment must accompany the housing application. If a space is available, the student will be sent a Housing Agreement which will assure on-campus accommodations if signed and returned to the Housing Office within the specified time. The Housing Agreement is for the Fall and Winter Trimesters of an academic year.

Fort Lewis College may be characterized as somewhat conservative or traditional in its approach to residence hall living policies. Resident students are issued a key which permits them to gain entrance to their residence hall and room. Residents are expected to live by the rules and regulations as outlined in their Housing Agreement, Guide to Residence Living and Student Handbook. Each residence complex is staffed by a Complex Coordinator, Head Resident and Student Assistants. It is their responsibility to promote a living environment conducive to study and pleasant living. They are there as added resources for the student as he adjusts to collegiate living at Fort Lewis College. The Student Services Staff also attempts to stimulate supplementary social activities to aid in the personal growth and development of the individual. All living is a learning experience; the Fort Lewis College residence hall program is predicated on this principle, carried out in an educationally directed manner, and dedicated to providing safe, healthy, relaxed places for all students to sleep and study. Fort Lewis College does not believe that such principles are best served through elaborate facilities or completely open facilities.

The RESIDENCE HALL ASSOCIATION (RHA) includes all students, both male and female living on campus. Each of the thirteen residence halls has a council of officers who coordinate the hall activities.

Students admitted to Fort Lewis College should realize they are expected to follow the housing policies as a condition of their admission to the College.

## Counseling and Student Development

#### COUNSELING

Counseling services at Fort Lewis College are based on the philosophy that a student's personal growth is as important as his or her intellectual development. The Counseling and Student Development Center offers services designed to implement these developmental objectives. The Center also functions as an academic support system, offering programs and services to help students gain more from their education. In addition to the services offered by the Center, counseling is available from all Student Services Staff members serving students in specialized need situations, such as: financial planning, housing, career placement, health, campus activities, and student government. Students with general questions or concerns should start at the Counseling and Student Development Center located in Room 14 of the Library. The telephone number is 247-7212.

The Center's staff offers professional counseling, psychological, and educational services for individual students and small groups of students. Examples are career counseling, educational counseling, personal counseling, and services for handicapped students. In conjunction with the counseling process, the Center offers personality and career interest inventories. Some of the tests require a minimal processing fee. The tests are available to students who request such service through the Center and for whom the counseling staff deems testing to be appropriate.

The Counseling and Student Development Center views student growth as a cooperative effort between and among faculty advisors, the Division of Cultural Studies, the Residence Hall staff, the Health Service, Student Government organizations and officers, College administrative personnel, and anyone else having contact with students. Referrals are also made to community agencies and religious organizations.

Courses through academic departments and specialized programs are offered to groups of students by Counseling and Student Development Center Staff in such areas as communication skills, couples' relationships and communication, career and life planning, peer counselor training, and other areas as student interests and needs dictate.

#### LEARNING SKILLS PROGRAM

The Learning Skills Program is an additional academic support system. Its purpose is to help students become more independent, self-confident, and efficient learners so that they will be better prepared to meet the academic standards of Fort Lewis as well as to better achieve their own educational and personal goals. To accomplish these objectives, the program operates a tutorial and skills development program.

This program also sponsors learning skills workshops designed to help small groups of students develop maximum efficiency in learning and studying including time-management, listening and notetaking, reading, and exam skills. The emphasis is on group discussion and interaction, informational handouts, and practice exercises.

#### HEALTH SERVICES

Student Health Service, an out-patient treatment center, is located near the center of the campus and residence halls. A registered nurse is on duty during the daytime hours. The campus hours of the College physicians are posted in the Student Health Center. One of the College physicians is on call after Student Health Center hours.

Student Health Center provides general medical care and minor surgical procedures. It issues certificates of exemptions from or limitations to any required physical education program for health reasons.

All medical records are confidential. No release of information is possible without the written consent of the individual involved except in cases of public health matters in which certain reports of contagion may be required by public health officials.

Accident and sickness (hospitalization) insurance is sold to students through an independent carrier and may be purchased at registration.

A complete physical examination is only required for participation in intercollegiate athletics.

A physician's statement of approval for participation in intramural athletics is required. In the case of a serious, chronic illness or medical problem the family physician should provide a detailed statement to Robert C. Pivonka, M.D., Health Center, Fort Lewis College.

#### STUDENT FINANCIAL AID

Fort Lewis College offers a complete student financial aid program of scholarships, grants, loans and student employment

#### Federally Funded Programs

- Basic Educational Opportunity Grant (BEOG)
- 2. National Direct Student Loan (NDSL)
- Supplemental Educational Opportunity Grant (SEOG)
- 4. College Work-Study (CWS)

#### State Funded Programs

- 1. Colorado Student Grant (CSG)
- 2. Colorado Scholars Program
  - a. Presidential Scholarship (entering Freshman only)
  - Continuing Student Scholarship (Juniors and Seniors only)
- 3. Athletic Scholarship (Men and Women)
- 4. Colorado Work Study Program
- 5. State Student Incentive Grant (SSIG)

All financial aid awards, with the exception of Athletic Scholarships, Presidential Scholarships and Continuing Student Scholarships, are based on financial need.

Every effort is made to provide the best type of aid or combination of aid to assist students in completing a college education.

All financial aid awards are contingent upon availability of funds.

#### APPLICATION PROCEDURE

All students wishing to be considered for student financial aid must submit an ACT-Family Financial Statement. The ACT-FFS will allow each applicant to indicate whether or not he/she wants the income and asset information passed on to the Basic Grant program for their processing and determination of BEOG eligibility.

The appropriate Financial Aid application may be secured from your high school counselor or by request from the Office of Student Financial Aid, Fort Lewis College, Durango, Colorado 81301.

Applications for student aid are to be completed by May 1, for complete consideration for the academic year and March 1, for summer school aid.

Complete consumer information revelant to all student services programs is available upon request. Requests for information should be directed to the appropriate office.

#### PLACEMENT SERVICE

The College has a full time placement and career counseling service. The placement service is located in Room 202 of Miller Student Center. In addition to the Auxiliary Services personnel, faculty members are available for career counseling. Faculty advisors and department chairmen actively assist students and alumni seeking career opportunities. The placement office works closely with the Cooperative Education Program.

It is suggested that students register with the Placement Office upon completion of their junior year.

Interviews with representatives of business, industry, government agencies as well as schools are arranged for students through the Placement Office. The Placement Office also tries to assist students in securing summer jobs as well as part time positions during the school year.

#### ALUMNI ASSOCIATION

The Alumni Association of Fort Lewis College is now duly constituted and incorporated by the State of Colorado as a non-profit organization. Every effort is being exerted to maintain an up-to-date mailing list.

Regular semi-annual newsletters are planned starting each year. Correct addresses and current news of all former students are needed for a more complete and inclusive letter. Please drop us a line if you are an alumnus or have news of our former students.

#### STUDENT UNION

The Fort Lewis College Student Union contains lounges, meeting rooms, a ballroom, a dining room, and a snack bar.

#### BOOKSTORE

The campus bookstore, called The Sutler's Shop, is located in the basement of the College Union Building. In addition to all text-books and supplies for all classes, the bookstore sells candies, tobaccos, jewelry, greeting cards, stationery, Fort Lewis jackets and shirts, magazines, toiletries, and various other sundries. The bookstore is designed to serve the students' needs, especially those who live on campus. The hours are 8 a.m. to 5 p.m., Monday through Friday.

#### MAIL SERVICE

A post office is maintained in the College Union Building for the convenience of the students. Students living on campus have their mail delivered to the residence halls. STUDENTS LIVING OFF CAMPUS SHOULD OBTAIN A POSTAL BOX AT THE COLLEGE POST OFFICE UNLESS THEIR PERMANENT ADDRESS IS DURANGO.

#### MOTOR VEHICLES

All students are permitted to have their cars on campus, although freshmen often find that the ready availability of a car has been a contributing factor to a poor academic record. The student faculty advisor, the Academic Standards Committee, or the Dean of Students may restrict the use of an automobile if excessive use appears to be resulting in poor grades or other misuse.

Students and all Fort Lewis College personnel must register and pay the scheduled fees for all automobiles with the Campus Security Officer during the official registration period. Campus traffic and parking regulations are distributed at the time of registration.

Currently the registration fee is \$12. Students using campus parking lots are assessed this fee to pay for the construction and maintenance of parking lots, since it is the policy of the State of Colorado not to build parking lots with state funds. All parking sticker permits are pro-rated at \$1.00 per month from the time of the student's first registration until August 31 of the academic year.

# ATHLETICS AND RECREATION

Fort Lewis College has a comprehensive men's and women's intercollegiate athletic program. The College sponsors men's teams in
the following sports: football, basketball, wrestling, swimming,
golf, and tennis. The Women's Intercollegiate program includes
College-sponsored teams in volleyball, basketball, swimming, and
tennis. All Raider teams compete against four-year colleges in the
Rocky Mountain and Southwestern areas. Facilities include 12
tennis courts, a gymnasium, football stadium, 440-yard track, and
a swimming pool. Located adjacent to the campus are the municipal golf course and a ski hill. Fort Lewis is a member of the Rocky
Mountain Athletic Conference, National Association of Intercollegiate Athletics, the National Collegiate Athletic Association, Intermountain Association for Intercollegiate Athletics for Women,
and the National Association for Intercollegiate Athletics for
Women.

An excellent intramural athletic program is offered at Fort Lewis College. Opportunities for competition are provided in flag football, basketball, volleyball, softball, wrestling, tennis and table tennis, bowling, archery and swimming.

The physical education facilities are also available to students evenings and weekends for informal recreation activities, such as swimming, basketball and weight training.

### Student Life

#### ASSOCIATED STUDENTS OF FORT LEWIS COLLEGE (ASFLC)

The Student Senate of Fort Lewis College is the central agency for student policy, planning, coordinating, and budgeting for all College organizations. The Senate consists of fifteen senators elected at large by the student body. One-half of the senate members are elected each trimester for terms of one year. Many of the diverse responsibilities of the Student Senate are delegated to various standing committees and numerous temporary committees.

The largest committee in scope and membership is the Student Union Board (SUB). The Student Union Board formulates policies for the operation of the Student Center. Events and programs sponsored by the Board are planned through the following committees: Concert, Cultural, Dance, Lecture, Movie, PUB, and Special Events. The Board is chaired by the Activities Vice President. Interested students may become Board members and committee chairmen. The Director of the Union is a nonvoting member.

The executive branch of the student government at Fort Lewis College is unique in Colorado colleges because it consists of a Student Body President, Executive Vice President, an Activities Vice President and the Student Court.

The Student Body President coordinates the efforts of the legislative and executive branches and provides communication between the faculty, administration, and students.

The Executive Vice President chairs the Senate meeting and is responsible for preparing the agenda.

The Student Court is counsel to the Executive Vice President and Senate regarding all actions taken within the ASFLC Constitution. It interprets the Constitution and provides adjudication of oncampus parking and traffic violations and student affairs that cannot be settled elsewhere by a petition for a decision.

#### CAMPUS BROADCASTING

KDUR is a non-commercial, educational, radio station run entirely by the students of the College. The station began broadcasting in the spring of 1975, and has become one of the school's fastest growing sources of communication. KDUR not only serves the student body, faculty and staff of Fort Lewis College but also the community of Durango.

#### STUDENT NEWSPAPER

The Fort Lewis College Independent is the student newspaper, edited and staffed by students. Usually it contains 12 pages and comes out weekly on Friday mornings.

Any student is welcome to work on the staff. Writers, photographers, cartoonists, layout persons, ad salespersons, bookkeepers, editors and artists always are in demand.

The paper is governed by a committee made up of students and faculty members which serves in an advisory capacity.

#### OUTDOOR PURSUITS

The Outdoor Pursuits program provides students with the opportunity to experience the mountain and desert lands adjacent to Durango. The program offers trips nearly every weekend with activities ranging from hiking to rock climbing, cross country skiing to river rafting and more. In addition, students may check out equipment free of charge, utilize the program's library of maps, books and magazines and benefit from workshops sponsored by the program. Outdoor Pursuits is an excellent way to meet people and enjoy the College's unique geographical location.

#### STUDENT CONDUCT CODE

Fort Lewis College believes that learning and day-to-day living cannot be separated, but go hand in hand. Therefore, student behavior which seriously threatens the individual or the community will not be tolerated. For these reasons and for their own human and social value, high standards of personal conduct are expected of students both on- and off-campus. Any student who is unwilling or unable to meet these standards may be asked to leave the College. There are no voluminous rules and regulations published concerning student conduct. The College relies instead on good taste and maturity of college students and on their assumption of full adult responsibility for the consequence of their behavior.

Fort Lewis College acknowledges the fact that most students recognize the importance of self-discipline and the expectations of a mature citizen in the College community. However, the complexity of College regulations frequently confuses those students who are unfamiliar with existing rules and regulations. For this reason it is necessary to point out that a demonstrated sense of responsibility and conformity to high standards of behavior in accordance with College, City, State, and Federal regulations is expected of all students.

Any student of Fort Lewis College, who by his or her conduct in the residence halls, cafeteria, classroom, or elsewhere on- or off-campus demonstrates a lack of regard for the established standards by which respected citizens of the community live, will be referred to appropriate officials for such corrective action as is deemed necessary.

The Fort Lewis College Student Handbook which is published annually includes specific College policies, rules, and regulations. It also includes the policies and procedures of the Committees on Student Life and Student Conduct which inform students of their rights and responsibilities to ensure due process. The Student Handbook is provided to each student and may be secured in advance of arrival on campus from the Office of the Vice President of Student Affairs.

#### DISCIPLINARY ACTION

The Vice President of Student Affairs is officially charged with encouraging and promoting high standards of conduct by all students. Through his own initiative, or through referrals made by members of the faculty, staff, or others, he or his delegate considers all cases of misconduct and, to ensure due process, will refer those of an especially serious nature to an appropriate committee for advice. Should major disciplinary action be necessary, it will take one of the following forms.

In addition to other penalties, disciplinary agencies may give a WARNING for minor infractions. These warnings are cumulative and are considered official College actions. When a student has completed his academic program, his previous warnings are null and void.

PROBATION is a middle status between good standing and suspension or dismissal. The student remains enrolled but under stated conditions according to College policies. Probation covers a stated trial period during which it is determined whether the student is returned to good standing, having met the stated requirements, or dismissed or suspended at the end of the probation period for failure to meet the stated requirements. SUSPENSION is an involuntary separation of the student from the College, but it differs from dismissal in that it implies and states a time limit when return may be possible. Thus suspension may extend for one trimester or until a specified date or a stated condition is met.

Involuntary separation of the student from the College is implied by the term DISMISSAL. It may not be a permanent separation but neither is a definite time set when return may be expected. Terms having the same meaning which seem less commonly used and which could be replaced by dismissal are involuntary withdrawal, requested withdrawal, disqualification, expelled, or expulsion.

#### POLICIES

#### PEACEFUL ASSEMBLY

The policy on demonstrations is really a reaffirmation of the commitment of the College to the principles of a democratic society in which each individual is entitled to the rights and privileges guaranteed him by the Constitution of the United States, including the right to peaceful assembly and that of free speech.

The primary purpose of Fort Lewis College is to provide facilities for obtaining an education for its students. Any peaceful demonstration by groups exercising the right of peaceful assembly and free speech will receive the full protection of any and all administrative personnel and staff. Any student who attempts to interfere with the exercise of these rights will be subject to College disciplinary action. Conversely, if an individual participating in a demonstration impedes the freedom of movement of other individuals, or if he in any way obstructs the normal use of a building or other facility, or interferes with the normal academic processes of the College, then he too will be subject to College discipline. It is important to understand that speech and behavior are distinctly separable.

All students at all times are expected to behave in accordance with the Student Code which calls for a high standard of personal behavior governed by good taste and maturity. This code warns that any student behavior which seriously threatens the individual, the community, or property will not be tolerated.

#### GUNS AND WEAPONS

Guns and other lethal weapons are not allowed on the Fort Lewis College campus. Because of accidents that have occurred, and the failure of students to comply with the policy on storage of guns on campus, this regulation is deemed necessary. Students are reminded that it is also against school policy to store guns in their cars.

#### RELIGIOUS ACTIVITY

The College encourages a student to pursue the religion of his choice. Active organized groups on campus are the Newman Club, Baha'i, Raider Christian Fellowship, Student Association of the Church of Jesus Christ of Latter Day Saints (LDSSA), the Campus Crusade for Christ, and the Church of Christ.

# IDENTIFICATION CARDS

Identification cards are required of all students. They are important in helping a student establish his identification for cashing checks and for admission to many campus events.

# The Academic Programs THE DEGREES

Fort Lewis College offers a number of programs leading to the bachelor's degree. The Bachelor of Science is offered in Biology, Chemistry, Geology, and Physical Sciences; the Bachelor of Arts is granted in all other four-year programs. In addition, the College offers a program leading to the Associate of Arts in Secretarial Science and one leading to an Associate of Arts in Agricultural Science.

The Fort Lewis College teacher education programs have been approved by the Colorado State Board of Education. Certification is offered in elementary education and a wide variety of secondary teaching fields.

### THE ACADEMIC PROGRAMS

The academic programs at Fort Lewis College are offered through the Schools of Arts and Sciences, Business Administration, Education, and the Center for Southwest Studies.

# ARTS AND SCIENCES

Curricula in Agriculture, Anthropology, Art, Biology, Chemistry, Engineering, English, Forestry, French, Geology, German, History, Industrial Arts, Latin, Mathematics, Music, Philosophy, Physics, Political Science, Sociology, Spanish, and Theatre, as well as interdisciplinary work in the Humanities and the Physical Sciences, are offered in the School of Arts and Sciences.

#### BUSINESS ADMINISTRATION

The School of Business Administration provides instruction in Accounting, Business Administration, Business Education, Economics, and Secretarial Science.

#### **EDUCATION**

The School of Education prepares students professionally for teaching at both the elementary and secondary levels; it also offers major fields of study in Physical Education and Psychology.

#### STUDENT CONSTRUCTED PROGRAM

In addition, the College has established the Student-Constructed Major, whereby a student may design a major to meet a specific purpose. The major may be related to any school or include course offerings from more than one school.

Also, Fort Lewis College offers a rich variety of special programs which are available to students regardless of the specific school in which they are enrolled.

#### LIBRARY

The Library at Fort Lewis College is truly a special instructional program. Its broadly experienced professional staff, all of whom hold graduate degrees, and its well-trained complement of technical and clerical specialists provide ready, competent service to students, faculty, and staff.

Library holdings, in addition to over 120,000 volumes of books, 8,000 reels of microfilm, 950 magazine subscriptions, and approximately 30,000 volumes of microfiche, include a wide selection of audiovisual material. The approximately 2,200 recordings, individually cataloged as a convenience to library patrons, include popular and classical music, poetry, dramatic readings and speeches. Films, filmstrips, and some 10,000 overhead projector transparencies are likewise important components of the audiovisual collection.

Individualized reference service by a professional librarian is provided during all hours of library operation, normally about eighty-four hours each week. Additionally, library orientation is a regular feature of the Freshman Seminar Program. An essential part of the orientation is instruction in the use of bibliographic tools, such as periodical indexes and abstracts and basic reference books needed in the preparation of research papers and reports.

#### CENTER OF SOUTHWEST STUDIES

The Center of Southwest Studies is closely allied to both the Library and the instructional Schools. As a major field of study the Center provides an interdisciplinary approach to an investigation of the history and culture of the Southwest. The course work for this program is drawn mostly from Anthropology, History, and Spanish.

The holdings of the Center include books, magazines, newspapers, separates, photographs, and records of all kinds. At the present time, the materials on the American Indians are among the largest in the entire western portion of the United States. A second important collection is composed of mining, railroad, and military records. Most of the collection is housed in the Southwest Room of the Library where the materials are available to students and faculty in all disciplines and research scholars throughout the nation.

A brief visit to the Southwest Center reveals the fact that Fort Lewis College is located in a fascinating multi-cultural area where the rich traditions of the Spanish, the American Indians, and Western America are developing a new and even richer culture. Fort Lewis College, through its federally funded Intercultural Program, is a significant part of this process.

#### DIVISION OF CULTURAL STUDIES

The purpose of the Division of Cultural Studies is to develop a culturally pluralistic thrust that deals primarily with the complexities and opportunities of education across cultures involving the major ethnic societies in the service region of Fort Lewis College, but not excluding other ethnic and cultural groups.

To accomplish this purpose, the Division of Cultural Studies in cooperation with the College departments will offer academic, service, experiential and cultural approaches in multi-cultural education that relate to the following basic aspects of the college community: academic programs, student services, community services, social and living experiences and cultural opportunities.

#### INTERNATIONAL CONTENT AND EXPERIENCE

In an increasingly interdependent world, a quality undergraduate education must sensitize students to the global dimensions of most significant issues confronted by modern society. In the content of the curriculum, as well as through the provision of opportunities for some students to be exposed directly to the cultural settings of major societies overseas, Fort Lewis College hopes to relate meaningfully its educational process to the fast changing world environment. The presence of foreign students on campus, the visits of foreign scholars, and the involvement of faculty in educational programs overseas are also assets to be capitalized on and constitute important Fort Lewis College objectives.

Currently under way, or planned for the near future, are study abroad programs to Mexico, England, Norway and Japan.

# COOPERATIVE

The Cooperative Education Program is designed to help students translate the theoretical systems of scholarship into patterns of work and thought that are directly useful in the broader community.

The Cooperative Education Program assists students in defining career goals and locating appropriate placements. Students work with private or government employers throughout the United States in jobs related to their career interests.

Students analyze their work experience and career goals while enrolled in Cooperative Education in the form of a daily work journal and a formal final paper at the end of the trimester. Written work is evaluated by the program director at Fort Lewis and is done in conjunction with appropriate faculty members whenever possible. Grading is on a credit (S), no-credit (NC) basis.

Cooperative Education students may be enrolled part-time or full-time depending on the nature of the job and the number of hours worked per week. Students may be in salaried positions or unsalaried internships. Cooperative Education emphasizes full-time salaried positions whenever possible. These include formal agreements with a wide variety of federal agencies for specialized career training programs which qualify students for permanent placement upon graduation.

Cooperative Education Program credits are granted in the form of general electives. Students can earn from three to a maximum of ten credits in a single trimester under the heading of Cooperative Education 200, 300, or 400. The level and amount of credit depends on the nature of the work placement and the number of hours of weekly involvement.

Students are allowed to apply a maximum of twenty Cooperative Education elective credits to their bachelor's degree at Fort Lewis College.

Cooperative Education Program students who are based in Durango pay regular tuition and fees. Students who work outside a twenty-mile radius of the college pay regular tuition and reduced fees.

Students are normally eligible to participate in Cooperative Education after they have satisfactorily completed their freshman year and have obtained the approval of their faculty advisor.

The Cooperative Education Program at Fort Lewis was established in 1970 which made it the first college program of its kind in Colorado. Since that time it has continued as one of the most extensive Cooperative Education Programs in the state.

# COMPUTER

The Fort Lewis College Computer Center is equipped with a Digital Equipment Corp. PDP-11/70 computer. The Center provides computational support for computer-oriented courses, student and faculty independent studies, and digital computer indoctrination seminars for faculty and students without charge for normal academic use; when possible, programming assistance is provided.

### COOPERATION WITH OTHER INSTITUTIONS

In cooperation with Colorado State University, Fort Lewis College offers growing programs in agriculture, forestry, and engineering. In these fields a student may take two years of work at Fort Lewis; if the student follows the prescribed program and maintains a 2.5 average, his work will be transferred as a block to Colorado State University at the beginning of the Junior year. In engineering, Fort Lewis also offers a 3-2 cooperative plan in which the student spends three years at Fort Lewis followed by two years at Colorado State University; at the conclusion of the program, the student receives a Fort Lewis College degree in mathematics and a degree from Colorado State University in engineering. A program in Engineering in association with The Colorado School of Mines was initiated last fall. By taking a certain block of courses at Fort Lewis College in the first two years, a student can transfer to the School of Mines as a junior if all requirements are met. These programs are, of course, transferable to other schools as well on the basis of a course-by-course evaluation.

The Department of Biology, in cooperation with accredited teaching hospitals, offers a program in medical technology.

# CONTINUING EDUCATION

The Continuing Education Program endeavors to fill the needs and demands of people in the San Juan Basin.

Through night classes it can help the employed to complete courses for graduation, the interested to attain worthwhile leisure time activities, and the unemployed to equip themselves for gainful employment. Many courses are offered as an aid to teachers to meet certification requirements, or to keep up with new developments in their fields; when possible, Fort Lewis College in cooperation with other colleges and universities will attempt to make graduate courses available, both on- and off-campus. Fort Lewis College will offer specialized or hobby courses in diverse fields providing sufficient interest exists. Inquiries concerning Continuing Education should be addressed to the Director of Continuing Education.

# REQUIREMENTS FOR GRADUATION

### GENERAL REQUIREMENTS

Each candidate for graduation must complete a minimum of 128 credit hours, 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 his major course of study.

Each student is required to complete a minimum of 50 credits of the 128 credits required for graduation outside the discipline in which the student is majoring.

Candidates for bachelors degrees have three basic parts to their program: general studies, a major, and electives. Each candidate must complete a minimum of 41 credit hours in the general studies program to be chosen as outlined below, and 32 credit hours minimum in a field of specialization, called the major. The balance of the 128 hours required for graduation are called electives. The student has wide latitude in selecting these, although some of them may be specified in certain programs as auxiliary to the major or for teacher certification.

A student must complete his or her final 28 hours of credit in residence. Exceptions to this requirement include such programs as medical technology and engineering (3-2). Other exceptions may be made in unusual circumstances by the Vice President of Academic Affairs on recommendation of the appropriate School Dean. Among the 128 credit hours required for the degree, 40 hours must be upper-level courses. No more than 28 credit hours will be accepted for work completed by correspondence, extension, and broadcast educational television.

A course offered in substitution of a required course or the request that a requirement be waived must have the approval of the faculty adviser, the School Dean, and the Vice President of Academic Affairs.

# PETITIONING TO GRADUATE

In order to graduate from Fort Lewis College, each student must submit a signed Petition for Candidacy for a degree which can be obtained from the Records Office. The signed petition must be returned to the Records Office within a month after the completion of 90 credit hours for the Bachelor's degree and after the completion of 30 credit hours for the Associate of Arts degree. Also the graduation fee must be paid by that date.

## SECOND BACHELOR'S DEGREE

A student who for special reasons desires to secure a second Bachelor's degree must complete a minimum of 28 semester credit hours in addition to the total number of credits required for the first degree. The student is required to complete all requirements for the second degree including general graduation requirements and specific requirements for the major selected. If a student receives his first Bachelor's degree from another accredited college the additional 28 semester credit hours must be in residence to fulfill the requirements for the second bachelor degree. The additional credits required for the second degree may be completed concurrently with those credits applying on the first degree and two degrees may be granted simultaneously, providing all of the requirements have been completed for both degrees.

## GENERAL STUDIES

Fort Lewis requires a broad background of general studies of all candidates for the bachelor's degree. Students have a variety of choices, but they are specified by general categories in order to assure breadth of education in addition to the specialization required in the major. Each student will be aided by a faculty adviser in choosing a general studies program best suited to his/her own needs and interests.

# FRESHMAN/SOPHOMORE SEMINARS

Every beginning freshman will take a freshman seminar in one of his first two trimesters at Fort Lewis. (Freshmen in the Intercultural Program may postpone their first seminar for one or two trimesters if this is recommended by their advisers.) Sophomores are required to take a seminar in one of the trimesters of the sophomore year. The two seminars are to be chosen from different fields. They are offered in a wide variety of fields and are intended to develop at the beginning of a student's college career both research and communication skills. Only two seminars can be counted toward graduation.

### II. DISTRIBUTION REQUIREMENTS

The groups below indicate the number of courses required in each group. The listing is by academic field in most cases, and any course in the field may be chosen with the exceptions noted in parentheses. Courses taken in the major field will not apply toward groups A, B, C and D except for the broad majors of Elementary Education, Humanities, Physical Science, and Southwest Studies. However, courses required for a major that are under "Auxiliary Requirements from Other Departments" may apply toward General Distribution Requirements.

Furthermore, courses of less than three hours' credit will not meet these requirements, except where there are laboratory activities related to other courses taken at the same time or previously.

# Group A. VALUE STRUCTURE

Three courses must be chosen, at least one from each sub group.

- 1. English (except Engl 189, Engl 208, and courses numbered below Engl 130.) Foreign Language
- Art (except Art 203) Industrial Arts 111, 112, 220, 221 Music (except Mu 314, Mu 315, Mu 316) Theatre (except Thea 121)

### Group B. QUANTITATIVE AND NATURAL SCIENCE

Three courses required; at least one must be a natural science with laboratory; the three must be chosen from at least two different fields.

Biology Chemistry Geology Physical Science Physics

Mathematics (except Computer Science)

The following individual courses outside these fields may also be chosen:

BA 251, 252, Business Statistics Phil 271, Logic

Group C. FOUNDATIONS OF SOCIETY

Two courses required.

History
Philosophy (except Phil 271)
Anthropology

# Group D. SOCIAL STRUCTURE AND BEHAVIOR

Two courses required.

Economics
Political Science
Psychology (except Psych 218)
Sociology

# III. SPECIAL DISTRIBUTION REQUIREMENTS

At least one course used to meet graduation requirements must focus on contemporary Latin America, Asia, Africa, or a combination thereof. A list of specific courses that meet this requirement will be published prior to each registration period.

# IV. PHYSICAL EDUCATION

Two activity courses of one credit hour each are required; the two must be in different activities.

# THE MAJOR

All students seeking baccalaureate degrees must select a major area of study for specialization. The College now offers majors in Biology, Chemistry, Geology, Physical Sciences, Anthropology, Art, English, History, Humanities, Mathematics, Music, Political Science, Spanish, Accounting, Business Administration, Business Education, Economics, Elementary Education, Physical Education, Psychology, Sociology, and Southwest Studies. In addition to these regular majors the College has established a procedure whereby a student with a special purpose may construct his own major. This ordinarily will be of an interdisciplinary character and should be worked out with an adviser or school director and submitted to the Curriculum Committee for approval not later than the end of the sophomore year.

# **ELECTIVES**

The third part of a student's program of study consists of additional courses, called "electives," selected by him in accordance with his ability, interest, and purpose. The courses permit a student to become acquainted with other areas of knowledge to broaden his education, to supplement his major area of concentration, to meet specific requirements of a graduate school, to take professional teacher certification courses, or to add a second teaching field.

### REPEATABLE COURSES

Certain courses are repeatable but have limits on the number of credits that can be counted toward graduation. The limit on Physical Activity courses is six semester hours. Thea 100, 200, 300 and 400 may each be repeated for 6 credits. Up to 24 credits are allowable toward graduation in these courses. The courses, General Studies 200 and 300 may be taken three times for a total of nine credits. A combined maximum of twelve credit hours from Mu 105, 106, 107, 110, 115, and 116 are allowable toward graduation. Any course in Applied Music may be repeated once for a total of two, three, or four credit hours at the same level. A combined maximum of sixteen hours from Applied Music are allowable toward the 128 credits required for graduation.

# MINORS

Minors are offered by some departments. A student desiring a minor should contact the appropriate department as early in his college career as possible to determine whether that department offers a minor and the requirements for its completion.

# ACADEMIC PERFORMANCE

# **EXAMINATIONS**

The number and type of examinations in any particular course are determined by the instructor. Separate days are set aside for the final examinations that come at the close of each trimester.

It is the student's responsibility to take all examinations or to arrange for exceptions directly with the instructor.

# GRADING

Beginning with the grades awarded in the fall term of the academic year 1977-78, all grades of I (incomplete) will be changed to F's after one year unless the faculty member responsible for the assignment of the I (incomplete) takes the action either to change the grade or to retain the I (incomplete) for an additional period.

The grade of X means the student has passed a course by special examination.

The grade of P means that the student has passed a course on a Pass-Fail basis.

The grade of W signifies that the student has withdrawn from the course while passing.

The grade of S (credit) means that the student has successfully completed the course.

The grade of NC (No Credit) means the student did not complete the course. No credit is given nor is the grade figured in the grade point average.

The grade of NG (No Grade) indicates that the instructor did not report a grade by the deadline for submission of final grades.

For a number of usages the quality of a student's work is appraised according to grade point averages. Fort Lewis uses the 4-point system, which assesses grade points as follows:

A	4 points	С	2 points
A -	3.75 points	C -	1.75 points
B+	3.25 points	D+	1.25 points
В	3 points	D	1 point
B -	2.75 points	D -	.75 points
C+	2.25 points	F	0 points

The grade point average, carried to two decimal places will be computed by dividing the total number of grade points by the total number of credit hours attempted. Grades of X, S, P, W, NC and NG do not affect the grade point average.

When a student repeats a course the credit will count only once and only the last grade will be counted in the grade point average.

# CREDIT-NO CREDIT

Courses that primarily utilize field experiences may, at the discretion of the sponsoring School, be graded either "credit-no credit", or with the traditional "A through F" letter grade system.

Should the "credit-no credit" option be utilized, the courses may still be applied to either the major or general distribution requirements.

### PASS-FAIL ELECTIVES

A student with at least a C cumulative average is permitted to take up to four Pass-Fail electives during his/her undergraduate career. The Pass-Fail basis is limited to elective courses only. Pass-Fail may not apply to General Studies requirements, departmental requirements, or teacher-education requirements. The student may take no more than one Pass-Fail elective in any one trimester and no more than 18 hours may be taken during the term he/she is carrying the Pass-Fail elective. A Freshman may not choose a course on this basis before his second term. The student taking a Pass-Fail elective must fulfill all necessary prerequisites for that course. Changes to or from Pass-Fail status after the beginning of a term are limited to the normal period for adding courses.

### ACADEMIC PROGRESS

Full-time students generally have two trimesters to make proper academic adjustment to college, but anyone not doing satisfactory academic work may receive a probation, warning, or suspension notice earlier.

An over-all grade of 2.0 is considered satisfactory progress toward a degree. A grade-point average of less than 2.0 marks unsatisfactory progress and may result in a student being placed on probation or warned or suspended or dismissed from College. A student who has been suspended may petition for readmission after completion of his suspension period. However, such petition does not guarantee readmission.

# **DEAN'S LIST**

The Dean's List is published at the end of each semester honoring students of high scholastic achievement.

Students who attain a grade point average of 3.4 or better in not less than 14 hours of graded credit and have completed all work for which they are registered by the end of the term will be listed for that term.

To graduate with honors the student must have earned in residence at Fort Lewis at least the same number of credit hours that are required for his major. Grade point averages required for honors are as follows:

Summa cum laude — Grade point average of 3.8 to 4.0. Magna cum laude — Grade point average of 3.6 to 3.7.

Cum laude — Grade Point average of 3.4 to 3.5.

### CREDIT BY SPECIAL EXAMINATION

Credit for some courses may be earned by special examination. Application should be made to the chairman of the appropriate department.

The College Entrance Examination Board provides a group of standardized exams available in lieu of courses. These are called College Level Examination Program (CLEP) tests. Successful results are acceptable at Fort Lewis College for many of these. Students interested in credit by CLEP tests should inquire about details at the Office of Admissions and Records.

# CREDIT FOR MILITARY SERVICE

Veterans are allowed credit for previous education. Also, credit for military experience may be allowed according to the American Council on Education recommendations when the D.D. 214 and other relevant information is submitted to the Records Office.

# AUDIT

A Student may audit courses with the permission of the instructor if he desires to attend classes regularly but does not wish to receive grades and credit.

Upon registration, the student must declare whether he wishes to take a course for audit or for credit. A student may not change from audit to credit basis, or vice versa, after the closing date for adding classes in each trimester. When registering, a student may take both audit and credit courses but the total should not exceed a normal load.

A student auditing courses is required to pay fees at the same rate as if enrolled for credit.

Students who wish to audit a course and later wish to obtain credit for it may do so by special examination.

# ACADEMIC PROCEDURES

### REGISTRATION

Registration for each trimester immediately precedes the beginning of classes for the trimester.

A fee is charged for late registration.

## COURSE LOAD

The normal student load in a given trimester is 16 semester credit hours. A three-hour course will customarily be taught three hours per week, a five-hour course, five hours per week.

The maximum regular load is 18 hours in a trimester. If a student wants to take more than this he must obtain permission from his adviser and his School Dean. A student should plan to spend a minimum of two hours of outside preparation for every hour of classroom or laboratory attendance.

# CLASSIFICATION

A regular student is one who has been admitted to the College and who has declared his intention to pursue the requirements for the baccalaureate or associate of arts degree.

Regular students are classified as follows according to semester hours completed:

Freshman Less than 30 semester hours

Sophomore 30-59 semester hours
Junior 60-89 semester hours

Senior 90 or more semester hours

An unclassified student is one who has been permitted to enroll but who does not intend to work toward a degree.

# PROGRAM CHANGES

Once a student has registered for a given set of classes, records are established, and no courses are dropped from, or added to, a student's official registration except on forms provided by the Records Office. Such changes are the responsibility of the individual student; he must make arrangements with the Records Office, with his faculty adviser, and with the instructors concerned. There is a fee charged for making changes.

With the consent of the adviser and the instructors, courses may be added during the first week and a half following registration.

A grade in a course dropped by a student prior to 5:00 p.m. on the Friday following the date midterm grades are due is to be recorded as W or F for either the fall or winter trimester; during each of the five-week sessions, the deadline for the policy stated above is the third Friday of the session. After these deadlines, a grade of W may be given only in the case of unusual circumstances determined by the course instructor.

A student who desires to withdraw from College entirely must go through an official withdrawal procedure starting with the Counseling Center. Failure to do so leaves the student liable to a record of total failures for the term.

### ATTENDANCE

Regular class attendance is expected. Each instructor keeps his own record of student absences and determines the extent to which absences affect final grades.

# FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974.

Compliance with the Family Educational Rights and Privacy Act of 1974 (P.L. 93-380) as amended. Each eligible student has the right to review his or her own academic records, to seek correction of information contained in those records, and to limit disclosure of information from the records.

Student academic records which are kept in the Records Office are confidential to the student, the academic adviser, and those faculty or staff members who must have access to the files to perform their jobs. No information from a student's file will be released to any other party without the written permission of the student.

This information plus the policy and details concerning the Act (available in the Records Office) constitute the annual notification to students of their rights under the Act.

# TRANSCRIPTS

The first transcript (record of grades) for a Fort Lewis College student is supplied free of charge. A charge is made for additional transcripts. All accounts with Fort Lewis must be settled before a transcript may be issued.

### EFFECTIVE CATALOG

Academic policies and regulations are changed by Fort Lewis College from time to time. Which set of regulations as published in the catalog applies to a given student is determined by the following rule: All students intending to graduate from Fort Lewis College must meet the course requirements for graduation set forth in the catalog in effect at the time of their matriculation or the one in effect at the time of their graduation; students may choose between the two catalogs but may not combine them; regulations other than course requirements will apply according to the catalog in effect at the time of graduation except as new regulations have other effective dates specifically fixed. However, no catalog more than ten years old at the time of the student's graduation will be accepted as the source of graduation requirements. A student who matriculated earlier than ten years before graduation will meet the requirements of the catalog in effect at the time of graduation, or may petition the Vice President of Academic Affairs to be permitted to graduate under some intervening catalog not more than ten years old. Any student who is not registered at Fort Lewis College for any continuous period of two calendar years or more forfeits his claim to the catalog under which he entered and comes under the catalog in effect at the time he next returns to Fort Lewis College as a student. Such students will also have the right of appeal to the Vice President of Academic Affairs for use of an earlier catalog.

The College reserves the right to cancel a class if enrollment in the class is not deemed sufficient.



# The Curriculum

### INTERPRETING THE CATALOG

The figures after each course have the following meanings: the first figure in the parentheses refers to hours spent in lecture or seminar sessions and the second number for hours in laboratory each week. The figure outside the parentheses refers to semester credit hours. Disciplines appear alphabetically according to school and the schools themselves are in alphabetical order beginning with the School of Arts and Sciences.

Courses are numbered on four levels. 100-199 indicate the courses with these numbers are intended primarily for freshmen, 200-299 primarily for sophomores, 300-399 primarily for juniors, and 400-499 primarily for seniors. However, a student may freely choose courses one level above or below his own classification if he has the proper prerequisites. He may choose a course more than one level removed from his own classification only with the consent of the instructor of the course. A few courses are numbered below 100. These do not count toward graduation. Courses numbered below 300 are called lower division courses while those 300 and above are known as upper division.

The courses offered are listed by Schools except that those listed below are not confined to any one School.

## COURSES COMMON TO ALL PROGRAMS

# FRESHMAN/SOPHOMORE SEMINARS

Freshman and Sophomore Seminars are offered in a variety of fields of study. They are problem-centered courses, substituting for Freshman English or composition courses, and introducing students to the key concerns and questions of different disciplines. Their central purpose is to teach scholarly procedures and attitudes to students at the beginning of their college careers and again during their second year. The problem for research will vary from term to term. Each instructor will choose the problem for his seminar. The seminars will emphasize both research techniques and communication skills. Students will write frequent papers and give and defend oral reports. These will be graded for English and oral presentation as well as content pertinent to the seminar problem. Each beginning freshman will take a freshman seminar during his first or second term. The sophomore seminar will be taken during the third or fourth term. Seminars have limited enrollments so that the individual student can express himself and can receive personal attention.

A lower-division seminar in interdisciplinary studies. Offered on sufficient demand, This course and General Studies 300 may be repeated for a combined maximum of nine hours.

#### **GENERAL STUDIES 300**

2.4

An upper-division seminar in interdisciplinary studies. Offered on sufficient demand. This course and General Studies 200 may be repeated for a combined maximum of nine hours.

#### 190 SPECIAL TOPICS

1-6

This is not a fixed course but is a designation to take advantage of special opportunities and topics. It can be offered in any area with consent of the School Dean and the Vice President of Academic Affairs. Credit may vary from 1-6 hours.

#### 390 SPECIAL TOPICS

1-6

Same as 190 Special Topics except that this course is at the upper division level.

#### 299 INDIVIDUALIZED STUDY

1-3

Independent study for lower division or non-major students. Available in most disciplines offered at Fort Lewis College.

#### 499 INDEPENDENT STUDY

1.3

All major fields require either independent study or a seminar at the senior level.

Independent study may be undertaken in a field other than the student's major. To do so, a student must have the approval of his adviser, his Department Chairman, the Department Chairman in whose area the study will be made, and the professor who will supervise the study. However, independent study in the field outside the student's major cannot be substituted for the requirement of independent study or seminar in his major field.

### HONORS PROGRAM

Under the direction of an Honors Committee, the College offers an Honors Program for students of superior ability. With its stress on reading, on independent creative work, and on developing the tools of analysis and reflection, the program is designed to enrich the participants' education.

Incoming Freshmen may be admitted to the Honors Program on the basis of high school records and ACT scores. Sophomores and Juniors may be admitted on the basis of academic achievement, faculty recommendations and interviews.

The Program consists of the following: a student may take either an Honors Freshman Seminar or an Honors Sophomore

Seminar and will be required to take the four courses in the Core Curriculum.

## 301 HONORS SEMINAR IN THE NATURE OF MAN

3

A seminar examining various interpretations of human nature derived from the fields of psychology and philosophy. Views examined will include studies in anthropology, biology, and religion. It is proposed that this seminar include student research reports on the disciplines listed. (Will fulfill one of the General Studies Requirements in Group C.)

### 302 HONORS SEMINAR IN PHYSICAL SCIENCES

3

A study of the technological and scientific developments that have had a profound effect on man's relationship to the physical world. An examination into the moral issues raised about the proper control, application, and use of scientific knowledge. (Will fulfill one of the General Studies Requirements in Group B - with the laboratory requirement still prevailing.)

### 303 HONORS SEMINAR IN THE HUMANITIES

3

An examination of major ideas and themes embodied in the Arts since the Renaissance. Readings and discussions will emphasize the degree to which the Arts have shaped, criticized, and mirrored the institutions and values of western society. (Will fulfill one of the General Studies Requirements in Group A.)

# 304 HONORS SEMINAR

3

# IN THE SOCIAL SCIENCES

A study of contemporary problems of man in his society from political, historical, sociological, and economic perspectives. An attempt will be made from the knowledge we possess, to understand the social process as man struggles as one among many to survive in this universe. (Will fulfill one of the General Studies Requirements in Group D.)

# 401 SENIOR HONORS SEMINAR

4-6

A project demonstrating a high level of scholarly accomplishment.

An Honors student must maintain a minimum cumulative of 3.2; must complete 20 hours of Honors work; can leave the Program at any time without the loss of academic credit; and upon successful completion of an academic career as an Honors student, will receive Honors recognition at graduation and on the transcript.

For additional information, contact the Director, Honors Council or the Admissions Office.



# SCHOOL OF ARTS AND SCIENCES

ANTHROPOLOGY

ART AND INDUSTRIAL ARTS

**BIOLOGY, AGRICULTURE, AND FORESTRY** 

CHEMISTRY

**ENGLISH AND THEATRE** 

**FOREIGN LANGUAGES** 

GEOLOGY

HISTORY

MATHEMATICS

MUSIC

PHYSICS AND ENGINEERING

POLITICAL SCIENCE AND PHILOSOPHY

SOCIOLOGY AND HUMAN SERVICES

LARRY S. JOHNSON, Dean

# THE SCHOOL OF ARTS AND SCIENCES

### The Departments:

Anthropology — Susan M. Riches, Chairman
Art and Industrial Arts — David J. Hunt, Chairman
Biology, Agriculture, and Forestry — Lee Preston Somers,
Chairman
Chemistry — James W. Mills, Chairman
English and Theatre — Carroll V. Peterson, Chairman
Foreign Languages — John R. Tapia, Chairman

Geology — Robert W. Blair, Jr., Chairman History — Ira L. Plotkin, Chairman

Mathematics - Gary W. Grefsrud, Chairman

Music - Richard G. Strawn, Chairman

Physics and Engineering - Robert N. Likes, Chairman

Political Science and Philosophy — LeRoy W. Goodwin, Chairman

Sociology and Human Services — Norman Linton, Chairman

The programs in the School are administered through its academic departments, but for easy reference the separate curricula are listed alphabetically.

# Agriculture

Assistant Professor Arthur E. Johnson Instructor Jimmy T. LaBaume

### PRE-AGRICULTURE

The agricultural science program provides the student with the equivalent background of the first two years of a four-year agricultural college. This part of the agricultural science program is designed for those students pursuing a professional career where a transfer to a four-year agricultural college is necessary for completion. Minors are offered in General Agriculture, Agronomy and Animal Science

#### Pre-agriculture course requirements:

Freshman level		Units
Freshman Seminar		4
Sophomore Seminar		4
(Two of the following agriculture courses		
are recommended):	12	
Ag 101 Introduction to Livestock	2	
Ag 102 Forage and Crop Production	4 4 3	7-8
Ag 150 Farm Records and Accounts	3	6-8
Two courses from Group A distribution requirements		6-8
Two courses from Group B distribution requirements		0-0
Sophomore level		27-32
(Two of the following agriculture courses		
are recommended):		
Ag 231 Range and Pasture Management	4	
Ag 235 Soils	4	
Ag 240 Feeds and Feeding	4 4 3 3	
Ag 250 Farm Management	3	
Ag 390 Special Topics as offered	3	6-8
Completion of general distribution requirements		
Group A - 1 or more courses	3-6	
Group B — 1 or more courses	3-6	
Group C — 2 courses	6-7	
Group D — 2 courses	6.7	18-26
Electives	2-6	2-6
		26-34
		20.04

# TWO-YEAR AGRICULTURAL SCIENCE

The agricultural science program provides the necessary basic background courses plus additional practical and vocational courses designed to fill the needs of those students pursuing an agricultural career on a ranch, farm, or other agriculture-oriented business and industry. Upon completion of the two-year requirements of this program, the students will be awarded an Associate of Arts degree.

A student enrolled in the two-year Agriculture Science Program must complete the following requirements:

General Studies	Units
Freshman Seminar	4
Sophomore Seminar	4
An approved math course	3
Four courses to be selected	
from the four distribution	
groups of General Studies, one	
from each group	12

Direction of the control of the cont	A
Specific Agriculture Science Requirements:	
Ag 101 Introduction to Livestock	4
Ag 102 Forage and Crop Production	4
Ag 150 Farm Records and Accounts	3
Ag 250 Farm Management	3
Ag Experience — A student is required	
to have a minimum of 15 weeks or one	
summer experience on the farm, ranch,	
or other agricultural business prior to	
the Associate Degree.	
Agriculture Electives: (At least four courses selected t	rom
the following):	
Ag 201 Livestock Judging	2
Ag 202 Weeds and Weed Control	4
Ag 231 Range and Pasture Management	4
Ag 235 Soils	4
Ag 240 Feeds and Feeding	4
Ag 243 Irrigation & Fertilizer Prac.	3
Ag 390 Special Topics (as offered)	
	3-6
Ag 473 Mammalian Physiology	4
Suggested Electives:	
IA 101 Elementary Woodworking	3
IA 102 Advanced & Machine Woodworking	3
IA 150 Principles of Drafting	3
IA 201 Electric Welding	3
IA 202 Advanced Metal Working	3
Engr 205 Elementary Surveying	3
TOTAL REQUIRED FOR GRADUATION	227
TOTAL REGULARD FOR GRADUATION	
COURSES	
Ag 101 INTRODUCTION TO LIVESTOCK	(3-3) 4
Basic elements of animal husbandry, with emphasis on	
dairy production.	occi, oncopi omno, and
Ag 102 FORAGE AND CROP PRODUCTION	(3-3) 4
Principles of forage and field crop production, with special	1 No. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Colorado.	
Ag 150 FARM RECORDS AND ACCOUNTS	(3-0) 3
This course is designed to give proficiency in keeping fare	118
and management purposes.	in records for income tax
Ag 201 LIVESTOCK JUDGING	(1-3) 2
Selection and judging of modern types of livestock.	14000000000
Targing Times of Management	

Principles and practices of weed control and recognition of important weed spe-

Physical Education.

cies.

Prerequisite: Ag 101.

Ag 202 WEEDS AND WEED CONTROL

#### Ag 231 RANGE AND PASTURE MANAGEMENT

(3-3) 4

A study of the management, development, and utilization of range land and pasture and a short survey of the more common poisonous plants.

Ag 235 SOILS

(3-3) 4

A basic course dealing with formation, properties, and management of soils with special attention to (a) soil conditions that affect moisture relations and (b) elementary fertility analysis.

Prerequisite: Chem 115.

#### Ag 240 FEEDS AND FEEDING

(3-3) 4

Principles of feeding livestock, with emphasis on the use of feeds available in the western states.

Prerequisite: permission of instructor.

#### Ag 243 IRRIGATION AND FERTILIZER PRACTICES

(2-3) 3

Techniques of irrigation and fertilizer recommendations.

#### Ag 250 FARM MANAGEMENT

(3-0) 3

Basic economic principles applied to farm and ranch operations. Prerequisite: Ag 150.

Ag 473 MAMMALIAN PHYSIOLOGY

(3-3) 4

See Biology 473.



# Anthropology

Professor John C. Ives;
Associate Professor Susan M. Riches;
Assistant Professors Donald R. Gordon, and Robert A. Ibarra.

Fort Lewis College offers a program of courses leading to the Bachelor of Arts Degree with a major in Anthropology, A range of courses is offered to serve the interests of the College as a whole. 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. Minors in Anthropology and Archaeology are offered.

Students majoring in Anthropology may be certified to teach in the broad area of Social Studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN ANTHROPOLOGY

Specific Departmental Requirements		
Anth 205, Introduction to Physical Anthropology	3	
Anth 210, Introduction to Cultural and		
Social Anthropology	3	
Anth 301, Human Evolution	4	
Anth 312, Topics in Archaeology:		
Old World Prehistory	3	
Anth 496, Senior Seminar or 499 Independent Study	2	15
Other Departmental Requirements		
Two additional courses in Cultural Anthropology	6	
Two additional courses in Archaeology or Prehistory	6	
Plus anthropology electives to total 32		32
Requirements outside the department		
Math 201. Elementary Statistics	3	3
Electives		37
TOTAL REQUIREMENTS FOR GRADUATION	********	128

The Anthropology Department offers minors in General Anthropology and Archaeology. Specific details on the minors programs should be discussed with the Department Chairman.

### COURSES

# Anth 151 INTRODUCTION TO ANTHROPOLOGY (3-0) 3

A comprehensive study of general Anthropology. The course is recommended as a beginning course for students who have no previous background in Anthropology. Fall and Winter terms.

Anth 205 INTRODUCTION TO PHYSICAL ANTHROPOLOGY (3-0) 3
This course is designed to introduce the student to the basic concepts and tech-

niques used in the study of human biology and human evolution. Fall term,

# Anth 210 INTRODUCTION TO CULTURAL AND SOCIAL ANTHROPOLOGY

(3-0) 3

The course focuses on the development of cultural and social anthropology and includes studies of the major concepts used in past and present anthropological studies. Fall and winter terms.

#### Anth 211 TRIBAL PEOPLES

(3-0) 3

A comparative study of band and tribal peoples of Africa, Eurasia, Oceania and the New World. Fall term.

#### Anth 213 PEASANT SOCIETIES

(3-0) 3

A study of agricultural societies throughout the world and the position of these societies within more complex systems. Winter term.

#### Anth 215 PRIMITIVE RELIGION

(3-0) 3

A study of religious behavior in non-literate societies. Alternate years.

#### Anth 231 ARCHAEOLOGY OF THE SOUTHWEST, PART I: THE ANASAZI CULTURE

(3-2) 4

The development of the Pueblo dwelling peoples of the Four Corners area. Fall term

#### Anth 259 FIELD TRAINING IN ARCHAEOLOGY

4-8

Actual excavation in the field with instruction in the various techniques of Archaeology. The student will spend all day, five days a week, in the field. The length of the dig is based on current excavation plans and may vary. Credit is determined by field school period. A written description of the field school for each year will be turnished to prospective students. Summer term.

#### Anth 276 FOLKLORE OF THE SOUTHWEST See English 276. Winter term.

(3-0) 3

#### Anth 301 HUMAN EVOLUTION

(3-2) 4

This course will review the history and theory of organic evolution including elementary genetics. Subsequent topics will include human and infrahuman fossils, human anatomy, primatology and behavioral evolution, and subspecies variation. Winter term.

Prerequisite: Anth 205 or consent of instructor.

#### Anth 312 TOPICS IN ARCHAEOLOGY

3-4

Various archaeological topics will be taken up different times. May be repeated for different topics. Some topics may include laboratory.

Prerequsite: Anth 151 or Anth 231 or Anth 259.

# Anth 321 TOPICS IN ETHNOGRAPHY AND SOCIAL ANTHROPOLOGY

(3-0) 3

The intensive study of a culture or of a particular problem topic in cultural anthropology. The course may be repeated for different topics.

#### Anth 331 ARCHAEOLOGY OF THE SOUTHWEST, PART II: THE HOHOKAM & MOGOLLON CULTURES

(3-2) 4

The development of the Hohokam and Mogollon cultures in the southern Southwest. A study of archaeological interpretations and method as applied to the South-

Prerequisite: Anth 231 or consent of instructor.

#### Anth 361 THE NORTH AMERICAN INDIAN

western United States. Winter term.

(3-0) 3

Archaeology, ethnology, and linguistic relationships of the Indians of North America, Alternate years.

#### Anth 401 ADVANCED TOPICS IN ANTHROPOLOGY

2-6

Various topics will be given. Course may be repeated for a different topic. Offered on demand.

Prerequisites: Junior or senior standing (unless by consent of instructor) and a minimum of two other courses in anthropology.

#### Anth 451 SOCIAL STRUCTURE

(3-0) 3

Contemporary theories of the social aspects of man's culture are emphasized. Problems of data gathering and analysis are considered. Alternate years. Prerequisite: any course dealing with social or cultural anthropology, or consent of

instructor.

#### Anth 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. On demand. Prerequisite: senior standing and permission of instructor.

#### Anth 499 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of Department Chairman.

# Art

# Professor Stanton Englehart; Assistant Professors David J. Hunt and C. Gerald Wells; Instructors Ellen Cargile and Laurel Vogl.

The Art Department attempts to increase the student's awareness and understanding of art and its relationship to society. The art major prepares the student to be a practicing artist, to enter graduate school for further professional training, or to teach art on the elementary or secondary levels. The Department also serves majors from other disciplines who select art as a minor field. The department welcomes those students who wish to elect art courses as a means of achieving a greater sense of personal sensitivity and awareness.

There is a continuous schedule of student and professional shows for the benefit of the college and the general public. This department is of service to the general public through participation in the Continuing Education program.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN ART

General Studies		41
Specific Departmental Requirements		
Art 310, Art History to the Renaissance	3	
Art 311, Art History from the Renaissance	3	
Art 405, Theory and Aesthetics	3	
Art 496, Seminar		
or		
Art 499, Independent Study	2	
	11	
Other Departmental Requirements		
21 hours from the remainder of art		
offerings with the exception of		
Art 203, Art for Elementary Teachers	21	
	-	
	32	32
Electives		55
TOTAL REQUIRED FOR GRADUATION		. 128

Students seeking secondary certification must complete, in addition to the general requirements of the art major, the following courses:

101 Drawing	3
102 Painting	3
104 Basic Design	3
105 Ceramics	3
106 Introduction to Printmaking	3
204 Two and Three Dimensional Sculpture	3
SW 111 or 112 Indian Arts and Crafts	3-4

#### Recommended courses are:

201 Drawing, 203 Art for Elementary Teachers, 208 Basic Photography

A student who is admitted to the Teacher Education Program after September 1, 1977, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975. Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor.

# COURSES

#### Art 101 DRAWING

(0-6) 3

Practice in problems of technique, perspective, color, and design, and basics of composition. Subject matter to deal with still life, landscape, animals, and the human figure. (Course work in this area offered at the beginning and advanced levels.) Fall and Winter terms.

(0-6)

Instruction in various painting media. Students will concentrate on compositional and color problems while working from still life, landscape, and figures. (Course work in this area offered at the beginning and advanced levels.) Fall and Winter terms.

#### Art 104 BASIC DESIGN

(0.6) 3

An elementary course in the principles of composition utilizing line, mass, and color theory with emphasis on space and formal design related to both art and industrial art. An introduction to the basic tools and materials of both areas. Fall and Winter terms.

#### Art 105 CERAMICS

(0-6) 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. Fall and Winter terms.

#### Art 106 INTRODUCTION TO PRINTMAKING

(2-4) 3

A studio experience exploring the materials and methods basic to making prints. Relief, etching, collographic and silk screen techniques will be emphasized.

#### Art 201 DRAWING

(0-6) 3

A continuation of Art 101 but with emphasis placed on drawings of the human figure. Fall and Winter terms.

Prerequisite: Art 101.

#### Art 202 PAINTING

(0-6) 3

A continuation of Art 102. Fall and Winter terms.

Prerequisite: Art 102.

#### Art 203 ART FOR ELEMENTARY TEACHERS

(3-0) 3

Contemporary and historical concepts, practices, and methods used in the elementary school art program.

#### Art 204 TWO AND THREE DIMENSIONAL SCULPTURE

(0-6) 3

A course in two-dimensional design in bas-relief and three-dimensional sculpture. It consists of modeling in plastic materials as well as carving and shaping more rigid and resistant materials such as wood, metal, and stone.

#### Art 206 CERAMICS

(0-6) 3

A continuation of Art 105. Fall and Winter terms.

Prerequisite: Art 105.

#### Art 208 BASIC PHOTOGRAPHY

(2-4) 3

A basic course in photography. Introduction to the camera and basic darkroom procedures, Various ways to produce prints and photographic printing plates will be emphasized. Fall and Winter terms.

#### Art 301 DRAWING

(0-6) 3

A continuation of Art 201. Fall and Winter terms.

Prerequisites: Art 101, 201.

Art 302 PAINTING (0-6) 3A continuation of Art 202. Fall and Winter terms. Prerequisites: Art 102, 202. Art 303 ADVANCED STUDIO (0-6) 3Special Topics, Fall and Winter terms, Prerequsite: consent of instructor. Art 306 ADVANCED PRINTMAKING (2-4) 3Advanced development of printmaking skills with opportunity to do specialized work in one or more areas. Prerequisite: Art 106. Art 307 ART: FORMS AND IDEAS (3-0) 3Philosophical inquiry, by topic, into the formal nature of the visual arts and their meanings. Historical art forms will be compared with contemporary patterns of form and thought, Fall and Winter terms, Art 308 CERAMICS (0-6) 3 A continuation of Art 206, Fall and Winter terms. Prerequisite: Art 105, 206. Art 310. ART HISTORY TO THE RENAISSANCE (3-0) 3 History and appreciation of painting, sculpture, and architecture. These forms will be studied through their relationships to each other and to the societies which produced them. Fall term. Art 311 ART HISTORY FROM THE RENAISSANCE (3-0) 3 A continuation of Art 310, Winter term. Art 401 DRAWING (0-6) 3 A continuation of Art 301, Fall and Winter terms. Prerequisite: Art 101, 201, 301 or permission of instructor. Art 402 PAINTING (0-6) 3 A continuation of Art 302, Fall and Winter terms.

Prerequisites: Art 102, 202, 302.

Art 404 ADVANCED STUDIO (0-6) 3 Special Topics, Fall and Winter terms.

Prerequisite: consent of instructor.

Art 405 THEORY AND AESTHETICS (3-0) 3

Appreciation and understanding of various art forms through the study of aesthetics. Winter term.

Art 408 ADVANCED PRINTMAKING (0-6) 3 A continuation of Art 306. Prerequisites: Art 106, 306.

Art 496 SEMINAR (2-0) 2

Advanced study and research in selected topics. On demand. Prerequisite: consent of instructor.

61

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of Department Chairman.

# Biology

Professor James G. Erickson;
Associate Professors John E. Dever, Jr., Preston Somers and
Albert W. Spencer;
Assistant Professors Hsu-Ho Chung, David W. Jamieson

and J. Page Lindsey

The biology curriculum is designed to fit the needs of many types of students. Although all of the tracks within the course structure lead to a Bachelor of Science degree in biology, there are two major avenues, each with variations, leading to the degree: general biology and natural history. Students expecting to teach biology at the secondary school level; those entering pre-professional training for such areas as medicine, dentistry, and veterinary medicine; and students enrolled in the cooperative program in medical technology are expected to take the general biology track.

The natural history track is particularly valuable for those students who plan to work for the National Parks Service or some other governmental agency. It may also be used by prospective secondary teachers, although usually the general biology is better for this purpose.

There is a considerable demand from both government and industry 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 for pharmaceutical houses, require a biology background. Many biologist positions require a graduate degree for which a liberal arts biology major is an excellent background.

Minors in Biology, Botany, Zoology, Microbiology and Natural History are available. Interested students should consult with the chairman of the department.

# General Biology Curriculum

General Studies	
Specific department requirements	
Bio 100, Laboratory Experiences in Biology	1
Bio 101, General Biology	3
Bio 102, General Botany	4
Bio 103, General Zoology	4
Bio 321, General Physiology or Bio. 331.	4
Microbiology	
Bio 371, Genetics	4

Other biology courses (including one in the 400 series, other than	15	
496 and 499) excluding co-operative education		
Bio 496, Seminar;		
or		
Bio 499, Independent Study	2	37
*Auxiliary requirements from other Departments		
Chemistry 115-116 or 147-148; Chemistry 231-232		
Two mathematics courses chosen from:		
Math 111, College Mathematics;		
Math 201, Elementary Statistics;		
Math 221, Calculus; Math 222, Calculus;		
Math 223, Calculus		7-8
Electives	*********	23-24
TOTAL REQUIRED FOR GRADUATION		. 128

A student who selects the general biology curriculum is strongly advised to take courses in physics, languages (including computer language), advanced composition, and further courses in mathematics and chemistry depending upon his or her specific interests and goals. This further course work may greatly increase a student's chances for admission to graduate school and, in some cases, may be required for admission.

\*These auxiliary requirements fulfill Group B — Quantitative or Natural Science under the distribution requirements.

# **Natural History Curriculum**

General Studies		41
Specific departmental requirements		
Bio 100, Laboratory Experiences in Biology	1	
Bio 101, General Biology	3	
Bio 102, General Botany	4	
Bio 103, General Zoology	4	
Bio 201, Systematic Botany	4	
Bio 203, Field Zoology	4 4 4 5 5	
Bio 471, Ecology	5	
Bio 496, Seminar,		
or		
Bio 499, Independent Study	2	
Other biology courses (including at least two courses in the 300 or 400 series) (other than 471, 496, 499) excluding cooperative education.	8	
	3 <del>1 - 0</del> 5	36
*Auxiliary requirements from other departments		
Chemistry 115-116 or 147-148		10

6-8
35-37

Two courses in mathematics or computer science (excluding Math, 130 and CS 100 and 160), We

TOTAL REQUIRED FOR GRADUATION .....

A student who selects the natural history curriculum is strongly advised to take courses in anthropology and/or geology depending upon his or her specific interest and goals. Backgrounds in one or both of these fields can be strong positive factors in securing employment with federal agencies and other sources.

\*These auxiliary requirements fulfill Group B — Quantitative and Natural Science under the distribution requirements.

# Secondary Education

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

# Medical Technology

Fort Lewis College offers a medical technology program in affiliation with such hospitals as the Parkview Episcopal Hospital of Pueblo and Memorial Hospital of Colorado Springs. Students spend six terms at Fort Lewis College, completing at least 90 hours. They are then eligible to apply for a 12-month training program at one of the hospitals, after which they are eligible to become certified, and the B.S. degree in Biology is awarded. Dr. John E. Dever, Associate Professor of Biology, is the adviser for the program. In addition to fulfilling the normal requirements of the general biology curriculum, students who pursue this program must complete the following courses:

Bio 231, Comparative Anatomy	4
Bio 331, Microbiology	4
Physics — one course	5
Biology — approved elective	4

# Pre-Medical, Pre-Veterinary Medicine, and Pre-Dental Studies

Most medical schools require a baccalaureate degree as an entrance requirement; so do many schools of veterinary medicine and dentistry. Many students preparing for these professions specialize in chemistry or in biology, but some major in different fields. Members of the Pre-Medical Committee (Drs. Dever, Erickson, A. Johnson, Harrison, Ritchey, Somers and Wageman) should be consulted regarding course selection.

Preparation for graduate school. Students who major in biology and who plan to earn advanced degrees will be required to complete the general and departmental requirements for the bachelor's degree. In addition, their preparation for graduate school should include the following courses:

Inorganic and organic chemistry; physics, foreign language or computer science, advanced composition.

Many graduate schools for study in zoology and botany require satisfactory scores on the Graduate Record Examination (GRE) as part of their admission requirements. Students planning to work for advanced degrees should take this examination early in their senior year.

#### COURSES

#### Bio 100 LABORATORY EXPERIENCES IN BIOLOGY

(0-3) 1

This course is designed to accompany Bio 101, General Biology. It is optional for students who do not plan to take further biology courses but it is mandatory for students who continue in biology. Fall and Winter terms.

#### Bio 101 GENERAL BIOLOGY

(3-0) 3

An introduction to the life sciences. The course is designed to familiarize the student with some biological principles which are significant in everyday life and also to prepare him for the more specialized courses in biology. Fall and Winter terms.

#### Bio 102 GENERAL BOTANY

(3-3) 4

Study of the development of the plant kingdom. Fall and Winter terms. Prerequisite: Bio 101.

#### Bio 103 GENERAL ZOOLOGY

(3-3) 4

Study of the development of the animal kingdom from the protozoans through the vertebrates. Fall and Winter terms.

Prerequisite: Bio 101.

#### Bio 120 ENVIRONMENTAL CONSERVATION

....

The course will deal with natural resources in a global context. Attention will be given to public policies and programs which affect the long-range utilization of these resources. Winter term.

#### 3io 121 HUMAN ANATOMY & PHYSIOLOGY

(2-3) 3

An introduction to the structure and function of the human body. Fall and Winter terms.

#### BIO 132 HUMAN SEXUALITY

(3.0) 3

Biological aspects of human reproduction, supplemented by discussion of medical, societal, psychological and ethical issues. Not applicable to the Biology major.

#### Bio 201 SYSTEMATIC BOTANY

(3-3) 4

A study of the classification and relationship of the major flowering plant groups; use of plant keys and related terminology. Fall and Summer terms.

### Bio 203 FIELD ZOOLOGY

(4-3) 5

Collection, identification, and museum preparation of the vertebrate animals of the region. Summer term.

#### Bio 205 ENTOMOLOGY

(2-3) 3

A study of the general anatomy and physiology of insects, their identification and control. Offered on demand.

65

#### Bio 231. VERTEBRATE COMPARATIVE ANATOMY

(2-6) 4

A morphological study of the evolutionary development of vertebrate animals, Comparative dissections of representative animals will be done. Fall term of alternate years.

Prerequisite: Bio 103:

#### Bio 232 VERTEBRATE EMBRYOLOGY

(2-6) 4

A detailed study of reproduction and development in representative vertebrates. Winter term.

Prerequisite: Bio 103.

#### Bio 301 PLANT MORPHOLOGY

(3-3) 4

Study of structure, reproduction, modifications, and evolutionary development of vascular plants. Winter term.

Prerequisite: Bio 102.

#### Bio 303 HISTOLOGY

(2.3) 3

Study of the microscopic anatomy of the vertebrate body. Fall and Winter terms. Prerequisite: Bio 103.

#### Bio 321 GENERAL PHYSIOLOGY

(3-3) 4

Studies of functions of animal and plant cells, tissues, organs, and whole organisms, with emphasis on the basic processes common to all organisms. Fall and Winter terms.

Prerequisites: Bio 101, 102, 103 and concurrent enrollment in Chem 231.

#### Bio 322 RADIATION BIOLOGY

(3-3) 4

An introduction to the theory of radioactivity and the application of isotopes in medicine, physiology and research. Animals and plants will be used to demonstrate tracer techniques and results will be evaluated by use of scaler-counters and liquid scintillation. Winter term every two years.

Prerequisites: Bio 101, 102, 103, 321 and permission of instructor.

#### Bio 331 MICROBIOLOGY

(3-3) 4

A survey of the microbial world with emphasis on staining and culturing techniques and clinical methods for identification of bacteria and fungi of medical, economic and agricultural importance. Winter term.

Prerequisites: Bio 101, 102, 103; Chem 116 or 148.

#### Bio 343 PLANT PHYSIOLOGY

(3-3) 4

Study of growth and metabolism in plants: mineral nutrition, water relations, photosynthesis and other biosynthetic pathways, respiration, development, and responses to the environment. Fall term.

Prerequisites: Chem. 231; concurrent enrollment in Chem 232; Bio 102; Bio 321.

#### Bio 371 GENETICS

(3-3) 4

An investigation of inheritance with emphasis on the genetics of man, crops, and domestic animals. A discussion of the genetic basis of evolution is included. Fall term.

Prerequisite: Bio 321 or 20 hours of Biology.

#### Bio 407 EVOLUTION

(3-0) :

A study of the origin of living populations and the factors influencing genetic change. Winter term of alternate years.

Prerequisites: Bio 371 or consent of instructor.

#### Bio 433 BACTERIAL PHYSIOLOGY

(3-3) 4

Unique characteristics of metabolic pathways in bacteria will be studied. Major laboratory emphasis is placed on the interrelationships of bacteria, viruses and immune response, and their effects on human physiology. Fall term of even-numbered years.

Prerequisites: Bio 321, 331; Chem 232.

#### Bio 455 CELL STRUCTURE & PHYSIOLOGY

(3-3) 4

Examination of the ultrastructure of the cell. Metabolic mechanisms are studied at the molecular, organelle, and cellular levels. Winter term.

Prerequisites: Chem 232; Bio 343, or Bio 433. Biochemistry is strongly recommended.

#### Bio 465 PLANT AUTECOLOGY

(3-3) 4

A study of the interrelationships between individual plants, as opposed to communities of plants, and the various environmental factors.

Prerequisites: Bio 100, 101, 102, and one upper-division biology course or permission of instructor.

#### Bio 471 ECOLOGY

(4-3) 5

An introductory study of the relationships between animals, plants and their environment. Summer term.

Prerequisites: Bio 100, 101, 102, 103, Bio 201 and 203 strongly recommended.

#### Bio 473 MAMMALIAN PHYSIOLOGY

(3-3) 4

Functions of the mammalian organ systems with emphasis on nutrition, metabolism, and reproduction. Fall term

Prerequisite: Bio 321

#### Bio 477 BIOGEOGRAPHY

(3-3) 4

A study of the past and present distributions of plants and animals. Emphasis is on seed plants and vertebrate animals. Offered on demand.

Prerequisite: consent of instructor.

#### Bio 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Fall and winter terms.

Prerequisite: senior standing and permission of instructor.

#### Bio 499 INDEPENDENT STUDY

1-3

Individual research under the supervision of a faculty member. Offered on demand. Prerequisite: approval of Department Chairman.

# Chemistry

Professors E. Merle Harrison, John M. Ritchey; Associate Professors Rodney D. Hamilton, James W. Mills; Assistant Professors William R. Bartlett and Doreen M. Mehs

The Chemistry Department seeks to prepare students to become chemists in industry and teaching; to enter medical, engineering, or other professional and graduate schools; and to provide a general knowledge of chemistry and of the scientific method.

In order to achieve these objectives, a flexible curriculum encompassing three separate tracks has been designed, thus giving the student an opportunity to tailor his degree to fulfill his personal needs and interests. The chemistry major prepares the student for professional work in various areas of chemical technology, or may be combined with other majors or minors so that the student may ultimately practice in interdisciplinary vocations. Two extended majors are recommended for students contemplating advanced study—one appropriate for the pre-professional programs of pre-dentistry, pre-medicine, pre-pharmacy or pre-veterinary, and one suited for entrance into graduate study in chemistry or chemical engineering. A minor is also offered.

Chemists are concerned with the structure, composition, energy relationships, chemical conversions and other properties of substances. The various areas of chemical technology offer the largest field of employment in the physical sciences. Chemists are employed in fields such as petroleum, primary metals, electrical equipment, aerospace, pollution control, energy research and production, forensic science, paper, food, rubber, plastics, and textiles.

Thus, the graduate will find many applications for his training—e.g., teaching, research, management, production and sales—in the fields of education, business, industry and government.

#### BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY

General Studies		41
Specific Departmental Requirements:		
Chem 147-148 (or Chem 115-116*), Principles of Chemistry	10	
Chem 231-232, Organic Chemistry	10	
Chem 365, Analytical Chemistry	4	
Chem 358-359, Physical Chemistry	6	
Chem 360, Physical Measurements	2	
Chem 367, Instrumental Methods of Analysis	4	
Chem 496-497, Seminar	2	38
**Auxiliary Requirements from Other Departments:		
Mathematics through Math 222	14	
Phys 217-218 (Phys 201-202*)	10	
Computer Science 150	3	27
Electives		22
TOTAL REQUIRED FOR GRADUATION		. , 128

- \*Chem 115-116 and Phys 201-202 not recommended for EXTENDED MAJORS.
- \*\*These auxiliary requirements fulfill Group B—Quantitative or Natural Science—under the distribution requirements.

#### EXTENDED MAJOR FOR PROFESSIONAL SCHOOL PREPARATION

Because chemistry is of fundamental importance to other scientific areas, the student may elect to take an extended major if his professional goal is medicine, dentistry, medical technology or pharmacy. In addition to the chemistry major, 12-16 credits in the following courses are recommended.

Bio 231, Vertebrate Comparative Anatomy

Bio 232, Vertebrate Embryology

Bio 321, General Physiology

Bio 371, Genetics

Bio 331, Microbiology

Bio 455, Cell Structure and Physiology

Chem 310, Biochemistry

Chem 351, Pharmacology

#### EXTENDED MAJOR FOR GRADUATE SCHOOL PREPARATION

Students planning to earn an advanced degree in chemistry or engineering for the purpose of teaching or research are strongly encouraged to extend the chemistry major by completing 12-16 credits in the following courses:

Chem 264, Inorganic Chemistry

Chem 310, Biochemistry

Chem 351, Pharmacology

Phys 301, Introduction to Electronics

Phys 320, Modern Physics

Phys 380, Advanced Physics Laboratory I

Phys 420, Quantum Mechanics I

Chem 431, Advanced Organic Chemistry

Chem 454, Advanced Topics in Chemistry

Chem 460 Synthesis Techniques

Chem 464, Advanced Inorganic Chemistry

Chem 499, Independent Study

Math 223, Calculus

Math 327, Differential Equations

Math 401, Probability and Statistics

Students are also encouraged to complete a year of German.

#### SECONDARY TEACHING IN CHEMISTRY

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

A student who wishes to obtain a teaching certificate with a major in chemistry should complete at least 12 upper division credits in chemistry and six upper division credits in related disciplines—either mathematics or physics.

# Specific Departmental Requirements:

Chem 147-148 (or Chem 115-116)	10
Chem 231	5
Chem 365	4
Other chemistry courses numbered 200 or above	4

### Auxiliary Requirements from other Departments:

Mathematics or Physics courses numbered 200 or above 6

#### MINOR IN CHEMISTRY

Students may minor in chemistry by meeting the following requirements:

- A minimum of 18 credits of chemistry with at least 6 credits in upper-division courses approved by the department. (Chem 110 may not be counted towards the minor.)
- 2. One course from the following group, with a second strongly recommended:

Chem 310

Chem 358

Chem 365

### COURSES

#### Chem 110 INTRODUCTION TO COLLEGE CHEMISTRY

(4-3).5

This course provides the necessary scientific and mathematical background for those students not qualified for Chem 115 or 147. Major topics include a consideration of scientific and chemical measurement and calculation, elementary atomic theory, descriptive chemistry of the elements, the mole concept, balancing chemical equations, and calculations based upon chemical equations. This course is designed for those students who have not had high school chemistry and have generally weak scientific and mathematical backgrounds. It may not be used for credit in any major program.

#### Chem 115 GENERAL CHEMISTRY

(4-3) 5

A conceptual approach to fundamental principles of chemistry, including atomic and molecular theory, the periodic table, bonding, stoichiometry, gases, chemical equilibria and kinetics, thermodynamics and electrochemistry. A student will not receive credit toward graduation for both this course and Chem 147. Fall and winter terms.

#### Chem 116 GENERAL CHEMISTRY

(4.3) 5

A continuation of Chem 115. A student will not receive credit toward graduation for both this course and Chem 148. Winter term.

Prerequisite: Chem 115.

#### Chem 147 PRINCIPLES OF CHEMISTRY

(4-3) 5

A quantitative, physical approach to chemistry including electronic structure of atoms and molecules, solutions and states of matter, chemical thermodynamics and equilibrium, reaction kinetics, and electrochemistry. It is the recommended beginning course for science majors. A student will not receive credit toward graduation for both this course and Chem 115. Fall term.

Prerequisite: one year of high school chemistry and two years of high school mathematics. Concurrent enrollment in mathematics is recommended.

#### Chem 148 PRINCIPLES OF CHEMISTRY

(4-3) 5

A continuation of Chemistry 147. A student will not receive credit toward graduation for both this course and Chemistry 116. This course is recommended for science majors. Winter term.

Prerequisite: Chem 147, or Chem 115 and permission of instructor.

#### Chem 225 ENVIRONMENTAL CHEMISTRY

(3-0) 3

Sources, flow, dispersion and degradation of chemical pollutants in the environment. Energy relationships in natural systems. Introduction to abatement theory, mechanisms of pollution control.

Prerequisite: Chem 116 or Chem 148.

#### Chem 231 ORGANIC CHEMISTRY

(4-3) 5

Nomenclature, structure, stereochemistry and reactions of aliphatic and aromatic hydrocarbons. Unifying principles of reaction mechanisms are introduced and applied to free-radical substitution, electrophilic addition and electrophilic aromatic substitution reactions. The laboratory work is designed to acquaint the student with fundamental isolation and separation techniques. Fall term.

Prerequisite: Chem 116 or Chem 148.

## Chem 232 ORGANIC CHEMISTRY

(4-3) 5

Nomenclature, structure, spectroscopy and reactions of the major functional group classes. Emphasis is placed on nucleophilic substitution and addition reactions. The chemistry of biological compounds is introduced with studies of lipids, carbohydrates and amino acids. Laboratory emphasis is on synthesis and identification of organic compounds. Winter term.

Prerequisite: Chem 231.

#### Chem 264 INORGANIC CHEMISTRY

(2-0) 2

Occurrence, metallurgy, properties, uses of selected elements, compounds, and alloys. Also included are aspects of inorganic environmental chemistry, crystal-structure, stereochemistry of non-transition elements, coordination compounds, acidity and basicity, energy and chemical change, solution chemistry, solid-liquid phase equilibria, periodic relationships, and organo-metallic compounds. Winter term.

Prerequisite: Chem 148 or Chem 116.

#### Chem 310 BIOCHEMISTRY

(4-3) 5

The basic principles of biochemistry. The structure and function of proteins, carbohydrates, lipids, and nucleic acids; the metabolic processes occurring within living organisms; and biochemical genetics. The laboratory is designed to acquaint the student with basic biochemical techniques.

Prerequisite: Chem 232.

#### Chem 351 PHARMACOLOGY

(3-0) 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.

Prerequisite: Chem 231.

#### Chem 358 PHYSICAL CHEMISTRY

(3-0) 3

An introduction to thermodynamics and its applications 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 reactions rate theory. Fall term.

Prerequisites: Chem 116 or Chem 148, Phys 218 (or 202), and concurrent enrollment

in Math 222.
Chem 359 PHYSICAL CHEMISTRY

(3-0) 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 vibration and rotation, and the interaction of matter with light. Winter term.

Prerequisite: Chem 358

#### Chem 360 PHYSICAL MEASUREMENTS

(0-6) 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.

Prerequisites: Chem 359 or consent of instructor.

Chem 365 ANALYTICAL CHEMISTRY

(3-3) 4

Introduction to quantitative analytical chemistry including error, gravimetric and volumetric analysis; acid-base and redox equilibria; and electrochemistry; examples related to environmental concerns will be emphasized. Fall term.

Prerequisite: Chem 116 or Chem 148; Chem 231 recommended.

#### Chem 367 INSTRUMENTAL METHODS OF ANALYSIS

(3-3) 4

Modern spectroscopic theory and methods including electronic, infrared, nuclear magnetic resonance, emission, flame, atomic absorption, mass, x-ray and Mossbauer. Chromatographic, optical activity, and thermal methods of analysis will be introduced.

Prerequisite: Chem 365 or consent of instructor.

#### Chem 431 ADVANCED ORGANIC CHEMISTRY

(3-0) 3

Advanced studies in reaction mechanisms, molecular structure, stereochemistry, energy relationships, spectroscopy, and the application of quantum mechanics to organic chemistry. Fall term.

Prerequisite: Chem 232.

#### Chem 454 ADVANCED TOPICS IN CHEMISTRY

1.4

Advanced material in various areas of chemistry. During the course, material from one specific area will be treated. Class schedules will indicate the area. Example of offerings include polymer, forensic and photo chemistry. The time spent in the classroom and in the laboratory will vary with the topic. On demand.

Prerequisite: the 200 or 300 level course(s) in the specific subject area.

#### Chem 460 SYNTHESIS TECHNIQUES

(0-6) 2

Instruction in synthetic chemical techniques and the design of synthesis experiments. Standard organic and inorganic methods will be considered and applied to a variety of classes of compounds. Fall term.

#### Chem 464 ADVANCED INORGANIC CHEMISTRY

(3-0) 3

Atomic structure and periodic table, magnetic properties, modern bonding theories, chemistry of selected transitition and non-transition elements, reaction mechanism, solid state, organometallic and bioinorganic chemistry, inorganic synthesis. Winter term.

Prerequisite: Chem 264, 358 or consent of instructor.

#### Chem 496 SEMINAR

(1-0) 1

Advanced study and research in selected topics. Fall terms.

Prerequisites: Junior or Senior standing or consent of instructor.

#### Chem 497 SEMINAR

(1-0) 1

Advanced study and research in selected topics. Winter terms. Prerequisites: Chem 496 or consent of instructor.

#### Chem 499 INDEPENDENT STUDY

1-3

Work on a current research problem under the direction of a faculty member. Students present oral and written papers based on this research. On demand. Prerequisites: Junior or Senior standing and permission of instructor.

## Engineering

Associate Professor James R. Baker; Assistant Professor Tom D.Norton.

The engineering program at Fort Lewis College offers the student the requisite fundamental engineering sciences background, the liberal arts background, and the strong mathematical foundation necessary for pursuing upper-level classes and graduate studies in engineering. The program offers the equivalent of the first two years of college engineering studies, as well as selected, more advanced courses.

Fort Lewis College participates in formal engineering program agreements with Colorado State University (CSU) at Fort Collins, Colorado and the Colorado School of Mines (CSM) at Golden, Colorado. Under the agreement with Colorado State University, two options are available to the student. One option is the CSU block transfer plan. Under this agreement, the student completes a prescribed sequence of courses, listed below, in residence at Fort Lewis College. Successful completion of this sequence with an average grade point of 2.0 in the courses listed is sufficient for the collective transfer of the courses as a block and to Colorado State University for advanced standing as a junior in that institution. The block transfer sequence may be completed in two years residence at Fort Lewis College.

The second option is the CSU 3-2 program in which a student attends Fort Lewis College for six terms (equivalent to three academic years), and Colorado State University's College of Engineering for two academic years. During his residence at Fort Lewis, the student completes the requirements for the basic engineering core, and most of the requirements for a mathematics major. At Colorado State University 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 Colorado State University.

Under the block transfer plan agreement with the Colorado School of Mines, the student completes a prescribed sequence of courses, listed below, in residence at Fort Lewis College. If the student successfully completes this sequence of courses with a grade point average of 2.25 or above, admission to the Colorado School of Mines is guaranteed, with full junior standing.

Although the above plans pertain specifically to the agreements with Colorado State University and the Colorado School of Mines, the courses offered are ordinarily accepted for credit in comparable courses at other degree-granting engineering institutions. In addition, the engineering courses are often used by students in planning student-constructed majors at Fort Lewis College. Student-constructed majors utilizing the pre-engineering courses are available in conjunction with physics, geology, mathematics and other disciplines. The student should consult his advisor if interested in such a student-constructed major. An Engineering minor is also available to students majoring in other disciplines at Fort Lewis College. Students interested in an engineering minor should consult with the engineering faculty.

#### CSU BLOCK TRANSFER PLAN

Specific Departmental Requirements

nequirements		
Engineering Principles I	3	
Engineering Principles II	3	
Electric Networks I	3	
Electric Networks II, or	3	
Electronics		
Statics	3	
Dynamics	3	
		18
Freshman Seminar	4	
Calculus I, II, III	12	
Sophomore Seminar	4	
Differential Equations	3	
Physics for Scientists and		
Engineers I, II	10	
Heat and Thermodynamics	3	
Principles of Chemistry	5	
General Studies-Group A,C,D		
(Humanities and Social Sciences)	9	
Physical Activity I, II	2	
5) (52)	52	70
	Engineering Principles I Engineering Principles II Electric Networks I Electric Networks II, or Electronics Statics Dynamics  Freshman Seminar Calculus I, II, III Sophomore Seminar Differential Equations Physics for Scientists and Engineers I, II Heat and Thermodynamics Principles of Chemistry General Studies—Group A,C,D (Humanities and Social Sciences)	Engineering Principles I 3 Engineering Principles II 3 Electric Networks I 3 Electric Networks II, or 3 Electronics Statics 3 Dynamics 3  Freshman Seminar 4 Calculus I, II, III 12 Sophomore Seminar 4 Differential Equations 3 Physics for Scientists and Engineers I, II 10 Heat and Thermodynamics 3 Principles of Chemistry 5 General Studies—Group A,C,D (Humanities and Social Sciences) 9 Physical Activity I, II 2

## **CSU 3-2 PROGRAM**

Engr 104	Requirements Engineering Principles I	3	
Engr 105	Engineering Principles II	3	
Engr 201	Electric Networks I	3	
Engr 202	Electric Networks II, or	3	
Engr 203	Electronics		
Engr 217	Statics	3	
Engr 221	Dynamics	3	
Engr	Electives	3.6	
	Lieutines		21-24
Auxiliary Requirements			
FS. SS	Freshman, Sophomore Seminars	8	
Math 221, 222, 223	Calculus I, II, III	12	
Math 301	Foundations for Advanced Math	3	
Math 327	Differential Equations	3	
Math 401	Probability and Statistics	3	
Math 385, 386	Algebraic Structures I, II, Or	6	
Math 422, 423	Advanced Calculus I, II		
Math 496	Seminar, or		
Math 499	Independent Study	2	
Phys 217, 218	Physics for Scientists & Engineers I, II	10	
Phys 370	Heat and Thermodynamics	3	
Chem 147	Principles of Chemistry	5	
2000/17.	General Studies—Group A,C,D (Humanities and Social Sciences)	15	
PE 101, 102	Physical Activity I, II	2	
11/1/22	\$2.00 E S S S S S S S S S S S S S S S S S S	72	93-96
SM BLOCK TRAN	ISFER PLAN		
	ired of All Students Freshman Sophomore Seminars	100	
Specific Courses Requi		8	
FS, SS			
FS, SS Math 221, 222, 223	Calculus I, II, II	12	
FS, SS Math 221, 222, 223 Engr 104	Calculus I, II, II Engineering Principles I	3	
FS, SS Math 221, 222, 223 Engr 104 Engr 217	Calculus I, II, II Engineering Principles I Statics	3	
FS, SS Math 221, 222, 223 Engr 104 Engr 217 Chem 147, 148	Calculus I, II, II Engineering Principles I Statics Prin. of Chemistry I, II Or	3	
FS, SS Math 221, 222, 223 Engr 104 Engr 217 Chem 147, 148 Chem 115, 116	Calculus I, II, II Engineering Principles I Statics Prin. of Chemistry I, II Or General Chemistry I, II	3 10	
FS, SS Math 221, 222, 223 Engr 104 Engr 217 Chem 147, 148 Chem 115, 116 Geol 113	Calculus I, II, II Engineering Principles I Statics Prin. of Chemistry I, II Or General Chemistry I, II Physical Geology	3 3 10 4	
FS, SS Math 221, 222, 223 Engr 104 Engr 217 Chem 147, 148 Chem 115, 116 Geol 113 IA 150	Calculus I, II, II Engineering Principles I Statics Prin. of Chemistry I, II Or General Chemistry I, II Physical Geology Principles of Drafting	3 10 4 3	
FS, SS Math 221, 222, 223 Engr 104 Engr 217 Chem 147, 148 Chem 115, 116 Geol 113 IA 150 Phys 217, 218	Calculus I, II, II Engineering Principles I Statics Prin. of Chemistry I, II Or General Chemistry I, II Physical Geology Principles of Drafting Phys. for Sci. & Engr. I, II	3 10 4 3	
FS, SS Math 221, 222, 223 Engr 104 Engr 217 Chem 147, 148 Chem 115, 116 Geol 113 IA 150	Calculus I, II, II Engineering Principles I Statics Prin. of Chemistry I, II Or General Chemistry I, II Physical Geology Principles of Drafting	3 10 4 3	

Econ 261	Economics-Macro	3
Econ 262	Economics-Micro	3
Engr 221	Dynamics	3
Engr 317	Mechanics of Materials	3
Engr 321	Fluid Mechanics	3
Geol 114	Historical Geology	4
Geol 207	Mineralogy	3
Math 327	Differential Equations	3
Math 401	Probability and Statistics	3
Chem 231	Organic Chemistry	3
GS (A,C,D)	General Studies	
	(Humanities & Social Sciences)	3-6

## COURSES

## Engr 104 (CS150) ENGINEERING PRINCIPLES I

(3-0) 3

76-78

16-18

Introductory programming using primarily Fortran IV, with applications. Credit will not be granted for both Engr 104 and CS 150.

#### Engr 105 ENGINEERING PRINCIPLES II

(3-0) 3

Solution of fundamental engineering analysis and design problems utilizing digital computation and graphical techniques.

Prerequisite: Engr 104.

#### Engr 201 ELECTRIC NETWORKS I

(2-3) 3

An introduction to engineering circuit analysis. Topics include linear circuit elements (resistors, capacitors, inductors), linear circuits, Kirchoff's laws, methods of analysis, RL, RC, and RLC circuits, phasors, sinusoidal steady state response, average value and RMS values.

Prerequisite: Math 221,

### Engr 202 ELECTRIC NETWORKS II

(2-3) 3

Topics include polyphase circuits, complex frequency and frequency response of linear networks, magnetically coupled circuits, two post networks, Fourier analysis, and Laplace transform techniques.

Prerequisite: Engr 201.

#### Engr 203 ELECTRONICS

(3-0) 3

An introduction to electronics and electronic devices. Topics include rectifiers, amplifiers, diodes, tubes, transistors, power supplies, and certain other nonlinear devices. Applications of the devices discussed along with their mathematical models are also covered.

Prerequisite: Engr 201.

#### Engr 205 ELEMENTARY SURVEYING

(2-4) 3

Care and use of surveying instruments. Fundamental surveying computations. Applications in traversing and topographic mapping. Sources and evaluation of errors.

Prerequisite: Math 121 or knowledge of trigonometry.

Engr 206 ADVANCED SURVEYING

(2-4) 3

Topics include the Public Land Survey system, coordinate systems, astronomic observations, and route surveys.

Prerequisite: Engr 205.

Engr 217 STATICS

(3-0) 3

Vectors, forces and moments. Static equilibrium of particles and rigid bodies. Friction, centroids, moments of inertia, and virtual work.

Prerequisite: Math 221.

Engr 221 DYNAMICS

(3-0) 3

Kinematics and kinetics of particles and rigid bodies. Concepts of work-energy, impulse-momentum, and their applications.

Prerequisite: Engr 217.

Engr 317 MECHANICS OF MATERIALS

(3-0) 3

Stresses and deformations in structural members and machine elements, combined stresses, and stress transformations.

Prerequisite: Engr 217.

Engr 321 FLUID MECHANICS

(3-0) 3

Fluid properties. Statics, kinematics, and Kinetics of fluids including gravitational and viscous effects.

Prerequisite: Engr 221.

## English

Professors G. Leonard Bird, Kenneth I. Periman, and Carroll V. Peterson;

Associate Professors Mark D. Coburn and Roland Jones;
Assistant Professors Shaila Van Sickle,
Larry W. Gasser, Lillian B. Lang, and Paul Pavich;
Instructors Mary Jean Moseley, and Delilah Orr.

The work offered in English deals with several aspects of a liberal education; the literary, linguistic, and artistic history of Western culture; selected studies in non-Western literatures in translation; human values; the relationships between cultures in the Southwest; and written and oral communication, both utilitarian and creative. The various options under the major include careful attention to a great variety of vocational opportunities open to English graduates.

## The four options are:

- Option 1. English Major, no vocational goal declared.
- Option 2. English Major, preparation for graduate or professional school.
- Option 3. English Major, preparation for other vocations.
- Option 4. English Major, preparation for teaching in secondary schools.

Because many students wonder what employment an English major can find besides teaching, the department has designed the four options to indicate the career opportunities available to English graduates. We believe that the English major, combined with the college distribution requirements, provides a broad and liberating education which will give the student a high degree of literacy and flexibility valued in many fields, including business, industry, government, law, education, and the ministry.

Details given below about the options will guide students toward preparing themselves for one of many careers available to the English major. English department advisors, in cooperation with advisors in other departments, have specialized information about the four options and the careers connected with them.

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, the Elementary Education major, and the Division of Cultural Studies.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENGLISH

Options 1, 2, and 3 General Studies.  Specific Departmental Requirements A minimum of 34 hours from English courses designated in the catalog course offerings as "applicable to the major." These must be distributed minimally among the following areas:	41
One course in World Literature (161, 162, 163, 221, or 222) One course in American Literature (243, 244, or 342) One course in Composition (363 or 364) One course in English Language (362 or 461) Two courses in English Literature (any two from 331-335, 431) Engl 432 Shakespeare Engl 496 Seminar; or Engl 499 Independent Study (at least 2 hrs.) Other English courses applicable to the major	
(Option 2: Two additional courses in English Literature, including 431 required, for those students taking Option 2 who wish to qualify for graduate study in English.)  (TOTAL HERE 40 HOURS)	
Auxiliary requirements from other curricula  Option 1  Option 2: 2 to 4 courses in a foreign language when needed to qualify for graduate or professional school. Regularly applies to those who intend to qualify for graduate work in English  Option 2: 5 or more courses in the arts and humanities or in the sciences, as applicable for the chosen graduate or professional school.	. 0 -14 -52
(It is incumbent upon students to fulfill the requirements for admission	

to a particular graduate or professional school. They should study appropriate catalogs. Besides graduate study in English and other subject areas under the arts and humanities, students majoring in English

can go on to law school, seminary, the Master of Business Adm tion, medical school, or any other health career. The most str requirements apply to admission to medical schools. English ad as well as those in Chemistry and Biology, have hand-outs st science courses required by medical schools and other health ca	ringent visors, nowing
Option 3: 5 or more courses constituting a coherent both knowledge and/or skill in the chosen area	ody of15-17
(Students may work toward any one of various careers in industry ness, or government service, state or federal. These careers incluare not limited to publishing and editing positions. In addition, Estudents can enter sales, marketing, personnel, and other jobs in ness, industry, and government.)	ide but inglish
Electives (varying from 1 hour in Option 2 to 53 in Option 1)	1-53
(However, since many of the courses under "auxiliary requirer may also apply toward the general studies requirements, all cur combinations under these options will have a number of ele available, the smallest of which would be in the pre-medical an	ricular ectives
OTAL REQUIRED FOR GRADUATION (Options 1, 2, or 3)	128
Option 4: English Major, preparation for teaching in secondary se	chools
(Option 4 of the English major gives high-quality preparation of dents who wish to become secondary school English teachers. (4 recognizes that secondary teachers must be able to teach in all dard areas of literature, language, and composition and frequires that secondary teachers it is an extremely demanding which requires careful planning and advising. Students choosing tion 4 should consult Professor Lillian Lang as early in their coareers as possible.)	Option I stan- uently major ng Op-
General Studies	41
Specific Departmental Requirements for Option 4:	
Engl 221 Classical Literature	3
or	
Engl 222 Bible as Literature	
Engl 225 Semantics	3
Engl 243 American Literature, 1865-1945	3
Engl 328 Literature for the Adolescent	3
Engl 331-335 British Literature (Select 3 of 5 courses.)	9
Engl 342 American Literature to 1865	3
Engl 362 Introduction to Linguistics	3
Engl 363 Advanced Composition*	4
Engl 364 Creative Writing Engl 244 Contemporary American Literature or	:9
Engl 412 Twentieth Century English and American Fiction	3
Engl 432 Shakespeare	3
Engl 461 History of the English Language	3

Engl 463 Methods of Teaching English as a Second Language	3
Engl 481 Materials of Instruction for Teaching English	3 1 2
Engl 496 Seminar or	2
Engl 499 Independent Study	-
	50
(Because Engl 225 is a general studies, non-major course, it will sat a Group A Distribution Requirement.)	isfy
Auxiliary Requirements from Theatre Department for Option 4: Students electing Option 4 must take 12 hours of Theatre, the spec courses to be chosen in consultation with Professor Lillian Lan	
	12
(Two of the above theatre courses will satisfy Group A Distribu Requirement.)	tion 6
Required Secondary Education Program	27
Auxiliary Courses Required by Secondary Education Program	6
(Psych 157 will satisfy a Group D Distribution Requirement.)	3
Electives	4
TOTAL REQUIRED FOR GRADUATION (Option 4)	128
Option 4 majors will be expected to pass a proficiency examination	or offer credit

Option 4 majors will be expected to pass a proficiency examination or offer credit in Engl 101, Basic Composition, before taking Engl 363.

#### MINORS IN ENGLISH

The English department offers minors in Literature and in Language and Writing. Please see the English-Theatre department chairman for details.

#### SECONDARY ENGLISH EDUCATION AS A SECOND TEACHING EMPHASIS:

The following program will qualify a secondary teacher candidate for a second teaching area. The program may be undertaken only with consent of the English Education advisor, and only in conjunction with a teaching major in another area. Note: This program alone will not qualify a person for a teaching certificate.

#### Required Courses:

Engl 243 American Literature, 1865-1945
Engl 328 Literature for the Adolescent
British Literature—Any 2 courses
Engl 331 Renaissance Literature
Engl 332 Neoclassical Literature
Engl 333 Romantic Literature
Engl 334 Victorian Literature
Engl 335 English Novel
Engl 432 Shakespeare
Engl 362 Introduction to Linguistics*
Engl 363 Advanced Composition**
Engl 461 History of the English Language
Engl 481 Materials of Instruction for Teaching English***
Educ 480 Methods of Teaching English (Secondary)
Thea 121 Speech Communication
GARGOTATO INCLUENDE LA APRETE DE APLITE PARA SE LA SERVICIE DE LA SERVICIO DE LA PRESENTA DE LA MANTA
28

\*Prerequisite to Engl 461, History of the English Language.

## ENGLISH COURSE OFFERINGS

## Preparatory English

## Engl 019 INTRODUCTION TO WRITING

(3-0) 0

Designed exclusively and strongly recommended for students with special writing problems. This intensive free writing clinic provides individualized instruction for those students needing proficiency in basic English skills in order to effectively communicate ideas and information in writing and/or orally. Admission by referral and/or consent of instructor. Offered on demand.

#### Engl 100 DEVELOPMENTAL READING

(0-3) 1

A course designed to increase the student's reading rate and comprehension level. Primarily for bi-lingual students. Offered on demand.

#### Engl 101 BASIC COMPOSITION

(3.0) 3

Designed to develop basic writing and speaking skills. Emphasis on grammar, mechanics, vocabulary, spelling, and punctuation, with some attention to writing of short papers. Will satisfy one Freshman Seminar requirement. Sections will be provided for bilingual students. Admission by referral or with approval of instructor. Offered on demand.

<sup>\*\*</sup>Teacher candidates will be expected to pass a proficiency examination in composition or offer credit in Engl 101, Basic Composition, before taking Engl 363, Advanced Composition.

<sup>\*\*\*</sup>To be taken trimester prior to student teaching, in conjunction with Educ 480, Methods of Teaching English (Secondary).

## General English Electives

Courses fulfilling distribution requirements, requirements for majors other than English, or serving as electives; open to non-English and English majors, but not applicable to the English major (except that Engl 225 applies to Option 4).

#### Engl 130 THE ENGLISH TRADITION IN LITERATURE

(3-0) 3

The English literary and cultural heritage presented in its historical context. Winter term.

#### Engl 140 THE AMERICAN TRADITION IN LITERATURE

(3-0) 3

The American literary and cultural heritage presented in its historical context. Fall term.

#### Engl 150 INTRODUCTION TO PLAY READING

(3.0) 3

An introduction to the methods of understanding plays. Same as Thea 150, Offered on demand.

#### Engl 189 NEWS WRITING

(2-3) 3

A practical course in news writing, with emphasis on news gathering, interviewing, and the writing of news stories for the weekly student newspaper. Fall term, alternate years.

#### Engl 208 JOURNALISM

(2-3) 3

Advanced news writing, editorial and feature writing, preparation of copy for newspaper and campaigns, headline writing, and newspaper make-up. Winter term, alternate years.

#### Engl 225 SEMANTICS

(3-0) 3

A course which emphasizes the various ways in which words have meaning: lexical, psychological, social, philosophical. The course also emphasizes the ways in which interpersonal communication can break down because of manner, non-aligned assumptions about the world or about words, or because of the manipulation of words for propagandistic purposes. Fall and Winter terms.

#### Engl 327 CHILDREN'S LITERATURE

(3-0) 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 in the elementary school. Fall and Winter terms.

## **Literature Courses**

Courses applicable to the English major but also appropriate for distribution requirements, electives, or other special needs.

## Engl 161 WORLD LITERATURE TO 1914

(3-0) 3

A study of selected masterpieces of world literature to 1914. Winter term.

#### Engl 162 WORLD LITERATURE SINCE 1914

(3-0) 3

A study of selected masterpieces of world literature, primarily the novel, since 1914. Fall term.

# Engl 163 TWENTIETH CENTURY ASIAN AND AFRICAN NOVEL

(3-0) 3

A study of selected twentieth century novels in translation from Asia and Africa. Designed to give an appreciation and awareness of cultures other than Euro-American, Winter term.

#### Engl 221 CLASSICAL LITERATURE

(3-0) 3

A study of ancient Greek and Roman literature. Fall term.

#### Engi 222 BIBLE AS LITERATURE

(3-0) 3

A study of the Bible as literature, and its influence on art, music, and literature of the Western world. Fall term.

#### Engl 243 AMERICAN LITERATURE, 1865-1945

(3-0) 3

A study of American literature from the Civil War to World War II, with emphasis on the development of realism and naturalism. Winter term.

#### Engl 244 CONTEMPORARY AMERICAN LITERATURE

(3-0) 3

A study of American literature from World War II to the present, with emphasis on the novel. Offered on demand.

#### Engl 276 FOLKLORE OF THE SOUTHWEST

(3-0) 3

A study of Anglo-American, Hispanic, and American cultures, as reflected in their folklore, with attention paid to published and unpublished materials and collecting techniques, leading to a fuller understanding and appreciation of folk traditions of the Southwest. Fall term.

#### Engl 280 LITERATURE OF THE SOUTHWEST

(3-0) 3

The American Southwest seen through fiction, poetry, biography, and other works by Anglos, Indians, and Spanish Americans. Offered on demand.

#### Engl 328 LITERATURE FOR THE ADOLESCENT

(3-0) 3

Beginning with a review of children's 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. Winter term.

#### Engl 331 ENGLISH LITERATURE THROUGH THE RENAISSANCE

(3-0) 3

A study of the literature of England from Malory to Milton. Offered on demand.

#### Engl 332 NEOCLASSICAL LITERATURE

(3-0) 3

A study of the literature of England from about 1660 to 1798, with emphasis on satire and social and literary commentary. Offered on demand.

#### Engl 333 ENGLISH ROMANTIC LITERATURE

(3-0) 3

A study of the literature of England from about 1798 to 1830. Emphasis on poetry and non-fictional prose. Offered on demand.

## Engl 334 VICTORIAN LITERATURE

(3-0) 3

A study of the literature of England from about 1830 to 1914. Emphasis on poetry and non-fictional prose. Offered on demand.

#### Engl 335 THE ENGLISH NOVEL

A study of the development of the English novel from its beginnings to World War I. Offered on demand.

#### Engl 342 AMERICAN LITERATURE TO 1865

(3-0) 3

A study of American literature before the Civil War, with emphasis on the American Renaissance, Fall term.

#### Engl 370 HISTORY OF THE FILM

(2-2) 3

A study of the film as an art form, with emphasis on American and European films, Students view at least one major film each week. Offered on demand.

#### Engl 380 AMERICAN INDIAN LITERATURE

(3.0) 3

A study of traditional and contemporary American Indian expression of thought as seen through oration, tales and legends, chants and songs, poetry, drama, and the novel. Offered on demand.

#### Engl 411 TWENTIETH CENTURY ENGLISH AND AMERICAN POETRY

(3.0) 3

A study of twentieth century poetry from 1914 to the present. Offered on demand.

#### Engl 412 TWENTIETH CENTURY ENGLISH AND AMERICAN FICTION

(3-0) 3

A study of selected twentieth century English and American prose writers, concentrating on the novel. Offered on demand.

#### Engl 431 CHAUCER

(3-0) 3

A study of the writings of Geoffrey Chaucer. Winter term, alternate years.

## Engl 432 SHAKESPEARE

(3-0) 3

A study of Shakespearan drama. Fall term.

Recommended prerequisite: two courses in the Engl 331-334 series.

## English Language and Composition Courses

Courses applicable to the English major but also appropriate for distribution requirements, electives, or other special needs.

#### Engl 362 INTRODUCTION TO LINGUISTICS

(3-0) 3

A course which gives primary emphasis to the structure of the language, its sound, morphological and syntax systems. It gives secondary emphasis to many other facets of language; language acquisition; usage and the debate over prescriptive and descriptive approaches to language, to rules, to dialects and dialect variations, to the question of a "standard" dialect; the relationship between linguistics and reading and writing skills and to the analysis of literature. Fall and Winter terms.

#### Engl 363 ADVANCED COMPOSITION

(4-0) 4

An advanced writing course with emphasis on the common forms of writing used by educated adults. Fall and Winter terms.

Prerequisite: Freshman and Sophomore Seminars.

Engl 364 CREATIVE WRITING

(4-0) 4

An advanced writing course with concentration in such writing areas as poetry and short fiction. Fall and Winter terms.

Prerequisite: approval of instructor.

Engl 461 HISTORY OF THE ENGLISH LANGUAGE

(3-0) 3

A study of the development of English from Indo-European sources to the present. Winter term.

Prerequisite: Engl 362.

## Capstone Courses

Courses applicable to the major but open to all qualified students.

Engl 496 SEMINAR

(2-0) 2 or (3-0) 3

Advanced study and research in selected topics. Offered on demand.

Prerequisite: senior standing or permission of instructor.

Engl 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of Department Chairman.

## **English Education Courses**

Courses applicable to Option 4 of the English major but also appropriate for electives or other special needs.

Engl 463 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE (3-0) 3

Designed to prepare English teachers and bilingual-bicultural teachers in their teaching of children with language backgrounds other than English. Application made of both generalized and specific techniques. Offered on demand. Prerequisite: Engl 362.

#### Engl 481 MATERIALS OF INSTRUCTION FOR TEACHING ENGLISH

(1-0) 1

An introduction to materials for teaching literature, language, and composition in the secondary schools. Includes principles for the selection of literature for high school pupils and relationship of language and composition to the total secondary program. Teaching techniques are a point of emphasis. To be taken concurrently with Educ 480 term prior to student teaching. Fall and Winter terms.

NOTE: Engl 190 and 390 Special Topics and Engl 496 Seminar provide greater depth in English offerings. Recent subjects include Mark Twain, The Short Story, The West Through Fiction and Film, Modern Grammar, Science Fiction, Women in Literature, and Writing Fiction. Special Topics courses ordinarily apply to the major.

## Foreign Languages

Professor Maria Delaney;
Associate Professors M. Federico Cano, Odilie A. Cantillano,
and John R. Tapia;
Assistant Professor Deborah A. MacKeefe.

The Department of Foreign Languages offers work in French, German, Latin, and Spanish as an important element of a well-rounded liberal education and as preparation for life in the modern inter-related world. A Bachelor of Arts degree with a major in Spanish is offered. (See statement under SPANISH below.)

A minor is offered in French, German, and Spanish. Students majoring in Elementary Education may elect a Spanish minor as an area of concentration.

A student who is admitted to the Teacher Education Program after September 1, 1977, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975. Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor.

## COURSES

## French

#### FL 147 ELEMENTARY FRENCH I

(4-0) 4

A course in grammar, prose composition, reading, and conversation. Fall term.

#### FL 148 ELEMENTARY FRENCH II

(4-0) 4

Further study of French with emphasis on reading, composition, and conversation. Winter term.

#### FL 247 INTERMEDIATE FRENCH I

(3-0) 3

A course in second-year French with emphasis on reading and conversation. Fall term.

## FL 248 INTERMEDIATE FRENCH II

(3-0) 3

Continuation of FL 247. Winter term.

#### FL 301 ADVANCED FRENCH COMPOSITION AND SYNTAX

(3-0) 3

Composition and syntax through the study and analysis of French literary texts. Offered on demand.

Prerequisite: FL 248.

#### FL 308 TOPICS IN FRENCH LITERATURE

(3-0) 3

Topics will vary; the course may be repeated for a different topic. Offered on demand.

#### German

#### FL 123 ELEMENTARY GERMAN I

(4-0) 4

A course in grammar, pronunciation, reading, and conversation. Fall term.

## FL 124 ELEMENTARY GERMAN II

A continuation of FL 123. Winter term.

(4-0) 4

#### FL 233 INTERMEDIATE GERMAN I

(3-0) 3

Second-year German with emphasis on reading, composition, and conversation. Fall term.

#### FL 224 INTERMEDIATE GERMAN II Continuation of FL 223, Winter term.

(3-0) 3

#### FL 323 THIRD-YEAR GERMAN I

(3-0) 3

Emphasis on literature, advanced reading, conversation, and composition. Fall term.

#### FL 324 THIRD-YEAR GERMAN II

(3-0) 3

Emphasis on literature, advanced reading, conversation, and composition. Winter term.

## FL 325 MASTERPIECES OF GERMAN LITERATURE

(3-0) 3

Topics will vary; may be repeated for a different topic. Offered on demand.

#### Latin

## FL 109 INTRODUCTORY LATIN I

(4-0) 4

An introduction to the Latin language. Fall term.

#### FL 110 INTRODUCTORY LATIN II

(4-0) 4

A continuation of FL 109, Winter term.

Prerequisite: FL 109 or equivalent.

## Spanish

To earn a major in Spanish, a student is required to complete the equivalent of 34 hours of course work in the language. 12 hours must be in the 300 level. 8 hours must be in the 400 level. A student electing a survey course in Hispanic Literature must have at least one (1) course in Hispanic American Literature, and vice versa.

A student with previous study and/or on the basis of a placement examination, may be placed at an appropriate level.

A student electing Spanish as a major will consult with the Chairman, Department of Foreign Languages, for advice and assistance in formulating a plan of study.

Students intending to acquire a teaching credential at the secondary or elementary level (at the elementary level a bilingual-bicultural concentration is offered) should consult with the appropriate chairman in the School of Education.

Students desiring to pursue a major in Southwest Studies requiring courses in Spanish should consult with the Director, Center of Southwest Studies and the Chairman, Department of Foreign Languages.

BACHELOR OF ARTS WITH A MAJOR IN SPANISH	
General Studies	41
Specific Departmental Requirements FL 311 and FL 312, Survey of Spanish Literature I & II or	
FL 321 and FL 322, Survey of Hispanic American Literature I & II FL 496 Seminar; or FL 499 Independent Study Courses in 300 level	6 2 6 6 20
	8 6 14
Electives	53
TOTAL REQUIRED FOR GRADUATION	
COURSES	
FL 115 ELEMENTARY SPANISH I A course in grammar, prose composition, reading, and conversation. Falter terms.	(4-0) 4 It and Win-
FL 116 ELEMENTARY SPANISH II A continuation of FL 115. Fall and Winter terms.	(4-0) 4
FL 215 INTERMEDIATE SPANISH I A course in second-year Spanish with emphasis on grammar review, reconversation. Fall and Winter terms.	(3-0) 3 ading, and
FL 216 INTERMEDIATE SPANISH II A continuation of FL 215. Fall and Winter terms.	(3-0) 3
FL 311 SURVEY OF SPANISH LITERATURE I A survey of the literature of Spain from the 10th to the 18th centuries. Prerequisite: FL 216	(3-0) 3 Fall term.
FL 312 SURVEY OF SPANISH LITERATURE II A survey of the literature of Spain from 1824 to the present. Winter ter Prerequisite: FL 311 or permission of instructor.	(3-0) 3 m.
FL 319 ADVANCED SPANISH CONVERSATION Conversation based on current events and literary material. Fall term. Prerequisite: FL 216 or equivalent.	(3-0) 3
FL 320 SPANISH STYLISTICS & ADVANCED COMPOSITION Intensive study of the elements of style and extensive application throu	(3-0) 3 gh written

and spoken exercises. Prerequisite: FL 216.

#### FL 321 SURVEY OF HISPANIC AMERICAN LITERATURE I

(3-0) 3

A course in the literature of Colonial Spanish America from 1492-1824, with an emphasis on pre-Columbian literature, chronicles of discovery, travel and conquest, the 17th century poetry, roots of national literature and folklore, and literature of the Wars of Independence. Fall term.

Prerequisite: FL 216.

#### FL 322 SURVEY OF HISPANIC AMERICAN LITERATURE II

(3-0) 3

A course dealing with the Romanticists, Realists, Modernists, and Naturalists of the 19th century Spanish American republics. Also the literature of the 20th century emphasizing the Mexican Revolution and contemporary Spanish American writers will be included. Winter term.

Prerequisite: FL 321 or permission of instructor.

#### FL 425 LITERATURE OF THE GOLDEN AGE IN SPAIN

(3-0) 3

Reading the masterworks of Spain's Golden Century, with emphasis on Miguel de Cervantes, writings of the Spanish mystics, and the picaresque novel. Alternate years.

Prerequisite: FL 320, FL 312, or FL 322.

#### FL 426 TWENTIETH CENTURY SPANISH LITERATURE

(3-0) 3

A course on the novels, plays, essays, and poetry of 20th century Spanish authors. Emphasis on Unamuno, Baroja, Garcia Lorca, Gironella, literature of the Spanish Civil War, and contemporary authors of Spain. Alternate years.

Prerequisite: FL 312, FL 320, or FL 322.

#### FL 427 HISPANIC AMERICAN NOVEL AND POETRY

(3-0) 3

A course on the novels of the Pampa, the Lianos, the Jungle, the Sierra, and the City, as well as the poetic masterworks of Spanish America. Also included are the contemporary psychological novel, the novels of social and political reform, and contemporary poetry. Alternate years.

Prerequisite: FL 312, FL 320, or FL 322.

#### FL 429 MEXICAN LITERATURE

(3-0) 3

A survey of Mexican literature with emphasis on the works of the Revolution of 1910 and contemporary Mexican authors. Alternate years.

Prerequisite: FL 312, FL 320, or FL 322.

#### FL 496 SEMINAR IN SPANISH

(2-0) 2

Advanced study and research in selected topics. On demand.

Prerequisite: senior standing and permission of instructor.

#### FL 499 INDEPENDENT STUDY IN SPANISH, FRENCH, OR GERMAN

1-3

individual research conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of Department Chairman and senior standing.

## Forestry

## Assistant Professor Hsu-Ho Chung.

This program is designed for those students who intend to transfer to Colorado State University or other institutions offering degrees in forestry. It is not a terminal curriculum. The student should plan to enter the summer forestry camp session at the end of his second year at Fort Lewis College if the school to which he is transferring has a summer camp program. The term *forestry* is used here for all related areas; e.g., game and fish management and range management, as well as forest management.

#### COURSES

#### For 211 DENDROLOGY

(3-3) 4

Classification, identification, silvical characteristics, economic importance, and distribution of the broad-leaved and coniferous trees of the United States. Fall term.

Prerequisite: Biology 102.

#### For 220 FUNDAMENTALS OF ECOLOGY

(3.0) 3

A study of the fundamentals of the interrelationships between organisms and their environments.

Prerequisite: Bio 100 and 101.

# FRENCH (see FOREIGN LANGUAGES) GEOGRAPHY (see SOCIOLOGY AND GEOGRAPHY) GERMAN (see FOREIGN LANGUAGES)

## Geology

Professors Donald L. Baars, Frank O. Bowman, Jr., Jack A. Ellingson;

Assistant Professors Robert W. Blair, Jr., Thomas N. Westervelt.

The Department offers a Bachelor of Science degree with a major in geology. Laboratory and field equipment and geology holdings in the College library facilitate the necessary research and reading. The study of geology at Fort Lewis College is enhanced by the College's remarkable location amidst the unsurpassed geological phenomena in the southern Rocky Mountains and adjacent areas of the Southwest. The Grand Canyon, the Goose Necks of the San Juan River, Monument Valley, and Shiprock are representative of the classical geological localities nearby. The numerous outcrops and mine workings in the vicinity are sources of excellent geological specimens for the student. Also, the essentially continuous sequence of rocks in the Animas River valley represents literally hundreds of millions of years of erosion and deposition.

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.

#### BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN GEOLOGY

	es (including ten hours of auxiliary requirements ences		41
		randaninin	20.000
	partmental Requirements	- 2	
Geol 113		2	
Geol 114		4 4 1 3 4 4 3 3 3 6	
Geol 201		2	
Geol 207		3	
Geol 208		4	
Geol 334	그 가지하다면서까는 때 주 마시스 목속	4	
Geol 351	Igneous Petrology	3	
Geol 365	Stratigraphy and Sedimentary Petrology I	3	
Geol 366	Stratigraphy and Sedimentary Petrology II	3	
*Geol 441	Field Geology	6	
Geol 496	Seminar or		
Geol 499	Independent Study	2	
		37	37
Auxiliary Re	quirements from Other Departments		
Chemistry	115-116 or 147-148	10	
Mathemat	ics 221, and either Math 222 or		
Math 20	11 or Engr. 104	8-9	
Physics 2	01-202 or 217-218	10	
		24055	
		28-29	
(ten hours	included in the 41 hours of general studies)		18-17
Electives		*******	. 32-33
	RED FOR GRADUATION		128

<sup>\*</sup>Approved field work for two summers may substitute for Geol. 441.

## Preparation for Graduate School

The following courses are recommended for students majoring in geology who plan to earn advanced degrees:

Geol 233 Paleontology

Geol 323 Geomorphology

Geol 352 Metamorphic Petrology

Geol 412 Regional Geology of Western United States.

Additional work in the physical sciences and mathematics.

Engineering 104, 105, and 205.

French or German

#### COURSES

Geol 105 ROCKS AND MINERALS

(2-2) 3

Hand specimen study of the common rock-forming minerals, gem and ore minerals, and igneous, metamorphic, and sedimentary rocks. On demand — Continuing Education only.

Prerequisite: permission of instructor.

#### Geol 113 PHYSICAL GEOLOGY

(3-3)

Processes and agents at work on Earth and resultant land forms and structural features. Laboratory work on minerals, rocks, and maps. Field trips. Fall and winter terms.

#### Geol 114 HISTORICAL GEOLOGY

(3-3) 4

The geologic history and development of life on the Earth as recorded by rocks and fossils. Winter term.

Prerequisite: Geol 113.

#### Geol 150 GEOLOGY OF THE SOUTHWEST

(3-0) 3

A survey of the historical and structural geology and geomorphology of the Southern Rockies, Colorado Plateau, and Cordilleran provinces. Emphasis is on classic geologic areas and the significant geologic concepts that have been derived from them. This course will not count toward Physical Science major. Offered on demand — Continuing Education only.

#### Geol 201 FIELD METHODS

(0-3) 1

A survey of field techniques used in geology. Emphasis on use of Brunton compass, mapping techniques, and taking notes. Fall term.

Prerequisites: Geol 114 or permission of instructor

#### Geol 207 MINERALOGY

(2.3) 3

The elements of crystallography and the classification and identification of minerals. Fall term.

Prerequisites: Geol 113 and completion of, or concurrent enrollment in, Chem 115 or 147.

#### Geol 208 OPTICAL MINERALOGY AND PETROGRAPHY

(2-6) 4

Procedures for identification of minerals in thin section, with emphasis on the optical determination of rock-forming minerals. Winter term.

Prerequisite: Geol 207.

#### Geol 220 PHYSIOGRAPHIC REGIONS OF THE UNITED STATES

(3-0) 3

A survey of the general geology and development of the present landscape across the United States.

Prerequisite: Geol 113.

#### Geol 233 INTRODUCTORY PALEONTOLOGY

(3-3) 4

The systematic study of fossils, primarily those used often in the identification and correlation of geologic formations. Fall term.

Prerequisite: Geol 114.

#### Geol 323 GEOMORPHOLOGY

(3-3) 4

The relationship of geological processes to the development of the landforms. Field trips. Fall term.

Prerequisites: Geol 201 and Geol 207.

#### Geol 334 STRUCTURAL GEOLOGY

(3-3) 4

The analysis of structural features in the Earth's crust. Fall term.

Prerequisites: Geol 201 and Math 121.

#### Geol 351 IGNEOUS PETROLOGY

(2-3) 3

The origin, occurrence, and classification of igneous rocks. Fall term.

Prerequisite: Geol 201, 208.

#### Geol 352 METAMORPHIC PETROLOGY

(2-3) 3

The origin, occurrence, and classification of metamorphic rocks. Winter term, Prerequisite: Geol 351.

#### Geol 365 STRATIGRAPHY AND SEDIMENTARY PETROLOGY I

(2-3) 3

The dating, correlation, classification, mapping, and significance of the stratified rocks. Fall term.

Prerequisites: Geol 201 and Geol 208.

#### Geol 366 STRATIGRAPHY AND SEDIMENTARY PETROLOGY II

(2-3) 3

The origin, classification, and significance of sedimentary rocks with regard to depositional environment. Winter term.

Prerequisites: Geol 365.

#### Geol 401 NATURAL RESOURCES AND THE ENVIRONMENT

(3-0) 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. Offered on demand. Prerequisite: Geol 113 or permission of the instructor.

#### Geol 409 ECONOMIC MINERAL DEPOSITS

(3-3) 4

Principles of ore genesis; geologic occurrence of uranium and metallic mineral deposits; mine tours.

Prerequisites: Geol 351, Geol 334 and Geol 420 or Chem 115 (147); or permission of instructor.

#### Geol 410 PETROLEUM GEOLOGY

(2-3) 3

The origin, migration, and entrapment of petroleum, and the methods employed in exploration and development of petroleum occurrences.

Prerequisites: Geol 366 and Geol 334 or permission of the instructor.

#### Geol 412 REGIONAL GEOLOGY OF WESTERN U.S.

(3-0) 3

Regional study of the paleotectonic evolution of the mountain-west based on stratigraphic interrelationships.

Prerequisites: Geol 365 and Geol 334.

#### Geol 420 INTRODUCTION TO GEOCHEMISTRY

(3-0) 3

Behavior of the common rock forming oxides in endogenic and exogenic processes; isotope geochemistry; geochemical exploration.

Prerequisites: Geol 207, or permission of instructor.

#### Geol 423 PHOTOGEOLOGY

(1-6) 3

Stereoscopic interpretation of topographic and geologic features and preparation of geologic maps and cross sections from aerial photographs. Alternate years. Prerequisite: Geol 323 and Geol 334. Principles of plate tectonics, structural styles and evolution of the Rocky Mountains.

Prerequisite: Geol 334.

#### Geol 441 FIELD GEOLOGY

6

The fundamental procedures and practices in geologic field mapping. Summer term.

Prerequisite: 24 hours of geology.

#### Geol 442 FIELD STUDIES

5

Intensive field work on various geological problems emphasizing interpretation of petrologic and structural relationships. Summer term.

Prerequisites: Senior standing in geology or permission of instructor.

#### Geol 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Fall and Winter terms. Prerequisite: permission of instructor.

#### Geol 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: permission of Department Chairman.

# GERMAN (see FOREIGN LANGUAGES) History

Professors Robert W. Delaney, Gilbert C. Din, and Duane A. Smith;

Associate Professors Thomas R. Eckenrode, Reece C. Kelly, and Ira L. Plotkin;

Assistant Professors James K. Ash, W. Glenn Robertson, Peter M. Wright.

The study of history at Fort Lewis College is an important part of liberal education. The Department of History offers a variety of courses to provide the student
with an understanding and appreciation of man's past. Through examining the
experiences of the human community, the student gains a broad view of present
social and political conditions and problems. This broad view contributes to his
making responsible judgments as an informed citizen in his own times. Not the
least of the benefits derived from the study of history is the attainment of an appreciation of the creative achievements of civilization; such an appreciation contributes to the student's intellectual reservoir from which liberally educated men and
women draw aesthetic pleasure and creative inspiration. Finally, the study of history provides the student with a useful body of knowledge and basic skills in research necessary for a number of professions.

The 300-400 series: Upper division classes are offered under these numbers. These courses are organized under general headings such as History 460, Studies in European History and History 480, Studies in American History. Classes in each area of study will vary from one term to another as listed in the class schedule issued at the time of registration. A large offering of courses is available in each area. A student may take several courses under the same number, provided the particular subject matter differs each time. The Department of History employs this system in order that a greater variety of courses can be made available as needs and interests develop.

History majors are required to take a minimum of 36 hours, but no more than 42 hours of history shall apply toward the major. History majors are expected to concentrate in one of the areas listed below. Students majoring in History may be certified to teach in the broad area of Social Studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

The Department offers a minor in History. For details of the courses required, see the Chairman of the History Department.

BACHELOR OF ARTS DEGREE WITH A MAJOR IN HISTORY
General Studies
Areas of Concentration.  European History  Latin American History  Asian History  United States History  History major with no concentration. Courses, with the consent of the adviser, must be chosen from at least three of the above mentioned areas.
Requirements in History  Lower Division
Upper Division
Four courses on 300 or 400 level in the area of concentration (12 hrs.)  Three additional 300 or 400 level courses taken outside the concentration in at least two areas (9 hrs.)  Seminar taken in the area of concentration (3 hrs.)
Requirements Outside of History Two courses in one foreign language
Electives
TOTAL REQUIRED FOR GRADUATION
HIST 120. SOCIAL AND POLITICAL HISTORY OF (3.0) 3

HIST 120, SOCIAL AND POLITICAL HISTORY OF (3-0) 3
121 INDIANS OF THE SOUTHWEST

A two-trimester course on the history and culture of modern Indians of the Southwestern portion of the U.S. The first trimester deals with the Navajos, Apaches, Utes, and Pueblos; the second trimester deals with other tribes of the Southwest. Balanced attention is given to social, political, and economic aspects of each group. The course is approved for Southwest Studies major. Fall and Winter terms.

#### Hist 160 SURVEY OF WESTERN CIVILIZATION I AND II

(3-0)

A history of Western civilization from man's earliest experience to the present through a study of great movements or periods in history. Balanced attention is given to the social, political, economic and cultural developments of the past that help to explain current civilization and problems. Fall and Winter terms.

#### Hist 170 SURVEY OF EASTERN CIVILIZATION I AND II

(3-0) 3

A survey history focusing on the great East Asian civilizations of China, Korea, and Japan. Attention is also given to their relations with the surrounding areas of Southeast Asia, Inner Asia, Central Asia, and South Asia. Either part may be taken first. Fall and Winter terms.

#### Hist 270 SURVEY OF LATIN AMERICAN HISTORY I AND II

(3-0) 3

A two-trimester general history survey of Latin America. Either part may be taken first. Fall and Winter terms.

#### HIST 280 SURVEY OF AMERICAN HISTORY I AND II

(3-0) 3

A two-trimester general introductory survey of United States history. Either part may be taken first. Fall and Winter terms.

## HIST 340 STUDIES IN NEAR EASTERN AND AFRICAN HISTORY

(3-0) 3

A study of the history of the Near East and Africa. The specific topic will vary. Students may take this course one or more times for credit, provided the subject is different on each occasion. Offered on demand.

#### Hist 350 STUDIES IN ASIAN HISTORY

(3-0) 3

A study of the history of Asia. The specific topic will vary. Students may take this course one or more times for credit, provided the subject is different on each occasion. Fall and Winter terms.

#### HIST 370 STUDIES IN LATIN AMERICAN HISTORY

(3.0) 3

A study of the history of Latin America. The specific topic will vary. Students may take this course one or more times for credit, provided the subject is different on each occasion. Fall and Winter terms.

#### Hist 460 STUDIES IN EUROPEAN HISTORY

(3-0) 3

A study of the history of Europe. The specific topic will vary. Students may take this course one or more times for credit, provided the subject is different on each occasion. Fall and Winter terms.

#### HIST 480 STUDIES IN AMERICAN HISTORY

(3-0) 3

A study of the history of the United States and Canada. The specific topic will vary. Students may take this course one or more times for credit, provided the subject is different on each occasion. Fall and Winter terms.

#### HIST 496 SEMINAR

(2-0) 2 or (3-0) 3

Advanced study and research in selected topics.

Prerequisite: senior standing and permission of instructor.

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of Department Chairman and instructor.

## **Humanities Major**

Fort Lewis College offers an interdisciplinary major in Humanities. This major consists of an option of 20 or 32 hours and at least 12 hours in either one or two of the other cognate areas included within the offerings of the disciplines listed below, representing a total of 44 credit hours. Such a program in the Humanities affords a sound education for those contemplating careers in law or government service, for those preparing to go on to graduate school, and for those who wish a sound cultural grounding for the bachelor's degree. The student is required to cross traditional subject-matter areas to satisfy the requirements of the Humanities major; he will elect an option in History, Music, Art, Literature, Anthropology, Political Science, Foreign Language, Theatre, Philosophy, and also take at least 12 hours of coherent course work in either one or two other areas, depending upon his individual interests and needs.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN HUMANITIES

General Studies	entre entr		41
Primary concentration to include 2 credits in 496 or 499	20-32		
One or two secondary concentrations of 12 hours			
each	24-12	44	
Two trimesters of college mathematics or			
two trimesters of one college foreign language		6-9	50-53
Electives	ere service		. 20-47
TOTAL REQUIRED FOR GRADUATION			128

## **Industrial Arts**

## Assistant Professor Donald Spangsberg

This curriculum is designed to augment a liberal education with the skills of the traditional craftsman. It also provides basic work toward an Industrial Arts degree which may be obtained by transferring to an institution offering such a degree.

## COURSES

## IA 101 ELEMENTARY WOODWORKING

(2-3) 3

Basic techniques in woodwork, with emphasis in designing, layout, and construction of projects through use of hand tools. The care of tools and shop maintenance is also stressed. Fall term.

#### IA 102 ADVANCED AND MACHINE WOODWORKING

(2-3) 3

introduction to the use of woodworking machines. Students concentrate on advanced techniques of design and the use of new finishes. Winter term.

Prerequisite: IA 101 and permission of instructor.

IA 111 INDIAN ARTS AND CRAFTS

(0.6) 3

See SW 111.

#### IA 150 PRINCIPLES OF DRAFTING

(2-3) 3

A basic course in drafting concentrating on geometric construction, orthographic projection, sectional views, dimensioning, layout, and working drawings. Fall and Winter terms.

#### IA 201 ELECTRIC WELDING

(2-3) 3

The fundamentals of how to use welding equipment and to operate different kinds of welding machines. Includes flat, vertical, and overhead welding and the use of the cutting torch. Fall and Winter terms.

#### IA 202 ADVANCED METAL WORKING

(2-3) 3

Continuation of IA 201. The welding and identification of different metals. Wrought iron work and design of metal projects. Use of the gas torch. On demand. Prerequisite: IA 204.

#### 1A 220 CRAFTS I: ART METAL WORK

(2-3) 3

Emphasis on individual design in the ornamentation of aluminum, copper, brass, the etching of aluminum. Fall term.

## IA 221 CRAFTS II: LAPIDARY AND JEWELRY

(2-3) 3

Cutting and polishing of gem quality rocks. Winter term.

## Mathematics

## Computer Science & Statistics

Professors Donald D. Bushnell, and Larry S. Johnson; Associate Professors Richard A. Gibbs, Gary W. Grefsrud, William C. Ramaley, and Harry C. Rosenberg; Assistant Professors Gregory C. Bell, O. D. Perry, Tomas E. Salazar and Raymond E. Williams. Instructor Clifford B. Capp.

The Mathematics Department serves two basic purposes: (1) it provides students who major in mathematics with preparation for graduate school, teaching careers or employment in industry, and (2) it provides service courses in Mathematics, Statistics and Computer Science for students majoring in other fields. A departmental handbook which gives more detailed information is available through the chairman.

The mathematics major begins his studies with Math 111, College Mathematics, if his high school background includes at least three years of mathematics including two years of algebra and one of geometry. Students with stronger backgrounds may begin with Math 221, Calculus. Math 110, Introduction to College Mathematics, is offered for those students who are not prepared to begin with Math 111. Only courses numbered 221 or higher (excluding 260 and 315) are included in the mathematics courses required by the major. Twenty-three of these hours must be numbered higher than 300 and they must include Math 301, Foundations for Advanced Mathematics, Math 401, Probability and Statistics, and one of the se-

quences, Math 385 and 386, Algebraic Structures, or Math 422 and 423, Advanced Calculus. Also included are 2 hours of credit in Math 496, Seminar, or Math 499, Independent Study. Courses offered as Math 390, Special Topics, may be included in these upper division courses for the major. In addition, all mathematics majors are required to take CS150 or Engr. 104, and are recommended to take Math 201, preferably during their freshman year. Those majors who intend to enroll in a graduate program should take Math 385, 386, 422 and 423, and at least one year of German or French. They should also consult the mathematics department chairman at schools of intended enrollment to learn of any special requirements.

No student will receive credit for both Math 110 and Math 130.

Students wanting to enroll in a mathematics course which is a prerequisite for a previously completed mathematics course should consult the chairman of the Mathematics Department. Some courses may not be taken for credit after taking other mathematics courses. EXAMPLE: Math 111 may not be taken for credit after Math 221 has been successfully completed.

A student who is admitted to the Teacher Education Program after September 1, 1978, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975. Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor. The mathematics teaching major should take Math 385 and 386, Algebraic Structures, and Math 342, College Geometry.

For the elementary education major, the Mathematics Department offers the sequence of courses Math 215, Sets, Natural Numbers, and Integers, Math 216, Rational Numbers, Math 315, Real Numbers and Geometry, and Math 316, Topics in Number Theory. Those students wanting an 18 or 24 hour concentration in mathematics should consult the Mathematics Department for appropriate courses.

The Mathematics Department offers minors in mathematics, computer science, and statistics. For details of the courses required for these minors, see the Mathematics Department Chairman.

Computer Science and Statistics courses offerings are designed to serve the following purposes: (1) to provide the student insight into the history and practical applications of the computer; and in statistics, to acquaint the student with the necessary skills to interpret experimental data, and (2) to meet the requirements for other majors, and transfer programs such as forestry, nursing, wild life management, and (3) provides courses for students desiring more expertise in these fields both at and beyond the freshman-sophomore levels. The computer science courses do not satisfy the mathematics requirements of Group B of the distribution requirements.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN MATHEMATICS

General Studies	41
Specific Departmental Requirements	
Mathematics courses through Math 223, Calculus	13
Math 385 and Math 386 or	
Math 422 and Math 423	6
Math 301	6 3 3
Math 401	3
Other Departmental Requirements	
Additional courses numbered above Math 300	9 2
Math 496, Seminar; or Math 499, Independent Study	2
TOTAL	
Auxiliary Requirement	
CS 150 or Engr 104 (should be taken first year	
at Fort Lewis)	3
Electives	
TOTAL REQUIRED FOR GRADUATION	128

#### COURSES

## \*Math 110 INTRODUCTION TO COLLEGE MATHEMATICS (3-0) 3

Designed for students with weak mathematical backgrounds, this course includes such topics as sets, the real number system and its properties, including signed numbers, fractions and the simplification of algebraic expressions; exponents and logs, and solutions of equations and inequalities and their graphs. Credit will not be given for both Math 110 and Math 130. Fall and winter terms.

#### \*Math 111 COLLEGE MATHEMATICS

(5-0) 5

This course will emphasize functions, starting with linear and quadratic functions and continuing on to general functions, including exponential, logarithmic, and the trignometric functions. Also included are analytic geometry, conic sections, and polar coordinates.

Prerequisites: Three years of high school mathematics or Math 110 or equivalent. Credit will not be given for both Math 111 and Math 111B. Fall and winter terms.

#### \*Math 111B COLLEGE ALGEBRA

(3-0) 3

This course will emphasize functions, starting with linear and quadratic functions and continuing on to general functions, including exponential and logarithmic ones. This course is the first 3/5 of Math 111 and is intended for students who do not intend to take, or need trig. Students who do need trig should take Math 111. Credit will not be given for both Math 111 and Math 111B.

Prerequisite: Three years of high school Math or equivalent. Fall and winter terms.

<sup>\*</sup>These courses do not count toward the mathematics major

#### \*Math 130 MATHEMATICS FOR LIBERAL ARTS

A course in mathematics especially for the non-mathematics and non-science major. It includes topics from logic, algebraic structures, number theory, set theory, probability theory, and history of mathematics. Fall and winter terms. Credit will not be given for both Math 110 and 130.

#### \*Math 160 LINEAR MATHEMATICS

(3-0) 3

A first course in linear mathematics for students in business, biology, geology, the behavioral and social sciences. This course includes such topics as set theory, logic, matrix algebra, linear systems, linear programming, probability, and model building. Fall and Winter terms.

#### \*Math 201 ELEMENTARY STATISTICS

(3-0) 3

An introduction to basic ideas in probability and statistics; analysis (and actual collection) of numerical data and descriptive statistics, probability and probability models for statistics, sampling and statistical inference, which will be illustrated by examples from a variety of fields. Fall and Winter terms. No more than a total of 3 credits can be earned toward graduation for BA 251, Math 201, or Psych 241 because of uniform syllabus.

#### \*Math 215 SETS, NATURAL NUMBERS, AND INTEGERS

(3-0) 3

This course includes a presentation of sets, set operations, elementary logic, base and base free systems, construction of a number system, and the integers. It is intended primarily for elementary teachers. Fall term.

#### \*Math 216 RATIONAL NUMBERS

(3-0) 3

This course includes a presentation of further topics of integers, equivalence relations, construction of the rational numbers, properties and operations with rational numbers, decimal systems, sequences, and shortcomings of the rational numbers. Winter term.

Prerequisite: Math 215.

#### Math 221 CALCULUS

(5.0) 5

Limits, continuity, derivatives and integrals of elementary functions including polynomial, rational, logarithmic and exponential functions. Fall and winter terms. Prerequisite: Math 111 or 111B or permission of instructor.

#### Math 222 CALCULUS

(4-0) 4

A continuation of Math 221. Differentiation and integration of trigonometric functions, techniques and applications of integration, sequences and series. Fall and winter terms.

Prerequisite: Math 221 and Math 111 or permission of instructor.

#### Math 223 CALCULUS

(4-0) 4

Vectors and multi-variable calculus with applications. Fall and winter terms.

Prerequisite: Math 222.

A survey course in Calculus and Probability for students who have not enrolled in the Calculus sequence Math 221-223. This course is designed for students in business, biology, geology, behavioral and social sciences. It will include such topics as limits, differential calculus, integral calculus, and series and sequences. Emphasis is on application. Winter term.

Prerequisite: Math 120 or Math 160 or permission of instructor.

#### Math 301 FOUNDATIONS FOR ADVANCED MATHEMATICS

(3-0) 3

A study of axiomatic systems including axiomatic development of logic, set theory, and a number system; and a study of applications of logic and sets to mathematical structures. Winter term.

Prerequisite: Math 221 or permission of instructor.

#### Math 311. MATRICES AND LINEAR ALGEBRA

(3-0) 3

Topics to include Matrices, Determinants, Similarity, Canonical forms, Quadratic forms, Vector Spaces, Linear transformations, Linear Algebra and their applications. Fall term.

#### \*Math 315 REAL NUMBERS AND GEOMETRY

(3-0) 3

Topics to include real numbers, points, space, incommensurables, limits, cartesian product, and geometry in the cartesian plane. Fall term of alternate years (odd numbered).

Prerequisite: Math 216 or permission of instructor.

#### Math 316 TOPICS IN NUMBER THEORY

(3-0) 3

Some of the topics to be presented in this course are modular arithmetic, finite fields, basic prime number theorems, congruences, and combinations. Winter term of alternate years (even numbered).

Prerequisite: Math 315 or permission of instructor,

#### Math 320 NUMERICAL ANALYSIS

(3-0) 3

Numerical methods in calculus, differential equations, linear algebra, matrix inversion, and estimation of characteristic roots. The course is oriented toward machine computation. Fall term of alternate years (odd numbered).

Prerequisite: Math 223 or permission of instructor.

#### MATH 325 HISTORY OF MATHEMATICS

(3-0) 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. Fall term of alternate years (even numbered).

Prerequisite: Math 121 or permission of instructor.

#### Math 327 DIFFERENTIAL EQUATIONS

(3-0) 3

An introduction to ordinary differential equations and applications. Winter term. Prerequisite: Math 223 or permission of instructor.

#### Math 342 MODERN COLLEGE GEOMETRY

(3.0) 3

A course in college geometry which includes topics in Euclidean and non-Euclidean geometries. Fall term of alternate years (odd numbered). Prerequisite: Math 301 or permission of instructor.

#### Math 360 INTRODUCTION TO OPERATION RESEARCH

(3-0) 3

This course will include many of the areas of operations research such as linear programming, dynamic programming, network flow problems, transportation-like problems, game theory, queuing theory and others. Winter term of alternate years (odd numbered). Same as BA 360.

Prerequisite: Math 160 or Math 221 or permission of instructor.

#### Math 385 ALGEBRAIC STRUCTURES

(3-0) 3

A first course in abstract algebra which will cover a thorough discussion of groups, rings and isomorphism theorems. Fall term.

Prerequisite: Math 301 or permission of instructor.

#### Math 386 ALGEBRAIC STRUCTURES

(3-0) 3

A continuation of Math 385. Topics will include a continuation of Ring Theory and Field Theory through Galois Theory. Winter term.

Prerequisite: Math 385 or permission of instructor.

#### Math 401 PROBABILITY AND STATISTICS

(3-0) 3

This course covers topics in distribution theory, conditional probability, independence, moment generating functions, limiting distributions, estimation procedures, and hypothesis testing. Fall term.

Prerequisite: Math 223 or permission of instructor.

#### Math 402 PROBABILITY AND STATISTICS

(3-0) 3

Continuation of Math 401. Topics will include order statistics, multivariate distributions, nonparametric statistics, sufficient statistics, methods of multiple comparison, maximum likelihood procedures, and Bayesian procedures. Winter term.

#### Math 422 ADVANCED CALCULUS

(3.0) 3

Structure of the real number system, elementary topology of the real numbers and of the Euclidean spaces, general theory of limits and continuity, differentiation of functions in Euclidean spaces. Fall term of alternate years (even numbered). Prerequisite: Math 301 or permission of instructor.

#### Math 423 ADVANCED CALCULUS

(3-0) 3

A continuation of Math 422. Topics include the Stieltjes integral on the line and in Euclidean spaces, infinite series, and an introduction to function spaces. Winter term of alternate years (odd numbered).

Prerequisite: Math 422 or permission of instructor.

#### Math 461 ELEMENTARY TOPOLOGY

(3-0) 3

Topology of metric spaces with emphasis on the structure of the real numbers; topological spaces; separation axioms; continuous functions; homeomorphisms and topological invariants; product spaces and quotient spaces. Winter term of alternate years (even numbered).

Prerequisite: Math 301 or permission of instructor.

#### Math 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Offered on demand. Prerequisite: senior standing and permission of instructor. Individual research conducted under the supervision of a faculty member. On demand.

Prerequisite: approval of Department Chairman.

#### \*CS 100 INTRODUCTION TO COMPUTING SCIENCE

(3-0) 3

Programming and computing systems. Data representation and characteristics of computers. Survey of computers, languages, systems and applications. Binary and hexidecimal arithmetic. Designed for the student who is interested in a knowledge of computers and how they operate but not actually learning to program. Fall and Winter terms.

#### \*CS 150 INTRODUCTION TO PROGRAMMING SYSTEMS Engr 104

(3-0) 3

Introductory programming and program structure using primarily Fortran IV with application. Credit will not be given for both Engr 104 and CS 150. Fall and Winter terms.

#### \*CS 160 BUSINESS PROGRAMMING

(3-0) 3

Basic programming and program structure. Debugging and vertification. Computer solution of several business oriented problems. Programs will be written in COBOL. (Common Business Oriented Language.) Winter term.

#### CS 350 ADVANCED PROGRAMMING

(3-0) 3

The following advanced concepts will be studied: Input/Output to secondary storage devices such as magnetic tape and disk; file organization such as sequential, indexed sequential, and direct; the use of utility programs and library routines. Students will implement these concepts in a convenient language, and will complete a term project related to their major or field of interest. Fall term of alternate years (even numbered).

Prerequisite: CS 150 or CS 160.

## MUSIC

## Associate Professors Ralph A. Downey, Maurice LeGault, Richard G. Strawn and Patricia E. Weaver; Assistant Professor Jan Carl Roshong

The Fort Lewis College Music Department offers a major in music with three different programs of study, each designed to meet specific goals and aspirations of the individual student. The department also offers to any student the opportunity to participate in the understanding and enjoyment of music which is one of the most ancient, joyous and personal forms of spiritual communication. The study of music offers to each student an expanded awareness of himself in terms of the musical expressions of man's most universal thoughts.

#### THE MUSIC MAJOR

A Bachelor of Arts with a major in Music may be earned in either Liberal Arts, with two different options, or in Music Education as follows:

#### LIBERAL ARTS - OPTION I - GENERAL MUSIC STUDIES

This curriculum is designed for those with no particular vocational goal or for those who plan to pursue graduate work in Music Theory, Music Journalism, Musicology, or Composition.

#### LIBERAL ARTS - OPTION II - MUSIC PERFORMANCE

A concentration in Music Performance is offered in those areas of expertise represented by the individual members of the music faculty. This curriculum is designed as a preparation for a career in studio teaching or for graduate work leading to a career in music performance, studio teaching, or college teaching.

#### MUSIC EDUCATION

This curriculum is designed for those planning a career in public school teaching.

The courses listed below are required for all Music Majors.

General Stud	lies	41
Specific D	epartmental Requirements	
	Theory I 5	
	Keyboard Harmony I	
Mu 127	Sight Singing and Ear Training 1 2	
Mu 225		
Mu 226	Keyboard Harmony II	
Mu 227		
Mu 250	Conducting 3	
Mu 325	Theory III 5	
Mu 326	Conducting   3   3   5   5   5   5   5   5   5   5	
Mu 331	Music History I 3	
Mu 332	Music History II 3	
Mu 423	Orchestration 3	
Mu 496	Seminar or	
Mu 499	Independent Study 2	
	36	36
Other Depa	artmental Requirements	
At least	six credit hours from the following:	
hours al	Nu 106, Mu 110, Mu 115, Mu 200, with a maximum of 12 credit lowable toward graduation in any combination of these	
	At least one of the above required each trimester of	
residenc	664	
Chi Co-Story (Cont.)	Music (8 to 16 hours) Required each trimester of resi-	99905
dency.	8-16	14-28
Electives	PARTICIPATOR CONTRACTOR AND TRACTOR AND TR	23-37
TOTAL REQU	IRED FOR GRADUATION	128

Specific guidelines and additional requirements within each of the three programs of study are as follows:

#### LIBERAL ARTS - OPTION I - GENERAL MUSIC STUDIES

Applied Music is required each trimester of residency but a student need not declare a major performing area. A student may study in a variety of applied areas. Large ensemble participation (Mu 105, Mu 106, Mu 110, Mu 115) is required each trimester of residency.

Two trimesters of foreign language, either French or German or a combination of the two, are strongly recommended.

The required (wo-hour senior Independent Study (Mu 499b) may be within the areas of Music History, Music Literature, Music Theory, Applied Music, or a combination of these. All Independent Studies require the approval of the area instructor and the Department Chairman.

#### LIBERAL ARTS - OPTION II - MUSIC PERFORMANCE

The areas of specialization are: A-Piano, B-Voice, C-Brass, D-Woodwinds, E-Percussion, and F-Strings.\* The 8 to 16 hours of Applied Music must be directed toward the major instrument or area. Students must register for two credit hours of Applied Music within the major instrument or area each trimester of residency after declaring the major area of specialization. Any additional courses in other applied music areas do not contribute to specific departmental requirements. The Piano specialization requires Piano Symposium Mu 200, each trimester of residency.

Two trimesters of foreign language, either French or German or a combination of the two, are strongly recommended. The Voice specialization requires three trimesters of French or German, including at least one trimester of each language.

A half recital (Mu 499a) of at least 30 minutes duration is required during the junior year. A full recital (Mu 499b) of at least one hour duration is required during the senior year. For specific recital requirements, see the Music Department Student Handbook.

#### MUSIC EDUCATION

All Music Education Majors must satisfy the Fort Lewis College Teacher Education Department requirements as well as the Music Department course requirements. Students may certify at the secondary level or K-12 level. The additional classes which are required are in compliance with the Teacher Certification Act of 1975 which outlines the following three areas of specialization: General Music, Instrumental Music, and Choral Music.

The additional required classes in General Music are: Mu 120, Mu 314, and Mu 315.

The additional required classes in both the Instrumental and Choral areas are: Mu 314, Mu 315, Mu 103B, Mu 103C, Mu 103D, Mu 103E, and Mu 103F.

Applied Music and large ensemble participation (Mu 110 or Mu 115 for the Instrumental specialization and Mu 105 or Mu 106 for the Choral specialization) are required each trimester of residency except during the trimester of student teaching. Those who elect the piano as the primary applied area and who do not have a secondary instrumental area should select the Choral Music specialization. There is no foreign language requirement.

The required two-hour senior Independent Study (Mu 499b) may be within the areas of Music Education, Music History, Music Literature, Music Theory, Applied Music or a combination of these. All Independent Studies require the approval of the area instructor and the Department Chairman.

\*Within the brass, woodwind or string areas a specific instrument must be chosen.

# THE MUSIC MINOR

The requirements for the Music Minor are as follows:

A minimum of 18 credits of music with at least 6 credits in upper-division courses.

A core curriculum which includes: Mu 125, either Mu 126 or Mu 127, and either Mu 331 or Mu 332.

All other courses in the curriculum can be counted towards the minor except Mu 314, Mu 315, and Mu 316. All applied music and large and small ensemble credit can be included in the Music Minor.

# THEORY SEQUENCE

The required theory sequence for Music Majors includes Music Theory I, II, and III, Keyboard Harmony I, II, and III, and Sight-Singing and Ear-Training I and II. These classes are scheduled in alternate years and must be taken concurrently.

# PIANO PROFICIENCY

All Music Majors must satisfy a Piano Proficiency Requirement prior to graduation. The requirement includes sight-reading, harmonization at sight of a simple melody, two-octave major and harmonic minor scales, and the performance of a memorized composition of at least two pages in length from the traditional plano repertoire. Successful completion of Mu 126, Mu 226, and Mu 326 (Keyboard Harmony I, II, and III) satisfies the Piano Proficiency Requirement.

# MUSIC CONCENTRATIONS FOR THE ELEMENTARY EDUCATION MAJOR

Students who are Elementary Education Majors may construct a 12, 18, or 24 hour concentration in Music, Mu 316 (Music in the Elementary School) is required. Mu 314 (Methods and Principles of Teaching Vocal Music) is recommended for the 18 or 24 hour concentration. Mu 103A and Mu 103B (Piano and Vocal Class Instruction) are recommended for all three concentrations. Other recommended classes include: Mu 101, Mu 120, Mu 125, Mu 126, Mu 127, and Mu 332. All Applied Music and large and small ensemble credit can be included in the concentration.

# COURSES

# Mu 101 THE MUSICAL EXPERIENCE

(3-0) 3

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. Attendance at music performances on campus is an integral part of the course. Fall and Winter terms.

# Mu 103 INSTRUMENTAL, VOCAL AND PIANO CLASS INSTRUCTION (A,B,C,D,E, & F)

(0.2) 1

These classes are all designed to provide the student with the basic elements and techniques of performance in each of the media. Piano Class (Mu 103A) is specifically designed for the general student. A and B — Fall and Winter terms. C, D, E, and F — Alternate years.

Prerequisite: consent of instructor.

# Mu 104, 204, 304, 404 APPLIED MUSIC (A,B,C,D,E,F)

1 or 2

Individual instruction scheduled, at the discretion of the instructor, either privately or in a small class. The course is open to all students. Each course may be repeated once for credit. No student may register for more than two different applied lessons during any one trimester. Students may register for two credit hours only with music faculty consultation and approval of the Department Chairman. Two credit hours are required for Option II. Students who register for two credit hours will receive longer lessons in proportion to the amount of time spent in preparation. *Prerequisite*: consent of instructor.

# Mu 105 CONCERT CHOIR

(0-3) 1

Thorough study and performance each trimester of larger choral compositions. Open to all students through audition. Fall and Winter terms.

### Mu 106 CHAMBER SINGERS

(0-3) 1

An ensemble specializing in the performance of small scale choral works. By audition only, Fall and Winter terms.

# Mu 107 SPECIAL CHOIRS

(0-3) 1

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 function and receive 1 hour credit during any one term. Fall and Winter terms.

# Mu 110 BAND

(0-3) 1

Designed to provide every student who plays a musical instrument the opportunity to pursue his musical interests. A variety of musical literature will be provided as well as the opportunity to perform in concert on campus and on tour. Fall and Winter terms.

# Mu 115 SYMPHONY ORCHESTRA

(0-3) 1

Offered in conjunction with Durango Civic 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 Monday evening 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. Fall and Winter terms.

# Mu 116 ACCOMPANYING

(0-2) 1

A course designed to provide ensemble and accompanying experience for piano students.

Prerequisite: consent of piano instructor.

# Mu 120 FUNDAMENTALS OF MUSIC

(3-0) 3

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. Fall and Winter terms.

# Mu 125 THEORY I

(5-0) 5

The study of basic four part vocal writing in the 18th and 19th centuries. Emphases include major and minor modes, triads constructed within these modes, voice leading techniques, figured bass in relationship to the unharmonized chorales of Bach. Fall term — alternate years.

# Mu 126 KEYBOARD HARMONY I

(0-2) 1

Piano lab concurrent with Theory I and mandatory for students enrolled in that course. Emphases include all major and harmonic minor scales, triads and triadic progressions, sight reading. Successful completion satisfies Part I of the Piano Proficiency Requirement. Fall term — alternate years.

# Mu 127 SIGHT-SINGING AND EAR-TRAINING I

(2.0) 2

A study of and practice in rhythmic and melodic sight-singing and ear-training to include simple and compound rhythms and meters, all clefs, major and minor scales, intervals, and triads. To be taken concurrently with Theory I. Fall term — alternate years.

# Mu 200 PIANO SYMPOSIUM

(0-2) 1

A performing lab designed to accompany Applied Plano, and mandatory concurrently for any student registered in that course (Mu 104A, Mu 204A, Mu 304A, Mu 404A). Plano Symposium is open to all students. The course is repeatable. Fall and Winter terms.

# Mu 203A INTERMEDIATE PIANO CLASS INSTRUCTION

(0-2) 1

Continuation of Mu 103A. Fall and Winter terms. Prerequisite: Mu 103A or consent of instructor.

### Mu 225 THEORY II

(5.0).5

Continuation of Theory I. Four part writing expanded to include non-harmonic tones, dominant sevenths, secondary dominants, diatonic modulations, and dominant ninths in all forms. Harmonic analysis. Winter term — alternate years. Prerequisites: Mu 125, Mu 126, Mu 127.

# Mu 226 KEYBOARD HARMONY II

10.21 1

Piano lab concurrent with Theory II and mandatory for students enrolled in that course. Chord progressions utilizing secondary dominants and modulation, sight reading, harmonic analysis. Successful completion satisfies Part II of the Piano Proficiency Requirement. Winter term — alternate years.

Prerequisite: Mu 126.

# Mu 227 SIGHT-SINGING AND EAR-TRAINING II

(2-0)

A continuation of Sight-Singing and Ear-Training I with the addition of augmented and diminished triads in first and second inversion, seventh and ninth chords and harmonic dictation. Singing will include more difficult melodies with 2, 3, and 4 part singing. To be taken concurrently with Theory II. Winter term — alternate years. Prerequisite: Mu 127.

# Mu 250 CONDUCTING

(3-0) 3

A course in basic instrumental and choral conducting including baton technique, score reading, and various cueing and rhythmic aspects concerned with ensemble control. Winter term — alternate years.

### Mu 300 VOCAL ENSEMBLE

(0-2) 1

A study through performance of the literature for vocal ensemble. A maximum of two credit hours to be allowed towards the Music Major. Fall and Winter terms. Prerequisite: consent of instructor.

# Mu 301 WOODWIND ENSEMBLE

(0-2) 1

A survey through performance of the literature composed for woodwind instruments from the Renaissance through avant garde schools of composition and including the use of ancient instruments where applicable. A maximum of two credit hours to be allowed towards the Music Major. Fall and Winter terms. Prerequisite: consent of instructor.

# Mu 302 BRASS ENSEMBLE

(0-2) 1

A survey through performance of the literature written for this medium. Literature from the Baroque period to and including the contemporary period will be studied and performed. A maximum of two credit hours to be allowed towards the Music Major. Fall and Winter terms.

Prerequisite: consent of instructor.

# Mu 303 STRING ENSEMBLE

(0-2) 1

A survey through performance of the literature written for this medium. Literature from the Baroque period to and including the contemporary period will be studied and performed. A maximum of two credit hours to be allowed towards the Music Major. Fall and Winter terms.

Prerequisite: consent of instructor.

# Mu 314 METHODS AND PRINCIPLES OF TEACHING VOCAL MUSIC

(3.0) 3

A course designed to provide music majors with contemporary teaching skills and techniques in teaching vocal music in the public schools in grades K-12. The Kodaly and Orff methods coupled with a pragmatic approach will be used. Fall term—alternate years.

# Mu 315 METHODS AND PRINCIPLES OF TEACHING INSTRUMENTAL MUSIC

(3-0) 3

A course designed to provide music majors with contemporary teaching skills and techniques in the teaching of instrumental music in the public schools. Fall term — afternate years.

# Mu 316 MUSIC IN THE ELEMENTARY SCHOOL

(3-0)

A music class for training elementary classroom teachers. A study of basic music and basic music teaching. A correlation is made with the music indigenous to the cultures of the Southwest. Winter term.

# Mu 325 THEORY III

(5.0) 5

Continuation of Theory II. Modulating and non-modulating sequences, altered chords leading to late 19th century use of temporary tonal centers, harmonic and formal analysis. Fall term — alternate years.

Prerequisites: Mu 225, Mu 226, Mu 227.

# Mu 326 KEYBOARD HARMONY III

(0-2) 1

Piano lab concurrent with Theory III and mandatory for students enrolled in that course. Compositional techniques for keyboard, free composition, memorization, sight reading. Successful completion satisfies Part III of the Piano Proficiency Requirement. Fall term — alternate years.

Prerequisite: Mu 226.

### Mu 331 MUSIC HISTORY I

(3-0) 3

Study of the history of music from classical antiquity to 1750. Fall term — alternate years.

# Mu 332 MUSIC HISTORY II

(3-0) 3

Study of the history of music from 1750 through 1900. Winter term — alternate years.

# Mu 333 TWENTIETH CENTURY MUSIC

(3-0) 3

A survey of 20th century trends, styles, techniques, and composers, including the current electronic and avant garde movements.

Prerequisites: Mu 331 and 332 or permission of instructor.

# Mu 423 ORCHESTRATION

(3.0) 3

A course designed to equip music majors with the skills and techniques of arranging for instrumental ensembles. Fall term.

Prerequisites: Mu 225, 226, 227.

# Mu 496 SEMINAR

(2.0) 2

Advanced study and research in selected topics. Offered on demand.

Prerequisite: senior standing and permission of instructor.

# Mu 499 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of Department Chairman.

The following courses are offered periodically under the title Special Topics 190 or 390: Aesthetics of Music, Form and Analysis, Care and Repair of Wind and Percussion Instruments, Chamber Music Literature, Symphonic Literature, Opera as Drama, Vocal Literature, Choral Literature, Composition, Counterpoint, Psychology of Music, Jazz Ensemble, Jazz Choir, and Introduction to Jazz.

# Philosophy

Professor Paul W. Pixler; Associate Professor William Coe.

The study of philosophy at Fort Lewis College has as its purpose the study of traditional and contemporary philosophical issues and positions for their intrinsic interest, and also the demonstration that man's age-old but continuing attempts to understand himself and his relation to the world are important to all of us. It is the mark of the liberally educated person to understand the conclusions of the various specialized sciences in terms of their basic assumptions, to have thought seriously about the nature of such assumptions, and to be aware of the way in which our views of reality are influenced by the very structures of our language. Perhaps the most important function of philosophy as a part of liberal education is the destruction — or at least the recognition — of the provincialism and complacency of much of our thinking. Philosophy is a necessary part of self-knowledge.

For those students interested in taking several courses or in constructing their own majors in philosophy, the program is designed to provide a systematic acquaintance with man's attempts to know himself, and a concomitant basis from which the student can formulate his own view of man and world. Also offers a minor in philosophy.

COURSES

# Phil 141 PROBLEMS OF PHILOSOPHY

(3-0) 3

A broad selection of philosophical problems is presented through representative readings from the history of philosophy. Problems included are: free will vs. determinism, the nature and relationship of mind and body, the possibility of proving that God exists, the nature of morality, and the nature of knowledge and its relation to experience. Fall and Winter terms.

# Phil 171 CONTEMPORARY MORAL ISSUES

(3-0) 3

An examination of the relation between different ethical points of view and the handling of the personal, social, political, ecological, and global problems of today.

# Phil 199 INDIVIDUALIZED STUDY

1-3

The student conducts research under the direction of a faculty member. Prerequisite: approval of instructor.

# Phil 251 ETHICS

(3-0) 3

This course reviews broadly the history of man's systematic attempts from Plato to modern theory to identify morally and to establish standards for making and assessing moral judgments. Winter term.

# Phil 261 PHILOSOPHY OF RELIGION

(3-0) 3

A detailed survey of philosophical approaches to problems raised by religion. Readings are selected from sources representing widely differing points of view. Fall term.

# Phil 271 LOGIC

(3-0) 3

A broad treatment of different methods of assessing the validity of deductive and inductive arguments. The course covers syllogistic logic, elementary, truthfunctional logic, quantification, and a brief discussion of inductive logic. Fall and Winter terms.

# Phil 274 ANCIENT AND MEDIEVAL PHILOSOPHY

(3.0) 3

An examination of the history of philosophy from the origins of scientific thinking 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, in which are embodied many of the roots from which modern thought has grown. Fall term.

# Phil 275 MODERN AND RECENT PHILOSOPHY

(3-0) 3

An examination of the history of philosophy from the Renaissance through the 20th century. Schools of thought like Continental Rationalism and British Empiricism are studied not only on their own terms but in terms of their relationship to the Kantian synthesis. The Kantian philosophy in turn, together with much 19th century thought, is shown to be a necesary background for the understanding of the major philosophical issues of the 20th century. Winter term.

# Phil 321 WORLD RELIGIONS

(3-0) 3

A study of the nature and history of the major contemporary religions of the East and the West, Winter term.

# Phil 328 PHILOSOPHY OF SCIENCE

(3-0) 3

An examination of the field, structure, methodology, and spirit of science covering such topics as measurement, probability, theory, verification, and relations to other fields.

# Phil 351 CONTEMPORARY PHILOSOPHICAL ISSUES

(3-0) 3

An examination of trends and issues in 20th century philosophy. Topics may vary, but will be selected from pragmatism, process philosophy, logical positivism, ordinary language analysis, phenomenology, existentialism, and the new idealism. Winter term.

Prerequisite: three hours of philosophy other than Phil 271, or consent of instructor.

### Phil 499 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of instructor.

# Physical Science Major

The physical science major provides excellent training in the physical sciences within the broad context of a liberal arts curriculum. The program offers a concentration of courses in which the student takes at least 20 credit hours in one of the three physical sciences (chemistry, geology, physics), 3 courses in a second physical science, and 2 courses in the third science.

The program is designed for students who intend to teach more than one science at the secondary school level or to do advanced work in physical science, earth science, or possibly one of the major fields of physical science (chemistry, geology, physics). Others may wish to use the program as a means of preparing for work as a science technician, or as a basis for continued training toward a career in medicine or dentistry. Any student planning a career in secondary education should consult the School of Education section of this bulletin for specific certification requirements.

A student who is admitted to the Teacher Education Program after September 1, 1977, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975, Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor.

# BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN PHYSICAL SCIENCE

General Studies.....

General requirements		
Chemistry (2 courses, preferably Chem 147-148)	10	
Geology 113-114	8	
Mathematics through Math 222	12	
Physics (2 courses, preferably Phys 217-218) Senior Seminar or Independent Study in	10	
area of concentration	2	
	42	42
	77	
Additional requirements depending on concentration see (Choose the courses in one of the sciences listed be courses listed above as general requirements these cour plete the required 20 hours concentration.) Chemistry 231, 358 and one other course numbered above 231 or Geology 207, 351, 365 and one other course numbered above 207 or Physics — 3 courses numbered above 218)	low; with the	
(Excluding Physics 299, 499)	10-14	
Choose one additional course in either science not select	ed as the ma-	
jor concentration above. This will serve as the necessary t	hird course in	
a second physical science.	3-5	
	13-19	13-19
Electives		32-26
TOTAL REQUIRED FOR GRADUATION		128
*Includes 10 hrs. of Group B which can be satisfied under ments."		

# COURSES

PhySc 100 LABORATORY

(0-3) 1

Work covers experiments in the fields of physics, chemistry, meterology, geology, and astronomy. Laboratory techniques and scientific processes are emphasized. Fall and Winter terms.

# PhySc 105 THE PHYSICAL SCIENCES

(3-0) 3

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. Fall and Winter terms.

PhySc 200 INTRODUCTORY ASTRONOMY LABORATORY

(0-3) 1

Work is aimed toward a greater appreciation of the universe through selected observational laboratory experiments in astronomy. Fall and Winter terms. Prerequisite: PhySc 205 taken concurrently.

PhySc 205 INTRODUCTORY ASTRONOMY FOR THE LIBERAL ARTS

(3-0) 3

A course designed for students interested in elementary astronomy. A survey of modern observations of astronomy including the moon, planets, stars and their formations. A short history of astronomy is also included. Fall and Winter terms.

# **Physics**

Professor Daniel E. Gibbons; Associate Professor Robert N. Likes; Assistant Professor Tom D. Norton.

As an important part of the physical science program set within the framework of a liberal arts education, the Department of Physics offers a strong selection of the basic undergraduate courses in physics. These courses are used extensively by students as part of their General Studies program and to augment their work in such fields as biology, chemistry, geology, engineering, and mathematics. The study of physics enables a student of the sciences to apply his mathematical skill to the basic physical principles which underly all of the natural sciences. A student-constructed major is available in physics or in interdisciplinary fields with physics as one of the component areas.

A minor may be earned in Physics. For details of required courses, see the chairman of the Department.

# COURSES

Phys 201 PHYSICS

(4-3) 5

A study of mechanics, wave motion, sound, and heat. Calculus is not used. The course is intended to meet college physics requirements and also satisfy the curiosity of all students whose major interests are not in engineering, physical science, or mathematics. Students who take Phys 217 will not receive credit toward graduation for Phys 201. Fall term.

Prerequisite: high school algebra and trigonometry.

Phys 202 PHYSICS

(4-3) 5

A continuation of Phys 201. The course includes topics in electricity and magnetism, light and optics, and modern physics. Calculus is not used. Students who take Physics 218 will not receive credit toward graduation for Phys 202. Winter term.

Prerequisite: Phys 201.

Phys 217. PHYSICS FOR SCIENCE AND ENGINEERING

(4-3) 5

An introductory course in physics covering the basic concepts of mechanics, wave motion, sound, fluids, and heat. Differential and integral calculus are used throughout the course. Physics 217 is required of engineering students and strongly recommended to all physical science majors. Fall term only.

Prerequisite: Math 221; Math 222 should be taken concurrently.

# Phys 218 PHYSICS FOR SCIENCE AND ENGINEERING

(4-3) 5

An introductory course in physics covering the basic concepts of electrostatics, electric currents, magnetism, optics, and light. Physics 218 is required of englneering students and strongly recommended to all physical science majors. Winter term only.

Prerequisite: Phys 217; Math 222.

# Phys 301 INTRODUCTION TO ELECTRONICS

(2-3) 3

A survey course of the theory and design of various electronic circuits and devices used in scientific instrumentation. Students receiving credit in Engineering 203 may not receive credit for Physics 301. Winter term, alternate years. Prerequisite: Math 221.

# Phys 320 MODERN PHYSICS

A study in the modern theories of atomic and nuclear physics that have developed since 1900. An introduction to special relativity and elementary quantum mechanics is included. Fall term, alternate years.

Prerequisite: Phys 202 or 218; Math 222.

# Phys 340 OPTICS

(3-3) 4

The 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. Fall term, alternate years.

Prerequisite: Phys 202 or 218 and Math 222.

# Phys 354 THEORETICAL MECHANICS

(3-0) 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. Winter term, alternate years. Prerequisite: Phys 202 or 218, Math 223.

### Phys 361 PRINCIPLES OF ELECTRICITY AND MAGNETISM

(4-0) 4

The mathematical theory of static electric and magnetic fields, time-dependent fields, and electromagnetic radiation. Offered on demand. Prerequisite: Phys 202 or 218, Math 327 taken concurrently.

### Phys 370 HEAT AND THERMODYNAMICS

(3.0) 3

The study of classical thermodynamics which includes the first and second laws of thermodynamics and their applications in energy conversion. On demand. Prerequisite: Phys 201 or 217, Math 223.

# Phys 380 ADVANCED PHYSICS LABORATORY I

(0-3) 1

Work will stress experiments in modern physics with emphasis on electronic instrumentation and subsequent data analysis. Offered on demand.

Prerequisite: Physics 320 taken concurrently or equivalent.

# Phys 381 ADVANCED PHYSICS LABORATORY II

(0.3) 1

Work will stress experiments in electricity and magnetism with emphasis on data collection and analysis. Offered on demand.

Prerequisite: Physics 361 or concurrent enrollment.

(2-0) 2

A course designed to investigate the interaction between science and the world community. The course will be conducted on a seminar basis with either interdisciplinary instructors and/or invited instructors from the other areas of the college. Scientific, social, and human values will be discussed. Offered on demand. *Prerequisite:* At least 6 hours in the Natural Sciences.

# Phys 420 QUANTUM MECHANICS I

(3-0) 3

An introduction to Schrodinger's formulation of wave mechanics including potential wells, harmonic oscillators, and energy and momentum operators. Offered on demand.

Prerequisite: Phys 202 or 218, Math 327.

# Phys 421 QUANTUM MECHANICS II

(3-0) 3

A continuation of the study of quantum systems via approximation techniques, theory of many electron atoms, identical particles and spin. Offered on demand. Prerequisite: Phys 420.

# Phys 499 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered on demand.

Prerequisite: approval of instructor.

# Political Science

Professor LeRoy W. Goodwin; Associate Professors David J. Bass and James C. Decker.

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; (4) expects to enter politics, either as a candidate or as an administrative aide to a public official.

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

Students majoring in Political Science may be certified to teach in the broad area of Social Studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

# BACHELOR OF ARTS WITH A MAJOR IN POLITICAL SCIENCE General Studies... Specific Departmental Requirements PS 110, U.S. National Government: Power 3 and Freedom in the Twentieth Century PS 488, Contemporary Political Analysis 3 PS 496, Seminar; or PS 499, Independent Study 2-3 8 Other Departmental Requirements 24 additional hours in Political Science 32 24 Auxiliary Requirements from Other Departments Hist 280 I and II, Survey of American History Two courses in any one of the following areas: Anthropology, Economics, Foreign Language, Mathematics, Philosophy, Psychology, or Sociology. 6-10 12-16 Electives ...... 39-43 TOTAL REQUIRED FOR GRADUATION .....

# COURSES

(3-0) 3

# PS 101 POLITICS: THE PROBLEM OF FREEDOM AND COERCION

An introduction to the relationship of man and government, man's role as a political animal; a study of the nature of the state and the forms of rule evolved from the past. Fall and Winter terms.

# PS 110 U.S. NATIONAL GOVERNMENT: POWER AND (3-0) 3 FREEDOM IN THE TWENTIETH CENTURY

A study of the policies, procedures, politics, and problems of the U.S. national government. Fall and Winter terms.

# PS 120 STATE AND LOCAL GOVERNMENT (3-0) 3

A study of the history, nature, organization, and operation of state and local government in the United States. Fall and Winter terms.

# PS 180 INTRODUCTION TO COMPARATIVE POLITICS (4-0) 4 A comparative study of the political systems of selected modern states, including examples of democratic, communist and developing societies. An emphasis is placed on the historical, social and economic environments as well as on political

examples of democratic, communist and developing societies. An emphasis is placed on the historical, social and economic environments as well as on political structures, participation, policy making and evaluating the effectiveness of political action.

# PS 220 U.S. PARTY AND INTEREST GROUP POLITICS (3-0) 3 An inquiry into the dynamics of the American representative system, stressing the roles of the two major parties in the nomination and election process and in the control and management of governmental power. Relationships among the government, parties, and interest groups are stressed. Fall term.

# PS 230 PUBLIC ADMINISTRATION

(3.0) 3

An examination of the role of administration in government, with special attention given to the relationship of the bureaucracy to the policy-formulating branches of the government. Winter term.

# PS 241 INTRODUCTION TO THE LEGAL SYSTEM

(4-0) 4

An introduction to the American legal system from the citizen's point of view, stressing the processes of criminal justice, and law as a social institution examined through study of the criminal justice system.

### PS 299 INDIVIDUALIZED STUDY

1-3

The student conducts research under the direction of a faculty member.

Prerequisite: approval of instructor.

# PS 320 INTERNATIONAL RELATIONS

(4-0) 4

An examination of international politics, with special emphasis on the relationships of security, sovereignty, nationalism, economic objectives, power, and international law to peace and war. Winter term.

# PS 337 U.S. FOREIGN POLICY

(3-0) 3

A study of United States foreign policy from the American Revolution to the present day, with emphasis on current policy and how it is made. Winter term.

# PS 340 CONSTITUTIONAL LAW: BILL OF RIGHTS

(3.0) 3

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 general advanced students.

# PS 341 CONSTITUTIONAL LAW: DISTRIBUTION OF POWER IN THE FEDERAL SYSTEM

(3-0) 3

Powers of Congress, presidency, judiciary and federal relationships. Primarily a case study course of Supreme Court decisions for advanced political science students.

# PS 380 SOVIET AND CHINESE POLITICAL SYSTEMS

(3-0) 3

A comparative study of the development of Soviet and Chinese ideologies from the perspective of their distinct cultural histories; their specific revolutionary conditions and their different levels of economic development. A comparison of their bureaucratic and party structure and the problem of leadership succession is also considered.

# PS 386 POLITICAL THOUGHT

(4-0) 4

Primarily a study of the ideas of both early-day and present-day political philosophers. Students read the original writings of the philosophers. Strongly recommended before taking PS 488. Fall term.

Prerequisite: consent of instructor.

# PS 488 CONTEMPORARY POLITICAL ANALYSIS

(3-0) 3

A course for senior political scientists stressing contemporary methods of political research. Students apply research technique to areas of interest developed in previous political science and other social science courses. PS 386 is strongly recommended before taking this course. Fall term.

119

PS 496 SEMINAR (3-0) 3

Advanced study and research in selected topics.

Prerequisite: senior standing and consent of instructor.

PS 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member, Oftered on demand.

Prerequisite: approval of the instructor and of the Department Chairman.

# SPANISH (see FOREIGN LANGUAGES)

# Sociology and Human Services

Associate Professors Norman K. Linton, Leland E. Stuart and Will H. Wright;

Assistant Professors John M. Booker, Samuel A. Burns and Dennis W. Lum

Sociology seeks to explain 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, provides 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 case work, 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.

The sociology and human services curriculum is organized to reflect two central concerns; theory (reflection) and practice (action). Thus field experience, sociology practicum, and participation in the Co-operative Education Program form the nucleus for off-campus experience in applied sociology. This experience as conventional knowledge will be critically compared with sociological theory in terms of its human relevance, viability, and consequences for moral action.

A minor is offered in Sociology and Human Services. For details of required courses consult Department Chairman.

# BACHELOR OF ARTS DEGREE WITH A MAJOR IN SOCIOLOGY AND HUMAN SERVICES

Specific De	partmental Requirements:			
Soc 101	Social Issues		3	
Soc 200	Principles of Sociology		3	
Soc 220	Field Techniques		3	
Soc 300	Social Theory		3 3 3	
Soc 320	Field Practicum		3	
Soc 421	Contemporary Social Analysis	•:	3	
Soc 496	Senior Seminar		3	21
Other Depa	rtmental Requirements:			
A minimu	im of 15 additional hours in Sociol	logy and		
Human	Services	2000	15	
Auxiliary Re	equirements from other Departmen	its:		
Math 201	or Phil. 271		3	
Phil. 351			3	
Engl 363	or Engl 364		3 or 4	9-10
Electives				. 41-42
TOTAL REQU	IRED FOR GRADUATION			128

# COURSES

# Soc 100 SOCIAL ISSUES

(3-0) 3

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. Topics for study may include the workplace, the environment, inequality, sexism, racism, health care, criminal justice, education, alienation, and social services.

# Soc 200 PRINCIPLES OF SOCIOLOGY

(3-0) 3

An examination of basic institutional forms and processes in modern societies with special attention paid to classic formulations of structure and process.

# Soc 220 FIELD TECHNIQUES

(3-0) 3

Development of participant-observer methodology and procedures for the conduct of narrative and ethnographic descriptions. Techniques of field research in community settings and research projects chosen by the student in consultation with faculty will be carried out during the course. Fall term.

# Soc 265 SOCIAL PROBLEMS AND SOCIAL MOVEMENTS

(4-0) 4

Contemporary social problems and issues and the social movements which have accompanied them are examined and analyzed from the perspective of several different models and theories of society. Fall term.

# Geog 271 WORLD GEOGRAPHY

(3.0) 3

An introduction to world geography including physical and cultural regions and development of natural resources. Offered on demand.

# Soc 279 ETHNICITY IN THE SOUTHWEST

(3-0) 3

A descriptive and analytic inquiry into the historical, social, and economic position of the Hispano and/or Indians of the Southwest.

# Soc 300 SOCIAL THEORY

(3-0) 3

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 theory will be evaluated.

# Soc 317 SURVEY OF HUMAN SERVICE PROGRAMS

(3-0) 3

The helping relationship will be examined as a social process as it relates to public problems, programs, and human communities. A survey will be made of the variety of human service programs including health, mental health, recreation, housing, corrections, and the like. Students will be required to deal with policy issues, methods of service, intervention techniques, and to apply these concepts to an ongoing program.

### Soc 320 SOCIAL SCIENCE PRACTICUM

(3-0) 3

This course will engage the student in an off-campus experience in applied sociology. Students will be involved with social service agencies or other organized settings in the community to work and to conduct a study of their work setting under the supervision of a college faculty member. The planned program of activities will be oriented toward the generation of grounded theory. Periodic evaluations will be made by the assigned faculty member.

# Soc 337 FAMILIES, MARRIAGES, AND OTHER SEX-ROLE SYSTEMS

(3-0) 3

Analysis of changing patterns of family life and sex roles in contemporary society, of the societal sources of these changes, and of their societal and individual consequences.

# Soc 353 THE SOCIOLOGY OF HEALTH

(3.0) 3

A study of the social practices and beliefs which define and constitute the phenomena of health and illness. An examination and critique of the current health care delivery system, including professional roles, patient participation, administration, medical education and planning.

### Soc 361 DEVIANCE

(3-0) 3

An examination of the traditional versions of deviance followed by modern critiques which emphasize "labeling" and the more phenomenological approaches to understanding human conduct.

# Soc 362 CRIMINOLOGY AND CRIMINAL JUSTICE

(3.0) 3

An examination of the major "positivist" theories of crime and criminality (individual, familial, sub-cultural) 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.

(3-0) 3

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.

# Soc 421 CONTEMPORARY SOCIOLOGICAL ANALYSIS

(3-0) 3

A seminar in the application of theories of social change, social knowledge, and everyday life to the general questions of the human condition. Topics will vary but will critically address the issues of progress, urbanization, individualism, inequality, justice, public morality, the role of science, the possibility of community, and education.

Soc 496 SENIOR SEMINAR IN SOCIOLOGY

(3-0) 3

Advanced study and research in selected topics.

Prerequisite: Senior standing and permission from the instructor.

Soc 499 INDEPENDENT STUDY

1-3

Individual research is conducted in consultation with a faculty member.

# THEATRICAL ARTS

Stage, Film and Television

Associate Professor Kenneth E. Bordner; Assistant Professors John T. Calhoun and Dinah L. Leavitt.

The theatrical arts include all those activities by which human beings embody in themselves — either directly or through some medium like film or television — ideas and visions of themselves and their common humanity.

The theatrical arts at Fort Lewis College are taught in the attempt to further two liberal arts goals: to increase self-awareness and understanding and to heighten social awareness and responsibility.

The thrust of our program is to help our students realize that whenever we do anything as human beings we are using one or more of the principles, methods, techniques or devices of the theatrical arts; we are doing theatre in the process. Work and training in the theatrical arts, therefore, is useful and applicable no matter what one's specific career goals are.

The specific curricular offerings in the theatrical arts are organized in six divisions. The entire curriculum is taught in two year cycles, some courses every year, some every other year, and some every term.

Students may design a student constructed major in Theatrical Arts. These programs are specifically tailored to individual aspirations in consultation with the Coordinator of Theatre. Some of our recent graduates have gone on to graduate schools of theatre, professional acting programs, and careers in theatre management, the military, private business, law enforcement and other professions. Students may also minor in theatre.

# COURSES

# Thea 100 DRAMATIC THEATRE

(0-9) 1-3

A continuing practicum in public theatrical communication. Each term a major production requiring five to six weeks (about 140 hrs.) of rehearsal and public performance time is offered as a keynote to the work of The Theatre Company of Fort Lewis College. Open to freshman and sophomore students and may be repeated for six credits. Enrollment by audition.

# Thea 101 INTRODUCTION TO THEATRE

(3-0) 3

A general introduction to Theatre Arts. Work includes fundamental interpretive techniques in acting, directing and design. Interpretive techniques include an understanding of both physical methods and the function of theatre in its society and in its cultural and artistic context.

# Thea 102 FILM, TELEVISION AND HUMAN PERCEPTION

(3-0) 3

A basic study of the language and meaning of film and television.

# Thea 103 PRINCIPLES OF HUMAN ATTIRE AND APPEARANCE

(3-0) 3

An historical, social, political and psychological look at the effects of clothing.

# Thea 121 SPEECH COMMUNICATION

(3-0) 3

Through closely supervised activities in various speech forms, the student develops skills necessary to deal successfully with various speaking situations. Designated sections will be offered on demand for teacher candidates. Fall term

# Thea 125 THEORIES OF ACTING

(3-0) 3

The emphasis in the course will be on reading about and discussing the various theories of the craft and art of acting. Theories such as those of Diederot, Stanislavski, Brecht, Grotowski, Schechner, and others will be studied.

# Thea 126 INTRODUCTION TO THEATRICAL DANCE

(3.0) 3

A course in the basics of dance — tap, modern, folk, jazz and ballroom — which emphasizes the performance aspects of dance. Students will find outlets for creative expression in Choreography and public performance.

# Thea 132 CRAFTS AND DESIGN STUDIO

(3-0) 3

A studio course introducing all the design and craft arts of the theatre and of the theatrical elements in film and television. Scenery, props, costumes, light, make-up, sound, and various skills and techniques are introduced through studio project work.

# Thea 150 INTRODUCTION TO PLAY READING

(3-0) 3

An Introduction to the methods of understanding plays, Same as Engl 150. Offered on demand.

# Thea 170 DRAMATIC VISION AND SOCIAL CONTEXT:

(TITLE OF WORK OF ART)

(1-0) 1

A close discussion of the vision of human life in a single work of dramatic art as the work expresses and emerges from its particular environment. This course may be repeated for a total of eight credits. Open to freshman and sophomore students.

# Thea 180 AN INTRODUCTION TO THEATRE ARTS

(3-0) 3

A beginning discussion of each of the major art forms of the western world from the dramatic perspective of the everyday audience.

# Thea 181 PLAYS: (THEME OR TOPIC)

(3-0) 3

A study of plays chosen from the entire canon of dramatic literature which relate to a specific theme or topic. The theme or topic is changed regularly, eg., war, women, marriage, the family, and work.

# Thea 200 MUSIC THEATRE

(0-9) 1-3

A continuing practicum in public theatrical communication. Each term a major production requiring five to six weeks (about 140 hrs.) of rehearsal and public performance time is offered as a keynote to the work of The Theatre Company of Fort Lewis College. Open to freshman and sophomore students and may be repeated for six credits. Enrollment by audition.

# Thea 222 CREATIVE DRAMATICS

(3-0) 3

Endeavors to develop creativity and imagination through theatre. While especially useful to those working with youngsters, these techniques which foster self-awareness and expression can be used by anyone. Students will conduct workshops with school children in Durango.

# Thea 223 CHILDREN'S THEATRE

(0.9) 3

A course whose purpose is to produce a children's play. All aspects of the production will be handled by the class who will also perform the play for child audiences in the Durango area.

# Thea 232 THEATRICAL COSTUMING

(3-0) 3

Principles of costume design and construction and theory and application of theatrical make-up.

# Thea 280 STUDIES IN INTERDISCIPLINARY THOUGHT

(3-0) 3

A group of plays which relate directly to another discipline, eg., philosophy, political science, sociology, theology, are studied for their theatrical and dramatic qualities and also for their insights into the other discipline.

### Thea 300 DRAMATIC THEATRE

(0-9) 1-3

A continuing practicum in public theatrical communication. Each term a major production requiring five to six weeks (about 140 hrs.) of rehearsal and public performance time is offered as a keynote to the work of The Theatre Company of Fort Lewis College. Open to junior and senior students and may be repeated for six credits. Enrollment by audition.

# Thea 301 FILM-MAKING

(3.0) 3

Introductory work in practical, expressive film-making.

Prerequisite: Thea 102 or Engl 370.

# Thea 302 FILM-MAKING LAB

(0-3) 1

An introduction to film processing and single and double system sound editing. Must be taken concurrently with Thea 301 but optional.

# Thea 303 ADVANCED INDIVIDUAL FILM-MAKING Independent Film-Making

(0.9) 3

Independent Film-Making.

Prerequisite Thea 301.

125

# Thea 304 TELEVISION PRODUCTION

(0-9) 3

Introductory work in the arts and techinques of actual television production. Prerequisite Thea 102.

Thea 324 CLASSROOM TEACHER PERFORMANCE WORKSHOP

An intensive workshop in presentational skills and methods for the classroom teacher. Offered in cooperation with the School of Education.

Thea 325 INTERPRETIVE PROBLEMS IN ACTING

(0-9) 3

(0-3) 1

Work on a play which presents a specific problem for the actor, eg. Shakespeare, farce, dialect, comedy. Enrollment by audition.

Thea 326 INTERPRETIVE PROBLEMS IN DANCE

(0.9) 3

Advanced dance class whose final production will be a dance production for public performance. Enrollment by audition.

Thea 370 DRAMATIC VISION AND SOCIAL CONTEXT:

(TITLE OF WORK OF ART)

(1-0) 1

A close discussion of the vision of human life in a single work of dramatic art as the work expresses and emerges from its particular environment. This course and Thea 170 may be repeated for a total of eight credits. Open to juniors and seniors.

Thea 400 MUSIC THEATRE

(0-9) 1-3

A continuing practicum in public theatrical communication. Each term a major production requiring five to six weeks (about 140 hrs.) of rehearsal and public performance time is offered as a keynote to the work of The Theatre Company of Fort Lewis College. Open to junior and senior students and may be repeated for six credits. Enrollment by audition.

Thea 401 ADVANCED STUDIES

(2.3) 3

Advanced study in analytical scene work, design, scripting, history and theory, acting, opera, cabaret and nightclub performance, readers' theatre and oral interpretation, style, dramatic literature, management, dance, directing and choreography.

The Advanced Studies Program is intended primarily for juniors and seniors of demonstrated talent, creative discipline and artistic ability, regardless of their major field of work. Admission to the program is in consultation with the faculty.

Advanced Studies, Thea 401, may be taken four times for a total of twelve credits.

Thea 449 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered on demand. Prerequisite: approval of Department Chairman.





# SCHOOL OF BUSINESS ADMINISTRATION

# ACCOUNTING

# BUSINESS ADMINISTRATION BUSINESS EDUCATION ECONOMICS

AUBREY E. HOLDERNESS, Dean

# SCHOOL OF BUSINESS ADMINISTRATION

The School of Business Administration prepares students for responsible positions in business and industry, for teaching, or for admission to graduate school. The school is accredited by The American Assembly of Collegiate Schools of Business.

In accordance with the highest standards of education for business, students are expected to acquire a sound background in the liberal arts as a basis for mature understanding of the problems of business leadership and management. Some basic business courses are offered in the student's first two years. The program is, however, largely at an upper-division level and students are advised to concentrate their professional courses in the junior and senior years.

The School is characterized by its professional attitude and its close studentfaculty relationship. In addition to its concern for good classroom instruction, the faculty believes that much learning takes place through personal and informal contacts with students. There is an active Business Club on campus as well as a chapter of Beta Gamma Sigma, a national honorary business fraternity. A student may earn a Bachelor of Arts Degree by majoring in one of the following areas:

- -Accounting
- -Business Administration
- -Business Education
- -Economics

or may earn an Associate of Arts Degree in Secretarial Science.

# SCHOOL OF BUSINESS ADMINISTRATION FACULTY

Professors Bernard E. Anderson, Edward S. Freienmuth; Don L. James, Aubrey E. Holderness, Julian H. Murphy; Associate Professors Leonard D. Atencio, Reginald A. Graham, E. Lee Holehan, and John H. Zoller;

Assistant Professors Dennis R. Ehlers, Miriam T. Henderson, Patrick A. Hennessee, Nancy M. Hill, Vernon E. Lynch, Jr., Tom W. Mouek, Richard A. Podlesnik and L. J. Richardson; Instructors John W. Byrd and Larry C. Malick

# The Curriculum

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

The General Studies Program as described in this catalog. In satisfying this requirement a freshman seminar, "Business in Modern Society" must be taken.

		40.00		
	I. The Common Requir			
		y Accounting t	7.	
	Acc 226 Elementar	y Accounting II	4	
	Econ 261 Principle	s of Economics-Macro	3	
	Econ 262 Principle	s of Economics-Micro	3	
	BA 251 Business S	tatistics I	3 3 3 3 3 3 3	
	BA 252 Business S	tatistics II*	3	
	BA 301 Organizatio	n Theory	3	
	BA 311 Business L	aw I	3	
	BA 340 Marketing	WATER TO THE TAX TO TH	3	
	BA 350 Operations	Management	3	
	BA 380 Financial M	lanagement	3	
	BA 405 Business P	olicies	3	38
	BA 496 Seminar or			
	BA 499 Independen	t Study	2	40
111	. The following course			
	and computer science		1040	
	CS 150 Computer S		3	74
	Math 160 Linear Ma	ithematics	3	6

- IV. Requirements that are listed on the following pages under each major.
- V. Sufficient elective hours to bring the student's total hours to 128 (the number required for graduation.) At least 40% but no more than 60% of the student's total hours must be taken outside of the School of Business Administration.

For students with majors offered by the School of Business Administration, Acc 225, Acc 226, Econ 261 and Econ 262 are prerequisites for 300 and 400 level courses offered by the School of Business Administration.

# Accounting

The objectives of the program in Accounting are: To provide opportunity for students to develop into thinking, well balanced, social beings; to become familiar with the economic, political, and social climate in which modern business is conducted; to familiarize the student with the primary analytical tools and methods; and to develop capacity for objective analysis, for leadership, for appreciation of cultural values, and an awareness of the individual's social responsibility.

Students successfully completing the major in Accounting are prepared to embark immediately upon a career as a public, private or governmental accountant, and are provided with a foundation in accounting and business administration that will enable them to pursue effectively graduate study in these fields.

The accounting major at Fort Lewis College is currently approved by the State Board of Accountancy of Colorado as preparation for the Certified Public Accountant Examination and for those receiving C.P.A. certificates. Effective in 1982, a fifth year of education will be required by the State Board of Accountants to qualify for the CPA exam.

# BACHELOR OF ARTS DEGREE WITH A MAJOR IN ACCOUNTING

In addition to the college's General Requirements and the Common Requirements of the School of Business Administration, a student majoring in Accounting must complete the following major requirements:

Specific Mi	ajor Requirements		
Acc 323	Intermediate Accounting I	4	
Acc 324	Intermediate Accounting II	4	
Acc 325	Cost Accounting I	3	
Acc 430	Income Tax Accounting	3	
Acc 433	Advanced Accounting	4	18
Other Majo	r Requirements		
Acc 436	Auditing	3	
or			
Acc 437	Internship in Public Accounting	3	
Acc	Elective	3	6
Auxiliary R	equirements from Other Areas		
BE 221	Business Communications	3	3

<sup>\*</sup>Not required of Business Education majors; others may substitute Math 260 or BA 360.

<sup>&</sup>quot;May substitute CS 100 or CS 160.

# ACCOUNTING MAJOR

# Suggested Course Sequence

# First Year

FALL		WINTER	
Freshman Seminar	4	Econ 261 or 262	3
Math 160 or CS 150	3	CS 150 or Math 160	3
P.E.	1	P.E.	1
General Studies		General Studies	
or Electives	8	or Electives	9
	_		===
	16		16
	Secon	d Year	
Sophomore Seminar	4	Acc 226	4
*Acc 225	4	BA 252	3
BA 251	3	BE 221	3
Econ 261, or 262	3	Electives	3
General Studies	2	General Studies	3
			-
	16		16

<sup>\*</sup>Accounting majors with strong high school backgrounds may desire to start the accounting sequence in the freshman year.

	Third	Year	
Acc 323	4	Acc 324	4
Acc 325	3	Acc Elective (Cost 326 or	
BA 311	3	Managerial 319)	3
BA 340	3	BA 301, 350 or 380	3
General Studies	3	BA 312	3 3 3
	-	General Studies	3
	16		
			16
	Fourt	h Year	
Acc 430	3	Acc 436 or 437	3
Acc 433	4	BA 301, 350 or 380	3
BA 301, 350 or 380	3	BA 405	3
Electives	3	Seminar 496	2
General Studies	3	General Studies	5

16

16

# COURSES

# Acc 225 ELEMENTARY ACCOUNTING I

(4-0) 4

Double-entry accounting, its meaning and purpose, is introduced. Accounting for business transactions from inception through the accounting cycle is covered. Specialized topics include: special journals, the voucher system, internal control, valuation of accounts and notes receivable, inventories, fixed assets and depreciation, manufacturing and payroll accounting. Offered fall and winter terms.

### Acc 226 ELEMENTARY ACCOUNTING II

(4-0) 4

Major emphasis is on accounting for corporations which covers organization and operations, stock transactions, retained earnings, investments, and the flow of funds. Introduction to partnership, cost, and tax accounting are included. Offered fall and winter terms.

Prerequisite: Acc 225.

# Acc 232 PREPARATION OF YOUR INCOME TAX RETURN

(3-0) 3

A nontechnical approach to the fundamental concepts and mechanics of preparation of federal income tax returns. All classes of individual returns and commonly encountered business forms are covered. Offered summer term.

# Acc 319 MANAGERIAL ACCOUNTING

(3-0) 3

The application of accounting information for principal purposes of making managerial decisions is stressed. Topics include: the analysis and interpretation of financial statements, budgeting for planning and control, cost behavior (cost-volume-profit relationships), relevant cost analysis for making long- and short-range capital expenditure decisions, and the impact of income taxes on management planning. This course is not available to students who have over 14 semester credit hours of accounting. Offered winter term.

Prerequisite: Acc 226.

# Acc 323 INTERMEDIATE ACCOUNTING I

(4-0) 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. Offered fall term only.

Prerequisite: Acc 226.

# Acc 324 INTERMEDIATE ACCOUNTING II

(4-0) 4

Continuation of financial accounting theory and problems. In addition, partnership accounting and an introduction to business combinations are covered. Offered winter term only.

Prerequisite: Acc 323.

# Acc 325 COST ACCOUNTING I

(3.0) 3

This course develops cost accounting procedures applicable to job order and process cost systems. Emphasis throughout the course is on the processing and reporting of a firm's historical and projected cost data to assist management in planning, controlling, and analyzing operations and costs. Offered fall term.

Prerequisite: Acc 226.

# Acc 326 COST ACCOUNTING II

(3-0) 3

A continuation of the study of cost accounting with emphasis on standard costs, analysis of cost for profit decision-making purposes, and other special cost and analysis problems. Offered on demand.

Prerequisite: Acc 325.

# Acc 430 INCOME TAX ACCOUNTING

(3-0) 3

A brief history of the income tax, income tax accounting, and a study of current federal income tax provisions are presented. Offered fall term.

Prerequisite: Acc 324 or consent of instructor.

### Acc 433 ADVANCED ACCOUNTING

(4-0) 4

This course develops basic accounting principles relating to consolidated statements, fund and governmental accounting, bankruptcies, receiverships, estates and trusts, actuarial accounting. Offered fall term.

Prerequisite: Acc 324.

# Acc 435 SURVEY OF ACCOUNTING THEORY TRENDS

(4-0) 4

The origin and development of accounting; a review of the ideas of leading accounting theoreticians; an examination of current accounting theory; a look at accounting theory as it relates to the C.P.A. examination. Offered winter term.

Prerequisite: Acc 324.

# Acc 436 AUDITING - THEORY AND PRACTICE

(3-0) 3

Functions of the independent public accountant are stressed. The course includes audit reports and opinions, 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. Offered winter term.

Prerequisite: Acc 433 or consent of instructor.

### Acc 437 INTERNSHIP IN PUBLIC ACCOUNTING

3

Accounting students in their senior year may be placed with a selected certified public accounting firm where they will serve as a member of the accounting staff. The planned program of activities is the basis for a term paper to be submitted to the supervising college faculty member at the end of the trimester. The student's performance will be evaluated periodically by his supervisors in the firm as well as the assigned college faculty member.

Prerequisite: consent of the instructor.

### BA 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Offered fall and winter terms. Prerequisite: senior standing and permission of instructor.

# BA 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member. Offered fall and winter terms.

Prerequisite: approval of Dean, School of Business Administration.

# **Business Administration**

The Business Administration program prepares the student for leadership positions in today's society or for entrance into graduate school.

Students may elect courses that emphasize a particular area of management. All are, however, expected to develop a basic understanding of the social and economic environment of business, the principles of leadership and organization theory, the quantitative tools of decision making, and the functional areas of the firm.

Emphasis is placed on developing leaders and on a professional, well balanced understanding of management.

# BACHELOR OF ARTS DEGREE WITH A MAJOR IN BUSINESS ADMINISTRATION

In addition to the College's general requirements and the common requirements of the School of Business Administration, a student majoring in Business Administration must complete the following major requirements:

	or Requirements		
	evel Accounting course  B suggested)	2	
	vel Economics course	3	6
One 300 le	vei Economics course		:0
Other Major	Requirements		
A minimum or 400 leve	of 15 hours of business administration o i.	ourses at the 300	
GROUP A			
BA 342	Retailing	3	
BA 343	Sales Management	3 3 3 3	
BA 344	Advertising	3	
BA 445	Marketing Management	3	
BA 446	Marketing Research	3	
GROUP B			
BA 302	Industrial Relations	3.	
BA 312	Business Law II	3 3 3 3 3	
BA 360	Operations Research	3	
BA 483	Investments	3	
BA 486	Insurance	3	
BA 489	Real Estate	3	15
			,,

# **BUSINESS ADMINISTRATION MAJOR**

# Suggested Course Sequence

# First Year

FALL		WINTER	
Math 160 or CS 150	3	Math 160 or CS 150	3
Freshman Seminar (Business		Econ 261 or Econ 262	3
in Modern Society)	4	General Studies	9
Econ 261 or Econ 262	3	P.E.	1
General Studies	5		-
P.E.	1		16
	-		
	16		
	Secon	d Year	
Sophomore Seminar	4	BA 252	3
BA 251	3	Acc 226	4
Acc 225	4	General Studies or	
General Studies or		Electives	9
Electives	5		-
	-		16
	16		
	Thire	i Year	
BA 301	3	Acc 319	3
BA 311	3	BA Elective	3 5 5
BA 340	3	Electives	5
Econ 361 or 365	3	General Studies	5
General Studies	4		-
	-		16
	16		
	Four	th Year	
BA 350	3	BA 405	3
BA 380	3	BA 496 or BA 499	3 2 6 5
BA Electives	6	BA Electives	6
Electives	4	Electives	5
Electives	-		-
	16		16
	1.00		

# COURSES

# BA 251 BUSINESS STATISTICS I

(3-0) 3

An introduction to the methods used in economics and business for the collection and analysis of numerical data for decision-making purposes. The course covers data collection, methods of statistical description, statistical inference including estimation, simple hypothesis testing and statistical decision theory and an introduction to index number construction. No more than a total of 3 credits can be earned toward graduation for BA 251, Math 201, or Psych 241 because of uniform syllabus. Offered fall and winter terms.

Prerequisite: One semester of mathematics.

### BA 252 BUSINESS STATISTICS II

(3-0) 3

A continuation of Business Statistics I. Topics covered include simple and multiple regression and correlation, analysis of variance, and time series analysis. Offered fall and winter terms.

Prerequisite: BA 251.

NOTE: For students with majors offered by the School of Business Administration, Acc 225, Acc 226, Econ 261 and Econ 262 are prerequisites for 300 and 400 level courses offered by the School of Business Administration.

# BA 301 ORGANIZATION THEORY

(3-0) 3

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. Offered fall and winter terms.

# BA 302 INDUSTRIAL RELATIONS

(3-0) 3

An adaptive approach to employer-employee relations, included in an introduction to union-management relations which emphasize labor law, collective bargaining, and arbitration. Current theories of organizational behavior are studied as applied in the industrial relations system.

Prerequisite: BA 301.

### BA 311 BUSINESS LAW I

(3.0) 3

Basic principles of law as applied to business transactions. Study of the law of contracts and sales, sales warranties, law of agency, negotiable instruments and personal property is included. Offered fall and winter terms.

# BA 312 BUSINESS LAW II

(3-0) 3

Continuation of Business Law 311. Study of the law of partnerships, corporations, secured transactions, suretyship, real property and bankruptcy. Offered winter term.

Prerequisite: BA 311.

# BA 340 PRINCIPLES OF MARKETING

(3-0) 3

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 of concepts of marketing and application of these concepts in the making of decisions and managing marketing variables within a dynamic environment. Offered fall and winter terms.

Prerequisite: Econ 262.

(3.0)

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. Offered winter term.

Prerequisite: BA 340.

# BA 343 SALES MANAGEMENT

(3-0) 3

The course is concerned primarily with the management of outside sales forces and their activities. It deals almost entirely with the management of sales forces of manufacturers and wholesaling middlemen.

Prerequisite: BA 340.

# BA 344 ADVERTISING

(3-0) 3

The course, which is a comprehensive survey of advertising, deals with the management, planning, creation and use of advertising. A non-technical approach is stressed.

Prerequisite: BA 340.

# BA 350 OPERATIONS MANAGEMENT

(3-0) 3

Concepts and methods for economical planning and control of activities required for transforming a set of inputs into specified products or services. Emphasis is given to investment and cost analysis, design of production systems, production marketing relationships, and operations planning and control. Offered fall and winter terms.

Prerequisite: BA 251 and Math 160.

# OPERATIONS RESEARCH

BA — Math 360 (see Math — BA 360) INTRODUCTION TO

(3.0) 3

BA 380 FINANCIAL MANAGEMENT

(3-0)/3

The financial structure of various types of business organizations including sole proprietorships, partnerships, and corporations. Methods of securing and managing funds to meet short and long term capital requirements are presented. Offered fall and winter terms.

Prerequisite: Acc 226.

# BA 405 BUSINESS POLICIES

(3-0) 3

An integration of the required courses in accounting, business administration and economics into a managerial concept of business decision making and corporate strategy through the study of the problems of policy formulation and administration. Offered fall and winter terms.

Prerequisite: senior standing.

# BA 415 MANAGEMENT IN ACTION

(4-0) 4

The study of management principles and their application through research, plant visits, and on-site interviews with top management personnel.

# BA 445 MARKETING MANAGEMENT

(3-0-1 3

Detailed case analysis of corporate marketing problems. Cases include all of the marketing inputs and allied internal and external forces and resources. Offered winter term only.

Prerequisite: BA 340 and senior standing.

# BA 446 MARKETING RESEARCH

(3-0) 3

Evaluates the role of research in marketing management, includes the use of research in defining, analyzing and resolving marketing problems. Consideration is given to research procedures, sources of data, and the use of information for decision making. Offered winter term.

Prerequisites: BA 251 and BA 340.

# BA 481 CASES AND PROBLEMS OF FINANCIAL MANAGEMENT

(3-0) 3

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. Offered on demand.

Prerequisite: BA 380.

# BA 483 INVESTMENTS

(3-0) 3

Analysis of several theories of investment followed by an investigation and study of security markets. Corporate bonds and stocks are stressed; however, federal and state bonds and private investment opportunities are also considered. Offered winter term.

Prerequisite: Acc 226. Recommended but not required: BA 380.

# BA 484 PORTFOLIO MANAGEMENT

(3-0) 3

A continuation of analysis of investment theories from BA 483, followed by application of these theories through advanced security analysis. Institutional investors will be studied, and discussions of investment diversification, risk and return will be applied to both institutional and individual investing concepts. Offered on demand.

Prerequisite: BA 483; recommended but not required: BA 380.

### BA 486 INSURANCE

(3.0) 3

Coverage available, buying methods, and general procedures of operation of all types of insurance companies. Special emphasis on the analysis of the standard or more common forms of fire, marine, casualty, and life insurance contracts. Offered fall term.

# BA 489 REAL ESTATE

(3.0) 3

The regulation, practices, legal aspects, and professional ethics of the real estate business. Some consideration is given to real estate appraisal techniques and theory. Offered winter term.

Prerequisite: BA 311.

### BA 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Offered fall and winter terms. Prerequisite: senior standing and permission of instructor.

OR

# BA 496 SEMINAR - SBI

(2.0) 2

Limited enrollment. Allows students to act as business consultants to selected businesses. Actual experience in working with real business problems.

# BA 499 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered fall and winter term.

Prerequisite: approval of Dean, School of Business Administration.

# **Business Education**

There are three programs offered in Business Education: Business Education (Secretarial and Non-Secretarial) and Secretarial Science.

The teacher-education curriculum is designed specifically for the preparation of teachers of business subjects. Students who are not enrolled in the teacher-education curriculum may elect to enter the vocationally oriented program in secretarial science and, upon completion, receive an Associate of Arts Degree.

Each curriculum is constructed to ensure that the students receive a broad general education and a sound foundation in the basic areas of business knowledge.

The objective of the programs is to develop in each student a professional outlook and the ability to perform successfully the duties demanded in his pursuits.

# BACHELOR OF ARTS DEGREE WITH A MAJOR IN BUSINESS EDUCATION (SECRETARIAL)

Specific Requirements in Rusiness Education:

In addition to the college's general requirements and the common requirements of the School of Business Administration, a student majoring in business education (secretarial) must complete the following major requirements:

Openine i	requirements in Desiness Loucation.	
BE 108	Advanced Typing	2
BE 112	Intermediate Shorthand	3
BE 144	Business Machine Calculations	2
BE 213	Advanced Shorthand and Transcription	3
BE 221	Business Communications	3

BE 221	Business Communications	3	
BE 232	Secretarial Procedures	3	16
Auxiliary F	Requirements from Other Departments		
Educati	on courses (see secondary education section)	25	25

A student who is admitted to the Teacher Education Program after September 1, 1977, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975. Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor.

# **BUSINESS EDUCATION MAJOR**

# Suggested Course Sequence

# First Year

FALL		WINTER	
Freshman Seminar	4	Econ 261 or 262	3
BE 108	2	BE 144	2
Math 160 or CS 150	2	BE 213	3 2 3 3 5
General Studies	6	Math 160 or CS 150	3
P.E.	1	General Studies	5
	-	P.E.	1
	16		-
			17
	Secon	d Year	
Sophomore Seminar	4	Acc 225	4
BE 221	3	BE 232	3 3 2 5
Econ 261 or 262	3	Econ 262 or Econ 261	3
ED 201	3	Ed 212	2
Psych 157	3	General Studies	5
	100		-
	16		17
	Third	Year	
Acc 226	4	BA 311	3
BA 251	3	BA 340	3 3 3 5
BA 301	3	BA 380	3
Psych 218	3	Ed 364	3
Ed 362	3	General Studies	5
			-
	16		17
	Fourti	Year	
BA 350	3	ED 402	2
BA 405	3	ED 480	2
BA 496 or BA 499	2	ED 495	10
ED 401	2 2 7		
General Studies	7		14
	-		220
	17		

# BACHELOR OF ARTS DEGREE WITH A MAJOR IN BUSINESS EDUCATION (NON-SECRETARIAL)

In addition to the college's general requirements of the School of Business Administration, a student majoring in business education (non-secretarial) must complete the requirements for a degree in business administration and the following requirements:

Auxiliary Requirements from Other Departments
Education courses (see secondary education section)

A student who is admitted to the Teacher Education Program after September 1, 1977, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975. Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor.

25

# Secretarial Science

# ASSOCIATE OF ARTS DEGREE IN SECRETARIAL SCIENCE

The secretarial science program provides the basic skills necessary for practicing secretaries. In addition, general studies, accounting, business administration, and economics courses are included to enable the secretary to function and communicate in a business environment. These additional course requirements also make it very practical for the recipient of the Associate of Arts degree in Secretarial Science to complete a Bachelor of Arts degree in Business Administration within a normal four-year span.

A minor is offered in Secretarial Studies in addition to the Associate of Arts degree in Secretarial Science.

A student majoring in Secretarial Science must complete the following requirements:

General S	tudies		
Freshm	an Seminar*	4	
Sophon	nore Seminar	4	
PE 101	Physical Activity	1	
PE 102	Physical Activity	1	
Four co	jurses to be selected from the four distribution groups		
of Ge	neral Studies, one from each group	12	22
Specific S	Secretarial Science Requirements		
BE 108	Advanced Typing	2	
BE 144	Business Machine Calculations	2 2 3 3	
BE 213	Advanced Shorthand and Transcription	3	
BE 221	Business Communications	3	
BE 232	Secretarial Science	3	13
Other Req	uirements		
Four bu	usiness courses to be selected from Accounting,		
Econo	mics, Business Administration or Business Educa-		
tion; n	o more than two courses may be from Business Educa-		
tion		12	12

"The Freshman Seminar must be in "Business in Modern Society."

# SECRETARIAL SCIENCE MAJOR

# Suggested Course Sequence

#### First Year

	290323	10,520	
FALL		WINTER	
FS 101	4	BE 112 or BE 213	3
BE 111 or BE 112	3	Econ 261	3 6 3
BE 144	2	Elective	6
Elective	3	General Studies	3
General Studies	3	P.E.	31
P.E.	1		
	7		16
	16		
	Secon	d Year	
Sophomore Seminar	4	BE 232	3
Acc 225	4	Electives	10
BE 213	3	General Studies	3
BE 221	3 3 2		
General Studies	2		3 — 16
A PLANTA THE CONTROL OF A STATE FOR A STATE	72		
	16		

# COURSES

# BE 107 INTERMEDIATE TYPING

(2-3) 2

The development of speed and accuracy in producing business forms. Offered fall and winter terms.

Prerequisite: One year of high school typing or ability to pass the typing qualification examination.

#### BE 108 ADVANCED TYPING

(2-3) 2

The development of skill in office production. Business letters, business forms, tabulations, and manuscripts are presented. Use of electric machines. Offered fall and winter terms.

#### BE 111 ELEMENTARY GREGG SHORTHAND

(2-3) 3

The basic principles of reading and writing shorthand, and dictation of practice material. Offered fall term.

#### BE 112 INTERMEDIATE SHORTHAND

(2-3) 3

The practice of dictation and transcription including shorthand vocabulary building. Offered fall and winter terms.

Prerequisite: BE 111 or permission of instructor.

#### BE 144 BUSINESS MACHINE CALCULATIONS

(1-3) 2

The latest arithmetical techniques used in business and accounting. Stress is placed on applications including a thorough instruction in the use of rotary and listing calculators, electronic calculator, and ten-key adding machines. Offered fall and winter terms.

#### BE 213 ADVANCED SHORTHAND AND TRANSCRIPTION

(2-3) 3

The practice of advanced dictation and speed building, and development of skill in shorthand. Offered fall and winter terms.

Prerequisite: BE 112 or permission of instructor.

## BE 221 BUSINESS COMMUNICATIONS

(3-0) 3

A course built around the basic concept that both the functions and objectives of business are achieved through effective communication. Includes the processes of business communication and the conventions of business writing. Offered fail and winter terms.

#### BE 232 SECRETARIAL PROCEDURES

(2-4) 3

Basic secretarial principles and procedures, including filing procedures, mail, telephone, and reception techniques; machine transcription; duplicating machines; receiving callers; business etiquette; expediting meetings; and legal facets of secretarial work. Also includes office simulation, Offered winter term.

Prerequisites: BE 108 and BE 112, or permission of instructor.

#### BE 308 OFFICE MANAGEMENT

(3-0) 3

The principles of office management. The responsibilities of management for office services, office layout and space utilization, office furniture and equipment, machines and appliances, branch office management, office personnel problems, training of office workers, office costs, and office methods and procedures are included. Individual research required. Offered winter term.

#### BA 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Offered fall and winter terms. Prerequisite: Senior standing and permission of instructor.

#### BA 499 INDEPENDENT STUDY

1-3

Individual research is conducted under the supervision of a faculty member. Offered fall and winter terms.

Prerequisite: Approval of Dean, School of Business Administration.

# **Economics**

The program in Economics offers, within the general framework of the liberal arts, courses designed to meet the needs and desires of students who major in economics. The major in economics is designed to (1) provide the student with an understanding of our present-day economic system and an understanding of economics and its relationship to other disciplines, and (2) prepare the student for graduate work, employment in government and business.

A minor is offered in Economics in addition to a Bachelor of Arts degree with a major in Economics.

Students majoring in Economics may be certified to teach in the broad area of Social Studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN ECONOMICS

In addition to the College's general requirements and the common requirements of the School of Business Administration, a student majoring in economics must complete the following departmental requirements:

Specific Maj	or Requirements		
Econ 356	Intermediate Micro-theory	3	
Econ 364	Intermediate Macro-theory	3	6
Other Major	Requirements		
Any four o	of the following courses:		
Econ 310	Economic History of the United States	3	
Econ 361	Managerial Economics	3	
Econ 365	Money and Banking	3	
Econ 367	Comparative Economic Systems	3	
Econ 369	Public Finance	3	
Econ 371	International Economics	3	
Econ 375	Industrial Organization	3	
Econ 475	Regional Economics	3	12



# **ECONOMICS MAJOR**

# Suggested Course Sequence

# First Year

FALL		WINTER	
*Freshman Seminar	4	Econ 261 or 262	2
**Math 160 or CS 150	3	Math 160 or CS 150	2
General Studies	5.5	General Studies	3 3 6 3
or Electives	8	Electives	2
P.E.	1	1.000,000,000	3
	_		16
	16		
	Secon	d Year	
Sophomore Seminar	4	Acc 226	Ä
Acc 225	4	BA 252	3
BA 251	3	Electives	3 3 6
Econ 261 or 262	3	General Studies	6
General Studies	2		77
	_		16
	16		
	Third	l Year	
BA 301	3	BA 340	3
BA 380	3	Econ 364	
Econ 356	3	Econ Elective	3
Econ Elective	3	Electives	3
General Studies	4	General Studies	3
STROOMSON SON STROOMS			87
	16		15
	Fourt	h Year	
BA 311	3	BA 405	3
BA 350	3	BA 496 or BA 499	2
Econ 470	3	Econ Electives	6
Econ Elective	3	Electives	3
Electives	4	General Studies	3
	7-3		3.55
	16		17

<sup>\*</sup>The freshman seminar must be in "Business in Modern Society."

<sup>\*\*</sup>Math 120 is recommended for students weak in math; Math 121 is recommended for students with a strong background in high school mathematics.

## COURSES

#### Econ 261 PRINCIPLES OF ECONOMICS-MACRO

(3-0) 3

An introductory course on national income analysis. Included are an introduction to markets, the determination of prices via the market, income flows, macro-economic equilibrium, monetary and fiscal policy and an introduction to international economics. Offered fall and winter terms.

#### Econ 262 PRINCIPLES OF ECONOMICS-MICRO

(3-0) 3

Price determination and income distribution in a capitalistic economy. Investigation of current economic issues with particular emphasis on labor-management relations, agriculture, international trade, and government regulation of business is included. Offered fall and winter terms.

### Econ 310 ECONOMIC HISTORY OF THE UNITED STATES

(3-0) 3

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.

Prerequisite: Consent of instructor.

#### Econ 320 ECONOMICS OF THE SOUTHWEST

(3-0) 3

A theoretical analysis of economic organization in the Southwestern U.S. from the colonial era to the present. Analysis includes models appropriate to economics in the process of development and the influence of cultures on the developmental process.

Prerequisite: Consent of instructor.

### Econ 356 INTERMEDIATE MICRO THEORY AND ANALYSIS

(3-0) 3

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. Prerequisite: Econ 262.

#### Econ 361 MANAGERIAL ECONOMICS

(3.0) 3

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.

Prerequisite: Econ 262, Math 160. Offered winter term.

#### Econ 364 INTERMEDIATE MACRO THEORY

(3-0) 3

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.

Prerequisite: Econ 261.

## Econ 365 MONEY AND BANKING

(3-0) 3

Money, deposit creation, central banking, financial institutions, banking structure, and the Dual Banking system. Monetary theory is developed from the Classical, the Keynesian, the fiscal policy to the current monetarist approach. Problems of inflation and unemployment are examined. International monetary problems are analyzed. Offered fall term.

Prerequisite: Econ 261, Econ 262.

#### Econ 367 COMPARATIVE ECONOMIC SYSTEMS

(3-0) 3

An analysis and comparison of capitalism, socialism and communism and a survey of the historical background in which these systems developed. Offered on demand.

Prerequisite: consent of instructor.

#### Econ 369 PUBLIC FINANCE

(3-0) 3

An analysis of the financing of federal, state, and local units of government. Emphasis given to problems of taxation, expenditures and debt management. Offered on demand.

Prerequisite: Econ 261.

#### Econ 371 INTERNATIONAL ECONOMICS

(3-0) 3

Classical, neo-classical, 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. Offered on demand.

Prerequisite: Econ 261 and 262.

#### Econ 375 INDUSTRIAL ORGANIZATION

(3-0) 3

An empirical, theoretical, and legal analysis of economic concentration in the United States. Includes detail of market and aggregate concentration, alternative models of oligopoly behavior from economic theory, and studies of cases in antitrust law.

Prerequisite: Econ 261 and Econ 262.

## Econ 475 REGIONAL ECONOMICS

(3-0) 3

A study in the economic structure, stability and growth of regional and urban economics. Included is an analytical approach to the location of economic activity, and methods of measuring and analyzing regional and urban economic performance. Attention to be focused on problems unique to the southwestern region of the national economy. Offered on demand.

Prerequisite: Econ 364 or consent of instructor.

#### BA 496 SEMINAR

(2-0) 2

Advanced study and research in selected topics. Offered fall and winter terms. Prerequisite: senior standing and permission of instructor.

#### BA 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member. Offered fall and winter terms.

Prerequisite: approval of Dean, School of Business Administration.

# SCHOOL OF EDUCATION

## ELEMENTARY EDUCATION

# SECONDARY EDUCATION

# PHYSICAL EDUCATION

## **PSYCHOLOGY**

DONALD F. WHALEN, Dean

# TEACHER EDUCATION DEPARTMENT

Edith W. Brochu, Chairperson; Professors Edith W. Brochu, Bill D. Engman and Donald F. Whalen;

Associate Professors Gary D. Knight and Ray N. Wilson; Assistant Professors Virginia A. Regelmann, Charles H. Reid, Jr., Janice L. Simmons Thom A. Votaw and Pamela R. Young; Instructor Linda L. Simmons. The Colorado Department of Education has approved Fort Lewis College for teacher education at the elementary level and at the secondary level in the following areas: Art, Business Education (secretarial and non-secretarial), English, Mathematics, Music, Physical Education, Sciences (Biology, Chemistry, Geology, General Science), Spanish, and Social Studies (includes an approved major, a support area, and required support courses.)

Students majoring in art, music, and physical education may elect certification for grades K-12 in their respective disciplines by completing additional requirements beyond their secondary certification program. Certification in sciences and social studies requires a composite major. See the Department of Teacher Education adviser for details.

The Teacher Education Program also is accredited by the National Council for the Accreditation of Teacher Education (NCATE). Accreditation by NCATE provides for reciprocal certification in 26 states.

The unique geographical location and the population characteristics of the student body and the service area dictate that the teacher education program of Fort Lewis College be cognizant of the need to prepare teachers to fulfill the requirements of the schools in the immediate area. The philosophy of education of the Teacher Education Department is that an adequate program of teacher preparation must select individuals who are capable of becoming effective teachers, and provide the pre-service teacher with the technical and attitudinal skills necessary for functioning in the public schools of the present, as well as the public schools of the future. Academic as well as experiential bases are a vital concern for a program oriented toward the individual student's acquisition of subject matter skills and development of attitudinal competencies. The goals of the program are:

# GOALS

- To provide the pre-service teacher with orienting, formative and consolidating experiences in subject matter teaching.
- To provide the pre-service teacher with experiences that will insure opportunities to learn about children and young adults, the community, and the teaching profession.
- To provide the pre-service teacher with experiences that will enable the student to maximize his own potential as a person and to recognize that every other person is of great worth and is entitled to develop to his greatest potential.
- To provide the pre-service teacher with experiences that will lead to an enthusiasm for life and a love of learning to help make it possible for each student to successfully meet the challenges he faces in a rapidly changing world.
- To provide the surrounding geographical area with professional competencies to meet the inservice needs of presently certified school professional personnel who work with children.

Procedures have been established for a college student to complete the Teacher Education program and be recommended by the College to the Colorado Department of Education for a teaching certificate. Students from other areas of study may take education courses as electives if they desire a broad understanding of the American school systems. The College maintains a placement office which serves teaching candidates.

### ADMISSION TO THE PROGRAM

The student makes application for admission to the program while enrolled in Ed 201, the Teacher Education Admissions Seminar. Requirements for initial admission include demonstrated competencies in communicative skills, an overall grade point average of 2.0, 30 hours coilege credit and the recommendation of the Professional Education Review Committee. Requirements for admission to student teaching are more stringent than for initial admission. In addition to the criteria listed above, the Professional Education Review Committee considers each candidate in light of the following factors: character, personal adjustment, and physical condition.

Transfer or unclassified students will be accepted for the Teacher Education Program depending on prior preparation and scholastic achievement. Such students must meet a residency requirement prior to the student teaching semester. In addition, the usual screening procedures and prerequisites to student teaching apply. Written approval of the teaching major by the appropriate academic department of Fort Lewis College is required.

## SECONDARY EDUCATION PROGRAM

		Departmental Requirements:	Specific D
	3	Teacher Education Admission Seminar	Ed 201
	3 2 3	Secondary Teacher Aid Practicum	Ed 212
	3	Developmental Reading in Secondary School	Ed 362
		Teaching the Handicapped in the	Ed 364
	3	Secondary Classroom	
		Seminar for Laboratory Experience in	Ed 401
	2	the Secondary School	
	2 2 2	Secondary Education	Ed 402
	2	Methods of Teaching (Subject area)	Ed 480
2	10	Laboratory Experience	Ed 495
		Requirements from other departments	Auxiliary F
	3	57 General Psychology	Psych 1
	3	18 Psychological Foundations of Education	Psych 2

- Ed 201 must be successfully completed, and admission to the program granted prior to taking any subsequent courses in the certification sequence.
- Ed 401 must be taken the semester immediately preceding the student teaching experience. Application for student teaching will be made in this course.
- All courses in the certification sequence must be completed satisfactorily prior to student teaching.
- Ed 402, and Ed 480 will be taken during the student teaching semester in the first five weeks. Exceptions to this would include Ed 480's taught only one term in the academic year, and full semester methods courses.
- Students who intend to seek certification in states other than Colorado should contact their Department of Teacher Education adviser as early as possible for specific state requirements.

## **ELEMENTARY EDUCATION PROGRAM**

#### BACHELOR OF ARTS WITH A MAJOR IN ELEMENTARY EDUCATION

General Stu	dies	****	41
Specific D	Departmental Requirements		
Ed 201	Teacher Admissions Seminar	3	
Ed 211	Elementary Teacher Aide Practicum	2	
Ed 261	Reading Skills in the Elementary School	3	
Ed 301	Classroom Practices and Instructional Strategies	2 3 2 2	
Ed 305	Mathematics in the Elementary School	2	
Ed 360	Methods of Teaching Diagnostic Reading		
	in the Elementary Classroom	3	
Ed 363	Teaching the Handicapped Child in		
	the Elementary Classroom	3	
Ed 411	Science in the Elementary School	3 2 2	
*Ed 415	Social Studies in the Elementary School	2	
Ed 433	Language Arts in the Elementary School	2	
*Ed 494	Laboratory Experience and Seminar in the		
	Elementary School	10	
*Ed 496	Seminar	2	36
Auxiliary (	equirements from other departments		
Psych 1	57 General Psychology	3	
Psych 2	18 Psychological Foundations of Education	3	
Psych 2	54 Developmental Psychology	3	0

#### Areas of Concentration

Students majoring in elementary education will select two areas of concentration from the following areas: art, English, mathematics, music, physical education, science, social science, Spanish, bilingual education. They must also elect to follow one of two plans. Plan I requires that a minimum of 18 hours of approved course work be completed in each of the two concentration areas. Plan II requires the student to complete a minimum of 24 hours in one concentration area, and at least 12 hours in the other area.

In place of either Plan I or Plan II, a student may select a bilingual-bicultural emphasis of 36 hours.

Specific course requirements for each area of concentration should be obtained from the Office of Department of Teacher Education.

\*Courses to be taken during student teaching trimester.

Additional Requirements from other Departments
English (9-10 hours)
Engl 363, or Engl 362; Engl 327
and one approved literature course

Mathematics (6 hours)
Math 215 and Math 216

Social Science (6 hours) 6 hours of American and/or Latin American History	6	
Science (8 hours) Bio 100 and 101 Physical Science 100 and 105, or Geol 113	8	
Art 203 - Art in the Elementary School	3	
Music 316 — Music in the Elementary School	3	
Physical Education 370 — Methods of Teaching Elementary P.E.	3	
	39	39

## COURSES

## Ed 201 TEACHER EDUCATION ADMISSIONS SEMINAR

(3-0) 3

A course designed to provide a foundation for advisement on admission to the School of Education and to orient prospective members to the teaching profession. Historical, philosophical, and sociological developments which have resulted in relevant contemporary educational issues are explored. Students normally will apply for admission to the teacher education program during this course. This course is a prerequisite for all other courses in the required professional education sequence and requires at least 30 hours of college credit. Offered every term.

## Ed 202 COMMUNICATION COMPETENCIES FOR CLASSROOM

**TEACHERS** 

(3-0) 3

This course is designed to aid prospective teachers in the development of formalized communication skills. Offered every term.

## Ed 211 ELEMENTARY TEACHER AIDE PRACTICUM

1-3

A course that gives students practical experience in an elementary school setting. It features placement in local or nearby schools and the experience of a regular assignment in one teaching situation for the duration of the term — not to exceed 12 hours per week. Assignments are highly individualized and are monitored by the public school principal. Credit is based on the ratio of one hour per 25 contact hours. There are also weekly seminar meetings, May be repeated for a total of 6 credits if on different levels. Permission of instructor.

#### Ed 212 SECONDARY TEACHER AIDE PRACTICUM

1.3

A course that gives students practical experience in a secondary school setting. It features placement in local or nearby schools and the experience of a regular assignment in one teaching situation for the duration of the term — not to exceed 12 hours per week. Assignments are highly individualized and are monitored by the public school principal. Credit is based on the ratio of one hour per 25 contact hours. There are also weekly seminar meetings. May be repeated for a total of 6 credits if on different levels. Permission of instructor required.

#### Ed 261 READING SKILLS IN ELEMENTARY SCHOOL

(3-0)

The scope and sequence of reading skills in the elementary school with emphasis on readiness for the various aspects of the reading process. Offered fall and winter terms.

Prerequisite: Ed 201 or prior approval of instructor.

# Ed 301 CLASSROOM PRACTICES AND INSTRUCTIONAL STRATEGIES

(2-0) 2

A course dealing with behavioral objectives, lesson planning, unit construction, testing, skill continuums, classroom management and discipline techniques and other subjects of a general nature as background for methods courses. Prerequisite: Admission to the Teacher Education Program.

#### Ed 305 MATHEMATICS IN THE ELEMENTARY SCHOOL

(2-0) 2

Content and procedures in the teaching of modern mathematics in the elementary school. Offered every term,

Prerequisite: Math 216 and admission to teacher education program.

#### Ed 330 HUMAN RELATIONS IN THE CLASSROOM

(3-0) 3

Designed to increase teacher effectiveness in the realm of inter-personal relations and group dynamics; analysis of individual and group behavior in a classroom setting; theoretical concepts and skill training in classroom management. Offered on demand.

Prerequisite: admission to teacher education program or permission of instructor.

### Ed 331 THE SOUTHWESTERN MINORITY CHILD IN THE CLASSROOM

(3-0) 3

Course is designed to provide a systematic analysis of the forces which shape the behavior of the American Indian or Chicano child 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.

Prerequisites: Ed 201 and Admission to Teacher Education Program, or permission of instructor.

### Ed 333 SOUTHWEST LANGUAGE IMMERSION FOR TEACHERS

(1-3)

Language Immersion is designed for prospective teachers who may encounter Native American languages or Southwest Spanish dialects in the school community. It provides the student with basic oral skills in the languages and the courses are taught almost entirely in the target languages. Students may enroll for one, two, or all of the courses for a total of 3 hours. Offered Fall and Winter terms,

#### Ed 332 MATERIALS AND METHODS OF BILINGUAL EDUCATION

(3-0) 3

An introduction to the group and individual methods of teaching in a bilingualbicultural setting and current methods for teaching cognitive areas in other languages. Also introduces bilingual materials available. Students required to make materials to meet S.W. classroom needs. Many in-class activities.

#### Ed 353 GROWTH & DEVELOPMENT OF THE YOUNG CHILD

(3-0) 3

A study of the physical, mental, social, emotional, and psychological growth and development of the child from conception through early childhood. Emphasis is given to the child in the school setting. Offered on demand.

Prerequisite: permission of instructor.

## Ed 355 METHODS AND TECHNIQUES FOR TEACHING PRE-SCHOOL CHILDREN

(3-0) 3

Designed to acquaint the student with the pre-school curriculum and methods of teaching children, age 1-6. The student will have the opportunity to discover creative activities and their implementation in the classroom. An eclectic approach will be used. Offered on demand.

Prerequisite: permission of instructor.

## Ed 360 METHODS OF TEACHING DIAGNOSTIC READING IN THE ELEMENTARY SCHOOL

(3-0) 3

Methods and materials used in the teaching of elementary school reading. Emphasis will be placed on diagnosis and prescription and individualization of instruction. Offered every term.

Prerequisite: Admission to Teacher Education Program and Ed 261 and 301.

## Ed 362 DEVELOPMENTAL READING IN THE SECONDARY SCHOOL

(3-0) 3

The course includes reading theory, reading as skills development, techniques and materials for the detection of individual differences in reading ability, readiness for reading subject matter, vocabulary development in specific content areas, reading study skills, and increasing comprehension and reading rate. Offered every term. *Prerequisite:* permission of instructor.

## Ed 363 TEACHING THE HANDICAPPED CHILD IN THE ELEMENTARY CLASSROOM

(3-0) 3

Deals with teaching handicapped students in the regular classroom. Emphases are identifying handicapping conditions and teaching methods that facilitate learning in the regular classroom. Offered every term.

Prerequisite: Ed 201, Psych 157, Psych 218 or permission of instructor.

## Ed 364 TEACHING THE HANDICAPPED IN THE SECONDARY CLASSROOM

(3-0) 3

Deals with teaching students in the regular secondary classroom who have handicaps. Emphasis is on screening of potential handicaps and methods of remediating diagnosed problems. Offered every term.

Prerequisite: Ed 201, Psych 157, Psych 218 or permission of instructor.

#### Ed 365 EDUCATIONAL MEASUREMENT

(3-0) 3

A presentation of the applications of measurement and its contributions to and usefulness in the education program. On demand.

Prerequisite: admission to teacher education program and Psych 218, or permission of instructor.

## Ed 401 SEMINAR FOR LABORATORY EXPERIENCE IN THE SECONDARY SCHOOL

2

Discussion of education topics pertinent to and in preparation for student teaching. The course must be taken prior to student teaching. Fall and Winter terms. Prerequisite: admission to teacher education program and senior standing, or second semester junior. (See Student Teaching Handbook).

Organization and management of instruction and the principles of teaching as applied to the secondary school; case studies; and materials of instruction. Fall and Winter terms.

Prerequisite: Ed 401, admission to student teaching.

#### Ed 411 SCIENCE IN THE ELEMENTARY SCHOOL

(2.0) 2

Emphasis on helping prospective teachers to (1) analyze the science needs of elementary school children in the modern world; (2) select subject matter which will help pupils meet these needs; and (3) develop methods of teaching which will encourage scientific inquiry on the part of the learner. Fall and Winter.

Prerequisite: admission to teacher education program and 8 semester hours of laboratory science or approval of instructor.

## Ed 415 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL

(2-0) 2

Content and procedures in the social studies program of the elementary school. Offered Fall and Winter terms.

Prerequisite: admission to teacher education program and 6 semester credits of social science or approval of instructor.

#### Ed 420 INSTRUCTIONAL MEDIA

(3.0) 3

A study of the place of instructional media in the learning process; general principles underlying the selection and use of materials for instructional purposes; exploration of visual and auditory aids available to teachers in the elementary secondary schools; demonstration and practice in the use of instructional media in teaching. Offered on demand.

Prerequisite: admission to teacher education program or approval of instructor.

## Ed 433 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL

(2-0) 2

The adaptation of the various language arts content subjects to the needs and maturity levels of elementary school children. Emphasis is given to instruction in grammar, composition, spelling, listening, writing and speaking. Offered fall and winter terms.

Prerequisite: Ed 201, Engl 363 or Engl 362, or permission of instructor.

# Ed 454 LANGUAGE ARTS FOR EARLY CHILDHOOD

(3-0) 3

The various skills of language development of the young child are considered, and language arts curriculum materials for early childhood are surveyed. Offered on demand.

Prerequisite: junior standing and admission to teacher education program.

# Ed 455 MODERN TRENDS IN EARLY CHILDHOOD EDUCATION

(3-0) 3

Emphasis is given to recent developments which have influenced early childhood education programs, such as Head Start, Day Care, Follow Through, and federal legislation. A consideration of appropriate curriculum materials is also included. Offered on demand.

Prerequisite: junior standing and admission to teacher education program.

### Ed 461 DIAGNOSTIC AND REMEDIAL READING

(3-0) 3

A study of the diagnosis and teaching of children with reading difficulties, with emphasis on the development of appropriate skills through laboratory experience. Offered on demand.

Prerequisite: admission to teacher education program and Ed 261 or Ed 360 or Ed 362.

Ed 480 METHODS OF TEACHING (SUBJECT MATTER AREAS)

(2.0) 2

A course designed to show the prospective teacher how to teach specific subjects in high school. Attention is given to the historical development and new trends within the subject matter area and their influence upon curriculum, learning, and teaching. Check with department for term offered. Some sections of course only one term per year.

Prerequisite: admission to student teaching.

#### Ed 490 ADVANCED TOPICS IN EDUCATION

1-3

Designed to accommodate the needs or requests of school systems, teachers, or regular 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. Offered on demand.

# Ed 494 LABORATORY EXPERIENCE AND

(0-10) 10

SEMINAR IN THE ELEMENTARY SCHOOL

Directed observation and teaching in the public schools at the elementary level. Periodic seminars are held in which relevant areas of elementary school organization and management are discussed. Fall and Winter terms.

Prerequisite: admission to student teaching.

# Ed 495 LABORATORY EXPERIENCE AND

(0-10) 10

SEMINAR IN THE SECONDARY SCHOOL Includes observation, participation, teaching, and allied activities under the direction of a selected regular teacher in a secondary school in consultation with Col-

lege Supervisors. Fall and Winter terms.

Prerequisite: admission to student teaching.

#### Ed 496 SEMINAR

(2-0) 2

A senior seminar to be taken concurrently with elementary student teaching (Ed 494). The class will include information on placement files, job applications, teacher certification, health care in the public schools, interview techniques, school and community relationships, professional organizations and negotiations and programs for exceptional children. In-class simulated microteaching and school visitations will be required.

Prerequisite: Admission to student teaching.

#### Ed 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member. Offered every term.

Prerequisite: approval of Department Chairman,

# **Physical Education**

Troy D. Bledsoe, Chairman;

Professors Marvin L. Giersch, Adolph M. Kuss;

Associate Professors Troy D. Bledsoe, Louis C. Cullen, and Joan M. Sanders:

Assistant Professors William E. Hayes, John McNitt, Carol Seale, and Charles H. Walker; Instructors Patti A. Carr and Michael Allison. The objectives of the Department of Physical Education are:

To provide for the preparation of skilled teachers of physical education as well as qualified persons in the allied areas of recreation and coaching;

To provide a meaningful program in individual and dual sports, stressing the carry-over value of these activities for all students;

To provide extracurricular experiences for all students in health, physical education, and recreation;

To provide professional leadership for the recreational and athletic activities of the students.

# BACHELOR OF ARTS DEGREE WITH A MAJOR IN PHYSICAL EDUCATION

	Pepartmental Requirements		
PE 165	Standard First Aid and Safety	2	
PE 170	Introduction to Physical Education	2	
PE 175	Field Experience in Physical Education	1	
PE 198	Introduction to Kinesiology	2	
PE 243	Personal Health	3	
PE 254	Adapted Physical Education	2	
PE 260	Anatomical Kinesiology	2 3 3 3	
PE 340	Motor Learning: Principles and Practices	3	
PE 350	Measurement and Evaluation	3	
PE 360	Physiological Kinesiology	3	
PE 370	Physical Education in Elementary School	3	
PE 480	Organization and Administration of Health		
and P	Physical Education Programs	3	
PE 496	Seminar in Physical Education	2	
		32	32

- A non-teaching major will elect any 10 hours of physical education theory courses.
- A teaching major must declare an area of concentration.
  - a. A major who declares K-12 physical education as an area of concentration is required to take PE 371 and PE 372 and 7 hours of elective physical education theory courses.
  - A major who declares secondary physical education as an area of concentration is required to take PE 410 and 8 hours of elective physical education theory courses.
  - A major who declares a coaching concentration is required to take PE 224 and PE 375 and 6 hours of elective physical education theory courses.

- All Physical Education majors must show proficiency in 8 motor skills from the following areas:
  - a. Individual and Dual sports a minimum of 2.
  - b. Team Sports a minimum of 2.
  - c. Folk and Square Dance A minimum of 1.
  - d. Stunts and Tumbling A minimum of 1.
- All Physical Education majors must demonstrate an acceptable level of physical fitness commensurate with abilities.

Auxiliary Requirements from Other Departments:

Biology 121	3	
Psychology 157	3	
	-	
	6	6
Electives		39
TOTAL REQUIRED FOR GRADUATION		. 128

\*A student who is admitted to the Teacher Education Program after September 1, 1977, must complete additional requirements as provided by the Colorado Teacher Certification Law of 1975. Information concerning these requirements may be obtained from the Department Chairman for Teacher Education or from the appropriate academic department chairman or academic advisor.

# Suggested Course Sequence

First Year

FALL		WINTER	
PE 170	2	PE 165	2
PE Act Skill Proficiency	1	PE 185	1
Freshman Seminar	4	PE Act Skill Proficiency	1
Bio. 101	3	Bio. 121	3
Psych. 157	3	General Studies	3
General Studies Recommended	3	General Studies General Studies	3
Biology Lab	4		
976	9		16
	16-17		

Second Year

PE 198	2	PE 243	3
PE Act Skill Proficiency	1	PE Act Skill Proficiency	1
Sophomore Seminar	4	PE Concentration Area	4
Psych, 218	3	ED 201	3
General Studies	3	General Studies	3
General Studies	3	Psych 254 (if K-12) or	
deneral oludies		Second Teaching Area	3
	16		-
			17

	Third	Year	
PE 340	4.500		
	3	PE 260	3 3 2
PE 370	3	PE 350	3
PE 254	2	PE 496	2
PE Act Skill Prof.	3 3 2 1	PE Act Skill Prof.	1
PE Act Skill Prof.	1	PE Act Skill Prof.	1
PE Concentration Area	2	PE Concentration Area	1 1 2
ED 362	2	ED 212	2
	***	ED 364	3
	15		
			17
	Fourt	h Year	
PE 360	3	ED 402	2
PE 480	3	ED 480	2
PE Act skill Prof.	- 1	ED 495	10
PE Concentration Area	2	(T0,0,19.5)	- 2

# COURSES

#### PE ACT PHYSICAL ACTIVITY

ED 211 & PE Conc. Area

Second Teaching Concent. (if Secondary)

ED 401

(if K-12) or

(0-2) 1

Seasonal Physical activities during each trimester for men or for women. No physical activity at the same level can be repeated for credit. Offered each term.

#### PE 165 STANDARD FIRST AID AND PERSONAL SAFETY

(2-0) 2

Study and practice of Red Cross First Aid Procedures in handling common injuries, accidents and medical emergencies. Fall and Winter.

#### PE 170 INTRODUCTION TO PHYSICAL EDUCATION

(2-0) 2

Designed to orient the student to the field of physical education as a profession. Course will include discussion of the nature and scope of the field; its aims and objectives; mechanical, psychological, and physiological foundations; and professional opportunities, responsibilities and associations. Fall and Winter.

#### PE 175 FIELD EXPERIENCE IN PHYSICAL EDUCATION

11.21

Observational experiences followed by discussions will be used to increase the students' understanding of the nature and role of physical education and coaching in the elementary and secondary school setting. Fall and Winter.

### P.E. 198 INTRODUCTION TO KINESIOLOGY

(2-1) 2

An introduction to the anatomical and physiological systems of the human body with an emphasis upon the interrelationships between the systems and human movement. Fall and Winter.

Prerequisite: Bio 121.

### PE 224 TREATMENT OF ATHLETIC INJURIES

(2-0) 2

A comprehensive presentation of the many aspects involved in training, recognition, evaluation, management, and rehabilitation of conditions and injuries, which occur in athletics and physical education. Fall and Winter.

Prerequisite: PE 198.

### PE 225 THEORY OF COACHING FOOTBALL

(2-0) 2

Classroom instruction directed toward the various phases of American football: history, defensive theory, strategy and personnel, offensive theory, the kicking game, practice organization, relationship and influence of teachers, parents, booster clubs and news media. Winter.

#### PE 226 THEORY OF COACHING VOLLEYBALL

(2-0) 2

Study of principles, methods, techniques and strategies involved in the coaching of volleyball. Winter.

### PE 227 THEORY OF COACHING BASKETBALL

(2-0) 2

Analysis of the game of basketball in theory and application with special emphasis upon teaching the game. Development of offense, defense and special situations for both prospective coaches and enthusiasts. Fall.

#### PE 228 THEORY OF COACHING WRESTLING

(2-0) 2

Study of principles, methods, techniques, and strategies involved in the coaching of wrestling. Fall - Alternate years.

### PE 229 THEORY OF COACHING TRACK AND FIELD

(2.0) 2

Designed to teach methods, techniques and priciples of coaching all events in track and field at both the high school and college levels. Fall - Alternate years.

### PE 233 OFFICIATING OF FOOTBALL

11.01

Designed to provide individuals with the rules, skills, and mechanics of officiating. Includes rules of the National Federation of High Schools, National Intercollegiate Athletic Association, and National Collegiate Athletic Association. Fall.

#### PE 234 OFFICIATING OF VOLLEYBALL

(1-0) 1

Instruction in the rules and practice of the mechanics and skills of officiating volleyball at the high school and college level. Fall - Alternate years.

#### PE 235 OFFICIATING OF BASKETBALL

(1-0) 1

Designed to teach the student the rules, skills and mechanics of officiating basketball. Winter.

#### PE 236 OFFICIATING OF WRESTLING

(1-0) 1

Discussion and practice in the techniques of officiating wrestling, with an intensive study of the rules of both high school and college. Winter - Alternate years,

#### PE 243 PERSONAL HEALTH

(3.0) 3

A study of the basic facts related to the health of the individual with a strong emphasis on the social implication of these facts. Fall and Winter.

#### PE 254 ADAPTED PHYSICAL EDUCATION

(2.0) 2

Background and foundation - understanding the individual who is atypical. Sociological and psychological implication. How an adapted program is developed. Organization, administration, methods of teaching, test and measurements, relaxation and therapeutic exercises. Understanding specific disabilities. Fall. Prerequisite: PE 198.

#### PE 260 ANATOMICAL KINESIOLOGY

(3.1) 3

An in-depth study of the basic body movements; osteology; applied myology; spatial relations of muscles to joints; aggregate muscle action; kinesiologic constructs of summation of internal forces, aerodynamics, and hydrodynamics; techniques for cinematographic and non-cinematographic analysis of sport skills. Winter.

Prerequisite: PE 198.

PE 265 HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION

The history of physical education from ancient civilization to the present day. Special emphasis given to the philosophical approaches to the profession by outstanding physical educators. Each student develops a philosophy of physical education. Fall.

#### PE 275 PRINCIPLES OF PHYSICAL EDUCATION

(2-0) 2

(2-0) 2

Examination of the psychological, sociological, and physiological principles underlying the philosophies, objectives, and curriculum of physical education. Winter.

#### PE 299 INDIVIDUALIZED STUDY

1.3

Opportunity to investigate a significant problem through laboratory or library research under the supervision of a faculty member. Fall and Winter.

Prerequisite: approval of department chairman and instructor after presentation of a problem outline. Not available to majors of Junior or Senior standing.

## PE 340 MOTOR LEARNING: PRINCIPLES AND PRACTICES

(3-0) 3

Principles involved in learning motor skills, the individual variables which affect this learning, and the practice and techniques for improving motor performance. Fail.

#### PE 350 MEASUREMENT AND EVALUATION

(3-0) 3

Administration of tests in physical education. Obtaining data from test, analyzing this data, and the evaluation and interpretation of this data. Winter,

#### PE 360 PHYSIOLOGICAL KINESIOLOGY

(3-1) 3

Theory and laboratory investigations into the temporary and adaptional adjustments of selected bodily systems to the stress of human movement and under different intensities, durations, and environments. Fall.

Prerequisite: PE 198.

# PE 370 METHODS OF TEACHING ELEMENTARY PHYSICAL

#### EDUCATION

(3-0) 3

Emphasis will be upon values, principles, objectives, growth and development characteristics, curriculum construction, and general methods of organizing and teaching physical education in Grade K-6. Fall and Winter.

#### PC 371 ELEMENTARY PHYSICAL EDUCATION SKILLS

12.00 3

Experience in analyzing and presenting physical education skills with an understanding of progression and appropriate methods for elementary school children. Fall term.

Prerequisite: PE 370.

#### PE 372 MOTOR AND PERCEPTUAL-MOTOR DEVELOPMENT

(1-0) - 1

Designed to acquaint classroom teachers and physical educators with theories, principles, activity selection, and relationships between motor, perceptual-motor and cognitive development of elementary and pre-school children, Winter.

Prerequisite: PE 370.

#### PE 375 PSYCHOLOGY OF COACHING

(2.0) 2

Examination of psychological principles and concepts as they apply to athletes and coaches involved in competitive sports. Fall,

Prerequisite: Psych 157.

PE 410 CURRICULUM CONSTRUCTION IN PHYSICAL EDUCATION (2-0) 2 Examination of principles, practices, functional philosophies and trends as they relate to curriculum construction of Grades K-12. Fall.

### PE 420 SOCIAL DIMENSIONS OF PHYSICAL EDUCATION

(2-0) 2

Development of a theoretical framework and an analysis of research concerning socio-cultural influences on physical education activities and sport; interrelationships among forces in society and physical education and their effect upon the individual and the group. Winter.

## PE 480 ORGANIZATION AND ADMINISTRATION OF HEALTH & PHYSICAL EDUCATION PROGRAMS

(3-0) 3

Relationships, procedure and problem solving approaches in effective organization and administration of health, physical education, recreation, and athletic programs. Budget, use of facilities and equipment, legal responsibilities, public relations, policy development and supervision are analyzed. Fall. Prerequisite: junior standing.

## PE 496 SEMINAR IN PHYSICAL EDUCATION

(2.0) 2

Discussions and inquiries dealing with contemporary issues, trends and problems in physical education. Winter.

Prerequisite: lunior standing.

#### PE 499 INDEPENDENT STUDY

1-3

Opportunity to investigate a significant problem through laboratory or library research under the supervision of a faculty member. Fall and Winter. Prerequisite: approval of department chairman and instructor after presentation of a problem outline. Senior standing.

# Psychology

John F. Hale, Chairman;
Professor John F. Hale;
Associate Professors Nicholas J. Heidy,
Harold L. Mansfield, Robert M. Wageman,
Assistant Professors Sarah Jane Harmel, Robert Parks, Jr.,
and Roger Peters

Psychology is the study of behavior. The basic problems of the field of psychology are describing, understanding, predicting, and controlling behavior. The curric-

ulum in psychology attempts to expose the student to the approaches taken to these basic problems. He is presented with current research findings and theoretical positions regarding motivation, perception, personality, adjustment, learning, and thinking. He is trained in research procedures, and in the application of psychological principles to the solution of problems of personal and social relevance.

Course offerings are designed to serve three purposes: (1) to give students an insight into human behavior and thus prepare them to live a more productive and enjoyable life; (2) to meet needs of students planning to enter vocations such as teaching, business, law, or nursing where a psychological understanding is required or desirable; and (3) to prepare students for graduate study in psychology or allied fields such as social work, counseling, or medicine.

Students majoring in Psychology may be certified to teach in the broad area of Social Studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education.

A Handbook for Psychology Majors is available to assist the student in preparing a program of courses to effectively achieve the purposes described.

#### BACHELOR OF ARTS DEGREE WITH A MAJOR IN PSYCHOLOGY

Specific Depa	ertmental Requirements		
Psych 157	General Psychology	3	
Psych 159	General Psychology	3	
Psych 219	Experimental Psychology	4	
Psych 241	Quantitative Methods in Psychology	3	
Psych 242	Psychological Testing	3	
Psych 254	Developmental Psychology	3	
Psych 365	Psychology of Learning	4	
Psych 385	Historical Intro. to Modern Psychology	4	
Psych 387	Abnormal Psychology	3	
Psych 496	Senior Seminar	2	
		32	32

Twelve additional hours in either Psychology electives or electives from related fields, or a combination of both. Electives should be selected in consultation with Psychology Advisor.

A list of "related field" electives is as follows:

Any Foreign Language

Biology 100 and 101

Biology 121 — Human Anatomy and Physiology

Biology 371 — Genetics

Physical Science 105 or above

Chemistry 115 or above

Math 160 and 260 - Linear Math and Probability

Philosophy 351 — Contemporary Philosophical Issues

Anthropology 151 or above

Sociology 101 or above

Economics 261 and 262

This list can be extended to include any course or program which is reviewed and accepted by the Psychology faculty. It should be noted that courses on this list should not be counted toward both Psychology Department requirements and General Distribution Requirements.

Psych 157 GENERAL PSYCHOLOGY

(3-0) 3

An introduction to the scientific study of behavior, the basic learning process, and motiviation, with attention given to social behavior. Offered every term.

Psych 159 GENERAL PSYCHOLOGY

(3.0) 3

An extension of basic principles to the area of complex human behavior. An attempt is made to integrate these principles with other approaches such as that of Freud. The course includes basic experimentation in both lectures and laboratory. Offered every term.

Prerequisite: Psych 157.

Psych 218 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION (3-0) 3
An introduction to the psychological principles relevant to education. Offered every term.

Prerequisite: Psych 157.

Psych 219 FOUNDATIONS OF EXPERIMENTAL PSYCHOLOGY (3-2) 4 Introduction to the basic assumptions, concepts, and methodology of experimentation in psychology. The course includes a study of general scientific concepts, definition of terms, measurement, techniques of observation, and experimental design. Laboratory is designed to provide skill in implementing simple experiments in various psychological fields. Fall term.

Psych 225 PRINCIPLES OF OPERANT BEHAVIOR

Prerequisite: Psych 159, Psych 241 or consent of instructor.

(3-2) 4

An introduction to the experimental analysis of human and animal behavior. The student learns basic operant conditioning methodology and applies operant principles to problems of everyday life. It is an applied psychology course suitable for education and other non-psychology majors as well as psychology majors. Winter term.

Prerequisite: Psych 157.

Psych 228 INDUSTRIAL PSYCHOLOGY

(3-0) 3

An introduction to the application of psychology to the industrial environment, including personnel recruitment and selection, job analysis, supervisory practices, training, systems design, decision-making, and organizational theory. Winter term. Prerequisite: none.

Psych 241 QUANTITATIVE METHODS IN PSYCHOLOGY (3-0) 3 Introduces student to basic data analysis procedure used in psychology. Presents descriptive and inferential statistics with practice in their use with behavioral data. No more than a total of 3 credits can be earned toward graduation for BA 251, Math 201 or Psych 241 because of a uniform syllabus. Fall and Winter terms. Prerequisite: Psych 159.

### Psych 242 PSYCHOLOGICAL TESTING

(3-0)

A course designed to introduce the student to the area of psychological tests and measurements, providing training in the concepts and application of intelligence tests, personality inventories, and projective techniques, as well as aptitude and interest scales. Fall and Winter terms.

Prerequisite: Psych 241.

#### Psych 254 DEVELOPMENTAL PSYCHOLOGY

(3.0) 3

Principles of development in childhood and adolescence. Fall and Summer terms. Prerequisite: Psych 159 or Psych 218 or consent of instructor.

#### Psych 300 RESEARCH DESIGN IN HUMAN BEHAVIOR

(3-0) 3

The course is designed to supplement Psych 219, Foundations of Experimental Psychology. It includes methods and tools of research other than laboratory experimentation, such as historical, case study, descriptive, field, observational and expost facto investigations. An emphasis will be made on the design of psychological research. Psychological and educational models, social system models, and computer simulation will also be a part of this course.

Prerequisite: Psych 241 or Math 201, or consent of instructor.

#### Psych 327 PHYSIOLOGICAL PSYCHOLOGY

12:20:4

Study of basic neuroanatomy, neurophysiology, and other physiological variables in the prediction and understanding of behavior. Attention is paid to contemporary and classical research. Winter term — alternate years.

Prerequisite: Psych 219 or consent of instructor.

### Psych 365 PSYCHOLOGY OF LEARNING

(3-2) 4

The conditions of learning in animals and men as found in the experimental literature. Fall term.

Prerequisite: Psych 159 or Psych 218 and consent of instructor.

#### Psych 368 CULTURE AND PERSONALITY

(3-0) 3

A study of the cultural determinants of perception and behavior. Fall term. Prerequisite: Psych 159 or consent of instructor.

# Psych 385 HISTORICAL INTRODUCTION TO MODERN PSYCHOLOGY

(4-0) 4

A study of the philosophical and scientific antecedents of modern psychology, together with a review of the classical psychological systems and theories from ancient times to the present. Fall term.

Prerequisite: Psych 159 or consent of instructor.

#### Psych 387 ABNORMAL PSYCHOLOGY

(3-0) 3

A review of the various models employed in the understanding, prediction and change of disorganized behavior. Winter term.

Prerequisite: Psych 159 or consent of instructor.

## Psych 472 PSYCHOLOGY OF PERSONALITY

(3.0) 3

The psychological and physiological nature of personality. The course devotes study to individual differences and the development of personality. Winter term. Prerequisite: Psych 159 or consent of instructor. Psych 496 SEMINAR

(2.0) 2

Advanced study and research in selected topics. Fall and Winter terms.

Prerequisite: senior standing and permission of instructor.

Psych 499 INDEPENDENT STUDY

1.3

Individual research is conducted under the supervision of a faculty member. Fall and Winter terms.

Prerequisite: approval of Department Chairman.

# CENTER OF SOUTHWEST STUDIES

# MAJOR IN SOUTHWEST STUDIES

with concentrations in

ANTHROPOLOGY

HISTORY

SPANISH

ROBERT W. DELANEY, Director



# Southwest Studies

Professors Robert W. Delaney (Chairman), John C. Ives, and Duane A. Smith; Associate Professor John Tapia.

The major in Southwest studies is an area major made up of courses in history, anthropology, and Spanish, as the central core of the major, plus certain auxiliary courses. All three of these are included in the major to some extent, but there are three separate patterns listed, and the student is to choose one of these for special emphasis. In considerable measure, programs will be tailored to each individual major. This major would provide that a student be able to enter a graduate school in the field of his major emphasis, and it is expected that careers in state and local governments would be open to majors in Southwest studies.

Students majoring in Southwest Studies may be certified to teach in the broad area of Social Studies at the secondary level. To obtain requirements for teacher certification, please contact the Department of Teacher Education. A minor may be obtained in S.W. Studies. See Department Chairman.

## BACHELOR OF ARTS DEGREE WITH A MAJOR IN SOUTHWEST STUDIES — HISTORY EMPHASIS

General Studies.....

History Req		
Hist 280,	Survey of American History I	3
Hist 280,	Survey of American History II	3
Hist 270,	Survey of Latin American History I	3
Hist 370,	History of Mexico	3 3 3
Hist 480,	History of the Southwest	3
Hist 480, or	Transmississippi West	
Hist 480,	20th Century U.S.	3
		18
west, may	121, Social and Political History of Indians of be substituted for one or two of the following bry of Mexico; Hist 480, Transmississippi We ury U.S.)	courses: Hist
anguage R	equirement	
To the second se		
	ice in Spanish equal to 12 hrs. above	
Competer	nce in Spanish equal to 12 hrs. above ny Spanish I & II	12
Competer Elementa	ry Spanish I & II	12
Competer Elementa othropolog		12

Literature an	d Sociology Requirements		
Two of the	following required:		
Engl 280,	Literature of the Southwest	3	
Engl 276,	Folklore of the Southwest	3	
Soc 279,	The Hispano in the Southwest	3	
		6	
Science Rea	uirements		
At least tw	o courses selected from the biological and		
physical s	ciences which have to do with the Southwest	6	
Research Re	quirements		
SW 498.	Problems in Southwest Studies I	3	
Sw 499,	Problems in Southwest Studies II	3	
	d SW 499 fulfill the requirement of Seminar or		
	dent Study required of other majors	6	5
Electives	**********************		3
내용에 다양하다 되었다.	RED FOR GRADUATION		
TOTAL REQUIR	TED FOR GRADOATION	10.000.000	14.
BACHELOR OF	ARTS DEGREE WITH A MAJOR IN		
	TUDIES - ANTHROPOLOGY EMPHASIS		
General Studies	5	rina nasasa	4
45425555355			
	y Requirements		
	Introduction to Anthropology	3	
	Archaeology of the Southwest,	0.00	
100000000000000000000000000000000000000	he Anasazi Culture	4	
	Archaeology of the Southwest	400	
	lohokam and Mogollon Cultures	4	
	Field Training in Archaeology Topics in Ethnography:	6	
	of the Southwest	3	
West State of the	ov. triansament toward	-	
		20	
History Requ	irements		
the state of the s	o courses dealing with Southwestern history to		
	d by the Director, at least one of which must be		
History 480	[1] 2시 2 [1] 다른 [1] [1] [2 [2] [2 [2] [2] [2 [2] [2] [2] [2 [2] [2]	6	
anguage	literature, social science, science and research		
	nts the same as in history emphasis	30	56
Electives			29
TOTAL REQUIR	ED FOR GRADUATION		. 128
BACHELOR OF	ARTS DEGREE WITH A MAJOR IN		
	TUDIES - SPANISH EMPHASIS		
General Studies	Barrana and a same and a same a s	10.51943 (CV) (SV)	41

Spanish Hequirements		
Foreign Language competence equivalent		
to FL 216, Intermediate Spanish II	14	
Three courses in advanced Spanish with Mexican Literature and Hispanic American Civilization (in Spanish and English)		
사용 전경을 받는 경기 (1) 전경 (1) 전 (1	0	
being recommended	9	
History Requirements		
Hist 270, Survey of Latin American History	3	
Hist 370, History of Mexico	3	
Hist 480, History of the Southwest	3	
(Hist 120 or 121, Social and Political History of Indians		
of the Southwest may be substituted for Hist 370, History		
of Mexico)		
Anthropology, literature, social science, science, and research		625
requirements the same as in the history emphasis.	24	56
Electives		31
TOTAL REQUIRED FOR GRADUATION	*****	. 128
COURSES		
SW 100 FUNDAMENTALS OF NAVAJO LANGUAGE	(3	3-0) 3
A course in the basic fundamentals of the Navajo language on the	0.77	
proach. A native speaker is the instructor and much use is made of		
SW 101 NAVAJO LANGUAGE II	(3	3-0) 3
A continuation of Navajo I. Whereas Navajo I emphasized speaking, th	is cours	e will
center on reading and writing the Navajo language.		
Prerequisite: Navajo I or approval of instructor.		
	222 12	02020
SW 111, 112 INDIAN ARTS AND CRAFTS	111-(0	
	112-(0	
A two-term course which includes such media as weaving, silversmit		
work, leathercraft, bead work, and basketry. Each course will end with	an exnit	on
of student work. Fall and Winter terms.		
SW 120, SOCIAL AND POLITICAL HISTORY OF	15	3-0) 3
121 INDIANS OF THE SOUTHWEST	10	10/ 3
These courses are the same as Hist 120 and 121. See History.		
meso courses are the same as that the and the court hardy.		
SW 211 ART HISTORY OF THE SOUTHWEST	(3	3-0) 3
A comprehensive study of the art forms developed in the Southwe	0.70	1000
present.		
SW 280 NATIVE AMERICAN IN THE MODERN WORLD	(	3-0) 3
An advanced study of contemporary affairs that involve the America	n Indian	n. The
historical beginnings, development, and current significance of issue	s will be	stud-
led.		
CHICAGO ALLEDIGANI INDIANI DINI COCCINITO		0.00
SW 322 AMERICAN INDIAN PHILOSOPHIES		3-0) 3
The course will look at the various aspects of American Indian philoso		
manifestations of those philosophies. The course will study both frad		

ophies and those which have been changed through contact with American so-

ciety.

Spanish Requirements

171

#### SW 365 HISPANIC CIVILIZATION

(3.0) 3

Contributions of Spain and Portugal to the building of Western civilization. Topics include: Great Age of Exploration, Golden Age of Spanish-Portuguese Civilization, masterworks of literature, and History of Ideas. Offered on demand.

#### SW 375 HISPANIC-AMERICAN CIVILIZATION

(3-0) 3

The literature, culture, thought, art, anthropology, history, geography, and contemporary position of Hispanic-American civilization. Offered on demand.

#### SW 381 MEXICAN AMERICAN LITERATURE

(3-0) 3

A study of selected literary works by Mexican American authors (from the traditional Hispanic period to the current Chicano Movement) Designed to give an appreciation and awareness of the culture of Mexican Americans and to show their literary contributions to the main body of world literature.

#### SW 481 COLORADO HISTORY

(3-0) 3

The history and peoples of Colorado from the preterritorial days through the present.

#### SW 482 MINING IN THE AMERICAN WEST

(3-0) 3

From the days of the Spanish to today, a history of mining and its impact, with special emphasis on the Southwest.

#### SW 498 PROBLEMS IN SOUTHWEST STUDIES I

3

A senior-level individual research project based on the needs and interests of the individual. Offered on demand.

Prerequisite: approval of Committee.

#### SW 499 PROBLEMS IN SOUTHWEST STUDIES II Same as above.

3

For other course descriptions, see listings under the appropriate disciplines.



# The Register

# 1980-81

# The State Board of Agriculture

	Address	Term Ends
ROBERT L. BEERS	. Durango	1981
THOMAS T. FARLEY	. Pueblo	1982
JOHN D. FUHR	. Denver	1981
JEAN C. GRAHAM	. Lakewood	1983
BEVERLY HADDON		1981
EDMOND F. NOEL, JR		1983
JOHN STENCEL, III	. Aurora	1981
JOHN F. STEGNER	. Fort Collins	1981

# Officers

EDMOND F. NOEL, JR	President
EUGENE PETRONE	xecutive Director
J. R. HEHN	Treasurer
DANIEL E. BLACK	Deputy Treasurer

# Fort Lewis College Foundation

The Fort Lewis College Foundation functions apart from the College for the purpose of soliciting, receiving, managing, and disbursing gifts to Fort Lewis College. Donors may designate gifts for specific programs or for general college use.

For further information, please contact the Program Coordinator, the Foundation Board of Directors (Fort Lewis College), or the Office of the President, Fort Lewis College.

# **Board of Directors**

MRS. CLAY BADER DR. W. P. BALL RICHARD G. BALLANTINE. Secretary MRS. EARL A. BARKER, JR., Vice President ROBERT L. BEERS LEONARD BURCH JACKSON CLARK ROBERT C. DUTHIE HORACE B. GRIFFEN JAMES M. JACKSON GEORGE A. KING

FRED V. KROEGER MRS. AUGUSTINE MARTINEZ LAWRENCE W. McDANIEL F. F. MONTOYA MRS. ROGER A. PTOLEMY J. DOUGLAS SHAND, Treasurer JOE D. TIPTON R. W. TURNER, JR., President STANLEY WADSWORTH MAHLON T. WHITE ROBERT WILLARD ARTHUR M. WYATT RUSSELL E. YATES, ex officio

# Administrative Cabinet

REXER BERNDT President DANIEL E. BLACK, Director, Budget and Planning ROBERT W. DELANEY, Director Center of Southwest Studies BILL D. ENGMAN, Acting Vice DONALD F. WHALEN, Dean President for Student Affairs AUBREY HOLDERNESS. Acting Dean, School of Business Administration

LARRY S. JOHNSON, Dean School of Arts and Sciences CLAYTON L. KYLE **Business Manager** JULIAN H. MURPHY Vice President for Academic Affairs School of Education

# Administration and Programs

JAMES ASH, Supervisor Cooperative Education TROY D. BLEDSOE Director of Athletics CONRAD CHAVEZ, Director Financial Aids CAROLYN J. DAILEY, Director, Institutional Research and Planning CYNTHIA DAVIS, Supervisor College Union and Student Activities JAMES E. DEZENDORF. Contract Administrator and **Purchasing Agent** NANCY ELLIOTT Public Affairs Officer BILLIE G. HELMS Asst. Controller WILLIAM HILL, Assistant Director of Housing B. LANCE HURT, Assistant Dean, Counseling Services JAMES J. JONES, Director Support Services MERLE E. JOOSTEN Operations Supervisor,

AUGUSTINE MARTINEZ Registrar MARY JEAN MOSELEY. Coordinator Cultural Studies Program JOSEPH P. PERINO Controller O. D. PERRY, Manager Computer Center CHARLES H. REID, JR., Director Admissions and Records SHERI R. ROCHFORD Admissions Counselor SUSAN SMITH, Assistant Registrar DONOVAN E. SNYDER, **Director Continuing** Education HARLAN STEINLE Supervisor of Admissions JACK SYLVESTER Bookstore Manager JOE E. WOLCOTT, Director of Housing and Assoc. Dean of Student Affairs LINDA YEAGER, Ass't. Director of Financial Aid

# Library

RICHARD L. GOBBLE
Head Librarian
JOHN CROWDER
Librarian
ESTHER T.C. LIU
Librarian

Computer Center

SUSAN PERRY Librarian HARROLD S. SHIPPS, JR Librarian DEBORAH SOWLE Librarian

# **EMERITI**

BERG, DAVID, Associate Professor Emeritus B.A., Colorado College M.S., University of Utah

BOWMAN, WILLARD O., Professor of Psychology Emeritus B.A., Berea College B.Eng., I.T.I., University of Chicago M.A., University of Colorado Ed.D., University of Colorado

FOX, MAYNARD, Professor of English Emeritus A.B., Fort Hays Kansas State College M.A., Fort Hays Kansas State College Ph.D., University of Colorado

KELLY, FLOYD, Asst. Professor of Business Emeritus A.B., Colorado State College M.A., Colorado State College

REED, JOHN F., President Emeritus B.A., Dartmouth College M.A., Duke University Ph.D., Duke University

\*TATE, NORVEL G., Professor of Secondary Education Emeritus
B.A., New Mexico Highlands University
M.A., University of New Mexico
Ed.D., University of Southern California

TAYLOR, RANDALL D., Professor of Physical Science Emeritus B.S., University of Nebraska M.Ed., Adams State College

\*REEDER, RAY M., Professor of History Emeritus B.S., Utah State University Ph.D., Brigham Young University

# Academic Faculty 1980-81

ALLISON, MICHAEL L., Instructor of Physical Education (1978)\* B.A., Adams State College, 1974 M.A., Adams State College, 1977

ANDERSON, BERNARD E., Professor of Business Adm. (1971)
B.S., Arizona State College, 1960
M.A., University of Arizona, 1961
Ph.D., The Ohio State University, 1964

ASH, JAMES K., Coordinator, Cooperative Education Program; Assistant Prof. of History (1970) B.A., University of Calif. (Berkeley) 1967 M.A., Harvard University, 1970

ATENCIO, LEONARD D., Assoc. Professor of Economics (1968) B.A., Fort Lewis College, 1964 Ph.D., Kansas State University, 1969

BAARS, DONALD L., *Professor of Geology* (1968) B.S., University of Utah, 1952 Ph.D., University of Colorado, 1965

BADGER, LEE, Asst. Professor of Mathematics (1979)
A.B., University of Missouri, 1968
M.A., University of Colorado, 1970
Ph.D., University of Colorado, 1975

BAKER, JAMES R., Assoc. Professor of Engineering (1966-70/1973)
B.S.C.E., University of New Mexico, 1965
M.S.C.E., University of New Mexico, 1966
P.E., Colorado, 1968
M.S.C.E., Purdue University, 1971
L.S., Indiana, 1972; Colorado, 1973
Ph.D., Purdue University, 1975

BARTLETT, WILLIAM R., Asst. Professor of Chemistry (1978) B.A., Luther College, 1965 Ph.D., Stanford University, 1969

BASS, DAVID J., Assoc. Professor of Political Science (1970)
B.Sc., The Ohio State University, 1943
M.A., University of Chicago, 1947
Ph.D., University of Chicago, 1972

# BELL, GREGORY W., Assistant Prof. of Mathematics (1978) B.A., University of Utah, 1969

M.A., University of Michigan, 1972 Ph.D., University of Michigan, 1976

# BERNDT, REXER, President (1969)

B.S., University of Denver, 1949

M.B.A., University of Denver, 1950

Ph.D., University of Colorado, 1956

# BIRD, G. LEONARD, Professor of English (1969)

B.A., San Diego State College, 1961

M.A., University of Utah, 1963

Ph.D., University of Utah, 1969

# BLAIR, ROBERT W., Jr., Asst. Professor of Geology (1973)

B.S., University of New Mexico, 1966

Ph.D., Colorado School of Mines, 1975

# BLEDSOE, TROY, Director of Athletics; Assoc. Professor of Physical Education (1974)

B.A., Hendrix College, 1949

M.A., Memphis State University, 1955

Ph.D., University of Denver, 1973

## BOOKER, JOHN M., Asst. Professor of Sociology (1979)

B.A., University of South Alabama, 1970

M.A., University of South Alabama, 1972

M.S., Florida State University, 1975

Ph.D., Florida State University, 1977

# BORDNER, KENNETH E., Assoc. Professor of Theatre (1972)

B.A., Princeton University, 1963

M.A., University of Massachusetts, 1965

M.F.A., University of Massachusetts, 1966

# BOWMAN, FRANK O., JR., Professor of Geology (1959)

A.B., Williams College, 1941

B.S., University of North Carolina, 1942

Ph.D., University of North Carolina, 1954

# BROCHU, EDITH W., Professor of Education (1970)

B.S., University of Kansas, 1951

M.A., University of Northern Colorado, 1967

Ed.D., University of Northern Colorado, 1970

# BURNS, SAMUEL A., Asst. Professor of Sociology (1972) B.A., University of San Francisco, 1963

BUSHNELL, DONALD D., Professor of Mathematics (1960)
B.S., Kearney State College, 1951
M.A., University of Northern Colorado, 1957
Ed.D., University of Northern Colorado, 1969

BYRD, JOHN, Instructor of Business Administration (1979)

B.A., Fort Lewis College, 1977 M.P.P.M., Yale University, 1979

CALHOUN, JOHN THOMAS, Asst. Professor of Theatre (1977)

B.A., Williams College, 1962

M.A., Wichita State University, 1967 Ph.D., University of Colorado, 1972

CANO, M. FEDERICO, Assoc. Professor of Foreign Language (1974)

B.S., University of Mexico, 1956

B.S., Saint Louis University, 1963

M.A., Saint Louis University, 1966

Ph.D., Saint Louis University, 1973

CANTILLANO, ODILIE A., Assoc. Professor of Foreign Languages (1971)

M.A., West Virginia University, 1958

Ph.D., Univeristy of Arizona, 1972

CAPP, CLIFFORD B., Instructor of Mathematics, Division of Cultural Studies (1970)

B.S., Colorado State University, 1962

M.S., Colorado State University, 1969

CARGILE, ELLEN, Instructor of Arts and Crafts, Division of Cultural Studies (1973)

B.S., University of Texas, 1953

M.Ed., Arkansas University, 1967

CARR, PATTI ANN, Instructor of Physical Education (1979)

B.S., George Williams College, 1975 M.A., Michigan State University, 1978

CHUNG, HSU-HO, Asst. Professor of Biology (1978)

B.A., National Taiwan University, 1967

M.A., Duke University, 1972

Ph.D., Duke University, 1975

COBURN, MARK D., Assoc. Professor of English (1971)

A.B., University of Chicago, 1963

M.A., Stanford University, 1966

Ph.D., Stanford University, 1969

<sup>\*</sup>Date after title denotes when appointment began at Fort Lewis College,

COE, WILLIAM, Assoc. Professor of Philosophy (1971)
A.B., Dartmouth College, 1957
M.A., Vanderbilt University, 1959
Ph.D., The Pennsylvania State University, 1967

CARREON, LARRY, Instructor and Counselor, Division of Cultural Studies (1978)

B.F.A., New Mexico State University, 1971
M.A., New Mexico State University, 1976

CROWDER, JOHN, Librarian and Asst. Professor (1973) B.A., University of Colorado, 1969 M.A., University of Denver, 1973

CULLEN, LOUIS C., Assoc. Professor of Physical Education (1963) B.S., University of New Mexico, 1948 M.A., University of New Mexico, 1952

DECKER, JAMES C., Assoc. Professor of Political Science (1966) B.A., University of Illinois, 1953 M.A., University of Colorado, 1963 Ph.D., University of Colorado, 1966

DELANEY, MARIA, Professor of Foreign Languages (1958) Akademischer Übersetzer, Univ. of Heidelberg, 1955 Diplom-Dolmetscher, Univ. of Heidelberg, 1956

DELANEY, ROBERT W., Director, Center of Southwest Studies;
Professor of History and S.W. Studies (1957)
B.S., Northeast Missouri State College, 1948
A.B., Northeast Missouri State College, 1948
M.A., University of New Mexico, 1950
Ph.D., University of New Mexico, 1955

DEVER, JOHN E., JR., Assoc. Professor of Biology (1967) B.S., Rutgers University, 1960 M.S., Oregon State University, 1962 Ph.D., Michigan State University, 1967

DIN, GILBERT C., Professor of History (1965)
A.B., University of Calif. (Berkeley) 1957
M.A., University of Calif. (Berkeley) 1958
Doctor en Filosofia y Letras, Univ. of Madrid, 1960

DOWNEY, RALPH A., Assoc. Professor of Music (1969) B.S., Lebanon Valley College, 1949 M.M., University of Montana, 1965 Ed.D., University of Montana, 1974 ECKENRODE, THOMAS R., Assoc. Professor of History (1969)
A.B., St. Vincent College, 1958
M.A., University of Colorado, 1964
Ph.D., St. Louis University, 1970

EHLERS, DENNIS, Asst. Professor of Business Adm. (1977)
B.S., U.S. Air Force Academy, 1971
M.S., University of Calif. (L.A.) 1972
J.D., University of Denver, 1975

ELLINGSON, JACK A., Professor of Geology (1970)
B.S., University of Washington, 1958
M.S., University of Washington, 1959
Ph.D., Washington State University, 1968

ENGLEHART, STANTON, Professor of Art (1961) B.F.A., University of Colorado, 1960 M.F.A., University of Colorado, 1968

ENGMAN, BILL D., Vice President for Student Affairs; Professor of Education (1970)

B.A., Eastern New Mexico University, 1957

M.N.S., Eastern New Mexico University, 1963

Ed.D., University of New Mexico, 1966

ERICKSON, JAMES G., Professor of Biology (1964) B.A., Doane College, 1950 M.S., Iowa State University, 1951 Ph.D., University of Wyoming, 1964

FREIENMUTH, EDWARD S., Professor of Accounting (1978) J.D., University of Colorado, 1949 C.P.A., Colorado, 1964

GASSER, LARRY W., Asst. Professor of English (1976) B.A., Western Washington State College, 1965 M.A., Western Washington State College, 1967 Ph.D., University of Denver, 1975

GIBBONS, DANIEL E., Professor of Physics (1968) B.S., University of Houston, 1964 M.S., University of Houston, 1967 Ph.D., University of Houston, 1969

GIBBS, RICHARD A., Assoc. Professor of Mathematics (1971) B.A., Michigan State University, 1964 M.S., Michigan State University, 1965 Ph.D., Michigan State University, 1970 GIERSCH, MARVIN L., Professor of Physical Education (1970) B.S., Fort Hayes Kansas State College, 1959 M.S., Baylor University, 1960 Ed.D., University of Northern Colorado, 1970

GOBBLE, RICHARD L., Head Librarian and Assoc. Professor (1967)

B.S.B.A., University of Denver, 1948 M.A., University of Denver, 1950

GOODWIN, LeROY W., Professor of Political Science (1957) B.A., University of Colorado, 1947 M.A., University of Colorado, 1955

Ph.D., Columbia University, 1970 GORDON, DONALD R., Asst. Professor of Anthropology (1975)

B.A., Calif. State Univ. (San Francisco) 1964 M.S., University of Oregon, 1969 Ph.D., University of Oregon, 1974

GRAHAM, REGINALD A., Assoc. Professor of Business Adm. (1971)

B.S., Miami University, 1955

M.B.A., Kent State University, 1958

Ph.D., Case Western Reserve University, 1970

GREFSRUD, GARY W., Assoc. Professor of Mathematics (1971) B.S., Montana State College, 1960

M.S., Montana State College, 1962 Ph.D., Montana State College, 1971

HALE, JOHN F., Professor of Psychology (1970)

A.B., Brown University, 1957 M.A., Brown University, 1959

Ph.D., Carnegie-Mellon University, 1963

HAMILTON, RODNEY D., Assoc. Professor of Chemistry (1969) B.S., Marietta College, 1960 Ph.D., Indiana University, 1964

HARMEL, SARAH JANE, Asst. Professor of Psychology (1977) B.A., Antioch College, 1968 M.A., University of Colorado, 1973 Ph.D., University of Colorado, 1977

HARRISON, MERLE E., Professor of Chemistry (1968)

B.S., Brigham Young University, 1955 M.S., Colorado State University, 1957

Ph.D., Colorado State University, 1960

HAYES, WILLIAM E., Asst. Professor of Physical Education (1971) B.S., University of New Mexico, 1962 M.A., University of New Mexico, 1968

HEIDY, NICHOLAS J., Assoc. Professor of Psychology (1971)

A.B., Adams State College, 1962

M.A., Adams State College, 1964

Ed.D., University of Northern Colorado, 1971

HENDERSON, MIRIAM T., Asst. Professor of Business Education (1974)

B.S., University of Utah, 1941

M.S.B.A., University of Denver, 1967

HENNESSEE, PATRICK A., Asst. Professor of Accounting (1979)

B.E., University of Oklahoma, 1966

M.B.A., Western State College of Colorado, 1973

Ph.D., North Texas State University, 1977

HILL, NANCY M., Asst. Professor of Accounting (1979)

B.A., Western State College, 1978

M.S., Colorado State University, 1979

HOLDERNESS, AUBREY E., Dean, School of Business Administration; Professor of Business Adm. (1965)

B.A., Adams State College, 1962

M.A., Adams State College, 1965

Ph.D., University of Northern Colorado, 1972

HOLEHAN, EUGENE L., Asst. Professor of Business Education (1972)

B.A., Arizona State University, 1957

M.A., Northern Arizona University, 1965

Ed.D., Arizona State University, 1972

HUNT, DAVID J., Asst. Professor of Art (1978)

B.A., Brigham Young University, 1967

M.A., Brigham Young University, 1969

IBARRA, ROBERT A., Asst. Professor of Anthropology (1977)

B.A., Northern Illinois University, 1969

M.A., University of Wisconsin (Madison), 1972

Ph.D., University of Wisconsin (Madison), 1976

IVES, JOHN D., Professor of Anthropology (1966)

B.A., State University of Iowa, 1954

A.M., State University of Iowa, 1956

Ph.D., Harvard University, 1960

- JAMES, DONALD L., Professor of Business Administration (1974 B.S., Oklahoma State University, 1957 D.B.A., University of Colorado, 1970
- JAMIESON, DAVID W., Asst. Professor of Biology (1978)
   A.B., Humboldt State University, 1966
   M.A., Humboldt State University, 1969
   Ph.D., University of British Columbia, 1976
- JOHNSON, ARTHUR E., Asst. Professor of Agriculture (1976) B.S., Oklahoma Panhandle State College, 1970 M.S., University of Kentucky, 1974 Ph.D., University of Kentucky, 1979
- JOHNSON, LARRY S., Dean, School of Arts and Sciences; Profes sor of Mathematics (1970) B.A., Western State College of Colorado, 1964
  - M.S., University of Wyoming, 1966 Ph.D., University of Wyoming, 1969
- JONES, ROLAND C., Assoc. Professor of English (1967)
  B.A., University of Michigan, 1956
  M.A., Northern Arizona University, 1963
  Diploma for Advanced Graduate Studies, Michigan State University, 1970
- KELLY, REECE, C., Assoc. Professor of History (1971) B.A., Eastern Washington State College, 1964 M.A., University of Washington, 1967 Ph.D., University of Washington, 1973
- KNIGHT, GARY D., Assoc. Professor of Education (1972)
  B.S., East Central State College, Okla., 1962
  M.T., East Central State College, Okla., 1964
  Ed.S., Eastern New Mexico University, 1970
  Ed.D., University of New Mexico, 1972
- KUSS, ADOLPH M., JR., Professor of Physical Education (1964) B.A., Western State College of Colo., 1952 M.A., Western State College of Colo., 1964
- LaBAUME, JIMMY T., Instructor of Agriculture (1978) B.B.A, North Texas State University, 1972 M.S., Sul Ross State University, 1974 Ph.D., Texas Tech, 1980
- LANG, LILLIAN B., Asst. Professor of English (1973)
  B.A., Portland State University, 1961
  M.A., University of Calif. (Santa Barbara) 1967
  Ph.D., University of Calif. (Santa Barbara) 1976

- LEAVITT, DINAH L., Asst. Professor of Theatre (1978) B.A., University of Mississippi, 1969 M.A., University of Mississippi, 1970 Ph.D., University of Colorado, 1978
- LeGAULT, MAURICE E., Assoc. Professor of Music (1972) B.S., University of Minnesota, 1957
  - M.A., University of Minnesota, 1961 Ph.D., University of Minnesota, 1969

Ph.D., University of Arizona, 1975

- LIKES, ROBERT N., Assoc. Professor of Physics (1974)
  B.A., Wayne State College, 1960
  M.Sci.Ed., University of Utah, 1965
  Ph.D., University of Wyoming, 1973
- LINDSEY, JULIA PAGE, Asst. Professor of Biology (1978) B.A., Hendrix College, 1970 M.S., University of Arizona, 1972
- LINTON, NORMAN, Assoc. Professor of Sociology (1973) B.A., Reed College, 1958 M.A., University of Oregon, 1960
- LIU, ESTHER T. C., Librarian and Assoc. Professor (1963) B.A., National Fu Tah University, 1944
  - M.A., University of Minnesota, 1953 M.A., University of Denver, 1954 Ed.D., University of Northern Colorado, 1976

Ph.D., University of Calif. (Berkeley) 1972

- LUM, DENNIS W., Asst. Professor of Sociology (1975) B.A., University of Nevada (Reno) 1966 M.A., University of Nevada (Reno) 1971
  - M.A., University of Calif. (San Diego) 1973
- LYNCH, VERNON E., JR., Asst. Professor of Economics (1972) B.A., University of Texas (Austin) 1965 M.A., University of Texas (Austin) 1967 Ph.D., University of Arizona, 1976
- MALICK, LAWRENCE, Instructor of Economics (1978) B.A., University of Colorado, 1962
  - M.A., Princeton University, 1964 J. D., University of Calif. (Berkeley) 1973)
- MacKEEFE, DEBORAH A., Asst. Professor of Foreign Languages (1972)
  - Degree Superieure, Sorborne, 1965 B.A., University of Arizona, 1966 M.A., University of Arizona, 1969

Ph.D., University of Arizona, 1972

MANSFIELD, HAROLD L., Assoc. Professor of Psychology (1974)

B.S., Colorado State University, 1958

M.A., University of Denver, 1967

Ph.D., University of Denver, 1974

McNITT, JOHN B., Asst. Professor of Physical Education; Football Coach (1970)

B.S., University of New Mexico, 1962

M.A., University of New Mexico, 1968

MEHS, DOREEN M., Asst. Professor of Chemistry (1973)

B.A., Harpur College, SUNY Binghamton, 1966

M.A., State University of N.Y., Binghamton, 1972

MILLS, JAMES W., Assoc. Professor of Chemistry (1973)

A.B., Earlham College, 1963

Ph.D., Brown University, 1967

MOUCK, TOM W., Assistant Professor of Accounting (1979)

B.B.A., University of Texas at Arlington, 1967

M.A., University of Texas at Arlington, 1973

MOSELEY, MARY JEAN, Coordinator, Division of Cultural Studies (1973)

B.A., Northern Arizona University, 1964

M.A., The University of New Mexico, 1970

MURPHY, JULIAN H., Vice President for Academic Affairs; Professor of Business Administration (1979)

A.B., Stetson University, 1951

M.A., Stetson University, 1952

A.M., Fletcher School, Harvard and Tufts University, 1953

Ed.D., University of Massachusetts, 1974

NORTON, TOM D., Asst. Professor of Physical Sciences and Engineering (1973)

B.S., University of Oklahoma, 1966

M.S., University of Oklahoma, 1967

Ph.D., University of Oklahoma, 1972

ORR, DELILAH, Instructor-Counselor, Division of Cultural Studies (1976)

B.A., Fort Lewis College, 1971

M.ED., Harvard Graduate School of Education, 1975

PARKS, ROBERT JR., Asst. Professor of Psychology (1976)

B.A., West Virginia State College, 1951

M.A., Michigan State University, 1953

Ed.D., University of Washington, 1974

## PAVICH, PAUL N., Asst. Professor of English (1978)

B.A., Walsh College, 1967

M.A., Colorado State University, 1968

Ph.D., University of New Mexico, 1973

#### PERIMAN, KENNETH I., Professor of English (1962)

B.A., University of Colorado, 1951 M.A., University of Colorado, 1953

#### PERRY, SUSAN, Librarian and Instructor (1978)

B.A., University of Minnesota, 1974 M.A., University of Denver, 1976

#### PERRY, O. D., Manager of Computer Center; Asst. Professor of Mathematics (1972)

B.B.A., New Mexico State University, 1968

M.S., New Mexico State University, 1970

#### PETERS, ROGER, Asst. Professor of Psychology (1975)

B.A., University of Chicago, 1965

Ph.D., University of Michigan, 1974

#### PETERSON, CARROLL V., Professor of English (1968)

B.S., University of Minnesota, 1958

M.A., University of Iowa, 1959

Ph.D., University of Iowa, 1963

#### PIXLER, PAUL W., Professor of Philosophy (1967)

A.B., Kletzing College, 1944

B.D., Asbury Theological Seminary, 1947

S.T.M., Harvard University, 1949

Ph.D., Boston University, 1958

#### PLOTKIN, IRA L., Assoc. Professor of History (1975)

B.A., University of Rochester, 1964

M.A., University of Michigan, 1966

Ph.D., University of Michigan, 1974

# PODLESNIK, RICHARD A., Asst. Professor of Business Adm. (1979)

B.S., Illinois Institute of Technology, 1971

M.S., Illinois Institute of Technology, 1971

Ph.D., Northwestern University, 1977

#### RAMALEY, WILLIAM C., Assoc. Professor of Mathematics (1973)

B.Sc., Ohio State University, 1961

M.A., University of Colorado, 1963

Ph.D., University of Colorado, 1969

REGELMANN, VIRGINIA A., Asst. Professor of Education (1978)

B.A., SUNY, Oswego, 1972
M.S., SUNY, Oswego, 1973

Ph.D., Arizona State University, 1978

REID, CHARLES H., JR., Director of Admissions and Records;

Asst. Professor of Education (1950)

A.B., Montclair State College, 1948 M.Ed., University of Colorado, 1949

RICHARDSON, LYNN J., Asst. Professor of Business Adm. (1979)

B.S., University of Southwestern Louisiana, 1955

B.S., University of Oklahoma, 1963

M.A., University of Southern Calif., 1969

RICHES, SUSAN M., Assoc. Professor of Anthropology (1971)

B.A., Eastern New Mexico University, 1964

M.A., University of Wisconsin, 1970

Ph.D., University of Wisconsin, 1976

RITCHEY, JOHN M., Professor of Chemistry (1972)

B.A., Wichita State University, 1962

Ph.D., University of Colorado, 1968

ROBERTSON, W. GLENN, Asst. Professor of History (1979)

B.A., University of Richmond, 1966

M.A., University of Virginia, 1968

Ph.D., University of Virginia, 1975

ROSENBERG, HARRY C., Assoc. Professor of Mathematics (1964)

B.A., University of Northern Colorado, 1956

M.A., University of Northern Colorado, 1957

M.A., University of Illinois, 1964

ROSHONG, JAN CARL, Asst. Professor of Music (1979)

B.S., The Ohio State University, 1965

M.A., The Ohio State University, 1974

Ph.D., The Ohio State University, 1978

SALAZAR, TOMAS E., Asst. Professor of Mathematics (1976)

B.S., New Mexico Highlands University, 1965

M.A., University of Montana, 1969

Ph.D., University of New Mexico, 1978

SANDERS, JOAN M., Assoc. Professor of Physical Education (1972)

B.A., Stanford University, 1950

M.A., Stanford University, 1951

Ph.D., University of Denver, 1970

- SEALE, CAROL M., Asst. Professor of Physical Education (1969) B.A., Carroll College, 1962 M.A., University of Northern Colorado, 1968
- SHIPPS, HARROLD S., JR., Librarian and Assoc. Professor (1970)
  B.S., Bridgewater State College, 1949
  M.Ed., Bridgewater State College, 1960
  M.S.P.A., George Washington University, 1964
  M.A. in Librarianship, University of Denver, 1967
  Ph.D., University of Denver, 1969
- SIMMONS, JANICE, Asst. Professor of Education (1977)
  B.A., University of Arizona, 1960
  M.Ed., University of Arizona, 1970
  Ed.D., University of Northern Colorado, 1978
- SIMMONS, LINDA, Bilingual/Bicultural Specialist, Division of Cultural Studies (1976) B.A., New Mexico Highlands University, 1970
- SMITH, DUANE A., Professor of History (1964) B.A., University of Colorado, 1959 M.A., University of Colorado, 1961 Ph.D., University of Colorado, 1964
  - SOMERS, LEE PRESTON, Assoc. Professor of Biology (1969) B.S., Wake Forest University, 1967 M.A., University of Colorado, 1969 Ph.D., University of Colorado, 1971
- SOWLE, DEBORAH, Librarian and Instructor (1977) B.A., University of Wisconsin (Madison) 1971 M.A., University of Wisconsin (Madison) 1975
- SPANGSBERG, DONALD, Asst. Professor of Industrial Arts (1957)
  B.A., Kearney State Teachers College, 1950
  M.A., University of Northern Colorado, 1957
- SPENCER, ALBERT W., Assoc. Professor of Biology (1965)
  B.S., Colorado State University, 1957
  M.S., Colorado State University, 1961
  Ph.D., Colorado State University, 1965
- STRAWN, RICHARD G., Assoc. Professor of Music (1973) B.M., University of Redlands, 1959 M.M., Indiana University, 1961
- STUART, LELAND E., Assoc. Professor of Sociology (1972)
  A.B., Chico State College, 1962
  M.A., University of Oregon, 1964
  Ph.D., University of Oregon, 1971

TAPIA, JOHN R., Assoc. Professor of Foreign Languages (1972)
B.A., West Virginia State College, 1960
L.L.B., Blackstone School of Law, 1960
J.D., Blackstone School of Law, 1961
M.A., University of Utah, 1966
Ph.D., University of Utah, 1969

VAN SICKLE, SHAILA, Asst. Professor of English (1974) B.A., Carleton College, 1956 M.A., Occidental College, 1959 Ph.D., University of Denver, 1975

VOGL, LAUREL C., Asst. Professor of Art (1976) B.F.A., University of Southern Calif., 1964 M.F.A., Claremont Graduate School, 1968

VOTAW, THOM A., Asst. Professor of Education (1979) B.A., John Brown University, 1964 M.A.T., New Mexico State University, 1975 Ed.D., New Mexico State University, 1978

WAGEMAN, ROBERT M., Assoc. Professor of Psychology (1969 B.S., Arizona State University, 1961 M.A., Arizona State University, 1963 Ph.D., Arizona State University, 1968

WALKER, CHARLES H., Asst. Professor of Physical Education Basketball Coach (1972) B.S., University of Nevada, 1960 M.Ed., University of Nevada, 1964 Ph.D., University of Utah, 1972

WEAVER, PATRICIA E., Assoc. Professor of Music (1969) M.B., Baylor University, 1955 M.M., University of Illinois, 1958

WELLS, C. GERALD, Asst. Professor of Art (1970) B.A., University of Mississippi, 1959 M.F.A., University of Mississippi, 1964

WESTERVELT, THOMAS N., Asst. Professor of Geology (1975) B.A., Middlebury College, 1967 Ph.D., University of Wyoming, 1979

WHALEN, DONALD F., Dean, School of Education; Professor of Education (1959)

B.S., Northern Arizona University, 1954

M.A., Northern Arizona University, 1955

H.Ed.D., Indiana University, 1962

### WILLIAMS, RAYMOND, Asst. Professor of Mathematics (1974) B.A., Hendrix College, 1965

M.S., University of Arkansas, 1967 Ph.D., University of New Mexico, 1976

WILSON, RAY N., Assoc. Professor of Education (1971)

A.B., University of Northern Colorado, 1961 M.A., University of Northern Colorado, 1964 Ph.D., University of Northern Colorado, 1968

WRIGHT, PETER M., Assistant Professor of History (1979)

B.A., University of Oklahoma, 1962 M.A., University of Oklahoma, 1965 Ph.D., University of Wyoming, 1978

WRIGHT, WILL, Assoc. Professor of Sociology (1979)

B.A., University of Oregon, 1962 M.A., University of Rochester, 1964 Ph.D., University of Calif. (Berkeley) 1972

YOUNG, PAMELA R., Asst. Professor of Education (1976) B.A., The University of Texas (Austin) 1968 M.Ed., The University of Texas (Austin) 1974 Ph.D., The University of Texas (Austin) 1976

ZELLER, CYNTHIA L., Instructor-Librarian (1979) B.A., Springfield College, 1974 M.S., Simmons College, 1979

ZOLLER, JOHN, Assoc. Professor of Business Adm. (1971 & 1980) B.B.A., University of Minnesota, 1948 M.B.A., University of New Mexico, 1968 Ph.D., University of Arizona, 1977



## INDEX

ACT Tests	Course Load
Academic Performance 40	Courses Common to All
Academic Procedures 44	Programs
Academic Programs30	Courses, Repeatable
Academic Progress	Credit-No Credit4
Accounting	Credit through Special
Accreditation	Examination43
Adding Courses44	Curriculum
Administrative Officers 174	
Administrative Staff	Dean's List
Admission 9,12	Degrees
Adm. of Amer. Indian	Description of College
Students	Disciplinary Action
Advanced Placement 12	Distribution Requirements 38
Agriculture	Distribution Requirements.
Alumni Association 24	Special
Anthropology56	Division of Cultural Studies 33
Art58	Dropping Courses44
Arts & Sciences	Mu)&
Athletics & Recreation 25	Early Admission 12
Attendance	Economics144
Auditing	Education
	Educational Goals
Bachelor Degrees30	Effective Catalog46
Bachelor Degree, Second 37	Elective Courses39
Biology	Elementary Education
Bookstore	Program
Business Adminis-	Engineering73
tration	English77
Business Education	Enrollment
	Examinations
CLEP Examination	
Calendar 6,195	Faculty Register177
Catalog, Interpreting the 47	Fee Regulations
Center of Southwest	Financial Aid22
Studies 32,167	Financial Aid Applications 23
Changes in Programs of	Foreign Languages
Study	Foreign Students11
Chemistry	Forestry90
Classification of Students 17,44	Former Students10
College Description 5	Francisco Cart Lands
Computer Center	College
Computer Science	French
Concurrent Students 12	Freshmen
Continuing Education	Freshman Seminar37
Cooperative Education	
Cooperation with Other	General Studies Program37
Institutions	Geology
Costs	German 8t
Counseling Services	Grading40

Graduate, Petitioning to 36	Policies
Graduation with Honors	Political Science
Graduation Requirements36	Pre-Dental
Grants-in-aid	Pre-Medical
Guns & Weapons	Pre-Veterinary
	Program Changes 44
Health Services	Psychology
High School Students	Radio Station, Student
History	Register
Honors Program 48	Registration44
Honors Seminars 49	Religion30
Housing	Requirements, General
Humanities	Residence Halls
	Residence Reservations
I.D. Cards	Residency Requirements17
Independent Newspaper 27	Room & Board Refund
Independent Study48	
Indians	Scholarships
Individualized Study48	School of Arts & Sciences 51
Industrial Arts97	School of Business
International Content &	Administration
Experience	School of Education
	Secondary Education Program 151
KDUR-FM	Secretarial Science 142
	Seminars
Latin	Sociology120
Library 31,175	Sophomore Seminars
Loans	Southwest Studies 167
	Spanish
Major, Student Con-	Special Project Month7
structed31,39	Special Topics
Majors	State Board of Agriculture 173
Mail Service	Student Code
Mathematics	Student Constructed Major 31,39
Medical Technology64	Student Government
Military Service, Credit for 43	Student Life26
Minors	Student Newspaper
Motor Vehicles 25	Student Services
Music 104	Student Union24
	Summer Sessions7
Natatorium 5,25	Swimming Pool 5,25
Natural History 63	Teacher Education Program 149
	Theatre123
Organizations, Student 26	Transcripts
	Transfer Students
Pass-Fail Electives	Trimester Academic Calendar 6
Peaceful Assembly29	Tuition & Fee Refund
Petitioning to Graduate36	Tuition & Fees
Philosophy	Tuition & Fees, Indian
Physical Education 25,157	
Physical Science 113	Unclassified Students
Physics	Voterann
Placement Services 23	Veterans





From: Office of Admissions Fort Lewis College Durango, Colorado 81301

Nonprofit Or U.S. Postage I Fort Lewis Col Durango, Colo Permit No. 7





Fort Lewis College in Colorado West An area of mountains, lakes, hiking trails, rushing trout streams, forests blue skies, clean air.

Archaeological and geological marv



# FORT LEWIS COLLEGE

DURANGO, COLORADO