

FORT LEWIS COLLEGE

CATALOG ISSUE

1969 - 70



DURANGO, COLORADO

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*The Experimental College
of the Rocky Mountain West*

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Reprinted

March, 1969

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North Central Association of Colleges and Secondary Schools.

Discrimination on the grounds of race, color 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 Laws.

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Academic Calendar, 1969 - 70

FALL, 1969-70

Aug.	15	Friday	Deadline for accepting applications
Sept.	7	Sunday	Orientation
Sept.	8	Monday	Registration
Sept.	9	Tuesday	Classes begin
Oct.	31	Friday	Mid-term grades due
Nov	26-30	Wed-Sun.	Thanksgiving break
Dec.	1	Monday	Classes resume
Dec.	20	Saturday	Term ends

WINTER, 1970

Jan.	5	Monday	Registration
Jan.	6	Tuesday	Classes begin
Feb.	20	Friday	Mid-term grades due
Feb.	21-25	Sat-Wed.	Mid-term break
Feb.	26	Thursday	Classes resume
April	18	Saturday	Term ends

SPRING, 1970

April	27	Monday	Registration for 15-week term
April	28	Tuesday	Classes begin
June	15	Monday	Registration for Concentrated Session
June	19	Friday	Mid-term grades due
July	1-5	Wed-Sun.	Mid-term break
July	6	Monday	Classes resume
Aug.	8	Saturday	Term ends

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The Fort Lewis College catalog was printed by O'Brien Printing Company of Pueblo, Colorado. Photos were taken for the Office of Information and Services by Photo Arts Studio, Durango.

The College

Fort Lewis College is a fully accredited, state-supported, baccalaureate degree-granting, liberal arts college. There are five academic divisions—Humanities, Biological Science, Education and Psychology, Business and Economics and Physical Science, Mathematics and Engineering.

History

The College became a four-year institution of higher learning in the fall of 1962, with a charge from its Board to develop a program of high quality in the image of the most outstanding liberal arts institutions in the Nation. The College is one of Colorado's newest senior colleges, although its tradition dates back to the settlement of the San Juan Basin and its establishment as an army post called Fort Lewis in 1878. It has been successively an Indian School, a secondary school, a two-year branch of Colorado A. and M., a state-supported junior college, and finally a degree-granting, undergraduate liberal arts college. In its present status it is cast in the role of an experimental college as far as year 'round education is concerned. The College operates on a trimester academic calendar.

Enrollment

A steady pattern of growth and development has occurred at the College since 1962, both in enrollment and in financial resources. In 1962, the enrollment was 720 students. In the fall of 1968 the enrollment was over 1,700 and it will exceed 2,000 students by 1971.

Physical Plant

An extended building program is underway on the campus at the present time. A new library-classroom building opened in 1967. Six new residence halls accommodating 300 students were opened for use in 1967, and a new student center was opened in 1968. A new physical education building, a humanities-fine arts building, and eight new residence halls are planned for the immediate future. Construction is expected to be completed on a life-sciences addition to the Academic Building in the 1969-70 academic year. In addition, there is an Academic Building, fine arts building, gymnasium, student center, chapel, a small health center, married student apartments, and seven residence halls.

The Faculty

The faculty of the College consists of over 80 full time teachers. One of the strong convictions prevailing at Fort Lewis is that every member of the academic faculty must be an excellent and dedicated teacher. Special advantages immediately accrue to stu-

dents in a college whose faculty is primarily concerned with teaching and counseling and students can receive personal attention.

The Philosophy

The liberal arts program at Fort Lewis College is designed to help the student prepare to live a complete and useful life, as well as preparing him for employment or graduate school, whether his interests be science, mathematics, the humanities, social sciences, history, or for the professions such as business, law, medicine, government service. The College expects its students to be well rounded in all phases of liberal arts and also expects them to receive sufficient preparation in their special areas of interest to secure and hold good jobs upon graduation.

The educational philosophy of the College is to educate young adults to enjoy life to the fullest and to assume willingly the responsibilities of democracy in the world of today and to prepare young adults for gainful employment or for graduate study.

The main business of the College is teaching—teaching, first of all, in the classroom and in the laboratory, but secondly through continued out-of-class contact between faculty, administration and the individual student. An informal, friendly atmosphere prevails throughout the campus.

The Fort Lewis program includes the following characteristics that mark the liberal arts nature of the College:

—Each student, regardless of his major area of interest is required to complete satisfactorily 24 trimester hours of "core courses."

—Each student, regardless of his major area of interest, is required to complete as electives a considerable number of courses outside his primary academic field of study.

—The number of majors is restricted to avoid over-specialization and to preserve the College goal of graduating liberally educated individuals.

—The curriculum consists of a limited number of courses that has the effect of concentrating rather than fragmenting the knowledge acquired over the centuries.

The Fort Lewis College graduate must be aware of and have a basic knowledge of science, even though his major may be humanities or English, and conversely the science major leaves the campus with a basic knowledge and appreciation of the humanities and the social sciences.

The Trimester Academic Calendar

Year 'round education at the College is provided within the framework of a trimester academic calendar. The academic year is

divided into three 15-week trimesters, each providing approximately 75 days in the classroom. Class periods at the College are extended beyond the normal 50 minutes. The credit hours earned in each of the three trimesters of an academic year equal those acquired in the normal semester.

At Fort Lewis, the fall trimester begins early in September and ends before the beginning of the Christmas vacation in December. The second or winter trimester begins early in January and ends in late April. The spring trimester begins early in May and ends in mid-August. Shorter concentrated sessions may be superimposed on a regular trimester for the benefit of special groups.

Students are encouraged to attend Fort Lewis College year 'round by enrolling for three trimesters each calendar year. Those who do so from the beginning of the freshman year onward can graduate in about two and two-thirds calendar years. Students may, however, if they so desire, attend only two trimesters in a given year. Should they elect to attend only during the fall and winter trimesters, they can leave the campus in late April and thus have more than four months available for work or travel.

Center of Southwest Studies

A Center of Southwest Studies has been established at Fort Lewis College. The Center has a threefold purpose: It makes possible the gathering in one place the widely-scattered records of the history of the Southwest; it provides an enrichment to the entire academic program of the College through the materials collected and the faculty members directly involved in the program; and the focus on Southwest studies will effect a close and desirable integration of several otherwise separate academic disciplines within the College. History and humanities majors, in particular, are expected to benefit from the materials collected and the studies undertaken by the Center.

The Center of Southwest Studies was made possible through a gift from friends of the College.

The Library

The library is a major unit of the institution, serving primarily as a teaching instrument in which all of the materials and activities are channeled to accomplish these objectives:

1. To supplement and enhance instruction.
2. To encourage the extra-curricular use of library materials by students with a view toward facilitating the life-long process of self-education.

The library provides reading space for more than 300 students,

with the majority of the seating at individual stations. It is also designed for expansion as future growth of the institution occurs. The stacks are open and the featured areas include a bibliographic and reference section, several browsing areas centered around an attractive fireplace, seminar rooms, facilities for reading microfilm, listening to recorded information, and a Southwest special collections room.

As a further service, all students and members of the academic faculty have the privilege of borrowing materials from libraries of the other state-supported institutions of higher learning in Colorado.

Services to Students

Activities and Organizations

The intent of Fort Lewis College is to equip students to live purposefully and effectively in a complex world. This is accomplished by faculty, staff and students working together. The coordination of these activities is the function of the Office of the Dean of Students.

Athletics and Recreation

Intercollegiate Athletics. Fort Lewis College has a comprehensive men's intercollegiate athletic program and sponsors teams in the following sports: football, basketball, wrestling, gymnastics, skiing, golf, tennis and track. All Raider teams compete against four-year colleges in the Rocky Mountain and Southwestern areas. Facilities include six tennis courts, a gymnasium, football stadium, 440-yard track and ice skating pond. Located adjacent to the campus are the municipal golf course and a ski hill. Fort Lewis is a member of the Mountain Division of the Rocky Mountain Athletic Conference, National Association of Intercollegiate Athletics, and the National Collegiate Athletic Association.

Intramural Athletics. An excellent intramural athletic program is offered at Fort Lewis College. The following activities are provided: flag football, baseball, softball, basketball, track and field, tennis, golf, volleyball, badminton, gymnastics and wrestling and the Women's Recreation Association activities.

Recreation and Physical Education. The physical education program for both men and women at Fort Lewis College emphasizes individual and dual sports. Facilities and equipment for golf, tennis, badminton, bowling, archery, gymnastics, weight training, ice skating and skiing are available.

Religious Affairs

One of the standing committees, the Religious Affairs Committee, concerns itself with religious organizations and activities of the students. The College encourages a student to pursue the religion of his choice.

Student Organizations

Student Government

The Student Senate of Fort Lewis College is the central agency for student policy, planning, coordinating and budgeting for all College organizations. Senate consists of fifteen senators elected at large by the student body. One-third 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. Two of the largest committees in scope and in membership are the Student Union Board (SUB) and the Clubs and Organizations Activities Council (COAC).

The **Student Union Board** formulates policies for the operation of the Student Centers and coordinates and schedules events occurring in the Student Centers. Chaired by the Student Body President, this committee lists as permanent members the three student body vice-presidents and three senators, as well as representatives from the Office of the Dean of Students, the Director of Auxiliary Services, and the Director of Information. Various non-voting representatives from the freshman class and the housing office complete the board.

The **Clubs and Organizations Activities Council (COAC)** is responsible for scheduling activities of clubs and organizations. It is also responsible for appropriating senate financial allocations to the clubs and organizations. Membership of this committee consists of representatives of all clubs, classes, and organizations chartered or constituted through the Student Government and the College.

The executive branch of the student government at Fort Lewis College is unique in Colorado colleges because it consists of a Student Body President, an Executive Vice-president, a Publicity Vice-president, and an Activities Vice-president. 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 meetings and is responsible for preparing the agenda. The **Publicity Vice-president**, is responsible for overseeing the budget committee and other com-

mittees. He is also responsible for submitting reports as directed by the President.

The **Activities Vice-president** presides over COAC and along with the other members of the executive branch plays a major role on the Student Union Board.

The **Student Court** has three Court Justices. One Court Justice is elected each trimester for a term of one year, and the senior member serves as Chief Justice. Adjudication of student affairs that cannot be settled elsewhere are brought before the court by petition for a decision.

Clubs and Organizations

The Clubs and Organizations Activities Council (COAC) is composed of all clubs and organizations on campus, which serve a wide variety of student interests from writing to skiing and from history to acting. Any student who does not find an organization already formed that relates to his particular interests may start one. The possibilities are unlimited.

Business and economic majors may join the **Business Club**. The club's purpose is to broaden the student's practical and academic knowledge and also to provide services to Fort Lewis College and Durango's business community.

The **Student Colorado Education Association** (SCEA) members have activities that prepare them for employment in the teaching profession. They promote professionalism among future teachers. An annual election selects the professor of the year.

For students interested in history, there is the honorary history organization, **Phi Alpha Theta**. This club's purpose is to promote interest and scholastic achievement in history and other subjects.

Social and other extracurricular activities are the main aim of the **Ski Club**. Besides bringing the ski enthusiasts together, it provides information about skiing to beginners.

Two of the larger clubs on campus are the **Shalako Indian Club** and **Westerner's Club**. Both of these clubs are open to anybody. The Indians sponsor Hohzoni Days, and the cowboys sponsor Westerner's Week. Both of these provide fun and gaiety for the student body. These clubs bring their way of life and culture to the campus.

Students interested in dramatics and who want acting experience can join the **Fort Lewis College Players**. The Players present several major productions as well as smaller theatre workshops each year.

For students with a musical interest, there are the **Raider Marching Band, the Symphonic Orchestra, the Dance Band** and large and small choruses which are open to all students, and a Men's Glee Club.

The Pep Band adds to Raider spirit for the home football and basketball games.

The **Cheerleaders**, **Hilltoppers**, and **Lettermen's Club** support and participate in athletic events. These clubs also sponsor social events and the annual Christmas party for underprivileged children.

Students at Fort Lewis can provide communication for the student body through the **Katzima** (year book) and **Independent** (newspaper). These two organizations always have openings for interested and talented students and provide on-the-job training for future journalists.

The politically minded student can join either **Young Democrats** or **Young Republicans**. These clubs promote interest in politics on campus, especially during elections.

Students interested in religious clubs have their choice of **Newman Club**, **Inter-varsity Christian Fellowship**, and **Deseret Club**. Each of these clubs sponsors films and speakers pertaining to Christian growth and development.

A newly formed club is the **Married Student Association** (M.S.A.), which provides a social, economic, and political unity for married students and their spouses.

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 five officers who coordinate the hall activities. RHA traditionally sponsors Residence Hall Week and the Intramural Sports Program.

The **Interethnic Club** promotes interethnic and intrasocietal relationships for students from all cultures, races, and walks of life, bringing students together socially for better understanding.

The **G.I. Club** is an organization for all interested ex-G.I.'s who have served in the military services.

Guidance and Placement

Career Placement

The College assists its students to find permanent employment after graduation. The Office of Auxiliary Services helps students to compile a set of credentials which are available to prospective employers upon request of the student. Interviews with business, industrial, and educational recruiters are arranged by the career placement service. Faculty advisers and division chairmen actively work to place their graduates.

Graduate School Placement

The student faculty adviser, division chairman and the student personnel staff offer assistance to students applying for admission to

graduate work. Students should discuss their intentions with their faculty adviser before the senior year at College.

Guidance

It is the function of the Educational Adviser's office to coordinate the various guidance services to help all students make a successful adjustment to college life and plan adequately for the future. The Educational Adviser's office implements and supplements the guidance activities of faculty advisers

Student Conduct

Fort Lewis College believes that learning and day-to-day living cannot be separated. They 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 consequences 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 College officials for such corrective action as is deemed necessary.

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.

Snack Bar

Two snack bars are provided for the student body, one located in the Student Union and one in Miller Student Center. The hours are variable according to demand and are posted.

Student Union Game Room

Open from 12:00 noon to 10:00 p.m. 7 days a week.

College Book Store

Located in the Student Union Building, the book store is open from 8 a.m. to 5 p.m. Monday through Friday and 10 a.m. to 2 p.m. on Saturday.

Health Service

There are three distinct features of the College Health Service.

There is an out-patient treatment center located near the center of the campus and residence halls. A registered nurse is on duty forty hours each week and is on call at all times.

Medical doctors are retained and are on call by the College nurse at all times.

An accident and sickness insurance policy is available to all students.

ALL SUCCESSFUL APPLICANTS MUST PROVIDE THE COLLEGE NURSE WITH A RECORD OF A RECENT PHYSICAL EXAMINATION NO LATER THAN REGISTRATION. The College health card will be mailed to the applicant prior to registration.

Housing

The residence halls at Fort Lewis College provide a physical environment designed to further the academic, cultural, and personal development of the students. The College seriously assumes the responsibility of providing housing for nearly 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.

Prominent within this policy is the requirement that all single students who are under 21 years of age will live on campus. Exceptions to this are very rare and the responsibility of the Dean of Students' office.

Students 21 years of age or older may live in residences of their choice. If these students desire to live on campus, they must accept the accommodations available and are subject to the same housing policies and procedures that govern all campus residents.

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.

Other Services

Identification Cards

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

Mail Service

A post office is maintained in Miller Student Center 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 in Durango.**

Motor Vehicles

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

Students must register their automobiles with the Campus Security Officer during the official registration period. Campus traffic and parking regulations will be distributed at the time of registration.

Admission

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 principal. It can always be obtained from the College.

The meeting of minimal admission requirements does not **assure** admission.

Students under 21 are required to live in residence halls subject to availability of space except for those whose homes are within commuting distance of the campus.

Students admitted for the Fall Trimester are required to make an advanced payment of \$50 on their Fall expenses by July 1. Those admitted after this date must submit the payment as soon as possible after admission. A full statement of this policy is given on Page 17.

Admission of American Indian Students

Fort Lewis College, by statute, is required to admit academically qualified American Indian students tuition free. Such students are

required to file documentary evidence of their tribal membership with the Office of Admissions and Records.

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 1, 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 peoples of Alaska shall be considered Indians . . ." (United States Code, 1964 Edition, Vol. 6, Title 25, Chapter 14, Section 479, Page 4, 897.)

How to Apply for Admission

Freshman Procedure

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

—Fill out Part One of the application and mail it with the \$5 application fee to the Office of Admissions and Records. Have your high school principal fill out his portion. (This report is to be forwarded directly to the College.)

—See your high school counselor to register to take the American College Test (ACT). Registration for the test should be completed a month prior to the test date. ACT test results are normally used in advising a student and in scheduling work loads and may be used as a factor in admissibility.

Transfers From Other Colleges or Universities

—Request an application form with advanced standing from the Office of Admissions and Records.

—Complete the application and send it to the Office of Admissions and Records at Fort Lewis College with the required \$5 application fee.

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

—Request the Dean of Students or appropriate personnel officer at each previously attended college or university to forward a completed Part II of the Transfer Application form to the Director of Admissions and Records.

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

Admission of First-Time College Students

Applications for admission of first-time college students will be evaluated on the basis listed below. They are expected to show promise of success in college, to have demonstrated satisfactory achievement, and/or to have strong recommendations from school officials.

—**Graduation:** Those admitted are normally high school graduates (grades 9-12) who have completed 15 acceptable secondary school units. Of the 15 units, 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.

—**Rank in Class:** Applicants are expected to be in the upper two-thirds of their graduating class. However, others may also apply.

—**The American College Test:** All freshman applicants are expected to have the results of the American College Test sent to Fort Lewis College. Complete information regarding this test may be secured from the high school counselor or principal, or by writing to ACT Central Registration Unit, 519 West Sheridan Road, McHenry, Illinois.

—**Personal Qualifications:** Applicants must be of acceptable moral and ethical character.

Admission of Transfer Students

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

A maximum of 66 semester hours 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. An effort will be made to bring college transfer students into the Fort Lewis College program without loss of previously earned credits.

Resumption of Studies by Former Students

Former students of the College returning after an absence of more than one trimester must petition to resume studies. If the student has attended other collegiate institutions in the interval, he must file complete transcripts of all work taken.

Admission of Students From Foreign Countries

Fort Lewis College has been approved by the United States De-

partment of Justice as an institution of higher learning for non-quota 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.

Admission of Unclassified Students

Under special circumstances individuals may be permitted to register for certain courses 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 baccalaureate degree. The privilege of re-registering 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.

Early Admission

A limited program in early admission for a selected number of well-qualified high school students is available. Under this program an outstanding scholar who has completed 14 acceptable units in high school may apply for admission as a regular freshman student at Fort Lewis College. For further information contact the Office of Admissions and Records.

Advanced Placement Program

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 college-level courses in their own high schools. Satisfactory scores on an examination administered and graded by the College Board are forwarded to Fort Lewis and may serve as a basis for advanced placement of the student. The decision of the College in such cases is final.

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.

Any questions about admissions not answered here should be addressed to the Office of Admissions, Fort Lewis College, College Heights, Durango, Colorado, 81301.

Costs and Financial Aids

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 \$1250, which includes tuition, health fees (including 12-month health and accident insurance coverage), student fees, room, seven-day board, books, and supplies. Out-of-state students will pay an additional amount of approximately \$450.

Personal expenses, such as clothing, travel, and social activities, will depend upon the individual and are in addition to the above expenses.

ADVANCED PAYMENT

In order to facilitate the best planning for the Fall Trimester the College must have a good indication of its enrollment. Therefore, all students are asked to reflect their intent to enroll by advancing a payment of \$50 on their Fall Trimester expenses on or before July 1. This is refundable on request until August 18, but not thereafter. Those who are admitted after July 1 must make the advanced payment as soon as possible after admission.

All student charges are due and payable on registration day; however, the student may elect to pay his total charges before registration day to avoid the cashier's station on that day. Current rules and regulations prohibit a delayed payment after registration day.

After a student's advanced payment has been received, his room in a dormitory will be reserved, returning students will have their advanced registration firmed up, and entering freshmen will be contacted to begin course selection. Those who wait until registration day to make any payment will find many classes already closed and selection of housing restricted. Students who are heavily dependent on financial aid and unable to pay the \$50 in advance may request special consideration.

FINANCIAL AID

Fort Lewis College offers a complete financial aids program of scholarships, grants, loans, and part-time employment for its students. All students are eligible for consideration, if they have been accepted for admission. Every effort is made by the Financial Aids Committee to provide the best type of aid or combination of aid to assist deserving students to complete a college education. Academic record and demonstrated need are factors considered by the committee in arriving at a decision.

Scholarships and Grants-in-Aid

Merit Scholarship. Upper one-third of high school graduating class or "B" average or better work in college. High academic, leadership quality, and school recommendation. **Waives tuition.** Renewable upon maintaining adequate grades and good standing.

Educational Grant. Awarded on demonstrated need and satisfactory scholarship. **Waives tuition.** Renewable upon maintaining adequate grades and good standing.

Educational Opportunity Grants. Awarded on demonstrated need and satisfactory scholarship or creativity. Value of \$200 to \$1,000 per year. Renewable upon maintaining satisfactory grades and availability of funds.

Music Grant. Demonstrated band instrument proficiency and satisfactory scholarship. **Waives tuition.** Renewable upon maintaining adequate grades, participation in the music program and recommendation of The Director of Music. Please direct initial inquiry to The Director of Music.

Athletic Grants. Demonstrated athletic ability and satisfactory scholarship. **Waives tuition** and in some cases required fees. Renewable upon satisfactory grades, participation in the inter-collegiate athletic program, and recommendation of the Director of Athletics. Please direct initial inquiry to Director of Athletics, Fort Lewis College.

American Indian Students. American Indian students who provide written proof of Indian blood through tribal census number or roll number are admitted tuition free each term upon satisfactory scholastic progress and good standing.

In addition to the above programs Fort Lewis College has a number of sponsored grants and scholarships. Information concerning these may be obtained from the Student Finance Officer.

Loans

Fort Lewis College is a participating institution in the National Defense Student Loan Program and the United Student Aid Funds Loan Program. Applications and information regarding these loans are available from the Financial Aids Committee.

Employment

Fort Lewis College operates a part-time employment program for its students on campus. The College also participates in the work-study program under the provisions of the Higher Education Act, 1965. Off-campus employment opportunities are coordinated by the College. Application forms are available from the Financial Aids Office.

Requests for additional information and application forms should be directed to the Student Finance Officer, Fort Lewis College, Durango, Colorado. Completed applications should be returned as soon as possible. Entering freshman may apply concurrent with their application for admission. Students needing financial aid should apply prior to May 1 to insure full consideration.

Academic Information

Programs of Study

Five academic divisions offer programs of study.

The **DIVISION OF BUSINESS AND ECONOMICS** provides students an opportunity to obtain professional business training within the framework of the overall liberal arts nature of the College. Within the Division there are four options: accounting, business administration, business education, and managerial economics. There is also a two-year, terminal program in secretarial science. It leads to an Associate of Arts degree that can be earned in seventeen months and prepares the student for a good-paying secretarial position and enables the student to participate fully in the cultural programs and exchanges of campus life.

The **DIVISION OF BIOLOGICAL SCIENCE** offers curricula designed for many types of student interests. A major in Biology gives students preparation for graduate school, training for a career in secondary education, and pre-professional training in such areas as agriculture,* forestry, medicine, nursing, medical technology, dentistry, and veterinary medicine.

The **DIVISION OF EDUCATION AND PSYCHOLOGY** provides programs for students who expect to teach in elementary or secondary schools. It is also the home of academic offerings in physical education and psychology.

The **DIVISION OF HUMANITIES** provides the course work for majors in English, history, and humanities, as well as for minors in art, music, French, German, Spanish and philosophy. The service courses in English, journalism, government, drama, crafts, and anthropology are part of the offerings of this Division. The person who expects to teach in an elementary school registers as a humanities major, selecting the social science option.

The **DIVISION OF PHYSICAL SCIENCE, MATHEMATICS, AND ENGINEERING** provides a wide variety of subject matter.

Within the Physical Science major, one chooses between a broad physical science option, a geology option, or a chemistry option. The

first includes a combination of courses in chemistry and in either geology or physics.

Fort Lewis College cooperates with Colorado State University in a 3-2 engineering program. The engineering program at Fort Lewis College can be adapted to meet the engineering requirements of other universities, as well. Three years of course work is completed at Fort Lewis, two at Colorado State University. The person graduated from the program receives degrees from both institutions and will customarily have majors in mathematics and engineering.

*The agricultural courses are taught at Fort Lewis College by members of the professional staff of the San Juan Basin Branch Experiment Station of the Colorado Agricultural Experiment Station of Colorado State University.

The Bachelor's Degree

The College offers a number of programs leading to the bachelor's degree. For majors in the fields of Biological and Physical Sciences, the degree is bachelor of science. In all other fields it is the bachelor of arts. Except for the major field, all other requirements listed below are alike for the two degrees.

Suited to a wide variety of student needs, Fort Lewis programs prepare students for employment in business and industry, for graduate school, for professional school such as law or medicine, and for teaching. Graduate school is recommended for those who plan to teach at the college or university level, as well as for certain positions in government work, business, and social service.

Associate of Arts Degree

The College offers a program leading to the associate of arts degree in secretarial science, offered by the Division of Business and Economics. The student will take 31 hours in business and economics and 33 hours of electives and liberal arts requirements, making a total of 64 hours minimum. (See the Division of Business and Economics section for the specific requirements for the degree.)

Elementary and Secondary Education

While the elementary and secondary education programs at Fort Lewis College are, in every sense, "degree programs," the plan of study is unique enough to warrant special attention.

Fort Lewis College provides the necessary courses for certification of students as teachers in the elementary and secondary school systems of the State of Colorado. The programs of study have been approved by the Colorado State Board of Teacher Education.

Students wishing to teach in secondary schools must complete the major requirement of the College and include among their electives, courses in psychology and education. Courses required for certification include: General Psychology, Education in America, Educational Psychology and Measurements, Secondary Education, Methods of Teaching, and Supervised Student Teaching. Students should also

choose a second area of concentration consisting of a minimum of 18 hours for certification in two teaching areas at the secondary level.

Those students who choose to teach in the elementary school will complete a major in humanities with a social-science option. These courses are required: General Psychology, Child and Adolescent Psychology, Educational Psychology and Measurements, one course in mathematics, one course in a laboratory science, Art in the Elementary School, Music in the Elementary School, five special area methods courses, a general elementary education course, and Supervised Student Teaching.

Additional questions about the teacher education program should be addressed to the Director of Teacher Training.

Adult Education

The College schedules many of its regular classes in the late afternoon and evening to accommodate Durango area residents who may wish to start work on a degree or to complete the requirements for a degree, but who find it difficult to come on campus in mid-day. Fort Lewis is also prepared to offer specialized or hobby courses where sufficient interest exists. The Dean of Faculty welcomes inquiries on adult education.

Requirements for Graduation

General Requirements

Each student works out his program of study in cooperation with his faculty adviser and with the division chairman at the beginning of each trimester to assure that the courses selected make for progression toward a degree. The student receives help and advice in selecting the courses required for a degree, but he has the responsibility for meeting the graduation requirements established by his academic division.

Each candidate for graduation will have completed a minimum of 128 credit hours, will have earned a minimum cumulative grade-point average of 2.0, and a minimum cumulative grade-point average of 2.0 for those courses accepted by the division to meet the requirements for the student's major course of study.

In addition, each candidate for graduation will ordinarily have completed a minimum of 28 credit hours in upper-division courses on campus. Among the 128 credit hours required for the degree, 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 and the request that a requirement be waived must have the approval of the faculty adviser, the division chairman, and the Academic Standards Committee.

A student who already holds a bachelor's degree, and for special reasons desires to secure an additional bachelor's degree, must earn 28 hours at Fort Lewis College beyond any other bachelor's degree he now holds, and fulfill all general graduation requirements and the specific requirements for the major chosen.

Common Courses

Several courses are required of all students regardless of the major they have selected. Included in the common requirements are eight liberal arts "core courses" that contain the knowledge a well-educated man should possess. A student will normally enroll for one of the eight liberal arts "core courses" during each of his trimesters at Fort Lewis College.

In addition, two trimesters of freshman English, one of speech and three of physical activity are required. Each student is required to enroll for a departmental seminar or to complete an approved independent study project, ordinarily registering for one or the other as a senior.

The common courses are:

I. LIBERAL ARTS CORE COURSES	No.	Course	Credit Hours
	LA-101	Man and the Social World	3
	LA-102	Man and the Political World	3
	LA-103	Man and World Civilization	3
	LA-201	Man and World Civilization	3
	LA-211	Man and the Scientific World	3
	LA-212	Man and the Biological World	3
	LA-301	Man and His Cultural Heritage	3
	LA-302	Man and His Cultural Heritage	3
(See Page 27 for course descriptions.)			
II. COMMUNICATIONS			
	EL-103	Freshman English	3
	EL-104	Freshman English	3
	EL-121	Fundamentals of Speech	3
III. PHYSICAL ACTIVITY			
	PE-101	Physical Activity	1
	PE-102	Physical Activity	1
	PE-103	Physical Activity	1
IV. SEMINAR OR INDEPENDENT STUDY			
	LA-396	Departmental Seminar	2
		or	
	LA-399	Independent Study	1-3
Total			37-39

Majors and Minors

The student seeking a baccalaureate degree must select a major area of study. Majors of twenty-eight to thirty-two hours are provided in biological science, business, English, history, humanities, mathematics, and physical science. Minors, for those preparing to teach at the secondary level consisting of course work of 18 to 20 hours in particular disciplines, are provided in these several fields: agriculture, art, biology, business-economics, chemistry, engineering, English, French, geology, German, history, industrial arts, mathematics, music, philosophy, physical education, physics, psychology, secretarial science, and Spanish.

Elective Courses

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 supplement his major and minor areas of concentration, or to meet specific requirements of a graduate school.

Graduation With Honors

To be eligible for 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.

Academic Performance

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.

Auditing Privileges

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 auditing to credit basis, or vice versa, after the first two weeks of a 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.

Changes in Program of Study

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

The proper dropping or adding of a course is the responsibility of the individual student. When a student changes his class schedule through adding or dropping a course or through changing to another meeting time for the same course, he must make arrangements for the change with his faculty adviser, the professors concerned, and the Director of Admissions and Records.

A student who desires to withdraw from College must start the withdrawal procedure with the Dean of Students' Office.

Classification of Students

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.

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

A freshman is defined as a regular student who has completed less than 36 credit hours of college work.

A middle-year student is one who has completed more than 36 but less than 89 credit hours of college work.

A senior is one who has completed at least 90 credit hours of college work.

Credit for Military Service

Credit for military service may be allowed according to the recommendations established by the American Council on Education.

Credit Through Special Examination

Credit for some courses may be earned by special examination. Application should be made to the chairman of the appropriate department. A student may receive no more than 30 semester hours of credit by special examination.

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

If a student withdraws from a course within the first 12 weeks of a trimester, a grade of **F** or **W** will be recorded. If withdrawal occurs after the first 12 weeks because of academic difficulty, a grade of **F** will be recorded.

The grade of **I** means that the student's work is incomplete and additional time has been granted. It is the student's responsibility to make up the work. An appropriate grade will be recorded when the work is completed. A grade of **F** can be expected if the work is still incomplete at the end of the next trimester's work at the College.

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.

Letter grades which carry the indicated numerical equivalent are used in the calculation of grade point averages:

A - 4.0, B - 3.0, C - 2.0, D - 1.0, F - 0.0

The grade point average, carried to one decimal point, will be computed by dividing the total number of grade points by the total number of credit hours.

Common courses, those required of all students, may be repeated as often as necessary until the student receives a grade of **D** or better. If a student receives a grade of **F** or **W** in other courses, he may normally repeat it only once, unless the catalog description of the course indicates otherwise. Exceptions may be made because of extenuating circumstances if the course instructor, the student's adviser, and chairman of the division involved approve the request.

Grade reports are ordinarily mailed to the parents and guardians of students, but may be received directly by self supporting students upon request.

Honor Roll

The names of students who have earned a grade point average of 3.2 or better on not less than 12 hours for any trimester will be included on the Honor Roll for that trimester.

Independent Study

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 Division Chairman, the Division 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 if so required.

No more than two independent studies outside of the student's major field may be taken for credit.

Pass-Fail Electives

A student with at least a **C** cumulative average is permitted to take up to four Pass-Fail electives during his undergraduate career. The Pass-Fail basis is limited to elective courses only. Pass-Fail may not apply to LA 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 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.

Regular and Late Registration

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

Advanced registration periods and terminal dates for registration are announced each trimester. A fee may be charged for late registration.

Satisfactory Progress

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

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

Study Load

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

If a student wishes to take more than 18 hours, he must secure the permission of his division chairman. A student should plan to spend a minimum of two hours of outside preparation for every hour of classroom or laboratory attendance.

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.

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



Courses of Study General Liberal Arts Courses

(The first figure in the parenthese refers to hours spent in lecture each week; the second to hours spent in the laboratory each week. The figure outside the parentheses refers to semester credit hours.)

(Required of All Students)

All students are required to take the eight general liberal arts courses. A student will normally enroll for one of these during each of his trimesters at Fort Lewis College. Each student is required to complete a departmental seminar or an approved independent study project in addition to the eight general arts courses.

- 101 Man and the Social World (3-0) 3**
An awareness and general knowledge of the human environment in which the citizen operates.
- 102 Man and the Political World (3-0) 3**
A study of the form and operation of the federal government as a basis for intelligent citizenship. An analysis of the major forces in international relations.
- 103 Man and World Civilization (3-0) 3**
A history of world civilization from man's earliest experience to the Reformation Era through a study of great movements or periods in history. Balanced attention given to the social, political, economic, and cultural developments of the past that help to explain current world civilization and problems.
- 201 Man and World Civilization (3-0) 3**
A continuation of the study of the history of world civilization.
- 211 Man and the Scientific World (3-0) 3**
History and philosophy of science. Study will be made of the development of some of the most important concepts of science: modern development, problems in science, and problems from science. Area studies in electron theory, transistors, particle chemistry.
- 212 Man and the Biological World (3-0) 3**
A continuation of 211.
- 301 Man and His Cultural Heritage (3-0) 3**
A course devoted to the study of the expression of man as revealed in his art and music.
- 302 Man and His Cultural Heritage (3-0) 3**
An examination of man's thought as evidenced in his religious, philosophical and literary works.
- 390 Special Studies (1-6)**
A study of special topics in any field.
- 396 Seminar (2-0) 2**
Students prepare and present library research papers. Modern trends and literature are emphasized. Students will be allowed to register for two seminars up to a maximum of four hours credit.
Prerequisite: Senior standing and permission of instructor.
- 399 Independent Study 1-3**
Individual research conducted under the supervision of a faculty member. No more than two independent studies outside of the student's major field may be taken for credit.
Prerequisite: Approval of Division Chairman.

The Division of Biological Science

Programs in the Division

The Division of Biological Science at Fort Lewis College offers curricula designed to fit the desires and requirements of many types of students. The one major offered is biological science within which there are two avenues of preparation, one leading to the degree of bachelor of science in biological science with an option in general biology and a second leading to the degree of bachelor of science in biological science with an option in natural history. Students expecting to enter graduate school, expecting to teach biological science at the secondary level, or seeking pre-professional training for such areas as medicine, dentistry, and veterinary medicine, and students enrolled in the cooperative programs in medical technology are expected to select the option in general biology.

The Division of Biological Science also offers pre-programs in the areas of forestry, agriculture, and industrial arts. In these programs students may take two years of work and transfer to an institution offering a degree in forestry, agriculture, or industrial arts. Primarily the curriculum is designed to coincide with the curriculum at Colorado State University. However, a student may modify his program in these areas to fit any institution to which he desires to transfer.

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. Careers may be found in government service with the Food and Drug Administration and with a variety of conservation and recreation agencies. Laboratory and development work is available with the aerospace industry and with several government agencies. A few 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.

Option in General Biology

A student selecting the option in general biology must complete the following courses:

	Hours
Common requirements (See Page 22)	38
Biology requirements:	Hours
100 Lab Experience in Biology	1
102 - General Botany, Prereq. LA 212, Biog. 100	4
103 - General Zoology	4
271 - Genetics	4
Other Biology Courses	19
Total Biology	32

At least three biology courses in the 200 series, and three in the 300 series must be taken.

Additional requirements:	
Four trimesters of chemistry	18-20
Electives	38-40
Total	128

The student is strongly urged to take one year of German or French, Advanced Composition (English 204), physics and mathematics. Additional courses in mathematics and the physical sciences will be useful in graduate school.

Option in Natural History

A student selecting the option in natural history has to complete the following courses:

	Hours
Common requirements	38
(See Page 22)	
Biology requirements:	
100 Lab. Experiences in Biology	1
102 - General Botany	4
103 - General Zoology	4
201 Systematic Botany	5
203 - Field Zoology	5
371 Ecology	5
Approved Electives	8
Total Biology	32
Additional requirements:	
Three trimesters of courses in one of the following fields: Anthropology, Chemistry, Geology, Mathematics, Physics	9-12
Electives	46-49
TOTAL	128

Medical Technology

Fort Lewis College offers a Medical Technology program in affiliation with the Colorado State Hospital School of Medical Technology of Pueblo and St. Mary's Hospital of Grand Junction which enables a student to receive both a Bachelor of Science degree and a certificate in Medical Technology. Students spend six trimesters at Fort Lewis College, completing 90 hours and are then eligible to apply for a 12-month training program at Colorado State Hospital. Dr. James G. Erickson, Associate Professor of Biology, is the adviser for the program. Students entering this program must complete, in addition to the normal requirements for the option in general biology, the following courses:

	Hours
Biology 231 Comparative Anatomy	4
Biology 331 Microbiology	6
Mathematics 101 Fundamentals of Mathematics	3
Physics - one trimester	4
Biology - approved elective	4

Secondary Education

A student planning to enter the secondary education field in biology should take the General Biology Option and plan his biology electives in such a way as to insure that he has as broad a background in both botany and zoology as possible. See Page 44 for education courses required.

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 biological science, but some major in totally different fields.

Preparation for Graduate School

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

Inorganic and organic chemistry

General Physics

One year of a foreign language, preferably German

Statistics and College Mathematics

Advanced Composition

Additional chemistry and mathematics will be useful in graduate school.

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 during their senior year at least three months prior to graduation.

Agriculture

101 Introduction to Livestock (4-3) 5

Introduces the student to the basic elements of animal husbandry with emphasis on beef, sheep, swine, and dairy production.

102 Forage and Crop Production (4-3) 5

Principles of forage and field crop production. Crops in Colorado are stressed.

Prerequisite or concurrent requisite: Biology 102

231 Range and Pasture Management (4-3) 5

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

Prerequisites: Biology 102 and Forage and Crop Production 102

235 Soils (3-2) 4

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

240 Feeds and Feeding (3-3) 4

A study of the principles of feeding livestock with emphasis on the use of feeds available in the western states.

Prerequisite: Permission of instructor

250 Farm Management (3-0) 3

Basic economic principles applied to farm and ranch operations.

373 Mammalian Physiology (3-3) 4

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

Prerequisites: Biology 103, Chemistry 116 or equivalent.

Biological Science

100 Laboratory Experiences in Biology (0-3) 1

This course is designed to accompany Liberal Arts 212, Man

and the Biological World. It is optional for students not planning to take further biology courses; mandatory for students planning to continue in biology.

- 102 General Botany** (3-3) 4
Study of the development of the plant kingdom.
Prerequisite: Liberal Arts 212.
- 103 General Zoology** (3-3) 4
Study of the development of the animal kingdom from the protozoans through the vertebrates.
Prerequisite: Liberal Arts 212, Biology 100.
- 121 Human Anatomy & Physiology** (2-3) 3
An introduction to the structure and function of the human body. This course is designed for those students wishing a better knowledge and understanding of their own bodies.
- 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.
- 203 Field Zoology** (4-3) 5
Collection, identification, and museum preparation of the vertebrate animals of the region.
- 205 Entomology** (2-3) 3
A study of the general anatomy and physiology of insects and their identification and control.
- 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.
Prerequisite: Biology 103.
- 232 Vertebrate Embryology** (2-6) 4
A detailed study of reproduction and development in representative vertebrates.
Prerequisite: Biology 103 or permission of instructor.
- 271 Genetics** (3-2) 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.
Prerequisite: Biology 103 or permission of instructor.
- 273 Plant Physiology** (2-3) 3
A detailed study of the function of plants.
Prerequisite: Biology 102 or permission of instructor.
- 301 Plant Morphology** (3-2) 4
Study of structure, reproduction, modifications and evolutionary development of vascular plants.
- 303 Histology** (2-3) 3
Microscopic anatomy of the vertebrate body.
- 331 Microbiology** (4-6) 6
Study of bacteria and related groups with emphasis on their functions, culture, and identification, including diseases of economically important plants.
- 355 Cell Structure and Physiology** (3-3) 4
A study of the physical and chemical factors related to the organization of the cell and its functions.

- 371 Ecology (4-3) 5**
An introductory study of the relationships between animals, plants and their environment.
- 373 Mammalian Physiology (3-3) 4**
Functions of the mammalian organ systems with emphasis on nutrition, metabolism and reproduction.
Prerequisites: Biology 103, Chemistry 116 or equivalent.
- 375 Biogeography (3-0) 3**
A study of the past and present distributions of plants and animals. Emphasis will be on seed plants and vertebrate animals.

Forestry

- 101 Forestry and Allied Professions (1-0) 0**
Professional responsibilities, advantages, disadvantages, job characteristics, training, and education requirements for the profession.
- 106 Map Drafting and Reading (0-3) 1**
Lettering and use of simple drafting equipment. Map interpretation.
- 211 Dendrology (3-3) 4**
Classification, identification, silvical characteristics, economic importance and distribution of the broad-leaved and coniferous trees of the United States.
Prerequisite: Biology 102.
- 259 Range and Forage Plants (2-3) 3**
Distribution, growth habits, ecological requirements and importance of range plants in relationship to their use by big game and domestic animals.
Prerequisite: Biology 201.

Industrial Arts

- 101 Elementary Woodworking (2-5) 4**
Basic techniques in woodwork with emphasis in designing, layout and construction of projects using hand tools. The care of tools and shop maintenance is also stressed.
- 102 Advanced and Machine Woodworking (2-5) 4**
Introduction in the use of woodworking machines. Students will concentrate on advanced techniques of design and the use of new materials in the construction of projects. The use of new finishes is also stressed.
- 201 Electric Welding (2-5) 4**
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. One project of metal sculpture is required (wrought iron or scroll work).
- 220 Crafts I (2-5) 4**
Includes artmetal and leathercraft. Emphasis of individual design is stressed in the ornamentation of aluminum, copper, brass, the etching of aluminum, modeling and carving of leather.
- 221 Crafts II (2-5) 4**
A course in lapidary and silversmithing. Stresses individual design of jewelry and the cutting and polishing of gem quality rocks.

The Division of Business and Economics

The Division of Business and Economics at Fort Lewis College offers the student a unique opportunity to obtain a liberal arts background and, at the same time, gain a thorough foundation in one of four business options—accounting, business education, general business administration, or economics. Each one of the four option areas offers the student the latest in contemporary theory and practice. Ordinarily, approximately 128 credit (semester) hours are required for graduation.

The Fort Lewis business student is especially fortunate in obtaining the balanced type of training that is a prerequisite for success in today's dynamic world of business enterprise. A student in the Division of Business and Economics may secure the necessary training to enter graduate school, to pursue his individual business ambitions, to enter an established firm, to enter government service, to obtain professional recognition.

There is a great demand for the fully trained secretary who has a liberal arts background. Fort Lewis offers a two year program in secretarial science to fill this need. These students are graduated with the Associate of Arts degree.

Business majors are also required to take an appropriate mathematics course and general psychology as well as the common requirements

Graduation Requirements

B. A. Degree

Business Major

Requirements Common to All Business Majors	Credit Hours
Common requirements (See Page 22)	37-39
Appropriate mathematics course	4
211 General Psychology	3
225 Principles of Accounting	4
226 Principles of Accounting	4
261 Principles of Economics	3
262 Principles of Economics	3
Electives approximately	55

Accounting Option Requirements

321 Intermediate Accounting I	3
322 Intermediate Accounting II	3
325 Cost Accounting I	3
330 Income Tax Accounting	3
333 Advanced Accounting	4
336 Auditing—Theory and Practice	3
Choice of two of the following four:	
319 Managerial Accounting	3
326 Cost Accounting II	3
334 Governmental and Institutional Accounting	3
338 C.P.A. Review	3

It is recommended that all accounting majors take the following courses as electives:

201 Business Management.....	3
211 Business Law	3
251 Business Statistics	4
380 Corporation Finance	3

General Business Administration Option Requirements

201	Business Management	3
251	Business Statistics	4
305	Business Policies and Public Relations	3
340	Marketing	3
380	Corporation Finance	3
Choice of six hours from the following:		
211	Business Law	3
301	Personnel Management	3
302	Labor Economics	3
319	Managerial Accounting	3
321	Intermediate Accounting I	3
325	Cost Accounting I	3
326	Cost Accounting II	3
341	Market Research	3
356	Intermediate Economic Theory and Analysis	3
361	Managerial Economics	3
365	Monetary Economics	3
370	Quantitative Methods Applications	3
382	Financing Government	3
383	Investments	3
386	Insurance	3

Business Education Option Requirements

Required Basic Courses:

108	Advanced Typing	2
111	Elementary Shorthand (or elective; this will be an elective for most)	3
112	Intermediate Shorthand	3
121	Business Communications	3
127	Advanced Shorthand and Transcription	3
131	Secretarial Procedures	3
144	Quantitative Business Techniques	2
211	Business Law	3
308	Office Management	4

Education Courses:

(See Page 44 for education courses required.)

Take at least two of the following 11 courses:

361	Managerial Economics	3
365	Monetary Economics	3
321	Intermediate Accounting I	3
322	Intermediate Accounting II	3
325	Cost Accounting I	3
330	Income Tax Accounting	3
334	Governmental and Institutional Accounting	3
305	Business Policies and Public Relations	3
340	Marketing	3
383	Investments	3
386	Insurance	3

Economics Option Requirements

319	Managerial Accounting	3
356	Intermediate Economic Theory and Analysis	3
361	Managerial Economics	3

364	Intermediate Macro	3
365	Monetary Economics	3
370	Quantitative Methods Applications	3
251	Business Statistics	4
367	Comparative Economic Systems	3
	or	
368	History of Economic Thought	3
	or	
371	International Economics	3

It is recommended that all economics majors take the following courses:

340	Marketing	3
380	Corporation Finance	3

General Business Administration and Business Education students are urged to take 321 Intermediate accounting I, or 319 Managerial Accounting.

Independent Study

The student must have a 3.0 (B) average and no grade less than a 2.0 (C) in his division courses to be eligible for independent study.

The student must have the approval of the directing professor and the Division Chairman.

Independent Study Grade and Credit

The student will complete the independent study to the satisfaction of the directing professor.

After completion of the study, the completed paper will be circulated to appropriate professors in the division. The student will present his paper orally to these instructors and be questioned concerning the paper. The attending instructors and the directing professor in conference will determine the grade and number of credit hours to be awarded (not to exceed three hours) following the oral presentation of the paper.

Associate of Arts Degree

Common Requirements

(CS-102)	Freshman English	3
104	Freshman English	3
121	Fundamentals of Speech	3
101	Physical Activity	1
102	Physical Activity	1
101	Man and the Social World	3
103	Man and World Civilization	3
	Select two courses from the following:	6
	102 Man and The Political World	
	201 Man and World Civilization	
	211 Man and The Scientific World	
	212 Man and The Biological World	
	301 Man and His Cultural Heritage	
	302 Man and His Cultural Heritage	

Secretarial Science Requirements

225	Principles of Accounting	4
261	Principles of Economics	3
108	Advanced Typing	2
111	Elementary Shorthand (or elective)	3

112	Intermediate Shorthand	3
127	Advanced Shorthand & Transcription	3
121	Business Communications	3
131	Secretarial Procedures	3
144	Quantitative Business Techniques	2
201	Business Management	3
211	Business Law	3
308	Office Management	4
	Electives—2 courses Adviser's approval (required)	each 2 or 3
	Total	64

Accounting

- 225 Principles of Accounting (3-2) 4**
 The theory of double entry bookkeeping is introduced. Principles of the balance sheet and the income statement are considered along with the accounting cycle, accruals and apportionments, working papers, merchandise accounting and the voucher system.
- 226 Principles of Accounting (3-2) 4**
 Inventory, manufacturing, and managerial accounting are presented. Introduction to financial statement analysis, budgeting, mergers and consolidations. Corporate accounting is stressed.
Prerequisite: Accounting 225.
- 319 Managerial Accounting (3-0) 3**
 Theory and practice of accounting for managerial needs. Development of purposes for data which will aid in solving problems of planning and controlling enterprise operations.
Prerequisite: Accounting 226.
- 321 Intermediate Accounting I (3-0) 3**
 The fundamental processes of accounting, working capital items and non current assets and liabilities are analyzed.
Prerequisite: Accounting 226.
- 322 Intermediate Accounting II (3-0) 3**
 The study of noncurrent assets and liabilities is continued. New areas of concentration are primarily stockholder's equity and the various analytical processes.
Prerequisite: Accounting 321.
- 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.
Prerequisite: Accounting 226.
- 326 Cost Accounting II (3-0) 3**
 A continuation of the study of Cost Accounting with emphasis on standard costs and analysis of cost and profit for decision making purposes.
Prerequisite: Accounting 325.

- 330 Income Tax Accounting (3-0) 3**
A brief history of the income tax, income tax accounting, and study of current federal income tax provisions are presented.
Prerequisite: Accounting 321, or consent of instructor.
- 333 Advanced Accounting (4-0) 4**
This course develops advanced theory in relationship to financial statement items. Included are income measurement, changes in creditor and proprietary interests, consignments, branch offices, consolidations, insolvency, estates, trusts, and foreign exchange
Prerequisite: Accounting 322.
- 334 Governmental and Institutional Accounting (3-0) 3**
Fund accounting, budgetary accounts, and control are covered. The course also includes presentation of accounting systems for governmental and institutional units.
Prerequisite: Consent of instructor.
- 336 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 or financing and current literature on auditing.
Prerequisite: Accounting 322 and consent of instructor.
- 338 C.P.A. Review (3-0) 3**
General advanced accounting problems of the type found on C.P.A. examinations are subjected to analysis. Accounting theory is applied and procedures for solution are rated.
Prerequisite: Consent of instructor.

Business Administration

- 201 Business Management (3-0) 3**
Fundamentals of the administration and organization of the firm. Human relations are stressed through outside readings and cases.
Prerequisite: Accounting 225 or concurrent registration.
- 211 Business Law (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.
- 251 Business Statistics (3-2) 4**
Collecting, tabulating, analyzing, presentation, and interpretation of business and economic statistical data. Correlation, both linear and multiple, time series analysis, index numbers, and statistical inference are described and used in practical business applications.
Prerequisite: Mathematics 101 or higher.
- 301 Personnel Management (3-0) 3**
Personnel selection, placement, training, promotion, wage in-

centives, absenteeism, and counseling. Job analysis and evaluation, safety and health, employee services and human relations.
Prerequisite: Business Administration 201.

- 302 Labor Economics (3-0) 3**
Principles of labor bargaining and a critical examination of wages, unemployment, collective bargaining, wage regulations, and social insurance.
Prerequisite: Business Administration 301.
- 305 Business Policies and Public Relations (3-0) 3**
The first part of the course concerns the firm and American institutions; its place in society, its responsibilities and duties. A study of the history and present impact of governmental regulations and activities as it affects the businessman. The course concludes with an analysis of the problems encountered by management in its daily operations. The case method is stressed.
Prerequisite: Business Administration 201 or concurrent registration.
- 340 Marketing, Principles of (3-0) 3**
The first part of the course is devoted to a broad investigation of the channels of distribution with an emphasis on marketing functions, policies and costs. The course is concluded with an investigation of the marketing institutions, with special emphasis on retailing.
Prerequisite: Economics 261 or concurrent registration.
- 341 Market Research (3-0) 3**
Nature and scope of marketing research, the scientific method applied to marketing research. Sources and collection of data, statistical collection of data, statistical analysis of data; reporting and evaluation of research results.
Prerequisite: Business Administration 340.
- 380 Corporation Finance (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.
Prerequisite: Accounting 226 or concurrent registration.
- 382 Financing Government (3-0) 3**
Descriptive, analytical and philosophical aspects of international, national, state and local problems; and of economic, political and legal content. Principles and analysis of various forms of taxation, incidence and shifting of taxes.
- 383 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. Taught on demand.
- 386 Insurance (3-0) 3**
Coverage available, buying methods, and general procedures of operation of all types of insurance companies. Special em-

phasis on the analysis of the standard or more common forms of fire, marine, casualty, and life insurance contracts. Taught on demand.

- 389 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. Taught on demand.
Prerequisite: Business Administration 211.

Business Education

- 8 Elementary Typing (1-3) 0**
Mastery of the keyboard and development of speed and accuracy by the touch system. Upon successful completion of this course, the student will have the necessary skills to be able to pass the typing qualification examination.
- 108 Advanced Typing (1-4) 2**
The development of skill in office production. Business letter forms, business forms, tabulation, stencils, and manuscripts are presented. Use of electric machines.
Prerequisite: Qualification examination in typing.
- 111 Elementary Gregg Shorthand (2-3) 3**
The basic principles of reading and writing shorthand, and dictation of practiced material. Entrance into this course and 112 is determined by an examination administered by the Business and Economics Division. (May be waived by evidence of proficiency.)
- 112 Intermediate Shorthand (2-3) 3**
The practice of dictation and transcription including shorthand vocabulary building.
Prerequisite: Business Education 111.
- 121 Basic Communications (3-0) 3**
A study of the form and composition of written communication in business. Includes composition of letters of inquiry, reply, application, sales, credit, adjustment, and collection, telegrams, memos, business reports, and job application data sheets.
Prerequisites: Two trimesters of English and ability to type.
- 127 Advanced Shorthand and Transcription (2-3) 3**
The practice of advanced dictation and speed building, and development of skill in shorthand and machine transcription.
- 131 Secretarial Procedure (2-2) 3**
Basic secretarial principles and procedures, including filing procedure, mail and telephone techniques, duplicating machine use, receiving callers, business etiquette, and personal transportation.
- 144 Quantitative Business Techniques (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 key-driven, rotary, and listing calculators, and the ten-key adding machine.

- 308 Office Management (3-0) 4**
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.
Prerequisite: Business Administration 201.

Economics

- 261 Principles of Economics (3-0) 3**
A course in economic life, institutions, and problems, stressing the national income approach. Introduction to demand, supply, and prices is included.
- 262 Principles of Economics (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.
- 356 Intermediate Economic 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: Economics 261.
- 361 Managerial Economics (3-0) 3**
This course bridges the gap between economic theory and business decision. Shows how to measure profits for management decisions; how to use demand analysis for improving sales forecasting, pricing, promotional planning, and new product development.
Prerequisite: Economics 261 and 262.
- 364 Intermediate Macro (3-0) 3**
The goal is to enable the student to discuss analytically current policy problems. An analysis of the forces which generate fluctuations in the level of economic activity of the country.
Prerequisite: Economics 262.
- 365 Monetary Economics (3-0) 3**
Money, monetary systems, control banking, monetary theory, and the functions of various financial institutions including commercial banks. Included is an historical, statistical, and analytical consideration of the business cycle using modern techniques of national income accounting.
Prerequisite: Economics 262.
- 367 Comparative Economic Systems (3-0) 3**
An analysis and comparison of capitalism, socialism and com-

munism and a survey of the historical background in which these systems developed.

Prerequisite: Consent of instructor.

368 History of Economic Thought (3-0) 3

An analysis of economic thought. The writing of Plato, Aristotle, Xenophon through Mercantilist ideas; the classical tradition including Marx, the Marginalists and opponents including Jevons, Menger, Marshall, Pareto, Weber, Veblen, et al.; and the contemporary economists including Keynes, Chamberlain, Clark and Schumpeter.

Prerequisite: Consent of instructor.

370 Quantitative Methods Applications (3-0) 3

The application of quantitative methods to business and economic problems. The course will consider application of statistics, linear programming, input-output models, decision theory and game theory to problems in business and economics.

Prerequisite: Consent of instructor.

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.

Prerequisite: Economics 262.



The Division of Education and Psychology

Admission to the Program

The student makes application for admission to the program. This is ordinarily accomplished during his fourth trimester at Fort Lewis College. The Advisory Selection Committee, in considering an application for admission to the teacher education program, takes into consideration these factors: English language proficiency, character and personal adjustment, physical fitness, completion of necessary course work and scholarship.

Students transferring to Fort Lewis College from other collegiate institutions will be accepted for the teacher education program, depending upon their prior preparation. Inquiries about courses still needed for teacher preparation are welcomed and may be addressed to Director of Teacher Education at Fort Lewis College.

Teacher Education Program

The teacher education program, within the setting of a liberal arts college, is designed to prepare students to enter the teaching profession at the secondary and elementary levels. The program presents the skills, understandings, techniques, attitudes, knowledge and appreciations necessary for students to become successful teachers. Students from other areas of study may take education courses as electives if they desire a broad understanding of American schools.

Procedures have been established for a college student to complete the teacher education program and to be recommended by the College to the State Department of Education for a teacher certificate. A teacher-placement service is maintained.

Humanities Major: Social Science Option

(Designed for the Prospective Elementary Teacher)

	Hours
Common requirements	37-39
(See Page 22)	
Humanities Requirements	
H 150 Survey of American History (two trimesters)	6
H 160 Survey of Latin American History	3
Additional hours in approved social science or history courses	11
	<hr/>
History or Social Science	20
EI 227 Children's Literature	4
Additional hours in approved English and Literature courses	8
	<hr/>
English courses	12
A 312 Art in the Elementary School	3
Mu 316 Music in the Elementary School	3
Professional Education Requirements	
Ed 218 Educational Psychology & Measurements	4

Ed 297A	Elementary Education — Language Arts	2
Ed 297B	Elementary Education — Reading	2
Ed 298A	Elementary Education — Arithmetic ..	2
Ed 298B	Elementary Education — Science	2
Ed 398A	Elementary Education — Social Science	2
Ed 398B	Elementary Education — Curriculum ..	2
Ed 398C	Elementary Education — Directed Teaching	8
Other Requirements		
PS 211	General Psychology	3
PS 254	Child & Adolescent Psychology	3
	Approved Mathematics course	3-5
	Electives	17-21
	Approved Laboratory Science Course ..	1-4
TOTAL		128

Teacher Education Program Secondary

The following curriculum has been designed to prepare students for teaching in the secondary schools as well as graduating from Fort Lewis College.

Transfer Students — For students transferring to Fort Lewis College, the requirements would depend upon the evaluation of their academic records from colleges they attended.

	Hours
Common Requirements	38
(See Page 22)	
Courses in major field	32
Courses in minor field	18
Electives including courses that may be required related to the major	16
	<hr/> 66
Professional Education	
Ed 207 Education in America	3
PS 211 General Psychology	3
Ed 218 Educational Psychology & Measurements	4
Ed 302 Secondary Education	4
Ed 380 Methods of Teaching	2
Ed 395 Observation and Student Teaching in the Secondary School	8
	<hr/> 24
Total Credits for Graduation	128

Psychology

Psychology primarily prepares people to assist others. Many students elect courses in this discipline to provide better for their own personal growth and to assist them in their work. They can select from a variety of positions in clinics, hospitals, schools and colleges, business and industry, and governmental agencies.

Many positions require additional knowledge and skill in psychology, so many students seek the graduate degrees.

A psychology minor is offered to students who are majoring in other areas. General Psychology 211 and 212, three and four credit hours respectively, are required for the psychology minor. A total of 11 additional hours must be selected from the following courses.

254	Child and Adolescent Psychology	3
287	Abnormal Psychology	3
307	Mental Hygiene	3
365	Psychology of Learning	4
372	Psychology of Personality	3

Physical Education

Physical education courses for both men and women are offered to students who are majoring in other areas. These courses enable a student to prepare for specialization in health, physical education and recreation.

Many job opportunities await the college graduate who has prepared himself in the field of physical education. The teaching profession, owners of camps and resorts, and city and county recreation directors all require his services.

Three credit hours in physical education activity classes are required of all graduates. These classes may be selected from the following: men's gymnastics, weight training, golf, tennis, badminton, technical mountain climbing, women's gymnastics, bowling, skiing, ice skating, wrestling, archery, conditioning for women and square and folk dancing.

A person wishing a background in the field of physical education should select 18 credit hours from the following:

111	Introduction to Health, Physical Education, Recreation	4
124	First Aid	2
207	Theory and Coaching of Team Sports	5
216	Theory and Teaching of Individual and Dual Sports	4
242	Physical Education and Health in Elementary Schools	5
254	Adaptive Physical Education	5
261	Theory and Technique in Folk and Social Dance	3

Education

- 207 Education in America (3-0) 3**
 Designed for students desiring information about the American school system and for prospective teachers. Topics covered are introduction to education, history and philosophy of education, school organization and administration, characteristics of successful teachers, teaching as a profession, and observation of teaching.
- 218 Educational Psychology and Measurement (3-2) 4**
 Principles of psychology applied to the learning and teaching processes including psychological research in the field of education.
Prerequisite: Psychology 211.

297- Curriculum principles, methods and materials of instruction and directed teaching in elementary education, in the areas of
298- Reading, Language Arts, Arithmetic, Science and Social Science.
398 Prerequisite: Admission to Elementary Education.

297A Elementary Education — Language Arts (2-0) 2
297B Elementary Education — Reading (2-0) 2
298A Elementary Education — Arithmetic (2-0) 2
298B Elementary Education — Science (2-0) 2
398A Elementary Education — Social Science (2-0) 2
398B Elementary Education — Curriculum (2-0) 2
398C Elementary Education — Directed Teaching 8
302 Secondary Education (4-0) 4

Organization and management of instruction and the principles of teaching as applied to the secondary school; observation of secondary school classes; case studies; and materials of instruction including audio-visual aids.

380 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.

395 Observation and Student Teaching in the Secondary School 8
 Includes observation, participation, teaching, and allied activities under the direction of a selected regular teacher in a secondary school in consultation with College supervisors. The application for student teaching must be approved prior to registration for 395.

Physical Education

101 Physical Activity (0-2) 1
 Seasonal physical activities during each trimester for men or for women.

102 Physical Activity (0-2) 1
 A continuation of 101.

103 Physical Activity (0-2) 1
 A continuation of 102.

111 Introduction to Health, Physical Education, and Recreation (4-0) 4
 History and principles of the three general fields are covered as well as laws, professional organizations, and careers

124 First Aid (2-0) 2
 First aid is taught; those who complete the course are eligible to receive the advanced American Red Cross certificate

207 Theory and Coaching of Team Sports (5-0) 5
 This course devotes equal time to the following team sports for men: Football, basketball, baseball, track and wrestling. The rules, officiating procedures, organization of practices, psychology of coaching, facilities and equipment necessary for each of these sports is covered.

216 Theory and Teaching of Individual and Dual Sports (4-0) 4
 The rules and officiating procedures as well as teaching tech-

niques for the following activities for men and women are covered: Tennis, badminton, golf, archery, gymnastics, bowling, skiing, and weight lifting.

242 Physical Education and Health in Elementary Schools (5-0) 5

The physical and emotional growth and development of elementary school children in relation to physical activities. Organization and administration of the elementary school physical education program plus methods of teaching and evaluation of students.

254 Adaptive Physical Education (5-0) 5

Relating the physical education program to students who deviate from normal physical status. Basic kinesiology and corrective training programs are covered.

261 Theory and Techniques of Folk and Social Dance (3-0) 3

Course deals with fundamental rhythms, basic structure, and the teaching of folk and social dances. Material presented is for both elementary and secondary school use.

Psychology

211 General Psychology (3-0) 3

An introduction to the scientific study of behavior, the basic learning process, motivation, and an introduction to social behavior.

212 General Psychology (3-2) 4

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. Includes basic animal experimentation in both lectures and laboratory.

Prerequisite: Psychology 211.

254 Child and Adolescent Psychology (3-0) 3

Principles of development in childhood and adolescence

Prerequisite: Psychology 212 or Education 218.

287 Abnormal Psychology (3-0) 3

Borderline disorders as extreme variations of the normal personality. Such disorders as neurotic and psychotic behavior, alcoholism, drug addiction, personality disorders and sexual deviation will be considered.

Prerequisite: Psychology 212.

307 Mental Hygiene (3-0) 3

The psychological principles underlying the nature of mental and emotional health and its minor deviation in terms of remedial and preventative treatment.

Prerequisite: Psychology 212.

365 Psychology of Learning (3-2) 4

The conditions of learning in animals and men as found in the experimental literature.

Prerequisite: Psychology 212.

372 Psychology of Personality (3-0) 3

The psychological and physiological nature of personality. Individual differences. The development of personality.

Prerequisite: Psychology 287 or 307

The Division of Humanities

English Major

The minimum 32-hour requirement for the English major must consist of at least the following:

- One course in Language (260, part I or II)
- One in Composition (260, part III or IV)
- One in American Literature (any part of 230)
- One in World Literature (any part of 160 or 210)
- Two in English Literature (any two parts of 220 or 300)

All courses to meet the 32-hour requirement must be chosen from English 160, 210, 220, 230, 260, 270, 300, and 310. The student's adviser is qualified to assist in the selection of additional courses in English and allied areas to enable the student to reach his individual goal. The possible emphases within the department are four: (1) general culture, (2) public school English teaching, (3) professional or other theater work, and (4) graduate study.

Electives in English as a Second Teaching Field

Electives for secondary teachers expecting to use English as a second teaching field should include the same basic distribution among the five areas shown above for majors.

Humanities Major: Social Science Option (Education)

The English requirement:

	Credit Hours
English 227—Children's Literature	4
English 260—II Modern English Grammar or III Advanced Composition	3
From English 160, 220, and 230, at least two parts	6

History Major

Fort Lewis College offers a major in History. The area of history and social science is an important part of a liberal education. The courses also help to prepare students both for graduate work and for careers in many fields, including teaching, public service, and journalism.

Students are encouraged to pursue historical knowledge as an ordered set of carefully reached judgments with integrity and to

illuminate the issues of the present and help provide standards by which to appraise the trends of the contemporary world.

Students desiring to teach will take the required education courses.

History majors are required to take a minimum of 32 hours of history, but not allowed more than a maximum of 40 hours on the major.

Graduation Requirements— B. A. Degree History Major

	Credit Hours
Common Requirements	37-39
(See Page 22)	
History Requirements	
American History Concentration	
A minimum of three classes in European history, and a minimum of one class in either Latin American, Asian, or African History.	
European History Concentration	
A minimum of three classes of American and or Latin American History and a minimum of one class in Asian or African History.	
Other Requirements	
Two trimesters of college mathematics or college foreign language	8-9
Electives	28-38

The student must insure through proper scheduling and consultation with his adviser that graduation requirement of 128 total credit hours is met.

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 Division's offerings, to give a total of 44 hours. The student will receive a broad background in the liberal and fine arts. Such a program in the Humanities affords a sound education for those contemplating careers in law or government service, for those planning to teach, 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, or Literature, 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.

Graduation Requirements— Humanities Major B. A. Degree

	Credit Hours
Common Requirements	38
(See Page 22)	
Two trimesters of college mathematics or two trimesters of college foreign language	6-8
Total	44-46

Elect one primary field and one or two secondary fields from among art, history, literature, and music, or any other approved area. The student must acquire 20 to 32 credit hours in the major option field and 12 hours in either one or two other approved areas.

Major Option

- If Music—Select any courses from the offerings in music. (The maximum credit allowable in band and chorus for the major option in music is three credit hours) 20
- If History or Literature—Any courses accepted toward major, and should include Survey of English Literature 244 and 245 or American Cultural History 292 and 293 20
- If Art—160, Two and Three Dimensional Design, 170, Drawing, 171, Drawing, 220, Painting, 350, Theory and Aesthetics 20

Other Approved Areas:

The student will select his other approved area or areas in consultation with his adviser and with the approval of the division chairman.

Humanities Major: Music Options

Fort Lewis College offers two music options under the humanities major and a minor in music. Graduation requirements for the B.A. degree in these options are as follows:

Option 1.

	Credit Hours
Common Requirements	37-39
(See Page 22)	
Two trimesters of college math or two trimesters of college foreign language	6- 8
Music Courses—select 32 semester hours from the following:	32
100 Fundamentals of Music	2
101 Sight Singing and Ear Training	2
105 Chorus	1
110 Band	1
200 Applied Music	1
205 Select Choir	1
215 Methods and Principles in Instrumental Music	3
216 Methods and Principles in Vocal Music	3
221 Theory I, Counterpoint & Musical Form	5
222 Theory II, Counterpoint & Musical Form	5
223 Instrumental and Choral Arranging	3
231 Survey of Music History I	3
232 Survey of Music History II.....	3
316 Music in the Elementary School	3
331 Great Masterworks of Music	2
350 Conducting	2
Cognate Area — to be selected from the following areas: art, literature, French, Spanish, German, government, history, philosophy, social science (anthropology), theatre or other approved area	12
Electives	37-41
TOTAL	128

Option 2.

Common Requirements (See Page 22)	37-39
Two trimesters of college math or two trimesters of college foreign language	6- 8
Music Courses	20
Two Cognate Areas—12 hours in each area for a total of	24
Electives	37-41
TOTAL	128

Humanities Major: Social Science Option

(Designed for the Prospective Elementary Teacher)

Credit Hours

Common Requirements (See Page 22)	37-39
Humanities Requirements	
150 Survey of American History	6
160 Survey of Latin American History	3
Additional hours in approved social science or history courses	11
	<hr/>
227 Children's Literature	4
Additional hours in approved English and Literature courses	8
	<hr/>
	12
312 Art in the Elementary School	3
316 Music in the Elementary School	3
Professional Education Requirements	
218 Educational Psychology and Measurements	4
297A Elementary Education—Language Arts	2
297B Elementary Education—Reading	2
298A Elementary Education—Arithmetic	2
298B Elementary Education—Science	2
398A Elementary Education—Social Science	2
398B Elementary Education—Curriculum	2
398C Elementary Education—Directed Teaching	8
Other Requirements	
211 General Psychology	3
254 Child and Adolescent Psychology	3
Approved Mathematics Course	3- 5
Approved Laboratory Science Course	1- 4
Electives	17-21
TOTAL	128

Those who plan to teach at the secondary level see Page 44.

Art

- 160 Two and Three Dimensional Design (0-6) 4**
A course dealing with two-dimensional design in form and bas-relief. It also consists of modeling in plastic materials and carving and shaping more rigid and resistant materials such as wood, metal, and stone.

- 170 Drawing (0-6) 4**
Practice in problems of technique, perspective, color, 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.)
- 171 Drawing (0-6) 4**
A continuation of 170.
Prerequisite: Art 170.
- 220 Painting (0-6) 4**
Instruction in oil painting. Students will concentrate on compositional and color problems while working from human figures, still life and landscape. (Course work in this area offered at the beginning and advanced levels.)
- 221 Painting (0-6) 4**
A continuation of 220.
Prerequisite: Art 220.
- 263 Advanced Studio (0-6) 4**
Special Topics.
- 270 Advanced Drawing I (0-6) 4**
Advanced problems in composition and techniques. Primary emphasis is placed on the human figure and its relationship to environment.
Prerequisite: Art 170 and 171.
- 271 Advanced Drawing II (0-6) 4**
Continuation of 270.
Prerequisite: Art 170, 171, and 270.
- 312 Art in the Elementary School (3-0) 3**
Contemporary and historical concepts, practices, and methods used in the elementary school art program.
- 350 Theory and Aesthetics (3-0) 4**
The appreciation and understanding of the various art forms.
- 363 Advanced Studio (0-6) 4**
Special topics.

English

- 100 Developmental Reading (0-2) 1**
A course designed to increase the reading rate and comprehension level of any student.
- 101 A Linguistic Approach to the English Language (5-0) 2**
For bilingual students, to be taken either concurrently with English 100 for Bilingual Students (as a prerequisite to English 103a for Bilingual Students) or as a supplement to English 103a for Bilingual Students on recommendation of the instructor. An introduction to modern linguistic principles in studying the English language, with emphasis on oral and written communication systems in relation to other Anglo-American cultural patterns. Does not meet Freshman English requirement.
- 103a Freshman English (5-0) 3**
Training in good usage in written and oral expression. Must include English 100

- 103 Freshman English (3-0) 3**
 Training in good usage in written and oral expression.
Prerequisite: Satisfactory score on ACT
- 104 Freshman English (3-0) 3**
 A continuation of 103 with emphasis on longer units of composition.
Prerequisite: English 103.
- 121 Fundamentals of Speech (3-0) 3**
 Through closely supervised activities in various speech forms, the student develops skills in the organization and delivery of speeches.
- 125 Semantics (3-0) 3**
 A study of the application of the meaning of words in context to the communication process. An introductory course intended for the general student.
- 151 Oral Interpretation of Literature (3-0) 3**
 The areas of concentration in this course include the use of voice and body in the interpretation of literary materials, the interpreter's relation to the audience, and finding and expressing orally the meaning in the basic forms of literature: prose, poetry, and drama. Also serves as a theatre course
- 160 Masterpieces of World Literature (3-0) 3**
 A two-part course in masterpieces, but excluding English and American and the content of courses 210 and 270, with credit granted for each part completed: I To 1914; II Since 1914.
- 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.
- 208 Advanced Journalism (2-3) 3**
 Advanced news writing, editorial and feature writing, preparation of copy for newspaper campaigns, headline writing, and newspaper make-up are all stressed.
- 210 World Literature (3-0) 3**
 A two-part course, with credit granted for each part completed: I Classical; II Bible.
- 212 Advanced Public Speaking (3-0) 3**
 A study designed to handle larger units of persuasive speech materials.
Prerequisite: English 121 and permission of instructor.
- 220 English Literature (3-0) 3**
 A five-part course, with credit granted for each part completed: I Through the Renaissance; II Restoration and 18th Century; III 1798-1850 IV 1850-1914; V English Novel. Emphasis in parts I-IV on poetry and non-fictional prose.

- 227 Children's Literature** (3-0) 4
Folk literature, poetry, drama, and informational books for pre-school and elementary school children. Emphasis is placed upon the development of criteria for the selection of appropriate literature for children at different levels. Students in this course are strongly advised also to take Oral Interpretation of Literature—English 151, not necessarily concurrently, however.
- 230 American Literature** (3-0) 3
A three-part course, with credit granted for each part completed: I From Puritans to 1835; II American Renaissance; III 1865-1914.
- 260 Language and Composition** (3-0) 3
A four-part course, with credit granted for each part completed: I History of the English Language, II English Linguistics; III Advanced Composition; IV Creative Writing.
- 270 Dramatic Literature** (4-0) 4
A study and analysis of plays exclusive of Shakespeare.
- 300 Major English Writers** (3-0) 3
A two part course, with credit granted for each part completed: I Chaucer; II Shakespeare.
- 310 Contemporary Literature** (3-0) 3
A two-part course in literature since 1914, with credit granted for each part completed: I English and American Poetry; II English and American Fiction.

Foreign Languages

LATIN

- 109 Introductory Latin I** (4-0) 4
An introduction to the Latin language.
- 110 Introductory Latin II** (4-0) 4
A continuation of 109.
Prerequisite: Foreign Language 109

SPANISH

- 115 Elementary Spanish I** (4-0) 4
A course in grammar, prose composition, reading and conversation.
- 116 Elementary Spanish II** (4-0) 4
Further study of Spanish with emphasis on reading, composition and conversation.
Prerequisite: Foreign Language 115.
- 215 Intermediate Spanish** (4-0) 4
A course in second-year Spanish with emphasis on reading and conversation.
Prerequisite: Foreign Language 116.

- 320 Advanced Spanish (4-0) 4**
All advanced Spanish courses of literature, grammar, syntax, or rhetoric are taught under this designation. The specific subject in parentheses will vary but the advanced level of content will be maintained. May be taken more than once for credit, provided the subject matter is different on each occasion.

GERMAN

- 123 Elementary German I (4-0) 4**
A course in grammar, pronunciation and reading
- 124 Elementary German II (4-0) 4**
Continuation of 123.
Prerequisite: Foreign Language 123.
- 223 Intermediate German I (3-0) 3**
A continuation of 124 with emphasis on reading and conversation.
Prerequisite: Foreign Language 124.
- 224 Intermediate German II (3-0) 3**
Continuation of 223.
Prerequisite: Foreign Language 223.
- 323 Third-year German I (3-0) 3**
Emphasis on literature and advanced reading and conversation.
- 324 Third Year German II (3-0) 3**
Emphasis on literature and advanced reading and conversation.

FRENCH

- 147 Elementary French I (4-0) 4**
A course in grammar, prose composition, reading and conversation.
- 148 Elementary French II (4-0) 4**
Further study of French with emphasis on reading, composition and conversation.
Prerequisite: Foreign Language 147
- 247 Intermediate French I (3-0) 3**
A course in second-year French with emphasis on reading and conversation.
Prerequisite: Foreign Language 148.
- 248 Intermediate French II (3-0) 3**
Continuation of 247
Prerequisite: Foreign Language 247
- 301 Advanced French Composition and Syntax (3-0) 3**
Masterpieces of French literature from LaChanson de Roland to 1715.
Prerequisite: Foreign Language 248.
- 308 Contemporary French Literature (3-0) 3**
Masterpieces of French literature from 1715 to 20th century. Can be repeated for credit.

Government

- 120 State and Local Government (3-0) 3**
A study of the history, nature, organization, and operation of state and local governments in the United States.
- 188 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.
- 282 Comparative Governments (3-0) 3**
Considered are the governments and politics in present day Great Britain, France, Germany, Russia, China, and Japan; comparisons are made with the government of the United States.
- 287 History of Political and Economic Thought (3-0) 3**
Primarily a study of the ideas of both early-day and present-day political philosophers. Students read the original writings of the philosophers. Also serves as a history course.
- 334 U. S. Constitutional Law (3-0) 3**
The constitutional law of the United States as demonstrated in leading cases and historical materials. The Constitution and interpretations of the Constitution as they affect federalism. The scope of federal power in domestic and international affairs and in civil liberties is demonstrated. Case method of instruction is used.
- 337 Diplomatic History of the United States (3-0) 3**
A study of the diplomacy of the United States from the American Revolution to the present day. Also serves as a history course.

History

- 150 Survey of American History (3-0) 3**
A two trimester general introductory survey of United States history. Either part may be taken first. Students may take this course one or more times for credit, provided the subject is different on each occasion.
- 160 Survey of Latin American History (3-0) 3**
A two trimester general history survey of Latin America. Either part may be taken first. Students may take this course one or more times for credit, provided the subject is different on each occasion.
- 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 with offering. May be taken only with instructor's permission. Students may take this course one or more times for credit, provided the subject is different on each occasion.

- 350 Studies in Asiatic History (3-0) 3**
A study of the history of Asia. The specific topic will vary with each offering. May be taken only with instructor's permission. Students may take this course one or more times for credit, provided the subject is different on each occasion.
- 360 Studies in European History (3-0) 3**
A study of the history of Europe. The specific topic will vary with each offering. May be taken only with the instructor's permission. Students may take this course one or more times for credit, provided the subject is different for each occasion.
- 370 Studies in Latin American History (3-0) 3**
A study of the history of Latin America. The specific topic will vary with each offering. May be taken only with instructor's permission. Students may take this course one or more times for credit, provided the subject is different on each occasion.
- 380 Studies in American History (3-0) 3**
A study of the history of the United States and Canada. The specific topic will vary with each offering. May be taken only with instructor's permission. Students may take this course one or more times for credit, provided the subject is different on each occasion.

(English 292 and 293 and Government 287 and 337, also serve as history courses.)

Music

- 100 Fundamentals of Music (2-0) 2**
Open to all students. A beginning course in musical notation and the various elements of music.
- 101 Sight Singing and Ear Training (2-0) 2**
A study of, and practice in, rhythmic, melodic, and harmonic ear training, sight singing, and keyboard harmony.
Prerequisite: Music 100.
- 105 Chorus (0-2) 1**
Open to all students. This course may be repeated three times for credit, up to a maximum of three credit hours.
- 110 Band (0-3) 1**
Open to all students who are proficient in playing a band instrument. This course may be repeated three times for credit up to a maximum of three credit hours.
- 200 Applied Music (0-1½) 1**
Individual and/or class instruction in voice, piano, and wind instruments.
- 205 Select Choir (0-3) 1**
By audition only. This course may be repeated three times for credit up to a maximum of three credit hours.

- 215 Methods and Principles in Instrumental Music** (3-0) 3
Includes the study of principles and practices in teaching music and a playing knowledge of all standard band and orchestral instruments.
- 216 Methods and Principles in Vocal Music** (3-0) 3
Includes the study of principles and practices in teaching and singing choral music.
- 221 Theory I** (5-0) 5
Musical theory.
- 222 Theory II** (5-0) 5
Prerequisite: Music 221.
- 223 Instrumental and Choral Arranging** (3-0) 3
Arranging for band, orchestra, and chorus.
- 231 Survey of Music History I** (3-0) 3
Study of the history of music from ancient times to 1750.
- 232 Survey of Music History II** (3-0) 3
Study of the history of music from 1750 to present.
- 316 Music in the Elementary School** (3-0) 3
Methods and materials for the elementary school music program.
- 331 Great Masterworks of Music** (2-0) 2
A study in depth of great masterworks of music selected from composers such as Bach, Beethoven, Mozart, Brahms, Tschai-kowsky, Verdi, Hindemith, and Bartok.
- 350 Conducting** (2-0) 2
A course in the techniques of instrumental and choral conducting.

Philosophy

- 141 Problems in Philosophy** (3-0) 3
Philosophy consists in persistent, systematic, imaginative treatment of problems which everybody must face. Is there anything about the mind which will not be revealed by a study of the body or of behavior? Are we free to choose, or are we determined by our environment? What is truth? What is right? What is religion?
- 251 Ethics** (3-0) 3
Sample theories of John Locke, David Hume, Immanuel Kant, John Stuart Mill, and Albert Schweitzer are studied and compared.
- 261 Philosophy of Religion** (3-0) 3
A detailed survey of philosophical approaches to problems raised by religion. Readings will be culled from sources representing widely differing points of view.

- 271 Logic (3-0) 3**
 This course will study the main principles of reasoning as developed in Aristotle's Organon, in contrast to the Inductive methods, and Dewey's "Complete act of thought." Modern mathematical logic is illustrated by the Boole-Schroeder System, the theorems of which are developed and applied.
- 374 History of Ancient and Medieval Philosophy (3-0) 3**
 The origins of scientific thought among the ancient Milesian philosophers, the development of anthropological interest through the sophists and Socrates form the first part of this course. The great systems of Plato and Aristotle, and the religious approaches of Stoics, Epicureans, Sceptics, leading to St. Augustine and the Medieval Scholastics will give an understanding of the roots from which modern science has grown.
Prerequisite: Senior standing, year of philosophy, or permission of instructor.
- 375 Renaissance, Modern, and Recent Philosophy (3-0) 3**
 History of renaissance. Bacon, Descartes, Leibniz, Hume and Kant lay the groundwork for the modern scientific point of view. Marx, Mill, Dewey, Heidegger, Kierkegaard, Sartre, Buber, Whitehead, and Russell state the issues in modern terms. This course aims to bring the students up against the main intellectual conflicts of the present day.
Prerequisite: Senior standing, year of Philosophy, or permission of instructor.

Social Science

- 151 Introduction to Anthropology (3-0) 3**
 A comprehensive study of general anthropology.
- 253 Prehistory (3-0) 3**
 The development of Old World culture from the Old Stone Age through the Iron Age.
- 254 North American Indians (3-0) 3**
 Archaeology, ethnology, and linguistic relationships of the Indians of North America.
- 255 Archaeology of the Southwest (3-0) 3**
 The Pre History cultures of the desert and mountainous regions of the Southwest. Different culture sequences will be analyzed and compared.
- 255L Archaeology of the Southwest — Lab (0-2) 1**
 Laboratory supplement to Social Science 255. May be taken concurrent with the lecture course or at a later date.
- 256 Primitive Cultures (3-0) 3**
 An ethnographic survey of the peoples and cultures of Africa, Eurasia, and Oceania and the New World.
- 259 Field Training in Archaeology 6**
 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. Due to the necessity of limiting enrollment, preference will be given to those students who have taken Social Science 255 and to students in their last year. However, the course is open to and suitable for all students.

- 261 Collective Behavior (3-0) 3**
A descriptive and functional approach to human behavior in unstructured situations. Areas of consideration will include the crowd, the mass, and the public, with an analysis of the social condition necessary for their development and operation.
- 263 Contemporary Social Problems (3-0) 3**
A study of culture and its relation to specific social problems.
- 271 World Geography (3-0) 3**
An introduction to world geography; physical and cultural regions; development of natural resources.
- 303 Personality and Society (3-0) 3**
An interactionist approach to society and personality. Areas of investigation include the structure of organized groups; social control; motivation; and socialization.
- 351 Social Anthropology (3-0) 3**
Contemporary theories concerned with the social aspects of man's culture are emphasized. Problems of data gathering and analysis are considered.

Theater

- 125 Acting (1-2) 2**
A study of the problems and techniques involved in creating a role for the stage. Emphasis on body and voice techniques; relaxation, ease and individual creativity.
- 126 Acting (1-2) 2**
A continuation of 125. Emphasis on character and characterization.
Prerequisite: 125 or equivalent or permission of instructor.
- 144 Theatre Production (2-2) 3**
A lecture and laboratory course in the technical aspects of theatre production. Instruction and practical experience are provided in stage scenery, lighting, costuming and makeup. Laboratory work is scheduled in relation to the major production for the trimester.
- 181 Theatre Workshop (0-2) 1**
This course is designed to give college credit for participation in theatre activities. Such credit may be obtained by participation in acting or technical work in experimental theatre or major college production. A minimum of two hours of supervised laboratory work each week is required. The course may be taken four (4) times for credit.
Prerequisite: None.

215 Fundamentals of Playwriting (3-0) 3

A course in the principles and practice of writing for the stage and dramatic material for television. The student is encouraged to take a two-hour lab in theatre workshop while enrolled in this course. The student should have a prior background in dramatic literature.

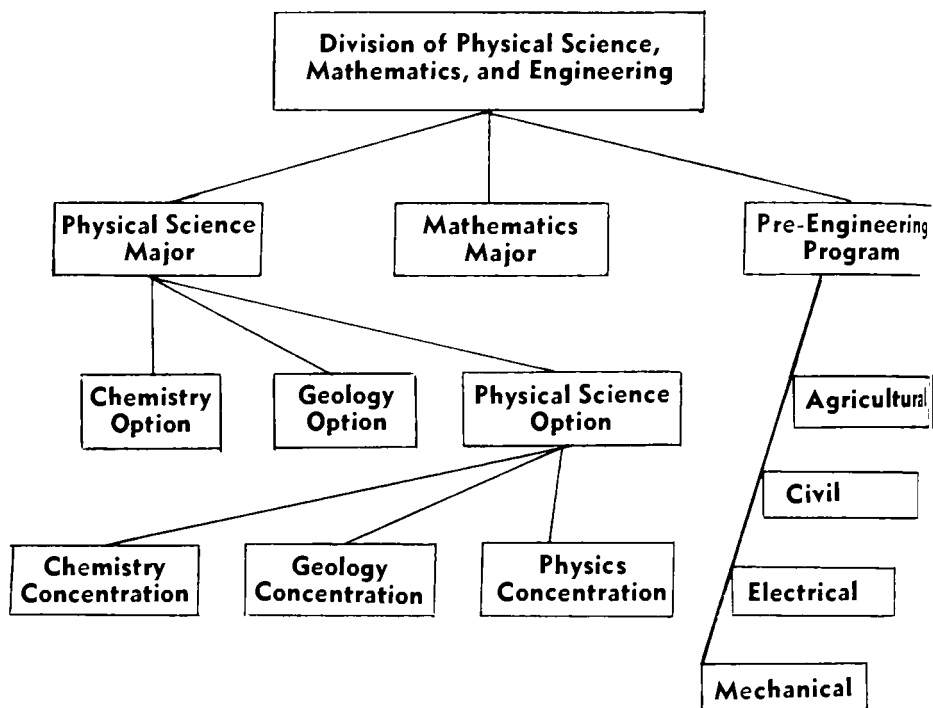
247 History of the Theatre (5-0) 5

A study of the theatre from the ancient Greeks to the moderns. Emphasis will be on theatre scholarship, chief periods of dramatic literature, architectural development of the physical theatre, and the chief styles of acting and theatre production.

(English 258, Dramatic Literature and English 151, Oral Interpretation of Literature may also be taken for credit in Theatre.)



The Division of Physical Science, Mathematics and Engineering



Programs in the Division

The Division of Physical Science, Mathematics, and Engineering offers courses in chemistry, engineering, geology, mathematics, and physics. Studies in the Division can lead to a Bachelor of Arts degree in Mathematics or a Bachelor of Science degree in Physical Science. The Division also gives courses for several pre-professional programs, courses in support of other disciplines, and courses for the general interest of the students.

The curricula in the Division have been planned to give the students excellent training in mathematics or physical science within a liberal arts framework. The programs are designed to meet the requirements of students who plan to attend graduate school, students who will seek employment in industry or with governmental agencies, students who seek careers in medicine or engineering, and students who are preparing for elementary or secondary school teaching. Pros-

pective elementary and secondary school teachers should take the required courses for teacher certification offered by the Division of Education and Psychology.

The Mathematics Major

The student who completes a major in mathematics graduates with a Bachelor of Arts degree in mathematics. For graduation, a student must complete 15 hours of credit in mathematics courses bearing numbers higher than 250.

One who plans to major in mathematics should begin his studies with Math. 121 (Elementary Functions). He should have taken at least two years of algebra, one year of geometry, and some trigonometry at the high school level. Students with exceptional mathematical backgrounds may be placed in more advanced courses.

The student who plans to do graduate work in mathematics should take Math. 276 (Algebraic Structures), Math. 376 (Linear Algebra), Math. 332 (Advanced Calculus), Math. 333 (Advanced Calculus), and courses in German or French. He should also consult the chairman of the Mathematics Department where he intends to do graduate work to learn of any special requirements of that department.

The student who plans to teach secondary school mathematics should take Math. 276 (Algebraic Structures), Math. 376 (Linear Algebra), and Math. 342 (College Geometry).

The Mathematics Department provides some courses for people who are majoring in other academic disciplines. Students planning to enroll in Math. 100 (Mathematics for Liberal Arts) should have taken at least one year of algebra and one year of geometry in high school. Math. 101 (Fundamentals of Mathematics) and Math. 102 (Trigonometry) are courses designed for students who do not have the necessary background for Math. 121 (Elementary Functions) and for students who may have a special need for the knowledge of elementary algebra or trigonometry. Math. 111 (Elementary Statistics) is designed for students without a background in calculus who want an introduction to statistical methods.

The Physical Science Major

A student who completes a major in Physical Science graduates with a Bachelor of Science degree in Physical Science. He may choose any of the following options: the Chemistry Option in which he earns 32 credit hours in chemistry, the Geology Option in which he earns 32 credit hours in geology, or the Physical Science Option in which he distributes his major studies among the physical sciences.

The Physical Science Option affords a student good training in physical science within a liberal arts curriculum. The program comprises a concentration of courses which includes at least 18 credit hours selected from one of the physical sciences and 8 credit hours in each of the other two physical sciences. Any student planning to teach a physical science in a secondary school should find out the number of credit hours in that science required by the state in which he plans to teach.

The Chemistry Option is designed to give the student a good

foundation for a career in chemistry. A student can choose one of two routes to his degree:

He may fulfill the minimum requirement of 32 hours for a major in Physical Science with the Chemistry Option.

For graduate study in chemistry, he should take additional courses recommended by the American Chemical Society. These courses, which are in addition to the minimum of 32 credit hours required for the major, are Physical Chemistry 259, Analytical Chemistry 265, and two trimesters of Advanced Topics in Chemistry 354 covering two different branches of chemistry. It is recommended that the student take mathematics and physics courses beyond the stated requirements for the degree.

The student who takes the **Geology Option** develops a good background for further study or work in either Geology or Earth Science. If he wishes to attend graduate school he should take as many of the following courses as practicable:

One year of Botany or Zoology	Mathematics through
Engineering Principles 104 & 105	Calculus 232
Chemistry through Physical	Elementary Surveying 205
Chemistry	Additional course work in physics

The Pre-Engineering Program

The engineering program is oriented toward preparing an engineering student with a liberal arts background and with the strong mathematical foundation necessary for pursuing upper level classes and graduate studies in engineering.

Fort Lewis College participates in a cooperative agricultural, civil, electrical, and mechanical engineering program with the College of Engineering, Colorado State University, at Fort Collins, Colorado. A student attends Fort Lewis College for six trimesters (the equivalent of three academic years); then, he spends two years at Colorado State University in the College of Engineering.

At Fort Lewis College, the student studies the engineering subjects normally found in the first two years of an engineering college. He also completes most of the Fort Lewis College requirements for a major in mathematics. At Colorado State University, he will complete the remaining requirements for a Bachelor of Arts degree in mathematics from Fort Lewis College. He is then awarded the degree of Bachelor of Arts in Mathematics by Fort Lewis College. Upon successfully completing his program in the College of Engineering at Colorado State University, he receives his engineering degree.

Students who want to pursue some branch of engineering other than those mentioned above can usually prepare themselves for the junior year in most engineering colleges by judicious choice of subject matter. They should bear in mind that most engineering colleges require a student to have completed mathematics through Differential Equations and to have completed three semesters of physics prior to beginning the junior year.

Summary of Requirements for Graduation

Credit Hours

GENERAL

Common Requirements	38
(See Page 22)	

MATHEMATICS MAJOR

Electives	58
Mathematics 121 through Mathematics 232	17
Mathematics courses bearing numbers above 250	15
Total credit hours	128

PHYSICAL SCIENCE MAJOR — Chemistry Option

Chemistry 147-148 (or Chem. 115-116, Chem. 231-232, Chem. 258, Chem. 264, and one course numbered above 340	32
Electives	27
Foreign Language (2 trimesters, preferably French or German)	8
Mathematics through Math. 231	13
Physics (2 trimesters, preferably Physics 217-218)	10
Total credit hours	128

PHYSICAL SCIENCE MAJOR — Geology Option

Chemistry (2 trimesters, preferably Chem. 147-148)	10
Electives	24
Foreign Language (2 trimesters, preferably French or German)	8
Geology	32
Mathematics (at least through Math. 102, preferably higher)	6
Physics (2 trimesters, preferably Physics 217-218)	10
Total credit hours	128

PHYSICAL SCIENCE MAJOR — Physical Science Option

General requirements for the Major

Chemistry (2 trimesters, preferably Chem. 147-148)	
Electives	
Foreign Languages (2 trimesters, preferably French or German)	
Geology 113-114	
Mathematics through Math. 122	
Physics (2 trimesters, preferably Physics 217-218)	

Chemistry Concentration

Chemistry 231, Chemistry 258, and any other course numbered above 231	
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Geology Concentration

Geology (3 courses numbered above 114)	
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Physics Concentration

Physics (3 courses numbered above 218)	
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Total credit hours	128
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Chemistry

- 115 General Chemistry (4-3) 5**
An introduction to chemistry, including atomic and molecular theory, the periodic table, bonding, stoichiometry, gases, solutions, and chemical equilibria. A student will not receive credit toward graduation for both this course and Chemistry 147.
- 116 General Chemistry (4-3) 5**
A continuation of Chemistry 115. A student will not receive credit toward graduation for both this course and Chemistry 148.
Prerequisite: Chemistry 115.
- 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. The recommended beginning course for science majors. A student will not receive credit toward graduation for both this course and Chemistry 115.
Prerequisite: One year of high school chemistry and two years of high school mathematics. Concurrent enrollment in Mathematics is recommended.
- 148 Principles of Chemistry (3-6) 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 chemistry majors.
Prerequisite: Chemistry 147, or Chemistry 115 and permission of instructor.
- 231 Organic Chemistry (4-3) 5**
The fundamental structure, reactions, and nomenclature of aliphatic and aromatic organic compounds. The laboratory is designed to acquaint the student with fundamental organic chemistry techniques.
Prerequisite: Either Chemistry 116 or Chemistry 148.
- 232 Organic Chemistry (3-6) 5**
The reactions of organic compounds containing halogen, hydroxyl, aldehyde, keto, carboxyl, amine and ether functional groups. The laboratory acquaints the students with more advanced techniques in organic chemistry such as syntheses and analyses.
Prerequisite: Chemistry 231.
- 258 Physical Chemistry (3-3) 4**
The quantitative aspects of laws governing chemical and physical phenomena. Includes thermodynamics, chemical potential, kinetics, phase rule discussions, and relationships of properties of substances to their molecular structures.
Prerequisites: Chemistry 148, 1 year of college physics, and Math 231 concurrently.
- 259 Physical Chemistry (3-3) 4**
A continuation of Chemistry 258.
Prerequisite: Chemistry 258.

- 264 Inorganic Chemistry** (3-0) 3
Modern concepts of inorganic chemistry. Chemistry 258 recommended.
- 265 Analytical Chemistry** (2-3) 3
Modern analytical theory and methods, including electrical, optical and chromatographic techniques.
Prerequisite: Chemistry 258.
- 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: Chemistry 231.
- 354 Advanced Topics in Chemistry** (—) 3
Advanced material in various areas of chemistry. During a trimester, material from one specific area will be treated. Class schedules will indicate the area. The time spent in the classroom and in the laboratory will vary with the topic.
Prerequisite: The 200 series course(s) in the specific subject area.
- 364 Organic Qualitative Analysis** (0-9) 3
Identification of a series of unknown organic compounds by instrumental means as well as by the preparation of derivatives. Designed to acquaint the student with the laboratory techniques involved in identifying organic compounds.
Prerequisite: Chemistry 232.

Engineering

- 104 Engineering Principles I** (2-4) 3
Introduction to engineering, engineering problem solving, graphical analysis, and engineering drafting techniques.
Prerequisite: Math 102 or high school trigonometry.
- 105 Engineering Principles II** (2-4) 3
A continuation of Engineering 104. Course involves advanced principles of graphic and descriptive geometry, graphical solution of engineering problems including graphical mathematics, and an introduction to computer language and programming.
Prerequisite: Engineering 104.
- 150 Computer Programming** (2-2) 3
Operation of digital computers, techniques of programming and practical applications. The individual sections of this course may be oriented toward particular fields.
Prerequisite: Permission of the instructor.
- 201 Electric Networks I** (2-3) 3
Element variable — voltage and current: Kirchoff's laws, network theory, systems of network equations, RC and RL network analysis.
Prerequisite: Math 232 must be taken at least concurrently.
- 202 Electric Networks II** (2-3) 3
Transient analysis, phasors, resonance, R.M.S. and average values.
Prerequisite: Engineering 201.

- 203 Electric Networks III** (2-3) 3
Transient and steady state analysis using Laplace Transform methods, multiport analysis.
Prerequisite: Engineering 202.
- 205 Elementary Surveying** (2-4) 3
Introduction to use of surveying equipment and solution of fundamental surveying problems.
Prerequisite: Mathematics 102 or high school trigonometry.
- 206 Advanced Surveying** (2-4) 3
General surveying, astronomical observations, topographic surveys, and their field applications.
Prerequisite: Engineering 205.
- 217 Statics** (3-0) 3
Composition and resolution of forces, equilibrium of force systems.
Prerequisite: Mathematics 232 must at least be taken concurrently.
- 221 Dynamics** (3-0) 3
The mechanics of bodies in motion and the resulting effects of force, motion, and acceleration.
Prerequisite: Engineering 217
- 245 Strength of Materials** (4-0) 4
Determination of strength, stresses, deformations, and other properties of engineering materials.
Prerequisite: Engineering 217
- 276 Fluid Mechanics** (3-0) 3
Statics, kinematics and dynamics of fluids.
Prerequisite: Engineering 221.

Geology

- 113 Physical Geology** (3-3) 4
The processes and agents at work on the Earth and the land forms they produce.
- 114 Historical Geology** (3-3) 4
The geologic history and development of life on the Earth as recorded by rocks and fossils.
Prerequisite: Geology 113.
- 207 Mineralogy** (3-3) 4
The elements of crystallography, and the classification and identification of minerals.
Prerequisite: Geology 113.
- 233 Introductory Paleontology** (3-3) 4
The systematic study of fossils, primarily those used often in the identification and correlation of geologic formations.
Prerequisite: Geology 114.
- 251 Igneous and Metamorphic Rocks I** (2-3) 3
The origin, occurrence, classification, and economic geology of igneous and metamorphic rocks.
Prerequisites: Geology 113 and 207.
- 261 Sedimentary Rocks and Stratigraphy I** (2-3) 3
The origin, classification, and significance of sedimentary rocks

with regard to depositional environment and paleotectonic relationships.

Prerequisites: Geology 113 and 114.

334 Structural Geology (3-3) 4

The analysis of geologic structures in the Earth's crust.

Prerequisite: Geology 113.

341 Field Methods (3-3) 4

The fundamental procedures in geologic field mapping.

Prerequisite: Math 102 and permission of instructor.

351 Igneous and Metamorphic Rocks II (2-3) 3

The origin, occurrence, classification, and economic geology of igneous and metamorphic rocks.

Prerequisite: Geology 251.

361 Sedimentary Rocks and Stratigraphy II (2-3) 3

The dating, correlation, mapping, and economic significance of stratified rocks.

Prerequisite: Geology 261.

Mathematics

100 Mathematics for Liberal Arts (4-0) 4

A course in mathematics especially for the non-mathematics and non-science major. Includes topics from logic, algebraic structures, number theory, set theory, probability theory, and history of mathematics.

101 Fundamentals of Mathematics (2-3) 3

Fundamentals of arithmetic and algebra. The material in this course is considered essential for any college mathematics course. Therefore, if a student has received a passing grade in any other mathematics course, he may not receive credit toward graduation for this course by taking it subsequent to the more advanced course.

102 Trigonometry (2-0) 2

A course in plane trigonometry. The trigonometric functions, fundamental identities and applications to triangles.

111 Elementary Statistics (3-0) 3

The types and treatments of data, sampling theory, and inferences.

Prerequisite: Mathematics 101 or equivalent.

121 Elementary Functions (5-0) 5

A study of elementary functions, their graphs and applications, including algebraic functions and transcendental functions; and introduction to two and three dimensional analytic geometry and vectors.

Prerequisite: Two years of high school algebra and one year of high school geometry and satisfactory ACT or SAT score.

122 Calculus (4-0) 4

Differential and integral calculus of the elementary functions with associated geometry.

Prerequisite: Mathematics 121.

- 231 Calculus (4-0) 4**
Techniques of single-variables and multi-variable calculus and an introduction to differential equations.
Prerequisite: Mathematics 122.
- 232 Calculus (4-0) 4**
Limits and continuity of functions, sequences and series, implicit differentiation, integration by substitution and other special techniques, improper integrals, maxima and minima, and differential equations.
Prerequisite: Mathematics 231.
- 276 Algebraic Structures (3-0) 3**
Groups, rings, fields, quotient structures, isomorphism theorems.
Prerequisite: Mathematics 232 or permission of instructor.
- 320 Numerical Analysis (3-0) 3**
Numerical methods in calculus, differential equations, linear algebra, matrix inversion, and estimation of characteristic roots, oriented towards machine computation.
Prerequisite: Mathematics 232 and Engineering 150.
- 327 Differential Equations (4-0) 4**
The types and solutions of differential equations.
Prerequisite: Mathematics 232.
- 332 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 on Euclidean spaces.
Prerequisite: Mathematics 232.
- 333 Advanced Calculus (3-0) 3**
A continuation of Mathematics 332. Topics include the Stieltjes integral on the line and in Euclidean spaces, infinite series, and an introduction to function spaces.
Prerequisite: Mathematics 332.
- 341 Probability and Statistics (3-0) 3**
Mean and variance of sum of random variables; binomial, Poisson, and normal distribution; Markov chains; Stochastic processes; and application to theory of queues.
Prerequisite: Mathematics 232.
- 342 Modern College Geometry (3-0) 3**
The advanced theories and topics in geometry.
Prerequisite: Mathematics 232.
- 361 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.
Prerequisite: Mathematics 276.
- 376 Linear Algebra (3-0) 3**
Vector spaces, linear transformations, linear algebras, matrices, determinants, similarity, canonical forms, quadratic forms.
Prerequisite: Mathematics 276.

Physics

- 117 Introductory Physics (4-3) 5**
A study of mechanics, wave motion, sound, and heat. Calculus is not used. The course is intended to satisfy the college physics requirements and/or curiosity of all students whose major interests are not in engineering, physical science, or mathematics. This course is not recommended for engineering students or for most physical science majors. Students who take Physics 217 will not receive credit toward graduation for Physics 117.
Prerequisite: High school algebra.
- 118 Introductory Physics (4-3) 5**
A continuation of Physics 117. The course includes topics in electricity and magnetism, light and optics, and topics in modern physics. Calculus is not used. Students who take Physics 218 will not receive credit toward graduation for Physics 118.
Prerequisite: Physics 117
- 217 Physics (4-3) 5**
The course includes topics in mechanics, wave motion, sound 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.
Prerequisite: Math 122; Math 231 should be taken concurrently.
- 218 Physics (4-3) 5**
A continuation of Physics 217. The course includes the principles of electricity and magnetism, light and optics, and topics in modern physics. Physics 218 is required of engineering students and strongly recommended to all physical science majors.
Prerequisites: Mathematics 231 and Physics 217.
- 220 Modern Physics (3-0) 3**
A course in modern physics. A study of current theories in atomic and nuclear physics.
Prerequisites: Physics 117 or 217 and Mathematics 231.
- 240 Optics (3-0) 3**
Fundamentals of geometrical and physical optics.
Prerequisites: Physics 118 or 218 and Mathematics 231.
- 254 Theoretical Mechanics (4-0) 4**
A study of kinematics, statics, and dynamics of particles and rigid bodies.
Prerequisites: Physics 117 or 217 and Mathematics 232.
- 261 Principles of Electricity and Magnetism (4-3) 5**
The mathematical theory of electrical and magnetic phenomena.
Prerequisites: Physics 118 or 218 and Mathematics 327
- 270 Heat and Thermodynamics (3-0) 3**
The concepts of temperature, heat, and changes of state.
Prerequisites: Physics 117 or 217 and Mathematics 327.
- 308 Electric Circuits (4-3) 5**
The principles and theories of circuit analysis, energy conversions, and pertinent equipment.
Prerequisites: Physics 117 or 217 and Mathematics 327

The Register*

State Board of Agriculture

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Dr. W. P. Ball	Durango	'73
Carl Breeze	Kremmling	'71
Edward Hofmann	Littleton	'77
John G. Holtorf	Yuma	'73
Kenneth W. Monfort	Greeley	'77
Arthur C. Sheely	Fort Collins	'71
Dr. John W. Thimmig	Brighton	'75
Carlyle N. Vickers	Lamar	'75
His Excellency, Governor John A. Love)		
W. E. Morgan,)		(Ex-Officio Members)
President, Colorado State University)		

Officers

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Dr. W. P. Ball	Vice-President
Charles L. Terrell	Secretary
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Daniel E. Black	Deputy Treasurer
John Bush	Resident Counsel

*Listing of The Register as of January, 1969

Administrative Staff

John F. Reed, President

Daniel E. Black Business Manager	Willard O. Bowman Chairman Division of Education and Psychology
Frank O. Bowman Chairman Division of Physical Science, Mathematics, and Engineering	James B. Bowra Admissions Counselor

Robert W. Delaney
Chairman
Division of Humanities and
Director
Center of Southwest Studies

James Dezendorf
Assistant Business Manager

Bennie W. Edmondson
Controller

Kenneth W. Eubanks
Chairman
Division of Business and
Economics

Kenneth Giesen
Manager, Bookstore

Nicholas J. Heidy
Associate Dean of Students
Educational Advisor

Billie Helms
Accountant

William W. Hollis
Assistant Dean of Faculty

James A. Johnson
Director of Information and
Services

James J. Jones
Manager, Auxiliary Services

Merle Joosten
Assistant to the Business
Manager

Chant D. Lee
Student Finance Officer

Allen J. Murdock
College Engineer

Herbert E. Owen
Chairman
Division of Biological Science

Paul W. Pixler
Dean of Faculty

John F. Reed
President

Charles H. Reid, Jr.
Director of Admissions
and Records

Betty Shoulders
Associate Dean of Students

Donovan E. Snyder
Assistant Director
Admissions and Records

Norvell G. Tate
Director of Teacher Education

Randall D. Taylor
Assistant Dean of Faculty

Edwin W. Wallace
Assistant to the President
Dean of Students

Donald F. Whalen
Director of Athletics

Joseph Wolcott
Coordinator of Campus Life,
Men

Library Staff

Carol D. Bradshaw
Lucile S. Cooper
Richard L. Gobble, Director

Charles J. Hitt
Esther T. C. Liu
Helen Wilson, Assistant Director

Student Health Service Staff

Louisa T. Helms, R.N., College Nurse

Leo W. Lloyd, M.D.
Tullius W. Halley, M.D.

Robert C. Pivonka, M.D.
Richard H. Geer, M.D.

Emeriti

Lory, Charles A., President Emeritus
Ped. B., Colorado State Normal School; B.S., University of Colorado; M.S., University of Colorado; L.L.D., University of Colorado; D.Ed., Colorado State College of Education; D.Sc., University of Denver; D.Sc., Colorado State University

Hershberger, Inez, Instructor of Languages
A.B., Kalamazoo College

Kelly, Floyd, Asst. Professor of Business
A.B., Colorado State College; M.A., Colorado State College; Advanced Graduate Work, Columbia University and Colorado State College

Academic Faculty

(First date following title indicates date of employment; second date, if any, indicates origin of present title.)

Addona, Antoinette D.

Asst. Professor of Physical Education (1968)
B.S., Univ. of Connecticut, 1961
M.A., University of Arizona, 1965

Admire, Alice K.

(on leave)

Asst. Prof. of English (1951, 1965)
B.S., Colo. State Univ., 1939
M.A., Western State College, 1962

Anderson, Richard D.

Asst. Prof. of Mathematics (1965, 1968)
B.S., Baker University 1958
MNS, Arizona State Univ., 1963

Atencio, Leonard D.

Asst. Professor of Economics (1968)
B.A., Fort Lewis College, 1964
Ph.D. candidate, Kansas State Univ.

Baars, Donald L.

Assoc. Prof. of Geology (1968)
B.S., University of Utah 1952
Ph.D., Univ. of Colorado, 1965

Baker, James R.

Instructor of Engineering (1966)
B.S.C.E., University of New Mexico, 1965
M.S.C.E., University of New Mexico, 1966

Beeson, Richard W.

Asst. Prof. of Sociology (1966, 1968)
B.A., Univ. of New Mexico, 1962
M.A., University of New Mexico, 1964

Benson, Stephen E.

Asst. Prof. of Philosophy (1968)
A.B., Univ. of Colorado, 1958
M.A., Univ. of Colorado, 1962
Ph.D. candidate at Univ of Colorado

Berg, David

Assoc. Prof. of Speech and Drama (1953, 1963)
B.A., Colorado College, 1951
M.S., University of Utah, 1952
Work toward Ph.D. at Univ. of Oregon

Bowman, Frank O., Jr.

Professor of Geology (1959, 1967)
A B, Williams College, 1941
B.S., University of North Carolina, 1942
Ph.D., University of North Carolina, 1954

Bowman, Willard O.

Professor of Education, and Chairman, Division of Education and Psychology (1958, 1968)
B.A., Berea College, 1931
B.Eng. .T.I., Univ of Chicago, 1933
M.A., Univ. of Colorado, 1958
Ed.D., Univ. of Colorado, 1965

Bradshaw, Carol D.

Librarian, Instructor (1966)
B.A., Colorado State College, 1960
M.A., Univ. of Denver, 1966

Briggs, Ullys L.

Instructor of Math, Intercultural Program (1968)
B.A., Univ. of Denver, 1960
M.Ed., Southeastern State College, 1967

Bushnell, Donald D.

Asst. Prof. of Mathematics, (1964, 1966)
B.S., Nebraska State Teachers College, 1951
M.A., Colorado State College, 1957
Course work completed for Ed.D., C S.C., 1968

Cameron, Donald D.

Visiting Prof. of English (1968)
B.A., Acadia Univ., Nova Scotia, 1922
A.M., Harvard University, 1923
Ph.D., Yale University, 1928

- Conrad, Ralph Wm.**
 Instructor of English, (1968)
 B.S., in Education, Kansas
 State College, 1950
 M.S., in English, Kansas
 State College, 1958
- Cooper, Lucile S.**
 Librarian and Instructor,
 (1967)
 B.A., Texas Woman's Univ.,
 1927
 B.S., in LS Texas Woman's
 Univ., 1952
 M.S. in LS, East Texas State
 Univ., 1965
- Cox, Billie Don**
 Asst. Prof. of Accounting
 (1967)
 BBA, Baylor University, 1961
 MBA, Baylor University, 1968
 CPA Colorado, Sept. 1965
- Cullen, Louis C.**
 Assoc. Professor of Physical
 Education (1963, 1967)
 B.S., University of New
 Mexico, 1948
 M.A., University of New
 Mexico, 1952
- Decker, James C.**
 Asst. 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**
 Assistant Prof. of Foreign
 Language (1958, 1964)
 Akademischer Übersetzer,
 Univ. of Heidelberg, 1944
 Diplom-Dometscher, Univ. of
 Heidelberg, 1956
- Delaney, Robert W.**
 Prof. of History and Southwest
 Studies and Chairman,
 Division of Humanities;
 Director, Center of South-
 west Studies (1957, 1964)
 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.**
 Asst. Professor of Biology
 (1967)
 B.S., Rutgers University, 1960
 M.S., Oregon State University,
 1962
 Ph.D., Michigan State
 University, 1967
- Din, Gilbert C.**
 Assistant Prof. of History,
 (1965)
 A.A., Imperial Valley College,
 1951
 A.B., University of California,
 Berkeley, 1957
 M.A., University of California,
 Berkeley, 1958
 Doctor en Filosofia y Letras,
 University of Madrid, 1960
- Dubois, Edward N.**
 Assoc. Prof. of Business and
 Econ. (1968)
 B.A., Univ. of Wyoming, 1946
 M.B.A., Univ. of Pennsylvania,
 1948
 Ph.D. course work completed,
 Univ. of Penn.
- Eccher, Sam C.**
 Instructor of English (1967)
 B.S., Regis College, 1954
 M.A., Colorado State College,
 1966
- Englehart, Stanton**
 Assistant Prof. of Art
 (1961, 1964)
 B.F.A., Univ. of Colorado,
 1960
 M.F.A., Univ. of Colorado,
 1968
- Erdley, R. Richard**
 Asst. Prof. of Elementary
 Education (1967)
 B.Ed., University of Miami,
 1952
 M.Ed., Univ. of Miami, 1961
 Ph.D., Florida State University
 1967
- Erickson, James G.**
 Associate Prof. of Biology
 (1964, 1967)
 B.A., Doane College, 1950

- M.S., Iowa State University,
1951
Ph.D., University of Wyoming,
1964
- Eubanks, Kenneth W.**
Prof. of Business and
Economics (1962-64-68)
B.B.A., Baylor University, 1954
M.S., Baylor University, 1955
Ph.D., Montana State University,
1962
- Fischer, Peter Klaus**
Instructor of History (1968)
B.A., Arizona State University,
1964
M.A., Arizona State University,
1966
Ph.D. candidate at Univ. of
Calif. at Santa Barbara
- Fox, Maynard C.**
Professor of Literature
(1964, 1967)
A.B., Fort Hays State College,
1937
M.S., Fort Hays State College,
1939
Ph.D. University of Colorado,
1963
- Gee, John E.**
Prof. of Elementary Education
(1964, 1965)
A.B., Tusculum College, 1929
M.Ed., University of
Pittsburgh, 1934
D.Ed., University of
Pittsburgh, 1946
L.L.D., Tusculum College,
1962
- Geerlings, Nancy**
Instructor of English (1968)
B.S., Ball State University,
1961
M.A., Ball State University,
1962
- Gibbons, Daniel E.**
Asst. Prof. of Physics (1968)
B.S., Univ. of Houston, 1964
M.S., Univ. of Houston, 1967
Ph.D. candidate, 1968
- Gilbert, James F.**
Asst. Prof. of Physical
Education (1967)
B.S. Ed., State University of
New York, 1962
M.Ed., Univ. of Arizona, 1963
- Gobble, Richard L.**
Associate Prof. & Director of
Library (1967)
B.S., University of Denver,
1948
M.A., University of Denver,
1950
- Goodwin, LeRoy W.**
Asst. Prof. of Government
(1957, 1962)
B.A., University of Colorado,
1947
M.A., University of Colorado,
1955
Ph.D., candidate, Columbia
Univ. (1968)
- Griffith, Dexter K.**
Asst. Prof. of Business and
Econ. (1962, 64)
B.A., Pomona College, 1933
M.A., San Francisco State
College, 1961
- Harrison, Merle**
Asst. Prof. of Chemistry (1968)
B.S., Brigham Young
University, 1955
M.S., Colorado State
University, 1957
Ph.D., Colorado State
University, 1960
- Harvey, Gina**
(on leave)
Asst. Prof. of Languages
(1963, 66)
Doctor of Letters, University
of Rome, 1943
- Heidy, Nicholas J.**
Instructor of Psychology,
Assoc. Dean of Students and
Educational Advisor
(1962-67)
A.B., Adams State College,
1962
M.A., Adams State College,
1964
- Hitt, Charles**
Librarian-Instructor (1968)
B.A. (Education), Nebraska
State, 1958
M.A. (Library Science),
University of Minn., 1968
- Holderness, Aubrey**
Instructor of Business
Education (1965)

- B.A., Adams State College,
1962
M.A., Adams State College,
1965
- Hollis, William W.**
Assistant Dean of Faculty
(1969)
Assoc. Prof. of Accounting
(1964, 67)
B.S., Okla. State University,
1958
M.S., Okla. State University,
1961
(C.P.A. 1962)
- Howard, Lyle**
Asst. Prof. of Language
(1957, 1965)
B.A., Kansas State Teachers
College, 1930
M.A., Western State College
of Colo., 1939
- Huffman, Letha**
Instructor of English (Title III),
1968
B.A., University of Kansas,
1965
B.S., University of Kansas,
1968
M.A., University of Kansas,
1968
- Ives, John C.**
Assoc. Prof. of Anthropology
(1966)
B.A., State University of Iowa,
1954
A.M., State University of Iowa,
1956
Ph.D., Harvard University,
1960
- Jenness, Arthur F.**
Visiting Prof. of Psychology
(1968)
B.A. Northwestern University,
1923
M.A., Northwestern
University, 1927
Ph.D., Syracuse University,
1930
- Jones, Roland C.**
Instructor of English (1967)
B.A., University of Michigan,
1956
M.A., Northern Arizona
University, 1963
- Kaufman, Jerry M.**
Assoc. Prof. of Business
(1963, 1967)
B.S., Southwestern State
College of Okla., 1959
M.S., Oklahoma State
University, 1961
C.P.A., 1962
- Keator, Richard G.**
Asst. Prof. of Biology (1967)
A.B., University of Calif.,
Santa Barbara, 1961
Ph.D., University of Calif.,
Berkeley, 1968
- Key, Kenneth**
Instructor of Mathematics
(1967)
B.S., Cheng Kung University,
1961
M.S., University of Iowa,
1965 (Hydraulics)
M.S., University of Iowa,
1967 (Mathematics)
- Korns, Richard F.**
Asst. Prof. of English &
Journalism (1966)
A.B., University of Penn.,
1930
Bach. of Journalism, Univ. of
Missouri, 1931
M.A., University of Minnesota,
1955
- Kuss, Adolph, Jr.**
Assoc. Prof. of Physical
Education (1964, 68)
B.A., Western State College
of Colo., 1952
M.A., Western State College
of Colo., 1964
- Liu, Esther T. C.**
Librarian-Asst. Prof. (1963, 68)
B.A., National Fu Tah
University, 1944
M.A., University of Minnesota,
1953
M.A., University of Denver,
1954
- Luna, George W.**
Instructor of Mathematics
(1965)
B.A., University of Calif.,
Santa Barbara, 1962
M.A., University of Calif.,
Santa Barbara, 1965

- Marquiss, Robert**
 Temp. Instructor of
 Agriculture (1966)
 Asst. Professor of Range
 Management (C.S.U.)
 B.S., Univ. of Wyoming, 1956
 M.S., Univ. of Wyoming, 1957
 Ph.D., Univ. of Arizona, 1967
- Martin, Jeanette**
 Asst. Prof. of English
 (1959, 65)
 B.A., University of Colorado,
 1933
 M.A., University of Colorado,
 1937
- Maxfield, Perry L.**
 Asst. Prof. of Chemistry
 (1966)
 B.S., Brigham Young
 University, 1961
 Ph.D., University of New
 Hampshire, 1965
- Moore, Howard D.**
 Temp. Instructor of
 Agriculture (1969)
 Asst. Professor of Agronomy
 (C.S.U.)
 B.S., Colorado State University,
 1963
 M.S., Montana State
 University, 1968
- O'Keefe, Ralph D.**
 Assoc. Prof. of English
 (1965, 68)
 B.A., Loyola University, 1938
 M.F.A., Yale University, 1947
- Owen, Herbert E.**
 Prof. of Biology and Chairman,
 Division of Biol. Science
 (1955, 66)
 B.S., Tulsa University, 1950
 M.S., Oregon State College,
 1953
 Ph.D., Oregon State College,
 1957
- Pearson, Roland**
 Instructor of Physical
 Education (1968)
 B.S., Univ. of Illinois, 1962
 M.A., Univ. of Illinois, 1965
- Periman, Kenneth I.**
 Assoc. Prof. of English
 (1962, 66)
 B.A., University of Colorado,
 1951
- M.A. University of Colorado,
 1953
- Peterson, Carroll V.**
 Assoc. Prof. of English, (1968)
 B.S., Univ. of Minnesota, 1958
 M.A., Univ. of Iowa, 1959
 Ph.D., Univ. of Iowa, 1963
- Phillips, Wendell**
 Assoc. Prof. of English
 (1961, 68)
 B.A., Iowa State Teacher's
 College, 1939
 M.A., Western State College,
 1958
 Ed.D., Univ. of New Mexico,
 June, 1958
- Pierce, Eleanor**
 Instructor of English in Title
 III (1967)
 B.A., Wellesley College, 1937
 M.A., Teachers College,
 Columbia Univ., 1965
- Pixler, Paul W.**
 Dean of Faculty and Prof. 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
- Plopper, Carol**
 Instructor of Biol. and Chem
 Labs (1968)
 B.S., Calif. State Polytechnic
 College, 1966
 M.A., University of Montana,
 1968
- Reber, Mick**
 Instructor of Art (1968)
 B.A., Brigham Young
 University, 1964
 M.F.A., Brigham Young
 Univ., 1968
- Rechard, Ottis H.**
 Visiting Prof. of Mathematics
 (1967)
 A.B., Gettysburg College,
 1916
 M.A., Gettysburg College,
 1918
 Ph.D., Univ. of Wisconsin,
 1930

- Reed, John F.**
 President of the College and
 Prof. of Biology (1962)
 B.A., Dartmouth College, 1933
 M.A., Duke University, 1935
 Ph.D., Duke University, 1936
- Reeder, Ray M.**
 Asst. Prof. of History (1966)
 B.S., Utah State University,
 1939
 M.S., Utah State University,
 1957
 Ph.D., Brigham Young Univ.,
 1966
- Reid, Charles H., Jr.**
 Asst. Prof. of Education and
 Director of Admissions and
 Records (1950-62)
 A.B., Montclair State College,
 1948
 M.Ed., University of Colorado,
 1949
- Richardson, Arlan G.**
 Asst. Prof. of Chemistry
 (1968)
 B.A., Peru State Teacher's
 College, 1963
 Ph.D., Okla. State University,
 1968
- Richardson, Carmen**
 Asst. Prof. of Elem. Education
 (1968)
 B.S., Okla. State University,
 1958
 M.S., Central State College,
 Okla., 1962
 Ed.D., Okla. State University,
 1966
- Roberts, Marda-Ruth**
 Instructor of Foreign
 Languages (1967)
 B.A., Valparaiso University,
 1964
 M.A., University of Arizona,
 1967
- Rodriguez, Manuel A.**
 Asst. Prof. of Foreign
 Languages (1965)
 B.A., Union College,
 Schenectady, N.Y., 1947
 M.A., Texas Western College,
 1964
- Rohde, Otto**
 Asst. Professor of Engineering
 (1964, 1966)
- B.S., U.S. Military Academy,
 1935
 M.S. in C.E., Mass. Inst. of
 Tech. 1937
- Rosenberg, Harry S.**
 (on leave)
 Asst. Prof. of Mathematics
 (1964, 66)
 B.A., Colorado State College,
 1956
 M.A., Colorado State College,
 1957
 M.A., University of Illinois,
 1964
- Root, Homer**
 Scholar in Residence
 (Archaeology) (1966)
 B.A., Denver University, 1921
 M.Th., Iliff School of
 Theology, 1925
- Ruland, Albert C.**
 Assoc. Prof. of Music
 (1964, 67)
 A.B., Western State College,
 1934
 M.A., Univ. of Southern Calif.,
 1947
- Schmidt, Frederick**
 Instructor of Music (1966)
 B.M.E., College of Emporia,
 1958
 M.M., Indiana University,
 1962
- Schwartz, Lucienne (DeSimplaire)**
 Instructor of Foreign
 Languages (1967)
 Diploma, Brussels
 Conservatory, 1945
 B.M., University of Wyoming,
 1964
 M.A., University of Wyoming,
 1965
 M.A., University of Colo.,
 1967
- Smith, Duane A.**
 Assoc. Prof. of History;
 (1964, 67)
 B.A., University of Colorado,
 1959
 M.A., University of Colorado,
 1961
 Ph.D., University of Colo.
 1964

- Spangenberg, Donald**
 Asst. Prof. of Industrial Arts
 (1957, 66)
 B.A., Kearney State Teachers
 College, 1950
 M.A., Colorado State College,
 1957
- Spencer, Albert**
 Asst. Prof. of Biology (1965)
 B.S., Colo. State University,
 1957
 M.S., Colorado State Univ.,
 1961
 Ph.D., Colo. State Univ., 1965
- Staley, Charles K.**
 Instructor of Business (1967)
 B.S., Colo. State University,
 1962
 M.S., Colorado State College,
 1967
- Stevenson, Douglas**
 Instructor of English in Title
 III (1968)
 B.A., Kalamazoo College, 1965
 M.A., University of Kansas,
 1968
- Stocker, Harold**
 Instructor of Mathematics
 (1965)
 B.A., Fort Lewis College, 1965
 M.A., University of Wyoming,
 1967
- Tate, N. G.**
 Prof. of Secondary Education
 & Director of Teacher
 Education (1962, 66)
 B.A., New Mexico Highlands
 Univ., 1929
 M.A., University of New
 Mexico, 1934
 Ed.D., University of Southern
 Calif., 1952
- Taylor, Randall D.**
 Prof. of Physical Science and
 Assistant Dean of Faculty
 (1953, 66)
 B.S., University of Nebraska,
 1935
 M.Ed., Adams State College of
 Colo., 1959
- Tikalsky, Frank D.**
 Asst. Prof. of Psychology
 (1966)
 A.B., Missouri Valley College,
 1954
- M.A., University of Missouri
 at K.C., 1959
 Ed.D., Colorado State College,
 1966
- Tochi, Alice**
 Instructor of Business
 Education (1968)
 B.A., Colo. State College, 1960
 M.A., Colo. State College, 1961
- Wallace, Edwin W.**
 Assoc. Prof. of Psychology,
 Dean of Students, and
 Special Asss. to the
 President (1950, 67)
 B.S., University of New
 Mexico, 1949
 M.Ed., Adams State College of
 Colo., 1960
- Wayt, Buford**
 Director and Instructor of
 Title III (1967, 68)
 A.B., Western State College,
 1943
 M.A., Western State College,
 1950
- Wendelburg, Norma**
 Asst. Prof. of Music (1968)
 B.M., Bethany College, 1943
 M.M., University of Michigan,
 1947
 M.M., Eastman School of
 Music, 1951
- Whalen, Donald F.**
 Assoc. Prof. of Physical
 Education and Director of
 Athletics (1959, 66)
 B.S., Business Adm., Arizona
 State College, 1954
 M.A., Education, Arizona State
 College, 1955
 Doctorate in Health & Safety
 Ed., Indiana Univ., 1962
- Wilson, Helen**
 Asst. Prof. and Librarian (1967)
 B.A., University of Colorado,
 1950
 M.A., University of Denver,
 1963
- Wilson, Janice R.**
 Instructor of Physical
 Education (1968)
 B.S., Slippery Rock State
 College, 1966
 M.A., Kent State University,
 August, 1968