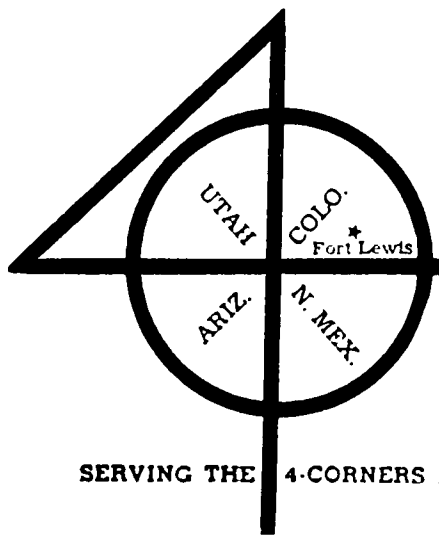


FORT LEWIS

A & M COLLEGE

HESPERUS, COLORADO

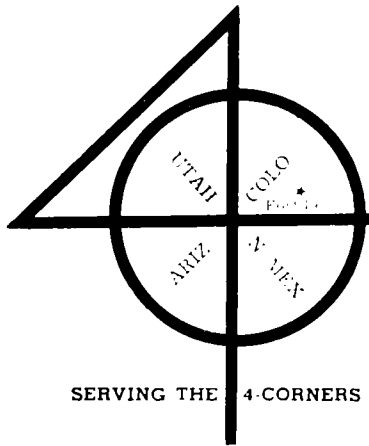


Series 3, No. 1

Fort Lewis A & M College

Catalog 1951-52

HESPERUS, COLORADO



MEMBERSHIP IN EDUCATIONAL
ASSOCIATIONS

American Association of Junior Colleges
American Association of Collegiate Registrars
and Admissions Officers

Colorado-Wyoming Association of Collegiate
Registrars and Admissions Officers

Fort Lewis A & M College Bulletin

Series 3, Number 1.

COLLEGE CALENDAR

*Summer Quarter

1951

June 11, Monday, 8:00 a. m.	Registration
	Classes begin at 1:00 p. m.
July 4, Wednesday	Independence Day Holiday
July 16, Monday	Midterm
August 1, Tuesday	Colorado Day Holiday
August 16 & 17, Thursday & Friday	Final Examinations
August 17, Friday	Last day of summer quarter

Fall Quarter

1951

September 17 & 18, Monday & Tuesday	Freshman Days
	All new students report at 8:00 a. m., Monday
September 19, Wednesday	Registration for all students
September 20, Thursday	Classes begin at 8:00 a. m.
October 31, Wednesday	Midterm
November 21, Wednesday	Thanksgiving holidays begin at noon
	College opens at 8:00 a. m., Monday, November 26
December 12-14, Wednesday-Friday	Final Examinations
December 14, Friday	Last Day of fall quarter

Winter Quarter

1952

January 2, Wednesday	Registration for all students
January 3, Thursday	Classes begin at 8:00 a. m.
February 7, Thursday	Midterm
March 12-14, Wednesday-Friday	Final Examinations
March 14, Friday	Last day of winter quarter

Spring Quarter

1952

March 24, Monday	Registration for all students
March 25, Tuesday	Classes begin at 8:00 a. m.
April 30, Wednesday	Midterm
May 7, Wednesday	Fort Lewis Day for high school seniors
May 30, Friday	Memorial Day holiday
June 1, Sunday	Baccalaureate Service
June 3-5, Tuesday-Thursday	Final Examinations
June 6, Friday	Final Convocation

*Note: For information concerning courses offered during the summer quarter, address inquiries to The Registrar, Fort Lewis A & M College, Hesperus, Colorado.

PLEASE BRING THIS CATALOG WITH YOU FOR USE IN REGISTRATION.

TABLE OF CONTENTS

Three

College Calendar	2
State Board of Agriculture	4
Personnel	5
Officers of Administration	5
Instructional Personnel	5
Instructors in Institutional on the Farm Training Program.....	7
Experiment Station Staff	7
Fort Lewis A & M College	8
History and Development	8
Student Activities	10
Student Health Service	11
Special Interest Groups	12
Living Accommodations	13
General Information	14
Requirements for Admission	14
Registration	16
Withdrawal from College	17
Academic Information	18
Credits	18
Scholastic Requirements	18
Certificate of Graduation	19
Expenses	20
General Fees	20
Deposits	20
Residence Fees	20
Fee Regulations	21
Scholarships and Loans	22
Joint Honor Scholarships	22
Recognition of Merit Scholarships	22
Other Scholarships	22
Loan Funds	23
Courses of Study	24
Lower Division College	24
Agriculture	24
Forestry and Range Management	27
Engineering	29
General Arts and Science	31
Business Administration	35
Chemistry	36
Education	37
Music	39
Pharmacy	40
Physical Education	41
Pre-Law	42
Pre-Medicine	43
Pre-Nursing	44
Pre-Veterinary	45
Terminal Vocational Courses	46
Practical Agriculture	46
Homemaking	50
Commerce	51
Description of Courses	54
Agriculture	54
Biology	56
Chemistry	57
Commerce	58
Education	60
Engineering	62
English Language and Literature	63
Geology	64
History and Social Science	66
Homemaking	67
Mathematics	67
Modern Language	68
Music	69
Physical Education	70
Physics	72

STATE BOARD OF AGRICULTURE

	Address	Term Expires
Walter G. Lehrer	Denver	1953
Raman A. Miller	Strasburg	1953
Charles P. Warren	Fort Collins	1955
T. C. McPherson	San Acacio	1955
Jesse McCabe	Dolores	1957
L. S. McCandless	Craig	1957
George McClave	McClave	1959
Warren Monfort	Greeley	1959

Governor Daniel I. J. Thornton	}	(ex-Officio Members)
President W. E. Morgan		

OFFICERS

Walter C. Lehrer	President
Charles P. Warren	Vice President
James R. Miller	Secretary
Joseph M. Whalley	Treasurer

EXECUTIVE COMMITTEE

T. C. McPherson	Walter G. Lehrer	L. S. McCandless
-----------------	------------------	------------------

PERSONNEL

Officers of Administration:

- Rea, Charles Dale President of College
 B. S., Colorado A & M College
 M. S., University of Southern California
 Advanced Graduate Study, University of Colorado
- Lory, Charles A. President Emeritus
 Ped. B., Colorado State Normal School
 B. S., University of Colorado
 M. S., University of Colorado
 LLD., University of Colorado, Colorado College
 D. Ed., Colorado State College of Education
 D. Sc., University of Denver, Colorado A & M College
- Pierce, Joseph E. Registrar
 B.A., University of Denver
 M.S., Purdue University
 Advanced Graduate Study, Purdue University
 University of Colorado
- Colley, Robert H. Business Manager
 B.S., University of Denver
 Graduate Study, University of Denver
- Black, Daniel E. Assistant Business Manager
 B.S., University of Colorado
 Graduate Study, University of Colorado
- Pierce, Margaret M. College Nurse
 B.A., University of Denver
 B.N., University of Colorado School of Nursing
- Irish, Walden C. Director of Public Relations
 A.B., Bates College
 Graduate Study, Tufts College Graduate School
 Boston University
 University of Denver

Instructional Personnel:

- Brown, Wilma Jean Music
 B. M., De Pauw University
 B.A., University of Colorado
 Graduate Study, University of Colorado
- Carswell, David F. Biological Science
 B.S., University of Maine
 M.A., Arizona State College
 Advanced Graduate Study, University of Colorado
- Hickman, Francis W. Engineering
 B.S., New Mexico School of Mines
 Graduate Study, University of Colorado

- Hershberger, Inez Language and Dramatics
 A.B., Kalmazoo College
 Graduate Study, University of Wisconsin
 University of Chicago
 University of Colorado
 University of Mexico
- Irish, Walden C. English
 A.B., Bates College
 Graduate Study, Tufts College Graduate School
 Boston University
 University of Denver
- Lowry, Wayne F. Chemistry and Physics
 B.A., Milton College
 Graduate Study, University of Colorado
- McKinnon, Max E. Agriculture
 B.S., Utah State Agricultural College
- Milton, Richard L. Physical Education
 B.S., University of New Mexico
 M.S., University of New Mexico
- Morrow, Evelyn Y. Business
 B.S., East Central State College, Oklahoma
 M.S., Oklahoma A & M College
 Advanced Graduate Study, Colorado State College of
 Education
- Nethery, Ruby Library
 B.S., University of Oklahoma
 M.S., University of Oklahoma
 B.L.S. University of Oklahoma
 Advanced Graduate Study, Columbia University
- Pierce, Joseph E. Chemistry
 B.A., University of Denver
 M.S., Purdue University
 Advanced Graduate Study, Purdue University
 University of Colorado
- Reid, Charles H., Jr. Mathematics
 A.B., Montclair State Teachers College
 M.Ed., University of Colorado
- Stephens, James P. Agronomy
 B.S., Oklahoma A & M College
 M.S., Oklahoma A & M College
- Taylor, Faith Education
 B.S., Wisconsin State Teachers College
 M.A., Northwestern University
- Wallace, Edwin W. Psychology and Physical Education
 B.S., University of New Mexico
 Graduate Study, University of New Mexico

Instructors in Institutional on the Farm Training Program

Drott, John A. (Director), 337 13th Street, Durango, Colorado
 Allum, Jack A., Mancos, Colorado
 Avis, Samuel Lee, Hesperus, Colorado
 Callison, Owen C., Ignacio, Colorado
 Campbell, A. Frank, 170 E. Park Avenue, Durango, Colorado
 Gores, Clyde J., Cortez, Colorado
 Hancock, Robert V., Dove Creek, Colorado
 Harrison, Keith, 706 6th Avenue, Durango, Colorado
 Hindmarsh, Russell E., Dolores, Colorado
 Hiner, Eldon B., 802 6th Avenue, Durango, Colorado
 Hollar, H. W., 575 8th Street, Durango, Colorado
 Holley, Edward J., Pagosa Springs, Colorado
 Huff, R. W., Pleasant View, Colorado
 Keeter, Lester F., Cortez, Colorado
 Longenbaugh, Harry L., Cortez, Colorado
 Mason, Edison, Route 2, Durango, Colorado
 McDaniel, Claude D., Dove Creek, Colorado
 Ritter, John W., Mancos, Colorado
 Rudolph, Talbot L., Pagosa Springs, Colorado
 Rutherford, Paul R., Jr., Hesperus, Colorado
 Sharp, C. E., Dolores, Colorado
 Stowe, L. A., Dove Creek, Colorado
 Strain, Oscar G., Ignacio, Colorado

Experiment Station Staff

Ingalls, James E., B. S., M. S. Animal Husbandman

Fort Lewis A & M College

HISTORY AND DEVELOPMENT:

The story of Fort Lewis A & M College begins in 1911 when a land-grant school was established, following the transfer from federal to state ownership of the lands of the Fort Lewis Military Reservation and Indian School, totaling 6,318 acres. An agricultural and vocational high school was maintained until 1933, and rural teaching training courses were offered after 1915. College courses have been offered since 1927, and exclusively since 1933.

Until 1948, the College was a branch of Colorado A & M College, but in that year, Fort Lewis A & M College became an independent institution. It, like Colorado A & M, is administered by the State Board of Agriculture.

Fort Lewis, a two-year co-educational school, is a member of the American Association of Junior Colleges. Its credits with the exception of those in certain terminal business and agricultural courses, are transferable to other colleges and universities. The college is on the quarter system, with three quarters making up the academic year. Summer sessions are also held and the courses given are determined by the demand.

Lower division college work is offered in the three major divisions: Agriculture, Engineering, and Arts & Science. Within the division of Agriculture, students may major in general agriculture, animal husbandry, or forestry and range management. In Engineering, work may be taken in Civil, Electrical, or Mechanical engineering. The division of Arts & Science offers specialization in business administration, education (teacher training), music, physical education, chemistry, pharmacy, pre-law, pre-medicine, pre-nursing, and pre-veterinary.

Terminal vocational courses are offered for those students who are not planning to take a full four-year course. These courses are offered in the fields of practical agriculture, ranch-classroom course in cattle production, secretarial science, general business, and home-making. These are practical courses that will prepare the student directly for occupation in these fields. The San Juan Basin Branch Station of the Colorado Agricultural Experiment Station is located at the College. Agricultural research at Fort Lewis A & M College is conducted in cooperation with the Colorado Agricultural Experiment Station. Projects consist of the testing of field and horticultural crops under high altitude conditions, and the production and distribution of foundation seed; also of animal investigation in the compari-

son of types of beef cattle and inbreeding for the improvement of strains. Most of the agricultural facilities of the College, which include pastures and feed production, are utilized in this livestock and crop improvement program.

In cooperation with the Veterans Administration, a vocational agricultural program serves veterans living in Dolores, Montezuma, La Plata, and Archuleta counties. The objective of this training is to aid the veteran in acquiring proficiency in farming skills and managerial abilities and to help him become established in worth while farming enterprises. Instructors are maintained in the field and most of the instruction is given to the student on the farm.

LOCATION:

Fort Lewis is located 14 miles west of Durango in an area unmatched for beauty. During the school year the students are able to visit many nearby points of interest on school-sponsored trips. These educational and scenic spots are easily reached because of the location of Fort Lewis in the heart of the San Juan Basin, a great geographical area, containing within it parts of four states, an area with unlimited possibilities for further development, for it contains agriculture, oil, gas, mining, grazing and industry.

Many national parks, mounments and forests are nearby: scenic drives through mountain and desert country may be taken; ancient Indian ruins and present day Indian culture may be seen. Not far away are Indian Reservations of the Navajo, Apache, Ute, and other tribes, and both Indian weaving and Indian jewelry are famous products of this region.

Thirty-five miles from the campus is Mesa Verde National Park, which contains the most notable and best preserved prehistoric cliff dwellings in the United States. Ruins of other prehistoric towers, pueblos, and cliff dwellings are found in the Hovenweep National Monument and Yucca House National Monument, in the same vicinity. Near by in northern New Mexico, are the Aztec Ruins National Monument and the Chaco Canyon National Monument, both of which are also prehistoric sites. Near these is Shiprock, a vast rocky spire, rising abruptly from the floor of the desert, which challenges the most experienced mountain climbers. At a somewhat greater distance, in Colorado, are the Great Sand Dunes National Monument and the Black Canyon of the Gunnison National Monument, the latter reached from Fort Lewis over the famous Million Dollar Highway between Silverton and Ouray, one of the great scenic drives of the United States. In southeastern Utah are the Na-

tural Bridges National Monument and the Rainbow Bridge National Monument. An easy trip into Arizona brings one to the Canyon de Chelly National Monument with its prehistoric cliff dwellings, and finally to the Grand Canyon National Park, where the Colorado River has produced a panorama of erosion which is acclaimed as the most sublime spectacle in the world. North and northeast of Fort Lewis lie the La Plata and the San Juan Mountains, among which are many of the most spectacular peaks in the Rockies. The Needle Mountains, in particular, have been described as the American Alps.

COLLEGE LIFE:

Fort Lewis has proved a unique experience for many. In a setting which is both rural and spacious, open to the famed Colorado sunlight, yet within sight of mountains snowcapped through most of the year, faculty and students mingle in a spirit of democratic friendliness. The small size of the student body makes it possible for each student's problems to be considered individually, both in class and out, and social pretensions do not exist. There are no fraternities or sororities; nearly all of the students and staff make their home on the campus during the school year, and social events are shared by all. Comfortable housing and residence-hall accommodations are available, and unmarried students eat together in the College dining hall.

STUDENT ACTIVITIES:

The range of extracurricular activities is wide, including intercollegiate athletics, intramural sports contests, and other individual winter and summer sports; formal and informal social affairs, such as dances, picnics, banquets, parties, and get-togethers; student government activities; and activities of a considerable variety of special interest groups. Student assemblies are held periodically for purposes of recreation and information, and prepared programs are presented both by student groups and by speakers and performers drawn from outside the campus. A few special excursions, sponsored by the College, require extra expense by students participating, but by far the greatest portion of the total cost of extracurricular activities is covered by the regular student activity fees. The recreation hall is maintained by the student body, and students plan the social program. A snack bar is provided for use of all campus residents.

STUDENT GOVERNMENT:

The affairs of the student body are managed by the Student Council, consisting of specially elected officers, together with

presidents of classes and housing groups. Acting as the executive committee of the student body, the Student Council considers all problems brought before it and presents its findings to the general assembly of the students. Faculty advisors are ex-officio members of the Student Council and other agencies of student government.

STUDENT HEALTH SERVICE:

The Student Health Service provides **out patient** treatment of minor illnesses and injuries to all full-time students. Physical examinations are required for all students as part of registration early in the first quarter of attendance at Fort Lewis.

The Dispensary is located at House No. 13, Lory Lane, and staffed by Mrs. Margaret Pierce, R. N., part-time college nurse. Dispensary hours are 8:00 a. m. to 12:00 noon, 1:00 p. m. to 5:00 p. m. Monday through Friday; and 8:00 a. m. to 12:00 noon Saturdays, while college is in session. Illness can be treated **only** at the Dispensary and students who become ill should avail themselves of the service offered. Any illness requiring the attention of a physician will be referred to a Durango physician at the student's expense. Any student who is ill and leaves the campus without consulting the Health Service does so at his own responsibility.

the expenses of special medications are to be born by the patient.

Immunization against typhoid fever will be given during fall quarter, **on a voluntary basis**, without extra charge. Immunization on the same basis for Rocky Mountain Spotted Fever will be given during spring quarter.

Veterans are entitled to the same privileges under the Health Service as all other students.

Married students may obtain this Health Service for their families if they wish. A fee of \$.50 for each dependent per quarter is charged.

Statements of illness will be issued by the nurse only if the student has been seen for his illness at the Dispensary.

Blue Cross and other types of hospitalization insurance give considerably more benefits than the Student Health Service. It is, therefore, desirable that membership in a hospitalization plan be maintained. This is of particular value during the vacation periods or when students are away from Fort Lewis.

STUDENT PUBLICATIONS:

The College publishes a student newspaper, *Smoke Signals*, and a student annual or yearbook, *The Cadet*, which are written and edited by students under competent faculty direction. Both publications have received wide acclaim for their high quality, and are popular reading among the student body.

SPECIAL INTEREST GROUPS:

Students interested in winter sports find ample opportunity for skiing, ice-skating, and tobogganing. The skating pond is a popular rendezvous for the students, and a ski tow has recently been installed. Tennis and horseshoe courts are popular in spring and fall. The Ag Club attracts students who are agriculturally minded, and presents an annual Rodeo. Among hobby groups organized from time to time, some of the most popular are the Camera Club, the Rifle Club, and the Square Dance Club. Music and dramatics are activities offering both recreational and educational opportunities. Students may earn regular academic credit by participation in vocal and instrumental ensembles and by individual lessons in piano and other instruments. The Dramatic Club is open to all students and tryouts are held for each of the plays given throughout the year at student assemblies, and on community occasions. Participants not only develop their acting abilities, but also learn principles of stage design and set construction, costuming, make-up, playwriting, and direction.

SENIOR DAY:

On the annual Senior Day, Fort Lewis students and faculty are hosts to all high-school seniors in the San Juan Basin. The program for the day includes games, picnics, athletic exhibitions, social dancing, and a major performance by the college dramatic group. Future college students have an opportunity to become acquainted with the Fort Lewis campus and its faculty and student body.

THE ALUMNI ASSOCIATION:

All students who have been regularly enrolled at Fort Lewis are members of the Fort Lewis Alumni Association, which promotes the welfare of the College by uniting former classmates. The Association meets annually on Homecoming Day.

INTERCOLLEGIATE ATHLETICS:

Fort Lewis athletic teams have brought to the college a

well-earned distinction. Fort Lewis A & M College is a member of the Colorado Junior College Conference, and extra-conference games are played with four-year colleges in Colorado and nearby states. After two years of participation within this Conference, athletes are still eligible for two more years of competition in four-year colleges or universities.

The "A" Club: The lettermen's club is an organization of athletes who have earned an award in sports. Its purpose is to maintain high standards in intercollegiate athletics.

WOMEN'S ATHLETICS:

All women students may participate in the athletic program of the college which is designed to encourage women's athletics and to develop qualities of leadership and good sportsmanship. Awards are given for participation in various activities.

LIVING ACCOMODATIONS:

Lory Hall, for women, and Snyder Hall, for men, are modern, well-appointed buildings in attractive locations on the campus, affording comfortable accomodations for social life as well as single and double rooms of approved design for student residence and study. Students' rooms are furnished with beds and mattresses, dressers, study tables, chairs, rods; students supply their own bedding, including pillows, linen, curtains, lamps, rugs, and other decorative equipment. Maid service is provided in the residence halls.

Apartments for married students and light-housekeeping rooms are available in Veterans' Village and in Downey Apartments. Apartments have one, two, and three bedrooms. These units are completely equipped with basic furnishings, other than bedding and linen, dishes, cooking utensils, lamps, radios, curtains, rugs, and other decorative equipment.

The Dining Hall: All students living in the residence halls take their meals in the Dining Hall, and other students have the privilege of doing so. Meals are planned and supervised by a trained dietitian and made available at moderate cost. Serving is cafeteria style, and tables for small groups promote informal good fellowship among the students.

GENERAL INFORMATION

REQUIREMENTS FOR ADMISSION:

An application for admission, accompanied by a transcript of the high school record, must be submitted before the time of registration. It should be submitted early enough to permit a reply to reach the applicant (preferably by September 1); it may be submitted as soon as the applicant has graduated from high school.

In Colorado, application blanks may be secured from any high school principal. Applicants from outside Colorado should write to The Registrar, Fort Lewis A & M College, Hesperus, Colorado, requesting an application blank.

Any graduate of an accredited high school is eligible for admission, provided his or her high school course includes the prescribed units tabulated on page 15. Applications from graduates of unaccredited high schools, or from applicants lacking one or more of the prescribed units, will be passed upon according to the merits of the individual case. Students of mature years who have not graduated from high school may be admitted provisionally, subject to their demonstrating ability to do work of college grade.

Students not desiring regular college status, who wish to pursue a special course of study, may be admitted as special students at the discretion of the President and the Registrar.

SPECIAL ADMISSION REQUIREMENTS:

Colleges and Schools	Special Requirements for Admission	Electives
Agriculture	English, three units Mathematics 1 unit (any)	Electives, 11 units
Arts and Science	English, three units Nine units from Group A (*a) distributed as follows: one major (in addition to Eng.) and two minors and two Group A electives; or two majors (in addition to Eng.) and three Group A electives.	Free electives (*a) to make up balance of fifteen units required for admission.
Engineering	English, three units Algebra, one unit Geometry, one unit Substantial mathematics one unit (recommended $\frac{1}{2}$ advanced algebra and $\frac{1}{2}$ solid geometry.) Natural Science, two units (one must be physics) Social Studies or History, two units.	Recommended two electives from Group A (*a) and three free electives (*b).

NOTES

- *a. Group A subjects: English, foreign language, mathematics, science and social science including history.
- *b. Free Electives: Any of the high school subjects (except physical education) which are accepted by an accredited school for its diploma and which meet the standards as defined by the North Central Association. Fractional credits of a value less than one-half unit will not be accepted. Not less than one unit of work will be accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry or biology.

Students lacking high school credit in advanced algebra or solid geometry are afforded opportunity to clear the deficiency after entering college. Those lacking other prescribed entrance credits may be required to include corresponding subjects in their college curriculum. Graduates of accredited high schools outside Colorado are eligible for admission if they are eligible at land-grant colleges in the state where they graduated. In other cases, applicants may be required to pass a standard college entrance test, such as the General Educational Development Tests applicable to veterans.

DEFINITIONS:

Unit: A unit of work in high school is defined as a course covering a school year of not less than thirty-six weeks, with five periods of at least forty minutes each per week. (Two periods of manual training, domestic science, drawing or laboratory work is equivalent to one period of class-room work.) This is equivalent to one hundred and eighty actual "periods" per unit. The fifteen units are equivalent to thirty "points."

Terminal: Students who do not intend to continue their formal education above the junior college level are designated as "terminal."

The program of terminal students is governed by the division in which they wish to specialize. To be admitted to Fort Lewis A & M College as a terminal student, the candidate for admission must be a graduate of an accredited four-year high school, or must be able to satisfy the college officials of his ability to do college-grade work.

REGISTRATION:

After the student has fulfilled admission requirements, he will receive a notice that he has been accepted for admission. Registration materials will be available for him on registration day.

Each regular and special student must go through the registration procedure, fill out all forms provided, and pay his tuition and fees at the appointed time.

The student should report in the college library at the time of registration. As soon as he enters the library, he will receive a permit to register, other registration forms and materials, and information as to who his counselor will be.

Late Registration: A student is required to pay a late registration fee for registration after the regularly appointed registration day. The student registering late will be required to make up all the work he has missed. No student will be permitted to register after the second week of any quarter for a full time class schedule.

Changes in Registration: Dropping a Course: After the close of registration, changes in a student's program are subject to the following rules: No new course may be added after the first week of regular class sessions except with the approval of the instructor concerned and in no case later than the third week of regular class sessions. A course may be dropped, without discredit and without record, by any student during the first three weeks of the quarter, and by students in their first quarter of college attendance, during the first eight weeks of the quarter. After the expiration of these time limits, a grade of either WP or WF will be reported in a course which is dropped. After the seventh week of the quarter (except as noted above for students in their first quarter of college attendance), the grade of WF is mandatory unless the student is dropping all courses and withdrawing from college.

VETERANS:

Veterans who wish to take advantage of their rights to training under the G. I. Bill (PL-346 or PL-16) must start their schooling before July 25, 1951. To be properly certified for this training the veteran should go to his nearest Veterans Administration Office and make an application for an eligibility certificate. The veteran must also make application for admission to the College and go through the regular registration procedure along with all of the other students.

WITHDRAWAL FROM COLLEGE:

A student who desires to withdraw from college should first obtain the necessary withdrawal form from the registrar. Withdrawal will be permitted only after the student has obtained clearance from his class instructors, the librarian, the dormitory proctor, and the business manager.

STUDENT REGULATIONS:

Students with cars on the campus are expected to register them with the office on registration day and park them in the parking lots provided.

Hours for the residence halls are set up by the students, and the students are expected to abide by them.

Disciplinary action in minor infractions is handled by a committee of students. In more serious cases, however, the responsibility for action lies in the hands of the Admissions Committee made up of faculty members.

Academic Information

CREDITS:

A credit hour represents one class or lecture period, or one two-hour or three-hour laboratory period, per week for one quarter. Such credit hours in colleges using the quarter system are commonly known as quarter hours. Credit in the required Physical Education courses is given on the basis of one credit hour per quarter.

GRADES AND QUALITY POINTS:

Official report of grades is by letter only, as follows:

A	(Excellent)
B	(Good)
C	(Average)
D	(Poor, but passing)
E	(Condition)
F	(Failure)
I	(Incomplete)
WP	(Withdrawn while passing)
WF	(Withdrawn while failing)

The grade of E is given when the student's work in the course is of a quality only slightly below passing. It may be raised to D by subsequent passing of a condition examination, which must be taken before the end of the regular quarter next following the quarter in which the grade of E was incurred. A condition not so removed becomes a failure (F).

The grade of I means that the student's work in the course is excusably incomplete (for example, because of illness), and additional time has been granted. A grade of I automatically becomes F if the work is not completed within one year from the end of the quarter for which the grade of I was reported.

In computing a student's scholastic average, the following scale of quality points is used: A,4; B,3; C,2; D,1. The total number of quality points earned is divided by the total number of credit hours for which the student was registered, disregarding courses in which the grade of WP has been reported.

COURSE LOADS AND LIMITS:

The normal student load is sixteen quarter hours. The minimum load for a full time student is twelve hours and the maximum seventeen hours. Only after a student has been in attendance at Ft. Lewis for one quarter and has shown his ability, will he be permitted to take more than the maximum load. Students that wish to take more than the maximum load must obtain the approval of the registrar.

SCHOLASTIC REQUIREMENTS:

In general, students preparing for transfer to other colleges or eventual graduation from college, should maintain a scholastic average grade of C. Students whose scholastic average falls below 1.4 in any quarter are required to appear before the Admissions Committee, which considers each case individually. The student may be placed on probation or transferred to another curriculum. If a student on probation fails to improve his grade average during the subsequent quarter, he will be suspended for a quarter after which he will be allowed to reenter on probation.

CLASS ATTENDANCE:

Regular attendance is expected of all students, and it is the responsibility of the student to present to the instructor a written explanation for any absence from class or laboratory periods. Work missed through absence must be made up, and extra work may be assigned as a penalty for unexcused absences. Unjustifiable absences may be made the ground for failure in the course. After cuts numbering the amount of hours for the course, the student will be suspended from class until he appears before the admissions committee and is allowed by this committee to return to class.

CERTIFICATES OF GRADUATION:

Two-year certificates: A certificate of accomplishment, representing the completion of two years college study, is awarded at the Final Convocation in June to each student who has earned 96 hours of college credit.

Teaching certificates: A student completing the required two year program of study in Education is eligible for a teaching certificate which entitles the holder to teach in the rural schools of Colorado. This certificate is obtainable from the Colorado State Department of Education and is valid for one year.

One-year Business certificate: A certificate of accomplishment, representing the completion of 45 quarter hours, composed of 30 quarter hours in secretarial or business administration-accounting and 15 quarter hours elective in either business or other college hours, will be presented to each eligible student.

Two-year Business certificate: A certificate of accomplishment, representing the completion of two years college study in general business, composed of 60 hours of business and 30 hours of electives in business or other college subjects, will be presented to eligible students.

TRANSCRIPTS:

When a student requests a transcript for the purpose of transferring to another college or university, his status is reported on the transcript. A student whose scholastic average is above the minimum required by this college will receive on his transcript a notation to the effect that he is good standing. A student who is on probation or has been suspended will have such information noted on the transcript.

The phrase "Entitled to Honorable Dismissal" will appear on transcripts of students who are not subject to disciplinary action and have met all financial obligations. In the case of students not entitled to honorable dismissal, the words "Entitled to Honorable Dismissal" will be deleted and a letter of explanation will accompany the transcripts.

The first transcript is supplied free of charge. A fee of \$1.00 will be charged for all subsequent transcripts.

EXPENSES*

GENERAL FEES:

Tuition and regular fees—per quarter	\$45.00
Students registered for fewer than 12 hours will be allowed a deduction at the rate of \$3.00 per hour.	
Non-resident tuition (paid in addition to resident tuition—per quarter)	10.00
Student and Agency fee (covers all student sponsored activities) per quarter	11.75
Cadet fee (pays for the student's copy of the yearbook, collected at the beginning of the quarter when a student first registers)	4.50
Students registered for fewer than 6 hours will not be assessed Student and Agency fee or Cadet fee.	

SPECIAL FEES:

Late registration	5.00
Fee for schedule change requested by the student	1.00
Special examination fee	3.00
Transcript of credits after the first one, which is free	1.00
Applied music (in addition to regular tuition):	
One half-hour lesson (voice or instrumental) per week—per quarter	15.00
Two half-hour lessons (voice or instrumental) per week — per quarter	25.00

DEPOSITS:

Security deposit	10.00
Apartment deposit	20.00
Laboratory breakage deposit—per quarter	5.00
The unused portions of these deposits are returned.	

RESIDENCE FEES:

Dormitory Room—per quarter	\$45.00
Rooms will be cleaned daily, Monday through Friday. Clean linens will be furnished weekly. Room rent is payable at registration on a quarterly basis.	
Apartments: Apartments are available for married students, furnished, with utilities supplied.	
One bedroom—per month	30.00
Two-bedroom—per month	32.00
Three bedroom—per month	34.00

* The State Board of Agriculture reserves the right to change any fee at any time without formal notice, whenever conditions warrant such change.

MEALS:

All meals are served in the dining hall, which is operated on the cafeteria style. Payment is made at the serving counter. Meal tickets are available in the business office at \$15.00 each. These tickets are for the convenience of the student so that he will not have to carry large sums of money.

BOOKS AND SUPPLIES:

All books and other school supplies may be purchased in the commissary located on the campus.

FEE REGULATIONS:

Payment of fees: All tuition, fees, and deposits for the quarter are payable at the time of registration—the first day of each quarter. Registration is not considered as being complete until the student has met his financial obligations in full.

Veterans: Students planning to attend under the G. I. Bill (PL-346 and PL-16) should come prepared to finance their living expenses for a period of 60 days. This is the normal amount of time required to set up a veteran's file in the regional office and begin issuing monthly checks.

If a student does not have an eligibility certificate at the time of registration, he will be required to pay all tuition and fees in cash. However, a refund will be made on this money to the amount that is covered by the eligibility certificate.

A student whose eligibility expires before the end of a quarter will be required to pay cash for that portion of his expenses that are not covered.

Refunds: A student withdrawing during the first week of the quarter may have all tuition and fees refunded. A student withdrawing after the first week of the quarter but before the close of the third week may have one-half of the tuition and fees refunded. No refund will be made after three weeks from the date of registration.

All refunds will be paid not later than three weeks after a student has terminated his work at the college.

SCHOLARSHIPS AND LOANS

JOINT HONOR SCHOLARSHIPS:

These scholarships are awarded by the Colorado State Institutions of Higher Learning upon the recommendation of the faculty or committee of the faculty of each accredited high school in Colorado. The students to receive the scholarships must rank in at least the upper twenty-five per cent of their graduating class in scholarship and must have attained a score at or above an established minimum on the American Council on Education Psychological Examination. While selections shall be made primarily upon the basis of scholastic achievement and promise of collegiate success, financial need may be taken into consideration.

A scholarship recipient is privileged to transfer at the end of any term from one participating institution to another and retain his scholarship if he is eligible for the continued use of the scholarship in the institution from which he transfers. The scholarship will be granted for a four-year period. The holders must maintain an accumulative average within the upper one-fourth of their respective classes in order to keep the scholarship from year to year. A year is to be considered as the equivalent of three quarters.

RECOGNITION-OF-MERIT SCHOLARSHIPS:

The State Board of Agriculture authorizes the award of a limited number of Recognition-of-Merit Scholarships. To qualify for one, a student must be an entering freshman, have ranked in the upper one-third of the graduating class, and have demonstrated the capacity for leadership through activity participation. The award is good for one year, but can be extended for another year if the holder maintains a cumulative average which would place him in the upper one-fourth of the freshman class.

OTHER SCHOLARSHIPS:

The following scholarships will be awarded on a basis of need as well as scholarship and all-round ability. Letters of application should be sent to the Registrar, Fort Lewis A & M College.

American Association of University Women: One scholarship is available to a girl graduate of a San Juan Basin high school and is good for two years.

The American Legion: Trujillo-Sheets Post No. 28: Three scholarships are available to sons and daughters of veterans of La Plata County. First preference will be given to orphans. Each scholarship is good for one year.

Durango Herald-Democrat: One scholarship is available to a graduate of a San Juan Basin high school and is good for one year.

Durango Lions Club: Two scholarships are available to graduates of the Durango High School and are each good for one year.

Durango Rotary Club: Two scholarships are available to graduates of San Juan Basin high schools and are each good for one year.

O.E.S. Kensington Club: One scholarship is available to a graduate of a San Juan Basin high school and is good for one year.

Foster Office Supply: One scholarship is available to a graduate of a San Juan Basin high school and is good for one year. The student is to major in business.

Radio Station KIUP: One scholarship is available to a graduate of a San Juan Basin high school who wishes to pursue a course in speech or a related field, and is good for one year.

Young Farmers & Homemakers of Durango: One scholarship is available to an average farm boy of the San Juan Basin, in financial need, and is good for one year.

Farm Women's Extension Club: One scholarship is available to a Durango girl showing financial need and ranking in the upper 10% of her class.

La Plata County Teachers' Association: One scholarship is available to a graduate of a La Plata County high school showing financial need and preferably one who is planning to major in Education.

Bruce Sullivan: One scholarship is available to a graduate of a La Plata County high school and is good for one year.

Dr. J. G. McKinley: One scholarship is available to a graduate of a San Juan Basin high school and is good for one year.

Benny Benham: Two half-tuition scholarships are available to graduates of Durango High School who are in need of financial aid. These scholarships are good for one year.

VALUE OF A SCHOLARSHIP:

The value of a scholarship amounts to \$35.00 each quarter to be applied against tuition and fees.

LOAN FUNDS:

Four funds have been established to give assistance to needy students, the Snyder Memorial Loan Fund, the Marie Ochsner Memorial Loan Fund, the Fort Lewis Alumni Loan Fund, and the Business and Professional Women's Loan Fund. The combination of all loan funds is known as the Fort Lewis Loan Fund. Money may be borrowed by worthy students after the completion of one quarter's work. Formal application must be made to the loan-fund committee.

COURSES OF STUDY

LOWER DIVISION COLLEGE:

On the next few pages are outlined courses of study which are recommended for students planning to major in either Agriculture, Engineering or Arts and Sciences and the specialized courses within these divisions.

These curricula have been planned with reference to the requirements of typical four year colleges at which students may be likely to continue their work after two years at Fort Lewis A & M College. Students are advised, however, to check their selection of courses and subjects of study against the published requirements of the particular institution to which they intend to transfer.

All freshmen **must** register for English Composition. Also Review English must be included in the fall quarter by those students who do not make a passing grade in the English Orientation Examination.

All students are required to take two years of physical education except veterans or students who are excused for health reasons upon presentation to the Registrar of a written request from their family physician.

AGRICULTURE

Instruction in the Division of Agriculture is designed to train students for general or specialized agricultural study. Students in this division take the same course during the freshman year but begin to take courses more closely related to their major interest in the sophomore year.

FRESHMAN YEAR

		Fall Quarter	Hours	Credits
AH-1	Introductory Animal Husbandry		(3-4)	5
E-2	English Composition		(3-0)	3
*E-1	Review English		(3-0)	1
Ag-1	Crop Production		(5-0)	5
FM-1	Farm Carpentry		(0-6)	2
PE-1	Physical Education		(0-3)	1
				16 or 17
		Winter Quarter	Hours	Credits
E-3	English Composition		(3-0)	3
B-1	General Botany		(3-4)	5
C-7	General Chemistry		(3-6)	5
M-10	Algebra		(5-0)	5
PE-2	Physical Education		(0-3)	1
				19
		Spring Quarter	Hours	Credits
E-4	English Composition		(3-0)	3
B-3	General Botany		(3-4)	5
C-8	General Chemistry		(3-6)	5
H-1	General Horticulture		(4-2)	5
PE-3	Physical Education		(0-3)	1
				19
				54 or 55

GENERAL AGRICULTURE

SOPHOMORE YEAR

		Fall Quarter	Hours	Credits
C-11	Organic Chemistry		(3-6)	5
En-1	Farm & Home Insects		(3-4)	5
ES-40	American Government		(3-0)	3
Z-1	Introduction to Zoology		(3-4)	5
PE-4	Physical Education		(0-3)	1
				19
		Winter Quarter	Hours	Credits
AH-12	Feeds & Feeding		(4-2)	5
PB-21	General Bacteriology		(3-4)	5
ES-41	American Government		(3-0)	3
FM-5	Farm Blacksmithing		(0-6)	2
PE-5	Physical Education		(0-3)	1
				16
		Spring Quarter	Hours	Credits
Ag-18	Irrigation Practices		(3-0)	3
FM-12	Farm Machinery and Power		(1-6)	3
Ag-2	Soils		(5-3)	6
ES-42	American Government		(3-0)	3
PE-6	Physical Education		(0-3)	1
				16
				51

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Animal Husbandry

SOPHOMORE YEAR

Fall Quarter		Hours	Credits
AH-5	Livestock Judging	(0-4)	2
C-11	Organic Chemistry	(3-6)	5
En-1	Farm & Home Insects	(3-4)	5
Z-1	Introduction to Zoology	(3-4)	5
PE-4	Physical Education	(0-3)	1
			18

Winter Quarter		Hours	Credits
AH-30	Meats	(0-8)	4
PB-21	General Bacteriology	(3-4)	5
AH-12	Feeds and Feeding	(4-2)	5
FM-5	Farm Blacksmithing	(0-6)	2
PE-5	Physical Education	(0-3)	1
			17

Spring Quarter		Hours	Credits
AH-7	Elements of Dairying	(2-2)	3
AH-9	Principles of Animal Nutrition	(5-0)	5
Ag-10	Principles of Genetics.....	(5-0)	5
FM-12	Farm Machinery and Power	(1-6)	3
PE-6	Physical Education	(0-3)	1
			17
			52

Forestry and Range Management

A college course in this field of specialization prepares qualified candidates for professional employment, either with various governmental agencies or by private enterprise, in forest management, forest industries, forest recreation, game management, range management, and grazing. Since the field is limited, colleges impose special requirements on students; reference is made to those set forth, as typical in the Bulletin of the Colorado A & M College, Fort Collins, Colorado, including the requirements of practical field instruction during residence in an organized summer camp.

The following program of courses is recommended for the first two years:

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
*E-1	Review English	(3-0)	1
Z-1	Introduction to Zoology	(3-4)	5
Ag-1	Crop Production	(5-0)	5
ES-40	American Government	(3-0)	3
PE-1	Physical Education	(0-3)	1
			17 or 18
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
M-10	Algebra	(5-0)	5
B-1	General Botany	(3-4)	5
C-7	General Chemistry	(3-6)	5
PE-2	Physical Education	(0-3)	1
			19
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
M-11	Trigonometry	(3-0)	3
B-3	General Botany	(3-4)	5
C-8	General Chemistry	(3-6)	5
PE-3	Physical Education	(0-3)	1
			17
			53 or 54

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

SOPHOMORE YEAR

		Hours	Credits
Fall Quarter			
CE-1	Surveying	(3-3)	4
F-3	Principles of Conservation	(2-0)	2
ES-3	Principles of Economics	(3-0)	3
E-23	Public Speaking	(2-0)	2
Ph-1	Principles of Physics	(3-0)	3
PE-4	Physical Education	(0-3)	1
			15
Winter Quarter			
F-4	Principles of Conservation	(2-0)	2
ES-4	Principles of Economics	(3-0)	3
Ph-2	Principles of Physics	(3-0)	3
G-1	Physical Geology	(4-3)	5
E-24	Public Speaking	(2-0)	2
PE-5	Physical Education	(0-3)	1
			16
Spring Quarter			
F-34	Basic Mapping	(1-6)	3
ES-5	Principles of Economics	(3-0)	3
Ag-2	Soils	(5-3)	6
Ph-3	Principles of Physics	(3-0)	3
E-25	Public Speaking	(2-0)	2
PE-6	Physical Education	(0-3)	1
			18
			49

ENGINEERING

The customary divisions of the field of engineering are Civil, Electrical, and Mechanical Engineering. Related fields are those of Industrial Arts and Industrial Arts Education. Civil engineering comprises such activities as irrigation engineering, highway engineering, structural engineering, sanitary engineering. Electrical engineering deals with the applications of existing techniques in the field of electricity, and the development of new engineering applications. Mechanical engineering relates to the design, construction, and operation of machinery, the generation and transmission of power, and the use of machines in economic production, including such machinery as steam turbines, steam boilers, diesel engines, air-conditioning and refrigeration machinery, and new materials of construction.

The following program of courses is recommended. During the freshman year all engineers take the same courses. In the sophomore year optional courses are offered according to the branch of engineering that the student is planning on following.

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
¹ E-1	Physical Education	(0-3)	1
M-15	College Algebra	(5-0)	5
² M-15a	Advanced High School Algebra	(3-0)	0
C-1	Inorganic Chemistry	(3-6)	5
ME-1	Mechanical Drawing	(0-6)	2
ES-40	American Government	(3-0)	3
PE-1	Review English	(3-0)	1
			19 or 20
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
M-16	Plane Trigonometry	(5-0)	5
² M-16a	High School Solid Geometry	(2-0)	0
C-3	Inorganic Chemistry	(3-6)	5
ME-2	Mechanical Drawing	(0-6)	2
ES-41	American Government	(3-0)	3
PE-2	Physical Education	(0-3)	1
			19
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
M-17	Analytical Geometry	(5-0)	5
C-5	Inorganic Chemistry	(3-6)	5
ME-3	Descriptive Geometry	(1-6)	3
M-2	Slide Rule	(1-0)	1
PE-3	Physical Education	(0-3)	1
			18
			56 or 57

¹Review English is required for all students who do not make a passing grade in the English Orientation Examination.

²These courses are required of students who have not had these courses in high school.

SOPHOMORE YEAR

		Fall Quarter	Hours	Credits
Ph-25	General Physics		(3-4)	5
M-36	Calculus		(5-0)	5
E-42	Fiction		(3-0)	3
*ES-3	Principles of Economics		(3-0)	3
*CE-1	Surveying (Civil only)		(3-3)	(4)
PE-4	Physical Education		(0-3)	1
CE-11	Engineering Problem Solution		(3-0)	(3)
*ME-5	Machine Drawing (Mechanical only)		(0-6)	(2)
				<hr/> 17 or 18
		Winter Quarter	Hours	Credits
Ph-26	General Physics ..		(3-4)	5
M-37	Calculus		(5-0)	5
E-43	Poetry		(3-0)	3
*ES-4	Principles of Economics		(3-0)	3
*CE-15	Theoretical Mechanics (Statics)		(4-0)	(4)
PE-5	Physical Education		(0-3)	1
				<hr/> 17 or 18
		Spring Quarter	Hours	Credits
Ph-27	General Physics		(3-4)	5
M-38	Calculus		(5-0)	5
E-44	Biography		(3-0)	3
*ES-5	Principles of Economics		(3-0)	3
*CE-4	Advanced Surveying (Civil only)		(2-3)	(3)
*CE-18	Strength of Materials		(4-0)	(4)
PE-6	Physical Education		(0-3)	1
*ME-15	Mechanism (Mechanical only)		(3-0)	(3)
*ME-16	Mechanism Laboratory		(0-6)	(2)
				<hr/> 17 or 18
				<hr/> 51 or 54

*Economics will fulfill the requirements in most Engineering Schools. However, some specialized courses may be taken instead. The best procedure is to follow the recommendations of the school of engineering to which the student is planning to transfer, as outlined in their catalog.

General Arts and Science

Under this heading is composed instruction in such general sciences as chemistry, physics, biology (botany, zoology), and geology, and in the field of the arts, which include language and literature, music, mathematics, history, and the social studies (sociology, economics, government, and psychology).

Students may work for a college degree in one or more of these fields, either with the aim of acquiring a general cultural education or for the purpose of developing a vocational specialty; the vocational possibilities include both practical employment (for example, as a chemist) and teaching at the high-school or college level. An undergraduate major in General Arts and Science is a proper foundation for graduate study and training in many of the professions, such as law and medicine.

Students electing to major in General Arts and Science or preparing for training in the professional fields of medicine, veterinary medicine, dentistry, law, and others should select courses with reference to the requirements of the college or university from which they expect to graduate. Many of the specific courses in General Arts and Science are included in the recommended programs for the several specialized fields of study set forth on the following pages.

All students in the division of Arts & Science are required to complete a definite number of hours in the following fields of study during their freshman and sophomore years. These courses are as follows:

	Hours
Biological Sciences	9
English Language	9
Humanities	9
Physical Education	6
Physical Sciences	9
Social Sciences	9
	51
¹ Modern Languages	(15)
¹ Mathematics	(9)
Electives	45
	96

¹These courses are suggested, but not absolutely required for freshman and sophomore years.

Courses which will satisfy the foregoing requirements:

Biological Sciences

		Hours
Biology		
Z-1	Introduction to Zoology	5
B-1	General Botany	5
B-3	General Botany	5

		Hours
Psychology		
Ed-10	General Psychology	4
Ed-11	General Psychology	4
Ed-12	Educational Psychology	3

English Language

		Hours
Freshman English		
E-2	English Composition	3
E-3	English Composition	3
E-4	English Composition	3
*E-1	Review English	1

Humanities

		Hours
Literature		
E-42	Fiction	3
E-43	Poetry	3
E-44	Biography	3
E-65	Survey of English Literature	3
E-66	Survey of English Literature	3
E-67	Survey of English Literature	3

		Hours
Modern Languages		
M-21	First Year Spanish	5
L-22	First Year Spanish	5
L-23	First Year Spanish	5
*L-24	Second Year Spanish	3
L-25	Second Year Spanish	3
L-26	Second Year Spanish	3
*L-40	First Year German	5
L-41	First Year German	5
L-42	First Year German	5
*L-43	Second Year German	3
L-44	Second Year German	3
L-45	Second Year German	3

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

¹Offered in alternate years, beginning 1952-53

²Offered in alternate years beginning 1952-53 if there is a sufficient demand for it.

³Offered in alternate years beginning 1951-52.

⁴Offered alternate years beginning 1951-52, if there is a sufficient demand for it.

Mathematics

		Hours
M-10	Algebra	5
M-11	Trigonometry	3
M-20	Mathematics of Finance	4
M-15	College Algebra	5
M-16	Plane Trigonometry	5
M-17	Analytical Geometry	5

Physical Education

Freshman Phys. Ed.		Hours
PE-1, 61	Physical Education	1
PE-2, 62	Physical Education	1
PE-3, 63	Physical Education	1

Sophomore Phys. Ed.		Hours
PE-4, 64	Physical Education	1
PE-5, 65	Physical Education	1
PE-6, 66	Physical Education	1

Physical Sciences

Chemistry		Hours
C-1	Inorganic Chemistry	5
C-3	Inorganic Chemistry	5
C-5	Inorganic Chemistry	5
C-7	General Chemistry	5
C-8	General Chemistry	5

Geology		Hours
G-1	Physical Geology	5
G-2	Historical Geology	5

Physics		Hours
Ph-1	Principles of Physics	3
Ph-2	Principles of Physics	3
Ph-3	Principles of Physics	3
Ph-25	General Physics	5
Ph-26	General Physics	5
Ph-27	General Physics	5

		Social Sciences	Hours
Economics			
ES-3	Principles of Economics		3
ES-4	Principles of Economics		3
ES-5	Principles of Economics		3
Sociology			
ES-55	Introduction to Sociology		3
ES-56	Introduction to Sociology		3
ES-57	Introduction to Sociology		3
Government			
ES-40	American Government		3
ES-41	American Government		3
ES-42	American Government		3
History			
ES-80	American History		3
ES-81	American History		3
ES-82	American History		3
ES-86	History of Western Civilization		3
ES-87	History of Western Civilization		3
ES-88	History of Western Civilization		3

The following are some typical curriculums which are recommended for Arts and Science students intending to major in one of these fields.

Business Administration

FRESHMAN YEAR

		Fall Quarter	Hours	Credits
E-2	English Composition		(3-0)	3
*E-1	Review English		(3-0)	1
BS-30	Principles of Accounting		(0-6)	3
PE-1, 61	Physical Education		(0-3)	1
	Electives			9
				16 or 17
		Winter Quarter	Hours	Credits
E-3	English Composition		(3-0)	3
M-10	Algebra		(5-0)	5
BS-31	Principles of Accounting		(0-6)	3
PE-2, 62	Physical Education		(0-3)	1
	Electives			4
				16
		Spring Quarter	Hours	Credits
E-4	English Composition		(3-0)	3
M-20	Mathematics of Finance		(4-0)	4
BS-32	Principles of Accounting		(0-6)	3
PE-3, 63	Physical Education		(0-3)	1
	Electives			5
				16
				48 or 49

SOPHOMORE YEAR

		Fall Quarter	Hours	Credits
ES-3	Principles of Economics		(3-0)	3
	Modern Language		(5-0)	5
E-42	Fiction		(3-0)	(3)
E-23	Public Speaking		(2-0)	(2)
PE-4, 64	Physical Education		(0-3)	1
	Electives			7
				16
		Winter Quarter	Hours	Credits
ES-4	Principles of Economics		(3-0)	3
	Modern Language		(5-0)	5
E-43	Poetry		(3-0)	(3)
E-24	Public Speaking		(2-0)	(2)
BS-34	Cost Accounting		(4-0)	4
PE-5, 65	Physical Education		(0-3)	1
	Electives			3
				16
		Spring Quarter	Hours	Credits
ES-5	Principles of Economics		(3-0)	3
	Modern Language		(5-0)	5
E-44	Biography		(3-0)	(3)
E-25	Public Speaking		(2-0)	(2)
BA-1	Business Organization & Management		(4-0)	4
PE-6, 66	Physical Education		(0-3)	1
	Electives			3
				16
				48

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Chemistry

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
E-1	Review English	(3-0)	1
E-65	Survey of English Literature	(3-0)	3
C-1	Inorganic Chemistry	(3-6)	5
M-15	College Algebra	(5-0)	5
PE-1, 61	Physical Education	(0-3)	1
			17 or 18
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
E-66	Survey of English Literature	(3-0)	3
C-3	Inorganic Chemistry	(3-6)	5
M-16	Plane Trigonometry	(5-0)	5
PE-2, 62	Physical Education	(0-3)	1
			17
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
E-67	Survey of English Literature	(3-0)	3
C-5	Inorganic Chemistry	(3-6)	5
M-17	Analytical Geometry	(5-0)	5
PE-3, 63	Physical Education	(0-3)	1
			17
			51 or 52

SOPHOMORE YEAR

Fall Quarter		Hours	Credits
ES-40	American Government	(3-0)	3
C-31	Inorganic Qualitative Analysis	(2-6)	4
M-36	Calculus	(5-0)	5
PE-4, 64	Physical Education	(0-3)	1
	² Electives		3
			16
Winter Quarter		Hours	Credits
ES-41	American Government	(3-0)	3
C-33	Quantitative Analysis	(3-6)	5
M-37	Calculus	(5-0)	5
PE-5, 65	Physical Education	(0-3)	1
	² Electives		2
			16
Spring Quarter		Hours	Credits
ES-42	American Government	(3-0)	3
C-36	Quantitative Analysis	(2-9)	5
M-38	Calculus	(5-0)	5
PE-6, 66	Physical Education	(0-3)	1
	² Electives		2
			16
			48

¹Review English is required for all students who do make a passing grade in the English Orientation Examination.

²It is recommended that the courses for these electives be selected from either E-23,24,25 Public Speaking (2-0)2; L-40,41,42 First Year German (5-0)5; or L-43,44,45 Second Year German (3-0)3.

Education (Teacher Training)

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
¹ E-1	Review English	(3-0)	1
ES-40	American Government	(3-0)	3
² Z-1	Introduction to Zoology	(3-4)	(5)
³ Ph-1	Principles of Physics	(3-0)	(3)
Ed-10	General Psychology	(4-0)	4
PE-1, 61	Physical Education	(0-3)	1
			15 or 17
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
ES-41	American Government	(3-0)	3
⁴ C-7	General Chemistry	(3-6)	(5)
⁵ B-1	General Botany	(3-4)	(5)
⁶ Ph-2	Principles of Physics	(3-0)	(3)
PE-35	Personal Hygiene	(3-0)	3
PE-2, 62	Physical Education	(0-3)	1
			15
Spring Quarter		Hours	Credits
Ed-12	Educational Psychology	(3-0)	3
E-4	English Composition	(3-0)	3
ES-42	American Government	(3-0)	3
⁷ C-8	General Chemistry	(3-6)	(5)
⁸ B-3	General Botany	(3-4)	(5)
⁹ Ph-3	Principles of Physics	(3-0)	(3)
PE-36	Community Hygiene & Sanitation	(3-0)	3
¹⁰ Ed-39	Introduction to Elementary Education	(4-0)	(4)
PE-3, 63	Physical Education	(0-3)	1
			18
			48 or 50

¹Review English is required for all students who do not make a passing grade in the English Orientation Examination.

²These courses may be taken to fulfill the requirement of 9 hours of physical science. If you choose Physics, you should plan to take the full sequence Ph-1,2,3, or if chemistry is the choice, sequence C-7,8 should be taken.

³These courses will satisfy the requirement in Biological Science. The combination of either Z-1 and B-1 may be taken, or B-1 and B-3.

⁴Ed-39 should be taken in place of PE-36 by those students who are taking the pre-graduate certificate teacher training course.

SOPHOMORE YEAR

		Hours	Credits
Fall Quarter			
E-65	Survey of English Literature	(3-0)	3
E-23	Public Speaking	(2-0)	2
ES-80	American History	(3-0)	3
Ed-82	Psychology of Childhood	(3-0)	3
PE-4, 64	Physical Education	(0-3)	1
	Electives		4
			16
Winter Quarter			
E-66	Survey of English Literature	(3-0)	3
M-10	Algebra	(5-0)	5
E-24	Public Speaking	(2-0)	2
ES-81	American History	(3-0)	3
PE-5, 65	Physical Education	(0-3)	1
	Electives		2
			16
Spring Quarter			
E-67	Survey of English Literature	(3-0)	3
E-25	Public Speaking	(2-0)	2
ES-82	American History	(3-0)	3
Ed-39	Introduction to Elementary Education	(4-0)	4
PE-6, 66	Physical Education	(0-3)	1
	Electives		3
			16
			48

Pre-Graduate Certificate

Those students desiring this course should take the course outlined for the Freshman year in the regular education course, with the exception which is noted on that page.

SOPHOMORE YEAR

		Hours	Credits
Fall Quarter			
E-65	Survey of English Literature	(3-0)	3
E-23	Public Speaking	(2-0)	2
Ed-40	Introduction to Teaching Arithmetic	(4-0)	1
Ed-49	School Management	(6-0)	6
PE-4,64	Physical Education	(0-3)	1
			16
Winter Quarter			
E-66	Survey of English Literature	(3-0)	3
E-24	Public Speaking	(2-0)	2
Ed-41	Introduction to Teaching Social Studies	(4-0)	4
Ed-47	Observation and Methods	(5-0)	5
PE-5, 65	Physical Education	(0-3)	1
			15
Spring Quarter			
E-67	Survey of English Literature	(3-0)	3
E-25	Public Speaking	(2-0)	2
Ed-42	Introduction to Teaching Reading	(3-0)	3
Ed-48	Student Teaching	(4-6)	6
PE-6, 66	Physical Education	(0-3)	1
			15
			46

Applied Music

FRESHMAN YEAR

		Fall Quarter	Hours	Credits
E-2	English Composition		(3-0)	3
¹ E-1	Review English		(3-0)	1
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
Mu-3	Fundamental Theory		(5-0)	5
PE-1, 61	Physical Education		(0-3)	1
				15 or 16
		Winter Quarter	Hours	Credits
E-3	English Composition		(3-0)	3
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
Mu-4	Fundamental Theory		(5-0)	5
PE-2, 62	Physical Education		(0-3)	1
				15
		Spring Quarter	Hours	Credits
E-4	English Composition		(3-0)	3
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
Mu-5	Fundamental Theory		(5-0)	5
PE-3, 63	Physical Education		(0-3)	1
				15
				45 or 46

SOPHOMORE YEAR

		Fall Quarter	Hours	Credits
Mu-9	Advanced Theory		(5-0)	5
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
	Modern Language		(5-0)	5
² Mu-15	History of Music		(3-0)	(3)
PE-4, 64	Physical Education		(0-3)	1
				17
		Winter Quarter	Hours	Credits
Mu-10	Advanced Theory		(5-0)	5
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
	Modern Language		(5-0)	5
² Mu-16	History of Music		(3-0)	(3)
PE-5, 65	Physical Education		(0-3)	1
				17
		Spring Quarter	Hours	Credits
Mu-11	Advanced Theory		(5-0)	5
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
	Modern Language		(5-0)	5
² Mu-17	History of Music		(3-0)	(3)
PE-6, 66	Physical Education		(0-3)	1
				17
				51

¹Review English is required for all students who do not make a passing grade in the English Orientation Examination.

²This course may be substituted for the language.

Music Education

FRESHMAN YEAR

Same course as for Applied Music.

SOPHOMORE YEAR

		Fall Quarter	Hours	Credits
Ed-10	General Psychology		(4-0)	4
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
Mu-9	Advanced Theory		(5-0)	5
PE-4, 64	Physical Education		(0-3)	1
				16
		Winter Quarter	Hours	Credits
Ed-11	General Psychology		(4-0)	4
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
Mu-10	Advanced Theory		(5-0)	5
PE-5, 65	Physical Education		(0-3)	1
				16
		Spring Quarter	Hours	Credits
Ed-12	Educational Psychology		(3-0)	3
	Applied Music (Major Instrument or Voice)		(1-0)	4
	Applied Music (Minor Instrument or Voice)....		(½-0)	2
Mu-11	Advanced Theory		(5-0)	5
PE-6, 66	Physical Education		(0-3)	1
				15
				47

Pharmacy

FRESHMAN YEAR

		Fall Quarter	Hours	Credits
E-2	English Composition		(3-0)	3
*E-1	Review English		(3-0)	1
C-1	Inorganic Chemistry		(3-6)	5
Z-1	Introduction to Zoology		(3-4)	5
PE-1, 61	Physical Education		(0-3)	1
				15 or 16
		Winter Quarter	Hours	Credits
E-3	English Composition		(3-0)	3
C-3	Inorganic Chemistry		(3-6)	5
B-1	General Botany		(3-4)	5
M-10	Algebra		(5-0)	5
PE-2, 62	Physical Education		(0-3)	1
				19
		Spring Quarter	Hours	Credits
E-4	English Composition		(3-0)	3
C-5	Inorganic Chemistry		(3-6)	5
B-3	General Botany		(3-4)	5
M-11	Trigonometry		(3-0)	3
PE-3, 63	Physical Education		(0-3)	1
				17
				51 or 52

Pharmacy students are required to spend three years in residence at the school where they will receive their degree; therefore, these students should plan to transfer at the end of their freshman year.

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Physical Education

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
E-1	Review English	(3-0)	1
ES-86	History of Western Civilization	(3-0)	3
PE-21	Physical Education Laboratory	(2-0)	2
Z-1	Introduction to Zoology	(3-4)	5
PE-20	Orientation to Physical Education	(3-0)	3
PE-1	Physical Education	(0-3)	1
			17 or 18
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
ES-87	History of Western Civilization	(3-0)	3
PE-35	Personal Hygiene	(3-0)	3
PE-22	Physical Education Laboratory	(2-0)	2
C-7	General Chemistry	(3-6)	5
PE-2	Physical Education	(0-3)	1
			17
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
ES-88	History of Western Civilization	(3-0)	3
PE-36	Community Hygiene & Sanitation	(3-0)	3
PE-23	Physical Education Laboratory	(2-0)	2
C-8	General Chemistry	(3-6)	5
PE-3	Physical Education	(0-3)	1
			17
			51 or 52

SOPHOMORE YEAR

Fall Quarter		Hours	Credits
Ed-10	General Psychology	(4-0)	4
	Literature (American or Modern)	(3-0)	3
Ed-15	Methods in Teaching Football	(4-0)	4
ES-44	American Government	(3-0)	3
PE-90	First Aid	(2-0)	2
PE-4	Physical Education	(0-3)	1
			17
Winter Quarter		Hours	Credits
Ed-11	General Psychology	(4-0)	4
	Literature (American or Modern)	(3-0)	3
Ed-16	Methods in Teaching Basketball	(4-0)	4
PE-25	Physical Education Laboratory	(2-0)	2
PE-80	Principles of Recreation	(3-0)	3
PE-5	Physical Education	(0-3)	1
			17
Spring Quarter		Hours	Credits
VP-21	Human Anatomy & Physiology	(5-0)	5
PE-26	Physical Education Laboratory	(2-0)	2
BA-1	Business Organization & Management	(4-0)	4
PE-17	Organization & Management of Sports	(3-0)	3
PE-6	Physical Education	(0-3)	1
PE-30	Treatment of Injuries & Care & Prevention	(2-0)	2
			17
			51

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Pre-Law

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
E-1	Review English	(3-0)	1
E-65	Survey of English Literature	(3-0)	3
ES-40	American Government	(3-0)	3
ES-86	History of Western Civilization	(3-0)	3
	Electives		3
PE-1, 61	Physical Education	(0-3)	1
			16 or 17
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
E-66	Survey of English Literature	(3-0)	3
ES-41	American Government	(3-0)	3
ES-87	History of Western Civilization	(3-0)	3
	Electives		3
PE-2, 62	Physical Education	(0-3)	1
			16
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
E-67	Survey of English Literature	(3-0)	3
ES-42	American Government	(3-0)	3
ES-88	History of Western Civilization	(3-0)	3
	Electives		3
PE-3, 63	Physical Education	(0-3)	1
			16
			48 or 49

SOPHOMORE YEAR

Fall Quarter		Hours	Credits
E-23	Public Speaking	(2-0)	2
Ed-10	General Psychology	(4-0)	4
ES-80	American History	(3-0)	3
	*Electives		6
PE-4, 64	Physical Education	(0-3)	1
			16
Winter Quarter		Hours	Credits
E-24	Public Speaking	(2-0)	2
Ed-11	General Psychology	(4-0)	4
ES-81	American History	(3-0)	3
	*Electives		6
PE-5, 65	Physical Education	(0-3)	1
			16
Spring Quarter		Hours	Credits
E-25	Public Speaking	(2-0)	2
ES-82	American History	(3-0)	3
	*Electives		10
PE-6, 66	Physical Education	(0-3)	1
			16
			48

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

*Electives should be selected from Science, Language, Mathematics, or Accounting.

Pre-Medicine

FRESHMAN YEAR

		Fall Quarter	Hours	Credits
E-2	English Composition		(3-0)	3
¹ E-1	Review English		(3-0)	1
ES-40	American Government		(3-0)	3
C-1	Inorganic Chemistry		(3-6)	5
Z-1	Introduction to Zoology		(3-4)	5
PE-1, 61	Physical Education		(0-3)	1
				17 or 18
		Winter Quarter	Hours	Credits
E-3	English Composition		(3-0)	3
ES-41	American Government		(3-0)	3
C-3	Inorganic Chemistry		(3-6)	5
M-10	Algebra		(5-0)	5
PE-2, 62	Physical Education		(0-3)	1
				17
		Spring Quarter	Hours	Credits
E-4	English Composition		(3-0)	3
ES-42	American Government		(3-0)	3
C-5	Inorganic Chemistry		(3-6)	5
M-11	Trigonometry		(3-0)	3
PE-3, 63	Physical Education		(0-3)	1
				15
				49 or 50

SOPHOMORE YEAR

		Fall Quarter	Hours	Credits
Ph-25	General Physics		(3-4)	5
E-65	Survey of English Literature		(3-0)	3
E-23	Public Speaking		(2-0)	2
	² Electives		(5-0)	5
PE-4, 64	Physical Education		(0-3)	1
				16
		Winter Quarter	Hours	Credits
Ph-26	General Physics		(3-4)	5
E-66	Survey of English Literature		(3-0)	3
E-24	Public Speaking		(2-0)	2
C-33	Quantitative Analysis		(3-6)	5
PE-5, 65	Physical Education		(0-3)	1
				16
		Spring Quarter	Hours	Credits
Ph-27	General Physics		(3-4)	5
E-67	Survey of English Literature		(3-0)	3
E-25	Public Speaking		(2-0)	2
	² Electives		(5-0)	5
PE-6, 66	Physical Education		(0-3)	1
				16
				48

¹Review English is required for all students who do not make a passing grade in the English Orientation Examination.

²It is recommend that a foreign language such as German be included in these electives.

³Ag-10 Genetics (5-0)5 may be taken in place of other electives.

Pre-Nursing

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
*E-1	Review English	(3-0)	1
Z-1	Introduction to Zoology	(3-4)	5
ES-55	Introduction to Sociology	(3-0)	3
Ed-10	General Psychology	(4-0)	4
PE-61	Physical Education	(0-3)	1
			16 or 17
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
C-7	General Chemistry	(3-6)	5
ES-56	Introduction to Sociology	(3-0)	3
Ed-11	General Psychology	(4-0)	4
PE-62	Physical Education	(0-3)	1
			16
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
C-8	General Chemistry	(3-6)	5
ES-57	Introduction to Sociology	(3-0)	3
PE-63	Physical Education	(0-3)	1
	Electives		4
			16
			48 or 49

Students may transfer to most schools of nursing at the end of the freshman year. However, some schools require additional college work and therefore a second year may be arranged. The student should consult the bulletin of the school to which he is transferring in order to make sure that he meets the entrance requirements.

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Pre-Veterinary

FRESHMAN YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
*E-1	Review English	(3-0)	1
C-1	Inorganic Chemistry	(3-6)	5
Z-1	Introduction to Zoology	(3-4)	5
ES-40	American Government	(3-0)	3
PE-1, 61	Physical Education	(0-3)	1
			17 or 18
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
C-3	Inorganic Chemistry	(3-6)	5
B-1	General Botany	(3-4)	5
ES-41	American Government	(3-0)	3
PE-2, 62	Physical Education	(0-3)	1
			17
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
C-5	Inorganic Chemistry	(3-6)	5
B-3	General Botany	(3-4)	5
ES-42	American Government	(3-0)	3
PE-3, 63	Physical Education	(0-3)	1
			17
			51 or 52

SOPHOMORE YEAR

Fall Quarter		Hours	Credits
C-11	Organic Chemistry	(3-6)	5
Ph-1	Principles of Physics	(3-0)	3
E-65	Survey of English Literature	(3-0)	3
Ed-10	General Psychology	(4-0)	4
ES-80	American History	(3-0)	3
PE-4, 64	Physical Education	(0-3)	1
			19
Winter Quarter		Hours	Credits
C-15	Organic Chemistry	(3-6)	5
Ph-2	Principles of Physics	(3-0)	3
E-66	Survey of English Literature	(3-0)	3
Ed-11	General Psychology	(4-0)	4
ES-81	American History	(3-0)	3
PE-5, 65	Physical Education	(0-3)	1
			19
Spring Quarter		Hours	Credits
E-67	Survey of English Literature	(3-0)	3
ES-82	American History	(3-0)	3
C-17	Organic Chemistry	(3-6)	5
Ph-3	Principles of Physics	(3-0)	3
PE-6, 66	Physical Education	(0-3)	1
			18
			56

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

TERMINAL VOCATIONAL COURSES:

Students who are not planning a four-year college course are offered the opportunity of taking two-year courses in agriculture, homemaking, and commerce. These courses afford practical training which will be of immediate value to the students in obtaining jobs, running their own farms or ranches, or setting up and maintaining a home.

Graduation from high school is not required. Any student who has sufficient age and experience to profit from such courses will be accepted. However, students admitted without evidence of high school graduation will not receive college credits that would be transferable to a four-year college and be acceptable toward a degree. In no case will courses bearing the prefix "0" in front of the course number in the course description be granted college transfer credit.

Upon satisfactory completion of the courses outlined below, the student will receive a certificate of graduation.

Practical Agriculture

This two year short course in Practical Agriculture is designed to make better farmers and ranchers. The course is divided into two sections in the second year. The student may take either one of these sections according to his interests and needs. In one section study is directed along the lines of ranch practices and cattle production. This course deals with the actual work of cattle breeding, raising, and grooming for market.

In the other section study is directed along the lines of farming and crop production. This course deals with farm management and the production of gainful crops.

In this course the student for the spring quarter of each year has the option of continuing to attend classes on the campus or working on a farm under supervised training and instruction. This work on the farm may be taken on the student's home farm, on the College farm, or on the farm of an approved employer. As a part of this supervised training a qualified instructor of the College will visit the student on the farm twice a month or as often as is needed, thus carrying the training directly to the field. This supervised farm training carries credit toward graduation the same as the regular classroom courses. The student must register in the regular manner at the appointed time for this training and pay the regular tuition and fees.

FIRST YEAR

		Fall Quarter	Hours	Credits
E-2	English Composition		(3-0)	3
E-1	Review English		(3-0)	1
PA-01	Field Crops in Colorado		(4-0)	4
AH-1	Introductory Animal Husbandry		(3-4)	5
FM-1	Farm Carpentry		(0-6)	2
PA-010	Arithmetic in Agriculture		(3-0)	3
PE-1	Physical Education		(0-3)	1
				18 or 19
		Winter Quarter	Hours	Credits
E-3	English Composition		(3-0)	3
B-1	General Botany		(3-4)	5
AH-12	Feeds & Feeding		(4-2)	5
FM-5	Farm Blacksmithing		(0-6)	2
PE-2	Physical Education		(0-3)	1
				16
		Spring Quarter ¹	Hours	Credits
E-4	English Composition		(3-0)	3
RA-5	Handicraft		(0-6)	2
B-3	General Botany		(3-4)	5
PA-02	Soil Management		(5-0)	5
PE-3	Physical Education		(0-3)	1
	Supervised Farm or Ranch Training		(2-)	(16)
				16
				50 or 51

¹Review English is required for all students who do not make a passing grade in the English Orientation Examination.

²The spring quarter work is optional and in its place a student may elect to take supervised farm or ranch experience on the student's home farm, on the College farm, or on the farm of an approved employer. This application of farming principles will be an integral part of the course.

Practical Agriculture-Ranch & Cattle Production

SECOND YEAR

Fall Quarter		Hours	Credits
EN-1	Farm & Home Insects	(3-4)	5
PA-011	Farm & Ranch Accounting	(3-0)	3
AH-5	Livestock Judging	(0-4)	2
PA-021	Agricultural Seminar	(0-4)	2
PA-05	Ranch Practice	(0-6)	2
PE-4	Physical Education	(0-3)	1
			15
Winter Quarter		Hours	Credits
PA-04	Livestock Diseases	(2-3)	3
PA-03	Farm Management	(4-0)	4
AH-30	Meats	(0-8)	4
PA-022	Agricultural Seminar	(0-4)	2
PA-06	Ranch Practice	(0-6)	2
PE-5	Physical Education	(0-3)	1
			16
*Spring Quarter		Hours	Credits
PA-023	Agricultural Seminar	(0-4)	2
FM-15	Rural Electrification and Sanitation	(2-3)	3
AH-7	Elements of Dairying	(2-2)	3
FM-12	Farm Machinery and Power	(1-6)	3
PA-07	Ranch Practice	(0-6)	2
PE-6	Physical Education	(0-3)	1
	Supervised Farm or Ranch Training	(2-)	(16)
			14
			45 or 47

*The spring quarter work is optional and in its place a student may elect to take supervised farm or ranch experience on the student's home farm, on the College farm, or on the farm of an approved employer. This application of farming principles will be an integral part of the course.

Practical Agriculture-Farm & Crop Production

SECOND YEAR

Fall Quarter		Hours	Credits
EN-1	Farm & Home Insects	(3-4)	5
PA-011	Farm & Ranch Accounting	(3-0)	3
AH-5	Livestock Judging	(0-4)	2
PA-021	Agricultural Seminar	(0-4)	2
	Electives		3
PE-4	Physical Education	(0-3)	1
			16

Winter Quarter		Hours	Credits
PA-04	Livestock Diseases	(2-3)	3
PA-03	Farm Management	(4-0)	4
AH-30	Meats	(0-8)	4
PA-022	Agricultural Seminar	(0-4)	2
	Electives		2
PE-5	Physical Education	(0-3)	1
			16

*Spring Quarter		Hours	Credits
PA-023	Agricultural Seminar	(0-4)	2
FM-15	Rural Electrification and Sanitation	(2-3)	3
AH-7	Elements of Dairying	(2-2)	3
FM-12	Farm Machinery and Power	(1-6)	3
	Electives		3
PE-6	Physical Education	(0-3)	1
	Supervised Farm or Ranch Training	(2-)	(16)
			15
			47 or 48

*The spring quarter work is optional and in its place a student may elect to take supervised farm or ranch experience on the student's home farm, on the College farm, or on the farm of an approved employer. This application of farming principles will be an integral part of the course.

Homemaking

This two year course is designed to provide the future homemaker with the basic, practical knowledge for efficient management of a home as well as to acquaint her with ideas and methods for making it attractive and comfortable. Also included in the course is the study and application of fashion and dress design.

FIRST YEAR

Fall Quarter		Hours	Credits
E-2	English Composition	(3-0)	3
*E-1	Review English	(3-0)	1
FN-010	Attractive and Wholesome Breakfasts	(1-6)	4
HE-07	Art of Color and Style	(1-6)	4
Ed-10	General Psychology	(4-0)	4
PE-61	Physical Education (Women's)	(0-3)	1
			16 or 17
Winter Quarter		Hours	Credits
E-3	English Composition	(3-0)	3
FN-011	Attractive and Wholesome Lunches	(1-6)	4
HE-05	Principles of Fabrics and Construction	(1-6)	4
Ed-11	General Psychology	(4-0)	4
PE-62	Physical Education (Women's)	(0-3)	1
			16
Spring Quarter		Hours	Credits
E-4	English Composition	(3-0)	3
FN-012	Attractive and Wholesome Dinners	(1-6)	4
HE-06	Art and Technique of Modern Fashion	(1-6)	4
PE-63	Physical Education (Women's)	(0-3)	1
	Electives		4
			16
			48 or 49

SECOND YEAR

Fall Quarter		Hours	Credits
ES-55	Introduction to Sociology	(3-0)	3
FN-036	Modern Methods of Food Preservation	(1-6)	4
HE-051	Tailoring	(1-6)	4
E-23	Public Speaking	(2-0)	2
PE-90	First Aid	(2-0)	2
PE-64	Women's Physical Education	(0-3)	1
			16
Winter Quarter		Hours	Credits
ES-56	Introduction to Sociology	(3-0)	3
FN-037	Party Foods	(1-6)	4
HE-052	Sewing for the Home	(1-6)	4
HM-010	Effective Management in the Home	(2-0)	2
E-24	Public Speaking	(2-0)	2
PE-65	Women's Physical Education	(0-3)	1
			16
Spring Quarter		Hours	Credits
ES-57	Introduction to Sociology	(3-0)	3
FN-038	Quantity Cooking for Social Affairs	(1-6)	4
HE-053	Fancy Work Sewing	(1-6)	4
HM-011	Making the Home More Attractive	(2-0)	2
E-25	Public Speaking	(2-0)	2
PE-66	Women's Physical Education	(0-3)	1
			16
			48

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Commerce

The courses offered in this general field are for those students who wish to find employment with a minimum amount of time spent in preparation. These courses provide the basic knowledge and training for employment as a secretary, stenographer, typist, or other clerical assistant.

ONE YEAR TERMINAL COURSE IN SECRETARIAL SCIENCE

Fall Quarter		Hours	Credits
¹ E-1	Review English	(3-0)	1
² BS-10	Theory of Shorthand	(5-0)	5
BS-05	Business Communications	(3-0)	3
BS-1	Principles of Typewriting	(0-3)	3
BS-021	Filing Systems	(0-4)	4
PE-1, 61	Physical Education	(0-3)	1
			16 or 17
Winter Quarter		Hours	Credits
³ BS-11	Theory of Shorthand	(5-0)	5
BS-2	Principles of Typewriting	(0-3)	3
BS-06	Business Communications	(3-0)	3
BS-040	Psychology of Business	(4-0)	4
PE-2, 62	Physical Education	(0-3)	1
			16
Spring Quarter		Hours	Credits
⁴ BS-12	Dictation	(5-0)	5
BS-019	Secretarial Training	(3-0)	3
BS-046	Business Orientation	(3-0)	3
BS-36	Payroll Accounting	(3-0)	3
PE-2, 62	Physical Education	(0-3)	1
			15
			47 or 48

¹Review English is required for all students who do make passing grades in the English Orientation Examination.

²If a student has had shorthand in high school, he will take: BS-014, Shorthand Review, (5-0)5.

³If a student has had shorthand in high school, he will take: BS-023, Dictation & Transcription, (5-0)5.

⁴If a student has had shorthand in high school, he will take: BS-024, Dictation & Transcription, (5-0)5.

One-Year Business Course

Fall Quarter		Hours	Credits
*E-1	Review English	(3-0)	1
BS-30	Principles of Accounting	(0-6)	3
BS-05	Business Communications	(3-0)	3
BS-021	Filing Systems	(0-4)	4
BS-1	Principles of Typewriting	(0-3)	3
BA-03	Introduction to Insurance	(3-0)	3
PE-1, 61	Physical Education	(0-3)	1
			17 or 18
Winter Quarter		Hours	Credits
BS-31	Principles of Accounting	(0-6)	3
BS-06	Business Communications	(3-0)	3
BS-040	Psychology of Business	(4-0)	4
BS-34	Cost Accounting	(4-0)	4
BA-04	Introduction to Advertising	(3-0)	3
PE-2, 62	Physical Education	(0-3)	1
			18
Spring Quarter		Hours	Credits
BS-32	Principles of Accounting	(0-6)	3
BS-36	Payroll Accounting	(3-0)	3
BA-1	Business Organization & Management	(4-0)	4
BS-03	Introduction to Income Tax	(3-0)	3
M-20	Mathematics of Finance	(4-0)	4
PE-3, 63	Physical Education	(0-3)	1
			18
			53 or 54

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

Vocational Business

FIRST YEAR

		Fall Quarter	Hours	Credits
*E-1	Review English		(3-0)	1
BS-10	Theory of Shorthand		(5-0)	5
BS-05	Business Communications		(3-0)	3
BS-1	Principles of Typewriting		(0-3)	3
BS-30	Principles of Accounting		(0-6)	3
PE-1 61	Physical Education		(0-3)	1
				15 or 16
		Winter Quarter	Hours	Credits
BS-11	Theory of Shorthand		(5-0)	5
BS-06	Business Communications		(3-0)	3
BS-31	Principles of Accounting		(0-6)	3
BS-2	Principles of Typewriting		(0-3)	3
PE-2, 62	Physical Education		(0-3)	1
				15
		Spring Quarter	Hours	Credits
BS-12	Dictation		(5-0)	5
BS-36	Payroll Accounting		(3-0)	3
BS-32	Principles of Accounting		(0-6)	3
BA-1	Business Organization & Management		(4-0)	4
PE-3, 63	Physical Education		(0-3)	1
				16
				46 or 47

SECOND YEAR

		Fall Quarter	Hours	Credits
BS-014	Shorthand Review		(5-0)	5
BA-03	Introduction to Insurance		(3-0)	3
BS-021	Filing Systems		(0-4)	4
PE-4, 64	Physical Education		(0-3)	1
	Electives			3
				16
		Winter Quarter	Hours	Credits
BS-023	Dictation & Transcription		(5-0)	5
BS-040	Psychology of Business		(4-0)	4
BS-34	Cost Accounting		(4-0)	4
BA-04	Introduction to Advertising		(3-0)	3
PE-5, 65	Physical Education		(0-3)	1
				17
		Spring Quarter	Hours	Credits
BS-024	Dictation & Transcription		(5-0)	5
BS-019	Secretarial Training		(3-0)	3
BS-046	Business Orientation		(3-0)	3
BS-039	Introduction to Income Tax		(3-0)	3
PE-6, 66	Physical Education		(0-3)	1
	Electives			2
				17
				50

*Review English is required for all students who do not make a passing grade in the English Orientation Examination.

DESCRIPTION OF COURSES

Note: Following the titles of individual courses, which are grouped by department in alphabetical order, the letters F, W, S, indicate the quarter (Fall, Winter, Spring) during which the course is offered. Arabic numerals in the parenthesis are used to indicate the number of actual hours spent in class and laboratory, while the last number on the line indicates the number of credit hours for the course. Thus, for example, the figures "(3-4)5" would mean that the course requires three hours of class and four hours of laboratory work each week, and carries five quarter hours of credit.

Courses whose numbers begin with a zero, for example PA-01, are primarily intended for students following the curriculums outlined for the Terminal Vocational Courses. (The credits for these courses are not transferable to other colleges.)

AGRICULTURE

AGRONOMY

Ag-1 CROP PRODUCTION **F (5-0)5**
 A study of the principles of field crop production with special emphasis on cultural practices and botanical characteristics of crops grown in the state.
 Prerequisites: B1, B3

Ag-2 SOILS **S (5-3)6**
 A basic course dealing with the formation, properties, and management of soils with special attention given to soil conditions that affect moisture relations and elementary fertility analysis.
 Prerequisites: C7, C8

Ag-10 PRINCIPLES OF GENETICS **S (5-0)5**
 A study of fundamental principles of heredity, variation, breeding and evolution. Emphasis is placed upon the physical basis of heredity, independent inheritance, and linkage.
 Prerequisites: B1, B3, Z1

Ag-18 IRRIGATION PRACTICES **S (3-0)3**
 A study of the systems used in irrigation, water supply, water measurement, methods of irrigation, soils in relation to irrigation, water efficiency, drainage, and the water requirements of different crops.
 Prerequisite: Ag-1

ANIMAL HUSBANDRY

AH-1 INTRODUCTORY ANIMAL HUSBANDRY **F (3-4)5**
 Selecting and evaluating beef cattle, dairy cattle, sheep, swine, and horses on a purebred and market basis. Emphasis placed on types, breeds, markets, and market classification.

AH-5 LIVESTOCK JUDGING **F (0-4)2**
 Selection and judging of market and breeding classes of livestock.

- AH-7 ELEMENTS OF DAIRYING** S (2-2)3
An introduction to the dairy industry. A brief study of the history and development of the industry and of the composition, properties, and food value of milk. An introduction to the manufacturing processes for butter, ice cream, cheese, and other dairy products.
- AH-9 PRINCIPLES OF ANIMAL NUTRITION** S (5-0)5
Study of the various nutrients; their functions, digestion, and fate in the metabolism; balance studies and requirements for maintenance and production.
Prerequisite: C11
- AH-12 FEEDS AND FEEDING** W (4-2)5
Feeds and their use in feeding livestock. Calculation of rations which meet requirements for maintenance, growth, and production.
Prerequisite: AH1.
- AH-30 MEATS** W (0-8)4
A study of meats from the producer's and consumer's standpoint. The slaughter, dressing, cutting, curing, and nutritive value of meats. Trips to packing plants.

FARM MECHANICS

- FM-1 FARM CARPENTRY** F (0-6)2
Rafter cutting and erection, framing, making wood appliances, drawing, care and use of tools, and painting.
- FM-5 FARM BLACKSMITHING** W (0-6)2
Forge work for the farmer, involving construction and repair work in shaping, annealing, hardening, and tempering; acetylene and electric welding.
- FM-12 FARM MACHINERY AND POWER** S (1-6)3
A theory, demonstration and maintenance course in motors, engines, and transportation equipment used on the farm, which includes repair, instruction, operation and adjustment of farm machinery.
- FM-15 RURAL ELECTRIFICATION AND SANITATION** S (2-3)3
Rural uses of electricity on the farm for light and power, water supply, and sewage disposal.
- RA-5 HANDICRAFT** S (0-6)2
Basic processes of handicraft, including woodworking, metal working, etc. Operation of power machinery.

PRACTICAL AGRICULTURE

- PA-01 FIELD CROPS IN COLORADO** F (4-0)4
A study of cereal grains, forage, and other crops grown in Colorado. A job-analysis approach is used.

- PA-02 SOIL MANAGEMENT** **S (5-0)5**
A study of tillage practices, crop rotations, fertilizers, irrigation, and other phases of soil management.
- PA-03 FARM AND RANCH MANAGEMENT** **W (4-0)4**
Size of farm, type and rates of production, combination of enterprises, labor and machinery efficiency are considered.
- PA-04 LIVESTOCK DISEASES** **W (2-3)3**
The course does not take the place of veterinary practice but aids the farmer in identifying common livestock diseases and in learning emergency treatments he can give before a veterinarian is available.
- PA-05 RANCH PRACTICES** **F (0-6)2**
This class is offered for the purpose of giving actual experience in handling stock, and of enabling the student to participate in other activities that confront stockmen and ranchers.
- PA-06 RANCH PRACTICES** **W (0-6)2**
A continuation of PA-05.
- PA-07 RANCH PRACTICES** **S (0-6)2**
A continuation of PA-06.
- PA-010 ARITHMETIC IN AGRICULTURE** **F (3-0)3**
A review of the principles of arithmetic with special emphasis on application to everyday farming problems.
- PA-011 FARM AND RANCH ACCOUNTING** **F (3-0)3**
A study of farm record keeping. Practical value of records is stressed.
- PA-021 AGRICULTURAL SEMINAR** **F (0-4)2**
Students study chosen problems with emphasis on a local situation.
- PA-022 AGRICULTURAL SEMINAR** **W (0-4)2**
A continuation of PA-021.
- PA-023 AGRICULTURAL SEMINAR** **S (0-4)2**
A continuation of PA-022.

BIOLOGY
Bacteriology

- PB-21 GENERAL BACTERIOLOGY** **W (3-4)5**
An elementary study of bacteria with emphasis upon their role in everyday life.
Prerequisites: C1, C3, C5, or C7 and C8.

Botany

- B-1 GENERAL BOTANY** **W (3-4)5**
The structure and functions of higher plants.

- B-3 GENERAL BOTANY** **S (3-4)5**
The development of plants from simple to complex forms.
Prerequisite: B1.

Conservation

- F-3 PRINCIPLES OF CONSERVATION** **F (2-0)2**
Open to all students of the college. A survey of the forest, range, wildlife, and other natural resources; policies and programs adopted for their protection and use. Basic and non-renewable resources are accented during this quarter.

- F-4 PRINCIPLES OF CONSERVATION** **W (2-0)2**
Continuation of F3, with accent upon biological resources.

Entomology

- En-1 FARM AND HOME INSECTS** **F (3-4)5**
Elementary anatomy and physiology of insects; the life histories, habits and control recommendations for the more important insect pests.
Prerequisite: Z1, or concurrent registration in Z1.

Horticulture

- H-1 GENERAL HORTICULTURE** **S (4-2)5**
A general course covering the principles underlying the propagation, improvement, and marketing of horticultural crops.
Prerequisite: B1

Physiology

- VP-21 HUMAN ANATOMY AND PHYSIOLOGY** **S (5-0)5**
A lecture and demonstration course in anatomy and physiology.
Prerequisites: C1, C3, C5 or C7 and C8.

Zoology

- Z-1 INTRODUCTION TO ZOOLOGY** **F (3-4)5**
A study of the principles of Zoology with reference to man. Demonstration and laboratory work are used to demonstrate these principles.

CHEMISTRY

- C-1 INORGANIC CHEMISTRY** **F (3-6)5**
A presentation of the basic principles of chemistry and a study of the more common elements. Lectures and laboratory exercises. Recommended for majors in chemistry, pharmacy, pre-medicine and engineering.

- C-3 INORGANIC CHEMISTRY** **W (3-6)5**
A continuation of C1. Includes chemistry of non-metallic elements. Lectures and laboratory exercises.
Prerequisite: C1

- C-5 INORGANIC CHEMISTRY** **S (3-6)5**
A continuation of C3. Includes the chemistry of the metallic elements.
Prerequisite: C3
- C-7 GENERAL CHEMISTRY** **W (3-6)5**
A course of lectures, laboratory work, and demonstration dealing with the facts and principles of chemistry in a broad manner. This course is primarily for agricultural and arts and science students, not majoring in the sciences.
- C-8 GENERAL CHEMISTRY** **S (3-6)5**
A continuation of C7, with more emphasis on the study of the elements and their compounds.
Prerequisite: C7
- C-11 ORGANIC CHEMISTRY** **F (3-6)5**
An elementary course in the chemistry of carbon compounds. Lectures and laboratory exercises.
Prerequisites: C1, C3, C5, or C7 and C8
- C-15 ORGANIC CHEMISTRY** **W (3-6)5**
The chemistry of fats, carbohydrates, and proteins. Lectures and laboratory exercises.
Prerequisite: C11
- C-17 ORGANIC CHEMISTRY** **S (3-6)5**
Chief emphasis is placed on the chemistry of cyclic compounds. Lectures and laboratory exercises.
Prerequisite: C15
- C-31 INORGANIC QUALITATIVE ANALYSIS** **F (2-6)4**
A discussion of the principles of inorganic analytical separations. Lectures and laboratory exercises.
Prerequisites: C1, C3, C5, or C7 and C8
- C-33 QUANTITATIVE ANALYSIS** **W (3-6)5**
A consideration of the theory and techniques involved in the use of modern analytical instruments in quantitative analysis. Lectures and laboratory exercises.
Prerequisites: C1, C3, C5, or C7 and C8
- C-36 QUANTITATIVE ANALYSIS** **S (2-9)5**
A continuation of the study of the principles and practices of inorganic quantitative analysis. Lectures and laboratory exercises.
Prerequisite: C33

COMMERCE

General Business

- BA-1 BUSINESS ORGANIZATION & MANAGEMENT** **S (4-0)4**
Managerial processes and relationships; principles of authority, responsibility and accountability.

- BS-1 PRINCIPLES OF TYPEWRITING** F (0-3)3
Speed and accuracy in the operation of the typewriter by the touch system; business letters.
- BS-2 PRINCIPLES OF TYPEWRITING** W (0-3)3
Business letters, office forms, tabulations.
Prerequisite: BS1
- BS-10 THEORY OF SHORTHAND** F (5-0)5
The fundamentals of Gregg shorthand.
- BS-11 THEORY OF SHORTHAND** W (5-0)5
The fundamentals of Gregg shorthand.
Prerequisites: BS1, BS10
- BS-12 DICTATION** S (5-0)5
Dictation and transcription, vocabulary building.
Prerequisite: BS11
- BS-30 PRINCIPLES OF ACCOUNTING** F (0-6)3
A study of the fundamentals and principles of accounting applicable to business ownership.
- BS-31 PRINCIPLES OF ACCOUNTING** W (0-6)3
Continuation of BS30. Partnership.
- BS-32 PRINCIPLES OF ACCOUNTING** S (0-6)3
Continuation of BS31. Corporation.
- BS-34 COST ACCOUNTING** W (4-0)4
Process and job lot accounting.
Prerequisite: BS30
- BS-36 PAYROLL ACCOUNTING** S (3-0)3
Principles of records applied to payroll.
- Terminal Business**
- BA-03 INTRODUCTION TO INSURANCE** F (3-0)3
A basic course covering the various fields of insurance.
- BA-04 INTRODUCTION TO ADVERTISING** W (3-0)3
A basic course covering the various fields of advertising.
- BS-05 BUSINESS COMMUNICATIONS** F (3-0)3
A study of communications used in business; letter writing, conferences, telegrams, speeches, report writing, etc.
- BS-06 BUSINESS COMMUNICATIONS** W (3-0)3
A continuation of BS-05
- BS-014 SHORTHAND REVIEW** F (5-0)5
Review of shorthand theory. Dictation and transcription.

- BS-019 SECRETARIAL TRAINING** **S (3-0)3**
Duties of the secretary.
Prerequisites: BS1, BS11
- BS-021 FILING SYSTEMS** **F (0-4)4**
A study of filing systems and practical application of principles.
- BS-023 DICTATION AND TRANSCRIPTION** **W (5-0)5**
Unfamiliar dictation; dictation and transcription.
Prerequisites: BS11 or BS14
- BS-024 DICTATION AND TRANSCRIPTION** **S (5-0)5**
Advanced dictation and transcription.
Prerequisite: BS023
- BS-039 INTRODUCTION TO INCOME TAX** **S (3-0)3**
A study of the general provisions of the income tax laws.
- BS-040 PSYCHOLOGY OF BUSINESS** **W (4-0)4**
Study of the application of psychology to the business situation.
- BS-046 BUSINESS ORIENTATION** **S (3-0)3**
Overall view of the business world.

EDUCATION

- Ed-10 GENERAL PSYCHOLOGY** **F (4-0)4**
Fundamental principles of psychology and their application to life, covering particularly the topics of personality, emotions, intelligence, attention, perception, learning, memory, thinking, and motivation.
Prerequisite to all psychology courses.
- Ed-11 GENERAL PSYCHOLOGY** **W (4-0)4**
A continuation of Ed10 covering especially individual emotional adjustments and the various phases of inter-relationships between the individual and the group.
Prerequisite: Ed 10
- Ed-12 EDUCATIONAL PSYCHOLOGY** **S (3-0)3**
A study of the phases of psychology bearing upon the problems of teaching, with emphasis on growth, intelligence, individual differences, motivation, learning, heredity, and environment. The principles of psychology as applied to education.
Prerequisite: Ed10.
- Ed-15 METHODS IN TEACHING FOOTBALL** **F (4-0)4**
A theoretical course dealing with the methods of coaching, strategy, tactics, football systems, training and diet, scouting, rules interpretation, equipment in secondary schools.
- Ed-16 METHODS IN TEACHING BASKETBALL** **W (4-0)4**
Methods of coaching offense and defense, styles of play, strategy, training and diet, rules interpretation, equipment in secondary schools.

- Ed-39 INTRODUCTION TO ELEMENTARY EDUCATION S (4-0)4**
An introductory course dealing with the essential principles and facts underlying educational activity; the school as a social institution, as a community institution, and as a community or state responsibility; the evolution of methods in the light of the educative process and the nature of learning; current practices and means of evaluating education.
- Ed-40 INTRODUCTION TO THE TEACHING OF ARITHMETIC F (4-0)4**
Experimental studies in arithmetic methods are studied and their findings applied to present arithmetic teaching. Meaningful arithmetic as opposed to mechanical arithmetic is emphasized.
- Ed-41 INTRODUCTION TO THE TEACHING OF SOCIAL STUDIES W (4-0)4**
The early history of the activity program is studied, present practices in democratic classrooms are analyzed, and the method of unit teaching is studied.
- Ed-42 INTRODUCTION TO THE TEACHING OF READING S (3-0)3**
A comprehensive study of the experimental studies in reading methods, their results, and their application to pupil needs in reading is made. Many up-to-date authorities are consulted.
- Ed-47 OBSERVATION AND METHODS W (5-0)5**
Observation techniques are developed and planned. Visitations to both rural schools and the campus elementary school are made at times during the year to note progress. Observation is especially directed to scientific procedures in reading, arithmetic, and other elementary-school subjects.
- Ed-48 STUDENT TEACHING S (4-6)6**
Sixty hours of classroom teaching in rural grade schools is required of the student. Attention is also directed to scientific methods in the teaching of reading, arithmetic, and other elementary-school subjects. Students are directed in their practice teaching by the instructor and by the regular teachers.
- Ed-49 SCHOOL MANAGEMENT F (6-0)3**
An introduction to the field of techniques and methods of teaching, a study of curriculum building as suggested in the state course of study, and a study of objectives of elementary schools. Practical applications are made of new projects and methods of rural and elementary teaching.
- Ed-82 PSYCHOLOGY OF CHILDHOOD F (3-0)3**
A study of the growth, adjustment and capacities of children from conception through the elementary school years. Emphasis is placed upon what to do in guiding the development of normal children.
Prerequisite: Ed10

ENGINEERING**Civil Engineering**

- CE-1 SURVEYING** **F (3-3)4**
Plane surveying methods of measuring distances, angles, and elevations. Care and use of surveying instruments.
Prerequisites: M16 or M11
- CE-4 ADVANCED SURVEYING** **S (2-3)3**
Geodetic surveying methods. Astronomic observations. Topographic surveys. Hydrographic surveys used in drainage and irrigation. Field practices in these branches.
Prerequisite: CE1
- F-34 BASIC MAPPING** **S (1-6)3**
Fundamentals of forest mapping, use of staff compass, Abney hand level, and other specialized equipment.
- CE-11 ENGINEERING PROBLEM SOLUTION** **F (3-0)3**
Formal and computational phases of the solution of problems in engineering.
Prerequisites: M2, M16
- CE-15 THEORETICAL MECHANICS (Statics)** **W (4-0)4**
Coplanar, non-coplanar, concurrent and non-concurrent force systems. Centroids and moments of inertia.
- CE-18 STRENGTH OF MATERIALS** **S (4-0)4**
Applications of the principles of mechanics and elasticity to the investigation of stresses and deformations in structural members and machine elements. Combined stresses.

Mechanical Engineering

- ME-1 MECHANICAL DRAWING** **F (0-6)2**
Care and use of instruments; lettering; geometrical construction and projection.
- ME-2 MECHANICAL DRAWING** **W (0-6)2**
A continuation of ME1. Isometric and other pictorial representations.
Prerequisite: ME1
- ME-3 DESCRIPTIVE GEOMETRY** **S (1-6)3**
The graphical representation of geometrical magnitudes in space.
Prerequisite: ME2
- ME-5 MACHINE DRAWING** **F (0-6)2**
The production of detail and assembly drawings of machines.
- ME-15 MECHANISM** **S (3-0)3**
Elements of machinery; motion-transmitting parts such as gears, belts, link work, etc.
Prerequisite: ME5

- ME-16 MECHANISM LABORATORY** **S (0-6)2**
Drawing room practice to accompany ME15.
Prerequisite: ME5

ENGLISH LANGUAGE AND LITERATURE

- E-1 REVIEW ENGLISH** **F (3-0)1**
Required of those students who need it on the basis of their achievement in the placement test. Drill in basic language skills through a remedial reading approach.
- E-2 ENGLISH COMPOSITION** **F (3-0)3**
Required of freshmen. Practice in both written and oral composition. This course is designed to develop correct language habits and to train the student in logical thought and effective expression.
- E-3 ENGLISH COMPOSITION** **W (3-0)3**
Required of freshmen. A continuation of E 2. This course trains the student in collecting, organizing, and presenting material in larger units of composition.
Prerequisite: E2
- E-4 ENGLISH COMPOSITION** **S (3-0)3**
Required of freshmen. A continuation of E3. This course continues to emphasize exposition and the use of narration and description in communicating sensory experience.
Prerequisite: E3
- E-23 PUBLIC SPEAKING** **F (2-0)2**
A general introductory course in public speaking planned to give the fundamentals of speech preparation and to develop simple and direct speaking. Practice in preparation and delivery of speeches. Two quarters are required for credit.
Prerequisite: E2
- E-24 PUBLIC SPEAKING** **W (2-0)2**
A continuation of E23.
Prerequisite: E23
- E-25 PUBLIC SPEAKING** **S (2-0)2**
A continuation of E24.
Prerequisite: E24
- E-42 FICTION** **F (3-0)3**
Reading and analysis of five typical modern novels, to foster appreciation and enjoyment.
- E-43 POETRY** **W (3-0)3**
A careful study of famous poems to encourage further reading and to enhance enjoyment.

- E-44 BIOGRAPHY** **S (3-0)3**
Lives of great men, ancient and modern, analyzed as to style and patterns of living.
- E-65 SURVEY OF ENGLISH LITERATURE** **F (3-0)3**
Chronological study of English literature from Anglo-Saxon to present century.
- E-66 SURVEY OF ENGLISH LITERATURE** **W (3-0)3**
A continuation of E65.
- E-67 SURVEY OF ENGLISH LITERATURE** **S (3-0)3**
A continuation of E66.

ENTOMOLOGY
(See under "Biology")

GEOGRAPHY
(See under "History and Social Science")

GEOLOGY

- G-1 PHYSICAL GEOLOGY** **W (4-3)5**
A study of the earth, the materials which make up the earth, its structure, surface features, and the geological processes involved. One Saturday field trip is required.
Prerequisites: C5 or C7 and C8.
- G-2 HISTORICAL GEOLOGY** **S (4-3)5**
A history of the development of the earth and its features from its origin to the present, and the accompanying evolutionary changes as revealed in the fossil record. One Saturday field trip is required.
Prerequisite: G1

GOVERNMENT
(See under "History and Social Science")

HISTORY AND SOCIAL SCIENCE

- ES-3 PRINCIPLES OF ECONOMICS** **F (3-0)3**
The purpose is to teach fundamental principles; to open the field of economics in the way most helpful to further a more detailed study of special problems and to give those not intending to specialize in the subject an outline of the general principles of economics. Not open to freshmen.
- ES-4 PRINCIPLES OF ECONOMICS** **W (3-0)3**
Continuation of ES3.
- ES-5 PRINCIPLES OF ECONOMICS** **S (3-0)3**
Continuation of ES4.

- ES-40 AMERICAN GOVERNMENT: National, State, and Local** **F (3-0)3**
Fundamental principles upon which the American government is founded, the organization and services of the national, state, and local government, and the current political problems of the units.
- ES-41 AMERICAN GOVERNMENT: National, State, and Local** **W (3-0)3**
Continuation of ES40.
- ES-42 AMERICAN GOVERNMENT: National, State, and Local** **S (3-0)3**
Continuation of ES41.
- ES-55 INTRODUCTION TO SOCIOLOGY** **F (3-0)3**
Nature and dynamics of human society, the major social institutions, the various environments conditioning society, such as the geographic and cultural, and the factors and forces producing social changes.
- ES-56 INTRODUCTION TO SOCIOLOGY** **W (3-0)3**
Continuation of ES55.
- ES-57 INTRODUCTION TO SOCIOLOGY** **S (3-0)3**
Continuation of ES56.
- ES-80 AMERICAN HISTORY: The Old World Period (1492-1815)** **F (3-0)3**
A course surveying the origin and development of the United States from the discovery of America to the present day, and the role of the United States as an American nation and as a world power.
- ES-81 AMERICAN HISTORY: The New World Period (1815-1898)** **W (3-0)3**
Continuation of ES80.
- ES-82 AMERICAN HISTORY: The One World Period (1898-.....)** **S (3-0)3**
Continuation of ES81.
- ES-86 HISTORY OF WESTERN CIVILIZATION** **F (3-0)3**
A course tracing the story of civilization from the most ancient times to the present day. Balanced attention is given to political, social, economic, and cultural developments.
- ES-87 HISTORY OF WESTERN CIVILIZATION** **W (3-0)3**
Continuation of ES86.
- ES-88 HISTORY OF WESTERN CIVILIZATION** **S (3-0)3**
Continuation of ES87.

HOMEMAKING

- FN-010 ATTRACTIVE AND WHOLESOME BREAKFASTS F (1-6)4**
How to prepare and serve "the most important meal of the day," with careful attention to a well balanced diet.
- FN-011 ATTRACTIVE AND WHOLESOME LUNCHES W (1-6)4**
Menu-planning and preparation of lunch, with special attention to box lunches, salads, and sandwich preparation.
- FN-012 ATTRACTIVE AND WHOLESOME DINNERS S (1-6)4**
Emphasis is placed on fulfilling dietary requirements with well-chosen, well-prepared foods. Special attention given to meat and dessert recipes. Includes proper way of serving formal and informal dinners, buffets.
- FN-036 MODERN METHODS OF FOOD PRESERVATION F (1-6)4**
Includes traditional methods of canning and preserving, but concentrates on quick-freezing, the pressure cooker. Work in laboratory with these methods.
- FN-037 PARTY FOODS W (1-6)4**
Planning and preparation of foods for coffees, brunches, party lunches, teas, and other types of formal and informal parties.
- FN-038 QUANTITY COOKING FOR SOCIAL AFFAIRS S (1-6)4**
How to plan the menu, purchase the food, prepare the dishes for large social affairs, such as banquets, formal teas, etc., with laboratory work in connection with campus affairs of this type.
- HE-05 ART OF COLOR AND STYLE F (1-6)4**
Application of art and economic principles to the selection of textiles and clothing.
- HE-06 PRINCIPLES OF FABRICS AND CONSTRUCTION W (1-6)4**
Fundamental construction processes applied to the making of clothing becoming to the individual. Study and use of commercial patterns.
- HE-07 ART & TECHNIQUE OF MODERN FASHION S (1-6)4**
Study of fashion magazines, style trends, great fashion designers; includes some use of original design with emphasis upon appropriate use of line, color, texture for the individual.
- HE-051 TAILORING F (1-6)4**
Planning and construction of a tailored garment such as a coat or suit.
- HE-052 SEWING FOR THE HOME W (1-6)4**
Basic course in curtain and drapery making, upholstery, and slip-cover making. May also include repairing of rugs, weaving, etc. Use of sewing machine attachments.

HE-053 FANCY WORK SEWING S (1-6)4
Embroidery, knitting, crochet, tatting, hand hemstitching, etc.

HM-010 EFFECTIVE MANAGEMENT IN THE HOME W (2-0)2
Family finance, budget-making, includes economical meal-planning, saving shortcuts, time and money management.

HM-011 MAKING THE HOME MORE ATTRACTIVE S (2-0)2
Types of home plans, materials and construction practices. Decoration and furnishing of home. Artistic appreciation of furniture, rugs, textiles and other furnishings.

HORTICULTURE
(See under "Agriculture")

MATHEMATICS

M-2 SLIDE RULE S (1-0)1
Open to all students of the college. Instruction in the basic principles and use of the slide rule.

M-5a HIGH SCHOOL PLANE GEOMETRY F (2-0)0
Remedial course in plane geometry for those with no high school geometry or insufficient preparation for college math. courses.

M-10 ALGEBRA W (5-0)5
Review of elementary algebra, linear and quadratic equations, linear and quadratic systems, functions and their graphs, logarithms, variation, binomial theorem, progressions.

M-11 TRIGONOMETRY S (3-0)3
Trigonometric functions of acute angles, trigonometric functions of the general angle, review of logarithms, solutions of right and oblique triangles, trigonometric functions of two angles, reduction formulas, trigonometric equations.
Prerequisite: M10

***M-15 COLLEGE ALGEBRA** F (5-0)5
Comprehensive review of elementary algebra functions and their graphs, coordinates and loci, variations, quadratic systems, the locus of an equation, the binomial theorem, and logarithms.

M-15a ADVANCED HIGH-SCHOOL ALGEBRA F (3-0)0
For removal of entrance deficiencies.

***M-16 PLANE TRIGONOMETRY** W (5-0)5
The trigonometric functions and their properties, solutions of the right and oblique triangle, fundamental trigonometric relations, trigonometric analysis, inverse functions, polar coordinates.
Prerequisite: M15.

M-16a HIGH SCHOOL SOLID GEOMETRY W (2-0)0
For removal of entrance deficiencies.

* A standard course for students expecting to take advanced college mathematics.

- *M-17 ANALYTICAL GEOMETRY** **S (5-0)5**
 Complex numbers, the straight line, the circle, the conic sections, tangents, equation of a locus, equations of a line in space, the plane, quadric surfaces.
 Prerequisite: M16
- M-20 MATHEMATICS OF FINANCE** **S (4-0)4**
 Mathematical theory of investment applied to annuities, sinking funds and amortization, depreciation, life insurance, etc.
- M-36 CALCULUS** **F (5-0)5**
 With M37 and M38, comprises the standard college course in calculus.
- M-37 CALCULUS** **W (5-0)5**
 Prerequisite: M36.
- M-38 CALCULUS** **S (5-0)5**
 Prerequisite: M37.

MODERN LANGUAGES

- L-21 FIRST YEAR SPANISH** **F (5-0)5**
 A course in grammar, prose composition, reading, and conversation.
- L-22 FIRST YEAR SPANISH** **W (5-0)5**
 Further study of Spanish grammar with emphasis on reading, composition, and conversation.
 Prerequisite: L21
- L-23 FIRST YEAR SPANISH** **S (5-0)5**
 Continuation of L22.
 Prerequisite: L22
- L-24 SECOND YEAR SPANISH** **F (3-0)3**
 A course in second year Spanish with emphasis on reading and conversation.
 Prerequisite: L23
- L-25 SECOND YEAR SPANISH** **W (3-0)3**
 Continuation of L24.
 Prerequisite: L24
- L-26 SECOND YEAR SPANISH** **S (3-0)3**
 Continuation of L25.
 Prerequisite: L25
- L-40 FIRST YEAR GERMAN** **F (5-0)5**
 A course in grammar, pronunciation, and reading.

* A standard course for students expecting to take advanced college mathematics.

L-41 FIRST-YEAR GERMAN	W (5-0)5
A continuation of L40. Prerequisite: L40	
L-42 FIRST YEAR GERMAN	S (5-0)5
A continuation of L41. Prerequisite: L41	
L-43 SECOND-YEAR GERMAN	F (3-0)3
A continuation of L42, with emphasis on reading and conversation. Prerequisite: L42.	
L-44 SECOND-YEAR GERMAN	W (3-0)3
A continuation of L43. Prerequisite: L43	
L-45 SECOND-YEAR GERMAN	S (3-0)3
A continuation of L44. Prerequisite: L44	

MUSIC

Mu-3 FUNDAMENTAL THEORY	F (5-0)5
An integrated course in music fundamentals, ear training, sight singing and theory of music.	
Mu-4 FUNDAMENTAL THEORY	W (5-0)5
A continuation of Mu3. Prerequisite: Mu3	
Mu-5 FUNDAMENTAL THEORY	S (5-0)5
A continuation of Mu4. Prerequisite: Mu4	
Mu-9 ADVANCED THEORY	F (5-0)5
Ear training and dictation. Choral-style simple chromatic melodies. Chromatic harmony used as embellishment of, and a substitute for, diatonic harmony. Continued work in original composition and keyboard harmony. Prerequisite: Mu5.	
Mu-10 ADVANCED THEORY	W (5-0)5
A continuation of Mu9. Further development of the chromatic element. The augmented sixth chords. Chromatic modulations; keyboard harmony. Prerequisite: Mu9.	
Mu-11 ADVANCED THEORY	S (5-0)5
Emphasis on original composition for voice and instrument; accompaniment writing. Contrapuntal devices. Prerequisite: Mu10.	

- Mu-15 HISTORY OF MUSIC** **F (3-0)3**
Study of the sources of our music. Beginnings of scale, notation, harmony, etc. Early schools of composition, culminating in Palestrina, Bach, and Handel.
- Mu-16 HISTORY OF MUSIC** **W (3-0)3**
Evolution of the modern sonata traced through Haydn, Mozart, and Beethoven. Rise of Romanticism and the music of the Romantic composers: Schubert, Mendelssohn, Schumann, Chopin, Liszt, and others.
- Mu-17 HISTORY OF MUSIC** **S (3-0)3**
The opera from Gluck to Wagner. Effect of Wagner's theories on music to the present day. Brahms and "the cause of absolute music." Nationalistic composers, including Tschaikowsky, Dvorak, Sibelius, and Grieg. French Impressionism: Franck, Debussy, Ravel, and others.
- Mu-48 MUSIC FOR ELEMENTARY TEACHERS** **W (3-0)3**
A comprehensive study of the rudiments of music, gauged to fit the needs of the classroom teacher who teaches her own music.
- Mu-49 MUSIC FOR ELEMENTARY TEACHERS** **S (3-0)3**
How to present note and reading songs; music appreciation in the elementary school. Survey of elementary level music texts.
- Mu-77 APPRECIATION OF MUSIC** **F (3-0)3**
Listening to music. A non-technical course in music appreciation, emphasizing the various forms of composition.
- ORCHESTRA, BAND, CHORUS** **F W S (0-3)1**
Receive one credit for full year's participation.
- APPLIED MUSIC (Minor)** **F W S (½-0)2**
Freshmen and Sophomore years-One half-hour lesson a week. Open to all students of the college and may be used as a minor instrument for music majors.
- APPLIED MUSIC (Major)** **F W S (1-0)4**
Two half-hour lessons a week. For music majors only in their major instrument.
- PHYSICAL EDUCATION**
Courses for Men
- PE-1 PHYSICAL EDUCATION** **F (0-3)1**
Apparatus, track, games, remedial or restricted as indicated by classification tests.
- PE-2 PHYSICAL EDUCATION** **W (0-3)1**
A continuation of PE1.
- PE-3 PHYSICAL EDUCATION** **S (0-3)1**
A continuation of PE2. Emphasis on skills in sports and post-school activities.
- PE-4 PHYSICAL EDUCATION** **F (0-3)1**
A variety of activities taught for physiological and recreational values.
- PE-5 PHYSICAL EDUCATION** **W (0-3)1**
A continuation of PE4, with some selection on the part of the student.

- PE-6 PHYSICAL EDUCATION** **S (0-3)1**
A continuation of PE5, with some selection on the part of the student.
- PE-17 ORGANIZATION AND MANAGEMENT OF SPORTS** **S (3-0)3**
The organization of the entire physical education program and the management of the physical plant as well as the activity program.
- PE-21 PHYSICAL EDUCATION LABORATORY** **F (2-0)2**
Instruction and practice in the fundamental skills of athletic activities. For Physical Education majors and minors only.
- PE-22 PHYSICAL EDUCATION LABORATORY** **W (2-0)2**
A continuation of PE21.
- PE-23 PHYSICAL EDUCATION LABORATORY** **S (2-0)2**
A continuation of PE22.
- PE-24 PHYSICAL EDUCATION LABORATORY** **F (2-0)2**
A practical course in the body mechanics of big-muscle activities. Applied to sports in season.
- PE-25 PHYSICAL EDUCATION LABORATORY** **W (2-0)2**
A continuation of PE24.
- PE-26 PHYSICAL EDUCATION LABORATORY** **S (2-0)2**
A continuation of PE25.
- PE-35 PERSONAL HYGIENE** **W (3-0)3**
A study of the factors of healthful living, such as heredity, anatomical factors, personal habits, physical fitness.
- PE-36 COMMUNITY HYGIENE AND SANITATION** **S (3-0)3**
A study of water supply, food and milk sanitation, ventilation, sewage disposal, lighting, housing, and health agencies.
- PE-50 METHODS OF BASEBALL** **S (2-0)2**
A study of the fundamentals, including batting, fielding, conditioning, training, and methods of teaching baseball.
- PE-80 PRINCIPLES OF RECREATION** **F (2-0)2**
A study of games and playground activities, general program and party organization, extra-curricular activities; methods; sources of material; reading assignments.
- PE-90 FIRST AID** **F (2-0)2**
A course in the underlying principles and applied techniques of first aid, meeting the requirements for the Standard and Advanced First Aid Certificates of the American Red Cross.
- PE-20 ORIENTATION TO PHYSICAL EDUCATION** **F (3-0)3**
A broad scope to men and women's physical education program, as is required in college today.
- PE-30 TREATMENT OF INJURIES, CARE & PREVENTION** **S (2-0)2**
A course of practical and theoretical study of massage, bandaging, treatment of sprains, bruises, strains, and wounds.

COURSES FOR WOMEN

- PE-61 FIRST-YEAR PHYSICAL EDUCATION** **F (0-3)1**
Hockey, tennis, archery, golf, and other recreational sports.

- PE-62 FIRST-YEAR PHYSICAL EDUCATION W (0-3)1**
Volleyball, basketball, modern and folk dancing, archery, tennis, golf, and physical fitness exercises.
- PE-63 FIRST-YEAR PHYSICAL EDUCATION S (0-3)1**
Basketball, baseball, modern and folk dancing, archery, tennis, golf, and physical fitness exercises.
- PE-64 SECOND-YEAR PHYSICAL EDUCATION F (0-3)1**
Continuation of PE63.
- PE-65 SECOND-YEAR PHYSICAL EDUCATION W (0-3)1**
Continuation of PE64.
- PE-66 SECOND-YEAR PHYSICAL EDUCATION S (0-3)1**
Continuation of PE65.

PHYSICS

- Ph 1 PRINCIPLES OF PHYSICS F (3-0)3**
Lecture course on principles and application of mechanics.
- Ph-2 PRINCIPLES OF PHYSICS W (3-0)3**
Lecture course on principles and applications of heat, light, and sound.
- Ph-3 PRINCIPLES OF PHYSICS S (3-0)3**
Lecture course on principles and applications of electricity, magnetism and modern physics.
- Ph-25 GENERAL PHYSICS F (3-4)5**
A course covering the fundamental principles of mechanics forming the basis for studies in applied science. For students in Engineering.
Prerequisites: M15 and M16.
- Ph-26 GENERAL PHYSICS W (3-4)5**
A course covering the fundamental principles of sound and light. For students in Engineering.
Prerequisite: Ph25.
- Ph-27 GENERAL PHYSICS S (3-4)5**
A continuation of Ph26. A course covering the fundamentals of magnetism, electricity, and modern physics. For students in Engineering.
Prerequisite: Ph26.

PHYSIOLOGY (See under "Biology")

POLITICAL SCIENCE (See under "History and Social Science")

PSYCHOLOGY (See under "Education")

SOCIOLOGY (See under "History and Social Science")

ZOOLOGY (See under "Biology")

Colorado State Institutions of Higher Learning

Adams State College of Colorado	Alamosa
N. William Newsom, President	
Colorado Agricultural and Mechanical College	Fort Collins
William E. Morgan, President	
Colorado School of Mines	Golden
John W. Vanderwilt, President	
Colorado State College of Education	Greeley
William R. Ross, President	
Fort Lewis Agricultural and Mechanical College	Hesperus
C. Dale Rea, President	
University of Colorado.....	Boulder
Robert L. Stearns, President	
Western State College of Colorado	Gunnison
Peter B. Mickelson, President	

**Please bring this catalog with
you for use in registration.**
