

OLORADO A & M COLLEGE BULLETIN

A black and white photograph of a brick building with a white door, framed by large trees. Three women are standing in front of the door. The scene is set outdoors with a lawn in the foreground.

FORT LEWIS BRANCH
CATALOG NUMBER-1945-1946

The Future of

The Fort Lewis Branch of Colorado A & M College

Established during the year of 1911 through a Federal grant of nearly ten sections of land and a number of buildings, the State of Colorado was given this property with the stipulation that there be maintained an educational institution at Fort Lewis. Under the supervision of The State Board of Agriculture, the Branch of the Colorado Agricultural and Mechanical College at Fort Lewis, has passed through a period of pioneering with one of the last frontier regions of Colorado and the West. During these early stages there has been constructed a physical plant with modern facilities designed to provide adequate, well-equipped dormitories, class rooms and laboratories for educational activities to conform closely with work at the home college at Fort Collins. Like the parent institution the branch has well-defined responsibilities and objectives.

Situated near the center of a large inland empire with many of its extensive resources yet to be developed, the future of the College has much in common with the future of the San Juan Basin. The opportunities for home building in this great Basin are excellent, since

farming may be extended along with the reclamation of large bodies of lands as the conservation and utilization of water will permit. This along with the industrial trade and recreational possibilities and developments encourages an optimistic outlook for all established businesses and institutions in this area.

Fort Lewis with its grazing and farm lands and its experiment station, can and should have a part in the future building that is certain to follow the cessation of war. Rehabilitation of the men and women of our armed forces and the training of the youth of the southwest is the stimulus for extensive planning and preparation of curricula and equipment to meet future demand for higher educational facilities in the sciences, arts and fields of specialization for the professions and the vocations.

The demands for the future may not be even partially foreseen, but there can be built at Fort Lewis additional courses and facilities to provide the types of instruction, experimental research, and services that may be requested and supported by the citizens of Colorado and the San Juan Basin.

FORT LEWIS BRANCH
of
Colorado A & M College

Annual Catalog
1945-1946

Hesperus, Colorado

Agriculture

Home Economics

Engineering

Science and Arts

Forestry

Pre-Veterinary

and

Foundation Training for Other Majors

Series 33, No. 8

March 1945

PUBLISHED MONTHLY BY
THE COLORADO AGRICULTURAL AND
MECHANICAL COLLEGE

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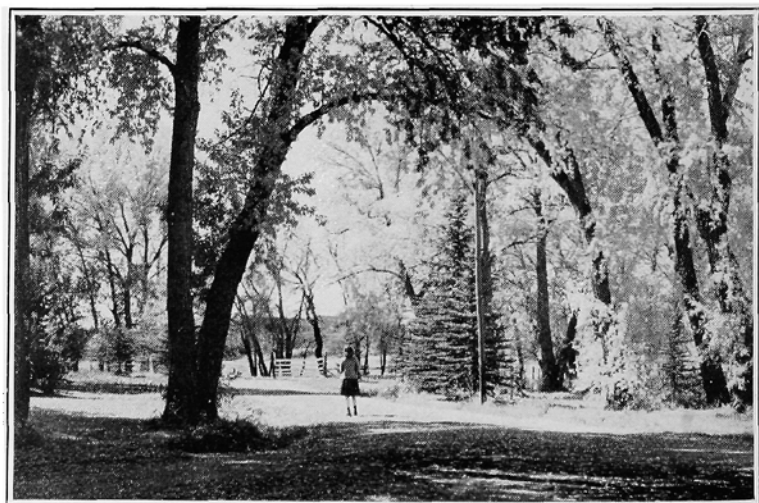
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Bright Autumn in Lory Lane



Ernest H. Bader, Dean

In a nation that is bending every human effort toward a victorious culmination of the most devastating and far reaching war of history, there is need to consider soberly the responsibilities of the individual.

The more we learn of relative strengths and resources of the world of nations, the more we are convinced that success will depend upon ingenuity coupled with individual ability, training, and character to bring the peoples of the world out of the maelstrom of chaos. Everywhere there is talk of planning—postwar, as well as planning for the immediate future. Organizations are planning. Nations, states, districts, communities, cities, and institutions are planning. Yes, and families, too, are making plans. There is real need for the young person, who has not yet reached the minimum age for military service, and those, who for some reason have not been assigned to war duty, to continue with their education and training.

Fort Lewis, Branch of the Colorado Agricultural and Mechanical College, is continuing to offer collegiate courses in surroundings that enable students to work where friendly associations aid greatly in the well-rounded development of young men and women.

May the facilities of the college of the San Juan be used by all who are interested in continuing their training.

ERNEST H. BADER, Dean

CALENDAR

1945

January							February							March							April						
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1946

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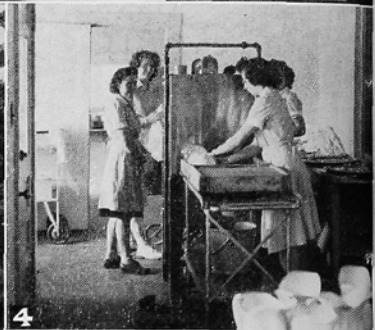
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COLLEGE CALENDAR

1945-46

Summer Session 1945**1945****May 28, Monday**—Registration 8:30 a. m. to 12:00 m.**May 28, Monday**—Classes begin at 1:00 p. m.**July 6, Friday**—Summer Session closes.**First Quarter, 1945-46****September 24 and 25, Monday and Tuesday**—Freshman Days. Orientation for new students.**September 26, Wednesday**—Registration.**September 27, Thursday**—Classes begin.**October 5, Friday**—Registration closes. Last day for payment of fees and schedule changes.**October 25 and 26, Thursday and Friday**—CEA meeting in Durango. Holiday.**November 22 to 23, Thursday and Friday**—Thanksgiving holiday.**December 19, 20, 21, Wednesday through Friday**—Final examinations.**December 21, Friday**—First quarter closes at 3:50 p. m.**Second Quarter, 1945-46****1946****January 2, Wednesday**—Registration 8:30 a. m. to 12:00 m.**January 2, Wednesday**—Classes begin at 1:00 p. m.**January 7, Monday**—Registration closes. Last day for payment of fees and for schedule changes.**March 20, 21, 22, Wednesday through Friday**—Final examinations.**March 22, Friday**—Second quarter closes at 3:50 p. m.**Third Quarter, 1945-46****April 1, Monday**—Registration 8:30 a. m. to 12:00 m.**April 1, Monday**—Classes begin at 1:00 p. m.**April 8, Monday**—Registration closes. Last day for payment of fees and schedule changes.**May 10, Friday**—Annual San Juan Basin Senior Day.**May 30, Thursday**—Memorial Day. Holiday.**June 11, 12, 13, Tuesday through Thursday**—Final examinations.**June 14, Friday**—Final Convocation.**Summer Session, 1946****June 24, Monday**—Registration 8:30 a. m. to 12:00 m.**June 24, Monday**—Classes begin at 1:00 p. m.**August 2, Friday**—Summer Session closes.



1. The Library is a pleasant place to study. 2. The botany laboratory, where students classify and study plants of many species. 3. The Gymnasium is the scene of much student activity. 4. Assisting in the dining hall gives women students practice in meal service as well as an opportunity to earn part of their expenses. 5. Work in typing helps students to earn while they learn. 6. Chemistry is a basic course in many curricula. 7. At the Final Convocation recognition is taken of students who have completed their work at Fort Lewis. 8. Campus buildings—Lewis and Lory Halls.

GREETINGS

We, the members of the student body, at Fort Lewis College, extend to you a very hearty welcome to our campus.

Our student body includes members who have been here from one to three years. Many of us came because we had heard through friends, and former students, that Fort Lewis offers excellent opportunities in the way of college training. Some of us are here because of the low expense and the privilege that every student has in earning much of his way. All of us are here because of our desire to improve ourselves in every way so that we may become better citizens of future America.

We have all found so much more in the way of education and social life than we had expected that we are taking this means of encouraging each of you to consider carefully the advantages to be gained at Fort Lewis. We truly believe that our Alma Mater has a promising future as it grows and develops with the great San Juan Empire.

Social life at Fort Lewis is democratic and informal, allowing for a wide range of individual taste and interest. We enjoy parties and dances on weekends, and a social hour is held each Wednesday evening. The athletic activities have been curtailed here, just as they have been in every college and university, but we are still able to enjoy competition and sportsmanship in class games which include football, baseball, volleyball, tennis and tumbling. Dramatics occupy a strong position in the life of the students, as does also music.

The democratic spirit which pervades the Fort Lewis campus gives everyone the opportunity to make lasting friendships and to participate in a great variety of school activities.

We earnestly hope that we may become acquainted with you and have the privilege of including you in our great Fort Lewis family.

Sincerely,

THE STUDENT BODY

FORT LEWIS COLLEGE FACULTY

- Green, Roy M., B.S. (University of Missouri), M.S., D.Sc. (Kansas State College) President
- Lory, Chas. A., Ped.B. (Colorado State Normal School), B.S., M.S., LL.D. (University of Colorado), D.Sc. (University of Denver), LL.D. (Colorado College), D.Ed. (Colorado State College of Education), D.Sc. (Colorado A & M College).....President Emeritus
- Bader, Ernest H., B.S. (Colorado A & M College), M.S. (University of Colorado) Dean
- Doyle, Louise, B.S. (State Teachers' College, Maryville, Missouri), (Graduate Study at Drake University).....English, Hostess of Lory Hall
- Good, Margaret, A.B. (University of Denver), (Graduate Study at Northwestern University, Denver University, University of Colorado, and Colorado A & M College) Hostess of Snyder Hall, Physical Education
- Holmes, Villa L., B.A. (North Texas State Teachers' College), M.A. (University of Colorado).....English Literature, Dramatics, Spanish
- Jones, W. Norton, Jr., B.A. (Hendrix College, Arkansas), M.A., Ph.D. (Johns Hopkins University), (Graduate Study at University of Southern California) Vice Dean, acting, Chemistry
- Koonce, Dwight, B.S. (Colorado A & M College), M.S. (Utah State College of Agriculture) Agronomy
- *McLain, Charles W., B.S., M.S. (Colorado A & M College) Vice Dean, Coach
- Moinat, Arthur D., B.S. (Colorado A & M College), M.S. (Oregon State College), Ph.D. (University of Illinois).....Biology and Agriculture
- Nisbeth, Frances, A.B. (Panhandle College of Agriculture and Mechanic Arts, Goodwell, Oklahoma) Commerce
- O'Brien, Irene, B.S. (State Teachers' College, Maryville, Missouri), M.A. (University of Missouri), (Graduate Study at Peabody College for Teachers, Nashville, Tennessee).....Education, Dean of Women
- Pollock, Floyd A., B.A. (Baker University, Kansas), M.S. (Colorado A & M College), Ph.D. (University of Southern California)..... Social Science
- Schroeder, Jnell M., B.S. (Colorado A & M College)..... Home Economics and Dietician
- Scott, J. Thomas, B.M. (Colorado A & M College), Post-graduate study (Colorado A & M College)Music

*On military leave.

FORT LEWIS COLLEGE

Branch of Colorado A & M College

The Fort Lewis College is not a junior college, but is a branch of the Colorado Agricultural and Mechanical College at Fort Collins. By an act of Congress approved April 4, 1910, and an act of the Eighteenth General Assembly of the State January 25, 1911, the Fort Lewis Military Reservation and Indian School lands of 6,318 acres, with buildings, became the Fort Lewis School and a part of the land-grant college system of Colorado.

Beginning in October, 1911, secondary courses in Agriculture, Home Economics, and Mechanics were offered. Four years later rural teacher-training courses were added. All secondary courses were discontinued in 1933. College work was first offered in 1927 with 27 freshmen enrolling—the first of hundreds of young people of the Southwest to receive collegiate training in the Fort Lewis School.

Students who have gone to other colleges of Colorado and to colleges of other states for their last 2 years of work have won recognition for the high standard of scholarship maintained at Fort Lewis. A student will have no difficulty in completing his college work in 4 years, provided he has carried a full 2 years load while at Fort Lewis, maintained a "C" average and does not change his major course, when that course is pursued in another institution.

Credits earned at the Fort Lewis Branch are placed on file with the registrar of the home institution at Fort Collins and may be used there or may be transferred from there to the institution of the student's choice.

Campus—Buildings and Equipment.—With fifteen major buildings and a greater number of residences and smaller structures, Fort Lewis Branch of Colorado A & M College is equipped with modern and standard facilities to take care of the needs of students in securing superior collegiate training. The new library, modern and fully equipped, is the latest building addition. It is the first of a series of new structures planned in the 10-year building program and reflects the policy which has been followed in improving and equipping the dormitories, the laboratories, classrooms and recreational facilities of the college.

Educational and Scenic Points

Location.—The Fort Lewis Branch of Colorado A & M College is located 5 miles south of Hesperus near the foot of the La Plata Mountains. The college is unique in the combination of location and educational advantages it offers. In the southwestern corner of Colorado at an elevation of 7,610 feet, the climate is mild—never too hot in the summer nor too cold in the winter. National parks, forests, deserts, mountains, scenic drives, ancient Indian ruins, and present Indian culture are all available to those interested in a first-hand study of these particular fields.

Mesa Verde.—Mesa Verde National Park offers the largest and most complete series of cliff dwellings in the United States. Because of the development of excellent roads, Mesa Verde is today becoming one of the leading national parks in the governmental system. It is located only 35 miles from the Fort Lewis campus. Park rangers often are invited to speak to school assemblies on the ancient Indian culture found at Mesa Verde.

Aztec Ruins.—The large, ancient pueblo located at Aztec, New Mexico, is now a national monument. The ruins are different from those found at Mesa Verde and contain the largest reconstructed kiva in the San Juan Basin.

Hovenweep National Monument.—Located a few miles northwest of Cortez, Colorado, on the Colorado-Utah boundary, the Hovenweep national monument consists of four groups of prehistoric towers, pueblos, and cliff dwellings.

Yucca House National Monument.—The ruins are located on the eastern slope of Sleeping Ute Monument near Cortez. The ruins are of great archeological value in their representation of relics from the prehistoric inhabitants.

Chaco Canon National Monument.—Located in northern New Mexico, this monument is about a 4-hour drive from the Fort Lewis campus. The ruins are the cliff-dwelling type, probably the most famous being Pueblo Bonito.

Natural Bridges National Monument.—This monument is a series of three bridges located in southeastern Utah. These natural spans are among the largest of their kind in existence.

Rainbow Bridge National Monument.—Located to the south of the above-mentioned monument, the Rainbow Bridge is unique in symmetry and scientific interest.

Million Dollar Highway.—This is acclaimed by many tourists to be the most scenic drive in the United States. A circle tour may be taken from the campus through Durango, Ouray, Telluride, Rico, Dolores, Cortez, Mancos and Hesperus to Fort Lewis.

There are many other points of scenic interest within a day's drive of the Fort Lewis campus, such as the Great Sand Dunes National Monument, Shiprock, Canyon de Chelly, and the Black Canyon of the Gunnison. Many other scenic and historical points of interest are within easy driving distance of the campus.

Several excursions are sponsored by Fort Lewis College during the school year for the benefit of the student body. In addition to trips by the entire student body, special excursions for certain groups are planned from time to time. During the past year, the girls from Lory Hall made a week-end journey to Salt Lake City to study modern urban culture.

General Information

Requirements for Admission

The application for admission, which includes a transcript of the high-school record, must be submitted before the time of registration, and should be on file not later than September 15. In Colorado, blanks are available at the high-school principal's office and should be sent in as soon as possible after high-school graduation. Those desiring to apply for admission from outside Colorado should write to the registrar's office and ask for the regular Application For Admission blank. In every case the application should reach the registrar's office in time for the applicant to be notified whether his credentials are sufficient for entrance. Applications for admission from those who are graduates of unaccredited high schools will be passed upon according to the merits of each individual case.

Any person who has been graduated from an accredited Colorado high school will be eligible to register here, provided the following prescribed units have been included in his high-school course of study.

	All Divisions	
	Except Engineering	Engineering
English	3	3
Mathematics:		
² Algebra	1	1½
Geometry	1	1
² Solid Geometry .....	..	½
Science (selected from Social Science 1, Chemistry 1, Physics 1) .....	..	2
History .....	..	1
³ Electives	10	6
	15	15

It is recommended that students in their high-school work include 2 years of history and 2 of science.

Students from unaccredited high schools also may be required to pass one of the standard college-entrance tests. Students entering college without work in history will be expected to take additional work in college.

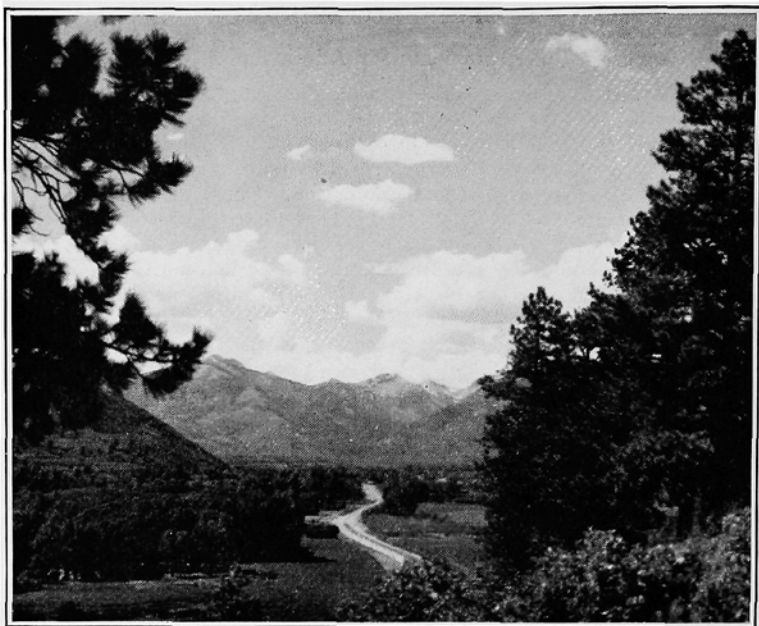
For additional requirements for entrance to the 4-year professional course in veterinary medicine, see page 68.

Non-residents of Colorado, in addition to the above requirements, must be eligible for admission to the land-grant institution in the State where the high-school work was done.

¹The requirements for admission of industrial arts students are the same as those in the column under "All Divisions Except Engineering."

²For those not having the advanced algebra or the solid geometry, opportunity will be given to clear the deficiency after entrance.

³Of the 10 elective units permitted, not more than 6 (for engineers, not more than 4), may be presented in vocational subjects, such as agriculture, shop, home economics and commercial subjects. Any student whose high-school preparation does not meet the above requirements may make a special application to the Committee on Admissions, which will consider each application upon its merits.



The La Platas from Hesperus Hill—a View Near the Fort Lewis Campus.

Adult Standing Regulation.—Students over 25 years of age will be granted conditional entrance to college, except to the Division of Veterinary Medicine, upon recommendation of the Committee on Admissions, and upon the passing of one of the standard college-entrance intelligence tests.

A Credit Defined.—One credit is given for 1 hour of lecture or recitation work a week; or 2 hours in the laboratory. In a few instances, 3 hours of laboratory are required for 1 credit. Credit is also given for physical education on the basis of one-half credit per quarter.

Marking System and Quality Point System.—Term grades are reported by letter only. The scale of grades and quality points follows:

Grade	Quality Points Per Credit
A (Excellent)	3
B (Good)	2
C (Average)	1
D (Poor, but passing)	0
E (Condition)	0
I (Incomplete)	0
F (Failure)	0
WP (Withdrawn Passing)	0
WF (Withdrawn Failing)	0

A grade of E (Condition) is to be given when all assignments have been completed but in quality and quantity do not quite justify a passing grade, and when, in the judgment of the instructor, the student might be able to pass a satisfactory examination after additional individual study and without repeating the subject in class. An E (Condition) must be cleared within 1 year and only a grade of D or F may be given following a condition make-up examination.

A grade of I (Incomplete) is a temporary grade indicating that a student has a satisfactory record in work completed and for justifiable reasons satisfactory to the instructor in charge was unable to complete the work of the course. An I (Incomplete) must be cleared within 1 year but no limitation is put on the grade to be given upon the clearing of the "incomplete."

Freshmen May Drop Subject.—A freshman student is permitted to drop a subject at any time before the close of the first 8 weeks in residence without any record of the drop being made.

Exemption From Final Examination.—Any student whose class and test grades for the quarter will average a grade of A, may be excused from the final examination. For the last quarter a senior may be exempt from the final examination in a senior subject if the class grade for the quarter is B or above.

Scholastic Standards.—Any student whose scholarship at the end of his sophomore year or at any later period is below that required for graduation shall be put on probation, and both the student and his parents notified that his scholarship standing must be raised if he expects to qualify for a degree.

A student who is thus placed on probation may continue under such status for not more than 3 quarters regardless of whether or not they are consecutive. If at the end of this period the scholarship is still below that required for graduation, he may register for further work only on the recommendation of the Committee on Scholastic Standards.

A student who, for 3 quarters of his freshman year or for any quarter thereafter, fails to pass 60 percent of all the credits for which he is registered (including courses in which a WP or WF has been received) is automatically suspended for 1 quarter.

The scholastic record of every student is subject to review by his Department Head and Dean at the close of each quarter. The Department Head or Dean may at any time refer a student to the Committee on Scholastic Standards. This committee has the authority to place on probation or suspend a student when it appears that his work is of such a character that he cannot continue with profit to himself and credit to the institution.

A student who is at any time placed on probation because of scholastic deficiencies may register for such courses only as are approved by the Head of his Department or the Dean of his Division.

Both the student and his parents will be notified in writing by the Dean of his Division (Dean of Student Personnel in case of freshmen and

sophomores) if the student is subjected to probation or suspension under the above regulations.

Unclassified Students and Special Courses.—In the case of war veterans or others where there are good reasons for it, students may be allowed to take a special course of study; but, in such case, the student must show that he is well qualified to pursue the studies selected and select his courses under the guidance of a trained counselor. No student will be allowed to change his course during the progress of the quarter, nor will he be allowed to drop a study except by permission of the Dean.

Advanced Standing.—Students entering Colorado Agricultural and Mechanical College from other institutions of higher learning that are regularly accredited will be given standing under the following rules:

1. Credentials, which must include honorable dismissal from the last institution attended, must be presented before the student may register.
2. Regardless of the number of credits earned at other institutions, a minimum of 52 credits earned in residence at this institution is required for a bachelor's degree.
3. Advanced standing students must meet all scholarship and course requirements which apply to regular students.

Classes in Elective Subjects.—Classes in elective subjects may be formed for six or more students.

Evaluation of Courses Taken Under the Army Specialized Training Program At This Institution.—An evaluation of the subjects offered in the Army Specialized Training Program has been made in terms of Colorado Agricultural and Mechanical College credits and in terms of regular subject equivalents. Anyone having completed work under this program and desiring to learn how it would apply in meeting degree requirements may write to the Registrar and full information will be furnished.

Regulations Governing Class Attendance

1. Students are expected to attend all classes for which they are regularly registered.
2. Whenever possible, arrangements concerning absences should be made with individual instructors before the absence occurs.
3. When a valid reason for absence is presented to an instructor before class time, he may at his discretion allow a student to miss that class period. In such instances it is preferable that the work to be missed be made up before the absence rather than after the absence.
4. Whenever a student is absent from any class without having made arrangements with the instructor of that class before the absence occurs, an "admit to class" slip must be obtained from the vice-dean's office.
5. The only absences which will be excused will be those caused by illness and by trips arranged for by the college.

6. Residents of the dormitories who have been confined to their rooms by illness must provide the vice-dean's office with a notice of this illness signed by the dormitory hostess.

7. Students who have been confined to their homes by illness must provide a statement of their illness signed by the attending physician, or other attendant.

8. Students who have been necessarily absent for reasons other than illness should provide a statement concerning the cause and necessity of the absence signed by a parent, guardian, or other reliable party involved.

Scholarships and Loans

Scholarships at Institutions of Higher Learning.—The following regulations, governing the award of scholarships, were adopted by the six Colorado State Institutions of Higher Learning:

1. Scholarships are to be awarded in any one calendar year by the faculty or a committee of the faculty of each accredited high school in Colorado on the following basis:

(a) 1 to 25 graduates.....	1 scholarship
26 to 50 graduates.....	2 scholarships
51 to 75 graduates.....	3 scholarships
76 to 100 graduates.....	4 scholarships
Over 100 graduates.....	5 scholarships

(b) The students to receive the scholarships must rank in the upper 10 percent of their graduating class in scholarship.

(c) Election shall be made primarily upon the basis of scholastic achievement and promise of collegiate success.

(d) The length of attendance at the respective high school need not be a determining factor in the award of the scholarships.

2. Scholarships may be used in any of the six State institutions of higher learning in Colorado. (They do not include student association fees, laboratory, library, health, and other fees for certain State institutions.)

3. Each scholarship is awarded for the freshman year only. Holders of these scholarships must be in the upper 25 percent of the freshman class in order to have their scholarship continued for the sophomore year. These scholarships expire at the end of the sophomore year. A "year" is to be considered as the equivalent of 2 semesters or 3 quarters.

4. Each State institution of higher learning will set up a number of scholarships open to competition for all students above the sophomore year. These scholarships may be open to students transferring from other institutions of higher learning.

5. A scholarship student may transfer from one State institution to another in the usual manner and use the scholarship as long as he meets all other conditions.

6. Scholarships will be valid at any time during which the institution is regularly in session for undergraduate study. When a scholarship is used in the summer term, it shall have the same cash value as it has in other terms.

7. A scholarship to be honored must be used at the beginning of the term next following upon its issuance, provided, however, that a summer term or session may intervene between its issuance and its use. It must be used for at least the equivalent of 2 semesters or 3 quarters in each calendar year in order to remain in force.

8. In a County High School System, a graduate of a branch school is entitled to a Joint Honor Scholarship within these regulations.

Note: This Certificate of Scholarship is the property of the student to whom issued, but **must be presented at the institution of his choice** on or before the day of registration. It will be kept on file there until returned to the student upon written request, which request must be kept on file in lieu of Certificate of Scholarship.

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 his graduating class, and have demonstrated capacity for leadership through activity participation. The value of this scholarship is \$20 a quarter to be applied to fees and tuition. The award is good for one year, but can be extended for another year if the holder has maintained a scholastic standard that places him in the upper third of his class, and if the Scholarship Committee recommends him for continuation.

Employment.—A few students find employment on the campus. New students with training for which there is a demand, may find employment to reduce living expense. Application with statement of training and needs should be filed with the Dean.

It is the policy of those in charge to favor students whenever service is needed. The best qualified and most willing have the preference.

Loan Funds.—Three funds have been established to give assistance to needy students, the Snyder Memorial Loan Fund, the Marie Ochsner Memorial Loan Fund, and the Fort Lewis Alumni Loan Fund. Money may be borrowed after the completion of one semester's work by worthy students. Formal application must be made to the loan-fund committee. Notes for all approved loans must be signed by the student and parents, and are drawn for 1 year or less.

Certification—Graduation

Certificates.—At the end of 2 years of work in which not less than 105 quarter credits have been earned, a certificate of accomplishment is awarded at the Final Convocation.

Teacher's Certificate.—Graduates of the Education department, who at the end of 3 years have completed the required courses, are eligible to receive a certificate entitling them to teach in the rural schools of Colorado for 5 years.

Graduation.—A total of 210 credits and 210 quality points are required for graduation in all courses offered at Colorado A & M College, except in civil engineering, forestry, and veterinary medicine. In civil

engineering, 216 credits and 216 quality points are required. In forestry and veterinary medicine, 225 credits and 225 quality points are required. Nine credits must be earned in military science and tactics for men except as follows:

A student transferring to Fort Collins from an institution where Military Science and Tactics (Senior Division) is not offered or required, will be entitled to an exemption from military courses of one quarter for each full quarter of academic credit received toward graduation.

Three credits in physical education for both men and women must be earned.

Fort Lewis students may earn 2 full years of credit as required in all courses at Colorado A & M College except veterinary medicine.

One year of college work in Pre-Veterinary Medicine may be obtained at Fort Lewis.

The additional credit required for graduation in civil engineering and forestry is obtained by students from the home institution and the Fort Lewis Branch in summer camps at the close of their Sophomore and Junior years.

Military Service.—Students withdrawing before the close of the semester to enter the military service may receive partial or full credit and tuition refunds, depending upon the date of withdrawal and grade standing.

Student Activities

Fort Lewis fosters various non-academic activities for the benefit of the student body. Winter sports enthusiasts find ample opportunity for skiing, ice skating, tobogganing, or sleigh riding. In the spring and fall, hikers may take advantage of the surrounding mountains for their favorite recreation. Other interests vary from intramural athletics to formal social functions. Opportunities for wholesome, democratic relations between faculty and student body are provided through the social program.

Student Government.—The affairs of the student body are governed by an elected Student Council. In addition, two dormitory presidents and class officers are chosen by the freshman, sophomore, and junior classes, with appointed faculty members as counselors.

Social Life.—Social life at Fort Lewis is democratic and informal, allowing for a wide range of individual taste and interest. Special week-end social gatherings, both formal and informal, are held throughout the year. A regular social hour is held each Wednesday from 6:30 to 7:30 p. m. The mountains and forests around the College furnish the setting for many picnics, parties, and campfires. These occasions are designed to cultivate courtesy and social ease, and are not calculated to involve students in large expenditures. For the most part, the expense of these activities is covered by the regular student activity fee. A recreation and game room and student cooperative store are maintained by the student body in the basement of the Arts Building.

Student Publications.—The "Fort Lewis Collegian" is published bi-monthly by the students. Combining the features of college life with those of the business world, the college publication has a large number of subscribers.

"The Cadet" is the college annual or yearbook. Students enjoy working hard to make their publications successful.

Dramatics.—Dramatics occupy a strong position in the life of Fort Lewis students. New students may join the Dramatic Club, and tryouts are held for each play. The members not only develop their acting abilities, but are taught the principles of stage design, construction of sets, costuming, make-up, play writing, and directing as well.

Music.—Students are encouraged to develop their musical talents at Fort Lewis. An a cappella choir, a men's glee club, a women's glee club, an orchestra, and a band offer outlets for musically minded students. The annual Christmas pageant is produced through the combined efforts of the musical and dramatic organizations.

Student Assemblies.—General student assemblies are held every week. As these assemblies are an essential part of the College program, attendance is unusually good. Seats are assigned at the beginning of the school year, and an attendance record is maintained. Quality points may be earned by students who attend the programs.

Physical Education.—All students in their first 2 years of college are expected to participate in some form of physical training. The classwork of the department consists of calisthenics, football, basketball, baseball, volleyball, and tennis. Credit for physical education is given to those competing with inter-collegiate athletic teams.

Intercollegiate Athletics.—Fort Lewis is a member of the Colorado Junior College Athletic Association. In addition to playing conference rivals, the teams often compete against 4-year institutions in athletic contests. Athletes who have had 2 years of participation in the conference are immediately eligible for 2 more years of competition in 4-year colleges and universities.

Women's Athletics.—All women may participate in the College athletic program. The purpose is to encourage women's athletics and develop leadership and good sportsmanship. Awards are given for participation in various activities.

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

Senior Day.—All high-school seniors in the San Juan Basin and surrounding areas are invited to Fort Lewis for a spring holiday. Games, picnics, folk and social dances, athletic contests, and a dramatic presentation are only part of the program planned by the College to welcome future students. The affair is one of the most popular of its kind in the State.



1. Members of the men's gym class. 2. The women's chorus is always popular. 3. Dramatics attract many students. 4. The instrumental ensemble. 5. The stringed trio. 6. The Library is a focal center of student interests. 7. The intramural basketball group. 8. Folk dancing constitutes a portion of the work of the women's gym classes.

The Alumni Association.—The Alumni Association is an organization composed of all those who have been regularly enrolled at Fort Lewis. The association aims to promote the best interests of Fort Lewis and to unite former classmates. The regular annual meeting is held at Fort Lewis in the fall on the Annual Homecoming Day.

The Dining Hall.—The Dining Hall at Fort Lewis is the most popular building on the campus. Meals are supervised by a trained dietitian and prepared by capable cooks. Meals are served family style by student waitresses. Students are seated at tables for six, seating arrangements being made by a student committee. The seating order is changed every 2 weeks.

Lory Hall for Women.—Lory Hall for Women, a two-story building, is located at the south end of the campus, and faces the La Plata Mountains. There are 30 rooms, 26 of which are double. Each room is equipped with bedsteads, springs and mattresses, in alcoves that may be closed from the room by sliding doors. Each room also contains a study table, dresser, chairs, curtain rods, and extension light cords.

A large living room with fireplace and furnished with overstuffed furniture, lamps, piano, and radio is open for residents and their guests. A small living room where newspapers and current magazines are kept is also available and the residents of the Hall are permitted to use the gas-equipped kitchenette.

Snyder Hall for Men.—Snyder Hall is south of the Administration Building and north of the Dining Hall. It is a U-shaped building and contains 37 rooms, 34 of which are double and 3 single. These bedrooms are decorated in green and white and contain two alcoves, a dresser, study tables and chairs. A large well-furnished recreation room with low-beamed ceiling, rugged fireplace and pictures of athletic heroes, is popular for recreation. The building is convenient and comfortable.

Registration

Registration.—Registration for the summer quarter will be held in the Library on Monday, May 28, 1945. Registration for the fall quarter will take place on Wednesday, September 26, 1945; for the winter quarter Wednesday, January 2, 1946, and for the spring quarter Monday, April 1, 1946. **Students who fail to register on the dates set for registration will be charged an additional registration fee of \$5.00.** One week is given in which to pay fees. If at all possible students should pay the full amount of tuition, fees, and other assessments on day of registration. A minimum payment of \$25 is required each quarter before attendance of classes is permitted. If payment in full is not made by the end of the first week, the right to attend classes is withdrawn. Students may be reinstated by paying regular quarter fees and a reinstatement fee of \$2.00. Students may not register later than one week after opening of any quarter. After registration, a fee of \$1.00 is charged for schedule changes requested by the student.

Tuition and Fees

	Quarter		
	I	II	III
Tuition and Registration fee	\$20.00	\$20.00	\$20.00
Library fee	2.00	2.00	2.00
Physical Education fee (men)	1.50	1.50	1.50
Health fee .....	.....	.....	.....
Key deposit (repaid on return of keys)....	1.00	.....	.....
Property deposit (repaid if property is undamaged)	5.00	.....	.....
Books (estimate)	15.00	7.00	5.00
Associated Student's Fees:			
Athletic fee	1.00	1.00	1.00
Student fee	1.50	1.50	1.50
Publication fee .....	.50	.50	4.00
Dormitory fee .....	.40	.40	.40
Class fee .....	.50	.50	.50
	\$48.40	\$34.40	\$35.90
Special Fees:			
Non-residents of Colorado	\$17.50	\$17.50	\$17.50
Late registration	5.00	5.00	5.00
Reinstatement fee, for failure to pay fees on time	2.00	2.00	2.00
Fees for schedule change requested by student	1.00	1.00	1.00

Tuition and Fees for Part-Time Students.—A student registering for five credits or less will pay the registration fee of \$5.00; tuition \$7.50; and the library fee of \$1.50; or the total of \$14.00. No student fees will be assessed but special fees and deposits will be charged where so designated in the catalog.

A student registering for a program of six to ten credits inclusive will pay tuition and registration fee of \$12.50, plus all other regular college and student-body assessments.

Special Fees for Applied Music Lessons.—Students majoring in music and other regularly enrolled students taking instrumental or voice lessons, pay \$15.00 per quarter for one half-hour lesson per week; \$25.00, for two half-hour lessons per week.

Persons not enrolled as regular college students pay \$18.00 for instrumental or voice lessons per quarter for one half-hour lesson per week.

Students registering in applied music for less than full quarter, pay \$1.75 per half-hour lesson (no student may take lessons for less than a 4-week period).

Credit in applied music is allowed only to those who can qualify for regular college entrance.

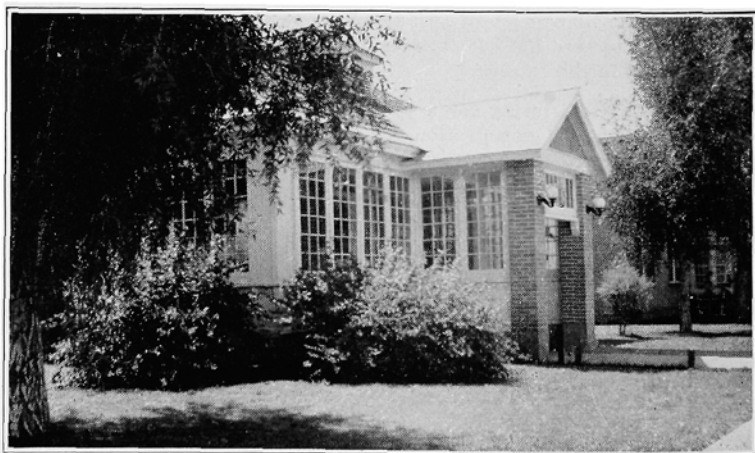
Refunds.—A student withdrawing during the first week of the quarter may have all tuition and college fees refunded except the registration fee of \$5.00. A student withdrawing after the first week of the quarter but before the close of the fourth week may have one-half of the tuition and college fees refunded. No refund will be made after the close of the fourth week. The amount of refund on the student activity fees varies according to the date of withdrawal and will be made as provided in the constitution of the Associated Students. No refund of any kind will be made to a student who is suspended or expelled for breach of discipline.

Claims for refunds for **tuition** and **fees** must be made when the student withdraws from college. All requests for the return of **deposits** must be made within two weeks after the close of the quarter or upon withdrawal from college.

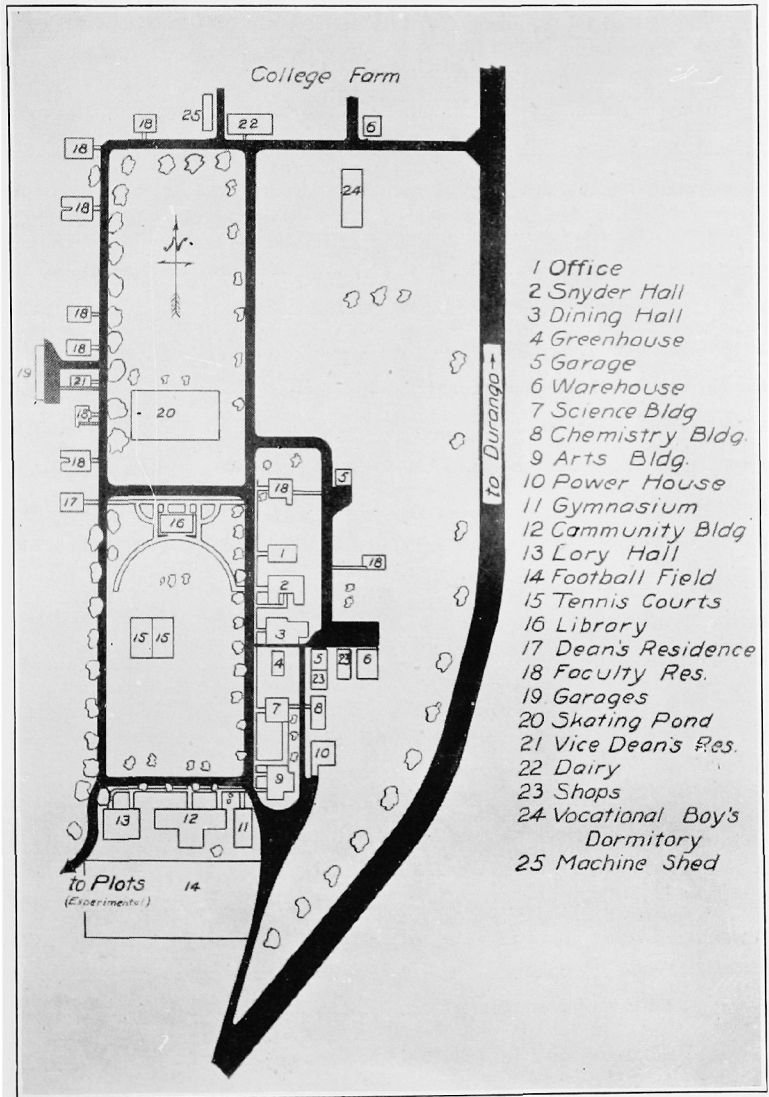
Summer Session 1945

Fort Lewis College will offer a summer session beginning May 28 and continuing for 6 weeks, until July 6. Courses offered will be rated in semester hours and a maximum of 6 semester hours may be earned during the session.

Emphasis during the summer session will be placed upon courses in education of which a considerable variety will be offered. Other courses in mathematics, the sciences, the social sciences, and music will be offered also. Any of the regular college courses in which there is sufficient interest will be offered upon demand. For further information address all inquiries to: The Registrar, Fort Lewis Branch, Colorado A & M College, Hesperus, Colorado.



The Administration Building



- 1 Office
- 2 Snyder Hall
- 3 Dining Hall
- 4 Greenhouse
- 5 Garage
- 6 Warehouse
- 7 Science Bldg
- 8 Chemistry Bldg.
- 9 Arts Bldg.
- 10 Power House
- 11 Gymnasium
- 12 Community Bldg
- 13 Lory Hall
- 14 Football Field
- 15 Tennis Courts
- 16 Library
- 17 Dean's Residence
- 18 Faculty Res.
- 19 Garages
- 20 Skating Pond
- 21 Vice Dean's Res.
- 22 Dairy
- 23 Shops
- 24 Vocational Boy's Dormitory
- 25 Machine Shed

Map of Campus

Scheme of Lettering Used in Course Numbers

ABBREVIATIONS

Agronomy	Ag
Animal Husbandry	AH
Botany and Plant Pathology	B
Business Subjects	BS
Chemistry	C
Civil Engineering	CE
Economics, Sociology and Commerce	ES
Education, Rural and Vocational	Ed
Electrical Engineering	EE
English	E
Entomology and Zoology	EZ
Farm Mechanics	FM
Forestry	F
Home Economics	HE
Horticulture	H
Language	L
Mathematics	M
Mechanical Engineering	ME
Music	Mu
Pathology and Bacteriology	PB
Physical Education	PE
Physics	Ph
Physiology	VP
Poultry Husbandry	P
Range and Pasture Management	RM

Abbreviations used in describing courses on pages 28 to 69.

(I means taught fall quarter; II, winter quarter, III, spring quarter. The number of credits which a specific subject carries and the number of clock hours spent in class per week are indicated as follows: 5 (3-4). The figure outside the parentheses indicates the number of credits; the first figure inside indicates the number of lectures or recitations per week and the second figure inside indicates the number of clock hours spent in laboratory.)

AGRICULTURE

The instruction in agriculture is designed to meet the needs of three groups of students: Those who desire to become agricultural experts or investigators, those who desire to become teachers, and those who desire a well-rounded scientific training as preparation for a life's work in farming, business or other professions.

To meet the varied and special agricultural conditions of the State, election is offered in four courses: Agronomy, animal husbandry, entomology, and horticulture. Specialization in the respective courses begins in the sophomore year.

In addition to courses in specialized fields, a course in general agriculture is offered to meet the needs of prospective teachers of vocational agriculture and of those desiring a broad and general course rather than specialized work.

Graduates in agriculture have been finding employment as teachers of vocational agriculture, in extension work, agricultural journalism, dairying, scientific research, and private industries associated with agriculture such as sugar companies, farm-implement companies, fruit companies, railroads, and farm and ranch management. Many graduates become farmers and stockmen.

TWO-YEAR COURSE IN AGRICULTURE

The Division of Agriculture offers a 2-year certificate course for those who plan to make agriculture their life's work but who find it impossible to complete a 4-year course.

Required subjects have been reduced to a minimum, leaving the greater part of the student's program to be developed on an individual basis with the aid of counselors appointed by the Dean. The course will provide a well-balanced and practical training in subjects and fields in which the students are particularly interested. The plan is so flexible that if a student wishes to put the major emphasis on either livestock or crop production it can be so arranged, or if he wishes a course including both livestock and crop production, he can also obtain that. Other subjects such as farm mechanics, farm management and bookkeeping, or public speaking and writing may be elected.

College credit may be obtained by 2-year-course students upon the passing of a comprehensive examination over the material covered in the regular 4-year course upon which credit is desired at the same time he becomes a candidate for a degree in a 4-year course.

Admission.—The 2-year course in agriculture is open to graduates of accredited high schools and to those who have finished the eighth grade and have had at least 3 years of farm experience after reaching their eighteenth birthdays. Any one interested should write to the registrar for detailed information.

Agriculture

The course for the freshman year is the same for all majors in Agriculture.

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

FRESHMAN YEAR

			Hours	Quarters and Credits		
			Lec-Lab	I	II	III
Ag	1	Crop Production	4-0	..		4
AH	1	Market Types and Classes of Livestock	2-4	4	..	..
B	1, 3, 5	General Botany	2-0	2	2	2
B	2, 4	General Botany Laboratory	0-3	1	1	..
B	6	General Botany Laboratory	0-4	..	..	2
C	1, 3	Inorganic Chemistry	3-0	3	3	
C	2, 4	Inorganic Chemistry Laboratory	0-4	2	2	..
C	5	Inorganic Qualitative Analysis	2-0			2
C	6	Inorganic Qualitative Analysis Laboratory	0-6	..		3
¹ E	1	English Composition Review	3-0	1	..	..
E	2, 3, 4	English Composition	3-0	3	3	3
ES	40	Local Government	2-0	2	..	
ES	41	State Government	2-0		2	..
ES	42	National Government	2-0	..		2
² M	2	Review of Mathematical Fundamentals	5-0	1	..	
M	10	Algebra	5-0	..	5	..
PE	1, 2, 3	Physical Education	0-2	0.5	0.5	0.5
				17.5	18.5	18.5

GENERAL AGRICULTURE MAJOR

SOPHOMORE YEAR

			Hours	Quarters and Credits		
			Lec-Lab	I	II	III
Ag	3	Crops Laboratory	0-6	3		..
Ag	12	Soils	5-0			5
Ag	14	Soils Laboratory	0-6	..		3
AH	3	Fitting and Showing Livestock	1-6	4	..	
AH	30	Meats	0-8	..	4	
C	11	Organic Chemistry	3-0	3		
C	12	Organic Chemistry Laboratory	0-4	2		..
E	25	Public Speaking	3-0		..	3
ES	1	Economics	5-0	..	5	
EZ	11	Zoology	3-0	3		
EZ	12	Zoology Laboratory	0-4	2	..	
EZ	40	Economic Entomology	3-4		5	..
FM	5	Farm Blacksmithing	0-6			2
H	1	General Horticulture	4-0		..	4
P	1	General Poultry Husbandry	3-3	..	4	..
PE	4, 5, 6	Physical Education	0-2	0.5	0.5	0.5
				17.5	18.5	17.5

¹To be taken by those who show a deficiency in English.

²To be taken by those who show a deficiency in mathematics.

CROPS MAJOR

SOPHOMORE YEAR

		Hours	Quarters and Credits		
		Lec-Lab	I	II	III
Ag	3	Crops Laboratory	0-6	3	..
Ag	12	Soils	5-0		5
Ag	14	Soils Laboratory	0-6	..	3
C	11, 15	Organic Chemistry	3-0	3	3
C	12, 16	Organic Chemistry Laboratory	0-4	2	2
E	25	Public Speaking	3-0	..	3
¹ E	50, 51, 52	Modern Literature	2-0	2	2
ES	1	Economics	5-0	..	5
EZ	11	Zoology	3-0	3	
EZ	12	Zoology Laboratory	0-4	2	
EZ	40	Economic Entomology	3-4		5
II	1	General Horticulture	4-0	..	4
M	11	Trigonometry	3-0	3	..
PE	4, 5, 6	Physical Education	0-2	0.5	0.5
				18.5	17.5
				17.5	17.5

ANIMAL HUSBANDRY MAJOR

SOPHOMORE YEAR

		Hours	Quarters and Credits		
		Lec-Lab	I	II	III
Ag	12	Soils	5-0		5
Ag	14	Soils Laboratory	0-6		3
AH	3	Fitting and Showing Livestock	1-6	4	
AH	5	Livestock Fundamentals	0-4	2	
AH	30	Meats	0-8	..	4
C	11	Organic Chemistry	3-0	3	
C	12	Organic Chemistry Laboratory	0-4	2	
C	43	Agricultural Biochemistry	3-0		3
C	44	Agricultural Biochemistry Laboratory	0-4	2	
C	45	Physiological Chemistry	3-0		3
C	46	Physiological Chemistry Laboratory	0-4		2
ES	1	Economics	5-0	..	5
EZ	11	Zoology	3-0	3	
EZ	12	Zoology Laboratory	0-4	2	
H	1	General Horticulture	4-0	..	4
PB	21	General Bacteriology	3-0	3	
PB	22	General Bacteriology Laboratory	0-4	..	2
PE	4, 5, 6	Physical Education	0-2	0.5	0.5
				16.5	19.5
				17.5	17.5

¹ Other electives may be substituted for literature.

Agronomy

- Ag 1. Crop Production. III. 4 (4-0).** Prerequisites: B 1, B 2.
A study of the principles of field crop production with special emphasis on cultural practices for crops grown in the State.
- Ag 3. Crops Laboratory. I. 3 (0-6).** Prerequisite: Ag 1. Fee \$1.00.
This course includes a study of botanical characteristics, classification, and judging of field crops.
- Ag 10. Principles of Genetics. II. 5 (4-2).** Prerequisites: B 1, B 2, EZ 11, EZ 12. Fee \$1.00.
A study of the fundamental principles of heredity, variation, breeding, and evolution. Emphasis will be placed on the physical basis of heredity, independent inheritance, and linkage.
- Ag 12. Soils. III. 5 (5-0).** Prerequisite: First-year Chemistry.
A comprehensive course dealing with the composition, properties, and formation of soils, with particular emphasis on soil conditions that affect plant growth and land management.
- Ag 13. Forest Soils. I. 5 (3-4).** Prerequisite: First-year Chemistry. Fee \$3.00.
A comprehensive course dealing with the composition, properties, and formation of soils, with particular emphasis on soil conditions that affect forest growth and development.
- Ag 14. Soils Laboratory. III. 3 (0-6).** Must accompany Ag 12. Fee \$3.00.
A study of the physical properties of the soil, moisture relations, and elementary fertility analysis.
- Ag 18. Irrigation Farming. II. 3 (3-0).** Prerequisite: Ag 1.
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.

Animal Husbandry

- AH 1. Market Types and Classes of Livestock. I. 4 (2-4).** Fee \$2.00.
Selecting and evaluating beef cattle, dairy cattle, sheep, swine, and horses on a purebred and market basis. Emphasis placed on types, markets, and market classification.
- AH 2. Market Types and Classes of Livestock. I. 3 (1-4).** For students in the Division of Forestry and Range Conservation only. Fee \$2.00.
Selecting and evaluating beef cattle, sheep, and horses on a purebred and market basis. Emphasis placed on types, markets, and market classification.
- AH 3. Fitting and Showing Livestock. I. 4 (1-6).** Fee \$2.00.
Fitting, handling and showing of beef cattle, dairy cattle, sheep, and swine for show and sale.

- AH 5. Livestock Fundamentals. I. 2 (0-4).** Fee \$2.00.
Relation of livestock to agriculture and human needs. Judging, breeding, and management.
- AH 7. Dairy Fundamentals. III. 3 (2-2).** Fee \$2.00.
An introduction to dairying. Judging, culling, breeding and management of dairy cattle. Composition and quality of milk and milk products.
- AH 30. Meats. II. 4 (0-8).** Fee \$3.00.
A study of meat from the producer's and consumer's standpoint. The slaughter, dressing, cutting, curing, and nutritive value of meats. Trips to packing plants.
- AH 40. Feeds and Feeding. II. 5 (5-0).** Prerequisite: AH 35.
Study of feeds, feeding requirements, feed replacement values, and economical rations for meat and producing animals.

Entomology and Zoology

- EZ 11. Zoology. I. 3 (3-0).** Accompanies EZ 12. (Upperclassmen may take EZ 11 without EZ 12.)
A study of structures, habits, and relationships of the animal kingdom.
- EZ 12. Zoology Laboratory. I. 2 (0-4).** Prerequisite: EZ 11, or must accompany EZ 11. No credit without the latter. A laboratory course to accompany EZ 11. Fee \$2.00.
- EZ 13. Zoology. II. 3 (3-0).** Prerequisite: EZ 11. Continuation of EZ 11.
- EZ 14. Zoology Laboratory. II. 2 (0-4).** Prerequisite: EZ 12. Continuation of EZ 12. Fee \$2.00.
- EZ 40. Economic Entomology. II. 5 (3-4).** Prerequisites: EZ 11 and EZ 12. Fee \$2.00.
Attention is given to the general structure, classification, and methods of control of many injurious insects. Fee \$2.00.

Horticulture

- H 1. General Horticulture. III. 4 (4-0).** Prerequisites: B 1, B 2.
A general course covering the principles underlying the propagation, culture, improvement and marketing of horticultural crops.

Poultry Husbandry

- P 1. General Poultry Husbandry. II. 4 (3-3).** Fee \$1.00.
A general course dealing with the application to farm poultry flocks of the elementary principles of feeding, breeding, incubation, rearing, housing, and management of chickens and turkeys, and of the marketing of poultry products.

ENGINEERING

Two years of College work are offered in Electrical, Mechanical and Civil Engineering.

The leaders in the engineering profession are unanimously agreed that a good engineering course should be composed largely of basic subjects. The greater ease with which broadly trained men adapt themselves to the service of society and attain important positions is ample evidence that the point of view of the leaders in the engineering profession is correct. The faculty of this institution has taken this point of view in the design of the engineering curriculum and the courses contained therein.

Many civil and irrigation engineering graduates find positions with the United States Bureau of Reclamation. Some become highway engineers. Many mechanical and electrical engineers secure positions with large corporations in the electrical manufacturing or the utilities fields. Graduates of the general and industrial arts engineering courses are equipped to teach industrial arts courses in the public schools or for employment with industrial or commercial firms needing men with engineering training.

Civil, Electrical, and Mechanical Engineering

The course for the freshman year is the same for all majors in engineering.

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

FRESHMAN YEAR

			Hours	Quarters and Credits		
			Lec-Lab	I	II	III
C	1, 3	Inorganic Chemistry	3-0	3	3	
C	2, 4	Inorganic Chemistry Laboratory	0-4	2	2	
¹ E	1	English Composition Review	3-0	1	..	..
E	2, 3, 4	English Composition	3-0	3	3	3
ES	40	Local Government	2-0	2	..	
ES	41	State Government	2-0		2	..
ES	42	National Government	2-0			2
² M	2	Review of Mathematical Fundamentals	5-0	1		.
M	15, 16, 17	Mathematics (Algebra, Trig- onometry, Analytics)	5-0	5	5	5
ME	1, 2	Mechanical Drawing	0-6	2	2	..
ME	3	Descriptive Geometry	6-1	..		3
Ph	25	General Physics	3-4	..	..	5
PE	1, 2, 3	Physical Education	0-2	0.5	0.5	0.5
				17.5	17.5	18.5

¹ To be taken by those who show a deficiency in English.

² To be taken by those who show a deficiency in mathematics.

CIVIL ENGINEERING MAJOR

SOPHOMORE YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
CE	1	Elementary Surveying	3-3	4	..
CE	4	Advanced Surveying	3-4	..	5
CE	9	Materials of Construction	2-3	3	..
CE	12	Engineering Problems	0-3	1	..
CE	15	Theoretical Mechanics (Statics)	4-3	5	..
CE	18	Mechanics of Materials	4-3	..	5
CE	19	Mechanics of Materials Laboratory....	0-3	..	1
¹ E	50, 51, 52	Modern Literature	2-0	2	2
M	36, 37, 38	Engineering Mathematics (Calculus)	4-0	4	4
Ph	26, 27	General Physics	3-4	5	5
PE	4, 5, 6	Physical Education	0-2	0.5	0.5
				18.5	17.5
					17.5

ELECTRICAL ENGINEERING MAJOR

SOPHOMORE YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
CE	1	Elementary Surveying	3-3	4	..
CE	15	Theoretical Mechanics (Statics)	4-3	5	..
CE	18	Mechanics of Materials	4-3	..	5
CE	19	Mechanics of Materials Laboratory....	0-3	..	1
¹ E	50, 51, 52	Modern Literature	2-0	2	2
EE	1	Principles of Electric and Magnetic Circuits	5-0	..	5
M	36, 37, 38	Engineering Mathematics (Calculus)	4-0	4	4
ME	5	Machine Drawing	0-6	2	..
ME	21	Machine Shop	1-3	..	2
Ph	26, 27	General Physics	3-4	5	5
PE	4, 5, 6	Physical Education	0-2	0.5	0.5
				17.5	18.5
					17.5

MECHANICAL ENGINEERING MAJOR

SOPHOMORE YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
CE	1	Elementary Surveying	3-3	4	..
CE	15	Theoretical Mechanics (Statics)	4-3	..	5
CE	18	Mechanics of Materials	4-3	..	5
CE	19	Mechanics of Materials Laboratory....	0-3	..	1
¹ E	50, 51, 52	Modern Literature	2-0	2	2
M	36, 37, 38	Engineering Mathematics (Calculus)	4-0	4	4
ME	5	Machine Drawing	0-6	2	..
ME	10	Working and Welding of Steel	1-3	..	2
ME	15	Mechanism	4-0	..	4
ME	16	Mechanism Laboratory	0-6	..	2
Ph	26, 27	General Physics	3-4	5	5
PE	4, 5, 6	Physical Education	0-2	0.5	0.5
				17.5	18.5
					18.5

¹ Other electives may be substituted for literature.

Civil Engineering

- CE 1. Elementary Surveying. I. 4 (3-3).** Prerequisite: M 16. Fee \$2.00.

Use, adjustment and care of all instruments necessary for elementary surveying and the field application of those instruments to surveying problems.

- CE 4. Advanced Surveying. III. 5 (3-4).** Prerequisite: CE 1. Fee \$3.00.

This course takes up in detail systems of triangulation, base line measurements, astronomical observations, stadia, transit and plane table topographic surveying, hydrographic surveying relating to drainage areas and reservoirs, and the field practices in all these branches.

- CE 7. Field Camp. s. 3.** Three credits allowed for each camp attended. Prerequisite: CE 1. Two weeks before the beginning of the fall quarter all junior and senior civil engineers spend two weeks at an engineers' camp in the mountains.

The work at camp consists of practice in the use of the surveying instruments, topographical surveying and location surveying relative to engineering construction.

- CE 9. Materials of Construction. I. 3 (2-3).** Prerequisite: C 3. Fee \$2.00.

A study of the properties of materials commonly used in construction, and the standard tests and specifications for these materials.

- CE 12. Engineering Problems. II. 1 (0-3).** Prerequisite: M 16.

The theory and use of the slide rule. Formal and computational phases of the solution of problems in engineering.

- CE 15. Theoretical Mechanics (Statics). II. 5 (4-3).** Prerequisites: M 36, Ph 25.

Coplanar, non-coplanar, concurrent and non-concurrent force system. Centroids and moments of inertia of areas. In the 3-hour computation period, graphic analysis is stressed.

- CE 18. Mechanics of Materials. III. 5 (4-3).** Prerequisites: CE 15, Ph 27, M 37.

The application of the principles of mechanics and elasticity to the investigation of stresses and deformations in bars, riveted joints, welded joints, beams, shafts and columns. The students spend a 3-hour period each week in a special computation period supervised by the instructor.

- CE 19. Mechanics of Materials Laboratory. III. 1 (0-3).** Taken with CE 18. Fee \$4.00.

Laboratory verification of the fundamental principles of elastic behavior of structural elements as presented in CE 18.

¹ Offered by the Home Branch of the College at Fort Collins.

Electrical Engineering

- EE 1. Principles of Electric and Magnetic Circuits. III. 5 (5-0).** Prerequisites: M 37, Ph 27. Must be taken with or following M 38.
The course covers fundamental principles of electric and magnetic circuits, power and energy, induced and generated voltages.

Mechanical Engineering

- ME 1. Mechanical Drawing. I. 2 (0-6).**
Care and use of instruments; lettering; geometrical construction and projection.
- ME 2. Mechanical Drawing. II. 2 (0-6).** Prerequisite: ME 1. A continuation of ME 1.
Isometric and other pictorial representations.
- ME 3. Descriptive Geometry. III. 3 (1-6).** Prerequisite: ME 2.
Graphical representation of geometrical magnitudes in space.
- ME 5. Machine Drawing. I. 2 (0-6).** Prerequisite: ME 2.
The production of detail and assembly drawings of machines.
- ME 10. Working and Welding of Steel. II. 2 (1-3).** Fee \$4.00.
Processes and equipment for working, welding and heat treating of steel. Steel classification. The effects of temperature change and mechanical working on the properties of steel.
- ME 15. Mechanism. III. 4 (4-0).** Prerequisite: ME 5.
Elements of machinery; motion transmitting parts such as gears, belts, cams, link work, etc.
- ME 16. Mechanism Laboratory. III. 2 (0-6).** Prerequisite: ME 5.
Drawing room practice to accompany ME 15.
- ME 20. Machine Shop. II. 3 (1-6).** Fee \$4.00.
A study of the tools and equipment used in machine shop work; elementary principles of machine and bench working of metals.
- ME 21. Machine Shop. II. 2 (1-3).**
For students enrolled in curricula other than mechanical engineering. A study of tools and equipment used in machine shop work; elementary principles of machine and bench working of metals.

FARM MECHANICS

- FM 1. Farm Carpentry. II. 2 (0-6).** Fee \$4.00.
Rafters cutting and erection, framing, farm structures, making wood appliances, lumber bills, drawing, care and use of tools, and painting.
- FM 5. Farm Blacksmithing. III. 2 (0-6).** Fee \$4.00.
Forge work for the farmer, involving construction and repair work in shaping, annealing, hardening, and tempering; acetylene welding.
- FM 10. Tractors. I. 3 (1-6).** Fee \$4.00.
Principles of the internal combustion engine; adjustments; timing valves, ignition, carburetor; trouble shooting. The electric motor as a source of power. Selection of power.
- FM 12. Farm Machinery. II. 3 (1-6).** Fee \$4.00.
Repair and overhauling of farm machinery, construction, operation, adjustments, and hitches.

FORESTRY AND RANGE CONSERVATION

The Division of Forestry and Range Conservation prepares students for professional employment within the field. Various Federal and State agencies employ most of the graduates, although there is an increasing opportunity with private enterprise. The principal Federal employers are the Fish and Wildlife Service, the Grazing Service, the Indian Service, the National Park Service, the Soil Conservation Service, and the United States Forest Service.

The number of students admitted into the junior class is limited to 60. Selection is made on the basis of scholarship and aptitude with preference shown those living in Colorado and adjoining states. Application for admittance into the junior class must be received by April 1, in order that those selected can arrange to attend summer camp. Application forms may be obtained from the Dean's office.

Practical field instruction covering a period of 10 weeks is given in the summer camp at Pingree Park, fifty-five miles west of Fort Collins, where permanent quarters are provided. The sophomore summer camp is required for a degree and is a prerequisite within the Division for succeeding forestry and range management courses.

The total expense per student for the summer camp has been \$70.00, of which \$55.00 has been for board and lodging and \$15.00 for camp expenses. Should rising costs make it necessary to increase the camp expense still further, the college reserves the right to do so, but no increases for the current year will be made after May 1. Each student will provide his own bedding.

Additional field work is required during the last two instructional years on forest and range lands near Fort Collins. Facilities for field instruction are offered on the Roosevelt National Forest, the Rocky Mountain National Park and forest and range areas owned by the college.

Students with physical handicaps who contemplate entering Federal service should check with the United States Civil Service Commission. The school does not bar men who are physically handicapped, but the Civil Service Commission may. Students showing a lack of proficiency in English may be required to take further instruction in this field.

The staff of the Rocky Mountain Forest and Range Experiment Station augments the regular faculty, through classroom lectures and supervision of graduate research. Regularly scheduled lectures are also given by officers of the Grazing Service, the National Park Service, the Soil Conservation Service, and the United States Forest Service.

Forestry and Range Conservation

The first 2 years of all majors—Forestry, Range and Pasture Management, Range Management Forestry—are the same.

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

FRESHMAN YEAR

		Hours	Quarters and Credits			
		Lec-Lab	I	II	III	
AH	1	Market Types and Classes of Livestock	2-4	4	..	..
B	1, 3, 5	General Botany	2-0	2	2	2
B	2, 4	General Botany Laboratory	0-3	1	1	..
B	6	General Botany Laboratory	0-4	..	..	2
C	1, 3	Inorganic Chemistry	3-0	3	3	..
C	2, 4	Inorganic Chemistry Laboratory	0-4	2	2	..
C	25	Phytochemistry	5-0	..	..	5
¹ E	1	English Composition Review	3-0	1	..	..
E	2, 3, 4	English Composition	3-0	3	3	3
ES	40	Local Government	2-0	2	..	..
ES	41	State Government	2-0	..	2	..
ES	42	National Government	2-0	..	..	2
F	3	Conservation Policy	2-0	..	..	2
² M	2	Review of Mathematical Fundamentals	5-0	1	..	..
M	10	Algebra	5-0	..	5	..
RM	05	Orientation	1-0	..	0	..
PE	1, 2, 3	Physical Education	0-2	0.5	0.5	0.5
				17.5	18.5	16.5

SOPHOMORE YEAR

		Hours	Quarters and Credits			
		Lec-Lab	I	II	III	
Ag	12	Soils	5-0	..	..	5
Ag	14	Soils Laboratory	0-6	..	..	3
B	23	Plant Classification	1-8	..	5	..
C	61	Physical Geology	3-4	5	..	..
CE	1	Elementary Surveying	3-3	4	..	..
E	25	Public Speaking	3-0	..	..	3
³ E	50, 51	Modern Literature	2-0	2	2	..
ES	1	Economics	5-0	..	5	..
EZ	11	Zoology	3-0	3	..	..
EZ	12	Zoology Laboratory	0-4	2	..	..
F	4	Conservation Policy	2-0	2	..	..
M	11	Trigonometry	3-0	..	3	..
Ph	15	General Physics	3-4	..	..	5
RM	58	Range Forage Plants	2-4	..	4	..
PE	4, 5, 6	Physical Education	0-2	0.5	0.5	0.5
		Electives				3
				18.5	19.5	19.5

¹To be taken by those who show a deficiency in English.

²To be taken by those who show a deficiency in mathematics.

³Other electives may be substituted for literature.

Forestry

F 3. Conservation Policy. III. 2 (2-0).

A survey of the forest, range, wild life and other natural resources together with the policies and programs which have been adopted for their protection and use.

F 4. Conservation Policy. I. 2 (2-0). Continuation of F 3.

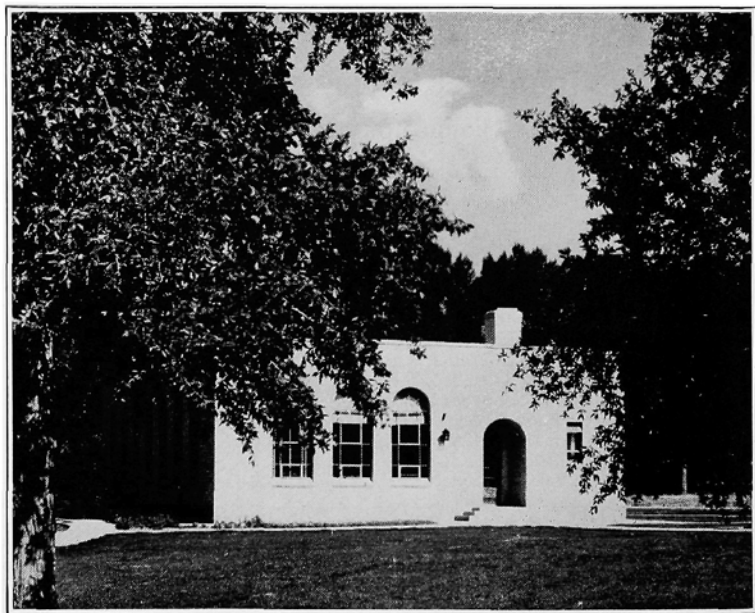
Range and Pasture Management

RM 05. Orientation. II. 0 (1-0).

The field of range and pasture management, its opportunities and professional requirements.

RM 58. Range Forage Plants. II. 4 (2-4). Fee \$2.00.

Distribution, abundance, growth characteristics and ecological requirements of important range plants. Production, nutritive value and palatability of forage as related to domestic and big game animals.



The Library

HOME ECONOMICS

Since a large majority of women become homemakers soon after leaving college, it is highly proper that the home become a pivotal interest in higher education. Home Economics is designed to meet this need, providing opportunity for the application of the sciences and the arts to problems of the home on a level that will challenge collegiate effort, and by methods that will stimulate a scientific attitude toward all relationships. The development of the student as an individual, and as a member of society more capable of dealing with rapidly changing conditions in the home and in the community are other outcomes to which the institution is obligated.

The basic curriculum, required of all home economics majors, serves as a foundation for educational experience that meets the interests of students in a fairly wide range of specialized occupations. The vocations attracting graduates from this institution have in the main been high-school and college teaching positions, extension service, social service, commercial work—including store service—and institutional fields requiring intensive training in nutrition.

The fields of the general subject in which one may work toward a major at Fort Lewis are: Home Management and Family Economics, Nutrition, and Textiles and Clothing.

Home Economics

FRESHMAN YEAR

(Same for all majors)

			Hours	Quarters and Credits		
			Lec-Lab	I	II	III
C	1, 3	Inorganic Chemistry	3-0	3	3	
C	2, 4	Inorganic Chemistry Laboratory	0-4	2	2	
¹ E	1	English Composition Review	3-0	1	..	..
E	2, 3, 4	English Composition	3-0	3	3	3
ES	80	Current World Problems.....	3-0	..	3	
EZ	11	Zoology	3-0	3		
EZ	12	Zoology Laboratory	0-4	2		
HE	0	Orientation	1-0	0		
HE	1	Color and Design	1-4	3		
HE	80	Elementary Textiles and Clothing Selection	5-0		5	..
HE	83	Principles of Clothing Construction	0-9			3
M	1	Basic Mathematics	5-0			5
² M	2	Review of Mathematical Fundamentals	5-0	1		..
Ph	15	General Physics	3-4	..	..	5
PE	61, 62, 63	Physical Education	0-2	0.5	0.5	0.5
					<hr/>	<hr/>
					16.5	16.5
					<hr/>	<hr/>
					16.5	16.5

¹ To be taken by those who show a deficiency in English Composition.

² To be taken by those who show a deficiency in mathematics.

HOME MANAGEMENT AND FAMILY ECONOMICS MAJOR SOPHOMORE YEAR

		Hours	Quarters and Credits		
		Lec-Lab	I	II	III
C	11	Organic Chemistry	3-0	3	
C	12	Organic Chemistry Laboratory	0-4	2	..
E	25	Public Speaking	3-0	..	3
E	50	Modern Literature	2-0	2	..
ES	50	General Sociology	5-0	..	5
HE	30	Food Selection and Preparation	2-6	5	..
HE	31	Food Selection and Preparation	1-4	..	3
L		Modern Language	5-0	5	5
PB	21	General Bacteriology	3-0		3
PB	22	General Bacteriology Laboratory	0-4		2
VP	21	Human Anatomy and Physiology	5-0	..	5
PE	64, 65, 66	Physical Education	0-2	0.5	0.5
		Electives			4 or 5
			17.5	18.5	17.5
					or 18.5

NUTRITION MAJOR SOPHOMORE YEAR

		Hours	Quarters and Credits		
		Lec-Lab	I	II	III
C	11, 15	Organic Chemistry	3-0	3	3
C	12, 16	Organic Chemistry Laboratory	0-4	2	2
C	41	Biochemistry	3-0		3
C	42	Biochemistry Laboratory	0-4		2
E	25	Public Speaking	3-0	..	3
E	50	Modern Literature	2-0	2	..
HE	30	Food Selection and Preparation	2-6	5	..
HE	31	Food Selection and Preparation	1-4	..	3
L		Modern Language	5-0	5	5
VP	21	Human Anatomy and Physiology	5-0	..	5
PE	64, 65, 66	Physical Education	0-2	0.5	0.5
		Electives			4 or 5
			17.5	18.5	17.5
					or 18.5

TEXTILES AND CLOTHING MAJOR SOPHOMORE YEAR

		Hours	Quarters and Credits		
		Lec-Lab	I	II	III
C	11	Organic Chemistry	3-0	3	
C	12	Organic Chemistry Laboratory	0-4	2	..
E	25	Public Speaking	3-0	..	3
E	50	Modern Literature	2-0	2	..
ES	50	General Sociology	5-0	..	5
HE	3	Advanced Design	0-4	..	2
HE	30	Food Selection and Preparation	2-6	5	..
L		Modern Language	5-0	5	5
PB	21	General Bacteriology	3-0		3
PB	22	General Bacteriology Laboratory	0-4		2
VP	21	Human Anatomy and Physiology.....	5-0	..	5
PE	64, 65, 66	Physical Education	0-2	0.5	0.5
		Electives			4 or 5
			17.5	17.5	17.5
					or 18.5

Home Economics

HE 0. Orientation. I. 0 (1-0).

Objectives and functions of the land-grant college and of the Division of Home Economics; occupational orientation, study habits, reading efficiency, social conduct, and personality adjustment.

HE 1. Color and Design. I. 3 (1-4).

Color as found in light rays and pigments. Principles of balance, rhythm, and harmony applied to original designs. Art appreciation.

HE 3. Advanced Design. II. 2 (0-4). Prerequisite: HE 1.

Emphasis given on original designs for special purposes.

HE 6. Handcrafts (General). I. 2 (0-6). Prerequisite: HE 1.

Introductory course to acquaint the student with media and materials used in inexpensive craft work. Techniques used in crafts.

HE 8. Handcrafts (Minor Crafts). II. 2 (0-6).

Various types of crafts utilizing limited equipment. Designed for occupational therapists, teachers and homemakers.

HE 30. Food Selection and Preparation. I. 5 (2-6). Prerequisites: C 11, C 12.

Principles and techniques of preparation of customary food products. Recognition of standard products. Introductory meal planning and service. Factors influencing selection and purchase of food.

HE 31. Food Selection and Preparation. II. 3 (1-4). Prerequisite: HE 30.

Experience in preparation of more varied types of food products.

HE 42. Meal Planning and Service. III. 3 (1-4). Prerequisites: HE 30, HE 34.

Planning and service of meals and food for special occasions for small groups on different income levels.

HE 49. Principles of Food Selection and Meal Service. I, III. 5 (2-6). No prerequisites. The course is open to men and women who are not majoring in home economics.

An elementary presentation of basic principles of food selection with emphasis upon the choice of food to meet the individual needs of the various members of the family. The well-balanced meal, carving, and accepted guides in table service and behavior are other considerations. Discussions, demonstrations and laboratory practice.

HE 80. Elementary Textiles and Clothing Selection. II. 5 (5-0).

Relationship of construction of fabrics and fiber content to the selection, care, and use of clothing. Selection of clothing according to individual needs and tastes.

HE 83. Principles of Clothing Construction. III. 3 (0-9).

Fundamental construction processes by hand and machine applied in repair, and in making of new garments.

HE 85. Costume Design and Construction. III. 3 (1-5).

Application of color, line and the principles of art in the selection and construction of clothing for the individual student.

HE 111. History of Art. II. 3 (3-0).

From earliest Stone Age to European Middle Ages. Also oriental and savage art.

HE 112. History of Art. III. 3 (3-0).

Renaissance in Europe. Contemporary European and American movements. Architecture, painting, sculpture, and minor arts.

SCIENCE AND ARTS

During their first two years in college, students from all divisions take much of their work in the Division of Science and Arts. Here basic courses prepare the beginning student for the more specialized study he will do during his last two years in the Divisions of Agriculture, Engineering, Forestry and Range Conservation, Home Economics, and Veterinary Medicine. Foundation courses in mathematics and the basic sciences are provided by the Departments of Mathematics, Botany, Chemistry, and Physics. The Department of English and Modern Languages is concerned with the establishment of correct habits of communication and expression. The constantly changing forces of our complex civilization are the subject of study in Economics, Sociology and History. The Department of Physical Education cares for the general well being of the students. The Music Department adds to the enrichment and enjoyment of college years and makes a distinct contribution to the cultural life of the campus.

Majors are offered in Chemistry, Botany, Economics, Sociology and Education. The first 3 years may be secured at Fort Lewis and the work completed at Colorado A & M College in Fort Collins.

The course in Chemistry with the various electives open, prepares the student for many lines of work in agricultural chemistry and industrial chemistry; it is excellent preparation for the teacher of physical sciences and mathematics; it furnishes a very desirable course for students who are preparing to enter medical schools.

Botany majors are equipped for scientific investigation and research, both in government service and in private industry. Many are now teaching in high schools and colleges. Many botany majors are employed by the United States Department of Agriculture and other state and federal agencies.

The three fields—economics, sociology, and history—should be studied by those interested in becoming teachers or those interested in social work. Economics is important to anyone expecting to engage in business enterprises relating to agriculture, merchandising, manufacturing or other fields of business administration. History has a three-fold purpose; to serve as a background for other courses of study; for the specialist who hopes to teach; and finally, to awaken the student to the problems of today. The sociologist has two fields open to him; as a teacher of the social sciences; or secondly, as a social worker in private or public fields. It is advisable for those interested in the social sciences to secure as broad an education as possible, especially in the first 2 years of college work.

Graduates of the 2 and 3-year courses in education find many opportunities in the schools of the San Juan Basin. There is an increasing demand for those who have prepared to teach in our rural schools. Many Fort Lewis graduates have established such fine teaching standards in the Basin schools that it has been impossible to supply enough candidates to

meet the demand. The opportunities are good for those who are sincere in their desires and efforts to prepare adequately to teach.

In addition to these majors offered by the Colorado A & M College, other fields are open to students. If careful selection of courses is made to meet the requirements of the first 2 years, work may be continued in other institutions of higher learning.

In general, these students should satisfy the following requirements during the first 2 years:

Biological Science	9	quarter hours
English Language	9	quarter hours
Literature or Language	9	quarter hours
Physical Science	9	quarter hours
Social Science	9	quarter hours
Physical Education	3	quarter hours
Mathematics	8	quarter hours

Freshmen must register for English Language and Physical Education and should include two of the other required courses. The specific course requirements not met in the freshman year must be met in the sophomore year.

Chemistry

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

FRESHMAN YEAR

			Hours	Quarters and Credits		
			Lec-Lab	I	II	III
C	1, 3	Inorganic Chemistry	3-0	3	3	
C	2, 4	Inorganic Chemistry Laboratory.....	0-4	2	2	..
C	5	Inorganic Qualitative Analysis	2-0			2
C	6	Inorganic Qualitative Analysis Laboratory	0-6	..		3
¹ E	1	English Composition Review	3-0	1	..	..
E	2, 3, 4	English Composition	3-0	3	3	3
E	50, 51, 52	Modern Literature	2-0	2	2	2
ES	40	Local Government	2-0	2	..	
ES	41	State Government	2-0		2	..
ES	42	National Government	2-0			2
² M	2	Review of Mathematical Fundamentals	5-0	1		
M	15, 16, 17	Mathematics (Algebra, Trigonometry, Analytics)	5-0	5	5	5
PE	1, 2, 3	Physical Education	0-2	0.5	0.5	0.5
³ PE	61, 62, 63	Physical Education	0-2	0.5	0.5	0.5
				17.5	17.5	17.5

¹ To be taken by those who show a deficiency in English.

² To be taken by those who show a deficiency in mathematics.

³ For women.

SOPHOMORE YEAR

	Hours	Quarters	Credits		
			I	II	III
	Lec-Lab				
C 11, 15, 19	Organic Chemistry	3-0	3	3	3
C 14, 18, 22	Organic Chemistry Laboratory	0-6	2	2	2
C 33	Quantitative Analysis	3-6	5	..	..
C 34	Quantitative Analysis	2-9	..	5	..
M 41, 42, 43	Calculus (Differential, Integral, Applied)	5-0	5	5	5
Ph 25	General Physics	3-4	..	..	5
PE 4, 5, 6	Physical Education	0-2	0.5	0.5	0.5
¹ PE 64, 65, 66	Physical Education	0-2	0.5	0.5	0.5
	Humanities		2	2	2
			17.5	17.5	17.5

JUNIOR YEAR

	Hours	Quarters	Credits		
			I	II	III
	Lec-Lab				
C	Advanced Chemistry		5	5	5
L 1 or 40	French or German	5-0	5	..	..
L 2 or 41	French or German	5-0	..	5	..
L 3 or 42	French or German	5-0	..	..	5
Ph 26, 27	General Physics	3-4	5	5	..
	Electives		3	3	8
			18	18	18

Course of Study for Teaching

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

FRESHMAN YEAR

	Hours	Quarters	Credits		
			I	II	III
	Lec-Lab				
B 13	Introduction to Biological Science ..	3-3	..	4	..
² E 1	English Composition Review	3-0	1	..	..
E 2, 3, 4	English Composition	3-0	3	3	3
ES 40	Local Government	2-0	2	..	..
ES 41	State Government	2-0	..	2	..
ES 42	National Government	2-0	..	..	2
ES 80	Current World Problems	3-0	..	3	..
ES 81, 82	Current Topics	1-0	1	..	1
ES 86, 87, 88	World History	3-0	3	3	3
Ph 1	Introduction to Physical Science	4-0	4	..	..
PE 35	Personal Hygiene	3-0	..	..	3
PE 36	Community Health	3-0	..	..	3
PE 61, 62	Physical Education	0-2	0.5	0.5	0.5
	Electives		3	2 or 3	2 or 3
			16.5	17.5	17.5
				or 18.5	or 18.5

¹ For women.

² To be taken by those who show a deficiency in English.

Recommended Electives

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
E 12, 13	Journalistic Writing	3-0	3	3	..
E 50, 51, 52	Modern Literature	2-0	2	2	2
HE 1	Color and Design	1-4	3	..	..
HE 80	Elementary Textiles and Clothing Selection	5-0	..	5	..
HE 83	Principles of Clothing Construction	0-9	..	..	3
M 1	Mathematics	5-0	..	..	5
M 10	Algebra	5-0	..	5	..
Mu 3, 4, 5	Fundamental Theory	5-0	5	5	5

SOPHOMORE YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
E 22	Vocabulary Building	3-0	..	..	3
E 25	Public Speaking	3-0	..	..	3
E 53	American Literature	3-0	..	3	..
E 68, 69	Children's Literature	3-0	3	3	..
Ed 10	Psychology	4-0	..	4	..
Ed 11	Educational Psychology	4-0	..	..	4
Ed 39	Introduction to Education	4-0	4	..	..
Ed 43	Teaching Health and Physical Education	3-0	3	..	..
ES 91	Early American History	3-0	3	..	..
ES 92	Middle Period in American History	3-0	..	3	..
ES 93	Recent American History	3-0	..	..	3
PE 64, 65, 66	Physical Education	0-2	0.5	0.5	0.5
	Electives		4 or 5	4 or 5	4 or 5
			17.5	17.5	17.5
			or 18.5	or 18.5	or 18.5

Electives

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
B 1, 3, 5	General Botany	2-0	2	2	2
B 2, 4	General Botany Laboratory	0-3	1	1	..
B 6	General Botany Laboratory	0-4	..	..	2
C 1, 3	Inorganic Chemistry	3-0	3	3	..
C 2, 4	Inorganic Chemistry Laboratory	0-4	2	2	..
C 5	Inorganic Qualitative Analysis	2-0	..	..	2
C 6	Inorganic Qualitative Analysis Laboratory	0-6	..	..	3
E 12, 13	Journalistic Writing	3-0	3	3	..
ES 50	General Sociology	5-0	..	..	5
HE 6 or 8	Handcrafts	0-6	2	..	..
HE 49	Principles of Food Selection and Meal Service	2-6	..	..	5
HE 111	History of Art	3-0	..	3	..
L	Modern Language (First-year)	5-0	5	5	5
M 1	Mathematics	5-0	..	..	5
M 10	Algebra	5-0	..	5	..
Mu 3, 4, 5	Fundamental Theory	5-0	5	5	5
Mu 15, 16, 17	History of Music	3-0	3	3	3

JUNIOR YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
Ed 40	Introduction to Arithmetic	4-0	4		
Ed 42	Introduction to the Teaching of Reading	3-0		3	
Ed 44	Introduction to the Teaching of English	3-0			3
Ed 45	Principles of Education (Elementary)	3-0	..		3
Ed 46	School Management	5-0	5	..	
Ed 47	Observation and Methods	5-0		5	..
Ed 48	Student Teaching	5-0			5
ES 9	Colorado School Law and Government	2-0	..		2
ES 35	Principles of Geography	2-0	2	..	
ES 36	Economic Geography	2-0		2	..
ES 37	Political Geography	2-0		..	2
ES 95	History of the West	3-0		3	
	Electives		6 or 7	4 or 5	2 or 3
			17 or 18	17 or 18	17 or 18

Electives

Electives listed for the Freshman or Sophomore years not elected then may be elected in the Junior year.

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
E 26	Public Discussion	3-0	3		
E 30	Acting and Directing	1-4	3	..	
E 31	Stagecraft	0-6		3	..
E 32	Stage Make-Up	0-6	..		3
Ed 25	Elementary Music Education	3-0	3	..	
Ed 26	Intermediate Music Education	3-0		3	..
Ed 41	Introduction to the Teaching of Social Studies	4-0			4
ES 50	General Sociology	5-0	..		5
ES 60	Social Pathology	3-0	3	..	
ES 65	Rural Life and Its Problems	3-0	..	3	
ES 191	American Economic History	3-0	3	..	..
ES 192	American Diplomatic History	3-0		3	..
ES 193	American Constitutional History	3-0		..	3
HE 111, 112	History of Art	3-0	..	3	3
L	Modern Language (Second-year)	5-0	5	5	5
Mu 9, 10, 11	Advanced Theory	5-0	5	5	5

Course of Study for Business Career

For students interested in work to prepare themselves for a career in business, the following curriculum is suggested.

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

FRESHMAN YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
B 13	Introduction to Biological Science...	3-3	..	4	..
BS 1, 2, 3	Typewriting	0-6	2	2	2
BS 10, 11	Theory of Shorthand	3-0	3	3	..
BS 12	New Matter Dictation	3-0	..	..	3
BS 30	Introduction to Accounting	0-6	3	..	..
BS 31	Proprietorship and Partnership Accounting	0-6	..	3	..
BS 32	Corporation Accounting	0-6	..	..	3
¹ E 1	English Composition Review	3-0	1	..	..
E 2, 3, 4	English Composition	3-0	3	3	3
E 22	Vocabulary Building	3-0	..	..	3
ES 81, 82	Current Topics	1-0	1	..	1
Ph 1	Introduction to Physical Science ...	4-0	4	..	..
PE 1, 2, 3	Physical Education	0-2	0.5	0.5	0.5
² PE 61, 62, 63	Physical Education	0-2	0.5	0.5	0.5
	Electives			2 or 3	2
			16.5	17.5 or 18.5	17.5

SOPHOMORE YEAR

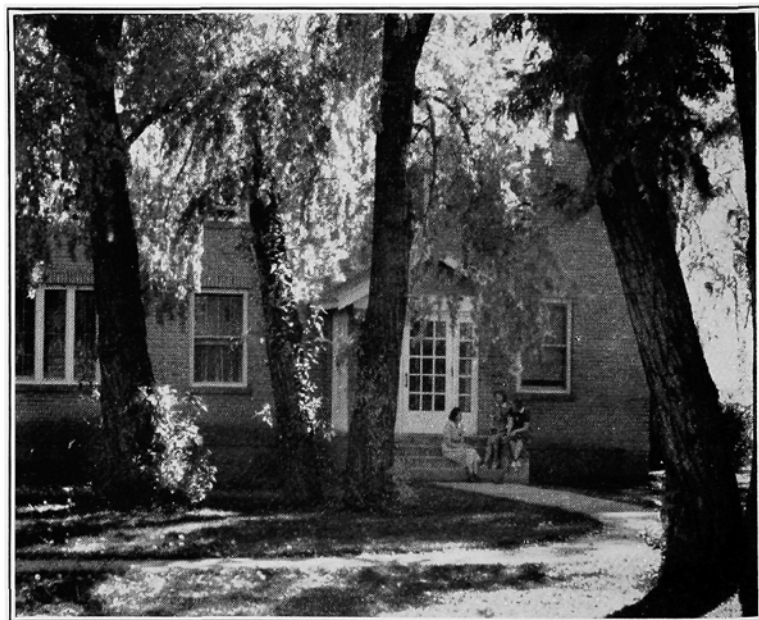
		Hours Lec-Lab	Quarters and Credits		
			I	II	III
BS 13	Intermediate Shorthand	3-0	3	..	..
BS 14	Advanced Shorthand	3-0	..	3	..
BS 15	Transcription	3-0	..	..	3
BS 18	Office Practice	1-4	3	..	..
BS 19	Secretarial Practice	1-4	..	3	..
BS 20	Advanced Secretarial Practice	1-4	..	..	3
BS 33	Secretarial Accounting	0-6	3	..	..
BS 34	Cost Accounting and Payroll Accounting	0-6	..	3	..
BS 35	Auditing	0-6	..	..	3
E 12, 13	Journalistic Writing	3-0	3	3	..
ES 1	Economics	5-0	..	5	..
ES 50	General Sociology	5-0	..	..	5
PE 4, 5, 6	Physical Education	0-2	0.5	0.5	0.5
² PE 64, 65, 66	Physical Education	0-2	0.5	0.5	0.5
	Electives		5	..	2
			17.5	17.5	16.5

¹ To be taken by those who show a deficiency in English.

² For women.

JUNIOR YEAR

		Hours Lec-Lab	Quarters and Credits		
			I	II	III
E 25	Public Speaking	3-0		..	3
Ed 10	Psychology	4-0	.	4	
Ed 40	Introduction to Arithmetic	4-0	4		
ES 10	Business Law	3-0	3		
ES 35	Principles of Geography	2-0	2	..	
ES 36	Economic Geography	2-0		2	..
ES 37	Political Geography	2-0	..	..	2
ES 86, 87, 88	World History	3-0	3	3	3
L	Modern Language	5-0	5	5	5
	Electives			3 or 4	4 or 5
			17	17 or 18	17 or 18



The Doorway to Lory Hall, Women's Dormitory

COURSE IN GENERAL SCIENCE

Many students wish to obtain a college education without specializing in a particular field of study. For such, the following course in General Science provides a diversified course of study leading to a bachelor of science degree. It also offers broad basic training for those who plan to continue their education in graduate or professional schools.

As far as possible this program attempts to fit the course of study to the interests and needs of the student. It is not rigidly prescribed. Although a minimum number of hours are required in a number of fields, as listed below, the General Science course provides a maximum number of electives. The student is expected to work with his advisor in early outlining a course, which must be approved by the dean of the division.

This course should be considered by those planning to prepare for high-school teaching in biology, chemistry, English, history, mathematics, modern languages, physics, and the social sciences; and by those who intend to study dentistry, law, or medicine.

COURSE OF STUDY IN GENERAL SCIENCE

	Approximate minimum Credit hours	Selected from:
Physical Science Group	20	{ Chemistry { Physics { Geology { Mathematics
Biological Science Group	20	{ Zoology { Botany { Physiology { Bacteriology { Genetics
Language-Arts Group	40	{ Foreign Language { English Literature, etc. { Music: Vocal Instrumental School Music { Art: Painting Etching Art Appreciation, etc.
Social Science Group	40	{ History { Government { Geopolitics { Economics { Sociology { Psychology { Philosophy
Recreational Training	5	
Electives	85	
	85	

Botany and Plant Pathology

B 1. General Botany. I. 2 (2-0).

Roots, stems, leaves, flowers, fruits, seeds and life processes of higher plants.

B 2. General Botany Laboratory. I. 1 (0-3). Laboratory to accompany B 1. Credit not given independently from credit for B 1. Fee \$1.00.

B 3. General Botany. II. 2 (2-0). A continuation of B 1.

B 4. General Botany Laboratory. II. 1 (0-3). A continuation of B 2. Credit not given independently from credits for B 3. Fee \$1.00.

B 5. General Botany. III. 2 (2-0).

The development of plants from simple to complex forms.

B 6. General Botany Laboratory. III. 2 (0-4). Laboratory to accompany B 5. Credits not given independently from credits for B 5. Fee \$1.00.

B 13. Introduction to Biological Science. II. 4 (3-3). Fee \$1.00.

A lecture-discussion and laboratory course in general biology. It is the aim of this course to give the student a better understanding of the plant and animal life in his environment. Life functions form the basis of discussion.

B 14. Plant Identification. II. 5 (1-8). For students who do not expect to take B 23. Fee \$2.00.

Methods of identification of flowering plants.

B 20. Plant Physiology. III. 5 (4-2). Prerequisite: A minimum of 6 credits in general botany. Fee \$1.00.

The functions and activities of plants.

B 23. Plant Classification. II. 5 (1-8). Prerequisites: A minimum of 10 credits in general botany. Fee \$2.00.

Identification and systematic relationship of flowering plants.

Chemistry ¹

C 1. Inorganic Chemistry. I. 3 (3-0). Must be accompanied by C 2.

Study of the basic principles of the science and chemistry of the non-metallic elements.

C 2. Inorganic Chemistry Laboratory. I. 2 (0-4). Exercises to accompany C 1. Fee \$5.00.

C 3. Inorganic Chemistry. II. 3 (3-0). Prerequisites: C 1, C 2. Must be accompanied by C 4. Continuation of C 1.

Includes chemistry of the metallic elements.

C 4. Inorganic Chemistry Laboratory. II. 2 (0-4). Exercises to accompany C 3. Fee \$5.00.

C 5. Inorganic Qualitative Analysis. III. 2 (2-0). Prerequisites: C 3, C 4. Must be accompanied by C 6.

A discussion of the theoretical principles of inorganic analytical separations.

¹A deposit of \$5.00 is required of all students taking laboratory work in chemistry. If a student is taking two or more laboratory courses at the same time, a deposit of \$10.00 is required. Upon return of key and apparatus in good condition this deposit is refunded.

- C 6. Inorganic Qualitative Analysis Laboratory. III. 3 (0-6).** Must be accompanied by C 5. Fee \$5.00.
Semimicro technique applied to the separation and identification of the common cations and anions.
- C 10. Calculations of Chemistry. II. 2 (2-0).** Prerequisites: C 1, 2, 3, 4.
Instruction and practice in the solution of typical problems of fundamental chemistry.
- C 11. Organic Chemistry. I. 3 (3-0).** Prerequisites: C 3, C 4. Must be accompanied by C 12 or C 14.
A study of the fundamental principles of organic chemistry and the chemistry of aliphatic compounds.
- C 12. Organic Chemistry Laboratory. I. 2 (0-4).** Fee \$5.00.
Experiments to acquaint the student with the preparation and properties of compounds discussed in C 11.
- C 14. Organic Chemistry Laboratory. I. 2 (0-6).** Chemistry, Botany and Animal Nutrition majors. Fee \$5.00.
Preparation and study of the properties of typical organic compounds.
- C 15. Organic Chemistry. II. 3 (3-0).** Prerequisites: C 11 and C 12 or C 14. Must be accompanied by C 16 or C 18. A continuation of C 11.
Major emphasis will be devoted to the chemistry of aromatic compounds.
- C 16. Organic Chemistry Laboratory. II. 2 (0-4).** Accompanies C 15. A continuation of C 12. Fee \$5.00.
- C 18. Organic Chemistry Laboratory. II. 2 (0-6).** Chemistry, Botany and Animal Nutrition majors. A continuation of C 14. Fee \$5.00.
- C 19. Organic Chemistry. III. 3 (3-0).** Prerequisites: C 15 and C 16 or C 18. Must be accompanied by C 20 or C 22. A continuation of C 15.
Chief emphasis will be placed on alkaloids, dyes, heterocyclic and medicinal compounds.
- C 20. Organic Chemistry Laboratory. III. 2 (0-4).** A continuation of C 16. Fee \$5.00.
- C 22. Organic Chemistry Laboratory. III. 2 (0-6).** Chemistry, Botany and Animal Nutrition majors. A continuation of C 18. Fee \$5.00.
- C 25. Phytochemistry. III. 5 (5-0).** Forestry students. Prerequisites: C 3, C 4.
A survey course in plant chemistry and forest products.
- C 33. Quantitative Analysis. I. 5 (3-6).** Prerequisites: C 5, C 6. Fee \$5.00.
A beginning study of the principles and calculations of inorganic quantitative analysis. Laboratory work in gravimetric, volumetric, and colorimetric analysis.
- C 34. Quantitative Analysis. II. 5 (2-9).** Prerequisite: C 33. A continuation of C 33. Fee \$6.00.
Emphasis will be upon oxidation-reduction titrations.

- C 35. Advanced Quantitative Analysis. III. 4 (1-9).** Prerequisite: C 34.

Emphasis will be placed upon useful specialized techniques of analysis not covered in courses C 33 and C 34.

- C 41. Biochemistry. III. 3 (3-0).** Home Economics students. Prerequisites: C 15, C 16. Must be accompanied by C 42.

Fundamentals of biochemistry applied to animal nutrition; chemistry of digestion, assimilation, and metabolism; internal secretions, blood, and urine.

- C 42. Biochemistry Laboratory. III. 2 (0-4).** Home Economics students. Exercises to accompany C 41. Fee \$5.00.

Laboratory practice with various constituents of living matter; determination of important constituents of blood and urine.

- C 43. Agricultural Biochemistry. II. 3 (3-0).** Prerequisites: C 11, C 12. Must be accompanied by C 44.

Lectures, text and reference study of agricultural biochemistry.

- C 44. Agricultural Biochemistry Laboratory. II. 2 (0-4).** Exercises to accompany C 43. Fee \$5.00.

- C 45. Physiological Chemistry. III. 3 (3-0).** Animal Husbandry, Animal Nutrition and Dairy Manufactures students. Prerequisites: C 43, C 44. Must be accompanied by C 46.

Principles of physiological chemistry with special emphasis to livestock and animal nutrition.

- C 46. Physiological Chemistry Laboratory. III. 2 (0-4).** Animal Husbandry, Animal Nutrition and Dairy Manufactures students. Exercises to accompany C 45. Fee \$5.00.

- C 61. Physical Geology. I. 5 (3-4).** Prerequisites: C 3, C 4. Fee \$5.00.

Acquaints the student with the physical properties which identify the common rock-forming minerals, rocks, and common ores with study of the associated dynamic processes in field and laboratory.

- C 62. Historical Geology. I. 5 (3-4).** Prerequisite: C 61. Fee \$5.00.

A study of erosive agents and principles of sedimentation with identification of common fossil forms and their application to the study of the geologic time table. Excellent local exposures of fossil bearing formations provide facilities for laboratory and field study.

- C 130. Advanced Inorganic Chemistry. I. 4 (2-6).** Prerequisite: Two full years of chemistry.

Development of certain basic theories, including electronic structure of compounds, and discussion of selected methods of research. Students will make reports on literature references. Laboratory work develops methods of inorganic synthesis.

- C 131. Advanced Inorganic Chemistry. III. 4 (2-6).** Prerequisite: Two full years of chemistry.

¹ To be offered in 1946-47 and alternate years thereafter.

Systematic study of element groups, with special attention to the rarer elements and to special reactions. Constant use of electronic and of Werner theories. Laboratory work is inorganic synthetic preparations.

- ¹ C 132. **Organic Preparations. III. 3 (0-9).** Prerequisites: C 19, C 22.

The preparation of a series of more difficult organic compounds, their purification, and identification.

- ¹ C 133. **Organic Qualitative Analysis. I. 4 (2-6).** Prerequisites: C 19, C 22.

A study of the systematic methods of separation, purification, and the identification of organic compounds.

Economics

- ES 1. **Economics. II. 5 (5-0).** Prerequisite: Sophomore standing.

The study of economic principles in present-day economic organization; the production and distribution of wealth and income, money, banking, and the forces determining price.

Geography

- ES 35. **Principles of Geography. I. 2 (2-0).**

A foundation course for all other courses in geography. The relation of man to his environment; the effect of physical geography on man's activities.

- ES 36. **Economic Geography. II. 2 (2-0).** Prerequisite: ES 1 or consent of instructor.

Economic forms of utilization of natural resources and their relation to development of major types of economic activity.

- ES 37. **Political Geography. III. 2 (2-0).**

Population as related to physical and economic aspects of geography and to the growth of nations.

Government

- ES 9. **Colorado School Law and Government. III. 2 (2-0).**

A study of the school law of Colorado and of the governmental organization of the State as related to the schools. Intended primarily for those who expect to teach in the public schools of the State.

- ES 10. **Business Law. I. 3 (3-0).** Not open to freshmen.

The elementary principles of property, contracts, agency sales, negotiable instruments, and their relationships to business.

- ES 40. **Local Government (City and Town). I. 2 (2-0).**

- ES 41. **State Government (Including County). II. 2 (2-0).**

- ES 42. **National Government. III. 2 (2-0).**

These three courses deal with the philosophy and development of democratic political institutions; with the organization, principles and actual workings of American government in these three main branches.

¹ To be offered in 1946-47 and alternate years thereafter.

History

- ES 80. Current World Problems. II. 3 (3-0).**
A study of international relations from 1914 to the present day, with particular attention to problems of the United States.
- ES 81. Current Topics. I. 1 (1-0).**
A study of current history as reported in the press.
- ES 82. Current Topics. III. 1 (1-0).** A continuation of ES 81.
- ES 86. World History. I. 3 (3-0).**
- ES 87. World History. II. 3 (3-0).**
- ES 88. World History. III. 3 (3-0).**
This series of courses offers a survey of world civilizations. It deals with the political, social, economic, and cultural development of the world from ancient times to the present day.
- ES 91. Early American History. I. 3 (3-0).**
The European background of American history, the colonial period, the Revolution, and the development of the United States from Washington through Jackson (1607-1837).
- ES 92. The Middle Period in American History. II. 3 (3-0).**
The slavery controversy, the Civil War, reconstruction, the growth of industry, and the awakening of interest in world affairs (1837-1898).
- ES 93. Recent American History. III. 3 (3-0).**
The study of America as a world power. The Spanish American War, imperialism, the progressive movement, World War I, the postwar era, the depression, the New Deal, and World War II (1898-1945).
- ES 95. History of the West. II. 3 (3-0).**
A study of the territorial growth of the United States, the westward movement, with special emphasis on the Great Plains and Rocky Mountain regions; and the cultural and political contributions of the frontier.
- ES 191. American Economic History. I. 3 (3-0).**
A study of the growth of American industry, sectional specialization, labor movements, and the relation of government to business enterprise.
- ES 192. American Diplomatic History. II. 3 (3-0).**
A survey to acquaint the student with the principles of foreign policy of the United States as it has evolved from the time of Washington to the present day.
- ES 193. American Constitutional History. III. 3 (3-0).**
A study of English and colonial backgrounds, the constitutional convention, the constitution and its amendments, and its development through judicial interpretation.
- ES 195. History of Inter-American Relations. I. 2 (2-0).**
A study of Spanish colonial policy, of the struggle for independence, and of the relations of Latin America with the United States.

Sociology

ES 50. General Sociology. III. 5 (5-0).

Origin, development, and change of the social structure, and how it affects the development of human nature; kinds of collective behavior; social control and social planning.

ES 52. Social Adjustments. III. 3 (3-0).

Various types of personal and social adjustments necessitated by our living in a changing world, and the resulting problems. Emphasis is placed upon helping college students to objectify and analyze personal problems of adjustment to campus life.

ES 60. Social Pathology. I. 3 (3-0). Prerequisite: ES 50 or consent of instructor.

Study of the malfunctioning of certain social institutions as reflected in such problems as delinquency, human mobility, divorce, unemployment, mental derangement, housing, and personal demoralization.

ES 65. Rural Life and Its Problems. II. 3 (3-0).

A descriptive analysis of rural life, policies affecting it, and rural planning as a means of influencing social change.

Business Subjects

Students who have had shorthand or typewriting in high school are permitted the following options: Students who have had one year of typewriting in high school may enter Typewriting BS 2, while those who have had two years of high-school typewriting may enter BS 3; those who have had one year of high-school shorthand may enter Shorthand BS 12, while those with credit for two years of high-school shorthand may enter Shorthand BS 14. Entrance to the advanced courses will be by examination or by the consent of the instructor. Students who do not feel qualified to enter the advanced courses for which they are eligible may repeat earlier courses without receiving college credit for them.

BS 1. Typewriting. I. 2 (0-6). Fee \$3.00.

For students who have had no previous experience with the typewriter. A fundamental course in mastering the technique of typewriting.

BS 2. Typewriting. II. 2 (0-6). Prerequisite: BS 1 or 1 year of high-school typewriting. Fee \$3.00.

Emphasis will be placed upon development of speed and accuracy. Instruction will be given in the preparation of personal and business papers and forms.

BS 3. Typewriting. III. 2 (0-6). Prerequisite: BS 2 or 2 years of high-school typewriting. Fee \$3.00.

Designed for students who desire advanced training for vocational use. Development of skill to meet standards of business.

BS 10. Theory of Shorthand. I. 3 (3-0).

Fundamentals of Gregg shorthand, functional method. Book I of Gregg method.

BS 11. Theory of Shorthand. II. 3 (3-0). Prerequisites: BS 1, BS 10. A continuation of BS 10.

BS 12. New Matter Dictation. III. 3 (3-0). Prerequisites: BS 1 and BS 11, or 1 year of high-school typewriting and 1 year of high-school shorthand.

Drill on brief forms and special forms. Beginning dictation from new matter. Dictation at 60 words per minute.

BS 13. Intermediate Shorthand. I. 3 (3-0). Prerequisites: BS 2, BS 12.

More advanced dictation. Practiced matter at 80 words per minute; new matter at 60 to 80 words per minute.

BS 14. Advanced Shorthand. II. 3 (3-0). Prerequisite: BS 13, or 2 years of high-school shorthand.

Dictation and transcription of new matter; dictation from many different industries at 80 words per minute; practiced material at 100 words a minute.

BS 15. Transcription. III. 3 (3-0). Prerequisites: BS 3, BS 14.

Preparation for Civil Service Tests. Dictation for 5 minutes on practiced material at 120 words a minute. New matter dictation from 100 words to 140 words a minute.

BS 18. Office Practice. I. 3 (1-4). Prerequisites: BS 3, BS 12. Fee \$3.00.

Designed to stress speed and accuracy of typing, the transcribing of notes taken by others, and general office procedures and use of office machines.

BS 19. Secretarial Practice. II. 3 (1-4). Prerequisites: BS 18, BS 12. Fee \$3.00.

Designed to place further emphasis upon speed and accuracy in typing and to stress the transcribing of letters, business forms, and tabulated material, and the fundamentals of filing.

BS 20. Advanced Secretarial Practice. III. 3 (1-4). Prerequisites: BS 19, BS 12. Fee \$3.00.

The transcribing of letters and legal matter from personal shorthand notes, further instruction in secretarial and general office practice.

BS 30. Introduction to Accounting. I. 3 (0-6).

A beginning course in the fundamental principles of record keeping. The accounting cycle is presented.

BS 31. Proprietorship and Partnership Accounting. II. 3 (0-6). Prerequisite: BS 30.

The principles of accounting are applied to sole proprietorship and partnership records. Adjusting entries for supplies, insurance, depreciation, interest, discount, and controlling accounts.

BS 32. Corporation Accounting. III. 3 (0-6). Prerequisite: BS 31.

The principles of accounting which apply to special books and records of corporations, accounting for sinking funds, special reserves, and advanced financial statements and other reports.

BS 33. Secretarial Accounting. I. 3 (0-6). Prerequisite: BS 31.

Systems of record keeping for professional men.

BS 34. Cost Accounting and Payroll Accounting. II. 3 (0-6). Prerequisite: BS 31.

The principles of distribution of overhead, material, and labor

as to unit cost. Includes payroll, time tickets, withholding tax, and social security taxes.

BS 35. Auditing. III. 3 (0-6). Prerequisite: BS 31.

Auditing theory and procedure, working papers and a thorough understanding of accounting statements.

Education

Ed 2. Methods of Teaching Non-Vocational Subjects. I. 5 (5-0). For students who expect to teach the common high-school subjects.

Basic principles, objectives, lesson planning and other aspects of the teaching process.

Ed 9. Orientational Psychology. I. 3 (3-0).

A course designed to help ex-service men and women and students in general to regain or develop efficient study habits. Note-taking, concentration of thought, reading and study aids, and budgeting of time will be emphasized.

Ed 10. Psychology. I, II. 4 (4-0). Not open to freshmen.

An elementary course in human behavior.

Ed 11. Educational Psychology. III. 4 (4-0). Not open to freshmen.

The principles of psychology as applied to education.

Ed 25. Elementary Music Education. I. 3 (3-0).

A study of music methods and materials for kindergarten, first, second and third grades, including solfeggio.

Ed 26. Intermediate Music Education. II. 3 (3-0).

A study of music methods and materials for fourth, fifth and sixth grades.

Ed 39. Introduction to Education. I. 4 (4-0). Required in the course in Education, sophomore year.

An introductory course acquainting the student 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, is studied. The evolution of methods as a result of the educative process and the nature of learning, current practices and means of evaluating education are studied in this course.

Ed 40. Introduction to Arithmetic. I. 4 (4-0).

Experimental studies in arithmetic methods will be studied and their findings applied to present arithmetic teaching. Special emphasis on diagnosis and remedial teaching will be given.

Ed 41. Introduction to the Teaching of Social Studies. III. 4 (4-0).

In this course the student will study the units suggested in the State course of study, with the purpose of getting them into teachable form. Current studies and texts in the field of teaching social studies in the elementary school will be examined and applied.

Ed 42. Introduction to the Teaching of Reading. II. 3 (3-0). This course is required of third-year education students.

A comprehensive study of the experimental studies in reading methods, their results, and their application to pupil needs in reading is made. The course will lay emphasis on diagnosis and remedial teaching.

Ed 43. Teaching Health and Physical Education. I. 3 (3-0).

Methods and materials in the teaching of health and physical education. Program planning, recess activities, games, rhythmic activities, principles of first aid, philosophy and theory of physical education.

Ed 44. Introduction to the Teaching of English. III. 3 (3-0).

A study of the objectives of the teaching of English and language work at the grade-school level and of the best means of attaining those ends. The fields of spelling and handwriting will also be covered.

Ed 45. Principles of Education (Elementary). III. 3 (3-0). Required in the course in Education, third year.

An introductory survey of the field of philosophy of education. The biological, psychological, sociological, and historical bases of education are studied. Some time is given to the philosophy underlying modern educational practices.

Ed 46. School Management. I. 5 (5-0). Required in the course in Education, third year. Fee \$2.00.

An introduction to the field of techniques and methods of teaching, a study of curriculum building as suggested in the State course of study, a study of objectives of elementary and secondary schools. Practical applications are made of new projects and methods of rural and elementary teaching. Type units of work are written and used in elementary school.

Ed 47. Observation and Methods. II. 5 (5-0). Required in the course in Education, third year. Fee \$2.00.

Observation techniques are developed and planned. Visitation to both rural schools and the campus elementary school is 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. III. 5 (5-0). Required in the course in Education, third year. Fee \$2.00.

Practical experience in teaching in rural grade schools is afforded 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.

English

Requirements in English Composition

1. All students in the college are required to take a year of English.
2. Those who are especially handicapped in their language habits and are seriously deficient in their knowledge of the elementary principles of composition may also be required to take an additional review course, E 1.
3. Students who have completed their required work in composition may be remanded to the English Department for additional training if they are reported by other departments as conspicuously lacking in the ability to write and speak clearly and correctly.

- E 1. English Composition Review. I. 1 (3-0).** Required of students who are not prepared to take E 2.
Drill in basic language skills through a remedial reading approach.
- E 2. English Composition. I. 3 (3-0).**
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. II. 3 (3-0).** Prerequisite: E 2. Continuation of E 2.
This course trains the students in collecting, organizing, and presenting material in larger units of composition.
- E 4. English Composition. III. 3 (3-0).** Prerequisite: E 3. Continuation of E 2 and E 3.
This course takes up narrative and descriptive writing. It attempts to train the student to record what his senses respond to and to apply imagination to the facts of sensory experiences.
- E 12. Journalistic Writing: The News Story. I. 3 (3-0).** Prerequisite: E 4.
Designed to train the student to write news copy and to teach him some of the functions of a newspaper in community life.
- E 13. Journalistic Writing: The Special Feature Article. II. 3 (3-0).** Prerequisite: E 4.
This course is designed to train students to write for publication in the fields of their study and interest.
- E 22. Vocabulary Building. III. 3 (3-0).**
The study of words; designed to stimulate growth and accuracy in vocabulary.
- E 25. Public Speaking. III. 3 (3-0).** Prerequisite: E 3.
A course in the fundamentals of public speaking with the emphasis on practice.
- E 26. Public Discussion. I. 3 (3-0).** Prerequisite: E 3.
The organization of public assemblies and the conduct of group discussions.
- E 30. Acting and Directing. I. 3 (1-4).**
Fundamentals of acting and play directing. A practical, laboratory course for those who want to act and for those who will produce school or community plays.
- E 31. Stagecraft. II. 3 (0-6).**
Designing, building, and painting stage scenery. Making of wigs and stage properties.
- E 32. Stage Make-Up. III. 3 (0-6).**
Practice in "straight," character, and old-age make-up.
- E 50. Modern Literature. I. 2 (2-0).**
A course intended to introduce the technical student to literature dealing with the problems of the individual. A study of the social significance of literature in terms of the individual and his environment.

E 51. Modern Literature. II. 2 (2-0).

A study of the significance and interpretation of literature treating problems of social groups.

E 52. Modern Literature. III. 2 (2-0).

Ethics, philosophy, and the problems of social justice as presented through literature.

E 53. American Literature. II. 3 (3-0). Prerequisite: E 4.

A study of the development of American literature from colonial times to the beginning of the twentieth century.

E 55. Nineteenth Century Literature. III. 5 (5-0). Prerequisite: E 4.

A study of the major trends of the thought and literature of the preceding century.

E 65. Survey of English Literature. I. 3 (3-0).

The beginning of English literature from Beowulf through the Elizabethan period.

E 66. Survey of English Literature. II. 3 (3-0).

The Puritan period, the Restoration, the Eighteenth Century, through the Romantic movement.

E 67. Survey of English Literature. III. 3 (3-0).

The Victorian Period to modern time.

E 68. Children's Literature. I. 3 (3-0). Required in the course in Education, sophomore year.

A survey of literature for the elementary schools, study of principles governing the choice of literature as well as the opportunity of making and presenting type units in the teaching of literature, the graphic arts and music.

E 69. Children's Literature. II. 3 (3-0). A continuation of E 68.

Modern Languages ¹

L 1. First-Year French. I. 5 (5-0).

A course in reading and conversation with a background of grammar and prose composition.

L 2. First-Year French. II. 5 (5-0). Prerequisite: L 1.

A continuation of L 1, with special emphasis on reading and conversation.

L 3. First-Year French. III. 5 (5-0). Prerequisite: L 2.

Grammar and prose composition with emphasis on reading and conversation.

L 4. Second-Year French. I. 2 (2-0). Prerequisite: L 3 or two years of high-school French. Should be taken with L 5.

Grammar and vocabulary for the purpose of developing a command of written and spoken French.

L 5. Second-Year French. I. 3 (3-0). Prerequisite: L 3 or two years of high-school French. Should be taken with L 4.

Training for rapid reading. The reading of modern short stories, novels, and plays.

¹ Note: Students having high-school credit for two years of a foreign language, may not take the first-year of the same language in college for credit.

L 6. Second-Year French. II. 2 (2-0). Prerequisite: L 4. Should be taken with L 7.

Grammar and vocabulary as a means to a better command of written and spoken French.

L 7. Second-Year French. II. 3 (3-0). Prerequisite: L 5. Should be taken with L 6.

Further training in rapid reading of modern French literature.

L 8. Second-Year French. III. 2 (2-0). Prerequisite: L 6. Should be taken with L 9.

Further practice in writing and speaking French.

L 9. Second-Year French. III. 3 (3-0). Prerequisite: L 7. Should be taken with L 8.

Further training in rapid reading of French literature.

L 21. First-Year Spanish. I. 5 (5-0).

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

L 22. First-Year Spanish. II. 5 (5-0). Prerequisite: L 21.

Further study of Spanish grammar with emphasis on reading, composition, and conversation.

L 23. First-Year Spanish. III. 5 (5-0). Prerequisite: L 22.

Further study of Spanish grammar with emphasis on reading, composition, and conversation.

L 24. Second-Year Spanish. I. 5 (5-0). Prerequisite: L 23 or two years of high-school Spanish.

Further study of Spanish grammar with practical application to speaking and writing.

L 25. Second-Year Spanish. II. 5 (5-0). Prerequisite: L 24.

Spanish vocabulary with further practice in reading, speaking, and writing.

L 26. Second-Year Spanish. III. 5 (5-0). Prerequisite: L 25.

Continuation of Spanish grammar with emphasis on dictation, prose composition, reading, and conversation.

L 40. First-Year German. I. 5 (5-0).

A course in grammar, pronunciation, and reading.

L 41. First-Year German. II. 5 (5-0). Prerequisite: L 40.

A continuation of the study of grammar, pronunciation, and reading.

L 42. First-Year German. III. 5 (5-0). Prerequisite: L 41.

A continuation of the study of grammar, pronunciation, and reading.

L 43. Second-Year German. I. 3 (3-0). Prerequisite: L 42 or two years of high-school German.

Modern German prose.

L 44. Second-Year German. II. 3 (3-0). Prerequisite: L 43.

Modern German prose.

L 45. Scientific German. III. 3 (3-0). Prerequisite: A good knowledge of German grammar.

A practical course for those who need to be able to read German technical literature. Practice in reading and translating scientific German.

Mathematics

Requirements in Mathematics

1. All freshmen enrolled in the Division of Agriculture together with such freshmen enrolled in the Division of Science who propose to major in Botany and Plant Pathology or Chemistry are required to take M 10.
 2. All freshmen enrolled in the Division of Home Economics are required to take M 1.
 3. All freshmen enrolled in the Division of Engineering are required to take M 15 or M 15a.
- M 1. Basic Mathematics. III. 5 (5-0).**
Elementary algebra and elementary statistics.
- M 2. Review of Mathematical Fundamentals. I. 1 (5-0).** Required of students who can not demonstrate a knowledge of the basic principles of arithmetic and algebra.
Drill in the fundamental processes of arithmetic and algebra and in mathematical logic.
- M 10. Algebra. II. 5 (5-0).**
- M 11. Trigonometry. I, II. 3 (3-0).**
- M 12. Analytic Geometry. I. 5 (5-0).** Prerequisites: M 10, M 11.
- M 15. Mathematics (Algebra). I. 5 (5-0).** Prerequisites: 1.5 units of high-school algebra, 1 unit of plane geometry, and 0.5 unit of solid geometry.
- M 15a. Mathematics (Algebra). I. 5 (8-0).** For engineering students deficient in high-school algebra.
- M 16. Mathematics (Trigonometry). II. 5 (5-0).** Prerequisite: M 15 or M 15a.
- M 16a. Mathematics (Trigonometry). II. 5 (7-0).** Prerequisite: M 15 or M 15a. For engineering students deficient in high-school solid geometry.
- M 17. Mathematics (Analytics). III. 5 (5-0).** Prerequisite: M 16 or M 16a.
- M 36. Engineering Mathematics (Calculus). I. 4 (4-0).** Prerequisite: M 17.
- M 37. Engineering Mathematics (Calculus). II. 4 (4-0).** Prerequisite: M 36.
- M 38. Engineering Mathematics (Calculus). III. 4 (4-0).** Prerequisite: M 37.
- M 41. Differential Calculus. I. 5 (5-0).** Prerequisite: M 12.
- M 42. Integral Calculus. II. 5 (5-0).** Prerequisite: M 41.
- M 43. Applied Calculus. III. 5 (5-0).** Prerequisite: M 42.

Music

- Mu 3. Fundamental Theory. I. 5 (5-0).**

Development of melodic and rhythmic feeling through reading and dictation. Drill in the rudiments of music. Scales, intervals, triads, chord connections. Harmonization of melodies, basses and original works. Simple keyboard harmony. Work in cadence forms.

- Mu 4. Fundamental Theory. II. 5 (5-0).** Prerequisite: Mu 3. A continuation of Mu 3.
- Mu 5. Fundamental Theory. III. 5 (5-0).** Prerequisite: Mu 3.
Melodic and simple diatonic dictation. Inversions of the dominant seventh chord. Secondary seventh chords. Dominant ninth chords. Diatonic modulation. Assigned melodies and basses; original composition; keyboard harmony.
- Mu 9. Advanced Theory. I. 5 (5-0).** Prerequisite: Mu 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.
- Mu 10. Advanced Theory. II. 5 (5-0).** Prerequisite: Mu 9. Continuation of Mu 9.
Further development of the chromatic element. The augmented sixth chords. Chromatic modulations; keyboard harmony.
- Mu 11. Advanced Theory. III. 5 (5-0).** Prerequisite: Mu 10.
Emphasis on original composition for voice and instrument; accompaniment writing. Contrapuntal devices.
(Courses Mu 3 to Mu 11 include sight singing, ear training, harmony, and keyboard harmony.)
- Mu 15. History of Music. I. 3 (3-0).**
Study of 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. II. 3 (3-0).**
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. III. 3 (3-0).**
The opera from Gluck to Wagner. Effect of Wagner's theories on music to present day. Brahms and "the cause of absolute music." Nationalistic composers, including Tschalkowsky, Dvorak, Sibelius, and Grieg. French Impressionism: Franck, Debussy, Ravel, and others.
- Mu 18. Twentieth Century Music. III. 3 (3-0).** Prerequisites: Mu 11 and Mu 17, or permission of instructor.
Consideration of theories backgrounding Twentieth Century music: atonality, polytonality, tone rows, etc., and a study of the music of the most important composers of this century: Hindemith, Shostakovitch, Schoenberg, Debussy, Ravel, Strawinsky, Prokofieff, Delius, Vaughan-Williams, Bax, Hanson, Barber, Copland, and others.
- Mu 51. Woodwind Class. I. 3 (3-0).**
A course designed to acquaint the student with the problem of tone production, tuning, fingering and care of woodwind instruments. Methods and materials used in the public schools.

Mu 52. Stringed Instrument Class. II. 3 (3-0).

Instruction in the playing of stringed instruments with instruments in the hands of students. Emphasis placed on the problems of public-school music class instruction.

Mu 53. Brass Instrument Class. III. 3 (3-0).

A course designed to acquaint students with problems of tone production, tuning, fingering, and care of brass instruments. Methods and materials used in public schools.

Ed 25. Elementary Music Education. I. 3 (3-0). See Education Section, page 57.**Ed 26. Intermediate Music Education. II. 3 (3-0).** See Education Section, page 57.**Piano. Freshman Year. I, II, III. Four credits each quarter.** Study of scales and arpeggios in various patterns.

Study of Clementi and Kuhlau Sonatinas, Haydn and Mozart Sonatas, easier Chopin works, and Bach inventions.

(Students planning to major in piano must satisfactorily perform for the faculty upon entering the course. Piano majors take two 30-minute private lessons per week and one 1-hour class lesson each week for all 4 years. The class lesson will include all piano majors in the school and will be conducted as a laboratory for the study of piano literature, pedagogy, accompanying, and criticism.)

(For Music Education Majors. I, II, III. Two credits each quarter. One half-hour private lesson per week. Music Education majors must continue piano study until they have passed a satisfactory examination.)

Piano. Sophomore Year. I, II, III. Four credits each quarter.

Study of Mozart and Beethoven Sonatas, Chopin Preludes, Nocturnes and easier Etudes, Bach "Well-Tempered Clavichord," Scarlatti, and modern works of medium difficulty. Further technical work according to student's needs.

Violin. Freshman Year. I, II, III. Four credits each quarter. Two half-hour private lessons per week. Applicants for violin major classification must pass a satisfactory entrance examination.

Study of Kreutzer. Etudes of Frosello and Rode (if necessary). Minimum of three approved compositions must be played by the end of each quarter. Scales: major, minor, three octaves, and chromatic; succession of thirds, sixths and octaves.

(For Music Education Majors. I, II, III. One half-hour private lesson a week. Music Education majors must continue violin study until they have passed satisfactory examination.)

Violin. Sophomore Year. I, II, III. Four credits each quarter. Two half-hour lessons per week.

Continuation of scales, shifting exercises. Styles of bowings. The concerti of Rode, Viotti, de Beriot. Short pieces in lighter forms. Handel sonatas. Minimum of three compositions a quarter must be approved by instructor.

Voice. Freshman Year. I, II, III. Four credits each quarter. Two half-hour private lessons per week. Applicants for voice major classification must pass a satisfactory entrance examination.

Emphasis will be placed on proper posture, breathing, and voice placement with vocalises prescribed to correct vocal defects. Studies in Vaccai and Marchesi. Early Italian songs and arias. A minimum of three approved songs must be prepared for performances by the end of the second and third quarter, showing accomplishments of good diction, intonation, tone placement, and legato.

(For Music Education Majors. I, II, III. Two credits each quarter. One half-hour private lesson per week. Music Education majors must continue voice study until they have passed a satisfactory examination.)

Voice. Sophomore Year. I, II, III. Four credits each quarter. Two half-hour private lessons per week.

Vocal exercises as needed by the individual. Continued study of Italian repertoire together with some English and American songs. A minimum of five approved songs or arias must be prepared by the student for examination at the end of each quarter. Participation in student recitals.

Mu 75. Sight Singing and Ear Training. I. 3 (3-0). Freshman year.

A fundamental course in teaching students to read music at sight. Drills in scales, intervals, and melodic dictation.

Mu 76. Sight Singing and Ear Training. II. 3 (3-0). A continuation of Mu 76.

Mu 77. Appreciation of Music. I, II, III. 3 (3-0).

A non-technical course in the appreciation and enjoyment of music.

Physical Education

PHYSICAL EDUCATION FOR MEN

All men students are required to take two years of physical education, including at least one semester of swimming for those unable to pass the swimming test. All new students will take the regular departmental physical education tests, these data being used for classification purposes. Restricted or remedial programs will be arranged for those of subnormal or defective physique. Practice with the varsity or freshman athletic teams may be substituted for the required work in physical education if departmental approval is secured. Physical education majors will take physical education in addition to freshman athletics; however, they may substitute varsity competition for this requirement in the sophomore year. Physical education tests will be given each term as measures of progress and development.

Fees.—Each student must furnish his own outfit consisting of shirt, pants, supporter, socks, and shoes. He is also required to pay a fee of \$1.50 per quarter.

- PE 1. Physical Education. I. 0.5 (0-2).** Required unless replaced by PE 21.
Swimming, apparatus, track, games, remedial or restricted as indicated by the classification tests.
- PE 2. Physical Education. II. 0.5 (0-2).** Continuation of PE 1. Required unless replaced by PE 22.
- PE 3. Physical Education. III. 0.5 (0-2).** Continuation of PE 2. Required unless replaced by PE 23.
Emphasis given on skills in sports and post-school activities.
- PE 4. Physical Education. I. 0.5 (0-2).**
A variety of activities taught for physiological and recreational values.
- PE 5. Physical Education. II. 0.5 (0-2).** Continuation of PE 4, with some selection on part of the student.
- PE 6. Physical Education. III. 0.5 (0-2).** Continuation of PE 5, with some selection on part of the student.
- PE 35. Personal Hygiene. III. 3 (3-0).**
A study of the factors of healthful living, such as heredity, anatomical, personal habits, physical fitness.
- PE 36. Community Health. III. 3 (3-0).**
A study of water supply, food and milk sanitation, ventilation, sewage disposal, lighting, housing and health agencies.
- PE 90. First Aid. II, III. 2 (2-0).**
A course in the underlying principles and applied techniques of first aid, meeting the requirements for the Standard First Aid Certificate of the American Red Cross.
- PE 115. History and Theory of Recreation. II. 4 (4-0).**
The nature and function of play; history and growth of the recreation movement; modern trends.

PHYSICAL EDUCATION FOR WOMEN

Requirement.—Each student is required to take six quarters of physical education during her college course.

Physical Examination.—Each student is given a complete physical examination to ascertain her fitness for college work and to determine the type of physical activity she may elect in physical education.

Limited Program.—In cases where the findings of the physical examination indicate it would be unwise for a student to participate in the normal program of required physical activities, an adjusted program of suitable activities will be substituted.

- PE 61. First-Year Physical Education. I. 0.5 (0-2).**
Hockey, tennis, archery, golf and recreational sports.
- PE 62. First-Year Physical Education. II. 0.5 (0-2).**
Volleyball, basketball, modern and folk dancing, archery and physical fitness exercises.
- PE 63. First-Year Physical Education. III. 0.5 (0-2).**
Basketball, baseball, modern and folk dancing, archery, golf and physical fitness exercises.
- PE 64. Second-Year Physical Education. I. 0.5 (0-2).** Prerequisites: PE 61 to PE 63 inclusive.

- PE 65. Second-Year Physical Education. II. 0.5 (0-2).** Prerequisites: PE 61 to 63 inclusive.
- PE 66. Second-Year Physical Education. III. 0.5 (0-2).** Prerequisites: PE 61 to PE 63 inclusive.
- PE 67. Elective Physical Education. I. 0.5 (0-2).** Prerequisites: PE 61 to PE 66 inclusive.
- PE 68. Elective Physical Education. II. 0.5 (0-2).** Prerequisites: PE 61 to PE 66 inclusive.
- PE 69. Elective Physical Education. III. 0.5 (0-2).** Prerequisites: PE 61 to 66 inclusive.

Physics

- Ph 1. Introduction to Physical Science. I. 4 (4-0).** Introduces the student to physical science in such a way as to acquaint him with some of the general concepts in the fields of astronomy, physics, meteorology and geology. An attempt is made to help the student learn to appreciate the nature of the universe in which he lives.
- Ph 15. General Physics. III. 5 (3-4).** For Veterinary, Forestry, and Home Economics students.
A one-quarter course covering the principles of mechanics of solids and liquids, heat, magnetism and electricity, sound and light, together with practical applications.
- Ph 20. General Physics. III. 5 (3-4).** Prerequisites: M 10 and M 11. For students in Agriculture, Botany and Industrial Arts.
A course covering the fundamental principles of mechanics and heat with practical applications.
- Ph 21. General Physics. I. 5 (3-4).** Prerequisite: Ph 20. For students in Agriculture, Botany and Industrial Arts. A continuation of Ph 20.
A course covering the fundamental principles of sound and light with practical applications.
- Ph 22. General Physics. II. 5 (3-4).** Prerequisite: Ph 21. For students in Agriculture, Botany and Industrial Arts. A continuation of Ph 21.
A course covering the fundamental principles of magnetism, electricity, and modern physics with practical applications.
- Ph 25. General Physics. III. 5 (3-4).** Prerequisites: M 15 and M 16. For students in Engineering and Chemistry.
A course covering the fundamental principles of mechanics and heat, forming the basis for study of applied science.
- Ph 26. General Physics. I. 5 (3-4).** Prerequisite: Ph 25. For students in Engineering and Chemistry.
A course covering the fundamental principles of sound and light.
- Ph 27. General Physics. II. 5 (3-4).** Prerequisite: Ph 26. For students in Engineering and Chemistry. A continuation of Ph 26.
A course covering the fundamental principles of magnetism, electricity, and modern physics.

VETERINARY MEDICINE

A 4-year professional course is offered by Colorado A & M College which is designed to meet the demands of modern veterinary education. A student entering the first year of the course in veterinary medicine must have completed one full year of acceptable college work. This pre-veterinary year may be taken at the Fort Lewis Branch College.

Pre-Veterinary Medicine Year

The course number before a subject refers to its description. For meanings of abbreviations, see page 26.

		Hours	Quarters and Credits			
		Lec-Lab	I	II	III	
B	14	Plant Identification	1-8	..	5	..
C	1, 3	Inorganic Chemistry	3-0	3	3	..
C	2, 4	Inorganic Chemistry Laboratory.....	0-4	2	2	..
C	5	Inorganic Qualitative Analysis	2-0	..	..	2
C	6	Inorganic Qualitative Analysis Laboratory	0-6	..	..	3
¹ E	1	English Composition Review	3-0	1	..	..
E	2, 3, 4	English Composition	3-0	3	3	2
E	25	Public Speaking	3-0	..	..	3
E	50, 51	Modern Literature	2-0	2	2	..
ES	40	Local Government	2-0	2	..	..
ES	41	State Government	2-0	..	2	..
ES	42	National Government	2-0	..	..	2
EZ	11	Zoology	3-0	3	..	..
EZ	12	Zoology Laboratory	0-4	2	..	..
Ph	15	General Physics	3-4	..	..	5
PE	1, 2, 3	Physical Education	0-2	0.5	0.5	0.5
				17.5	17.5	18.5

Pathology and Bacteriology

PB 21. General Bacteriology. II. 3 (3-0). Prerequisite: One year of Chemistry.

An elementary study of bacteria with emphasis upon their role in everyday life.

PB 22. General Bacteriology Laboratory. II. 2 (0-4).

Elementary techniques and laboratory methods in bacteriology.

Physiology

VP 21. Human Anatomy and Physiology. II. 5 (5-0). Prerequisite: Inorganic chemistry. Required of home economics majors.

A lecture and demonstration course in anatomy and physiology.

VP 30. Physiology of Domestic Animals. III. 3 (3-0). Prerequisite: Organic chemistry. Required of animal husbandry majors.

A sequence of three quarters devoted to the study of the practical aspects of the physiology of farm animals.

¹ To be taken by those showing a deficiency in English.

VOCATIONAL PROGRAM

To provide training for war veterans and others who may be interested in a short and intensely practical course, Fort Lewis has provided a two-year curriculum of vocational training in agriculture or forestry. Veterans who are certified by the Veterans Bureau and youths who do not wish to take a formal college course will be eligible if they have completed high school or can pass a required aptitude test.

The program is designed to be conducted on a four-quarter basis permitting registration the first of January, the first of April, the first of July, and the first of October.

Ample work experience is provided so that the students may obtain maximum application in the courses elected. Much time has been given to the selection of special work in each field to allow students the opportunity of making a complete preparation in the special fields of their choice. Thus, after this program is well established there will be the opportunity for students to specialize in dairying, poultry raising, stock raising, general agriculture, truck gardening, fruit production, cow testing, and other special fields.

Any who are interested should write for the additional materials that are now available for distribution.

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COLORADO STATE INSTITUTIONS OF HIGHER LEARNING

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