Colorado State College Bulletin

FORT LEWIS BRANCH

CATALOG NUMBER
1938-1939

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THE COLORADO STATE COLLEGE

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THE ANNUAL CATALOG

Colorado State College

of Agriculture and Mechanic Arts

Fort Lewis Branch

1938-1939

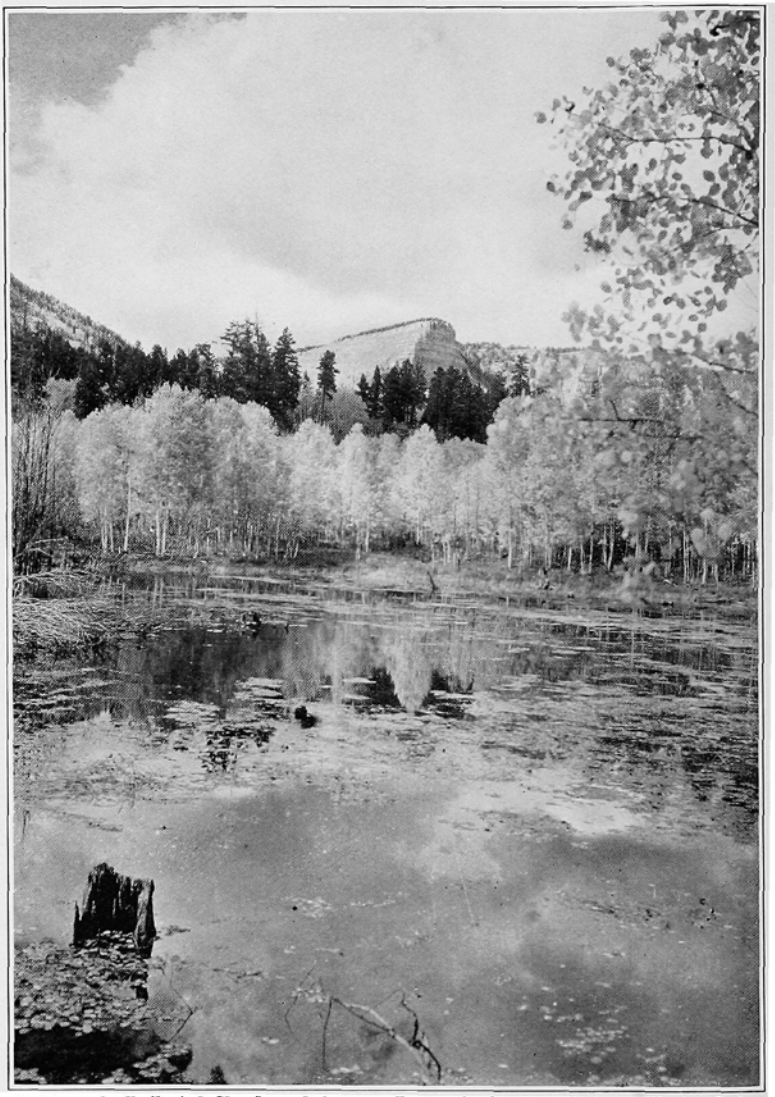
AGRICULTURE HOME ECONOMICS
ENGINEERING EDUCATION
FORESTRY

and

PRE-VETERINARY PRE-LAW
PRE-MEDICAL PRE-DENTAL COURSE

and

Foundation work for other lines of training



Patterns in Reflected Clouds and Autumn Leaves in Shallow Waters—Elcctra Lake

COLLEGE CALENDAR

1938

First Semester

Registration.....Tuesday, September 6

Special examinations for removal of conditions.

Entrance examinations for those who plan to enter from non-accredited high schools.

Regular classes begin.....Wednesday morning, September 7

Colorado Educational Association Meeting in Durango .....Friday and Saturday, October 7 and 8

Thanksgiving vacation begins at 3:45 p. m.....Wednesday, November 23

and ends at 8:00 a. m.....Monday, November 28

Christmas vacation begins at 3:45 p. m.....Friday, December 16

1939

Christmas vacation ends at 8:00 a. m.....Monday, January 2

First semester closes at 3:45 p. m.....Friday, January 20

Second Semester

Registration.....Monday forenoon, January 23

Second semester classes begin at 1:00 p. m.....Monday, January 23

Spring vacation begins at 3:45 p. m.....Friday, March 24

Spring vacation ends at 8:00 a. m.....Monday, April 3

San Juan Basin High-School Senior Day.....Friday, May 5

Second semester closes at 3:45 p. m.....Wednesday, May 31

COLORADO is maintaining a unique institution at Fort Lewis in the San Juan Basin, for the training of its youth. Located in the open country, with modern buildings, good equipment, excellent opportunities for study and recreation, and faculty-student relations conducive to culture, good scholarship, good conduct, and lasting friendships, the school is rendering splendid service.

It merits careful consideration by students who wish to continue their training in English, Mathematics, Modern Languages and the basic sciences leading to majors in Agriculture, Forestry, Engineering, Home Economics, Veterinary Medicine and teaching, and by parents who wish their sons and daughters to receive their first two years of collegiate training in an institution removed from the distractions of the city and possessed of superior facilities for instruction, character building and the development of personality.

Sincerely,

Geo. A. Lory

President, Colorado State College

To the Youth of Colorado:

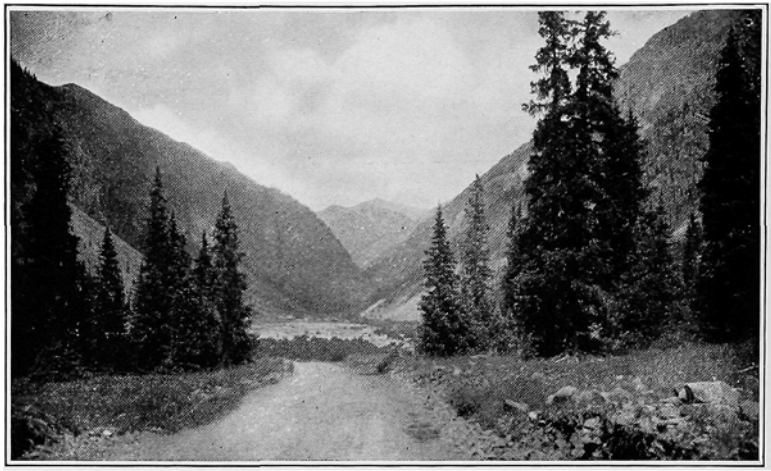
More than ever do we wish to urge the attention of the citizens of the San Juan Region to the fact that the State of Colorado has built up and is maintaining at Fort Lewis equipment and facilities which make it possible for a high-school graduate to get at least two years of strong collegiate training under a faculty of men and women who are not only well trained, but who have the welfare of young people as a first consideration.

Established to serve the youth of Colorado, Fort Lewis offers the courses which are outlined in this catalog at a student expense that is very reasonable. Every young man or woman who is anxious to be well prepared for a life of service will find at Fort Lewis a good place to work with congenial associates who live in a fine, wholesome, collegiate atmosphere.

May we have the privilege and pleasure of meeting you, talking with you about your future educational desires and finally, after you have carefully weighed opportunities, of working with you during your first years of college endeavor?

Sincerely,

E. H. BADER, *Dean.*



The La Plata Valley

THE STATE BOARD OF AGRICULTURE

		Term Expires
Mrs. Mary H. Isham	Brighton	1939
J. W. Goss	Pueblo	1939
Robert F. Rockwell	Paonia	1941
John J. Downey	Cortez	1941
Dewey J. Harmon	Fleming	1943
J. P. McKelvey	LaJara	1943
Thomas J. Warren	Fort Collins	1945
O. E. Webb	Milliken	1945

Governor Teller Ammons, President Charles A. Lory } Ex-Officio

Officers

J. W. Goss ..... President
Robert F. Rockwell ..... Vice-President
L. M. Taylor ..... Secretary-Treasurer

Executive Committee

J. W. Goss — Robert F. Rockwell — Thomas J. Warren

FORT LEWIS COLLEGE FACULTY

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) ..... President

Bader, Ernest H., B.S. (Colorado State College), M.S. (University of Colorado) ..... Dean

Brown, Marian, B.S. (Colorado State College), Advanced work for M.S. (Colorado State College and Iowa State College) ..... Home Economics

Custer, Brooks, O., B.Mus. (University of Colorado), Graduate work for M.A. (University of Colorado) ..... Music and Library

Good, Margaret, A.B. (University of Denver), Advanced work for M.A. (Northwestern University, Denver University, University of Colorado, and Colorado State College) ..... House Mother at Snyder Hall and Physical Education

Jones, W. Norton, Jr., B.A. (Hendrix College, Arkansas), M.A. and Ph.D. (Johns Hopkins University) ..... Chemistry and French

Knight, L. Fay, B.S., M.A. (University of Missouri), Advanced work for Ph.D. (Peabody College for Teachers, University of Kansas and University of Iowa) ..... English Literature and Dramatics

Koonce, Dwight, B.S. (Colorado State College), M.S. (Utah State College of Agriculture) ..... Agronomy

Lindon, Paul H., B.S. (Colorado State College), Advanced work for M.A. (University of Pittsburgh) ..... Engineering Shop

Longenbaugh, Harry L., B.S. (Colorado State College) ..... Animal Husbandry

McLain, Charles W., B.S., M.S. (Colorado State College) ..... Vice-Dean and Coach

Moinat, Arthur D., B.S. (Colorado State College), M.S. (Oregon State College), Ph.D. (University of Illinois), Graduate study (University of Chicago) ..... Botany and Agriculture

O'Brien, Irene, B.S. (State Teachers' College, Maryville, Missouri), M.A. (University of Missouri), Advanced work for Ph.D. (Peabody College for Teachers, Nashville) ..... Education, Dean of Women

Pollock, Floyd A., B.A. (Baker University, Missouri), M.S. (Colorado State College), Graduate study for Ph.D. (University of Southern California) ..... Social Science

Smith, Raymond R., B.S., M.S. (University of Colorado), Graduate study for Ph.D. (Denver University, University of Michigan, University of Southern California) ..... Mathematics and Engineering

Fort Lewis From the Air

COLORADO STATE COLLEGE
of Agriculture and Mechanic Arts
FORT LEWIS BRANCH

The Fort Lewis College is a part of the land-grant college system of Colorado established through the grant of 6,300 acres of the former Fort Lewis Military Reservation and Indian School with all buildings and fixed equipment, to Colorado, by act of Congress approved April 4, 1910. The provisions of this act were accepted by the Eighteenth General Assembly of the state, in an act approved January 25, 1911. This act provides that the "lands, buildings and equipment shall thereafter become a part of the Agricultural College system of the state, and shall be controlled and managed under the same laws, rules and regulations, by the State Board of Agriculture, as the Agricultural College at Fort Collins, provided that Indian pupils shall at all times be admitted to such school free of charge for tuition, and on terms of equality with white pupils."

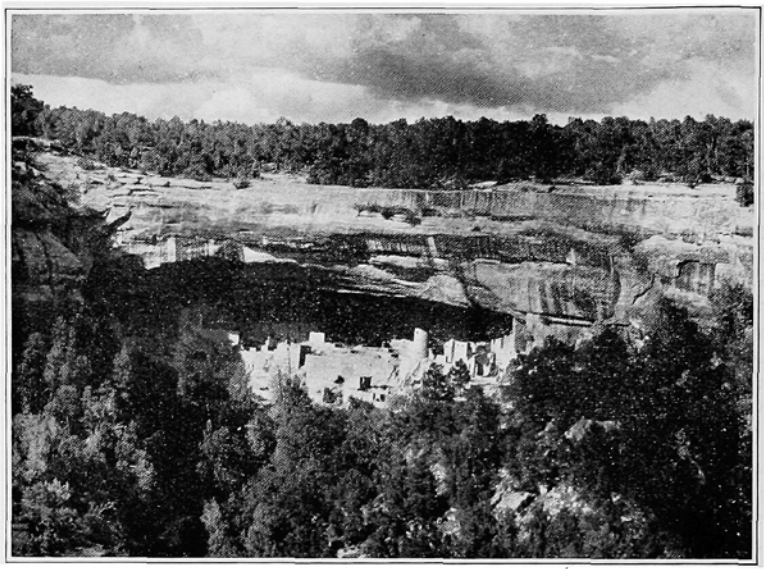
Situated on the lower slopes of the La Plata Mountains, which fall away to the vast Navajo Desert of New Mexico, Fort Lewis offers a wide variety of scenery and a considerable choice of sports for those who love the out-of-doors. Likewise, Fort Lewis is situated almost in the center of the richest archaeological area in the United States and within a few hours' drive of several of the pueblos of prehistoric peoples of the Southwest.

Spring with its rich greens and fall resplendent in a mantle of brown, green and gold, entice the hiker and tennis player, while winter shrouded in white and under brilliant sun affords skaters and skiers their opportunity.

Fort Lewis has several concrete tennis courts, three ski courses of varying degrees of difficulty, and ponds for skaters. Trips to the nearby mountains, hikes, and other enterprises offer variety in outdoor activities.

The student of Nature, may, within the span of a few miles, transport himself from the Alpine region of the rugged La Platas to the Sonora region of the desert where abound cacti, yucca and other characteristic desert flora. If his interest turns to geology, then in the confines of the San Juan Basin, he may find examples of practically all of the geological formations, mines of many kinds and types, and a number of geological curiosities such as the famed natural bridges just over the line in the White Canon country of southeastern Utah, the no less renowned Shiprock of northwestern New Mexico, and within a day's drive the incomparable Grand Canon of the Colorado.

Location Adds to Interest.—For those interested in American archaeology, Fort Lewis has an ideal location. Some thirty miles to the west of it lies Mesa Verde National Park with its great collection of well-preserved dwellings of the golden period of Pueblo culture, as well as numerous sites dating from earlier periods of culture. To the south lies the Aztec group of ruins noted for its great kiva and the ruins of the Chaco Canyon region, most notable of which is Pueblo Bonita, the largest communal dwelling yet found and the largest apartment house erected in this



Cliff Palace—Mesa Verde National Park

country until the 1880's. A day's drive to the southeast lie the ruins and modern pueblos of the Rio Grande region; to the south lies Zuni, the modern descendant of Coronado's Seven Cities of Cibola; and a day's drive to the southwest lie the ruins of the Kayenta and Little Colorado regions and the modern pueblos of Hopiland, the Tusayan of the conquistadores. Numerous unexcavated cities dating from a variety of culture periods await exploration.

The charm of the location of the college is manifest at all times. To stand at sunset on the hills which flank the campus as the orange in the west subsides into pink, and to watch the snow-capped peaks of the La Platas glow in radiance and the changing light of tier on tier of mesas shifting from lavenders to the blues—to see and feel these wonders of Nature bring one the spell of the Southwest in a never to be forgotten experience.

HISTORY OF FORT LEWIS

No institution in the state of Colorado can boast of a more glamorous and a more romantic historical background than Fort Lewis College. The story of this institution includes pictures of nomad Indian life, the heroic days of the cowboy, the trials and the hardihood of early pioneers, dashing young graduates of West Point, as well as many officers of Civil War fame.

The Fort came into existence in 1882 as a result of the warfare between the Indians and the whites and was abandoned as a military post in 1892. Many of the buildings of the military post are now a part of the Fort Lewis College campus.

Following its close as a military post, Fort Lewis was used as an Indian school to educate the children of the very Indians for protection against whom it had been built. When Indian schools were established on the reservations, Fort Lewis was discontinued, closing its doors in 1910.

After untiring effort on the part of the citizens of the San Juan Basin, Congressman John Martin and Senator Simon Guggenheim, a clause was put in the Federal Indian Appropriation Bill of April 4, 1910, which gave Fort Lewis to the State of Colorado providing a state school be established and maintained on the property. The grant was accepted by the state, January 25, 1911, and the Fort Lewis School made a part of the Agricultural College system of the state. Dr. Chas. A. Lory, president of the Colorado State College, was made president of the school, and Professor G. F. Snyder, principal, with secondary courses in Agriculture, Mechanic Arts and Home Economics being established.

Thirty-four high-school students enrolled for work in October, 1911. College courses were offered in 1927 and all high-school courses discontinued in 1933.

College of The San Juan Basin.—Fort Lewis is truly the college of the San Juan Basin. In 1925, over one-thousand parents and residents of the San Juan Basin signed a petition requesting the Twenty-sixth General Assembly to establish a college at Fort Lewis, in order that the young people of the Basin might attend a fully accredited college near home.

In the fall of 1927, Fort Lewis opened its doors for college work, and twenty-seven freshmen enrolled—the first of hundreds of young people of the Southwest to receive training at the college.

The college departments have had a substantial growth, the institution having a one-hundred percent increase in enrollment in the last six years.

The college has sent many students to the senior colleges of the state for their last two years of college work. These students have demonstrated their ability to carry their work with credit and have won recognition of the high standard of scholarship maintained at Fort Lewis. The good work being done for the community as well as for the individual student has won the support and appreciation of the people of the Basin.

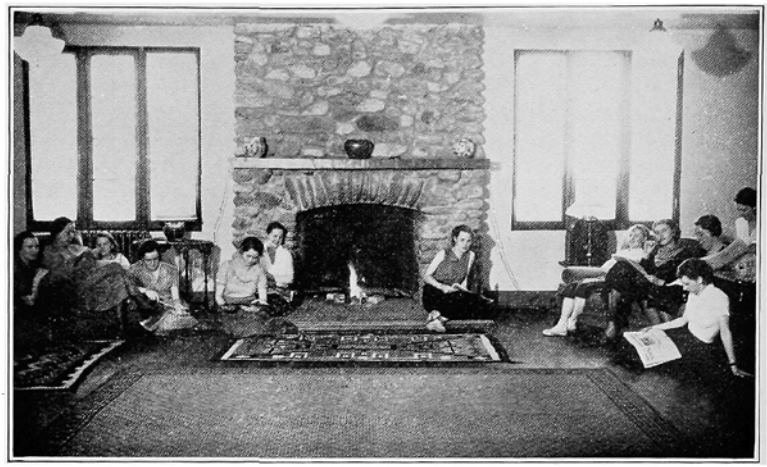
The City of Durango

Because of the proximity of the Fort Lewis Campus to Durango, mention should be made of this thriving city. Durango lies in the valley of the Rio de las Animas and has a population of some 5,500. In addition to being the county seat of La Plata County, it is the principal city of the San Juan Basin, the region surrounding the so-called "Four Corners."

Arrangements are made by the College so that students may be transported to Durango each week to take advantage of facilities afforded there.

Durango is a city of churches and transportation is available for those who desire to attend services. Special trips are arranged for students who wish to "go to town."

The sympathetic interest and cordial support of the citizens, business interests and organizations of Durango and of the other towns and communities of the San Juan Basin, are greatly appreciated by students, faculty and governing board.



Living Room in Lory Hall

General Information

To the young man or woman who is anxious for college training, the following may be of interest.

Fort Lewis is a co-educational boarding school, offering two years of work in Agriculture, Engineering, Home Economics and Rural Education. Many students have found it possible to select subjects for basic training in other fields of study.

For those who are interested in education, a training school embracing work from the first grade to the high school is maintained, through cooperation with the Hesperus School District.

The campus is spacious and in a natural setting that adds much to the general happiness, and gives unexcelled opportunities for a wide variety of outdoor activities. The buildings are modern and well equipped. The students who come to Fort Lewis have excellent equipment, congenial surroundings and opportunity to secure two years of good college work at a minimum of expense.

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 thirty rooms, twenty-six 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 recreation hour for dancing is reserved here each week.

The residents of the Hall are also permitted to use the gas-equipped kitchenette, and the living room in the Dean of Women's apartment where newspapers and current magazines are kept.

Snyder Hall for Men.—The large recreation room is a source of pleasure to all residents. A piano and radio, leather couch, comfortable rockers, sturdy wooden chairs and library tables comprise the furnishings in the room. For entertainment, there are games, daily newspapers and magazines. This clubroom, with its low-beamed ceiling, its rugged fireplace and pictures of athletic heroes, is a popular place for recreation.

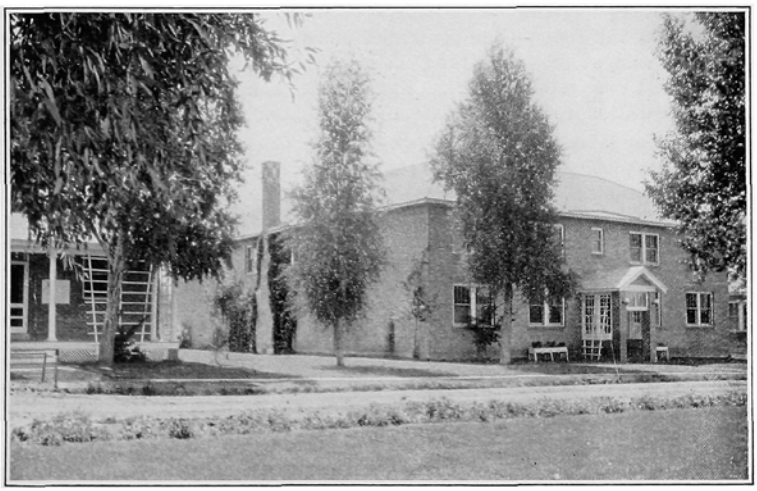
The bedrooms are decorated in cream and tan. Each double bedroom has two sleeping alcoves and is furnished with dresser, study tables and chairs.

The large hall is used as a lounge. The large south window makes a sunny pleasant place to sit and talk. In this hall also are flowering plants, which add to the homelike atmosphere of the dormitory.

Museum.—For several years the organization of a museum has been discussed. Biological materials have been collected and are displayed in the Biological laboratory. This year a large private collection of archaeological material, consisting of fine specimens of Basket-maker III, and Pueblo II and III, pottery and artifacts, has been loaned to the institution and is on display.

The San Juan Basin offers unlimited amounts of material in the geological, biological and archaeological fields, and in time the Fort Lewis Museum should have an outstanding collection.

Directions for All Students.—I. A transcript of the high-school record must be submitted before the time of registration. It is to the student's advantage to have this record forwarded as soon after high-school graduation as possible.



Snyder Hall for Men

II. Fifteen units and graduation from high school are required for admission. The student must present two units in mathematics (algebra, geometry) and three units in English.

III. Letters of inquiry will be answered promptly.

IV. Upon arrival on the campus a student should report to the Dean in the Office Building.

V. An additional fee of $5.00 is charged for late registration. (See calendar.)

VI. Attendance in classes is required from the date of the first scheduled recitation.

VII. After the student's registration is completed the schedule cannot be changed, except by permission of the Registrar. Students may not drop subjects of their own accord.

VIII. Two weeks are given in which to pay fees. Students not paying during first two weeks of either semester will be denied attendance at all classes. Students may be reinstated by paying regular semester fees and a reinstatement fee of $2.00.

IX. Students may not register later than two weeks after opening of either semester.

X. After registration a fee of $1.00 is charged for changes in registration requested by the student. If a student desires to drop a subject after two weeks from the time set for registration during any semester, such a drop counts as a failure if the student is not passing in the subject; otherwise the name of the subject is merely erased from the registration record when dropped.

XI. Classes in elective subjects may be formed for four or more.

College Expenses

First Semester

*Board and room—2 in room, per month	$26.00
Non-resident fee, no refund	12.50
Tuition, no refund	15.00
Registration fee, no refund	5.00
Fees for laboratory courses:	
Applied Design	1.00
Botany	1.00
Chemistry	5.00
Clothing II	2.00
Elementary Arts and Handicraft	2.00
Field Work	2.00
Pattern Making	3.00
Physics	3.00
General Methods and Management	2.00
Zoology	2.00
Deposits:	
Breakage deposit	5.00
Key deposit	1.00
Property deposit	5.00

Student Fees:

Athletic	3.00
Class	.75
Dormitory	.50
Individual use of radio per month	1.00
Student Activity	2.00
Student Publication	.75

Other Fees:

Change in registration	1.00
Failure to pay fees when due	2.00
Late registration	5.00

Second Semester

*Board and room—2 in room, per month	$26.00
Non-resident fee, no refund	12.50
Tuition, no refund	15.00
Registration fee, no refund	5.00

Fees for laboratory courses:

Botany	1.00
Chemistry	5.00
Clothing	2.00
Farm and Home Mechanics	2.00
Forge and Welding	4.00
Observation and Student Teaching	2.00
Physics	3.00
Plant Physiology	2.00
Quantitative Analyses	6.00
Selection and Preparation of Foods	5.00
Soils	3.00

Student Fees:

Annual	3.00
Athletic	3.00
Class	.75
Dormitory	.50
Individual use of radio per month	1.00
Student Activity	2.00
Student publication	.75

Other Fees:

Change in registration	1.00
Failure to pay fees when due	2.00
Late registration	5.00

None of the above fees cover transportation, hospital services, medicines, bandages, extra lights, power, laundry, use of typewriters, etc.

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*There is no reduction in board for an absence of fewer than four days. Board, room and other charges are due on the first day of each month. Failure to pay board by the fifth of the month will necessitate an additional charge of 1 percent a month until paid.

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 1. These blanks are available at the high-school principal's office and should be sent in as soon as possible after high-school graduation. In every case the application should reach the registrar's office in time for the applicant to be notified whether or not 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		
Algebra	1	1½
Geometry	1	1
Solid Geometry		½
Science		
Physics		1
Physical or biological		2
Electives	10	6
	15	15

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.

It is recommended that students, in their high-school work, include 2 years of history, and 2 years of science. Of the 10 elective units permitted, not more than 6 may be presented in vocational subjects. Any student whose high-school preparation does not meet the above requirements may make a special application to the Executive Committee of the faculty, who will consider each application upon its merits. Students over 25 years of age may be granted conditional entrance to college. Students from unaccredited high schools may be required to pass one of the standard college-entrance tests. Students entering college without work in history will be expected to take such in college.

Student Labor

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.

The National Youth Administration has also been assisting a good many students with part-time work.

*Effective September, 1939. Prior to this date engineering students will be admitted with the units listed for other divisions.

Students Building a Bridge

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 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 classes 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 and health fees for certain state institutions, nor will they be honored in the professional schools of Law, Medicine, and Nursing of the University of Colorado.)

3. Each scholarship is awarded for one year only. To keep the scholarship in force the student must maintain a "C" average during each term of the freshman year. He must be in the upper 25 percent of the freshman class to be awarded the scholarship for the sophomore year. He must rank in the upper 25 percent of his class during each term of the sophomore year to retain the scholarship for that year.

4. Each state institution of higher learning will set up each year beginning in 1938 a number of scholarships open to competition for all students above the sophomore year.

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 are not valid during summer sessions.

7. A scholarship, to be honored must be used the fall term next following its issuance.

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

Note: The 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 may 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. In order to qualify for such scholarships, the student must have a record for good scholarship, for general activities, and hold promise of good college work and leadership. In scholastic standing he must be in the upper third of his high-school class. This scholarship has the same value as the Joint Honor Scholarship.

This Recognition of Merit Scholarship is good for one year, but can be extended for another year if the student has maintained a scholastic standard that places him in the upper third of his class, and if he is recommended for continuation for another year by the committee on scholarships.

Credits, Grades and Quality Points

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 a semester.

Grades.—The lowest passing grade is D. All students who make a standing of F will be considered failed, and must take such subjects again in class. Those making a standing of E will be considered conditioned and will be allowed one special examination before the subject is taught again, in which they may try for a passing grade. In cases of studies extending over more than one semester, the student, if he has a grade of E, may be allowed to continue with his class, but finally must make a grade of D in one special examination in each semester's work. If his average is below E at the end of a semester he will be dropped from the class.

There is also a grade of I—Incomplete—a temporary grade for work of satisfactory quality, but not completed because of unavoidable absences, with same conditions for clearing as for E.

An "incomplete" or "condition" not cleared before the subject is taught again will automatically become a "failure" and the subject must be repeated in class.

Any student who shall have a semester standing of "A" may be exempted from examination, and in that case his class standing shall be his semester average.

Quality Points.—In order to encourage students to do the best work of which they are capable with a limited number of credit hours, rather than undertake to carry a larger number of credit hours with a lower grade, the faculty considers not only the number of hours a student takes, but the grades received in the different subjects.

In order to do entire justice to the needs of the students, instruction is adapted to the students of average ability. Those who will devote their best efforts and do superior work, will not only learn more but they will receive recognition for the same in quality points.

The grades and quality points given therefore are as follows:

A—Excellent (93 to 100)—3 quality points for each semester credit.
B—Good (85 to 92)—2 quality points for each semester credit.
C—Lowest satisfactory grade (77 to 84)—1 quality point for each semester credit.
D—Passing (70 to 76)—no quality points.
E—Condition or incomplete (temporary grade) (60 to 69)—minus ½ quality point for each semester credit.
F—Failure (below 60)—minus 1 quality point for each semester credit.

Quality Points for Assemblies.—Quality points for attendance at assemblies shall be as follows: A attendance (93-100 percent) shall receive ¾ quality point each semester; B attendance (85-92 percent) shall receive ½ quality point each semester; C attendance (77-84 percent) shall receive ¼ quality point each semester; D attendance (70-76 percent) shall receive no quality point a semester; and E attendance (60-69 percent) shall be subject to discipline.

"Students with not to exceed one absence a semester will be graded A, 2 graded B; 3—C; 4—D; 5—subject to discipline.

The first-year students meeting in General Assembly twice and in Freshman assembly twice each month—for them, A attendance (93-100 percent) shall receive 1½ quality points each semester; B attendance (85-92 percent), 1 quality point each semester; C attendance (77-84 percent), ½ quality point each semester; D attendance (70-76 percent), no quality point each semester; and E attendance (60-69 percent) shall be subject to discipline.

Under this system a student with A attendance at general assembly, for 4 years, would receive 7½ quality points; with B attendance, 5 quality points; and with C attendance 2½ quality points.

Absences and Excuses

1. Students are expected to attend all classes for which they are regularly registered.
2. All work missed by students shall be made up at the option of the instructor.
3. Unexcused absences will be counted as zero for the exercise missed.
4. Excuses will be granted only in case of protracted illness or extended trips on strictly college activities.
5. All other absences will be counted as unexcused.

Courses Offered

Since Fort Lewis is a branch of the Colorado State College, students may take the first two years of Agriculture, Forestry, Engineering, Home Economics and Education. By selecting basic subjects one may obtain one or two years of pre-medical, pre-dental, pre-law, and foundation work for Business Administration, Journalism, Pharmacy and other courses. When preparing for any of the last named it is advisable for the student to decide upon the institution where the course will probably be completed and plan his course to fit the requirements of the college or university of his choice.

The basic course in agriculture, which is outlined here, offers fundamental work in the various phases of agriculture, preparing the student for specialization during the junior and senior years in agronomy, horticulture, animal husbandry, forestry or agricultural education. Many young men, already provided with considerable practical experience on farm or ranch may find that the work of the agricultural division will prepare them for valuable service in agriculture.

Graduates from this division of the college become teachers of agriculture or related subjects, specialists and research men in agriculture, fieldmen for processing companies, county extension agents, or progressive farmers and leaders in communities in which they live.

Scheme for Numbering and Lettering

The abbreviations for the different courses are as follows:

Agronomy	Ag	General Science	GS
Animal Husbandry	AH	Home Economics	HE
Botany	B	Horticulture	H
Chemistry	C	Language	L
Civil and Irrigation Engineering	CE	Mathematics	M
Electrical Engineering	EE	Mechanical Engineering	ME
Economics, Sociology and History	ES	Physical Education	PE
Entomology and Zoology	EZ	Physics	Ph
English	E	Physiology	VP
Forestry	F	Education	Ed
		Music	Mu

Course in Agriculture

The number before a subject refers to its description; the number after it refers to credits.

Freshman Year

First Semester			Second Semester		
E2	English Composition	3	E3	English Composition	3
C1	Inorganic Chemistry	3	C3	Inorganic Chemistry	3
C2	Inorganic Chemistry Laboratory	2	C4	Inorganic Chemistry Laboratory	2
B1	General Botany	2	B3	General Botany	2
B2	General Botany Laboratory	1	B4	General Botany Laboratory	1
PE1	Physical Education	0.5	PE2	Physical Education	0.5
M2	Algebra	5	AH1	Judging Market Types	(2)
	Elective			or	
ME1	Wood Work	1	M3	Plane Trigonometry	2
			EZ4	Elementary Entomology	3
				Elective	
			ME3	Forge and Welding	1

Sophomore Year

First Semester			Second Semester		
E51	Life in Literature	2	C7	Organic Chemistry	3
C5	Organic Chemistry	3	C8	Organic Chemistry Laboratory	2
C6	Organic Chemistry Laboratory	2	PE4	Physical Education	0.5
PE3	Physical Education	0.5	Ag2	Soils	3
EZ11	Zoology	3	Ag4	Soils Laboratory	2
EZ12	Zoology Laboratory	1.5	H1	General Horticulture	3
Ag31	Principles of Genetics	2	ES3	Economics	3
B16	Plant Classification	3	E25	Public Speaking	2
	or				
AH2	Judging Purebred Livestock	(2)			

Course in Forestry

The number before a subject refers to its description; the number after it refers to credits.

Freshman Year

First Semester			Second Semester		
E2	English Composition	3	E3	English Composition	3
C1	Inorganic Chemistry	3	C3	Inorganic Chemistry	3
C2	Inorganic Chemistry Laboratory	2	C4	Inorganic Chemistry Laboratory	2
B1	General Botany	2	B3	General Botany	2
B2	General Botany Laboratory	1	B4	General Botany Laboratory	1
PE1	Physical Education	0.5	PE2	Physical Education	0.5
M2	Algebra	5	EZ4	Elementary Entomology	3
	Elective		M3	Plane Trigonometry	2
ME1	Wood Work	1		Elective	
			ME3	Forge and Welding	1

Sophomore Year

First Semester			Second Semester		
Ph5	Physics	3	E25	Public Speaking	2
Ph6	Physics Laboratory	2	Ag2	Soils	3
C5	Organic Chemistry	3	Ag4	Soils Laboratory	2
C6	Organic Chemistry Laboratory	2	PE4	Physical Education	0.5
PE3	Physical Education	0.5	ES3	Economics	3
B16	Plant Classification	3	E52	Life in Literature	2
CE1	Surveying	3	F22	Topographic Mapping	2
CE2	Field Work	1	B13	Plant Anatomy	3

Course in Civil Irrigation, Electrical and Mechanical Engineering

The number before a subject refers to its description; the number after it refers to credits.

Freshman Year

First Semester			Second Semester		
E2	English Composition	3	E3	English Composition	3
C1	Inorganic Chemistry	3	C3	Inorganic Chemistry	3
C2	Inorganic Chemistry Laboratory	2	C4	Inorganic Chemistry Laboratory	2
PE1	Physical Education	0.5	PE2	Physical Education	0.5
ME20	Mechanical Drawing	2	ME21	Mechanical Drawing	2
M4	Mathematics for Engineers	5	ME4	Forge and Welding	1
ME2	Pattern Making	1	E25	Public Speaking	2
			M6	Mathematics for Engineers	5

Sophomore Year

First Semester			Second Semester		
M21	Mathematics for Engineers	4	M26	Mathematics for Engineers	4
Ph5	Physics	3	Ph9	Physics	3
Ph6	Physics Laboratory	2	Ph10	Physics Laboratory	2
PE3	Physical Education	0.5	PE4	Physical Education	0.5
ME22	Descriptive Geometry	2	ME28	Theoretical Mechanics	3
CE1	Surveying	3	CE13	Higher Surveying	3
CE2	Field Work	1	CE14	Surveying Field Work	2
CE35	Drainage	2	ES3	Economics	3
	or			or	
C51	Elementary Geology	3	ME24	Mechanism	4

Course in Home Economics

The number before a subject refers to its description; the number after it refers to credits.

Freshman Year

First Semester			Second Semester		
E2	English	3	E3	English	3
C1	Inorganic Chemistry	3	C3	Inorganic Chemistry	3
C2	Inorganic Chemistry Laboratory	2	C4	Inorganic Chemistry Laboratory	2
PE51	Physical Education	0.5	PE52	Physical Education	0.5
M2	Algebra	5	HE16	Textiles and Clothing	3
HE1	Color and Design	2	VP22	Human Anatomy and Physiology	5
HE01	Orientation	(2)			
	or				
E51	Life in Literature	2			

Sophomore Year

First Semester			Second Semester		
C5	Organic Chemistry	3	C7	Organic Chemistry	3
C6	Organic Laboratory	2	C8	Organic Laboratory	2
L1	French		L2	French	
	or			or	
L15	German	5	L16	German	5
PE53	Physical Education	0.5	HE2	Advanced Design	2
B1	General Botany	2	HE30	Food Selection and Preparation	5
B2	General Botany Laboratory	1	PE54	Physical Education	0.5
HE17	Costume Design and Construction	5			

Course in Education

First Year

First Semester			Second Semester		
E2	English Composition	3	E3	English Composition	3
Sc1	Introduction to Biological Science	3	ES90	Government	3
Mu1	Music Fundamentals	2	MuT63	Sight Singing and Ear Training	2
Ed4	Introduction to Education	3	PE50	Personal and Community Health	3
Ed10	General Psychology	3	ES86	World History	3
ES85	World History	3	PE52	Physical Education	0.5
PE51	Physical Education	0.5	Ag1	General Agriculture for Teachers	3

Second Year

First Semester			Second Semester		
Ed9	General Methods and Management	5	Ed19	Observation and Student Teaching	5
Sc2	Introduction to Physical Science	4	Ed8	Teaching the Fine Arts	3
ES83	American History	3	ES84	American History	3
PE53	Physical Education	0.5	PE54	Physical Education	0.5
Ed105	Educational Psychology	3	Ed12	Teaching Health and Physical Education	2
Art1	Elementary Arts and Handicraft	2	ME5	Farm and Home Mechanics	2
			Mu2	Music Appreciation	2

Third Year

First Semester			Second Semester		
E51	Life in Literature	2	Ed18	Teaching Social Studies	3
Ed16	Teaching Science	3	E52	Life in Literature	2
ES13	World Geography	3	ES82	Colorado History, Geography and School Law	3
Ed14	Teaching Language Arts	3	Art2	Art Appreciation	2
HE1	Color and Design		E25	Public Speaking	2
	or		C3 and C4 Inorganic Chemistry		
E26	Public Discussion	2		or	
C1 and C2 Inorganic Chemistry			HE19	Dietetics for the Home	
	or			or	
M2	Algebra		E7	Functional English	
	or			and	
ES50	Sociology		HE16	Textiles and Clothing	
	or			or	
C51	Elementary Geology		EZ4	Entomology	
	and			or	
E8	Journalistic Writing	5	H1	Horticulture	5

Journalism and Business Courses

Those who are pursuing pre-journalism and pre-business courses should substitute subjects from the following list to take the place of the educational subjects given in the above course.

The requirements of the University of Colorado are covered in the education course and the following electives: Botany, B1, B2, B3, B4, 6 hrs.; Zoology, EZ11, EZ12, 4.5 hrs.; Chemistry, C1, C2, 5 hrs.; C3, C4, 5 hrs.; C5, C6, 5 hrs.; C7, C8, 5 hrs.; Algebra, M2, 5 hrs; Trigonometry, M3, 2 hrs.; Literature, E51, E 52, E53, each 2 hrs.; Sociology, ES50, 5 hrs.; Economics, ES3, 3 hrs.; Public Speaking, E 25, 2 hrs.; Public Discussion, E26, 2 hrs.; French, L1, 5 hrs.; L2, 5 hrs.; German, L15, 5 hrs.; Personal and Community Health, PE50, 3 hrs.; Music, 4 hrs.; Journalistic Writing, E8, 2 hrs.; Journalistic Writing, E9, 2 hrs.

Classes will not be formed for fewer than four students.

AGRICULTURE

Ag1.—Agriculture for Rural Teachers.—Required in course in Education, first year. Three hours attendance, three credits. Designed to emphasize significant facts of the field of agriculture that are of especial importance to the rural child and which serve to make him a better rural citizen. Involves economic and social relationships.

Agronomy

Ag2.—Soils.—Required in courses in Agriculture and Forestry, sophomore year. Three hours attendance, three credits. A study of the principles which underlie the origin of soils, their physics, chemistry and biology; the relation of soil texture, structure, and organic matter to moisture, tillage and fertility; relation of the physical and chemical properties to cultural and irrigation practices; alkali soils and their correction; soil colloids and organic matter; soil micro-organisms; the relation of these factors of soil science to crop production and practical management in arid and semi-arid climates.

Ag4.—Soils Laboratory.—Accompanies Ag2. Four hours attendance, two credits. A study of the physical properties of the soil, moisture relations, and elementary fertility analysis.

Ag31.—Principles of Genetics.—Required in course in Agriculture, sophomore year. Two hours attendance, two credits. 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.

Animal Husbandry

AH1.—Judging Market Types.—Alternative in Agriculture, freshman year. Six hours attendance, two credits. Score card and ring judging of various grades of commercial livestock.

AH2.—Judging Purebred Livestock. — Alternative in Agriculture, sophomore year. Six hours attendance, two credits. Prerequisite: AH1. Comparative judging of purebred cattle, horses, sheep and swine.

Horticulture

H1.—General Horticulture.—Required in course in Agriculture, sophomore year. Three hours attendance, three credits. Designed to meet the needs of students looking forward to general horticulture, county agent work, instruction in secondary or consolidated schools, etc. Subjects considered: Plant propagation, the principles underlying the culture and marketing of horticultural crops. Laboratory work in propagation of plants, making and care of hotbeds and cold frames.

Forestry

F22.—Topographic Mapping.—Four hours attendance, two credits. Office and field work. Logical contouring, coloring types, enlarging, reducing maps, use of planimeter.

One of the Horticulture Laboratories

EDUCATION

Ed4.—Introduction to Education.—Required in course in Education, freshman year. Three hours attendance, three credits. 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.

Ed8.—Teaching the Fine Arts.—Required in the course in education, second year. Three hours attendance, three credits. 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.

Ed9.—General Methods and Management.—Required in course in Education, second year. Five hours attendance, five credits. 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 school. Type units of work are written and used in elementary school. Practical applications are made of new projects and methods of rural and elementary teaching. Fee, $2.00.

Ed10.—General Psychology. — Required in course in Education, freshman year. Three hours attendance, three credits. An introductory survey of the essential facts and fundamental laws of behavior. This course is a basis for educational psychology or other education courses.

The course has practical value for those who are interested in other than the education course.

Ed12.—Teaching Health and Physical Education.—Open to second-year students in Education. Two hours attendance, two credits. Especially designed to study and present units for the teaching of health. Much time will also be given to the study of play-ground activities as health and physical-education problems.

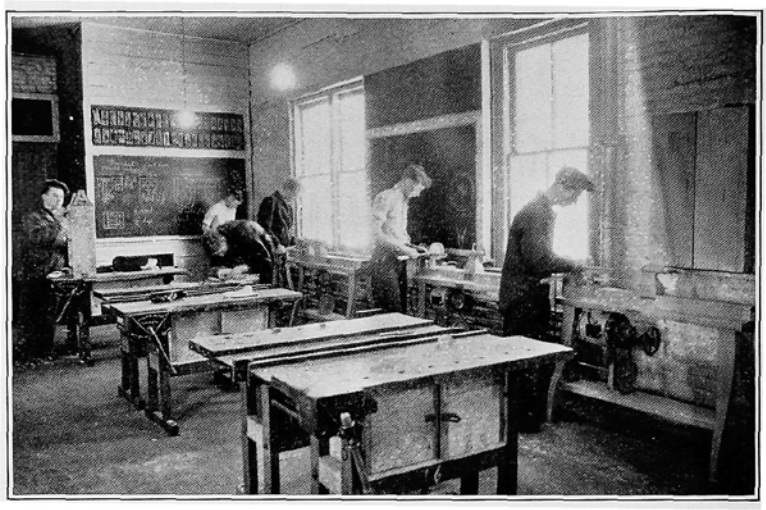
Ed14.—Teaching Language Arts.—This course may be taken by second or third-year Education students. Three hours attendance, three credits. A comprehensive study of the experimental studies in reading methods, their results, and their application to pupil needs in reading will be made. Scientific methods of teaching reading will be studied and tried. The state course of study in reading will be used as one text in this course. The course will lay emphasis on diagnosis and remedial teaching.

Ed16.—Teaching Science.—This course is open to third-year students in Education. Three hours attendance, three credits. 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.

Ed18.—Teaching Social Studies.—Three hours attendance, three credits. 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.

Ed19.—Observation and Student Teaching.—Required in course in Education, second year. Five hours attendance, five credits. Observa-

The Practice School for Teacher Training



In the Wood Working Shop

tion 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. Students are directed in their practice teaching by the instructor and by the regular teachers. Fee, $2.00.

Ed105.—Educational Psychology.—Required in course in Education, second year. Three hours attendance, three credits. Principles of psychology are applied to teaching procedures. Class procedures are used as type studies. Laws of learning as psychologically applied at any elementary grade level are studied. Changes in teaching procedures as a result of scientific studies in psychology are studied. All who expect to teach should take this course as a continuation of Ed10.

ART

Art1.—Elementary Arts and Handicraft.—Two hours attendance, two credits. This course is offered to the second-year students in Education. An effort will be made to make the state course of study in art a practical teachable course. It will be the aim to use materials which are available in any community.

Art2.—Art Appreciation.—Two hours attendance, two credits. The aim of this course will be an appreciation of the beauties about us, nature, poetry, sculpture, crafts, and the masterpieces in painting. An effort will be made to give the student such help as will enable him to lead the child to greater appreciation in these fields.

ENGINEERING

CE1.—Surveying.—Required in courses in Forestry and Engineering, sophomore year. Three hours attendance, three credits. Prerequisite: Trigonometry. This course deals with the principles underlying the practice of surveying. It takes up the use of chain, level and compass, their adjustment and operation. The student deals with the measurement of angles and distances and balancing of surveys.

CE2.—Field Work.—Required in courses in Forestry and Engineering, sophomore year. Three hours attendance, one credit. Taken with CE1. Fee, $2.00. The student receives practice in the use of compass and level. He takes up practical problems in land surveying and mapping.

CE13.—Higher Surveying.—Three hours attendance, three credits. Prerequisites: CE1, CE2. This course takes up in detail systems of triangulation, classifications of control, baseline measurements, astronomical observations, precise trigonomical and barometric leveling, transit and stadia methods, plane table, hydrographic surveying relating to shore line, stream, drainage areas and reservoirs.

CE14.—Surveying Field Work.—Six hours attendance, two credits. Prerequisites: CE1, CE2. This course deals with field practice in transit work of all kinds.

CE35.—Drainage.—Two hours attendance, two credits. Here the student makes an investigation of aikalied and seeped lands, the cause and remedy for this condition. He studies the design of different drainage systems and the proper installation and operation of the same.

ME1.—Wood Work.—Required of students in the Division of Agriculture, freshman year. Three hours attendance, one credit. Care and use of tools used in farm shop; filing and setting of saws; sharpening of edged tools; construction of farm buildings; repair of tools and harness; rope work and soldering.

ME2.—Pattern Making.—Required of students in the Division of Engineering, freshman year. Three hours attendance, one credit. Care and use of tools. Patterns are made for plane work, pulley work, pipe work, gear work, etc. Core boxes, their construction and use. Draft and shrinkage are considered.

ME3.—Forge and Welding.—Required of students in the Division of Agriculture, freshman year. Three hours attendance, one credit. The students are given instruction in the process of working iron and steel at the forge as applied to farm requirements; application of oxy-acetylene and electric-arc welding to farm machinery repairs.

ME4.—Forge and Welding.—Required of students in the Division of Engineering, freshman year. Three hours attendance, one credit. Students are given thorough instruction in the process of working iron and steel at the forge; oxy-acetylene welding and cutting; A. C. and D. C. electric welding.

ME5.—Farm and Home Mechanics.—Offered the second year in the course in Education. Four hours attendance, two credits. An effort will be made to make this course most practical in the preparation of students to teach the everyday mechanical and shop problems of the farm and the home.

Students Enjoy Mechanical Drawing

ME20.—Mechanical Drawing.—Required of students in the Division of Engineering, freshman year. Six hours attendance, two credits. Selection, care and use of instruments, free-hand lettering; orthographic projection; isometric drawing and other pictorial representations; intersection and development of surfaces.

ME21.—Mechanical Drawing.—Required of students in the Division of Engineering, freshman year. Six hours attendance, two credits. Prerequisite: ME20. Free-hand sketching of machine parts and assemblies; making detailed working drawings and assembly drawings, tracings, and blue prints; study of blue-printing machines and other modern methods of reproduction; commercial practice.

ME22.—Descriptive Geometry.—Required of students in the Division of Engineering, sophomore year. Six hours attendance, two credits. The principles of projection, intersection, etc., as applied to engineering practice.

ME24.—Mechanism.—Three hours lecture, three hours laboratory, four credits. Prerequisite: ME20. Elements of machinery; motion transmitting parts such as gears, belts, cams, link work, etc.

ME28.—Theoretical Mechanics (Statics).—Three hours attendance, three credits. Prerequisite: M21. A study of coplanar, non-coplanar, concurrant and non-concurrant forces. Centroids and moments of inertia of areas.

ENGLISH

E2.—English Composition.—Required of freshmen in Agriculture, Forestry, Engineering, Home Economics and Education. Three hours attendance, three credits. Study of the principles of rhetoric. Elements of effective writing in prose based upon the study of selected authors. Analysis of modern prose. Much time is devoted to composition, written and oral.

E3.—English Composition.—Continuation of E2. Three hours attendance, three credits.

E7.—Functional English.—Two hours attendance, two credits. A study of advanced grammar with special emphasis on sentence analysis, idioms and differing points of view of authorities. Textbooks and exercises.

E8.—Journalistic Writing.—Elective. Two hours attendance, two credits. Prerequisites: E2 and E3. This course is primarily concerned with the theory and practice of writing news stories. Some time, however, will be devoted to a consideration of the other types of writing which are common in present-day newspapers, as well as to make-up and other factors which govern excellence. The college paper furnishes a field for practical application of class work.

E9.—Journalistic Writing, The Special Feature Article.—Elective. Two hours attendance, two credits. Prerequisites: E2, E3. A practical study designed to fit students to write for publications in the field of their training and interest.

E25.—Public Speaking.—Two hours attendance, two credits. Prerequisites: E2, E3. A course in the fundamentals of public speaking. A minimum of theory with as much practical experience as can be given.

E26.—Public Discussion.—Two hours attendance, two credits. Prerequisites: E2 and E3. The organization of public assemblies and the conduct of group discussions.

E51.—Life in Literature.—Two hours attendance, two credits. A study of social significance of literature treating the reaction of the individual to his surroundings. Designed to introduce the technically trained person to literature dealing with his own problems.

E52.—Life in Literature.—Two hours attendance, two credits. A study of the significance of literature treating problems of social groups such as education, industry, business ethics, family life, war.

E53.—American Literature.—Two hours attendance, two credits. Prerequisites: E2 and E3. A study of the development of American Literature from colonial times to the beginning of the twentieth century, designed to give a background for the appreciation of modern American viewpoints.

HOME ECONOMICS

HE01.—Orientation.—Alternative for students in Division of Home Economics, freshman year. Two hours attendance, two credits. This course is designed to help the student to make adjustments to college procedures, to acquaint her with the objectives and organization of the work of her major division and the vocational fields for which the various sequences give specific preparation. Problems of social adjustment are also considered.

HE1.—Color and Design.—Required of Home Economics majors, freshman year. Four hours attendance, two credits. Fee, $1.00. This course deals with color theory, art principles and elementary design. It serves as a base for more advanced courses in art, as an aid to clothing and other technical courses.

Learning the Elements of Sewing

HE2.—Advanced Design.—Required of Home Economics majors, sophomore year. Four hours attendance, two credits. Fee, $1.00. Prerequisite: HE1. A study of the various systems of design and their application. Applied problems are required of each student.

HE16.—Textiles and Clothing.—Required of Home Economics majors, freshman year. Six hours attendance, three credits. Fee, $2.00. Prerequisite: HE1. Introductory study of the principles of proportion, line and color, with the student herself as an important part of the design; textile information and cost studies necessary to the selection of materials, clothing and accessories; fundamental construction processes by hand and machine, applied in repair and in the making of new garments.

HE17.—Costume Design and Construction.—Required of Home Economics majors, sophomore year. Eight hours attendance, five credits. Fee, $2.00. Prerequisites: HE1 and HE16. A study of the development of the costume and its adaption to present-day styles; the application of the principles of design and color to individual requirements and the appropriateness of dress to occasion; problems in clothing construction.

HE19.—Dietetics for the Home.—Five credits, three hours lecture and four hours laboratory. Elective for third-year students. Offered especially to give a course in the practical selection and preparation of foods for the diet in the home.

HE30.—Food Selection and Preparation.—Required of Home Economics majors, sophomore year. Eight hours attendance, five credits. Fee, $5.00. Prerequisites: C1 and C2. A study of the characteristics of foods; evaluation of their nutritive and economic qualities; methods of preparation, emphasizing means of preserving the food's most valuable qualities; selective principles upon which procedures are based. Meal

planning and service, taking into account various income levels and various types of families.

LANGUAGE

L1.—First-year French.—Five hours attendance, five credits. A course in grammar, prose, composition, reading and conversation.

L2.—First-year French.—Continuation of L1.

L15.—First-year German.—Five hours attendance, five credits. A course in grammar, pronunciation and reading.

L16.—First-year German.—Continuation of L15.

MATHEMATICS

M000.—Solid Geometry.—Two hours attendance, no credit. Required of freshmen in the Division of Engineering who because of deficiency in solid geometry are not qualified to take M4.

M2.—Algebra.—Required in the Division of Agriculture and Home Economics, freshman year. Five hours attendance, five credits. After a brief review of quadratic equations, the following topics are treated in the order given: Binomial theorem, the progressions, complex numbers and the theory of equations. Graphical representation is frequently used.

M3.—Plane Trigonometry.—Required in courses in Forestry, alternative in Agriculture, freshman year. Two hours attendance, two credits. Preference is given to geometric rather than analytic methods in the development of formulas of this subject. Special attention is given to practical application in surveying, geodesy, astronomy and artillery.

M4.—Mathematics for Engineers.—Five hours attendance, five credits. Prerequisites: 1.5 units of high-school algebra, 1 unit of plane geometry and 0.5 unit of solid geometry. The essentials of college algebra, trigonometry and analytic geometry are unified in this course.

M6.—Mathematics for Engineers.—Five hours attendance, five credits. Prerequisite: M4. This course is a continuation of M4.

M21.—Mathematics for Engineers.—Four hours attendance, four credits. Prerequisite: M6. This course is an intensive study of selected topics of the differential calculus with extended illustrations of their practical applications.

M26.—Mathematics for Engineers.—Four hours attendance, four credits. Prerequisite: M21. In this course the formulas of integration are verified and illustrated by numerous exercises and applications.

MUSIC

Mu1.—Music Fundamentals. — Required in course in Education, freshman year. Two hours attendance, two credits. An introduction to musical knowledge; notation, rhythm, scales, harmony, history, form, musical instruments, composers.

Mu2.—Music Appreciation.—Required in course in Education, second year. Two hours attendance, two credits. Prerequisite: Mu1. A practical course in the art of enjoying music from the standpoint of its organizating factors, rhythm, melody, harmony, tone-color and form.

Mu5.—Band Organization.—Two hours attendance, one credit. A practical course for instrumental directors; band organization, training, conducting, a playing knowledge of band instruments. Requirement: The student shall have had Mu1, or must take it in conjunction with Mu5.

The College Band

A playing knowledge of some instrument is of advantage to a student in this course but it is not required. The college maintains complete instrumental equipment for this course, the same being loaned to the students for a nominal charge. (Students in this course, where possible, should register for either orchestra or band, or both.)

Mu6.—Orchestra.—Two hours attendance, one credit each semester. This organization has been developed to meet the desire of musically inclined students for the type of instrumental playing found with orchestrations. The endeavor is toward a playing ability of the finer music in this field.

Mu7.—Band.—Two hours attendance, one credit each semester. The band is an organization of musicians under the leadership of an experienced director. All members receive two periods of ensemble instruction each week. This organization is giving those who register for this course, ample opportunity to develop their musical talents.

Mu8.—Piano.—One hour attendance, no credit. A beginner's course covering four semesters of instruction, designed to enable teachers to cope with the playing requirements of public-school music. (Students registering for this course should take Mu1.)

Mu9.—Glee Clubs.—There are two glee clubs at Fort Lewis, one for men and one for women. Their work consists of preparing and presenting a series of public programs given at intervals throughout the year. These programs vary, but usually include concerts, both secular and sacred, an operetta, and a minstrel or musical comedy. Students may earn one credit each semester by the work done in a glee club, besides securing the benefits that come from association of musical men and women.

MuT63.—Sight Singing and Ear Training.—Two hours attendance, two credits. Freshman year. A fundamental course in teaching students to read music at sight. Drill in scales, intervals and melodic dictation.

SCIENCE

Sc1.—Introduction to Biological Science.—Required in course in Education, freshman year. Three hours attendance, three credits. Those

aspects of human biology which relate to principles and practices in the field of psychology, sociology and education, including principles and facts relating to life development, life functions and reaction.

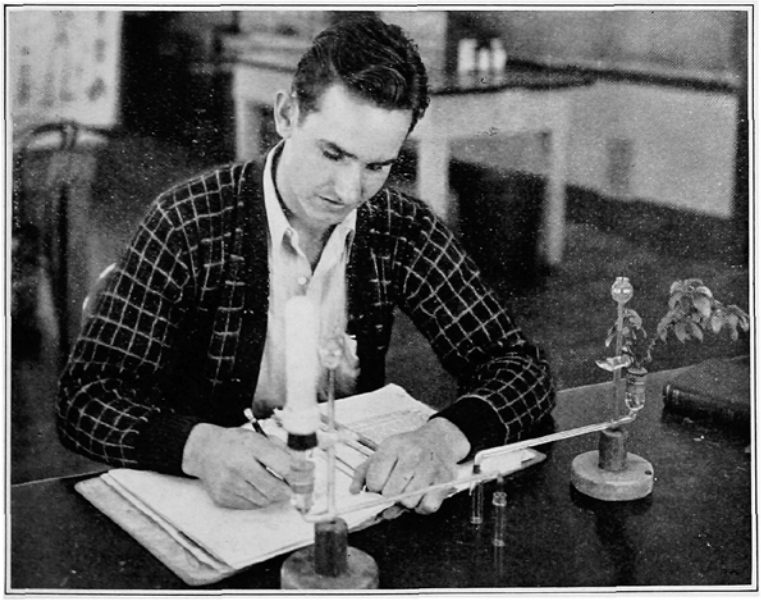
Sc2.—Introduction to Physical Science.—Required in course in Education, freshman year. Four hours attendance, four credits. The purpose is to introduce the student to physical science in such a way as to acquaint him with some of the general concepts which a teacher needs to know in the field of astronomy, physics, meteorology and geology. An attempt is made to help the student to appreciate the nature of the universe in which he lives.

Botany

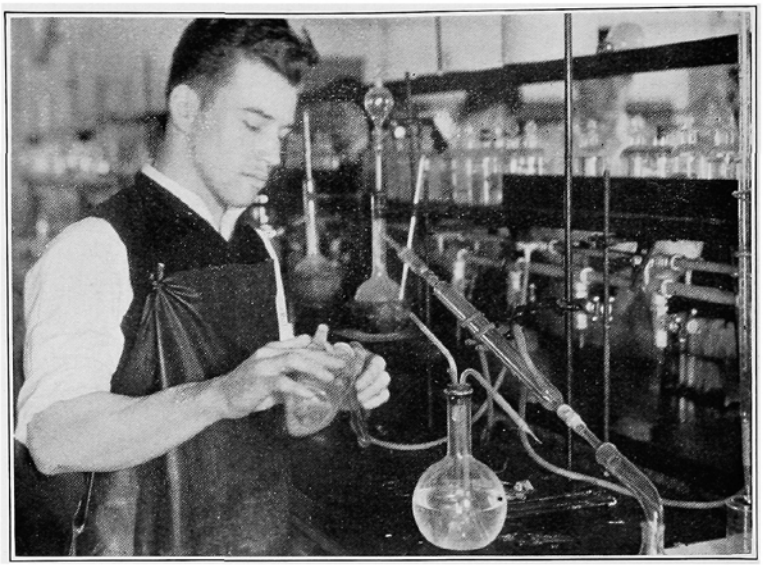
B1.—General Botany.—Required of all students in the Division of Agriculture, freshman year; and the Division of Home Economics, sophomore year. Two hours attendance, two credits. A study of plant relationships with emphasis placed on the origin and evolution of plants. The development of plant life is traced from the lowest forms of single-celled plants to the higher developed flowering plants.

B2.—General Botany Laboratory.—Laboratory to accompany B1. Credit not given independently from credits for B1. Two hours attendance, one credit.

B3.—General Botany.—Required of all students in the Division of Agriculture, freshman year. Two hours attendance, two credits. Prerequisites: B1 and B2. A study of the structure and life processes of



In the Botany Laboratory



In the Chemistry Laboratory

plants, morphology of roots, stems, leaves, flowers, fruits and seeds, the physiology of food production by the plant and plant identifications.

B4.—General Botany Laboratory.—Laboratory to accompany B3. Credit not given independently from credits for B3. Two hours attendance, one credit.

B13.—Plant Anatomy.—Two hours lecture, four hours laboratory, three credits. The structure of the cell, plant tissues and tissue systems.

B16.—Plant Classification.—Alternative in course in Agriculture, sophomore year. Six hours attendance, three credits. Prerequisites: B1, B2, B3, B4. A general introduction to the system of flowering plants and a preparation for studies in Grasses and Range Management.

Chemistry

C1.—Inorganic Chemistry.—Required in Divisions of Agriculture, Engineering and Home Economics, freshman year. Three hours attendance, three credits. Must be accompanied by C2. No previous knowledge of chemistry is required. Lectures, text and reference study of the principles of the science, covering the chemistry of non-metals, their typical and important compounds.

C2.—Inorganic Chemistry Laboratory.—Exercises to accompany C1. Four hours attendance, two credits. Fee, $5.00.

C3.—Inorganic Chemistry.—Required in Divisions of Agriculture, Engineering and Home Economics, freshman year. Three hours attendance, three credits. Prerequisites: C1 and C2. Continuation of C1, covering the chemistry of the metals. Must be accompanied by C4.

C4.—Inorganic Chemistry Laboratory.—Exercises to accompany C3. Four hours attendance, two credits. Fee, $5.00. A study of typical metals, their properties, tests and groupings, preparation, properties and reactions of important compounds, including elementary qualitative analysis.

C5.—Organic Chemistry.—Required in Divisions of Agriculture and Home Economics, sophomore year. Three hours attendance, three credits. Must be accompanied by C6. Prerequisites: C1 to C4, inclusive. Lectures, text and reference study of the aliphatic series. The basic principles of organic chemistry are stressed, and, as far as possible, the relation of the science to biology, agriculture, food, nutrition, etc., is presented.

C6.—Organic Chemistry Laboratory.—Exercises to accompany C5. Four hours attendance, two credits. Fee, $5.00. Exercises to familiarize the student with the preparation, properties and reactions of typical and important compounds, including qualitative tests.

C7.—Organic Chemistry.—Continuation of C5. Must be accompanied by C8. Prerequisites: C1 to C6, inclusive. Required in courses in Agriculture and Home Economics, sophomore year. Three hours attendance, three credits. Completion of the aliphatic series, including carbohydrates, proteins and miscellaneous topics. A brief study of the aromatic series is made.

C8.—Organic Chemistry Laboratory.—Continuation of C6. Exercises to accompany C7. Four hours attendance, two credits. Fee, $5.00.

C11.—Quantitative Analysis.—Prerequisites: C1 to C4, inclusive. Two hours lecture, six hours laboratory work for one semester, two credits. The course includes study of the principles of quantitative analysis and the calculations of analytical chemistry and laboratory work in gravimetric and volumetric analysis designed to familiarize the student with the primary methods. Fee, $6.00.

C16.—Organic Preparations.—Prerequisite: C8. Four hours attendance, one or two credits (according to work done). Fee, $4.00. An advanced organic laboratory course concerned largely with the preparation and purification of organic compounds.

C51.—Elementary Geology.—Three credits. Two hours lecture and one two-hour laboratory period each week. Prerequisites: C1, C2, C3, C4. Introductory studies of minerals and rocks, with field and laboratory work for the study of dynamic processes, mineral and rock structures and their associations.

Economics, Sociology and History

ES3.—Economics.—Required in the Divisions of Agriculture and Engineering, sophomore year. Three hours attendance, three credits. This study includes an analysis of our present-day economic organization; the laws of price, money, banking, and exchange; problems of business organization; problems of labor; and reform of the economic system.

ES13.—World Geography.—Three hours attendance, three credits. This is an attempt to give a substitute for the cultural benefits of travel and to arouse an interest in the world and its inhabitants.

ES50.—General Sociology.—Five hours attendance, five credits, sophomore year. Principles of sociology and application to social problems. Origin, development and functioning of important social institutions, such as the family, school, church, nation and community. Influence of biological, psychological and physiological factors upon society. A course intended to orient the student in the social sciences.

ES82.—Colorado History, Geography and School Law.—Required in course in Education, third year. Three hours attendance, three credits. The development of significant movements and activities and the cultural contribution of the early inhabitants of the southwestern territory of the United States, the geographic areas of Colorado and their relation to industry, recreation and education, and the constitutional provision for the public-school system of Colorado, and the laws which apply to schools, the teacher and the board will be included in this course.

ES83.—American History.—Three hours attendance, three credits. A study of American Life before 1865.

ES84.—American History.—Three hours attendance, three credits. Continuation of ES83. After 1865. Emphasis upon the history of Colorado.

ES85.—World History.—Three hours attendance, three credits. Evolution of western civilization from Egypt and Mesopotamia through Greece, Rome and the Middle Ages to the year 1660.

ES86.—World History.—Three hours attendance, three credits. Continuation of ES85. Development and expansion of modern Europe; China and Japan; post-war Europe, Hitler and Mussolini.

ES90.—Government.—Required in course in Education, freshman year; and in Forestry, sophomore year. Three hours attendance, three credits. The events and causes which led to the formation of the national governments, and the study of the privileges and obligations of the citizen.

Physics

Ph5.—Physics.—Required in courses in Forestry and Engineering, sophomore year. Prerequisite: College algebra. Three hours attendance, three credits. This is a course of fundamental scientific principles forming the basis for the study of applied science as related to engineering problems.

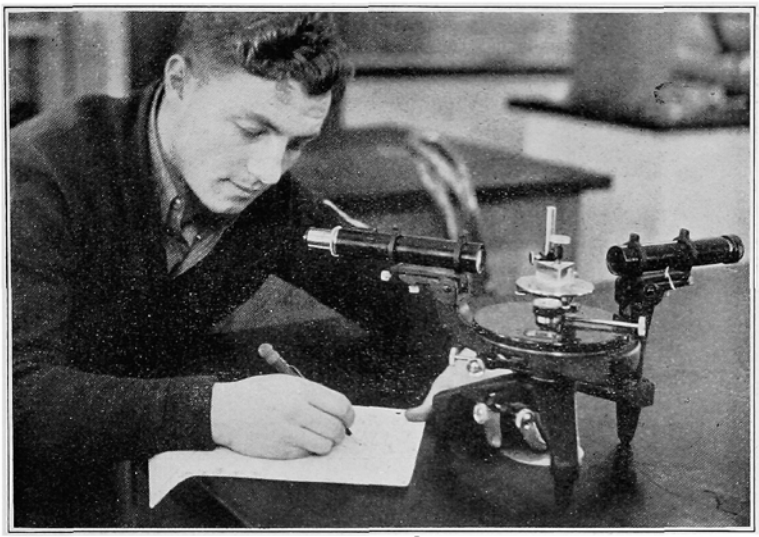
Ph6.—Physics Laboratory.—Accompanies Ph5. Four hours attendance, two credits. Fee, $3.00. The student obtains first-hand information of physical laws, learns to handle and manipulate apparatus in order that he may be able to arrive at definite and sane results from his measurements.

Ph9.—Physics.—A continuation of Ph5. Three hours attendance, three credits.

Ph10.—Physics Laboratory.—A continuation of Ph6. Four hours attendance, two credits. Fee, $3.00.

Physiology

VP22.—Human Anatomy and Physiology.—Required in course in Home Economics, freshman year. Five hours attendance, five credits. A



At Work in the Physics Laboratory

lecture course dealing with elementary physiology, anatomy and hygiene. Considerable attention is given to application of principles of practical hygiene and common phenomena.

Zoology

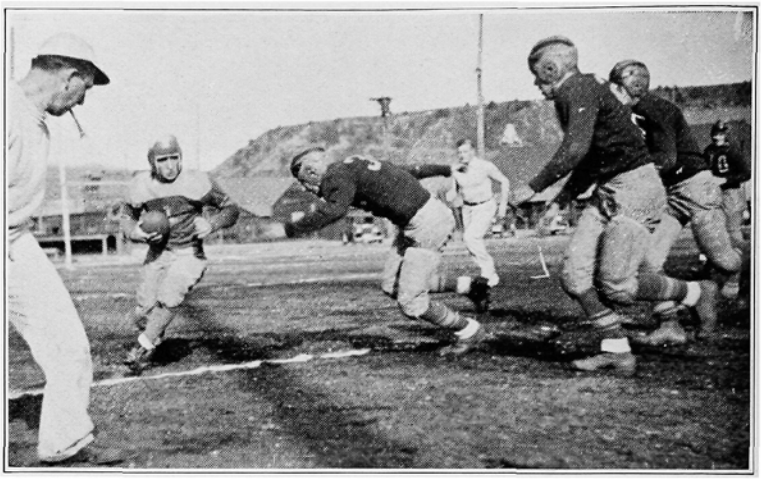
EZ4.—Elementary Entomology.—Required in Division of Agriculture, freshman year. Three hours attendance, three credits. Attention is given to the general structure, classification, and methods of control for many injurious insects.

EZ11.—Zoology.—Required in course in Agriculture, sophomore year. Three hours attendance, three credits. Accompanies EZ12. A general course in zoology in which the basic principles are stressed. The material presented is fundamental to further study in biology or medicine. The course also helps to provide the proper broad background for students in agriculture, home economics or liberal arts, in that many applied phases are given the attention.

EZ12.—Zoology Laboratory.—Accompanies EZ11. Four hours attendance, one and one-half credits. Stress is laid upon the structure, habits and relationships of the different groups of the animal kingdom. Definiteness and accuracy of observation are emphasized.

Physical Education

PE1.—Physical Education.—Two hours attendance, one-half credit, freshman year. Health education, postural drills and corrective work, games.



Fort Lewis in Action

PE2.—Physical Education.—Two hours attendance, one-half credit, freshman year. Games, postural drills, corrective work, individual sports, and tumbling.

PE3.—Physical Education.—Two hours attendance, one-half credit, sophomore year. Apparatus work and tumbling.

PE4.—Physical Education.—Two hours attendance, one-half credit, sophomore year. Apparatus work, tumbling, leader's classes, track and field sports, baseball.

PE50.—Personal and Community Health.—Required in course in Education, freshman year. Three hours attendance, three credits. A consideration of the principles of healthful living, emphasizing mental and nervous hygiene, immunity and bacteriology in relationship to health, foods and general care of the body. A general consideration of community endeavor for the protection of the health of its citizens.

PE51.—Physical Education.—Two hours attendance, one-half credit, freshman year. Volleyball, tennis, basketball, tap, clog and folk dancing.

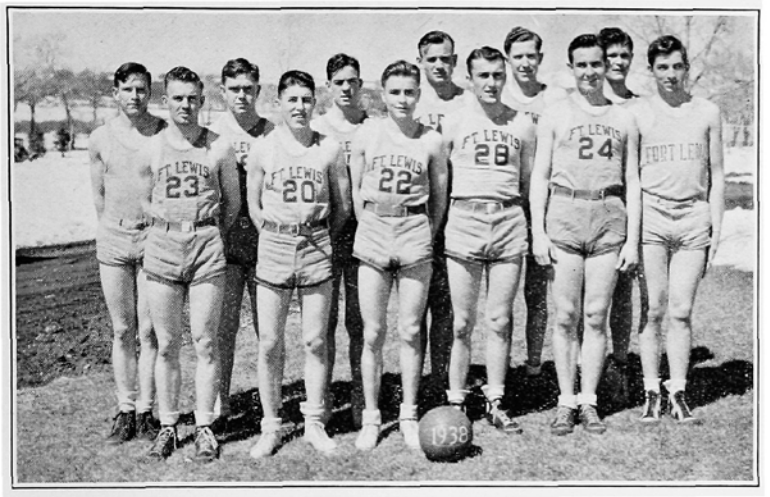
PE52.—Physical Education.—Two hours attendance, one-half credit, freshman year. Singing games, dancing, tennis, baseball and track.

PE53.—Physical Education.—Two hours attendance, one-half credit, sophomore year. Playground activities, volleyball, tennis, tap, clog, and folk dancing.

PE54.—Physical Education.—Two hours attendance, one-half credit, sophomore year. Singing games, playground activities, program planning, dancing, tennis, baseball and track.

Athletics and Sports

The athletic program is planned to meet the need of the entire student body. Competitive sport occupies much time and students are en-



Our Basketball Squad

couraged to take part. For those not interested in organized athletics, other sports are introduced, so that practically every student is given an opportunity for participation.

Conference Sports.—Fort Lewis is a member of the eastern division of the Intermountain Junior College Conference and participates in Football, Basketball and Track. Members of the league are Trinidad State Junior College, Pueblo State Junior College and Eastern New Mexico Junior College of Portales. In addition to games with teams from these institutions, other games are scheduled to fill out the season.

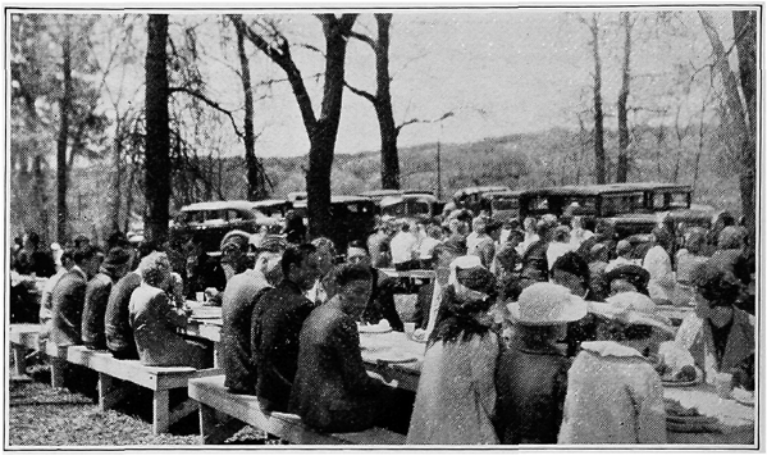
Athletics for Women.—Interclass tournaments in volleyball, basketball, and baseball are held in season. Track, tennis, hiking, and other athletic activities are offered to complete the year's program. Women students who participate in these various athletic events are eligible for awards given by the athletic association.

Non-Competitive Sports.—As an outgrowth of regular gymnasium class work, several sports are increasing in popularity so that time is being devoted to them outside of the regular class time.

With the advent of tumbling and pyramid work seven years ago, many students have become so interested that teams have been formed and exhibitions presented before the student body. The big event occurs each spring when the seniors of the Basin high schools are entertained by the college.

Handball and volleyball are popular enough to call for tournaments and interclass games.

Tennis.—Two cement tennis courts allow a large group of students to enjoy this active sport during the open weather every fall and spring. Tournaments are usually held for those interested.



Senior Day

Winter Sports.—Three courses have been cleared near the campus for skiing and tobogganing. There are splendid opportunities to develop this side of the out-of-door winter activities.

ACTIVITIES

Senior Day.—Hundreds of gay, eager, young people throng the campus every year on Senior Day. On that occasion, Fort Lewis School keeps open house for these high-school graduates. In the morning, they enjoy the various exhibits, shown in the classrooms, followed by the colorful pageantry of the crowning of the May Queen. At noon, a picnic dinner in the beautiful grove gives everyone a chance to visit and form new friendships. Entertainment in the afternoon takes the form of a tumbling exhibition followed by a social dance. After a jolly picnic supper, the visit-

Folk Dancing

The Collegian Staff

ors enjoy a play, presented by the Dramatic club—a fit ending to an eventful day, which has made them feel at home and acquainted at Fort Lewis.

Deutscher Verein.—The Deutscher Verein is an organization composed of members of the German class and meets for one hour each week. At these meetings German songs are sung, and games and plays used to increase the student's ability in conversational German.

The "A" Club.—The "A" Club of Fort Lewis has as its members all men who have earned an athletic award. It is organized for the purpose of promoting good sportsmanship and creating more friendly relations with other institutions.

Associated Students.—The students are organized as the Associated Students of Fort Lewis. The organization enables the students to deal with many activities and problems through their own government. The customary officers are elected as well as a student council. In addition, the group elects heads of various activities such as the editor of the college newspaper, social activity chairman, cheer leaders, and other committee chairmen. It is through the work of this organization and its officers, with the aid of faculty counselors, that social relationships and extra-curricular activities are promoted to the gain of the entire student body.

Besides the general organization of students, each class has its organization for the purpose of furthering the activities in which the class as a group is particularly interested. Each class assumes the responsibility of maintaining certain Fort Lewis traditions and of passing these to oncoming classes.

The Fort Lewis Collegian.—The trend of student opinion is found in "The Fort Lewis Collegian," a paper published monthly by the students. The staff is elected by the students, who act under the guidance of a Faculty Advisory Committee. The publication affords an excellent opportunity to develop talents along the lines of journalistic writing and general student leadership.

STUDENTS ENROLLED 1937-1938

Name	Year	Course	Address
Anderson, Donald	2	Forestry	Ignacio, Colo.
Bader, Ames	2	Soils	Hesperus, Colo.
Barrett, James	2	Soils	Cortez, Colo.
Bedford, Franklin	1	Education	Gallatin, Mo.
Blake, Grace	1	Home Economics	Monticello, Utah
Brennan, Michael	1	Special	Durango, Colo.
Brown, Alvie	2	Engineering	Durango, Colo.
Brown, Maurice	1	Engineering	Farmington, N. M.
Buchanan, Robert	1	Engineering	Durango, Colo.
Burtner, Richard	1	Engineering	Durango, Colo.
Chapman, Robert	1	Education	Ordway, Colo.
Cole, Erwin	1	Engineering	Cortez, Colo.
Cornelius, Royce	2	Agronomy	Durango, Colo.
Cowling, Keith	2	Engineering	Cortez, Colo.
Crosby, Loyal	1	Agriculture	Ignacio, Colo.
Dale, Harold	1	Forestry	Durango, Colo.
Dean, Edwin	2	Education	Redmesa, Colo.
Dean, Winifred	2	Education	Redmesa, Colo.
Denton, Marshall	2	Engineering	Ignacio, Colo.
Diehl, Myrna	1	Psychology	Durango, Colo.
Dona, David	1	Forestry	Durango, Colo.
Easley, Carlos	1	Engineering	Cortez, Colo.
Ervin, James	1	Vet. Medicine	Ordway, Colo.
Erwin, Russell	1	Forestry	Durango, Colo.
Glenn, W. L.	2	Engineering	Cortez, Colo.
Good, Ogrita	1	Education	Dove Creek, Colo.
Goulding, Anna Mae	1	Home Economics	Durango, Colo.
Grabowsky, Lorraine	2	Agronomy	Ignacio, Colo.
Gray, Stanley	1	Engineering	Bayfield, Colo.
Green, George	1	Civil Engineering	Durango, Colo.
Green, Margaret	2	Education	Durango, Colo.
Hamilton, Walter	1	Forestry	Mountain Home, Idaho
Hickman, Jewell	1	Education	Bayfield, Colo.
Hickman, Ollie	1	Education	Bayfield, Colo.
Hines, Ruth	2	Education	Durango, Colo.
Hughes, Lloyd	2	Education	Mancos, Colo.
Humiston, Glen	2	Engineering	Bayfield, Colo.
Jeantet, Nicholas	1	Romance Lang.	Durango, Colo.
John, Cecil	1	Engineering	Mancos, Colo.
Johnson, Franklin		Special	Hesperus, Colo.
Johnson, Lou Emma	1	Home Economics	Kline, Colo.

STUDENTS ENROLLED 1937-1938

Name	Year	Course	Address
Klahn, Austin	2	Forestry	Durango, Colo.
Klahn, Dolorine	1	Education	Durango, Colo.
Klatt, Ronald	1	Business Adm.	Durango, Colo.
Knight, Fern	2	Education	Bayfield, Colo.
Koehler, Natalie	2	Pre-Medical	Durango, Colo.
Kroeger, Fred	2	Agri. & Soils	Durango, Colo.
Lechner, Irwin	1	Forestry	Rockwood, Colo.
Lemmon, Arthur	1	General	Durango, Colo.
Lemmon, Richard	2	Business Adm.	Durango, Colo.
McAndrew, Edward	1	Forestry	Boulder, Colo.
McCarty, Bernice	2	Education	La Plata, N. M.
McCormick, Kenneth	1	Education	Durango, Colo.
McDaniel, Harry	1	Engineering	Durango, Colo.
McGregor, Sam	2	Special	Mancos, Colo.
McLeod, Richard	1	Forestry	Park City, Utah
McMillan, Maurice	1	Pre-Medical	Dolores, Colo.
McRay, Edith	1	Education	Mancos, Colo.
Marshall, William	1	Vet. Medicine	Albuquerque, N. M.
Melton, Glenn	1	Forestry	Durango, Colo.
Miernyk, William	2	Journalism	Durango, Colo.
Miller, Mary	1	Education	Cahone, Colo.
Morgan, Wilma	1	Education	Silverton, Colo.
Morrison, Marjorie	2	Jour. & Education	Bayfield, Colo.
Moyers, Clyde	2	Education	Ferris, Texas
Neal, Dortha	2	Home Economics	Dolores, Colo.
Neal, Elizabeth	1	Home Economics	Dolores, Colo.
Neal, Neva	1	Education	Hesperus, Colo.
Needham, William	1	Forestry	Durango, Colo.
Oldfield, Jack	1	Special	Kline, Colo.
Parker, Dorothy	1	Business Adm.	El Rito, N. M.
Pepin, Albert	2	Education	Durango, Colo.
Petty, Frances	1	Education	Denver, Colo.
Plantz, Leonard	1	Education	Mancos, Colo.
Ritterbush, Frank	1	Engineering	Ordway, Colo.
Roberts, James	1	Education	Durango, Colo.
Rooks, Darvin	1	Education	Ordway, Colo.
Ross, Fenton	1	Engineering	Ordway, Colo.
Rouse, Keith	1	Engineering	Durango, Colo.
Rowse, Elsie	1	Pre-Nursing	Ignacio, Colo.
Russell, James		Pre-Medical	Durango, Colo.
Schaill, William	1	Forestry	Fort Meade, Fla.

STUDENTS ENROLLED 1937-1938

Name	Year	Course	Address
Simpson, Uberta	1	Pre-Medical	Farmington, N. M.
Slack, Joseph	2	Engineering	Breen, Colo.
Slade, June	1	Education	Redmesa, Colo.
Smith, Fabion	1	Forestry	Denver, Colo.
Taylor, John	2	Engineering	Aztec, N. M.
Thomas, Margaret	1	Education	Breen, Colo.
Tooley, Olive	1	Education	Redmesa, Colo.
Towne, Eleanor	2	Home Economics	Durango, Colo.
Trainor, Vincent	1	Education	Ordway, Colo.
Tyner, George	1	Engineering	Falfa, Colo.
Way, Henrietta	1	Education	Silverton, Colo.
Weaver, Haralson	1	Agriculture	Mancos, Colo.
Wheeler, Lora	1	Education	Redmesa, Colo.
Whitener, Ruth	2	Education	Dove Creek, Colo.
Williams, John	1	Vet. Medicine	Norwood, Colo.
Wommer, Henry	1	Engineering	Bayfield, Colo.

Colorado State Institutions of Higher Learning

The University of Colorado.....Boulder
GEORGE E. NORLIN, President

The Colorado State College.....Fort Collins
(Of Agriculture and Mechanic Arts)
CHARLES A. LORY, President

Fort Lewis Branch.....Hesperus
E. H. BADER, Dean

The Colorado School of Mines.....Golden
M. F. COOLBAUGH, President

The Colorado State College of Education.....Greeley
G. W. FRASIER, President

The Western State College.....Gunnison
C. C. CASEY, President

The Adams State Teachers College.....Alamosa
IRA RICHARDSON, President