# Colorado State College Bulletin

FORT LEWIS SCHOOL

**CATALOG NUMBER**

**1937-1938**

**SERIES 31, NO. 8** **APRIL, 1937**

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THE COLORADO STATE COLLEGE

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# THE ANNUAL CATALOG

# The Fort Lewis School

of the

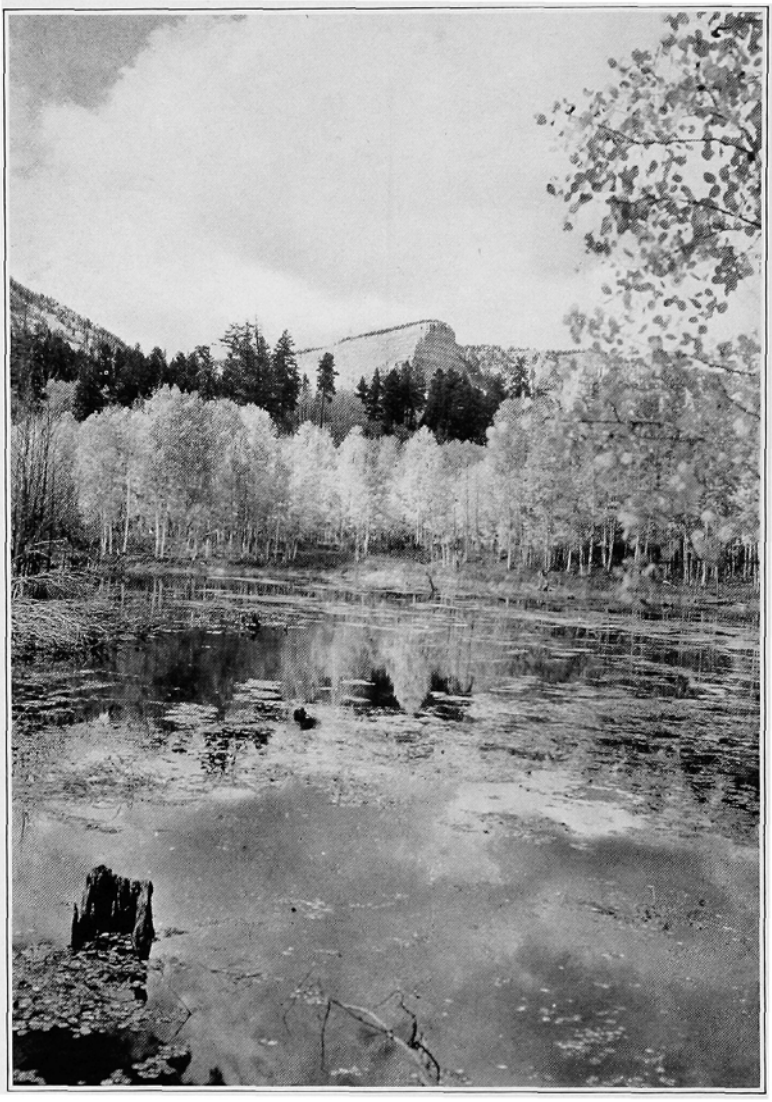
# Colorado State College

of Agriculture and Mechanic Arts

1937-1938

TWO YEARS OF

AGRICULTURE
ENGINEERING
FORESTRY
HOME ECONOMICS
EDUCATION



Patterns In Reflected Clouds and Autumn Leaves in Shallow Waters—Electra Lake

## COLLEGE CALENDAR

### 1936

### 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 25
and ends at 8:00 a. m.....Monday, November 30

Christmas vacation begins at 3:45 p. m.....Friday, December 18

### 1937

Christmas vacation ends at 8:00 a. m.....Monday, January 4

First semester closes at 3:45 p. m.....Friday, January 29

### Second Semester

Registration.....Monday forenoon, January 25

Second semester classes begin at 1:00 p. m.....Monday, January 25

Spring vacation begins at 3:45 p. m.....Friday, March 26

Spring vacation ends at 8:00 a. m.....Monday, April 5

San Juan Basin High-School Senior Day.....Friday, May 7

Second semester closes at 3:45 p. m.....Wednesday, ~~June 1~~ May 31

OLORADO 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,

Chas. A. Lory

*President, Colorado State College*

*To the Youth of Colorado:*

Trained men and women are in demand. More and more young people must answer the question, "Do you have a college education?" to prospective employers. Clear thinking and well-planned action were never needed more than now. Great changes in the political, social, economic and religious structures of the world are in process. Will you be ready to participate intelligently and effectively in the work of tomorrow?

We hope this catalog stimulates your interest in college training, and persuades you to write or to come to Fort Lewis and learn more about its faculty, its equipment, its work and its advantages before making final plans for college training.

May we have the pleasure of meeting you and of discussing with you the training offered at Fort Lewis? We hope we may be privileged to work with you during the first two years of your college course.

Sincerely,

E. H. BADER, *Dean.*

## THE STATE BOARD OF AGRICULTURE

| | | Term Expires |
|---|---|---|
| Thomas J. Warren | Fort Collins | 1937 |
| O. E. Webb | Milliken | 1937 |
| Mrs. Mary H. Isham | Brighton | 1939 |
| J. W. Goss | Pueblo | 1939 |
| John J. Downey | Cortez | 1941 |
| Robert Rockwell | Paonia | 1941 |
| H. B. Dye | Manzanola | 1943 |
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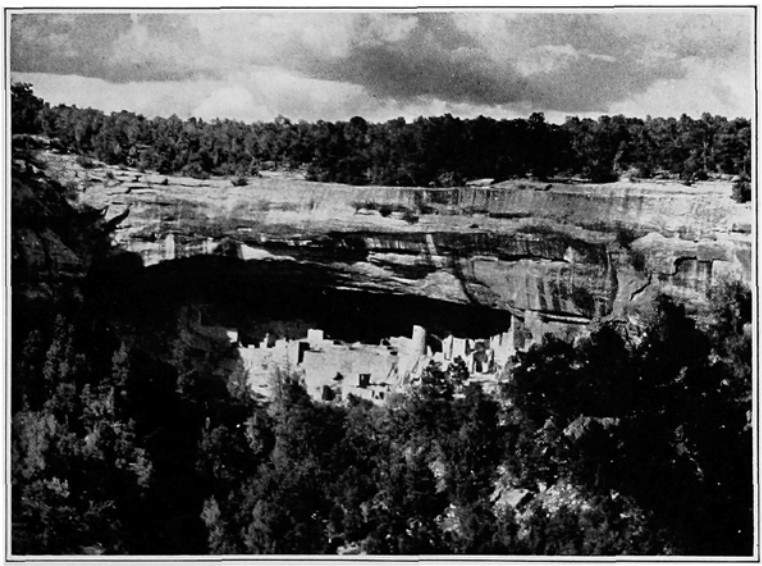
## FORT LEWIS COLLEGE FACULTY

Lory, Chas. A.—Ped.B., B.S., M.S., LLD., D.Sc., D.Ed., ..... President, Fort Collins, Colorado
Bader, Ernest H.—B.S., M.S. ..... Dean, Hesperus, Colorado
Brown, Marian—B.S. ..... Home Economics
Custer, Brooks O.—B.Mus. ..... Music and Library
Good, Margaret—A.B. ..... Physical Education and Library
Hershberger, Inez S.—A.B. ..... German
Jones, W. Norton, Jr.—B.A., M.A., Ph.D. ..... Chemistry and French
Knight, L. Fay—B.S., M.A. ..... English, Literature and Dramatics
Lindon, Paul H.—B.S. ..... Engineering Shop
Longenbaugh, Harry L.—B.S. ..... Animal Husbandry
McLain, Chas. W.—B.S., M.S. ..... Vice-Dean and Coach
Moinat, Arthur D.—B.S., M.S., Ph.D. ..... Botany and Agriculture
O'Brien, Irene—B.S., M.A. ..... Education, Dean of Women
Pollock, Floyd A.—B.A., M.S. ..... Social Science
Smith, Raymond R.—B.S., M.S. ..... Mathematics

# THE FORT LEWIS SCHOOL
# OF THE COLORADO STATE COLLEGE
## of Agriculture and Mechanic Arts

The Fort Lewis School 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, the Fort Lewis School 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.



**Cliff Palace—Mesa Verde National Park**

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 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 THE FORT LEWIS SCHOOL

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.

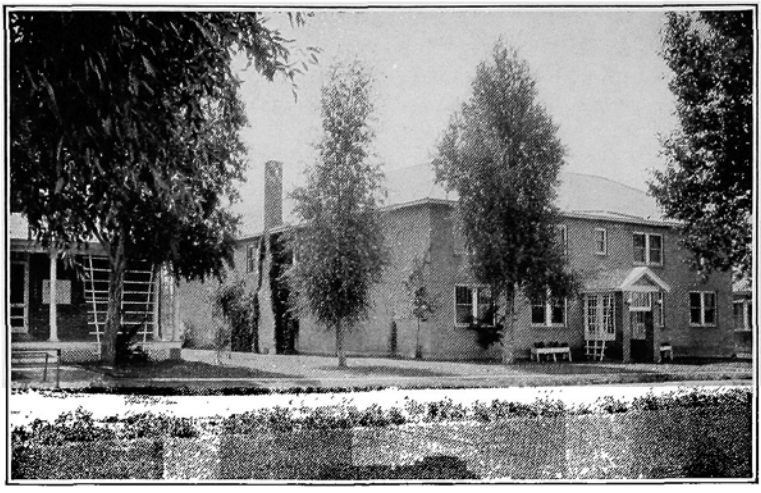
### The City of Durango

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 citizens, business interests, and of the Durango Chamber of Commerce, are greatly appreciated by students, faculty and governing board.



Snyder 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 the 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 fine radio, leather couch, comfortable rockers, sturdy wooden chairs and library tables comprise the furnishings in this room. For entertainment, there are daily newspapers and magazines, and various games—ping-pong and pool being the favorites. This clubroom, with its low-beamed ceiling, its rugged fireplace and mounted animal heads, is one of the most popular places for pastime on the campus.

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

This same color scheme is carried out in the halls and stairways. The large south windows in the lower hall make it possible to have an abundance of 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 will be on display soon.

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.

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 |
| Field Work | 2.00 |
| Physics | 3.00 |
| School Training | ~~1.50~~ 2.00 |
| Zoology | 2.00 |
| Deposits: | |
| Athletic | 2.50 |
| Breakage deposit | 5.00 |
| Key deposit | 1.00 |
| Student activity | 2.00 |
| Student publication | .75 |
| Property Deposit | 5.00 |
| Other Fees: | |
| Change in registration | 1.00 |
| Failure to pay fees when due | 2.00 |
| Late registration | 5.00 |
| Individual use of radio per month | 1.00 |

### Second Semester

| | |
|---|---|
| *Board and room—2 in room, per month | $25.00 |
| Non-resident fee, no refund | 12.50 |
| Registration fee, no refund | 5.00 |
| Tuition, no refund | 15.00 |
| Fees for laboratory courses: | |
| Botany | 1.00 |
| Chemistry | 5.00 |
| Clothing | 2.00 |
| Physics | 3.00 |
| Plant Physiology | 2.00 |
| School Training | 1.50 |
| Selection and Preparation of Foods | 5.00 |

*There is no reduction in board for an absence of fewer than four (4) 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.

| | |
|---|---|
| Deposits: | |
| Athletic | 2.50 |
| 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 |
| Individual use of radio per month | 1.00 |

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

### 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.

### Requirements for Admission

Students are admitted to the college upon either certification from an accredited high school or upon examination. Certificates from schools not accredited will be considered as the merits of each case may warrant.

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. It is to the student's advantage to have this record forwarded as soon after high-school graduation as possible. In every case the record should be sent in early enough for the student to be notified whether or not he is qualified for admission.

Fifteen units are required for admission. A unit course of study is defined as a course covering a school year of not less than 35 weeks, with 4 or 5 (preferably 5) periods of at least 40 or 45 minutes each, a week. The 15 units for entrance are divided as follows:

| | |
|---|---|
| Mathematics (Algebra, Geometry) | 2 |
| English | 3 |
| Electives | 10 |

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.

### 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.

## 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 grade 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.

## 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:

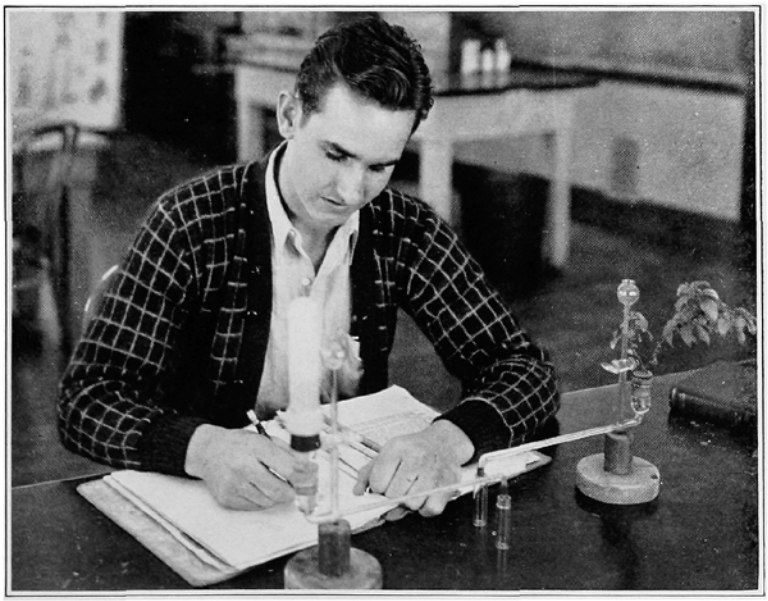
| | |
|---|---|
| Agronomy | Ag |
| Animal Husbandry | AH |
| Botany | B |
| Chemistry | C |
| Civil and Irrigation Engineering | CE |
| Electrical Engineering | EE |
| Economics and Sociology | ES |
| Entomology and Zoology | EZ |
| English and History | EH |
| Forestry | F |
| General Science | GS |
| Home Economics | HE |
| Horticulture | H |
| Language | L |
| Mathematics | M |
| Mechanical Engineering | ME |
| Physical Education | PE |
| Physics | Ph |
| 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 | | |
|---|---|---|---|---|---|
| EH2-f. | English | 3 | EH3-w. | English | 3 |
| C1-f. | Inorganic Chemistry | 3 | C3-w. | Inorganic Chemistry | 3 |
| C2-f. | Inorganic Chemistry Laboratory | 2 | C4-w. | Inorganic Chemistry Laboratory | 2 |
| B1-f. | General Botany | 2 | B3-w. | General Botany | 2 |
| B2-f. | General Botany Laboratory | 1 | B4-w. | General Botany Laboratory | 1 |
| PE1-f. | Physical Education | 0.5 | PE2-w. | Physical Education | 0.5 |
| M10-f. | College Algebra | 5 | AH1-w. | Judging Market Types | (2) |
| ME1-f. | Wood Work | 1 | | or | |
| | | | M11-w. | Plane Trignometry | 2 |
| | | | ME3-w. | Forge and Welding | 1 |
| | | | EZ4-w. | Elementary Entomology | 3 |



In the Botany Laboratory

Sophomore Year

| First Semester | | | Second Semester | | |
|---|---|---|---|---|---|
| EH51-f. | English Literature | 2 | C7-w. | Organic Chemistry | 3 |
| C5-f. | Organic Chemistry | 3 | C8-w. | Organic Chemistry Laboratory | 2 |
| C6-f. | Organic Laboratory | 2 | PE4-w. | Physical Education | 0.5 |
| PE3-f. | Physical Education | 0.5 | Ag2-w. | Soils | 3 |
| EZ11-f. | Zoology | 3 | Ag4-w. | Soils Laboratory | 2 |
| EZ12-f. | Zoology Laboratory | 1.5 | H1-w. | General Horticulture | 3 |
| Ag31f. | Pinciples of Genetics | 2 | ES3-w. | Economics | 3 |
| B16-f. | Plant Classification | 3 | EH25-w. | Public Speaking | 2 |
| | or | | | | |
| AH2-f. | 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 | | |
|---|---|---|---|---|---|
| EH2-f. | English | 3 | EH3-w. | English | 3 |
| C1-f. | Inorganic Chemistry | 3 | C3-w. | Inorganic Chemistry | 3 |
| C2-f. | Inorganic Chemistry Laboratory | 2 | C4-w. | Inorganic Chemistry Laboratory | 2 |
| B1-f. | General Botany | 2 | B3-w. | General Botany | 2 |
| B2-f. | General Botany Laboratory | 1 | B4-w. | General Botany Laboratory | 1 |
| PE1-f. | Physical Education | 0.5 | PE2-w. | Physical Education | 0.5 |
| M10-f. | College Algebra | 5 | EZ4-w. | Elementary Entomology | 3 |
| ME1-f. | Wood Work | 1 | M11-w. | Plane Trigonometry | 2 |
| | | | ME3-w. | Forge and Welding | 1 |

Sophomore Year

| First Semester | | | Second Semester | | |
|---|---|---|---|---|---|
| Ph5-f. | Physics | 3 | EH77-w. | Citizenship | 2 |
| Ph6-f. | Physics Laboratory | 2 | Ph9-w. | Physics | 3 |
| PE3-f. | Physical Education | 0.5 | Ph10-w. | Physics Laboratory | 2 |
| B16-f. | Plant Classification | 3 | EH25-w. | Public Speaking | 2 |
| CE1-f. | Surveying | 3 | Ag2-w. | Soils | 3 |
| CE2-f. | Field Work | 1 | Ag4-w. | Soils Laboratory | 2 |
| C5-f. | Organic Chemistry | 3 | PE4-w. | Physical Education | 0.5 |
| C6-f. | Organic Chemistry Laboratory | 2 | ES3-w. | Economics | 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 | | |
|---|---|---|---|---|---|
| EH2-f. | English | 3 | EH3-w. | English | 3 |
| C1-f. | Inorganic Chemistry | 3 | C3-w. | Inorganic Chemistry | 3 |
| C2-f. | Inorganic Chemistry Laboratory | 2 | C4-w. | Inorganic Chemistry Laboratory | 2 |
| PE1-f. | Physical Education | 0.5 | PE2-w. | Physical Education | 0.5 |
| ME20-f. | Mechanical Drawing | 2 | ME21-w. | Mechanical Drawing | 1 |
| M10-f. | College Algebra | 5 | M12-w. | Analytic Geometry | 5 |
| M11-f. | Plane Trigonometry | 2 | ME4-w. | Forge and Welding | 1 |
| | | | EH25-w. | Public Speaking | 2 |

#### Sophomore Year

| First Semester | | | Second Semester | | |
|---|---|---|---|---|---|
| M20-f. | Differential Calculus | 5 | M21-w. | Integral Calculus | 5 |
| Ph5-f. | Physics | 3 | Ph9-w. | Physics | 3 |
| Ph6-f. | Physics Laboratory | 2 | Ph10-w. | Physics Laboratory | 2 |
| PE3-f. | Physical Education | 0.5 | PE4-w. | Physical Education | 0.5 |
| ME22-f. | Descriptive Geometry | 2 | Ph20-w. | Applied Mechanics | 3 |
| ME23-f. | Descriptive Geometry (Drawing) | 1 | ES3-w. | Economics | 3 |
| CE1-f. | Surveying | 3 | ME2-w. | Pattern Making | 1 |
| CE2-f. | Field Work | 1 | | | |

Students Enjoy Mechanical Drawing

Learning the Elements of Sewing

## 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 | | |
|---|---|---|---|---|---|
| EH2-f. | English | 3 | EH3-w. | English | 3 |
| C1-f. | Inorganic Chemistry | 3 | C3-w. | Inorganic Chemistry | 3 |
| C2-f. | Inorganic Chemistry Laboratory | 2 | C4-w. | Inorganic Chemistry Laboratory | 2 |
| PE51-f. | Physical Education | 0.5 | PE52-w. | Physical Education | 0.5 |
| M10-f. | College Algebra | 5 | HE16-w. | Textiles and Clothing | 3 |
| HE1-f. | Color and Design | 2 | EZ2-w. | Human Anatomy and Physiology | 5 |
| HE01-f. | Orientation | (2) | | | |
| | or | | | | |
| EH51-f. | English Literature | 2 | | | |

### Sophomore Year

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

## Course in Education

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

### Freshman Year

| First Semester | | | Second Semester | | |
|---|---|---|---|---|---|
| EH2-f. | English | 3 | EH3-w. | English | 3 |
| EdBi1-f. | Educational Biology | 3 | Ed3-w. | General Psychology | 3 |
| EH80-f. | Modern European History | 2 | EH77-w. | Citizenship | 2 |
| EH81-f. | Recent European History | 3 | GSc1-w. | Personal and Community Health | 3 |
| EdE3-f. | (36ab.) English Grammar | 2 | Mu2-w. | Music | 2 |
| Mu1-f. | Music | 2 | PE2-w. | Physical Education or | |
| PE1-f. | Physical Education or | | PE52-w. | Physical Education | 0.5 |
| PE51-f. | Physical Education | 0.5 | Ed13-w. | Introduction to Science | 4 |
| Ed4-f. | Introduction to Education | 2 | | | |

### Sophomore Year

| First Semester | | | Second Semester | | |
|---|---|---|---|---|---|
| Ed12-f. | Principles of Education | 3 | Ed8-w. | Literature for Elementary Schools | 3 |
| Ed9-f. | School Training | 5 | Ed10-w. | School Training | 5 |
| Ed11-f. | Educational Psychology | 4 | Ed5-w. | School Management and Procedure | 3 |
| EH75-f. | American History | 2 | PE4-w. | Physical Education or | |
| EH76-f. | American History | 3 | PE54-w. | Physical Education | 0.5 |
| PE3-f. | Physical Education or | | Ed6-w. | Colorado History, Geography and School Law | 3 |
| PE53-f. | Physical Education | 0.5 | Ed1-w. | Agriculture for Rural Teachers | 3 |

## 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-f, B2-w, 6 hrs.; Zoology, EZ11-f, EZ12-f, 4.5 hrs.; Chemistry, C1-f, C2-f, 5 hrs.; C3-w, C4-w, 5 hrs., C5-f, C6-f, 5 hrs., C7-w, C8-w, 5 hrs.; Algebra, M10-f, 5 hrs.; Trigonometry, M11-f, 2 hrs.; Literature, EH52-w, EH53-w, each 2 hrs.; Sociology, ES50-w, 5 hrs.; Economics, ES3-f, 5 hrs.; Public Speaking, EH25-w, 2 hrs.; Argumentation, EH26-w, 2 hrs.; French, L1-f, 5 hrs., L2-w, 5 hrs.; German, L15-f, 5 hrs., L16-w, 5 hrs.: Personal and Community Health, GSc1-w, 4 hrs.; Music, Mu3, 2 hrs.; Harmony, Mu4-w, 2 hrs.; Journalistic Writing, EH8-w, 2 hrs.

Classes will not be formed for fewer than four students.

## AGRICULTURE

**Ed1-w.—Agriculture for Rural Teachers.**—Required in course in Education, sophomore 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-w.—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-w.—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-f.—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-w.—Judging Market Types.**—Alternative in Agriculture, freshman year. Six hours attendance, two credits. Score card and ring judging of various grades of commercial livestock.

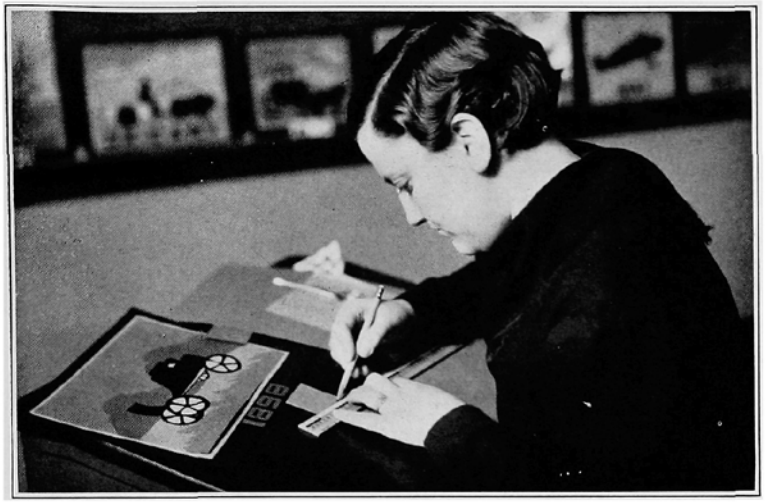
**AH2-f.—Judging Purebred Livestock.**—Alternative in Agriculture, sophomore year. Six hours attendance, two credits. Prerequisite: AH1. Comparative judging of purbred cattle, horses, sheep and swine.

### Horticulture

**H1-w.—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.

## EDUCATION

**Ed3-w.—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 human behavior. This course is a basis for educational psychology or other educational courses. All who expect to make psychology or education a major should take this course.



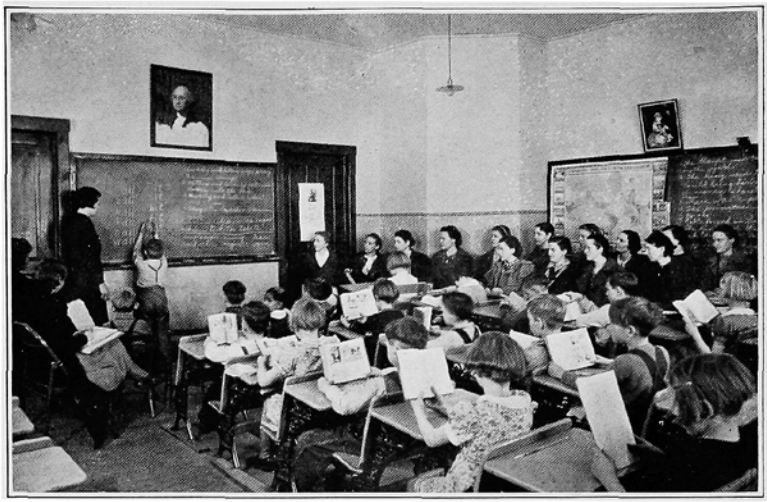
A Student Teacher Preparing Her Teaching Chart

**Ed4-f.—Introduction to Education.**—Required in course in Education, freshman year. Two hours attendance, two credits. An introductory course acquainting the student with the essential principles and facts underlying educational activity. Includes studies in the aim and scope of education; background of education; present program; organization and administration of teaching activity; financial support; agencies concerned with education.

**Ed5-w.—School Management and Procedure.**—Required in course in Education, sophomore year. Three hours attendance, three credits. A brief survey of the background of the public school, of the school procedures of the early school, and a definite study of the modern procedures in pupil accounting, registration, grouping, measuring and caring for individual differences is the basis of this course. The field of testing and measuring is studied and an effort is made to show their form, significance and use by the classroom teacher.

**Ed6-w.—Colorado History, Geography and School Law.**—Required in course in Education, sophomore 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.

**Ed8-w.—Literature for Elementary Schools.**—Required in course in Education, sophomore year. Three hours attendance, three credits. A survey of literature for the elementary school, the myths, fairy stories, fables, poetry, etc. The student will have practice in making and presenting type units. Principles governing the choice of literature for the elementary grades.



**The Practice School for Teacher Training**

**Ed9-f.—School Training.**—Required in course in Education, sophomore year. Five hours attendance, five credits. An introduction of techniques and methods of teaching, a study of the objectives of the elementary and secondary school, guiding principles in teaching, caring for individual needs. Type units of work will be written and practical applications made of the new projects and methods of rural and elementary teaching. Fee, $1.50.

**Ed10-w.—School Training.**—Required in course in Education, sophomore year. Five hours attendance, five credits. A study of the scientific methods of teaching reading, arithmetic and all grade-school subjects. Observation and teaching in the grade school under the direction of the instructor and the regular teachers. Fee, $1.50.

**Ed11-f.—Educational Psychology.**—Required in course in Education, sophomore year. Four hours attendance, four credits. The principles of psychology applied to teaching procedures. A study of the modification of school procedures as affected by the scientific findings in psychology. All who expect to teach should take this course as a continuation of Ed3.

**Ed12-f.—Principles of Education.**—Required in course in Education, sophomore year. Three hours attendance, three credits. Education as a life process, the properties of the individual and of society which make education possible, and the purpose of the school as a social institution form the basis of this course. General principles of the basic sciences of sociology, biology, history and psychology are emphasized in their relation to the development of the public-school system.

**Ed13-w.—Introduction to Science.**—Required in course in Education, freshman year. Four hours attendance, four credits. For elementary school teachers. Essentially a content course with emphasis on the subject matter of science needed by elementary school teachers. Attention is given to the aims in teaching elementary science, methods of presentation and ways of collecting, preserving and using materials.

## ENGINEERING

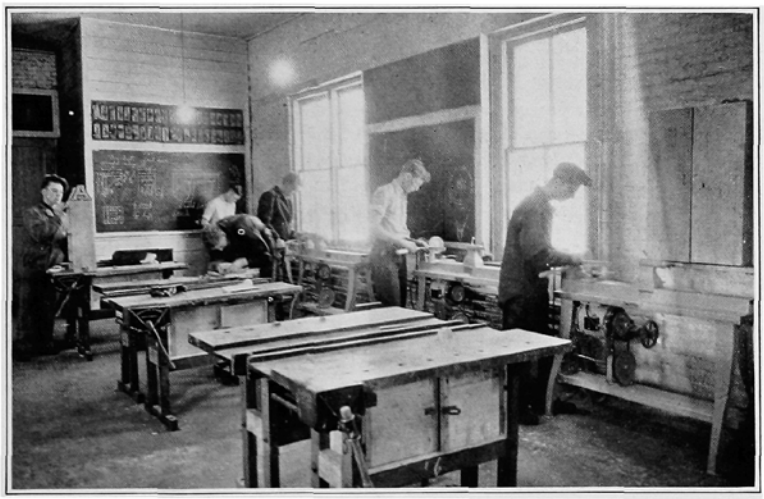
**CE1-f.—Surveying.**—Required in courses in Forestry and Engineering, sophomore year. Three hours attendance, three credits. Prerequisite: Trigonometry. This course deals with the principles underlying the practice of surveying. It takes up the use of chain, level and compass, their adjustment and operation.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

**CE2-f.—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.

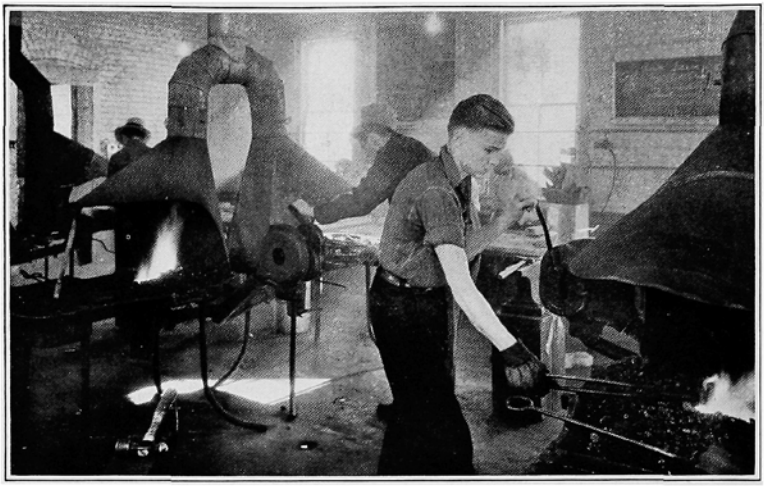
**ME1-w.—Wood Work.**—Required of students in the Division of Agriculture, freshman year. Three hours attendance, one credit. Care and use of tools used in farm shop; filing and setting of saws; sharpening of edged tools; construction of farm buildings; repair of tools and harness; rope work and soldering.

**ME2-w.—Pattern Making.**—Required of students in the Division of Engineering, sophomore 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-w.—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.



In the Wood Working Shop



**At the Forge**

**ME4-w.—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.

**ME20-f.—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-w.—Mechanical Drawing.**—Required of students in the Division of Engineering, freshman year. Three hours attendance, one credit. 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-f.—Descriptive Geometry.**—Required of students in the Division of Engineering, sophomore year. Two hours attendance, two credits. Must be taken with ME23. The principles of projection, intersection, etc., as applied to engineering practice.

**ME23-f.—Descriptive Geometry.**—Required of students in the Division of Engineering, sophomore year. Two hours attendance, one credit. Must be taken with ME22. A variety of problems drawn from engineering practice are accurately worked out on the drawing board. These problems illustrate the principles studied in ME22.

## ENGLISH AND HISTORY

**EdE-f (36-ab).—English Grammar.**—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.

**EH2-f.—English.**—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.

**EH3-w.—English.**—Continuation of EH2. Three hours attendance, three credits.

**EH8-w.—Journalistic Writing.**—Elective. Two hours attendance, two credits. Prerequisites: EH2 and EH3. 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.

**EH25-w.—Public Speaking.**—Required in Division of Agriculture, sophomore year, and Division of Engineering, freshman year. Two hours attendance, two credits. Prerequisites: EH2 and EH3. A course in the fundamentals of public speaking. A minimum of theory with as much practical experience as can be given.

**EH26-w.—Argumentation.**—Elective. Two hours attendance, two credits, sophomore year. Prerequisites: EH2 and EH3. Practice in argumentation and debate.

**EH51-f.—English Literature.**—Alternative for students in Home Economics Division, freshman year; required in course in Agriculture, sophomore year. Two hours attendance, two credits. A study of literary types; the essay, short story, novel and biography.

**EH52-w.—English Literature.**—Two hours attendance, two credits. A study of literary types, drama and poetry.

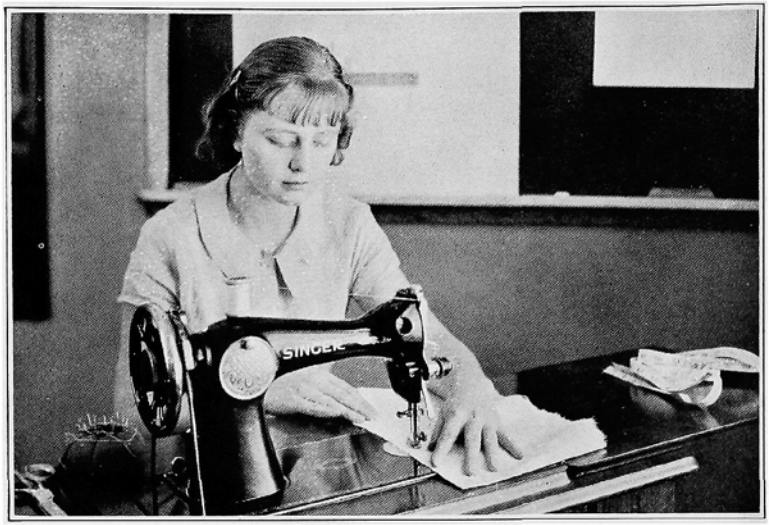
**EH53-w.—American Literature.**—Two hours attendance, two credits. Prerequisites: EH2, EH3, EH51, EH52. May not be elected by students except by permission of the head of the department. A study of the literary periods in our country from colonial times to the present.

**EH75-f.—American History.**—Required in course in Education, sophomore year. Two hours attendance, two credits. A general course in American History from the discovery of America down to 1850. This course is especially valuable to students who expect to teach.

**EH76-f.—American History.**—Continuation of EH75; from 1850 to the present. Three hours attendance, three credits.

**EH77-fw.—Citizenship.**—Required in course in Education, freshman year; and in Forestry, sophomore year. Three hours attendance, two credits. The events and causes which led to the formation of the national government as it exists today. Operation of the federal, state and local governments, and the study of the privileges and obligations of the citizen.

**EH79-w.—Industrial History.**—Three hours attendance, three credits. A review of industrial conditions in primitive England, of the days of the




**The Clothing Laboratory**

English manor, followed by the changes which produced the guild organizations, the domestic system of industry in the United States, the changes resulting from the factory system, and the consequent labor conditions.

**EH80-f.—Modern European History.**—Required in course in Education, freshman year. Two hours attendance, two credits. From about 1600 to 1870. Deals with the background and foundations of our present civilization.

**EH81-f.—Recent European History.**—Required in course in Education, freshman year. Three hours attendance, three credits. From 1870 to the present. Deals with the merging of European history into world history.

## HOME ECONOMICS

**HE01-f.—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-f.—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.

**HE2-w.—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-w.—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-f.—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.

**HE30-w.—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-f.—First-year French.**—Five hours attendance, five credits. A course in grammar, prose, composition, reading and conversation.

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

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

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

## MATHEMATICS

**M10-f.—College Algebra.**—Required in the Divisions of Agriculture, Engineering and Home Economics, freshman year. Five hours attendance, five crdits. 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.

**M11-fw.—Plane Trigonometry.**—Required in courses in Forestry and Engineering; 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.

**M12-w.—Analytic Geometry.**—Required in Engineering course, freshman year. Five hours attendance, five credits. Prerequisites: M10 and M11. The following topics are emphasized: Coordinates, fundamental metrical formulas, plane loci and their equations, the straight line, standard equations of the second degree, trigonometric and exponential functions, and the general equation of the second degree.

**M20-f.—Differential Calculus.**—Required in Engineering course, sophomore year. Five hours attendance, five credits. Prerequisites: M11 and M12. The doctrine of limits is here regarded as the foundation of the cal-

culus and as the entrance to higher mathematics. The derivative is rigorously developed and afterwards interpreted as a rate, a slope to a curve, and as the ratio between two differentials. Much time is given to the application to problems in engineering science and practice.

**M21-w.—Integral Calculus.**—Continuation of M20. Required in Engineering course, sophomore year. Five hours attendance, five credits. Prerequisite: M11. The integral is treated first as the inverse of the differential and then as a process of summation. Each problem is regarded as a sort of formula which may be used in the solution of succeeding problems. Special attention is given to length of curves, areas, surfaces, solids, water pressures, averages and center of gravity.

## MUSIC

**Mu1-f.—First-year Theory.**—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-w.—Appreciation.**—Required in course in Education, freshman year. Two hours attendance, two credits. Prerequisite: Mu1. A practical course in the art of enjoying music from the standpoint of its organizing factors, rhythm, melody, harmony, tone-color and form.

**Mu3-w.—Public School Music.**—Two hours attendance, two credits. A practical course for teachers of music in rural, one- and two-room schools, and the city elementary and intermediate systems; methods, materials, the child voice, appreciation, and the rhythm and harmonica bands, rhythm play. (It is suggested that, where possible, students in this course register for glee club.)

**Mu4-w.—Harmony.**—Two hours attendance, two credits. Prerequisite: Mu1. Exercises in tonal material in the way of scale forms, intervals, triads and their inversion, seventh chords and their progression, simple modulation and the harmonization of bases and melodies in four-part writing.

**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. A playing knowl-

**The College Band**

edge 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.

## SCIENCE

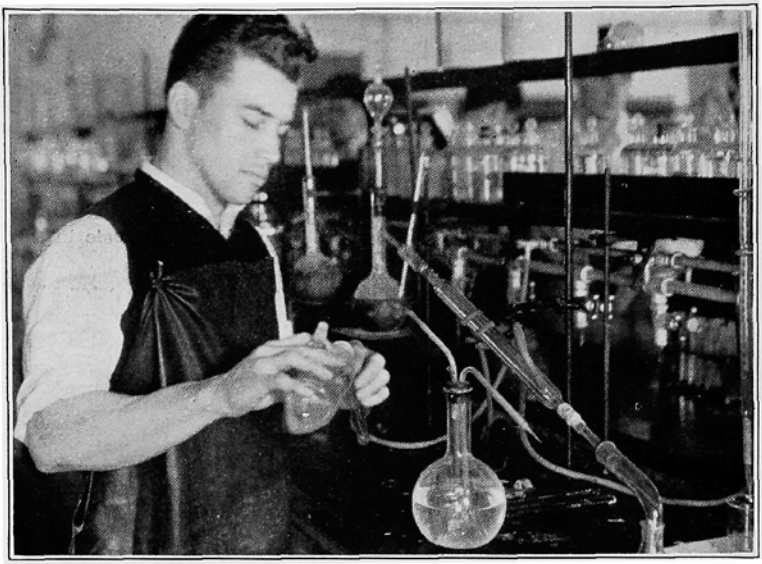
**EdBi1-f.—Educational Biology.**—Required in course in Education, freshman year. Three hours attendance, three credits. Those aspects of human biology which relate to principles and practices in the field of psychology, sociology and education, including principles and facts relating to life development, life functions and reaction.

### Botany

**B1-f.—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-f.—General Botany Laboratory.**—Laboratory to accompany B1. Credit not given independently from credits for B1.

**B3-w.—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 plants, morphology of roots, stems, leaves, flowers, fruits and seeds, the physiology of food production by the plant and plant identifications.



**Another Popular Laboratory—Chemistry**

**B4-w.—General Botany Laboratory.**—Laboratory to accompany B3. Credit not given independently from credits for B3.

**B16-f.—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-f.—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-f.—Inorganic Chemistry Laboratory.**—Exercises to accompany C1. Four hours attendance, two credits. Fee, $5.00.

**C3-w.—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-w.—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-f.—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-f.—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-w.—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-w.—Organic Chemistry Laboratory.**—Continuation of C6. Exercises to accompany C7. Four hours attendance, two credits. Fee, $5.00.

**C11-fw.—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.

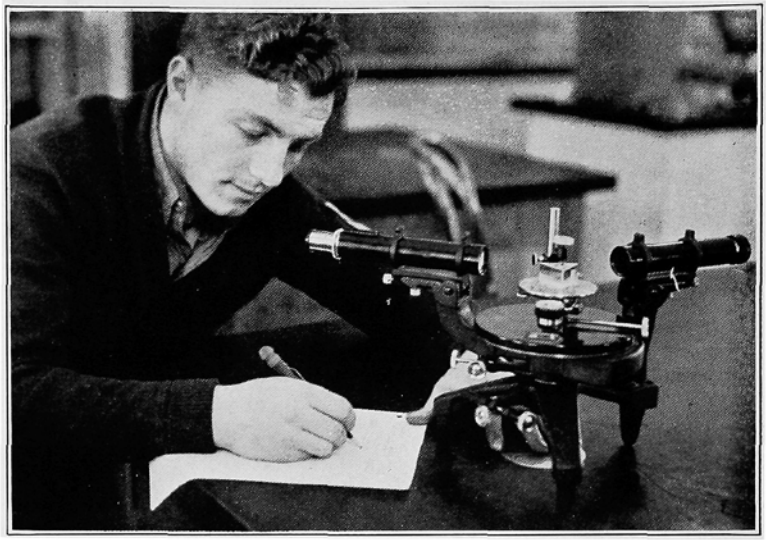
**C16-w.—Organic Preparations.**—Prerequisite: C8. Four hours attendance, one or two credits (according to work done). Fee, $4.00. An advanced organic laboratory course concerned largely with the preparation and purification of organic compounds.

### Economics and Sociology

**ES3-w.—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.

**ES50-w.—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.

**GSc1-w.—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.



At Work in the Physics Laboratory

## Physics

**Ph5-f.—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-f.—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-w.—Physics.**—A continuation of Ph5. Three hours attendance, three credits.

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

**Ph20-w.—Applied Mechanics.**—Required in course in Engineering, sophomore year. Three hours attendance, three credits. Prerequisites: College algebra, trigonometry, calculus (differential and taking integral) and first-semester physics. A lecture and recitation course covering the practical application as well as the theoretical side of the action of forces in the general field of mechanics. The student is familiarized with numerous type problems.

## Physiology

**EZ2-w.—Human Anatomy and Physiology.**—Required in course in Home Economics, freshman year. Five hours attendance, five credits. A 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-w.—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-f.—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 due attention.

**EZ12-f.—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-f.—Physical Education.**—Two hours attendance, one-half credit, freshman year. Health education, postural drills and corrective work, games.

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

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

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

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

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

**PE53-f.—Physical Education.**—Two hours attendance, one-half credit, sophomore year. Soccer, tennis, tap, clog, and folk dancing.

**PE54-w.—Physical Education.**—Two hours attendance, one-half credit, sophomore year. Volleyball, 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 all students are encouraged to take part. For those not interested in organized athletics, other sports are introduced, so that practically every student is given an opporunity for participation.

**Football** is the most popular sport. It is conducted on an inter-collegiate basis, with six games being played each season with Colorado and New Mexico colleges. The new sod field, the first to be developed in this region, was in use this past season and added materially to the pleasure of this sport.

**Basketball** competition is always keen. Various independent teams of the Basin offer strong competition. The best teams of the Western Slope are met at the Grand Junction tournament, which is usually attended by the

The Girls' Basketball Squad

Fort Lewis team. A San Juan Basin tournament is planned as an additional feature of the regular 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.

**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

The 1936 Football Squad

in the afternoon takes the form of a tumbling exhibition followed by a social dance. After a jolly picnic supper, the visitors 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 students of the German class have organized a Deutscher Verein, which meets for an hour every 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 pro-


The 1937 Basketball Squad

moting 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 1936-'37

| Name | Year | Course | Address |
|---|---|---|---|
| Allen, Bueford | 1 | Veterinary | Fort Defiance, Ariz. |
| Anderson, Donald | 1 | Forestry | Ignacio, Colo. |
| Bader, Ames | 1 | Agriculture | Hesperus, Colo. |
| Bader, Margaret | 2 | Home Economics | Hesperus, Colo. |
| Bailey, Mildred | 2 | Education | Durango, Colo. |
| Barrett, James | 1 | Forestry | Cortez, Colo. |
| Bauer, Doris | 2 | Education | Mancos, Colo. |
| Beaber, Howard | 1 | Engineering | Cortez, Colo. |
| Bedford, Franklin | 1 | Education | Gallatin, Mo. |
| Bozman, Faith | 1 | Education | Cortez, Colo. |
| Brown, Alvie | 1 | Engineering | Durango, Colo. |
| Brown, Fred | 1 | Forestry | Durango, Colo. |
| Brown, Marian | | Special | |
| Bruce, Sidney | 1 | Engineering | Durango, Colo. |
| Burns, Agnes | 1 | Education | Sioux City, Iowa |
| Carmack, Beatrice | 1 | Education | Durango, Colo. |
| Constantine, Elizabeth | 1 | Education | Cortez, Colo. |
| Conway, Winifred | 1 | Education | Durango, Colo. |
| Cornelius, Royce | 2 | Agriculture | Durango, Colo. |
| Cowling, Keith | 1 | Forestry | Cortez, Colo. |
| Dean, Edwin | 1 | Education | Redmesa, Colo. |
| Denton, Marshall | 1 | Engineering | Ignacio, Colo. |

## STUDENTS ENROLLED 1936-'37

| Name | Year | Course | Address |
|---|---|---|---|
| Dillon, Richard | 1 | Pre-Medicine | Lewis, Colo. |
| Downing, Robert | 1 | Pre-Medicine | Durango, Colo. |
| Eaton, Jean | 1 | Education | Cortez, Colo. |
| Easley, Carlos | 1 | Engineering | Cortez, Colo. |
| Ent, Maxine | 1 | Education | Farmington, N. M. |
| Fachman, Mary Frances | 1 | Education | Sioux City, Iowa |
| Fisher, Everett | | Special | Shiprock, N. M. |
| Galloway, Helen | 2 | Education | Cortez, Colo. |
| Garlinghouse, George | 2 | Education | Lewis, Colo. |
| Givens, Maude | 2 | Education | Ackmen, Colo. |
| Glenn, W. L. | 2 | Engineering | Cortez, Colo. |
| Good, Rowena | 2 | Education | Dove Creek, Colo. |
| Grabowsky, Lorraine | 1 | Home Economics | Ignacio, Colo. |
| Grabowsky, Theodore | 2 | Engineering | Ignacio, Colo. |
| Green, Margaret | 2 | Home Economics | Durango, Colo. |
| Hain, Marie | 2 | Education | Dolores, Colo. |
| Hanson, Donald | 2 | Engineering | Cortez, Colo. |
| Henry, Lee H. | 2 | Education | Hesperus, Colo. |
| High, Dale | 1 | Pre-Law | Cortez, Colo. |
| Hillyer, Ella Scott | 2 | Education | Hesperus, Colo. |
| Hines, Lyla Ruth | 1 | Education | Farmington, N. M. |
| Howard, Afton C. | 2 | Agriculture | Cortez, Colo. |
| Humiston, Glen W. | 1 | Engineering | Bayfield, Colo. |
| Hunt, Alice | 1 | Pre-Medicine | Silverton, Colo. |
| Hunt, Elizabeth Jane | 2 | Home Economics | Silverton, Colo. |
| Jacobson, Frances | 2 | Education | Cortez, Colo. |
| Kemble, Alma | 1 | Home Economics | Carrollton, Mo. |
| Klahn, Austin | 1 | Forestry | Durango, Colo. |
| Klatt, Ronald | 1 | Forestry | Durango, Colo. |
| Knight, Fern | 1 | Education | Bayfield, Colo. |
| Koehler, Natalie | 1 | Pre-Medicine | Durango, Colo. |
| Kroeger, Fred | 1 | Agriculture | Durango, Colo. |
| Larrabee, James | 1 | Engineering | Durango, Colo. |
| Lechner, Irwin | 1 | Forestry | Rockwood, Colo. |
| Lechner, Mabel | 1 | Education | Rockwood, Colo. |
| Lemmon, Richard | 2 | Business Adm. | Durango, Colo. |
| Livingston, Jessie | 2 | Education | Yellow Jacket, Colo. |
| McCarty, Berniece | 1 | Education | La Plata, N. M. |
| McDaniel, Harry | 1 | Engineering | Durango, Colo. |
| McDaniel, Larry | 2 | Pre-Law | Durango, Colo. |
| McLin, Thelma | 1 | Home Economics | Hesperus, Colo. |
| McRay, Edith | 1 | Education | Mancos, Colo. |
| Maddox, Avanell | 1 | Education | Durango, Colo. |
| Marshall, William | 1 | Veterinary | Albuquerque, N. M. |
| Miernyk, William | 1 | Journalism | Durango, Colo. |
| Morgan, Lee B. | 2 | Engineering | Burlington, Colo. |
| Morrison, Marjorie | 1 | Journalism | Bayfield, Colo. |
| Moyers, Clyde | 1 | Education | Ferris, Texas |

## STUDENTS ENROLLED 1936-'37

| Name | Year | Course | Address |
|---|---|---|---|
| Neal, Robert | 1 | Forestry | Dolores, Colo. |
| Neal, Neva | 1 | Education | Hesperus, Colo. |
| Needham, Alice | 2 | Home Economics | Durango, Colo. |
| Nelson, J. R. | | Special | Hesperus, Colo. |
| Pepin, Albert | 1 | Education | Durango, Colo. |
| Piccoli, Louis | 1 | Forestry | Durango, Colo. |
| Procarione, Lucille | 2 | Education | Allison, Colo. |
| Ptolemy, Robert | 1 | Forestry | Cortez, Colo. |
| Puett, Billy | 1 | Engineering | Mancos, Colo. |
| Putnam, James | 2 | Engineering | Lamar, Colo. |
| Putnam, Stewart | 1 | Forestry | Colorado Springs, Colo. |
| Riddle, Clure | 1 | Journalism | Bedrock, Colo. |
| Ringstad, Helen | 1 | Home Economics | Aneta, N. D. |
| Roelker, Louise | 2 | Education | Dolores, Colo. |
| Scott, Alyce | 2 | Education | Bayfield, Colo. |
| Sellers, Mary Joe | 2 | Education | Bayfield, Colo. |
| Slack, Joseph | 1 | Engineering | Breen, Colo. |
| Snyder, Marjorie | 1 | General | Durango, Colo. |
| Stavely, Robert | 1 | Engineering | Cortez, Colo. |
| Stevens, Ruth | 2 | Education | Lewis, Colo. |
| Stiles, Simmie Edna | 1 | Education | Farmington, N. M. |
| Sullivan, Samette | 1 | General | Durango, Colo. |
| Swanson, Ebba | 2 | Education | Pagosa Springs, Colo. |
| Taylor, John | 1 | Engineering | Aztec, N. M. |
| Thompson, Fern | 2 | Education | Drumright, Okla. |
| Thrasher, Juanita | 2 | Education | Fairbury, Nebr. |
| Towne, Eleanor | 1 | General | Durango, Colo. |
| Tripp, Robert | 2 | Engineering | Cortez, Colo. |
| Truby, Edna Ruth | 2 | Education | Blanco, N. M. |
| Tyner, George | 1 | Forestry | Falfa, Colo. |
| Tyner, Robert | 2 | Engineering | Falfa, Colo. |
| Walker, Troy | 2 | Education | Rockwood, Colo. |
| Walls, Ruth | 2 | Education | Durango, Colo. |
| Waters, Evelyn | 1 | Business Adm. | Durango, Colo. |
| Way, Henrietta | 1 | Education | Silverton, Colo. |
| Whiteley, James | 2 | Forestry | Norwood, Colo. |
| Whitener, Ruth | 1 | Education | Dove Creek, Colo. |
| Wilmer, Elizabeth | 2 | Business Adm. | Durango, Colo. |

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E. H. BADER, Dean

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