



Colorado
State College
Bulletin



FORT LEWIS BRANCH
CATALOG NUMBER

1940-1941

SERIES 32, No. 6

May, 1940

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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



1940-1941

Agriculture

Home Economics

Engineering

Education

Forestry

Science and Arts

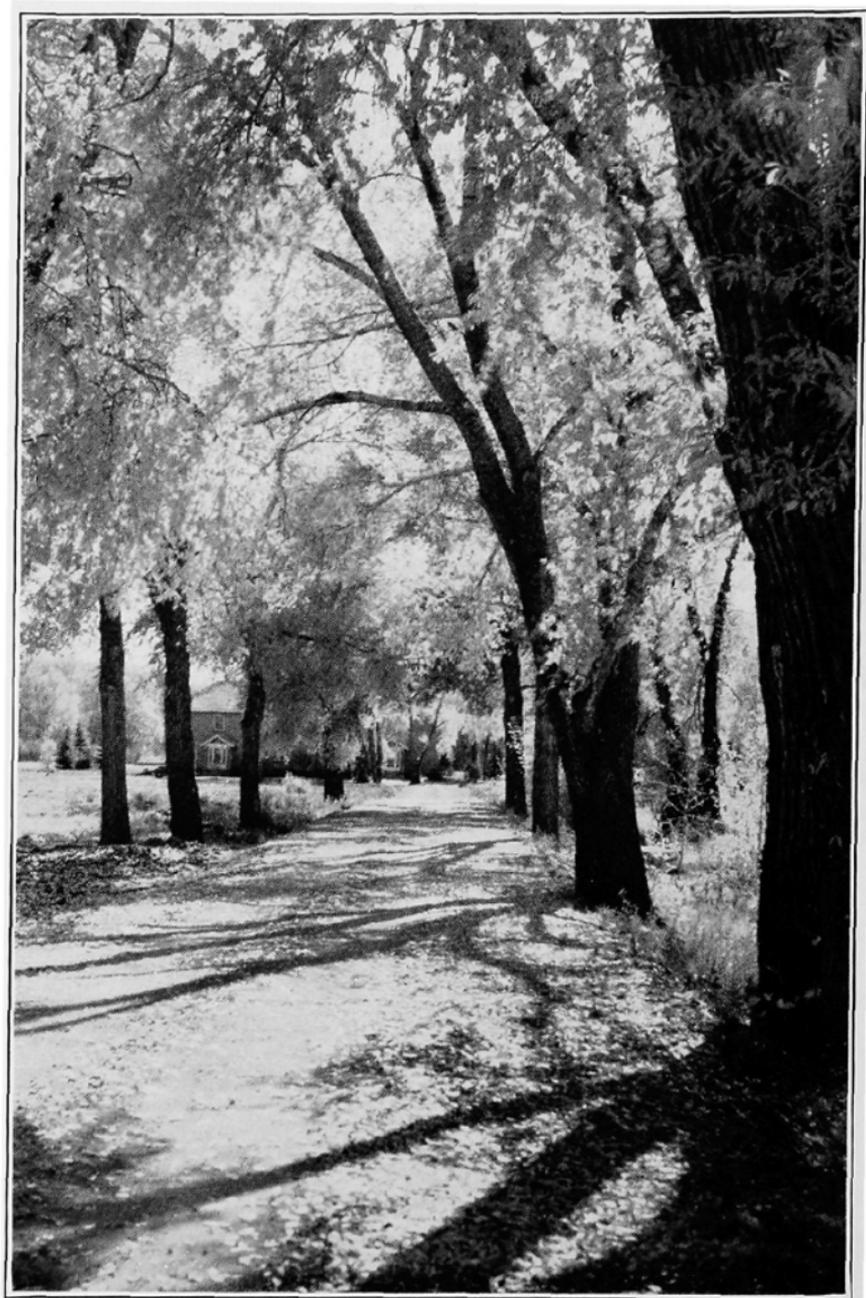
Pre-Veterinary

and

Foundation Training for Other Majors

also

Vocational Training in Agriculture and Home Economics



Looking Toward Lory Hall

THE STATE BOARD OF AGRICULTURE

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Dean Bader

During these times of unrest and concern, young people are indeed fortunate who live in a country where they have the privileges of choosing their occupation or profession and of deciding where to train for such. The tendencies are to increase facilities and opportunities for such training. Southwestern Colorado has had for a number of years what many other communities are now striving to obtain, and the citizens of this region are rightly grateful for the collegiate educational facilities at Fort Lewis.

The demand for trained men and women is strong. The youth of today face the responsibility of being ready to work in a world of disorder, the result of war and its terrible consequences.

Those who accept the challenge and are anxious to continue their education, will find at Fort Lewis much that is worthy of favorable consideration when selecting an institution of higher learning. With surroundings that are attractive and enjoyable, and a student and community atmosphere that is sympathetic and interested in each individual, student life is filled with the pleasures and satisfactions which come from work well done, and the friendly associations that are so vital in the development of young men and women. May we have the privilege of meeting and working with you while you continue your training through a college course?

ERNEST H. BADER, Dean

COLLEGE CALENDAR

1940

First Semester

Freshman Week	September 5-7
Special examinations for removal of conditions. Entrance examinations for those who plan to enter from non-accredited high schools.	
Registration	Monday, September 9
Regular classes begin	Tuesday morning, September 10
Colorado Educational Association Meeting in Durango.....	
.....	Friday and Saturday, October 11 and 12
Thanksgiving vacation begins at 3:45 p. m.	
.....	Wednesday, November 27
and ends at 8:00 a. m.	Monday, December 2
Christmas vacation begins at 3:45 p. m.	Friday, December 20

1941

Christmas vacation ends at 8:00 a. m.	Monday, January 6
First semester closes at 3:45 p. m.	Friday, January 17

Second Semester

Registration	Monday forenoon, January 20
Second-semester classes begin at 1:00 p. m.....	Monday, January 20
Spring vacation begins at 3:45 p. m.....	Friday, March 28
Spring vacation ends at 8:00 a. m.....	Monday, April 7
San Juan Basin High-School Senior Day.....	Friday, May 2
Second semester closes at 3:45 p. m.....	Wednesday, May 28

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
- Baker, Howard P., B.A., M.A. (University of Colorado), Graduate Study at University of Colorado, Bachelors Diploma in Education, 1939 Social Science
-
- Brown, Bryce K., A.B. (Southwestern College, Kansas), M.A. (University of Colorado) Mathematics and Engineering
- Brown, Marian, B.S. (Colorado State College), Graduate Study at Colorado State College and Iowa State College.....Home Economics
- Chinburg, Carl H., B.S., M.S. (Colorado State College).....
- Mathematics and Engineering
- Cool, Dwight W., B.A. (University of Colorado), M.A. (Colorado State College of Education).....Resident N. Y. A. Director
- Good, Margaret, A.B. (University of Denver), Graduate Study at Northwestern University, Denver University, University of Colorado, and Colorado State College House Mother at Snyder Hall and Physical Education
-
- Hard, Harry O., B.S. (Colorado State College), M.A. (Colorado State College of Education) Vocational Agriculture
- Hayman, George C., (Oklahoma A. and M. College) (Western State)..... Vocational Agriculture
-
- Jones, W. Norton, Jr., B.A. (Hendrix College, Arkansas), M.A., Ph.D. (Johns Hopkins University), Graduate Study at University of Southern California Chemistry and French
- Koonce, Dwight, B.S. (Colorado State College), M.S. (Utah State College of Agriculture) Agronomy
- 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 at University of Chicago Botany and Agriculture
- O'Brien, Irene, B.S. (State Teachers' College, Maryville, Missouri), M.A. (University of Missouri), Graduate Study at Peabody College for Teachers, Nashville Education, Dean of Women
- Pollock, Floyd A., B.A. (Baker University, Missouri), M.S. (Colorado State College), Graduate Study at University of Southern California Social Science
-
- Trimble, Martha, B.S. (Colorado State College), Graduate Study at University of Colorado.....English, Literature, and Dramatics
- Walker, Juanita, (Superior State Teachers College), B.A. (University of Iowa), B.L.S. (Illinois Library School), Head of Children's Department of Superior Public Library..... Librarian

GREETINGS

To those who sincerely wish to widen their interests in knowledge and social advantages, we heartily extend our encouragement; we cannot recommend Fort Lewis College too highly. Its educational facilities include a thoroughly efficient course in education; a secure foundation in agriculture, forestry, and engineering; and introductory courses to veterinary medicine. Special emphasis is also placed upon home economics. The recent establishment of the vocational school is proving to be, not only successful, but very popular.

Our athletic schedule has football, basketball, baseball, track, tumbling, and tennis. There are also gymnastic classes for both men and women who desire less strenuous participation. Credits are given in either case. An "A" club, which functions most actively, was formed several years ago for those who earn their letters in sports.

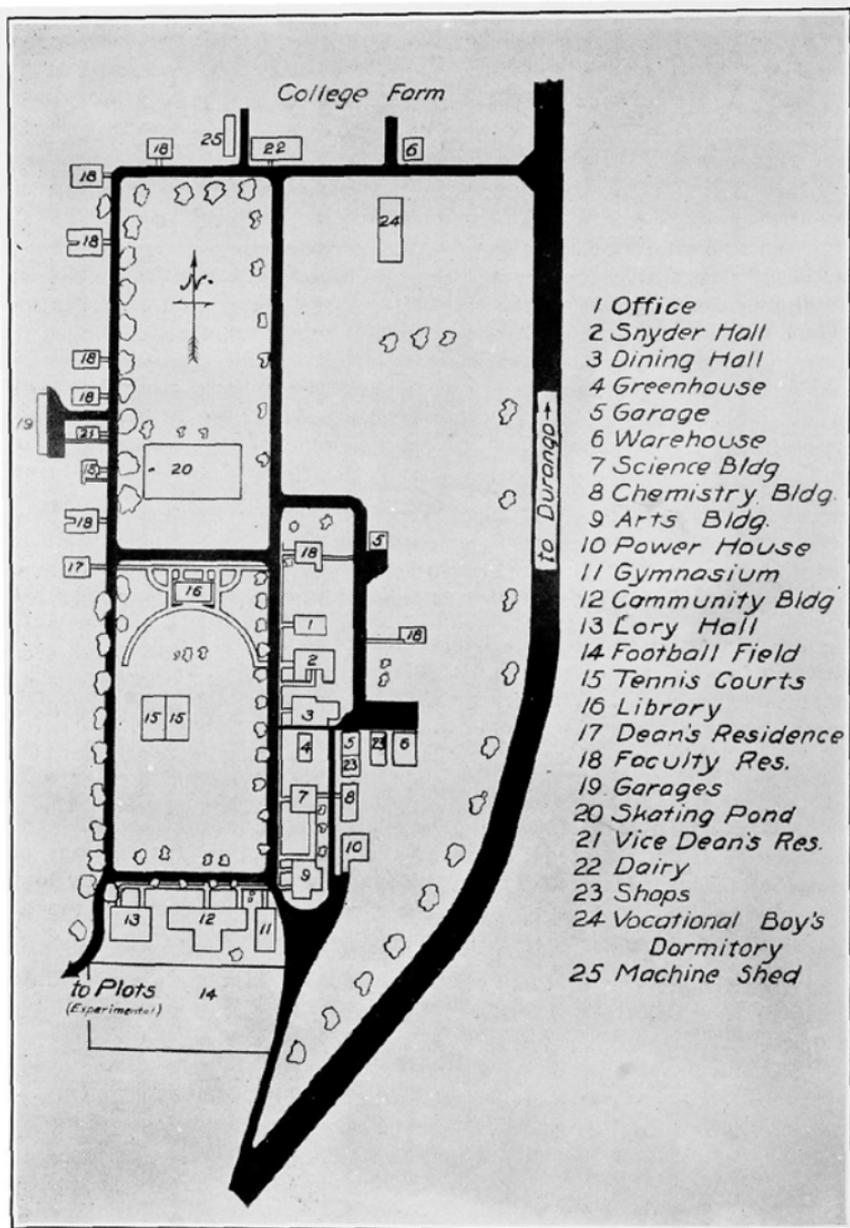
In our social activities, all have the opportunity for close contact with the faculty members, who also give us the great advantage of personal help in studies. We very quickly acquaint ourselves with our fellow students by the week-end entertainments, given solely for our benefit, and our social hour held on Wednesday nights. Parties, dances, banquets and bus trips feature these attractions.

Advantages at Fort Lewis are numerous. The school has a historic background; it is situated in one of the most picturesque sections of Colorado, only fourteen miles from Durango, expenses are unusually low, and campus life makes a new student a part of the work and fun at the Fort.

We welcome you to the Fort Lewis Branch of the Colorado State College of Agriculture and Mechanic Arts.

Sincerely,

THE STUDENT BODY



Map of Campus

COLORADO STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS

Fort Lewis Branch

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

Beginning in October, 1911, secondary courses in Agriculture, Home Economics, and Mechanics were offered. Four years later rural teacher-training courses were added. All secondary courses were discontinued in 1935. College work was first offered in 1927 with twenty-seven freshmen enrolling—the first of hundreds of young people of the Southwest to receive collegiate training in the Fort Lewis School.

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

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

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

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 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.

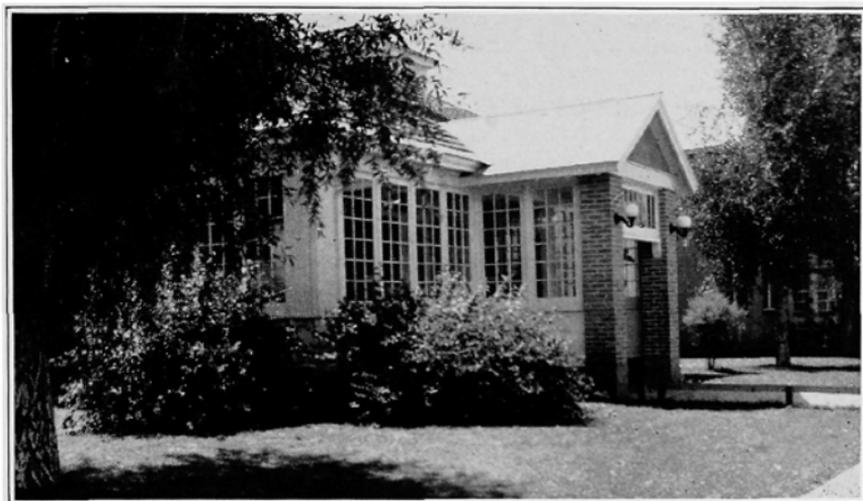
Any person who has been graduated from an accredited Colorado high school will be eligible to register here, provided the following prescribed units have been included in his high-school course of study:

	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
	<hr/>	<hr/>
	15	15

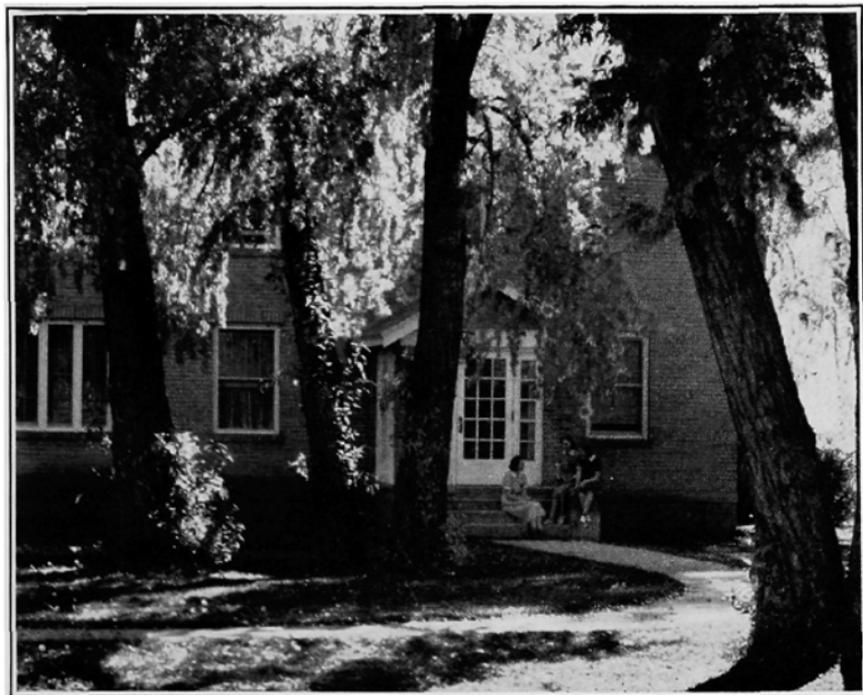
*For those not having the advanced algebra and the ½ unit of solid geometry, provision will be made for them to take these subjects without credit during the first semester of their freshman year. Such students in order to clear the deficiency in mathematics will not be able to complete the required second semester's work in English Composition during the freshman year. This must be cleared during the first semester of the sophomore year.

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.



The Administration Building



The Doorway to Lory Hall

BASIC COST FOR FRESHMEN 1940-1941

First Semester	Second Semester
September 5, 1940	January 20, 1941
Board and room\$22.50	Tuition\$25.00
Tuition 25.00	Registration fee 5.00
Registration fee 5.00	Books (estimate) 10.00
Books (estimate) 15.00	Student assessments:
Key deposit 1.00	Athletic fee\$3.00
Property deposit 5.00	Student fee 2.00
Student assessments:	Publications 3.75
Athletic fee\$3.00	Dormitory fee50
Student fee 2.00	Class fee75
Publications75	
Dormitory fee50	10.00
Class fee75	
7.00	
\$80.50	\$50.00
Oct. 1 Board and room.....\$ 26.00	Feb. 1 Board and room.....\$ 26.00
Nov. 1 Board and room..... 26.00	Mar. 1 Board and room..... 26.00
Dec. 1 Board and room..... 26.00	Apr. 1 Board and room..... 19.70
Jan. 1 Board and room..... 12.00	May 1 Board and room..... 24.60
\$170.50	\$146.30
Total—First Semester\$170.50	
Second Semester 146.30	
Total—Basic Cost\$316.80	

(Out-of-state students add \$12.50 each semester)

The above basic costs are paid by all freshmen, regardless of the course in which they are enrolled. Fees for special courses follow:

First Semester

(Payment due on Sept. 5)

Agriculture and Forestry:	
Botany	\$ 1.00
Chemistry	5.00
Breakage deposit	5.00
	<hr/>
	\$11.00
Engineering:	
Chemistry	\$ 5.00
Breakage deposit	5.00
	<hr/>
	\$10.00
Home Economics:	
Chemistry	\$ 5.00
Color and Design	1.00
Breakage deposit	5.00
	<hr/>
	\$11.00
Education:	
Introduction to Biology....	\$ 1.00

Second Semester

(Payment due Jan. 20, 1941)

Agriculture and Forestry:	
Botany	\$ 1.00
Chemistry	5.00
Forge and Welding	4.00
	(Agriculture only)
	<hr/>
	\$10.00
Engineering:	
Chemistry	\$ 5.00
Forge and Welding	4.00
	<hr/>
	\$ 9.00
Home Economics:	
Chemistry	\$ 5.00
Clothing	2.00
	<hr/>
	\$ 7.00
Education:	
No additions	—

A non-resident fee of \$12.50 per semester is charged students who do not live in Colorado.



Many Students Earn a Part of Their Expenses

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 $\frac{1}{2}$ quality point for each semester credit.

F—Failure (below 60)—minus 1 quality point for each semester credit.

SCHOLARSHIPS—EMPLOYMENT—LOANS

Scholarships. — 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 re-

turned 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.

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.

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

CERTIFICATION—GRADUATION

Certificates.—At the end of two years work in which not less than 70 semester credits have been earned, a certificate of accomplishment is awarded at the Final Convocation.

Teacher's Certificate.—Graduates of the Education department who at the end of two years have completed the required courses are eligible to receive a certificate entitling them to teach in the rural schools of Colorado for one year. At the end of the three-year course they may receive a five-year certificate.

Graduation.—One hundred forty credits and one hundred forty quality points are required for graduation in all courses offered at Colorado State College, except in forestry and veterinary medicine. Fort Lewis students may earn half of the credits required for graduation at "Colorado State" in the two years of work offered at this branch institution, except for majoring in forestry and veterinary medicine.



The Girls of Lory Hall

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.

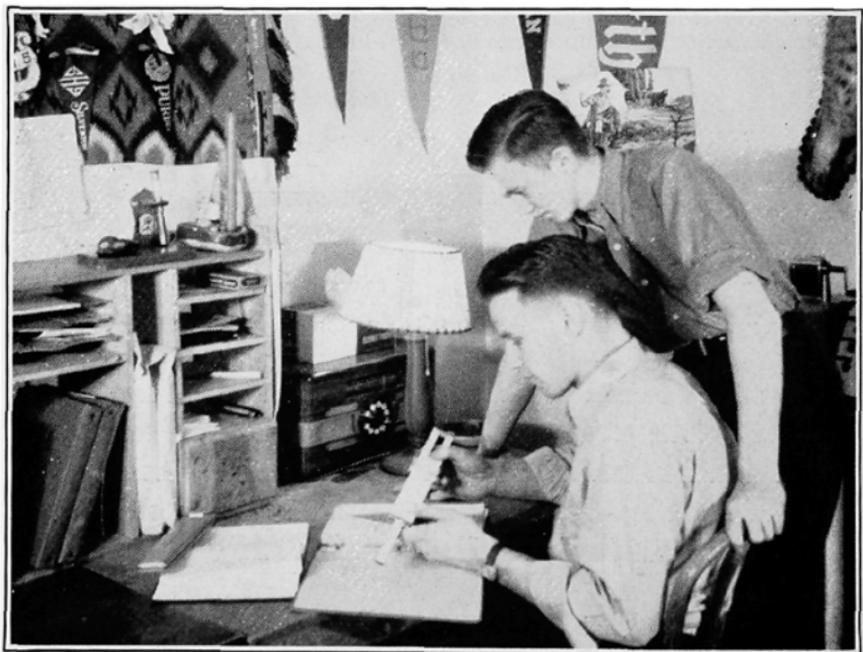


Two Girls Studying in Their Room in Lory Hall



The Boys Enjoy the Recreation Room in Snyder Hall

Snyder Hall for Men.—Snyder Hall is south of the Office and north of the Dining Hall. It is a U-shaped building and contains twenty-nine rooms, twenty-six double and three single. These bedrooms are decorated in green and white and contain two alcoves, a dresser, study tables and chairs. A large, well-furnished recreation room with low-beamed ceiling, rugged fireplace and pictures of athletic heroes, is popular for recreation. The entire building has been remodeled recently and is convenient and comfortable.



A Room in Snyder Hall



The Dining Hall

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



The Reading Room in the New Library

ABBREVIATIONS FOR DEPARTMENTS

Agronomy	Ag
Animal Husbandry	AH
Botany and Plant Pathology	B
Chemistry	C
Civil Engineering	CE
Economics, Sociology and History	ES
Education, Rural and Vocational	Ed
Electrical Engineering	EE
English	E
Entomology and Zoology	EZ
Farm Mechanics	FM
Forestry	F
Home Economics	HE
Horticulture	H
Industrial Arts	IA
Language	L
Library	Lib
Mathematics	M
Mechanical Engineering	ME
Military Science and Tactics	MT
Music	Mu
Pathology and Bacteriology	PB
Physical Education	PE
Physics	Ph
Physiology	VP
Poultry Husbandry	P
Range and Pasture Management	RM
Veterinary Medicine	VM
Veterinary Surgery	VS

Agriculture

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

To meet the varied and special agricultural conditions of the state, election is offered in four courses: Agronomy, animal husbandry, entomology, and horticulture. Specialization in the respective courses begins in the junior year. The need in another field of agriculture is met by the poultry department.

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

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

AGRICULTURE

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

Freshman Year

First Semester			Second Semester		
E	2	English Composition.....3	E	3	English Composition.....3
C	1	Inorganic Chemistry3	C	3	Inorganic Chemistry3
C	2	Inorganic Chemistry Laboratory2	C	4	Inorganic Chemistry Laboratory2
B	1	General Botany2	B	3	General Botany2
B	2	General Botany Laboratory1	B	4	General Botany Laboratory1
M	2	Algebra5	M	3	Plane Trigonometry2
PE	1	Physical Education0.5	H	1	General Horticulture3
			ME	4	Forge and Welding.....1
			PE	2	Physical Education0.5

Sophomore Year

First Semester			Second Semester		
E	51	Life in Literature.....2	C	7	Organic Chemistry3
C	5	Organic Chemistry3	C	8	Organic Chemistry Laboratory2
C	6	Organic Chemistry Laboratory2	Ag	2	Soils3
EZ	11	Zoology3	Ag	4	Soils Laboratory2
EZ	12	Zoology Laboratory2	EZ	4	Economic Entomology..3
B	16	Plant Classification3	E	25	Public Speaking2
PE	3	Physical Education0.5	ES	3	Economics3
AH	1	Types and Breeds2	PE	4	Physical Education0.5

AGRONOMY

Ag 1.—Agriculture for Rural Teachers.—II. 3 (3-0). Required in course in Education, first year. Designed to emphasize significant facts in the field of agriculture that are of especial importance to the rural child. Involves economic and social relationships.

Ag 2.—Soils.—II. 3 (3-0). Prerequisites: C 1, C 2, C 3, C 4. A comprehensive course dealing with the composition, properties, and formation of soils, with particular emphasis on soil conditions that affect plant growth and land management.

Ag 4.—Soils Laboratory.—II. 2 (0-4). Prerequisite: Ag 2. A study of the physical properties of the soil, moisture relations, and elementary fertility analysis.

ANIMAL HUSBANDRY

AH 1.—Types and Breeds of Livestock.—I. 2 (1-4). Judging beef cattle, dairy cattle, sheep, swine, horses and poultry on a purebred and market basis. Emphasis placed on breed characteristics and market classes and grades.

ENTOMOLOGY AND ZOOLOGY

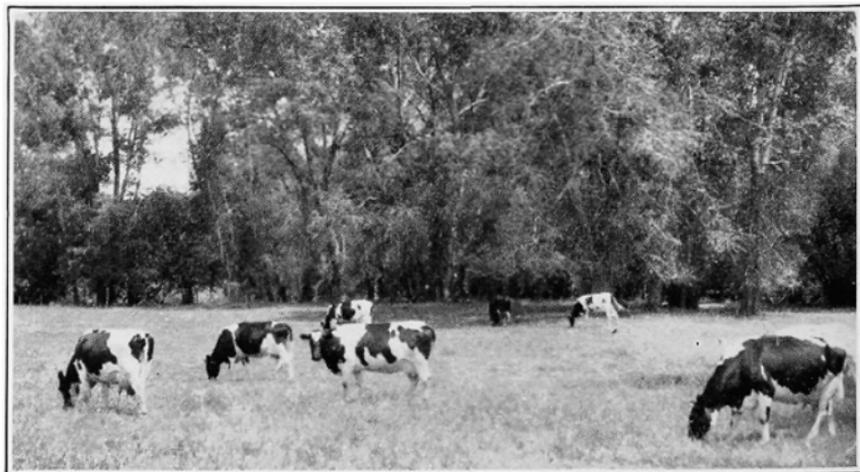
EZ 4.—Economic Entomology.—II. 3 (2-2). Prerequisites: EZ 11 and EZ 12. Attention is given to the general structure, classification, and methods of control for many injurious insects.

EZ 11.—Zoology.—I. 3 (3-0). Accompanies EZ 12. A study of the structures, habits, and relationships of the animal kingdom.

EZ 12.—Zoology Laboratory.—I. 2 (0-4). Prerequisite: EZ 11, or must accompany EZ 11. No credit without the latter. A laboratory course to accompany EZ 11.

HORTICULTURE

H 1.—General Horticulture.—II. 3 (3-0). Prerequisites: B 1, B 2. A general course covering the principles underlying the propagation, culture, improvement and marketing of horticultural crops.



Portion of the Dairy Herd at Fort Lewis



Learning the Principles of Surveying

Engineering

The college offers standard courses in Civil Engineering, Electrical Engineering, and Mechanical Engineering for the first 2 years of college work.

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

A considerable number of modifications have been made in the engineering curriculum during the last two years. The effect of these changes has been to broaden the courses and more adequately meet the requirements modern society is making upon the engineering profession.

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

**CIVIL ENGINEERING, ELECTRICAL ENGINEERING,
AND MECHANICAL ENGINEERING**

Freshman Year

First Semester		Second Semester	
E 2	English Composition3	E 3	English Composition3
C 1	Inorganic Chemistry3	C 3	Inorganic Chemistry3
C 2	Inorganic Chemistry Laboratory2	C 4	Inorganic Chemistry Laboratory2
M 4	Mathematics for Engineers5	M 5	Mathematics for Engineers5
ME 20	Mechanical Drawing3	ME 21	Mechanical Drawing1
PE 1	Physical Education0.5	ME 4	Forge and Welding1
		E 25	Public Speaking2
		PE 2	Physical Education0.5

Sophomore Year

First Semester		Second Semester	
M 21	Mathematics for Engineers4	M 26	Mathematics for Engineers4
Ph 5	Physics3	Ph 9	Physics3
Ph 6	Physics Laboratory2	Ph 10	Physics Laboratory2
ME 22	Descriptive Geometry....2	ME 28	Theoretical Mechanics ..3
CE 1	Elementary Surveying ..3	PE 4	Physical Education0.5
CE 2	Surveying Field Work ..1		
PE 3	Physical Education0.5		

In addition to the above, sophomore engineers will take the following:

Civil Engineering

First Semester		Second Semester	
M 22	Engineering Problems..1	CE 13	Higher Surveying3
CE 51	Materials of Con- struction2	CE 14	Higher Surveying Field Work2

Electrical Engineering

First Semester		Second Semester	
ES 91	Current Topics1	ES 3	Economics3
E 26	Public Discussion2		Elective2

Mechanical Engineering

First Semester		Second Semester	
M 22	Engineering Problems..1	ES 3	Economics3
E 26	Public Discussion2		Elective2

CIVIL ENGINEERING

CE 1.—Elementary Surveying.—I. 3 (3-0). Prerequisite: M 4. Use and adjustment of the tape, transit, and level. Measurements of angles, vertical and horizontal distances, and areas, and their application to engineering work. Land surveying and sub-division of public land.

CE 2.—Surveying Field Work.—I. 1 (0-3). Taken with CE 1. The student receives practice in the use of the tape, transit, and level. Practical problems in measuring distances, angles, and areas, and their application to engineering work are taken up.

CE 13.—Higher Surveying.—II. 3 (3-0). Prerequisites: CE 1, CE 2. This course takes up in detail systems of triangulation, classifications of control, baseline measurements, astronomical observations, precise trigonometric and barometric leveling, stadia, transit and plane table topographic surveying, hydrographic surveying relating to shore line, stream, drainage areas and reservoirs.

CE 14.—Surveying Field Work.—II. 2 (0-6). Prerequisites: CE 1, CE 2. Taken with CE 13. This course deals with field practice for all problems given in CE 13.

CE 51.—Materials of Construction.—I. 2 (2-0). A study of the properties of materials commonly used in construction. A study of the standard specifications and tests for these materials.

MECHANICAL ENGINEERING

ME 4.—Forge and Welding.—II. 1 (0-3). The technique of forging and welding iron and steel. The application of forging and welding processes to the manufacture of machines.

ME 20.—Mechanical Drawing.—I. 3 (0-9). Care and use of instruments; lettering; geometrical construction and projection.

ME 21.—Mechanical Drawing.—II. 1 (0-3). Prerequisite: ME 20. A continuation of ME 20. Isometric and other pictorial representations; drawing of machine parts.

ME 22.—Descriptive Geometry.—I. 2 (0-6). The graphical representation of geometrical magnitudes in space.

ME 28.—Theoretical Mechanics (Statics).—II. 3 (3-0). Prerequisite: M 21. A study of coplanar, non-coplanar, concurrent and non-concurrent forces. Centroids and moments of inertia of areas.

Forestry

The course in forestry prepares students for professional employment within the field. Various federal and state agencies employ most of the graduates, although there is an increasing opportunity with private enterprise. The principal federal employers are the Bureau of Biological Survey, the Indian Service, the National Park Service, the Soil Conservation Service, and the United States Forest Service.

Beginning with the fall of 1939, the college reserves the right to limit the sophomore enrollment in forestry to 60 students. Beginning in 1940, the number admitted to the junior class may also be limited to 60. In the event that the forestry enrollment is limited, selection will be on the basis of scholarship with preference given to those living in Colorado and adjoining states.

An important feature of the forestry course is practical field instruction given in the summer camp on the college forest of sixteen hundred acres in and near Pingree Park, fifty-five miles west of Fort Collins, where permanent quarters are provided. This summer course of ten weeks is required for a degree. The summer camp is the first course in forestry and is a prerequisite for all succeeding forestry courses offered in the junior and senior years. The total expense per student in the summer camp will be approximately \$65.00. Of this \$65.00, \$50.00 is for board and lodging, and \$15.00 for camp expenses. Each student will provide his own blankets.

FORESTRY

Freshman Year

First Semester			Second Semester		
E	2	English Composition3	F	31	Conservation Policy3
C	1	Inorganic Chemistry3	E	3	English Composition3
C	2	Inorganic Chemistry Laboratory2	C	3	Inorganic Chemistry3
B	1	General Botany2	C	4	Inorganic Chemistry Laboratory2
B	2	General Botany Laboratory1	B	3	General Botany2
M	2	Algebra5	B	4	General Botany Laboratory1
PE	1	Physical Education0.5	M	3	Plane Trigonometry2
			PE	2	Physical Education0.5

Sophomore Year

First Semester			Second Semester		
C	5	Organic Chemistry3	E	25	Public Speaking2
C	6	Organic Chemistry Laboratory2	Ag	2	Soils3
B	16	Plant Classification3	Ag	4	Soils Laboratory2
CE	1	Elementary Surveying ..3	ES	3	Economics3
CE	2	Surveying Field Work ..1	E	52	Life in Literature2
EZ	11	Zoology3	Ph	7	Physics5
EZ	12	Zoology Laboratory2	PE	4	Physical Education0.5
PE	3	Physical Education0.5			

F 31.—Conservation Policy.—II. 3 (3-0). A survey of the natural resources of the United States. The economic and social significance of the policies which have been developed to control waste and exploitation. Recent trends and important current projects are stressed.

Home Economics

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

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

HOME ECONOMICS

Freshman Year

First Semester		Second Semester	
E	2 English Composition	E	3 English Composition
C	1 Inorganic Chemistry	C	3 Inorganic Chemistry
C	2 Inorganic Chemistry	C	4 Inorganic Chemistry
	Laboratory		Laboratory
HE	1 Color and Design	HE	16 Textiles and Clothing
HE	01 Orientation	VP	22 Human Anatomy and
M	1 Mathematical Analysis		Physiology
	or	PE	52 Physical Education
M	2 Algebra		
PE	51 Physical Education		

Sophomore Year

First Semester		Second Semester	
C	5 Organic Chemistry	Ph	1 Physics
C	6 Organic Chemistry	Ph	2 Physics Laboratory
	Laboratory	L	2 French
L	1 French	HE	2 Advanced Design
B	1 General Botany	HE	30 Food Selection and
B	2 General Botany		Preparation
	Laboratory	PE	54 Physical Education
HE	17 Costume Design and		
	Construction		
PE	53 Physical Education		

HOME ECONOMICS

HE 01.—Orientation.—I. 2 (2-0). This course is designed to help the student to make adjustment 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, and to assist in educational and vocational guidance.

HE 1.—Color and Design.—I. 2 (0-4). 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.

HE 2.—Advanced Design.—II. 2 (0-4). Prerequisite: HE 1. Further application of the principles of design and color with emphasis placed upon designing for specific purposes.

HE 16.—Textiles and Clothing.—II. 3 (0-6). Prerequisite: HE 1. A study of prices and characteristics of fabrics with a view to better the selection of materials, ready-made clothing, and accessories. Fundamental construction processes by hand and machine are applied in repair and in the making of new garments, one of which is a child's garment. Budgets are studied for all members of the family.

HE 17.—Costume Design and Construction.—I. 5 (2-6). Prerequisites: HE 1, HE 16. The course includes the application of line, color, and the principles of art to the designing, selection, and construction of clothing for the individual student. Skills stressed are fitting, tailoring, and remodeling.

HE 19.—Dietetics for the Home.—II. 5 (3-4). Elective for third-year students. A course in practical selection and preparation of foods for the diet in the home.

HE 30.—Food Selection and Preparation.—II. 5 (2-6). Prerequisites: C 5, C 6. 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.



Fort Lewis Lies South of the Mountains in the La Plata Valley

Science and Arts

Majors are offered in Chemistry, Botany, Economics, Sociology and Education. The first two years may be secured at Fort Lewis and the work completed at Colorado State College.

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

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

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

Graduates of the two and three-year courses in Education find many opportunities in the schools of the San Juan Basin. There is an increasing demand for those who have prepared to teach in our rural schools. Many Fort Lewis graduates have established such fine teaching standards in the Basin schools that it has been impossible to supply enough candidates to meet the demand. The opportunities are good for those who are sincere in their desires and efforts to prepare adequately to teach.

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

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

Biological Science	6 semester hours
English Language	6 semester hours
Literature or French	6 semester hours
Physical Science	6 semester hours
Social Science	6 semester hours
Physical Education	2 semester hours
Mathematics	5 semester hours

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



The Highway Between Silverton and Ouray

EDUCATION**Freshman Year****First Semester**

E 2	English Composition3
Sc 1	Introduction to Bio- logical Science3
Mu 1	Music Fundamentals2
Ed 4	Introduction to Education3
Ed 10	General Psychology3
ES 85	World History3
PE 51	Physical Education0.5

Second Semester

E 3	English Composition3
ES 90	Government3
MuT63	Sight Singing and Ear Training2
PE 50	Personal and Com- munity Health3
ES 86	World History3
Ag 1	Agriculture for Rural Teachers3
PE 52	Physical Education0.5

Sophomore Year**First Semester**

Ed 9	General Methods and Management5
Sc 2	Introduction to Physical Science4
ES 83	American History3
Ed105	Educational Psychology3
Art 1	Elementary Arts and Handicraft2
PE 53	Physical Education0.5

Second Semester

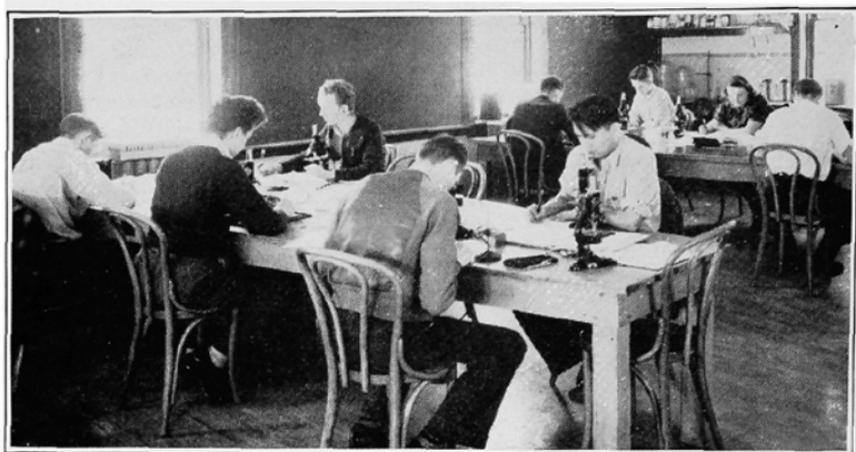
Ed 24	Observation and Student Teaching5
Ed 8	Teaching the Fine Arts..3
ES 84	American History3
Ed 12	Teaching Health and Physical Education2
Mu 2	Music Appreciation2
Ed 13	Principles of Education3
PE 54	Physical Education0.5

Junior Year**First Semester**

E 7	Functional English.....2
E 51	Life in Literature2
Ed 16	Teaching Science3
ES 13	World Geography3
HE 1	Color and Design2 or
E 26	Public Discussion2
C 1 and C 2	Inorganic Chemistry or
M 2	Algebra or
ES 50	Sociology or
B 1	General Botany
B 2	General Botany Laboratory and
E 8	Journalistic Writing5

Second Semester

Ed 18	Teaching Social Studies3
E 52	Life in Literature2
ES 82	Colorado History, Geography and School Law3
Art 2	Art Appreciation2
E 25	Public Speaking2
Ed 14	Teachnig Language Arts3
C 3 and C 4	Inorganic Chemistry or
HE 19	Dietetics for the Home or
E 9	Journalistic Writing and
HE 16	Textiles and Clothing or
B 3	General Botany
B 4	General Botany Laboratory5



Botany Interests Both Men and Women

SCIENCE

Sc 1.—Introduction to Biological Science.—I. 3 (2-2). A lecture-discussion and laboratory course in general biology. It is the aim of this course to give the student a better understanding of the plant and animal life in his environment. Life functions form the basis of discussion.

Sc 2.—Introduction to Physical Science.—I. 4 (4-0). Introduces the student to physical science in such a way as to acquaint him with some of the general concepts in the fields of astronomy, physics, meteorology and geology. An attempt is made to help the student learn to appreciate the nature of the universe in which he lives.

BOTANY AND PLANT PATHOLOGY

B 1.—General Botany.—I. 2 (2-0). A study of plant forms with emphasis placed on the origin and development of plants from simple plants to the higher developed flowering plants.

B 2.—General Botany Laboratory.—I. 1 (0-2). Laboratory to accompany B 1. Credit not given independently from credits for B 1.

B 3.—General Botany.—II. 2 (2-0). A study of the morphology of roots, stems, leaves, flowers, fruits, and seeds of higher plants and the physiology of life processes.

B 4.—General Botany Laboratory.—II. 1 (0-2). Laboratory to accompany B 3. Credit not given independently from credits for B 3.

B 16.—Plant Classification.—I. 3 (0-6). Prerequisites: B 1, B 2, B 3, B 4. A general introduction to the system of arrangement of flowering plants in their respective groups. Fundamental to advanced work in range and pasture management or soil conservation. Involves laboratory work in classifying the native vegetation of southwestern Colorado.

CHEMISTRY

C 1.—Inorganic Chemistry.—I. 3 (3-0). Must be accompanied by C 2. No previous knowledge of chemistry is required. The course consists of lecture, text, and reference study of the principles of the science and the chemistry of the non-metals and their typical and important compounds.

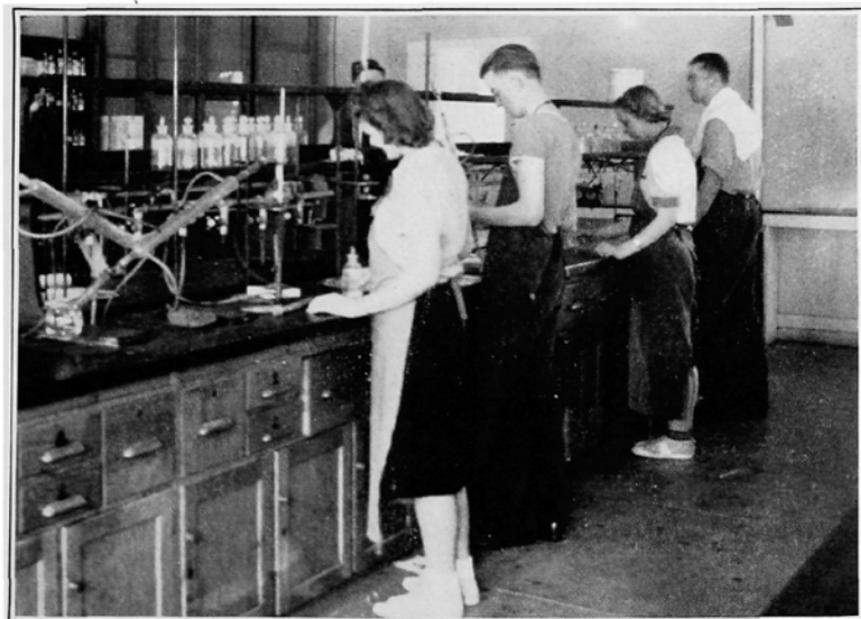
C 2.—Inorganic Chemistry Laboratory.—I. 2 (0-4). The course consists of exercises to accompany C 1. Fee \$5.00.

C 3.—Inorganic Chemistry.—II. 3 (3-0). Must be accompanied by C 4. Prerequisites: C 1 and C 2. The course is a continuation of C 1 covering the chemistry of the metals.

C 4.—Inorganic and Qualitative Chemistry Laboratory.—II. 2 (0-4). Prerequisites: C 1 and C 2. The course consists of a study of the typical metals, their properties, groupings, and tests and of important metallic compounds, their preparation, properties, and qualitative tests. Fee \$5.00.

C 5.—Organic Chemistry.—I. 3 (3-0). Must be accompanied by C 6. Prerequisites: C 1, C 2, C 3, C 4. The course consists of lecture, text, and reference study of the aliphatic series. The basic principles of organic chemistry are stressed, and, in so far as is possible, the relationship of the science to biology, agriculture, food, nutrition, etc., is presented.

C 6.—Organic Chemistry Laboratory.—I. 2 (0-4). Prerequisites: C 1, C 2, C 3, C 4. This course consists of exercises to accompany C 5. The aim of the course is to familiarize the student with the preparation,



At Work in the Chemistry Laboratory

properties, and reactions of typical and important compounds. Simple qualitative tests are included. Fee \$5.00.

C 7.—Organic Chemistry.—II. 3 (3-0). Must be accompanied by C 8. Prerequisites: C 1, C 2, C 3, C 4, C 5, C 6. This course completes the study of the aliphatic series, including carbohydrates, proteins, and miscellaneous topics. A brief study of the aromatic series is made.

C 8.—Organic Chemistry Laboratory.—II. 2 (0-4). Prerequisites: C 1, C 2, C 3, C 4, C 5, C 6. This course is a continuation of the study of organic compounds begun in C 6. Fee \$5.00.

C 9.—Qualitative Analysis.—I. 4 (2-6). Prerequisites: C 1, C 2, C 3, C 4. Thorough drill in the theory and practice of the separation and identification of the common cations and anions.

C 11.—Quantitative Analysis.—II. 4 (2-6). Prerequisite: C 9. A study of the principles of quantitative analysis and the calculations of analytical chemistry. Laboratory work in gravimetric and volumetric analysis. Fee \$6.00.

ECONOMICS

ES 3.—Economics.—II. 3 (3-0). A study which emphasizes our present day economic organization in regard to forces determining price, the distribution of wealth and income, money and banking, and monetary problems. Required of students who wish to major in economics and sociology, or in other divisions where specified.

GEOGRAPHY

ES 13.—World Geography.—I. 3 (3-0). A study of the basic principles of physical geography. The latter part of the course is designed to study the adjustments which man has made to his environment by the use of specialized cases.

SOCIOLOGY

ES 50.—General Sociology.—I. 5 (5-0). A survey of the basic sociological problems and their application to current social problems.

HISTORY

ES 82.—Colorado History, Geography, and School Law.—II. 3 (3-0). Special emphasis is placed upon the social development of the commonwealth of Colorado.

ES 83.—American History.—I. 3 (3-0). A study of the economic, political, and social life in the United States before 1865.

ES 84.—American History.—II. 3 (3-0). Continuation of ES 83 after 1865.

ES 85.—World History.—I. 3 (3-0). Evolution of western civilization from prehistoric times to 1660.

ES 86.—World History.—II. 3 (3-0). Continuation of ES 85. Emphasis is placed upon the developments in Europe and the Near East, and the rise of the dictators since 1918.

ES 90.—Government.—II. 3 (3-0). A comprehensive survey of the several types of government in the United States, and a comparison with the basic principles of other types of government.

ES 91.—Current Topics.—I. 1 (1-0). An analysis of headlines in the news. Open to freshmen and sophomores.

EDUCATION

✓ **Ed 4.—Introduction to Education.**—I. 3 (3-0). Required in the course in Education, freshman year. An introductory course acquainting the student with the essential principles and facts underlying educational activity. The school as a social institution, as a community institution, and as a community or state responsibility, is studied. The evolution of methods as a result of the educative process and the nature of learning, current practices and means of evaluating education are studied in this course.

Ed 8.—Teaching the Fine Arts. — II. 3 (3-0). Required in the course in Education, second year. A survey of literature for the elementary schools, study of principles governing the choice of literature as well as the opportunity of making and presenting type units in the teaching of literature, the graphic arts and music.

✓ **Ed 9.—General Methods and Management.**—I. 5 (5-0). Required in the course in Education, second or third year. An introduction to the field of techniques and methods of teaching, a study of curriculum building as suggested in the state course of study, a study of objectives of elementary and secondary schools. Practical applications are made of new projects and methods of rural and elementary teaching. Type units of work are written and used in elementary school. Fee \$2.00.

✓ **Ed 10.—General Psychology.**—I. 3 (3-0). Required in the course in Education, freshman year. 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.

Ed 12.—Teaching Health and Physical Education. — II. 2 (2-0). Methods and materials in the teaching of health and physical education. Program planning, recess activities, games, rhythmic activities, principles of first aid, philosophy and theory of physical education.

✓ **Ed 13.—Principles of Education.**—II. 3 (3-0). Required in the course in Education, second year. An introductory survey of the field of philosophy of education. The biological, psychological, sociological and historical basis of education are studied. Some time is given to the philosophy underlying modern educational practices.

Ed 14.—Teaching Language Arts.—II. 3 (3-0). This course is required of third-year education students. A comprehensive study of the experimental studies in reading methods, their results, and their application to pupil needs in reading is made. The course will lay emphasis on diagnosis and remedial teaching. The fields of handwriting, language and spelling are covered similarly.



The Teacher Training Class Making Observations

✓ **Ed 16.—Teaching Science.—I.** 3 (3-0). This course is required of third-year students in Education. Experimental studies in arithmetic methods will be studied and their findings applied to present arithmetic teaching. Special emphasis on diagnosis and remedial teaching will be given.

Ed 18.—Teaching Social Studies.—II. 3 (3-0). In this course the student will study the units suggested in the state course of study, with the purpose of getting them into teachable form. Current studies and texts in the field of teaching social studies in the elementary school will be examined and applied.

✓ **Ed 24.—Observation and Student Teaching.—II.** 5 (5-0). Required in the course in Education, second or third year. Observation techniques are developed and planned. Visitation to both rural schools and the campus elementary school is made at times during the year to note progress. Observation is especially directed to scientific procedures in reading, arithmetic and other elementary school subjects. Students are directed in their practice teaching by the instructor and by the regular teachers. Fee \$2.00.

✓ **Ed 105.—Educational Psychology.** — I. 3 (3-0). Required in the course in Education, second year. Prerequisite: Ed 10. 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 Ed 10.

ART

Art 1.—Elementary Arts and Handicraft.—I. 2 (0-4). 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.

Art 2.—Art Appreciation.—II. 2 (2-0). The aim of this course is 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.

ENGLISH

E 1.—English Composition, Review. — I. 1 (3-0). Required of freshmen who are not prepared to take E 2, E 1 is a thorough review of the essentials (high-school level) of grammar, punctuation, spelling, and sentence structure.

E 2.—English Composition.—I. 3 (3-0). Emphasis is upon the elements of correct expository prose writing, much time being devoted to fundamental study of words, sentences, and paragraphs; spelling and grammar are stressed.

E 3.—English Composition.—II. 3 (3-0). Prerequisite: E 2. Emphasis is upon both written and oral composition, correctness and effectiveness of style being stressed in description, narration, and business letters pertinent to the student's chosen field. Punctuation is stressed.

E 7.—Functional English.—I. 2 (2-0). Prerequisite: E 2. The course is designed especially for students who intend teaching. Backgrounds and fundamental study of English grammar, punctuation, spelling, sentence structure, and the functioning of each element in every day speaking and writing are studied.

E 8.—Journalistic Writing, The News Story.—I. 2 (2-0). Prerequisites: E 2 and E 3. Designed to train the student to write news articles of interest to readers, the course also teaches the student some of the functions of a newspaper in community life. Journalistic style is developed and distinguished from other forms of prose.

E 9.—Journalistic Writing, The Feature Article.—II. 2 (2-0). Prerequisites: E 2 and E 3. The course is a practical study designed to fit students to write for publications in the field of their training and interest. Training in writing features for campus and local publications is experience in learning the difference between feature and news style.

E 25.—Public Speaking.—II. 2 (2-0). Prerequisites: E 2 and E 3. Practical experience in overcoming fright of public appearance leads to voice control, organization of materials, and delivery of speeches to large and small groups.

E 26.—Public Discussion. — I. (2-0). Prerequisites: E 2 and E 3. Discussion of timely problems gives training in leading group meetings. Attendance at public gatherings gives a chance for criticism.



The Staff of the College Newspaper

E 31.—Stage Craft.—3 (1-4). The design and construction of scenery, wigs, and properties; make up; and lighting are studied thoroughly to acquaint students with back-stage work if they intend working with school and community productions.

E 51.—Life in Literature.—I. 2 (2-0). A study of literature reflecting the people whom writings represent is designed to familiarize the students with great authors, great books, and great characters, with emphasis upon English writers up to 1900.

E 52.—Life in Literature.—II. 2 (2-0). Prerequisite: E 51. A study of literature dealing with the life about the individual of the twentieth century, with emphasis upon how life affects literature, how literature represents life, and how the past literature affects present writing is for the students who are beginning to be critical of what they choose to read.

E 53.—American Literature.—II. 2 (2-0). Prerequisites: E 2 and E 3. Development of American Literature from colonial times to the beginning of the twentieth century is studied in order to give a background for the appreciation of modern American writing and thought.

LANGUAGES

L 1.—First-Year French.—I. 5 (5-0). This course includes a study of the fundamentals of French grammar, the reading of French prose, and some attention to conversation.

L 2.—First-Year French.—II. 5 (5-0). Prerequisite: L 1. This course is a continuation of L 1. Special emphasis is placed upon the acquisition of reading ability, although grammar and conversation still receive attention.

MATHEMATICS

M 1.—Mathematical Analysis.—I. 5 (5-0). The course comprises the most useful phases of arithmetic, algebra and trigonometry. Offered particularly for students in Home Economics.

M 2.—Algebra.—I. 5 (5-0). A course including a brief review of the most necessary topics of high-school algebra. In addition, simultaneous quadratic equations, inequalities, the Binomial Theorem, progressions, the theory of equations, permutations, and combinations, and probability.

M 3.—Plane Trigonometry.—II. 2 (2-0). The trigonometric functions, logarithms, solutions of right and oblique plane triangles, complex numbers, and the right spherical triangle.

M 4.—Mathematics for Engineers.—I. 5 (5-0). Prerequisites: 1.5 units of high-school algebra, 1 unit of plane geometry and 0.5 unit of solid geometry. A year's work in freshmen mathematics for engineering students combining the essentials of algebra, trigonometry and analytic geometry in a unified treatment.

M 4a.—Mathematics for Engineers. — I. 5 (8-0). Required of freshmen who are deficient in the prerequisites for M 4 or of those who show by examination that they are not prepared to take M 4.

M 5.—Mathematics for Engineers.—II. 5 (5-0). Prerequisite: M 4. This course is a continuation of M 4.

M 6.—Analytic Geometry.—II. 5 (5-0). Prerequisites: M 2, M 3. The straight line, conic sections, parametric equations, higher plane curves, polar co-ordinates, transformation of co-ordinates, and the quadric surfaces.

M 20.—Differential Calculus.—I. 5 (5-0). Prerequisite: M 6. Elementary differentiation, maxima and minima, curvature, law of the mean, indeterminate forms, and simple applications.

M 21.—Mathematics for Engineers.—I. 4 (4-0). Prerequisite: M 5. This course is an intensive study of selected topics of the differential calculus with extended illustrations of their practical applications.

M 22.—Engineering Problems.—I. 1 (0-2). Prerequisite or parallel: M 21. Formal and computational phases of problem solving are stressed.

M 25.—Integral Calculus.—II. 5 (5-0). Prerequisite: M 20. The course is a continuation of M 20, covering elementary integration, definite integrals, partial differentiation, series, integration by parts, multiple integrals, and simple geometrical and mechanical applications.

M 26.—Mathematics for Engineers. — II. 4 (4-0). Prerequisite: M 21. In this course the formulas of the integral calculus are verified and illustrated by numerous exercises and applications.

M 10.—The Slide Rule.—I. 1 (1-0). Prerequisite: M 2 or equivalent. A course in the theory and practical use of the polyphase, loglog, and other slide rules. Open to anyone having a knowledge of the theory of logarithms and elementary trigonometry.

MUSIC

Mu 1.—Music Fundamentals.—I. 2 (2-0). Required in course in Education. An introduction to musical knowledge; notation, rhythm, scales, harmony, history, form, musical instruments, composers.

Mu 2.—Music Appreciation.—II. 2 (2-0). Required in course in Education. Prerequisite: Mu 1. A practical course in the art of enjoying music from the standpoint of its organization factors, rhythm, melody, harmony, tone-color and form.

MuT 63.—Sight Singing and Ear Training.—II. 2 (2-0). A fundamental course in teaching students to read music at sight. Drill in scales, intervals and melodic dictation.

PHYSICAL EDUCATION

PE 1.—Physical Education.—I. 0.5 (0-2). Health education. Drills, outdoor games and recreation. Required of freshmen, unless replaced by PE 21.

PE 2.—Physical Education. — II. 0.5 (0-2). Games, individual sports, apparatus, tumbling. Required of freshmen men, unless replaced by PE 22.

PE 3.—Physical Education.—I. 0.5 (0-2). Individual and group games and sports. Required of sophomore men.

PE 4.—Physical Education.—II. 0.5 (0-2). Individual and group games and sports, apparatus and tumbling. Required of sophomore men.

PE 21.—Physical Education Laboratory.—I. 2 (0-10). Instruction and practice in the fundamental skills of athletic activities; football, basketball, track or baseball. Must be followed by PE 22.

PE 22.—Physical Education Laboratory.—II. 2 (0-10). Continuation of PE 21.



The Basketball Squad at Fort Lewis



The Girls Also Enjoy Playing Basketball

First Aid: A standard Red Cross First Aid Course will be offered. Twenty hours of class work will be required. The student who successfully completes the course will receive a standard Red Cross certificate.

PE 50.—Personal and Community Health.—II. 3 (3-0). A consideration of the principles of healthful living, emphasizing immunity and bacteriology in relation to health, foods, mental hygiene, and general care of the body. A general consideration of community endeavor for the protection of the health of its citizens.

PE 51.—Physical Education.—I. 0.5 (0-2). Volleyball, organized games, tennis, elements of basketball, rhythmic activities. Required of freshmen women.

PE 52.—Physical Education.—II. 0.5 (0-2). Singing games, dancing, tennis, indoor baseball, organized games. Required of freshmen women.

PE 53.—Physical Education. — I. 0.5 (0-2). Volleyball, tennis, rhythmic activities, organized games. Required of sophomore women.

PE 54.—Physical Education.—II. 0.5 (0-2). Creative rhythmic activities, dancing, tennis, organized games, indoor baseball. Required of sophomore women.

PHYSICS

Ph 1.—Physics.—II. 3 (3-0). A course covering the principles of mechanics of solids and liquids, heat, magnetism and electricity, sound and light, together with practical applications in home economics.

Ph 2.—Physics Laboratory.—II. 2 (0-4). Accompanies Ph 1. The student has the opportunity of handling and manipulating apparatus and of obtaining first-hand information of the principles and laws of physics.

Ph 5.—Physics.—I. 3 (3-0). Prerequisites: M 2, M 3. A course of fundamental physical principles forming the basis for the study of applied science as related to engineering problems.

Ph 6.—Physics Laboratory.—I. 2 (0-4). Accompanies Ph 5. The student obtains first-hand information of the physical laws, learns to use apparatus, and to arrive at definite results from his measurements.

Ph 7.—Physics.—II. 5 (5-2). Prerequisites: M 2, M 3. The work in this course covers the general field of physics as related to the requirements of a forester.

Ph 9.—Physics.—II. 3 (3-0). Continuation of Ph 5.

Ph 10.—Physics Laboratory.—II. 2 (0-4). Continuation of Ph 6.

Veterinary Medicine

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

PRE-VETERINARY YEAR

First Semester		Second Semester	
C (1 & 2)	Inorganic Chemistry..5	C (3 & 4)	Inorganic Chemistry..5
E 2	English Composition3	E 3	English Composition3
EZ (11 & 12)	Zoology5	B 3	Botany2
B 1	Botany2	B 4	Botany Laboratory1
B 2	Botany Laboratory1	ES 3	Economics3
PE 1	Physical Education0.5	E 25	Public Speaking2
		PE 2	Physical Education0.5

VP 22.—Human Anatomy and Physiology.—II. 5 (5-0). A course in the interrelationships and general biology, anatomy, and applied physiology, with special reference to human beings.

Vocational Training

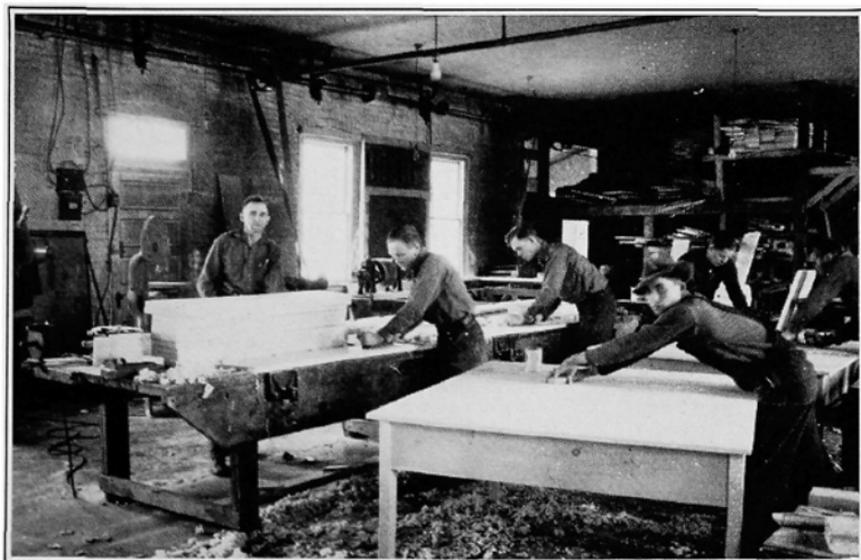
The National Youth Administration and the State Board for Vocational Education are cooperating with the State Board of Agriculture in making vocational training available at the Fort Lewis Branch of the Colorado State College.

Purpose.—This work is organized for young men of limited finances, who are interested in agriculture and farm building construction, and for young women interested in homemaking training.

TRAINING FOR MEN

Training in Building Construction.—Under the guidance of an experienced carpenter the vocational students have constructed a 32'x190' dormitory. This building will house fifty vocational students. About thirty are living in it at the present time. In addition to training in construction skills this project is a laboratory in which much valuable information is gained regarding low-cost farm structures. Other construction work is planned for the future.

Training in Agriculture.—Approximately one half of the student's time is devoted to training in agriculture and related subjects. The related training consists of classes in practical English, science, arithmetic, and citizenship. The work in agriculture is made more practical by a program of cooperative farming. The profits from this activity, which consists in growing crops and breeding and fattening livestock, are divided annually among the students in proportion to the number of hours each has worked.



Actual Building Is Done by Vocational Students

Financing.—The students are paid from funds appropriated by Congress to the National Youth Administration. The Fort Lewis College sponsors the project and furnishes supervision and instruction. Each youth is paid thirty dollars a month, from which his board and lodging which cannot exceed twenty-two dollars, is deducted. If the student avails himself of the social and athletic activities of the college he has additional charges to pay.

Who May Enroll.—Enrollment is open to young men between the ages of eighteen and twenty-five. In order to enroll, a written application must be made on forms which will be furnished upon request.

It is not necessary for applicants to be graduated from high school. Training varies to meet the individual's background of school and other experience. Those who are high-school graduates may take a maximum of five hours of work for credit by paying the necessary fees.

Enrollment Periods.—Students may enroll anytime from May to September or during the month of January.

It is advantageous to enroll for at least one year.

Bedding and Clothing.—Students must furnish their own work and dress clothes and bedding above the mattress.

TRAINING FOR WOMEN

Vocational Homemaking.—Requirements for admission in the vocational homemaking project for girls are similar to those for vocational boys; namely, a girl who has reached the age of eighteen and is under twenty-five may enroll.

Training is given through work projects and class instruction. The work projects give training in cooking, sewing, housekeeping, laundering, canning and care of dairy products.

Class instruction is offered in grooming, art in the home, sewing, cookery, housekeeping accounts, family relationships, buying, home furnishing, child care, home care of the sick, and personality development.



Senior Day Is Always a Big Day at Fort Lewis

Student Body List for 1939-1940

Abbreviations.—Numerals denote the year of classified students.

A	Arts	F	Forestry
ME	Mechanical Engineering	Sci	Science
U	Unclassified	VM	Pre-Veterinary
Agri	Agriculture	EE	Electrical Engineering
Eng	Engineering	CE	Civil Engineering
Ed	Education	J	Journalism
HE	Home Economics	Ag	Agronomy
Special	Special	B	Business
		C	Chemistry

Name	Classification	Town
Ames, Edith Anne, 2 A		Willow Springs, Mo.
Arriza, Joe Ed, 1 ME		Hesperus, Colo.
Assumpta, Mary, U		Durango, Colo.
Bader, Clay Verne, 1 Agri		Hesperus, Colo.
Baker, Merval L. R., 1 C		Cortez, Colo.
Ballreich, William Walter, 1 Eng		Gallup, N. M.
Bedford, Margaret Eunice, 2 Ed		Gallatin, Mo.
Bell, Anna C., U		Silverton, Colo.
Betow, Helen May, 2 HE		Durango, Colo.
Bigham, Margy Elaine, 2 Ed		Bayfield, Colo.
Bilderbeck, Mitchell Ward, 1 Ed		Aztec, N. M.
Binder, Roy, 2 Agri		Bayfield, Colo.
Blackmore, Rose Roxie, 2 HE		Bayfield, Colo.
Blevins, Mildred V., 1 HE		Mancos, Colo.
Bosscher, Jay John, 2 A		Rehoboth, N. M.
Bradfield, Mae, 1 Ed		Lewis, Colo.
Brooking, Doris Ida, 1 Ed		La Plata, N. M.
Brooks, Robert Henry, 1 Agri		La Plata, N. M.
Butler, Robert Maurice, 2 Agri		Dolores, Colo.
Campbell, Cora, U		Durango, Colo.
Carter, Gerald B., 1 ME		Durango, Colo.
Chapman, Robert Allen, 3 Ed		Ordway, Colo.
Chinburg, Carl Harold, Special		Hesperus, Colo.
Christofilis, James George, 1 F		Durango, Colo.
Clark, Theodore Paul, 1 Sci		Ocean Park, Calif.
Clem, Paul Leon, 1 Ed		La Crosse, Mo.
Consolata, Mary, U		Durango, Colo.
Coon, Elmer Dee, 1 VM		Aztec, N. M.
Cornelius, Hugh, 2 Eng		Durango, Colo.
Cox, Inelda Mae, 2 Ed		Mancos, Colo.
Cummins, Cyril Patrick, 2 A		Durango, Colo.
Dallabetta, Julio Poier, 1 EE		Durango, Colo.
Davies, Joe Earle, 2 Eng		Durango, Colo.
Davies, Korleen E., U		Durango, Colo.
Dobbins, Clyde James, 1 Ed		Durango, Colo.

Name	Classification	Town
Dunleavy, Mary, U		Durango, Colo.
Engler, George Phillip, 2 Ed		Durango, Colo.
Everett, Doris Louise, 1 Ed		Mancos, Colo.
Gibbs, Albert Edwin, 1 ME		Durango, Colo.
Gilleece, Jeannette Isabelle, 2 Ed		Westcliffe, Colo.
Gillespie, Phyllis Clurone, 1 Ed		Hesperus, Colo.
Goff, Mary Elizabeth, 1 Ed		Cortez, Colo.
Good, A. Margaret, Special		Denver, Colo.
Good, Ogrita Beatrice, 3 Ed		Dove Creek, Colo.
Grabowsky, Dick George, 1 ME		Ignacio, Colo.
Gray, Emma Marie, 1 Ed		Bayfield, Colo.
Hall, John Larkin, 1 Ed		Hesperus, Colo.
Hamilton, Betty Lee, 2 Ed		Mancos, Colo.
Hazelwood, Harold Harley, 1 A		Pagosa Springs, Colo.
Hess, Josephine Louise, 1 HE		Mancos, Colo.
Irving, Betty Managh, 1 HE		Dolores, Colo.
Irving, Marion Clark, 1 Agri		Dolores, Colo.
Ivanich, Frank Mathew, 1 ME		Durango, Colo.
Jensen, Don Yeaman, 2 Agri		Farmington, N. M.
Jensen, Mildred, 1 U		Mancos, Colo.
Johnson, Eleanor Elizabeth, 1 HE		Durango, Colo.
Johnson, Lou Emma, 3 Ed		Kline, Colo.
King, Curtis Monroe, 1 Ed		Breen, Colo.
King, Norman Arthur, 1 Agri		Farmington, N. M.
Klatt, Fred William, 2 A		Durango, Colo.
Klusman, Dorothy Ruth, 1 Ed		Oxford, Colo.
Knight, Howard Paul, 1 Ed		Milan, Mo.
Kroeger, Jack Ralph, 1 Agri		Durango, Colo.
Kuenzler, Annetta Rae, 2 A		Cortez, Colo.
Leo, Mary, U		Durango, Colo.
McCabe, Alice, 1 Ed		Dove Creek, Colo.
McCarty, Berniece Gentry, 3 Ed		La Plata, N. M.
McEwen, Charles Weldon, 1 CE		Durango, Colo.
McGregor, Helen Mary, 2 Ed		Westcliffe, Colo.
McLain, Charles W., Special		Hesperus, Colo.
McLeod, Richard E., 2 J		Hesperus, Colo.
Macht, Joe Joy, 1 ME		Pagosa Springs, Colo.
Mallett, Esther Marie, 3 Ed		Mancos, Colo.
Marr, Virginia Irene, 1 Ed		Ackmen, Colo.
Masters, Negal Dean, 2 Ed		Durango, Colo.
Maxwell, Edith Myrtle, 1 HE		Durango, Colo.
Mayn, Lola Launita, 2 CE		Falfa, Colo.
Mellott, Nathan Vernon, 1 Ed		Dove Creek, Colo.
Mitchell, L. Christine, Special		Hesperus, Colo.
Mullen, Avis Alpha, 2 HE		Hesperus, Colo.
Nash, Wilbur David, 1 Ed		Ridgway, Colo.
Neal, Elizabeth Anne, 3 Ed		Dolores, Colo.
Nichols, Nora Ann, 3 Ed		Hesperus, Colo.

Name	Classification	Town
O'Brien, Albert Loyd,	1 Eng	Durango, Colo.
Painter, Bertha,	U	Durango, Colo.
Palmer, Leona Margaret,	1 HE	Norwood, Colo.
Patscheck, Alvin,	2 F	Mancos, Colo.
Pepin, Albert Charles,	3 Ed	Durango, Colo.
Pepin, Henry William,	1 Ed	Durango, Colo.
Perkins, James Stewart,	1 A	Pagosa Springs, Colo.
Philip, Mary,	U	Durango, Colo.
Pohja, Walter John,	1 Eng	Durango, Colo.
Procaroni, Lucille,	U	Durango, Colo.
Prior, Eva Mary,	U	Durango, Colo.
Randolph, Juanita Louise,	1 Ed	Dove Creek, Colo.
Rasor, Webster W.,	3 Ed	Brush, Colo.
Roberts, Harold Ranford,	Special	Farmington, N. M.
Roberts, Lester H.,	2 Ed	Farmington, N. M.
Rogers, Ethel Marie,	3 Ed	Durango, Colo.
Sheppard, Wesley W.,	1 Ag	Mesa Verde Park, Colo.
Singer, Jerome,	1 F	Leupp, Ariz.
Stevenson, Ina Patricia,	2 Ed	Mancos, Colo.
Sullenberger, Robert Alexander,	1 Eng	Durango, Colo.
Thomas, Jr., Stanley,	1 CE	Lukachukai, Ariz.
Thrasher, Mary Inezas,	1 Ed	Fairbury, Nebr.
Walker, Edwin Earl,	1 Ed	Rockwood, Colo.
White, Gaily Eugene,	1 F	Cortez, Colo.
White, Sterling F.,	2 Eng	Fort Wingate, N. M.
Whitener, Retta Mae,	1 Ed	Dove Creek, Colo.
Whitener, Ruth Laverne,	3 Ed	Dove Creek, Colo.
Wielang, Mary Alice,	1 Ed	Durango, Colo.
Wilson, Wilfred Irvin,	1 EE	Norwood, Colo.
Wommer, Henry Bailey,	2 Eng.	Bayfield, Colo.
Woolman, Neva Marie,	3 Ed	Farmington, N. M.
Woods, Gordon Goodding,	1 B	Farmington, N. M.

Vocational Agriculture Student List

Adams, Lionel E.	Pagosa Springs, Colo.
Allen, Frank C.	Hesperus, Colo.
Amyx, Glen R.	Pagosa Springs, Colo.
Baker, Merval L.	Cortez, Colo.
Bradley, Paul	Cortez, Colo.
Burnham, Ben F.	Mancos, Colo.
Carlson, Emanuel W.	Tiffany, Colo.
Coverdell, Arell L.	Durango, Colo.
Cromar, C. Edwin	Dolores, Colo.
Evans, Melvin T.	Redmesa, Colo.
Gladden, Everett O.	Redmesa, Colo.
Hall, John L.	Hesperus, Colo.
Hancock, Robert V.	Dove Creek, Colo.
Harris, Donald C.	Kline, Colo.

Harris, William E.	Dove Creek, Colo.
Henderson, Fred	Durango, Colo.
Hiner, Elden B.	Hesperus, Colo.
Hiner, Kenneth H.	Hesperus, Colo.
Howe, Darwin B.	Durango, Colo.
Jones, Grant A.	Breen, Colo.
Kelso, John P.	Yellow Jacket, Colo.
Lee, Nyal	Redmesa, Colo.
Lee, W. Raymond	Redmesa, Colo.
Loyd, Wayne L.	Cortez, Colo.
McEwen, Charles W.	Bayfield, Colo.
Maynes, David E.	Cortez, Colo.
Miller, Herbert E.	Hesperus, Colo.
Moody, Murray M.	Kline, Colo.
Padilla, Walter L.	Hesperus, Colo.
Perkins, James S.	Pagosa Springs, Colo.
Pierce, Richard J.	Dolores, Colo.
Pilcher, Woodrow W.	Mancos, Colo.
Sandlin, Charles L.	Cortez, Colo.
Sandlin, Dale	Cortez, Colo.
Shaw, Raymond E.	Arboles, Colo.
Smith, Robert E.	Bayfield, Colo.
Stevens, Ernest L.	Dove Creek, Colo.
Taylor, Buster	Durango, Colo.
West, Ernest B.	Oxford, Colo.
Wommer, Harold	Bayfield, Colo.
Zufelt, Charles L.	Redmesa, Colo.

Colorado State Institutions of Higher Learning

The University of Colorado.....Boulder
ROBERT L. STEARNS, President

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

The Fort Lewis Branch of the Colorado
State College.....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