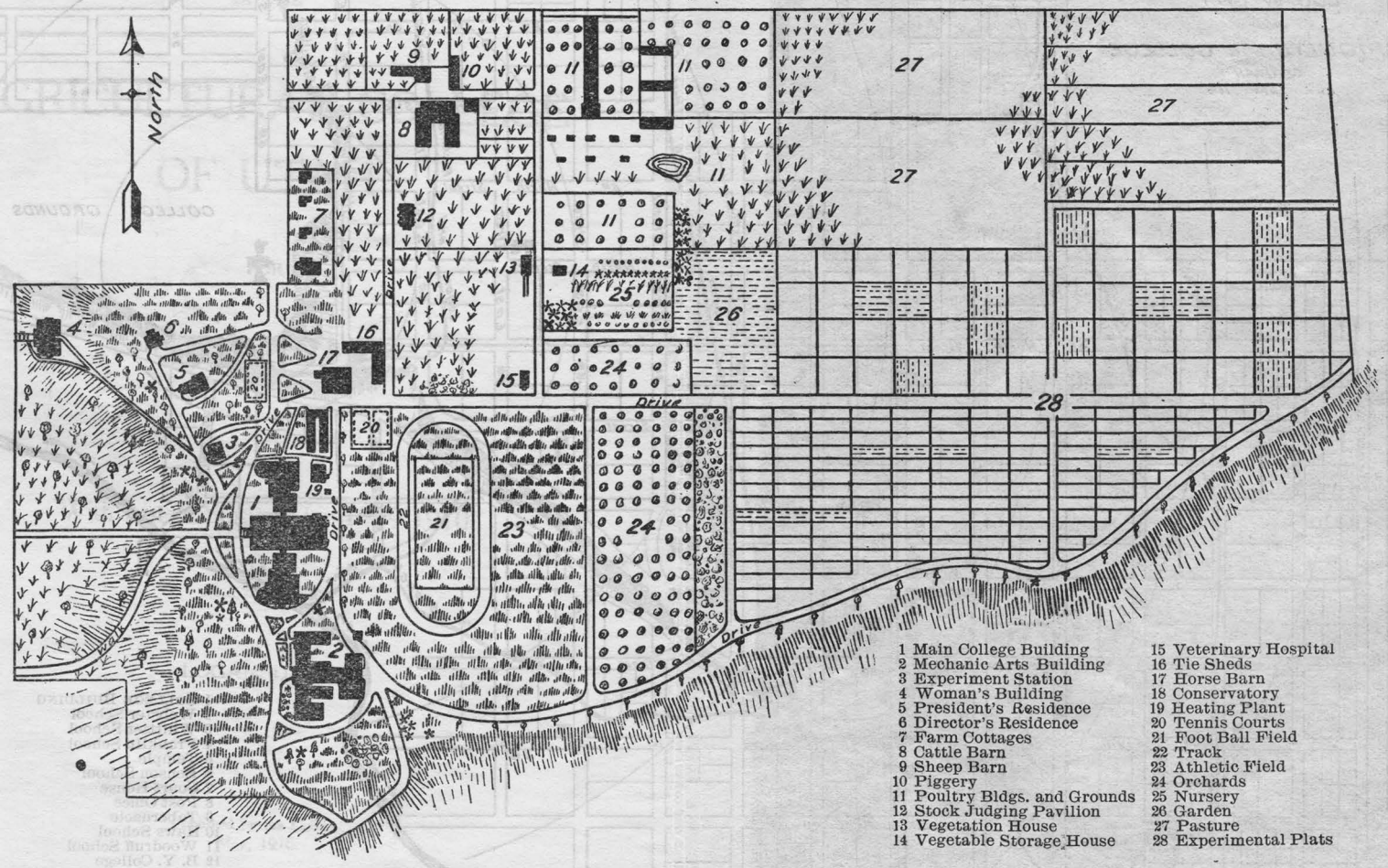
1910

General Catalogue 1910

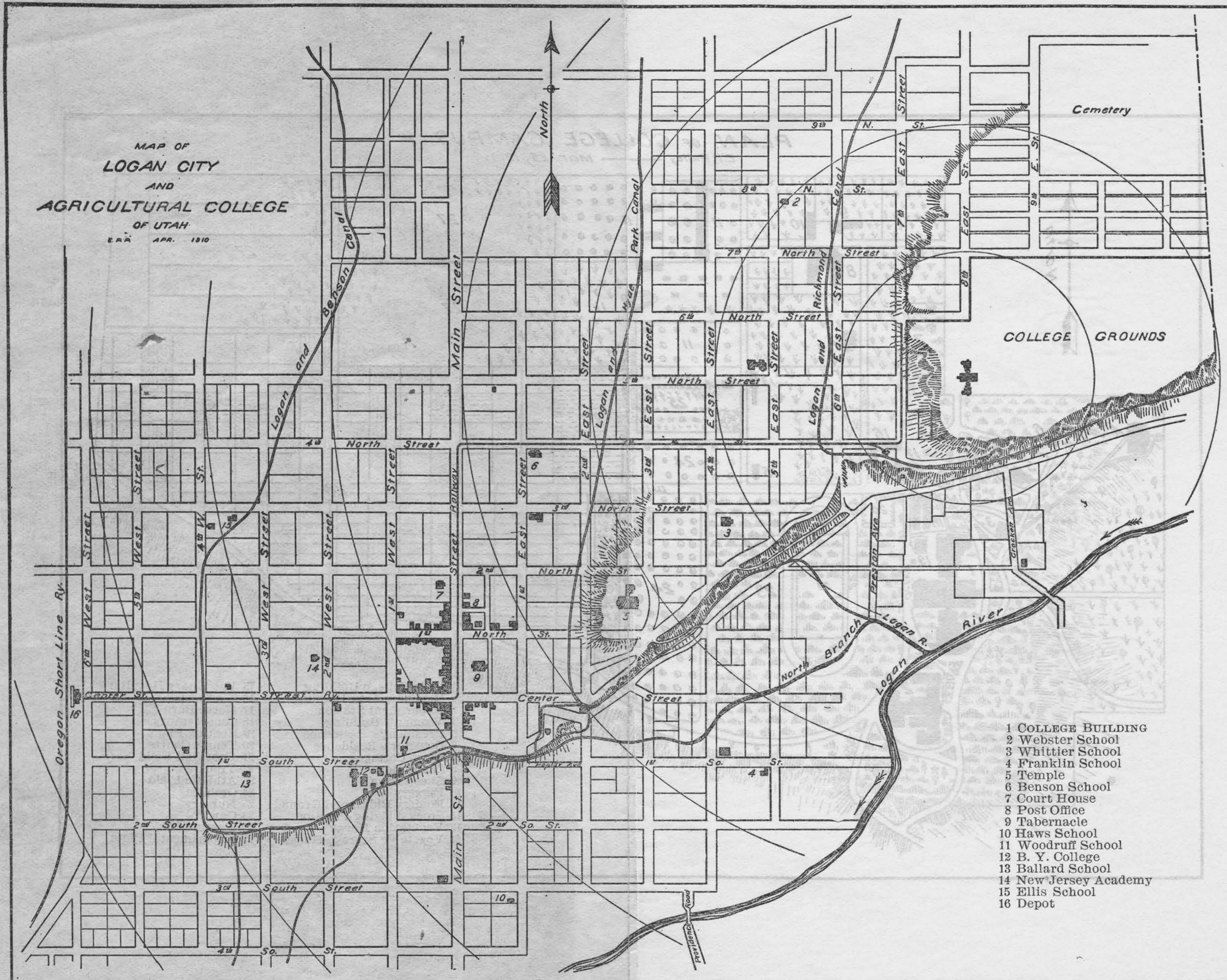
Utah State University

PLAN of COLLEGE CAMPUS

E.P. Pulley ——— Mar. 25, 1910.



1 Main College Building
2 Mechanic Arts Building
3 Experiment Station
4 Woman's Building
5 President's Residence
6 Director's Residence
7 Farm Cottages
8 Cattle Barn
9 Sheep Barn
10 Piggery
11 Poultry Bldgs. and Grounds
12 Stock Judging Pavilion
13 Vegetation House
14 Vegetable Storage House
15 Veterinary Hospital
16 Tie Sheds
17 Horse Barn
18 Conservatory
19 Heating Plant
20 Tennis Courts
21 Foot Ball Field
22 Track
23 Athletic Field
24 Orchards
25 Nursery
26 Garden
27 Pasture
28 Experimental Plats



MAP OF
LOGAN CITY
AND
AGRICULTURAL COLLEGE
OF UTAH
E.R.R. APR. 1910
North
Cemetery
COLLEGE GROUNDS
Main Street
Logan and Benson Canal
Logan and Hyde Park Canal
Logan and Richmond Canal
4th North Street
3rd North Street
2nd North St.
1st North St.
Center Street
1st South Street
2nd South Street
3rd South Street
4th So. St.
2nd So. St.
7th North Street
6th North Street
Preston Ave
Crockett Ave
North Branch Logan R.
Logan River
Oregon Short Line Ry.
Providence Road
1 COLLEGE BUILDING
2 Webster School
3 Whittier School
4 Franklin School
5 Temple
6 Benson School
7 Court House
8 Post Office
9 Tabernacle
10 Haws School
11 Woodruff School
12 B. Y. College
13 Ballard School
14 New Jersey Academy
15 Ellis School
16 Depot

CATALOGUE

OF THE

AGRICULTURAL COLLEGE OF UTAH

FOR

1910-1911

With List of Students for 1909-1910

LOGAN, UTAH.

Published by the College,
May, 1910.

1910.

JANUARY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

APRIL

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
..	..	..	..	..	..	..

JULY

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

OCTOBER

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

FEBRUARY

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	..	..	..	..	..
..	..	..	..	..	..	..

MAY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

AUGUST

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
..	..	..	..	..	..	..

NOVEMBER

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	..	..	..
..	..	..	..	..	..	..

MARCH

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..
..	..	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	..	..
..	..	..	..	..	..	..

SEPTEMBER

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..
..	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
..	..	..	..	..	..	..

1911.

JANUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

APRIL

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

JULY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

FEBRUARY

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	..	..	..	..
..	..	..	..	..	..	..

MAY

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
..	..	..	..	..	..	..

AUGUST

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..
..	..	..	..	..	..	..

NOVEMBER

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	..	..
..	..	..	..	..	..	..

MARCH

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..
..	..	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..
..	..	..	..	..	..	..

SEPTEMBER

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
..	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

COLLEGE CALENDAR—1910-1911.*

FIRST TERM.

1910.

September 20, Tuesday:	Entrance examinations. Registration of former students, and of new students, who are admitted on certificates.
September 21, Wednesday:	Classes organized.
November 24, Thursday:	Thanksgiving Holiday.
December 17, Saturday noon:	Holiday recess begins.

1911.

January 3, Tuesday:	Instruction resumed.
January 28, Saturday:	First term ends.

SECOND TERM.

January 31, Tuesday:	Second term begins.
February 22, Wednesday:	Washington's Birthday.
April 15, Saturday:	Arbor Day.
May 21, Sunday:	Baccalaureate sermon.
May 22, Monday:	Class Day. Alumni Reunion.
May 23, Tuesday:	Commencement. Alumni Banquet and Ball.
May 30, Tuesday:	Summer vacation begins.

*For the dates of the different winter courses and of the Summer School see the special circulars.

BOARD OF TRUSTEES.

LORENZO N. STOHL.....Brigham
THOMAS SMART ..... Logan
SUSA YOUNG GATES..... Salt Lake City
JOHN Q. ADAMS .....Logan
ELIZABETH C. McCUNE.....Salt Lake City
J. W. N. WHITECOTTON.....Provo
MATHONIHAH THOMAS .....Salt Lake City
JOHN DERN .....Salt Lake City
JOHN C. SHARP.....Salt Lake City

OFFICERS OF THE BOARD OF TRUSTEES.

LORENZO N. STOHL..... President
ELIZABETH C. McCUNE.....Vice President
JOHN T. CAINE, JR. .....Recording Secretary and Auditor
JOHN L. COBURN ..... Financial Secretary
ALLAN M. FLEMING ..... Treasurer

STANDING COMMITTEES OF THE BOARD OF TRUSTEES.

Executive Committee.
Lorenzo N. Stohl, Mrs. A. W. McCune and Thomas Smart.
Committee on Agriculture.
John Q. Adams, John Dern and John C. Sharp.
Committee on Mechanic Arts.
John Dern, J. W. N. Whitecotton and John C. Sharp.
Committee on Domestic Science and Arts.
Susa Young Gates, Mrs. A. W. McCune and John Dern.
Committee on Commerce.
John Dern, J. W. N. Whitecotton and Mrs. A. W. McCune.
Committee on Experiment Station.
Thomas Smart, Mathonihah Thomas and John Q. Adams.
Committee on Faculty and Courses of Study.
J. W. N. Whitecotton, Mathonihah Thomas and Susa Y. Gates.
Committee on Livestock.
John C. Sharp, Thomas Smart and Mathonihah Thomas.
Extension Work.
Mathonihah Thomas, Susa Young Gates and John Q. Adams.
Buildings and Grounds.
Thomas Smart, John Q. Adams and John Dern.
Auditor.
J. W. N. Whitecotton.

EXPERIMENT STATION STAFF.

ELMER DARWIN BALL,
Director and Entomologist.

HYRUM JOHN FREDERICK,
Veterinarian.

JOHN T. CAINE, III.,
Animal Husbandman.

ROBERT STEWART,
Chemist.

JAMES CHRISTIAN HOGENSON
Agronomist.

SAMUEL H. GOODWIN,
Economic Ornithologist.

EDWARD GAIGE TITUS,
Entomologist.

LEWIS ALFORD MERRILL,
Agronomist in Charge of Arid Farms.

JOSEPH EAMES GREAVES,
Associate Chemist.

GEORGE MELVIN TURPIN,
Poultryman.

ERNEST P. HOFF,
Assistant Entomologist.

CHARLES TARRY HIRST,
Assistant Chemist.

ALFRED EVAN ALDOUS.
Assistant Chemist.

ERASTUS PETERSON,
Assistant Agronomist.

In Charge of Co-operative Investigations with the United States Department of Agriculture:

WALTER W. McLAUGHLIN,
Irrigation Engineer.

CHAS. F. BROWN,
Drainage Engineer.

R. H. HART,
Assistant Drainage Engineer.

PHILIP V. CARDON,
Assistant Agronomist (Arid Farm Investigations).

THE COLLEGE COUNCIL.

THE PRESIDENT, Chairman.
THE REGISTRAR, ex officio.
PROFESSOR ELMER DARWIN BALL.
PROFESSOR GEORGE WASHINGTON THATCHER.
PROFESSOR GEORGE THOMAS.
PROFESSOR HYRUM JOHN FREDERICK.
PROFESSOR FRANK RUSSELL ARNOLD.
PROFESSOR JOSEPH WILLIAM JENSEN.
PROFESSOR JAMES CHRISTIAN HOGENSON.
PROFESSOR CHRISTIAN LARSEN.
PROFESSOR SAMUEL HENRY GOODWIN.
PROFESSOR LEWIS ALFORD MERRILL.
PROFESSOR EDWARD GAIGE TITUS.
PROFESSOR ROBERT STEWART.
PROFESSOR JOHN T. CAINE III.
PROFESSOR CLAYTON TRYON TEETZEL.
PROFESSOR ELLEN ALDEN HUNTINGTON.
LIEUTENANT LOCHLIN W. CAFFEY.
PROFESSOR WILBERT S. DREW.
ASSOCIATE PROFESSOR BLANCHE COOPER.
ASSISTANT PROFESSOR RHODA BOWEN COOK.
ASSISTANT PROFESSOR CALVIN FLETCHER.
ASSISTANT PROFESSOR JOSEPH EAMES GREAVES.
ASSISTANT PROFESSOR N. ALVIN PEDERSEN.
ASSISTANT PROFESSOR CHARLES PIPER SMITH.
ASSISTANT PROFESSOR ELIZABETH CHURCH SMITH.
ASSISTANT PROFESSOR CHARLES WALTER PORTER.
ASSISTANT PROFESSOR GEORGE B. HENDRICKS.
ASSISTANT PROFESSOR HARRY COOPER PARKER.
ASSISTANT PROFESSOR HARRISON CLIFFORD DALE.
ASSISTANT PROFESSOR GEORGE MELVIN TURPIN.

STANDING COMMITTEES.

1910-11.

The President of the College is *ex officio* a member of each standing committee.

1. *School of General Science.*—Professors Jensen, Thatcher, Stewart, Fletcher, Dale.

2. *High School.*—Professor Pedersen, Mr. P. E. Peterson, Mrs. Clark.

3. *Graduation.*—Professors Arnold, Hogenson, Cooper.

4. *College Publications.*—Professors Larsen, Arnold, Pedersen, Miss Huntsman, Miss Kyle.

5. *Attendance and Scholarship.*—Professors Thomas, Caine, Jr., Greaves, Smith, Hendricks, Miss Stewart, Mr. Saxer.

6. *Student Affairs.*—Professors Caine, Jr., Frederick, Huntington, Greaves, Miss Smith, Miss Dudley, Mr. Erastus Peterson.

7. *Athletics.*—Professors Teetzel, Ball, Caine, III, Caffey, Parker, Coburn.

8. *Publicity.*—Professors Larsen, Hogenson, Merrill, Huntington, Porter.

9. *Exhibits.*—Professors Caine, III, Cook, Fletcher, Porter, Turpin, Mr. Powell, Mr. Madsen.

10. *Debating.*—Professors Hendricks, Thomas, Larsen, Pedersen, Dale.

11. *Entrance Requirements.*—Professor Parker, Mr. Walker, Mr. Hoff, Miss Manning.

12. *Student Employment.*—Professors Stewart, Frederick, Caine, III, Cooper, Mr. Hansen, Mr. Newey, Mr. Pulley.

13. *Student Body Organization.*—Professors Ball, Thomas, Huntington.

14. *Graduate Employment.*—Mr. Van Wagoner, Professors Ball, Thomas, Jensen, Huntington, Drew.

15. *Summer School.*—Professors Thomas, Larsen, Caine, Jr., Porter.

AGRICULTURAL COLLEGE OF UTAH.

General Information.

The Agricultural College of Utah is a part of the public school system of the State. It comprises five different schools:—the school of Agriculture, the School of Home Economics, the School of Commerce, the School of Mechanic Arts, and the School of General Science; also the Agricultural Experiment Station, which, while not providing directly for instructional work, is one of the most important departments of the institution. The organization, purpose, and equipment of the College, together with the character and extent of the work offered, are described in the following pages.

HISTORY.

The Agricultural College of Utah was founded in 1888, when, on March 8th, the Legislative Assembly accepted the terms of the national law passed by Congress on July 2d, 1862. Under this Act of Congress, and the Enabling Act, providing for the admission of Utah as a state, 200,000 acres were granted to the State of Utah, from the sale of which lands there should be established a perpetual fund, the interest to be used in maintaining the College.

Under the Hatch Act, approved in 1887, the State receives $15,000 annually for the Experiment Station.

Under the Morrill Act of 1890, the State receives $25,000 annually for instruction in the Agricultural College.

Under the Adams Act of 1906, the State will ultimately receive an additional $15,000 annually for research work by the Experiment Station.

Under the Nelson Act of 1907, the Morrill Act was so amended that the State will receive an increase of $5,000 annually, until the annual amount so received reaches $50,000 per year.

These various federal appropriations, together with the annual income from the land-grant fund, represent the income from the general government, but as most of these funds must be used in accordance with the law for specific purposes, the institution is dependent on State appropriations for funds with which to carry on the work of instruction, etc. These needs have been generously met in the past by the various Legislative Assemblies of the State. In 1888 the sum of $25,000 was appropriated for buildings, and the county of Cache and the city of Logan gave one hundred acres of land on which to locate the College. In September, 1890, the institution was first opened for the admission of students, degree courses being offered in Agriculture, Domestic Arts, Civil Engineering, Mechanic Arts, and Commerce; a Preparatory Course and short courses in Agriculture and Engineering were also given. Since that time the State has, on various occasions, appropriated sufficient funds to erect and maintain in order all the buildings described in a later section, besides providing largely for instruction.

Since that time, also, many improvements have been made in the courses; some have been abandoned, several Manual Training courses in Agriculture, Mechanic Arts, and Home Economics have been added, the standard of the College work has been raised, and in 1903 the Board of Trustees established the School of Agriculture, the School of Home Economics, the School of Mechanic Arts, the School of Commerce, and the School of General Science.

GOVERNMENT.

The government of the College is vested primarily in the Board of Trustees, and, under their control, the four other administrative bodies,—the Directors' Council, the College Council, the College Faculty, and the Staff of the Experiment Station. These, in their several capacities, determine the policy and maintain the efficiency of the institution.

THE BOARD OF TRUSTEES consists of nine members, appointed by the Governor with the approval of the State Senate. This Board assumes the legal responsibility of the institution, cares for its general interests, and directs its course by the enactment of all necessary by-laws and regulations. Vested in it is the power to establish professorships and to employ the instructing force and other officers of the College.

Between sessions, the power of the trustees rests with an executive committee, whose actions are referred to the Board for their approval. Another committee is concerned with the funds and accounts of the College, while a third has general charge of all buildings and repairs throughout the institution. In addition to these, there are committees, largely advisory, having to do with the employment and service of College officers, and with the work of particular departments.

THE DIRECTORS' COUNCIL consists of the President, the heads of the five schools and the Superintendent of Extension Work. This body has immediate supervision of the instruction and discipline in all the various schools. It constitutes a permanent executive and administrative committee of the College Council and Faculty.

THE COLLEGE COUNCIL consists of the President of the Board of Trustees, the President of the College, the Registrar, and the professors, the associate professors, the assistant professors, and the librarian. All important questions of discipline and policy are decided by this body.

THE COLLEGE FACULTY includes the President, the professors, the associate professors, the assistant professors, the librar-

ian, the instructors, and the assistants. As an administrative body it is concerned with the ordinary questions of methods and discipline and with various matters pertaining to the general welfare of the College. Through its standing committees it is in intimate contact with the student body and with the life and interests of the college community.

THE STANDING COMMITTEES have delegated to them the immediate direction of all the various phases of college life, such as the enrollment and progress of students in the various schools, and the general direction of the work there carried on. The conduct of the student in his college home and his regularity in performing college duties; the publications of the College and the students; the interests of the students on the athletic field, in the amusement halls, and in their various organizations,—all these things are within the province of appropriate committees, consisting largely of members of the council.

THE EXPERIMENT STATION STAFF consists of the President of the College, the Director of the Station, and the chiefs, with their assistants, of the departments of Agronomy, Horticulture, Animal Husbandry, Dairy Husbandry, Entomology, Chemistry, Irrigation Engineering, Poultry Culture, and Veterinary Science. This body is employed in the investigation of problems peculiar to agriculture in this portion of the country, the purpose being to improve conditions and results. It is further responsible for the circulation, through private correspondence and regular bulletins, of such information as is of practical value to the farming communities.

THE STUDENTS. The College is maintained at public expense for the public good. The students, therefore, are under a peculiar obligation to perform faithfully all their duties to the State, the institution, and the community. Most important of these is an active interest in all that concerns the moral and intellectual welfare of the College. Regularity of attendance, faithful attention to studies, and exemplary personal conduct are insisted upon at all times, and the administrative bodies of the College are fully empowered to secure these results.

POLICY.

It is the policy of the Agricultural College of Utah, in accordance with the spirit of the law under which it is organized, to provide a liberal, thorough, and practical education. The two extremes in education, empiricism and the purely theoretical, are avoided, the practical being based upon, and united with the thoroughly scientific. In addition to the practical work of the different courses, students are thoroughly trained in the related subjects of science, and in mathematics, history, English, and modern languages. While the importance of practical training is emphasized, the disciplinary value of education is kept constantly in view. The object is to inculcate habits of industry and thrift, of accuracy and reliability, and to foster all that makes for right living and good citizenship.

Under this general policy, the special purpose of the Agricultural College of Utah is to be of service in the upbuilding of the State of Utah, and the Great West to which it belongs. The instruction in Agriculture, therefore, deals with the special problems relating to the conquest of the great areas of unoccupied lands, the proper use of the water supply, the kinds of crop or live stock produced, which in Utah may be made pre-eminent; in Mechanic Arts, the most promising trades are pointed out, and they are taught in a manner to meet the needs of the State; in Commerce the present commercial conditions of the State are studied and the principles and methods to be applied in the commercial growth of Utah are given thorough investigation. The women who study Domestic Science are taught house-keeping and right living from the point of view of prevailing Utah conditions.

The dominating spirit of the policy of the Agricultural College of Utah is to make the common work of the world—the work that most men and women must do—both profitable and pleasant. The motto of the College is, Labor is Life.

LOCATION, BUILDINGS AND GROUNDS.

The Agricultural College of Utah is in Logan, the county seat of Cache County, which is one of the most prosperous agricultural counties in the State. The city has a population of about 7,000; it is noted for its freedom from vice, is quiet, orderly, clean and generally attractive, with neat homes, good, substantial public buildings, electric lights, and a water system. Cement pavements and an excellent electric street-car line, both recently completed, extend from the Station to the College. The citizens are thrifty and progressive. The College is beautifully situated on a broad hill overlooking the city, one mile east of Main street, and commands a view of the entire valley and of its surrounding mountain ranges. The beauty of the location is perhaps unsurpassed by that of any other college in the country. A few hundred yards to the south is the Logan River. A mile to the east is a magnificent mountain range and a picturesque canyon. In other directions are towns and farms covering the green surface of Cache Valley, and distinctly visible through the clear atmosphere. The valley is a fertile, slightly uneven plain, 4,500 feet above sea level, about twelve by sixty miles in dimensions, almost entirely under cultivation and completely surrounded by the Wasatch Mountains. It is one of the most attractive and healthful valleys in the western region.

On this site the College now has nearly twenty buildings, all modern, all well lighted and well heated, and all carefully planned and constructed to meet the purpose for which each was intended.

The Main Building, of brick and stone, is 360 feet long, 200 feet deep in the central part, and four stories high. It contains the large auditorium, seating about 1,500; the administrative offices; the library; the gymnasium; and all the various class rooms and laboratories except those of Mechanic Arts and Home Economics.

The Woman's Building, formerly the Dormitory, is a large four-story brick building fifty by eighty feet, situated at three

minutes' distance from the Main Building on the north-west corner of the campus. Cement walks connect it with the other school buildings and with Main Street. It is one of the largest and best equipped structures devoted entirely to Domestic Science and Arts in the whole Inter-Mountain Region. It has automatic elevator service from the locker room and laundry in the basement to the spacious rooms on the fourth floor. On the first floor there is a large lecture room used for a class room and also for public lectures, a small class room and a kitchen-laboratory equipped with gas for individual work, a library, and an office. On the second floor is the second kitchen-laboratory, equipped with electricity for individual work, a small kitchen, a dining room, and a chemistry and a research laboratory. The third floor is devoted entirely to the Domestic Arts and contains the office, millinery room, sewing, dressmaking and fitting rooms with complete equipment. The fourth floor contains a rest room, class room, and a large room used for museum material and gymnasium work.

The Experiment Station Building, a two-story brick structure 45 feet long and 35 feet wide, contains the offices of the station staff, a reading room, and a dark room for photographic work.

The Mechanic Arts Building is a one-story brick structure, with the exception of the central part, which is two stories high. It has a ground floor area of 16,600 square feet, divided into four groups of rooms, viz.: wood working department, machine shop, forging, and draughting rooms. On the second floor are the Mechanic Arts Museum, blue-printing room, room for painting and staining, and a class room.

Two Conservatories, each 90 by 25 feet, divided into various compartments for the purpose of regulating the temperature, are used to supplement class work in botany, floriculture and horticulture.

The Veterinary Hospital, a two-story stone and frame structure, 18 by 42 feet, containing a well-equipped dispensary, oper-

ating room, and stalls for patients, gives ample room for all the work in veterinary medicine at present offered by the College.

Last summer a commodious, well-heated stock-judging pavilion was erected. Here the students in animal industry will carry on their work instead of being obliged, as in the past, to remain outdoors in all sorts of weather.

The Barns. *The horse barn,* a wooden structure, 60 feet square, contains model sanitary stables for horses, storage divisions for hay, grain and seed, and rooms for carriages and wagons, farm implements, and machinery; also the farm foreman's room, and repair shop. A ten-horsepower electric motor furnishes power for grain threshing, feed grinding, and fodder shredding. *The cattle barn,* 106 feet by 104 feet, is provided with the most modern equipment throughout, including iron stalls, cement floors and mangers, etc. There are accommodations for seventy-five head of cattle; also hospital rooms, feed rooms, a milk room, a root cellar, and storage room for hay and grain. *The sheep barn,* 94 feet by 41 feet, has accommodations for seventy-five sheep, and storage room for feed. *The hog barn* is a wooden structure, 65 feet by 31 feet. It contains two feed rooms, a cook room, an abattoir, and twelve pens, each of which is provided with an outside run. This building accommodates sixty mature animals.

The Poultry Building covers 230 feet by 25 feet, with yards 100 feet wide on each side. The building is divided into two sections:—first, the brooder section, with a capacity for about one thousand chicks; second, the experimental section, with a capacity for over five hundred hens. This section is divided into thirty-two pens; it is shut off from the public and used for conducting experiments on the different questions of poultry culture. The building is heated by a hot water system. In the front part are an office, a feed and weigh room, a store room, and a sleeping apartment.

A modern Incubator Cellar has recently been provided which is well equipped with the latest incubators of different makes, egg

distributing and turning tables, pedigree hatching trays, hygrometers, thermometers, acetylene and electric egg testers, and such chemical and other apparatus as is required for thorough work in the investigation of incubator problems.

The land occupied by the College and its several departments embraces about 116 acres. Of this, thirty-five acres constitute the Campus, laid out with flower-beds, broad stretches of lawn, and wide drives and walks leading to the College buildings. During the summer the conservatory contributes its hardy plants for lawn decoration.

Immediately east of the Main Building are the parade grounds and athletic field, of about ten acres. The farms comprise 71 acres; the orchards and the small fruit and vegetable gardens, 10 acres. All parts of the College grounds are used by the professors in charge of instruction in agriculture and horticulture and by the Experiment Station staff for the purpose of practical illustration in their respective departments, and for experimentation.

EQUIPMENT.

AGRONOMY. The Department of Agronomy is provided with a large collection of agricultural plants, seeds and soils, representing the main crops and types of soils of the inter-mountain region The College farms are equipped with the best and latest farming implements and machinery for carrying on work scientifically and successfully. They are divided, for illustrative and experimental purposes, into numerous plats on which many varieties of farm crops are grown and upon which important experiments are carried on.

The Soil Physics Laboratory has a good supply of apparatus for accurate and up-to-date work, including balances, microscopes, drying ovens, hot-water baths, compacting machines, and apparatus for determining the mechanical analysis of soils.

The Farm Crops Laboratory has recently been equipped with gas and has a large supply of farm crops on hand for illustrative and laboratory work. It is supplied with magnifying glasses, a Grey seed weigher, a vertical air-blast seed separator, a seed germinator and tester, as well as enlarged and dissectible models of various grains, grasses and root crops.

ANIMAL INDUSTRY. For this work general use is made of the College barns, live-stock, dairy, etc. During the last year the College has added to the equipment by the purchase, in Europe and in America, of some fine pure-bred horses, cattle and sheep. The large, new, well-lighted live-stock pavilion, one of the finest in the West, has made it possible to do all work in doors under the best conditions.

The model poultry house with its equipment, and the new incubator cellar, afford special facilities for illustrative and practical work with poultry. Several strains of pure-bred chickens, ducks, and geese are kept for experimental purposes.

DAIRYING. The creamery occupies a floor space of about three thousand square feet, divided into seven rooms for the various processes of dairy work, and equipped with all the apparatus necessary for the processes of butter and cheese-making and milk-testing. It is run on a commercial basis, milk being purchased from the farmers living near Logan. Ample facilities are provided for illustrating the handling of milk for the retail trade. The department has an eight-horsepower boiler and a six-horsepower engine, and model cold storage rooms for butter and cheese.

THE BOTANICAL LABORATORY has a good supply of apparatus for systematic and microscopic work. The herbarium contains 3,000 mounted and named specimens, and there are 700 samples of seeds for use in economic botany. The general equipment includes compound microscopes, Bausch and Lomb dissecting microscopes, microtome, and everything else necessary for successful botanical work. The orchard and the small fruit and vegetable gardens are used in connection with the work in botany and horticulture for illustrative purposes.

THE VETERINARY LABORATORY is supplied with all the more important surgical instruments, and other material found in a well equipped hospital. A modern operating table, an operating room, box stalls for patients, the necessary medicines, are all at hand. In this laboratory the agricultural students have practice and observation in the treatment of animals.

THE DEPARTMENT OF HOME ECONOMICS occupies an entire building, consisting of a basement and four stories connected by automatic elevator service. In the basement a locker room is provided for wraps. The two kitchen laboratories on the first and second floors have individual work tables equipped with new utensils. One laboratory is provided with individual gas stoves, the other with individual electric stoves. A small kitchen and dining room are newly and completely equipped with modern furnishings. A chemical laboratory and an experimental laboratory are also found on the second floor. The department has various charts and cabinets of food materials showing composition and process of manufacture. The laundry, which is fitted with stationary tubs, a drier, ironing tables and electric irons, is in the basement. The Department of Domestic Arts occupies the third floor and is completely furnished with the latest improved machines, tables, chairs, tracing boards, electric irons, wardrobes, drawers and cupboards for the finished and unfinished work. The museum material consists of exhibits which show the process of manufacturing wool, silk, cotton, and linen. A large room on the fourth floor is used for a gymnasium in connection with which shower and tub baths are available. A rest room is provided, and the library on the first floor offers opportunity for reading and study.

THE COMMERCIAL DEPARTMENT is equipped for thorough and efficient work in modern business courses. The entire third floor of the front of the Main Building, covering a floor area of 7,225 square feet, is occupied by the department. Each room is specially designed and furnished for the work to be conducted in it. Practice is given in the methods of modern banking, wholesale,

retail, and commission trade, and freight, insurance and real estate offices. The room for typewriting contains a full complement of standard machines. The rooms for stenography and penmanship are conveniently furnished for efficient work.

THE MECHANIC ARTS are taught by means of a large and carefully selected equipment for practical work in shop, field and laboratory. The carpentry rooms are supplied with seventy benches with full sets of tools. The wood-working machinery includes fifteen pattern-makers' lathes, universal saw table, jig and band saws, planer, mortiser and borer, shaper, and sander; and there are the usual clamps, vises, glue tables, veneer-presses and other special tools required for a shop of this kind. For the work in forging there are provided twenty-three single and eight double forges, each with a complete equipment of anvil and tools. In addition, there are two furnaces, one belted power hammer, drills, special swages, cutting-off machines and leveling tables, with a considerable assortment of special tools. The equipment for foundry work includes iron-melting cupola, brass furnace, core oven, annealing furnaces, flasks, patterns, ladles, crucibles, and full sets of regular tools for flask and floor moulding. The outfit used in carriage building comprises, in addition to the required benches, a full supply of carriage-builders' tools, including hub-boring and boxing machines, spoke-tenoning machines, felloe-boring machines, tirebender, etc. In the room devoted to machine work in iron are found six large engine lathes, three universal milling machines, a universal grinding machine, two speed lathes, a large radical drill press, sensitive drill (built by students), two crank shapers, two large planers, grindstones, and emery wheels, every machine having its regular equipment of tools and attachments. The tool room is well supplied with drills, reamers, cutters of various kinds, files, calipers, etc. All machinery, including blast and exhaust systems for the forge shop and foundry, is electrically driven.

THE BACTERIOLOGICAL LABORATORY is well equipped with modern apparatus for the work offered. Each student is provid-

ed with a high-power Leitz or Bausch and Lomb microscope. One microscope with triple nose-piece, fitted with 1-12 and 1-16 oil-immersion objectives, Abbe condenser, and rotary and mechanical stage, is used for identification work. The equipment includes an autoclay, hot air and steam sterilizers, incubator, refrigerators, aerobic plate apparatus, anaerobic tube apparatus, microtome, analytic balance, cages, permanent mounts, glassware, chemicals stains, and culture media.

THE ZOOLOGICAL LABORATORY is equipped with water and gas, and has for use in laboratory work the most improved modern instruments, many enlarged models, a *papier mache* manikin, articulated and disarticulated human skeletons, skeletons from each group of vertebrates, collections of mounted birds, mammals, reptiles and fishes, and alcoholic material in many groups. The department has exhibition and systematic collections of insects, and the private collections and libraries of the professors are available to students taking work in the department.

THE CHEMICAL LABORATORIES are well equipped for elementary and advanced work in chemistry. Several valuable collections of gums, oils, coloring matters, foods, etc., are important aids to the students in this department. The laboratories are fitted with water, gas, hoods, and all other conveniences.

THE PHYSICAL LABORATORY occupies a suite of rooms on the second floor. The equipment is fairly complete, consisting of all the necessary pieces of apparatus for class demonstration; a set of apparatus for elementary laboratory work, sufficient for ten students working on the same experiment; and all pieces required for an experimental course in mechanics, heat, electricity and light.

THE COLLEGE MUSEUM contains a large number of specimens illustrative of geology, mineralogy, paleontology, and vertebrate and invertebrate zoology, including a large series of the insects of the intermountain region; also an extensive series of plants of the western highlands. An extensive collection of grains represents the produce of Utah and other states. Contributions of fossils, ores, animals, plants, relics, or other material of value to the muse-

ums, will be highly appreciated. All gifts are labeled and preserved, and the name of the donor is kept on record.

THE ART ROOMS are supplied with plain and adjustable tables for the elementary work in drawing and design, also with easels and model stand for the studio. Individual lockers for students and cases for the materials of the department are supplied. Casts from the old masters in sculpture, reproductions of great paintings, examples of Japanese art, still-life models, drawing boards, and draperies are included in the equipment. The department has access to the art library which is well supplied with helpful works on design, home art, sculpture, painting, and architecture.

THE LIBRARY, with its offices and reading room, occupies the entire front of the second floor of the Main Building. The large, well-lighted main room is one of the most cheerful and inspiring reading rooms in the country, with an unsurpassed view over the entire valley. Growing plants, pieces of sculpture, and a number of oil paintings further enhance the attractiveness of the environment. The books are shelved on the Library Bureau standard steel stacks, arranged in alcoves, where tables also are provided for advanced students wishing to do special study. The readers have free access to the shelves.

The library now contains about 18,000 bound volumes and a large number of pamphlets. The books are classified by the Dewey decimal system, and there is a complete dictionary card catalogue of the library. The shelf list is also on cards, and forms a classed catalogue for official use.

The library is a depository for United States public documents, and receives practically all documents printed by the government. There are ninety-eight periodicals on the subscription list, besides about eighty which are received as exchanges for the publications of the College and of the Experiment Station. Thirty-five newspapers of the state are regularly received and placed on file in the reading room.

THE AGRICULTURAL EXPERIMENT STATION.

THE AGRICULTURAL EXPERIMENT STATION is a department of the College, supported by Congressional appropriations, supplemented by the receipts from the sales of farm products, and by such appropriations as the State Legislature makes from time to time to carry out special lines of work, or for the establishment and support of sub-stations. The station was created for the special purpose of discovering new truths that may be applied in agriculture, and of making new applications of well-established laws. It is, therefore, essentially a department devoted to research; and as such, it does the most advanced work of the College.

THE EXPERIMENT STATION is not, in the ordinary sense, an institution where model farming is carried on. It has a much higher purpose. The practices of the farmer are subjected to scientific tests, in order to determine why one is bad and the other good. Acting on the suggestions thus obtained, new lines of investigation are begun, with the hope that truths of great value to the farmer may be discovered.

THE STATION has for its present object the study of the underlying laws of irrigation. On the farm, in the orchards, gardens, and barns, experiments are going on that, in time, will lead to the establishment of an art of irrigation based on laws developed by scientific methods. Experiments for the improvement of alfalfa for hay and seed, of sugar beets in sugar content and seed production, and of potatoes and beans in yield and in quality, are being undertaken. Special investigations for the purpose of encouraging the horticultural, dairy, and poultry industries, and of reclaiming the alkali and arid lands of the state are also in progress.

By an act of the State Legislature of 1903, six experimental farms have been established in different parts of the state, for the purpose of demonstrating the possibilities of dry or arid farming on the soils of Utah. The work on all these sub-stations, includ-

ing also the Experimental farm near St. George, in Washington County, is placed under the direction of the Experiment Station. In co-operation with the Department of Agriculture, the Station is carrying on extensive investigations in irrigation, drainage, the breeding of arid farm grains, and the improvement of arid farm methods.

A report and four or five bulletins containing the results of the experiments of the stations are published annually for free distribution among the people of the state.

The Experiment Station has a high educational value. Nearly all the members of the Station Staff are also members of the College Faculty, and the students, therefore, receive at first hand an account of the methods and results of the work of the Station, and training in their application. The opportunities that the Experiment Station offers for advanced work in several branches of science are of great importance. The scientific method and spirit characterize all the operations of the Station, and none can fail to be benefited by a study of the experiments that go on at all times of the year.

The Station Staff are always glad to assist the advanced students of the institution in any investigation they may wish to undertake.

ADMISSION AND GRADUATION.

CONDITIONS FOR ADMISSION. Graduates of the district schools are admitted without examination to the College Preparatory Course, to the high school courses and to the Manual Training Courses. Candidates for admission must be at least fifteen years of age. Persons eighteen years old or over, not graduated from the district schools, will be admitted to the technical work of the Manual Training courses prior to June, 1911, after which time students who cannot show either by certificate or examination that

they have completed the work of the eighth grade of the district school will not be admitted to these courses. Until June, 1911, classes in the elementary branches will be maintained in order that the students referred to above may make up the regular entrance requirements.

Those who have completed the College Preparatory Course are admitted without examination to the four-year College courses in Agriculture, Home Economics, Commerce, and General Science. Students may transfer from one regular course to another by making up all the technical work not completed of the course to which they transfer. No one is allowed to substitute technical work of one course for that of another except by permission of the Faculty.

Other students are admitted to any of the courses leading to degrees upon the certificates of accredited high schools, or upon satisfactory examination in the required subjects. Students entering from other schools may be allowed to substitute for some of the required subjects.

Beginning with 1911-12 the College will require three years of high school work for admission to the four-year college courses. Students entering the college courses from other schools in that year must show credits for three years work in some reputable high school. Students who began their high school work as first year students at the U. A. C. in 1909-10 will take second-year work in 1910-11, and third-year work in 1911-12, becoming freshmen in 1912-13.

Candidates for admission to advanced standing may be required to pass satisfactory examinations in all the work of the preceding years, or to present satisfactory evidence of having completed an equivalent of such work in some other school or college.

SPECIAL STUDENTS. Persons of mature years, who for satisfactory reasons desire to pursue a special line of study, may be admitted as special students, provided they give evidence of ability to do the work desired. Special students may be allowed to

graduate in any of the courses, on condition that they complete the required work and pass the necessary examinations.

REGISTRATION. All students register at the beginning of the collegiate year for the work of the whole year. Changes in registration, and credit for work not registered, will be allowed only by special permission of the Council.

SCHOLARSHIPS. The Federation of Women's Clubs for two years has offered two scholarships to the Department of Home Economics. These scholarships refund to the students the entrance fee. Applications for such scholarships for next year should be made not later than June 1st, 1910.

CLASSIFICATION. All regular students are classified as first, second, and third year students in Agriculture, Home Economics, or Commerce; or as first, second, and third year students in the College Preparatory Course; or as first, second, third, and fourth year students in the Manual Training Course in Mechanic Arts; or as freshmen, sophomore, junior, and senior students in any of the four-year courses leading to degrees.

GRADUATION. Students who complete the three-year course in Commerce, or the four-year course in Manual Training in Mechanic Arts, or the three-year course in Manual Training in Home Economics, receive certificates of graduation. The degree of Bachelor of Science, Bachelor of Science in Agriculture, Bachelor of Science in Home Economics, and Bachelor of Science in Commerce, is conferred upon those who complete the regular four-year courses in General Science, Agriculture, Home Economics, and Commerce, respectively.

To obtain a degree the student must have been in attendance at least one school year preceding the conferring of the degree. He must have completed all the prescribed work or its equivalent in one of the four-year college schedules. He must have acquired credits for electives according to the grade and number indicated in his schedule. He may be required to pass a satisfactory oral examination on the technical work of his course before a special committee appointed by the president. He must

have no grade lower than D in any subject. Four-fifths of all his term grades must be C or better. He must have discharged all College fees. He must be recommended for graduation by his school faculty and receive the favorable vote of two-thirds of the members of the College Council.

HONORS IN SCHOLARSHIP.

In order to encourage high scholarship the College Council has instituted a College Roll containing the names of all students doing excellent work. This roll is divided into two groups for the High School and two for the College students, the first group containing the names of those who have A or B in all their work, the second composed of students having A or B with one C.

Last year (1908-09) the following students were selected from the College Roll as deserving of some special distinction for high achievements in scholarship. On the last day of school they were, accordingly, publicly honored by receiving either a "College A" or "Honorable Mention" for Scholarship.

The following received "A":

Ernest Carroll.
Vern Clark Woolley.
Percy Harry Barrows.
Lucile Lee.
Amelia Manning.
Byron Alder.

The following received "Honorable Mention":

Lofter Bjarnason.
Alfonso Laker Cook.
Robert James Evans.
Veda Hunsaker.
Charles Terry Hirst.
Stonewall Jackson Major.
Winnifred Smith.

STUDENT ACTIVITIES.

THE STUDENT BODY ORGANIZATION. This society embraces all the students of the institution. Its prime object is to foster a proper spirit of college loyalty. It also secures dispatch and efficiency, as well as uniformity, in the administration of all matters pertaining to the entire student body. Realizing the importance to all students of taking part in the various college activities, the organization further provides each member with the maximum amount of proper athletic, theatrical and social recreation at the minimum expense, viz., $5.00 annually. This society has control of the following student activities:

1. *Athletics,* including all inter-class and inter-collegiate contests in foot ball, base ball, basket ball, and track events.

2. *Music,* including all public performances of the Band, the Orchestra, Glee Club, Choir, String Quartette, and Mandolin and Guitar Club.

3. *Theatricals.* Once or twice each season some dramatic performance is given. In the past, two of Shakespeare's comedies, Goldsmith's *She Stoops to Conquer,* Gilbert's *Pygmalion and Galatea,* Clyde Fitch's *The Climbers,* and several minor productions, have been presented.

4. *Debating.* Each year two or more intercollegiate debates occur. In addition there are several debating societies organized by the different classes.

5. *Student Publications.* The students of the College publish a school paper, *Student Life,* which makes its appearance once a week and contains timely editorials, news items, announcements, reports and forecasts of College activities. In addition, several magazine numbers of *Student Life* are published during the school year.

In 1908-9 the juniors inaugurated the publication of a College Year Book, which they christened *The Buzzer.* It was so eminently successful that it has become one of the permanent annual publications of the College.

CLUBS. Not affiliated with the Student Body Organization,

and standing largely for the interests of the various schools, are the following clubs:

1. *The Agricultural Club,* which aims to keep its members in touch with current events in scientific agriculture. Special lectures, often illustrated, are given at intervals throughout the season.

2. *Home Economics Club.* The Home Economics Club is composed of the students in Domestic Science and Arts. Other students and instructors are eligible to associate membership. The object of the club is to keep students in touch with movements connected with their work and to promote interest in home economics work. Lectures and exhibits are given in connection with the club.

3. *The Commercial Club,* working to promote the interests of the Commercial School, to popularize the commercial courses, and to consider matters of interest not encountered in routine work. The club maintains an annual lecture course, given by prominent men throughout the state on topics of special interest to the business man. All commercial students are eligible to membership.

4. *The Delta Theta Sigma,* a chapter of the recently established national honorary fraternity for students in Agriculture. Members are chosen for scholarship, being selected from among the upper two-fifths of the junior and the senior classes in Agriculture.

SORORITIES AND FRATERNITIES. The following societies of limited membership are in active existence among the students:

1. *The Sorosis,* open to college women only, and having for its object general literary and social culture, as well as the advancement of college loyalty.

2. *The Sigma Alpha Fraternity,* open to college men and having for its object social and intellectual progress.

3. *The Pi Zeta Pi Fraternity,* open to college men. Its aims are to promote college loyalty, social and intellectual advancement.

STUDENTS' EXPENSES.

Tuition is free. Utah students pay an annual entrance fee of $5. Students from other States must pay $25. The privileges of the library and museums are free. In the Chemistry, Physics, Mechanic Arts, and Home Economics laboratories, and in typewriting, students are charged an incidental fee of $1 per credit hour. The total amount varies in each case in accordance with the course taken, ranging from $2.00 to $13.00 a year.

Every regular student must pay a Student Body fee of $5.00, for which a ticket is issued admitting him to all the activities controlled by the Student Body Organization,—athletic events, foot ball, basket ball, base ball, and track, dramatic and musical entertainments, socials, lectures, etc. This system has been found to be a great saving to the students and a most excellent means of fostering proper interest in student activities.

All the boys above first year and below senior must be prepared to purchase a uniform to wear at military drill. To this rule there is *no exception* unless a very unusual reason exists. This uniform is obtained through the Secretary of the College at actual cost, about $15.00, and has been found more serviceable and far more attractive in appearance than civilian clothes of the same price. With proper care one uniform will last two years.

All students in Domestic Science must provide themselves with two white aprons, two pairs of white half-sleeves, and two holders, six inches square.

All girls taking physical culture must provide themselves with a gymnasium suit and gymnasium shoes. These may be procured at the College. Cost, about $4.00.

The fee charged for a certificate of graduation is $2.50; and for a diploma, $5.00. Students are held responsible for any injury done by them to the College property.

Good board and rooms can be obtained in private houses for $3.50 to $4.50 per week. By renting rooms and boarding them-

selves, students are able to reduce considerably the cost of room and board. The College maintains a lunch counter where, for a few cents, students may get a hot luncheon daily.

The cost of necessary books and stationery ranges from $10.00 to $15.00 a year.

WINTER COURSES.

In order to be of the greatest service to the greatest number of people the College offers, and has offered annually since its opening year, a series of winter courses. Hundreds of persons, young and old, men and women, unable to attend school at any other time, have in the past taken advantage of this opportunity, and the number increases each winter. These courses furnish instruction in Agriculture, Home Economics, Mechanic Arts, Commerce, and Forestry. In addition the student is permitted to take any course or courses in any of the other departments for which he may be prepared. All the work is elective. The Home Economics Department offers a two weeks' course in housekeeping. Sewing, cooking and sanitation are taught in the laboratory, and public lectures are given in the afternoons. For the year 1909-10 subjects of some of the lectures were as follows: Civic Improvement, Sanitation in the Home and School, Household Art, Housekeepers as Consumers, Household Insects, Our Meat Supply, Our Food Supply. In connection with the conference was shown a fly exhibit. Send for special circular ready in December.

SUMMER SCHOOL.

The College maintains, as an integral part of its work, a summer session, beginning on the first Monday of June, and continuing for six weeks. Every department of the College is rep-

resented, the courses of instruction being arranged to meet the peculiar needs of summer students. For the benefit of teachers, special courses are provided in pedagogy, psychology, sloyd, and nature study, in addition to the regular work of the College. Students desiring to make up conditions or prepare for advanced work are given all assistance possible. The entire equipment of the institution is available for the summer session, and every care is taken to preserve the standard and the spirit of the college. No admission requirements are prescribed, but students in all departments are directed by instructors to those courses in which they may pursue work to the best advantage. Arrangements have been made with county superintendents throughout the State to accept Summer School credits in individual subjects in lieu of examination. An entrance fee of $2.50 is charged for each course for which the student registers. Board and rooms can be secured throughout the city at the usual prices. Special Summer School Circular will be sent on request.

NORMAL TRAINING.

For the purpose of providing specially trained teachers of domestic science and arts, agriculture, and mechanic arts, arrangements have been made whereby the graduates of the State Normal School of the University may enter the degree courses of the Agricultural College and there obtain technical work in Home Economics, Agriculture, and Mechanic Arts. All the work done in the State Normal School will be credited the candidates for the professional degree.

Graduates from the degree courses in Home Economics, Agriculture, and Mechanic Arts of the Agricultural College will be given the normal certificate upon the completion of one year of professional work at the State Normal School.

Graduates from the various Manual Training Courses and other short courses of the Agricultural College will be entered for the professional work of the Normal School, and will be given full credit for the work done at the Agricultural College.

SCHEDULE OF RECITATION HOURS.

The recitation periods, commonly known as hours, are fifty minutes in duration and begin at 8:30 a.m. After the third hour there is a daily intermission of 20 minutes for general devotional exercises. During the 4, 5, and 6 hours (from 11:00 to 1:30) the Cafeteria, or College Restaurant, will be open. The ninth period (from 3:30 to 4:20) is given to Military Drill. The following table shows the entire schedule:

1 hour, 8:30— 9:20.
2 hour, 9:20—10:10.
3 hour, 10:10—11.00.
Chapel, 11:00—11:20.
4 hour, 11:20—12:10.
5 hour, 12:10— 1:00.
6 hour, 1:00— 1:50.
7 hour, 1:50— 2:40.
8 hour, 2:40— 3:30.
9 hour, 3:30— 4:20.

Schools and Courses of Study.

For the purpose of more efficient administration, the College is divided into five schools: (1) The School of Agriculture; (2) The School of Home Economics; (3) The School of Commerce; (4) The School of General Science; and (5) The School of Mechanic Arts. These schools are not educationally separate, but are interdependent and together form a unit.

The School of Agriculture offers (1) A two-year short course in Agriculture; (2) Four-year college courses in Agronomy, Horticulture, Animal Husbandry and Dairying, Irrigation and Drainage, Agricultural Chemistry, and Economic Entomology. In addition a course in Irrigation Engineering is offered jointly by the Agricultural College and the State School of Mines.

The School of Home Economics offers (1) A three-year Manual Training Course in Home Economics; (2) A four-year college course in Home Economics.

The School of Commerce offers (1) A three-year high school course in Commerce; (2) A four-year college course in Commerce.

The School of General Science offers (1) a three-year college Preparatory Course; (2) A four-year college course in General Science. Upon completion of the College Preparatory Course a student may enter any one of the four-year courses leading to a degree.

The School of Mechanic Arts offers a four-year course in Manual Training in Mechanic Arts, which may lead to carpentry, forging, machine work, or other trades.

All college courses lead to the degree of Bachelor of Science; all other courses, to certificates.

THE SCHOOL OF AGRICULTURE.

The instruction in Agriculture is provided by the departments of Agronomy, Irrigation and Drainage, Animal Husbandry, Dairy Husbandry, Horticulture, Entomology, Chemistry, Poultry Culture, and Veterinary Science. The courses of these departments are so arranged as to enable the student to lay a foundation upon which he can build a successful career as a farmer, or develop into a specialist in Agronomy, Animal Industry and Dairying, Entomology, Horticulture, Irrigation, or Agricultural Chemistry. For the student who expects to return to the farm, a Short Course, continuing through two years, has been arranged; and a college course, leading to a degree, is offered for those who desire to secure positions as farm managers, experts in the State or Government employ, or as workers in agricultural faculties and in experiment stations. The two-year course confines itself to laying a foundation that will secure success on the farm; the longer course enables the student to prepare himself thoroughly for the work in which he is most interested.

In the junior and senior years the student is required to specialize in Agronomy, in Irrigation and Drainage, in Animal Husbandry and Dairying, in Horticulture, in Economic Entomology, or in Agricultural Chemistry.

Experience has shown that practically all of the students who take agriculture come from the farm, and it is assumed that they are acquainted with the various manual operations of farm work. The design of the course is, therefore, to teach the sciences that underlie practical agriculture, and sufficient supplementary studies to develop the agricultural students to the intellectual level of the educated in other professions.

The general and department libraries enable the student to become acquainted with a wide range of agricultural and related literature; the laboratories of the College, and the Experiment Station, afford opportunity for training and experience that it would be impossible to get from books.

Agriculture is one of the most promising of modern professions. It is growing very rapidly, and, owing to the scientific foundation that recent years have given it, large numbers of intelligent people are adopting it as their means of livelihood. The new agriculture is not a profession of unceasing toil. On the contrary, the freedom, health, intellectual activity and profit to be obtained from intelligent farming are attracting the best classes of people. Utah and other western states are offering splendid opportunities to those who prepare themselves for scientific farming. There is a great demand for men who can supervise large farm enterprises; there is a greater demand for men who can act as experts, experimenters or teachers in the schools and other institutions of the State and National Government. The supply of such men does not begin to equal the demand. Every graduate of the School of Agriculture of the Agricultural College is splendidly placed; and a large number of the graduates of the other schools have later entered the work in agriculture.

The first two years of all college courses in Agriculture are alike. At the beginning of the junior year the student must choose the subject in which he desires to specialize. Every college course leads to the degree of Bachelor of Science in Agriculture.

THE SCHOOL OF HOME ECONOMICS.

The courses in Home Economics aim to train and broaden the minds of women, and to enable them to meet more intelligently the home demands of modern life. When woman has learned to apply the principles of science, economics and art to the problems of daily living she will realize that housekeeping is an occupation worthy of the best thought which results in the betterment of home life and more efficient living. Formerly the higher education of woman led her away from the practical interests of the home. The recent establishment of Domestic Science courses

in many leading colleges and universities shows a public demand for education toward home life rather than away from it. The State of Utah wisely established such courses when this College was first organized; and the favor with which the work has been received by the public shows the wisdom of the plans. The Domestic Science Course has been strengthened and improved each year, and better facilities for instruction and study have been provided. The four-year course gives the same training in mathematics, in English, and in science as other baccalaureate courses, together with a broader culture in literature and modern languages than is offered in any other. Both in the preliminary work and in the advanced years, special studies in the various lines of home science are prescribed in logical order as the distinctive feature of the course. The Manual Training Course in Home Economics is offered for the benefit of young women who do not wish to take the studies of the regular college years, but desire to devote more time to the subjects of special interest to women.

Two courses are offered: a three-year Manual Training Course, leading to a certificate, and a four-year college course, leading to the degree of Bachelor of Science in Home Economics. The regular foundation for the latter is the College Preparatory Course.

THE SCHOOL OF COMMERCE.

The purpose of the School of Commerce is to give opportunity for a liberal education with special emphasis upon the commercial phases of life. Persons who complete the Commercial courses should be better prepared to assume leadership and responsibility in business and in the various industries and professions. Three courses are offered: a short course continuing through two years, one of three years, leading to a certificate of graduation, and one of four years, leading to the degree of Bache-

lor of Science in Commerce. Students in the three-year course may receive a certificate in Accounting or in Stenography. Those who have finished the three-year course are admitted to the sophomore year as candidates for degrees. The work of the senior year is, to a great extent, elective. The student may select as his major (1) Political Economy, (2) Political Science, or (3) Accounting and Administration. His plan must be approved by the principal of the School of Commerce.

For those who expect to enter the profession of law, the Commercial courses afford excellent preparation. Students who complete these courses will be well prepared for positions as teachers in commercial schools. The demand for thoroughly qualified teachers for such positions is greater than the supply, and many desirable positions are open to those prepared to do the work.

THE SCHOOL OF GENERAL SCIENCE.

To carry out the work of the several technical schools of the College, an efficient instructing force and a complete modern equipment have been provided in the natural and physical sciences, as well as in mathematics, history, language, etc. This makes it possible to satisfy the growing demand for strong baccalaureate courses affording a broad general education in the earlier years, and admitting of specialization later, when the student has matured his plans. Such courses constitute the work of the School of General Science, and, paralleling the other degree courses of the College, lead to the degree of Bachelor of Science. The natural introduction to this work is the College Preparatory Course.

Upon completion of four years' work in General Science, students receive the degree of Bachelor of Science in General Science.

THE SCHOOL OF MECHANIC ARTS.

The course in Mechanic Arts is intended to qualify students as artisans, hence the practical work of the shops and draughting room is emphasized. The course admits of a three-fold specialization—in woodcraft, forging, or machine work in metals, with special courses in foundry practice, horse-shoeing, carriage building, cabinet making, and sloyd. In this work are developed correct methods of using tools and doing the mechanic's work neatly, efficiently, and with rigid accuracy. In all departments of the school, work is done from series of shop drawings, arranged in progressive order, giving both the details of the exercise and a drawing of the finished product. Sufficient work is given in English, mathematics, and elementary science to represent a fair high school education. Students electing any branch of the Mechanic Arts Course are required to do at least two years' work in that branch. No machine work is given until the student has shown a reasonable proficiency with hand tools. All products of the shop are the property of the department, students being allowed to take away specimens of their work only by special permission.

The trades have changed greatly in recent years. Science has given them a secure foundation and the wages of artisans have advanced so rapidly as to make the trades desirable as means of livelihood. The lack of skilled artisans should encourage many boys to go into this kind of life work. Moreover, work offered by this school is an unusually good preparation for engineering.

Two courses are offered: a four-year course, and a short course continuing through two years. Upon completion of the four-year Manual Training Course, students receive certificates of graduation.

Schedules of Courses.

COLLEGE COURSES IN AGRICULTURE.

Freshman Year.*	1st Term	2nd Term
English 6	3	3
Mathematics 4	5	5
Chemistry 1	5	5
Botany 3, 4	3	3
Library Work	1	1
Drill	1	1
	18	18

Sophomore Year.*		
Physics 1	3	3
Chemistry 3	3	3
Zoology 2	3	3
German 1 or French 1	4	4
Agronomy 3	0	3
Agricultural Technology 2	2	2
Electives	3	0
Drill	1	1
	19	19

AGRONOMY.

Junior Year.		
English 7	3	3
German 2 or French 2	3	3
Agronomy 2	3	0
Chemistry 5a	0	3
Bacteriology 1	3	0
Electives	4	7
Drill	1	1
	17	17

Senior Year.		
Geology 2	3	3
Economics 2	3	3
Horticulture 3	3	0
Botany 5	3	0
Agronomy 4, 7	2	5
Electives	3	6
	17	17

*The freshman and the sophomore years are the same in all courses in Agriculture.

ANIMAL HUSBANDRY AND DAIRYING.

Junior Year.	1st Term	2nd Term
English 7	3	3
German 2 or French 2	3	3
Animal Husbandry 3	5	0
Poultry Husbandry 1	0	2
Bacteriology 1	3	0
Zoology 3 or 6	0	3
Dairying 1	0	3
Animal Husbandry 2	3	3
Drill	1	1
	18	18

Senior Year.		
Economics 2	3	3
Animal Husbandry 4	3	0
Dairying 3	0	3
Chemistry 6	3	3
Geology 2	3	3
Electives	5	5
	17	17

HORTICULTURE.

Junior Year.		
English 7	3	3
German 2 or French 2	3	3
Entomology 2	3	3
Horticulture 2	0	4
Bacteriology 1	0	3
Botany 5	3	0
Electives	4	0
Drill	1	1
	17	17

Senior Year.		
Economics 2	3	3
Geology 2	3	3
Horticulture 3, 4	3	3
Chemistry 5a	0	3
Electives	8	5
	17	17

ENTOMOLOGY.*

Junior Year.	1st Term	2nd Term
English 7	3	3
German 2 or French 2	3	3
Entomology 2	3	3
Bacteriology 1	0	3
Horticulture 2	0	4
Botany 5	3	0
Electives	4	0
Drill	1	1
	17	17

Senior Year.		
Economics 2	3	3
Geology 2	3	3
Zoology 3, 6	3	3
Entomology 3	3	0
Botany 11	3	0
Electives	2	8
	17	17

AGRICULTURAL CHEMISTRY.**

Junior Year.		
English 7	3	3
German 2	3	3
Chemistry 5a, 5b, 6	3	8
Bacteriology 1	3	0
Electives	4	2
Drill	1	1
	17	17

Senior Year.		
Geology 2	3	3
Economics 2	3	3
Chemistry 9, 13	3	5
Electives	8	6
	17	17

*Students desiring to take this course should complete the following subjects before entering the Junior year: Zoology 4 and 5.

**Students desiring to take this course should complete the following subjects before entering the Junior year:

Chemistry 3a, 11	5	5

IRRIGATION AND DRAINAGE.

Junior Year.	1st Term	2nd Term
English 7	3	3
German 2 or French 2	3	3
Mathematics 5	5	5
Irrigation 2	3	3
Irrigation 5	3	0
Irrigation 3	0	3
Drill	1	1
	18	18

Senior Year.		
Agricultural Technology 4	3	0
Agricultural Technology 3	0	3
Agricultural Technology 5	5	5
Irrigation 6	3	3
Geology 2	3	3
Economics 2	3	3
	17	17

Graduates from the course in Irrigation and Drainage will be admitted without examination to the Junior Year of the Irrigation Engineering course offered jointly by the University of Utah and the Agricultural College. The last two years, in which the technical irrigation work will be done, are spent at the University of Utah, and are as follows:*

Junior Year.		
Drawing 3	2	2
Electrical Engineering 4a	3	3
Engineering 4a, 4b, 5, 9a	5	3
Surveying 1a, 1b, 4	3	5
	13	13

Summer.	
Surveying 2	Six Weeks

Senior Year.		
Engineering 2a, 6, 7, 9b	12	0
Engineering 10, 11, 12, 13	0	8
Engineering 14a, 14b, 14c, 18	2	7
Mining 1 and Thesis	3	2
	17	17

*For a description of courses see University Catalogue for 1910-11.

COLLEGE COURSE IN HOME ECONOMICS.

Freshman Year.

	1st Term	2nd Term
English 6	3	3
Domestic Science 4	2	2
Mathematics 4	5	5
Chemistry 1	5	5
Zoology 2	3	3
Physical Education	1	1
	19	19

Sophomore Year.

English 7	3	3
German 1 or French 1	4	4
Physics 1	3	3
Chemistry 2, 7	3	3
Bacteriology 1	3	0
Domestic Science 7, 8	3	3
Domestic Science 10	0	3
	19	19

Junior Year.

German 2 or French 2	3	3
Botany 3, 4	3	3
Chemistry 10, 4	3	3
Economics 2	3	3
Domestic Science 11	3	3
Domestic Art 11	3	3
	18	18

Senior Year.

Geology 2	3	3
Domestic Science 12, 9	3	3
Domestic Science 13	3	3
Electives*	8	8
	17	17

*Suggested electives: French, German, English, history, sociology, advanced bacteriology, dairying, mechanical drawing, economic botany, textiles.

COLLEGE COURSE IN COMMERCE.

Freshman Year.

	1st Term	2nd Term
English 6	3	3
Mathematics 4	5	5
Economics 11	3	3
Economics 1	3	3
Accounting and Administration 3 or Stenography 2	3	3
Drill or Physical Education	1	1
	18	18

Sophomore Year.

Chemistry 1	5	5
Physics 1	3	3
Spanish 1	3	3
Economic and Commercial Geography	3	3
Zoology 2	3	0
Botany 2	0	3
Drill	1	1
	18	18

Junior Year.

English 7	3	3
German 1 or French 1	4	4
Economics 5	3	3
History 4	3	3
Economics 6	3	3
Economics 9	2	2
Drill	1	1
	19	19

Senior Year.

Geology 2	3	3
German 2 or French 2	3	3
Economics 10	3	0
Political Science 3	0	3
Economics 15	3	3
Electives	5	5
	17	17

COLLEGE COURSE IN GENERAL SCIENCE.

Freshman Year.

	1st term	2nd term
English 6	3	3
Mathematics 4	5	5
Physics 1	3	3
Chemistry 1	5	5
Library Work	1	1
Drill	1	1
	18	18

All of the work of the sophomore, junior, and senior years, except *Military drill,* is elective; but students are required to complete two years' work in modern languages, and to take an equivalent of five hours through one year in English, of three hours in economics, and of four and one-half hours in zoology and botany. With these restrictions, the whole field of college work lies open, with the understanding that the student will select some one major subject to which to direct his attention, and will group related courses around this, under the direction of the department in which he specializes. For convenience, the subjects offered have been grouped as below, and the requirement is that above the freshman year the student shall complete ten hours of his work in his major subjects, ten hours in subjects found in the same group, and the remainder as he may elect. For graduation, eighteen hours are required in the freshman and sophomore years, and the equivalent of seventeen hours through each of the following years. A subject marked * below cannot become a major in the General Science Course; and as required collateral work, the strictly technical studies are excluded.

Science Group.

*Soil Physics.	*Animal Husbandry.	Chemistry.
Zoology and Entomology.	*Agronomy.	Botany.
Geology and Mineralogy.	*Domestic Science.	*Horticulture.

Mathematical Group.

Mathematics.	Physics.	Chemistry.

Literary Group.

English.	*Political Economy.	*Political Science.
History.	Languages.	*Commerce.

High School and Special Courses.

COLLEGE PREPARATORY COURSE.*

First Year.

	1st Term	2nd Term
English 4	5	5
Mathematics 2	5	5
History 2	3	3
Art 1	2	2
*Optionals	4	4
	19	19

Second Year.

English 5	5	5
Mathematics 3	5	5
Zoology 1	2	2
*Optionals	6	6
Drill	1	1
	19	19

Third Year.

English 5a	3	3
German 1 or French 1	4	4
Physics 1	3	3
*Optionals	6	6
Drill	1	1
	17	17

*This course is designed for those who wish to prepare for a college course here or elsewhere. Students who complete it are admitted to the Freshman year in Agriculture, Domestic Science, Commerce, or General Science. See list of optionals, page 54.

COLLEGE PREPARATORY OPTIONALS.

First Year.

Agriculture.

Animal Husbandry 1 / Agronomy 1	4	4
Home Economics.			
Domestic Science 1	2	2
Domestic Art 7	2	2

Second Year.

Agriculture.

Entomology 1 / Horticulture 1 / Veterinary Science 1	6	3
Botany 2	0	3
Home Economics.		
Domestic Art 3, 4	3	3
Art 4	3	0
Commerce.		
History 1	3	3
Physiography	3	0
*General Science.**		
History 1	3	3
Entomology 1 (either term)	3	3
Botany 2	0	3

Third Year.

As the third year of the College Preparatory Course does not go into effect until 1911-12, the optionals are not yet arranged.

MANUAL TRAINING COURSE IN MECHANIC ARTS.

First Year.

	1st term	2nd term
English 4	5	5
Mathematics 2	5	5
Art 3	3	3
Shop work	5	5
	18	18

Second Year.

English 5	5	5
Mathematics 3	5	5
Government 1	3	3
Shop work	5	5
Drill	1	1
	19	19

Third Year.

English 6	3	3
Mathematics 4	5	5
Mechanical Drawing 1a	3	3
Zoology 1	2	2
Shop work	5	5
Drill	1	1
	19	19

Fourth Year.

Chemistry 1	5	5
Physics 1	3	3
Mechanical Drawing 1b	3	3
Technology 1	2	2
Shop work	5	5
Drill	1	1
	19	19

MANUAL TRAINING COURSE IN HOME ECONOMICS.

First Year.

	1st term	2nd term
English 5	5	5
Domestic Science 1	2	2
Domestic Art 1, 2	3	3
Art 2	2	2
Mathematics 2	5	5
Physical Education	1	1
	18	18

Second Year.

English 5	5	5
Domestic Science 2, 3	3	3
Domestic Art 3, 4	3	3
Art 4	3	0
Botany 2	0	3
Zoology 1	2	2
Physical Education	1	1
	17	17

Third Year.

English 6	3	3
Domestic Science 4	2	2
Domestic Science 5, 6	2	0
Domestic Art 6	0	2
Domestic Art 13	2	2
Chemistry 1	5	5
History 2	3	3
	17	17

SHORT COURSE IN COMMERCE.

First Year.

	1st term	2nd term
English 4	5	5
Mathematics 2	0	5
Business Correspondence and Spelling	5	0
Commercial Arithmetic	5	5
*Government 1	3	3
Penmanship	1	1
	19	19

Second Year.

English 5	5	5
Mathematics 3	5	5
Accounting 1, 2 or Stenography 1	5	5
Zoology 1	2	2
Typewriting 1	1	1
Drill	1	1
	19	19

Third Year.

English 6	3	3
Economics 1, 8, 11	9	9
Accounting 3 or Stenography 2	5	5
Typewriting	1	1
Drill	1	1
	19	19

*Agricultural or Domestic Science subjects may be substituted for this subject.

SHORT COURSE IN AGRICULTURE.

(November 8th, Tuesday, to March 18th, Saturday; seventeen weeks.)

First Year.

English 4a	5
Mathematics 2a	5
Carpentry 5	2
Agronomy 1	4
Horticulture 1	3
	19

Second Year.

English 4b	5
Mathematics 2b	5
Forging 4b	2
Animal Husbandry 1	4
Entomology 1 or Veterinary Science 1	3
	19

SHORT WINTER COURSE IN COMMERCE.

(November 8th, Tuesday, to March 18th, Saturday; seventeen weeks.)

First Year.

English 4a	5
Business Correspondence and Spelling	5
Commercial Arithmetic	5
*Government 1a	3
Penmanship	1
	19

Second Year.

English 4b	5
Mathematics 2a	5
Commercial Arithmetic	5
*Government 1b	3
Penmanship	1
	19

*Agricultural or Domestic Science subjects may be substituted for this subject.

SHORT MANUAL TRAINING COURSE IN MECHANIC ARTS.

(November 8th, Tuesday, to March 18th, Saturday; seventeen weeks.)

First Year.

English 4a	5
Mathematics 2a	5
Art 3a	3
Shop work	5
	18

Second Year.

English 4b	5
Mathematics 2b	5
Art 3b	3
Shop work	5
	18

Departments of Instruction.*

ACCOUNTING.

MR. P. E. PETERSON.
MR. L. A. STEVENS.

1. THEORY OF ACCOUNTS. Thorough drill in the principles of debit and credit, in balancing and closing accounts, and in making trial balances, statements, and balance sheets. The journal, cash book, sales book, and ledger are used. Two hours daily, one term. Two and one half credits. Fee, $1.00. Mr. Stevens.

Rm. 301; 4, 5 hrs.

2. BUSINESS PRACTICE. The student employs the principles learned in course one in a manner approaching as nearly as possible to actual business. He performs complete transactions with the firms represented in the office practice department. As much of the work is done by correspondence, special emphasis is given to letter writing. A daily rapid calculation drill is given. Two hours daily, one term. Two and one half credits. Fee, $1.00.

Rm. 301; 7, 8 hrs.

3. OFFICE PRACTICE AND BANKING. In this course the student is employed successively in offices representing various lines of business, as wholesale and retail merchandising, real estate and insurance commission, railway station work, and banking. Corporation organization and accounting are emphasized. The stu-

*In the following descriptions of courses *rm.* stands for *room; sec.* for *section; hr.* and *hrs.* for *hour, hours;* the days of the week are indicated simply by their initial letter. (*T, Tuesday, Th, Thursday.*) See the schedule of Recitation Hours, page 39.

dent is thoroughly drilled in adapting his theoretical principles to varied conditions and methods. Two hours daily throughout the year. Five credits. Fee, $2.00.

Rm. 301; 7, 8 hrs.

4. EXPERT ACCOUNTING AND AUDITING. This course is specially intended to prepare men for work as public accountants. It gives careful attention to the following subjects: analysis of profit, methods employed in the verification of statements and accounts and in the detection of errors, estate accounting, and a comparative study of the various systems employed in different lines of business. Elective. Daily throughout the year. Five credits.

COMMERCIAL ARITHMETIC.

This is a complete course in commercial mathematics. Particular attention is given to business measurements, and to percentage and interest as applied to profit and loss, commission, stocks and bonds, insurance, bank discount, averaging accounts, and partnership adjustments. Short methods are emphasized. Daily throughout the year. Five credits.

Rm. 302; 3 hr.

PENMANSHIP.

1. This course aims to develop a practical handwriting. Much stress is laid on movement and position of hand and body. Beginning with easy movement drills, the student is led into more difficult exercises, completing with words and short sentences. Designed for first year students and for Winter Course students. Five hours a week throughout the year. One credit. Mr. Stevens.

Rm. 302; 7 hr.

AGRONOMY.

PROFESSOR HOGENSON.
MR. ERASTUS PETERSON.

1. ELEMENTARY SOILS. Lectures and recitations on the origin, formation, distribution, character, function, and classification of soils; the sources and action of plant foods; alkali soils; the soil water and its movement; soil texture and its maintenance; renovation of worn-out soils; the soil atmosphere and temperature. A number of experiments illustrating the various points discussed are performed by the students in the laboratory. Four hours, one term. Two credits.

Daily except T.; rm. 129; 2 hr.

2. SOIL PHYSICS. A thorough study of the moisture in soils; the capillary rise of water; osmosis and diffusion as affected by cultivation and cropping; the action of lime on soils; specific gravity; the power of loose and compact soils to retain moisture; the rate of percolation of water and air through soils; the effects of varying depths of mulches upon the conservation of moisture; the determination of organic matter in soils and its loss by cropping. One recitation and two laboratory periods ,first term. One and one half credits.

Th., rm. 131, 3 hr.; W. F., rm. 27, 6, 7, 8 hrs.

3. FARM CROPS: CEREALS. Lectures, recitations and laboratory work on the history, production, cultivation and general management of cereal crops. A number of practicums and tests with seeds and plants are performed in the laboratory. A seminary of two hours is held every two weeks, where students report on special topics bearing upon particular crops, their history, development, culture, diseases, and uses. These seminaries alternate with the laboratory work. Three hours, second term. One and one half credits.

T. Th., rm. 131, 3 hr.; T., rm. 27, 6, 7, 8 hrs.

4. ARID FARMING. Instruction is given in the methods best adapted to the growing of profitable crops on arid lands; the treatment of the soil, including the conservation of moisture by deep and fall plowing, mulching, etc.; the soils and crops best adapted to arid farming. The experiments being carried on at the different arid experimental farms in the State are discussed. A thesis covering this subject will be required. Three hours, second term. One and one half credits.

T., 2 hr.; W. F., 4 hr.; rm. 131.

5. MANURES. Students becomes familiar with the various natural and artificial manures best suited for different crops, their composition, care and preservation. The manurial requirements of different soils are studied by means of plat work on the farm and pot cultures in the plant house. Elective. Three hours, one term. One and one half credits.

6. FARM MANAGEMENT. The various systems of farming; the economic use of labor and machinery; harvesting and disposing of crops; and other problems of the farm. Elective. Three hours, one term. One and one half credits.

7. INVESTIGATION AND EXPERIMENTATION. A study of the history, organization and work of the U. S. Department of Agriculture and Experiment Stations. Students become familiar with the experimenters and agricultural literature of this and other countries, especially the Rothamsted experiments. Abstracts are made of a number of bulletins bearing on a selected line of work. An original experiment is outlined, brought before the class for criticism and suggestions, performed, and written up by the student. Two hours throughout the year. Two credits.

W. F., rm. 131, 3 hr.

8. SEEDS. Judging of wheat, oats, barley, corn, potatoes, etc.; a study of market grades. The quality and preservation of seeds, shrinkage, vitality, germination, methods and depth of planting. Class room, laboratory and field work. Elective. Three hours, one term. One and one half credits.

9. UTAH SOILS. A detailed study of the soils of Utah, as to

their classification, origin and agricultural value. Prerequisite, Agronomy 1. Elective. Three hours, one term. One and one half credits.

10. ADVANCED SOILS. Treats of the soil provinces, series, and types of the United States, with reference to distribution, agricultural importance, etc. Certain selected areas will be surveyed and mapped. Prerequisite, Agronomy 1. Elective. Three hours throughout the year. Three credits.

11. SOIL MANAGEMENT. Principles governing the management of different types of soil, crop systems, rotations, and other factors influencing their productive capacity. Prerequisite, Agronomy 1. Elective. Three hours, one term. One and one half credits.

12. FORAGE CROPS. History, production, cultivation and general management of grasses and legumes with particular emphasis on alfalfa. Elective. Three hours, first term. One and one half credits.

13. TUBER AND ROOT CROPS. History, production, cultivation and general management of sugar beets and potatoes. Elective. Three hours, first term. One and one half credits.

14. AGRONOMICAL BACTERIOLOGY. The bacteria which affect soil fertility, including nitrifying and denitrifying organisms, are discussed in the class room and experimented with in the laboratory. Elective. Two hours, one term. One credit.

15. HISTORY OF AGRICULTURE. A series of lectures covering the general development and progress of agriculture in those nations which have contributed most to agricultural advancement. Elective. Two hours, one term. One credit.

16. PRACTICAL PLANT BREEDING. Practical problems in breeding farm crops. Elective. Prerequisite, Agronomy 3, 12 or 13. Three hours, first term. One and one half credits.

17. WEEDS. A study of the noxious weeds of the State, together with their seeds and the best methods of eradication. Elective. Three hours, one term. One and one half credits.

18. FUNGI AND OTHER FARM CROP DISEASES. A study is

made of the rusts, smuts, scab, rot, and other fungi that affect our economic plants, with particular emphasis on those that injure cereals, forage crops, tuber and root crops, together with remedies and prevention. Elective. Two hours, one term. One credit.

ANIMAL HUSBANDRY.

PROFESSOR CAINE III.
ASSISTANT PROFESSOR TURPIN.

1. MARKET TYPES. The judging of market types of horses, cattle, sheep, and swine. Some score card practice will be given, but most of the work will be comparative judging of groups of animals. Four hours, one term. Two credits.

T. Th., 2 hr., rm. 126; W. F., 7, 8 hrs., Pavilion.

2. BREED TYPES. (a) The first term's work covers the origin, history and characteristics of the different breeds of cattle and sheep, especial stress being laid upon their adaptability to western conditions. In addition instruction is given in the judging of representatives of different breeds according to their official standard.

T. Th., 3 hr., S., 1 hr., rm. 126.

(b). The second term is taken up by a similar study of the types of horses and hogs.

Three hours throughout the year. Three credits.

T. Th. S., 4 hr., rm. 126.

3. ANIMAL NUTRITION. A brief study of the anatomy and physiology of the digestive system, and the purposes of nutrition; the theory and practice of feeding, with especial reference to Utah's conditions of feed and climate. Five hours, first term. Two and one half credits.

Fourth hr., rm. 126.

4. PRINCIPLES OF BREEDING AND HERD BOOK STUDY. The laws of heredity, correlation, revision, variation, fecundity; the methods of breeding, cross-breeding, in-and-in breeding, and

selection. Special attention will be given to the methods of celebrated breeders. This work will be followed by a study of the various herd books and of the pedigrees of noted individuals of the important breeds. Three hours, first term. One and one half credits.

W. F. S., 2 hr., rm. 126.

5. LIVE STOCK MANAGEMENT. The housing, care and management of different classes of live stock, with especial attention to western conditions. Elective. One lecture and two laboratory periods, second term. One and one half credits.

6. ADVANCED STOCK JUDGING. A course in the judging of groups of animals of all classes. It takes up the work done at fairs, and prepares the student for real judging in the ring. Elective. Prerequisite, Animal Husbandry 1 and 2. Two hours, first term. One credit.

7. PRACTICAL FEEDING. This course is a combination of many of the principles of courses in feeding and management, and will be wholly practical. Some time will be given to the laws of nutrition, the balancing of rations, and the care and management of all classes of live stock. Elective. Three hours, first term. One and one half credits.

POULTRY HUSBANDRY.

ASSISTANT PROFESSOR TURPIN.

1. POULTRY HUSBANDRY. This course consists of lectures assigned readings and recitations on the history and classification of the breeds of domestic poultry; judging, breeding, feeding, housing and general management; natural and artificial incubation and brooding, and marketing. Two hours, one term.

T. Th., 2 hr., rm. 107.

2. INCUBATOR PRACTICE. Operating incubators and brooders. A complete record covering all the important phases of the work will be required. Daily, morning, noon, and afternoon, for

five weeks. One credit. Given each term. Must follow or accompany course one.

3. SPECIAL POULTRY PRACTICE. This course consists of practical work in feeding for egg production and for meat, killing and marketing fowls, and general management. Must follow or accompany course one. Credit according to amount of work done. Second term.

ART.

ASSISTANT PROFESSOR FLETCHER.
MR. POWELL.

1. NATURE DRAWING AND DESIGN. Drawing from plant, animal, and insect forms with a view to preparing students for their scientific work as well as developing their artistic sense; the study of the principles of design and their application. Five hours throughout the year. Two credits. Mr. Powell.

Sec. 1, 1 hr., sec. 2, 3 hr., rm. 357.

2. DESIGN. The work in this course aims to acquaint the student with the principles that underlie all art. The fundamental principles of order, as expressed by balance, rhythm, and harmony, are considered, and problems of home life embodying these principles are worked out. Five hours throughout the year. Two credits.

Sec. 1, 5 hr., sec. 3, 8 hr., rm. 351. Prof. Fletcher. Sec. 2, 5 hr., rm. 357. Mr. Powell.

3. FREEHAND DRAWING AND DESIGN. Perspective and sketching from objects with careful attention to pencil rendering; ornamental drawing from casts and decorative details; constructive design of furniture and architecture. Five hours throughout the year. Three credits. Mr. Powell.

Sec. 1, 4 hr., sec. 2, 8 hr., rm. 357.

4. HOME ART. A continuation of Art 2 with greater emphasis on applied design in stenciling, block-printing, etc. Designing for art needle work, costume design and decoration, and other problems of home life comprise part of the work. Nine hours, first term. Three credits. Prof. Fletcher.

Daily except S., 1, 2 hrs., rm. 351.

5. STUDIO WORK. Opportunity is given for special work in pure design; design applied in leather, textiles, basketry, carving, copper, and jesso; cast drawing, pose drawing, animal drawing, clay or wax modeling, lettering, illustrating, pencil and pen sketching, and painting in oil, water, or pastel. Elective Hours and credits to be arranged with the instructor.

BACTERIOLOGY.

PROFESSOR FREDERICK.

1. GENERAL BACTERIOLOGY. This course comprises a study of the history, morphology, and classification of bacteria, especially of the common disease germs; methods of preparing culture media, obtaining pure cultures, sterilization, mounting, staining, and inoculation. Special attention is given to sanitation, and prevention of contagious diseases. Yeasts and moulds are studied, and air, water, and soil examined. Nitrifying organisms and the relation of bacteria to soil fertility are discussed. One lecture and two laboratory periods, first term. One and one half credits.

T., 2 hr., rm. 177; W. F., 6, 7, 8 hrs., rm. 179.

BOTANY.

ASSISTANT PROFESSOR SMITH.

2. SYSTEMATIC AND MORPHOLOGICAL BOTANY. The aim in this course is to make the student familiar with the more important groups of the higher plants, with practice in interpreting their

descriptions and classification. Collection and determination of 50 specimens required. Two recitations and one laboratory period, one term. One and one half credits. Fee, $1.50.

Sec. 1, W. F., 3 hr., rm. 178; S., 1, 2, 3 hrs., rm. 180.

3. HISTOLOGY. A study of plant anatomy, protoplasm, the cell, and the various tissues. Prerequisite, Botany 2. One recitation and two laboratory periods, first term. One and one half credits. Fee, $1.50.

W., 1 hr., rm. 178; T. Th., 6, 7, 8 hrs., rm. 180.

4. PHYSIOLOGY. A study of plant functions, in terms of all the tissues studied in course 3, and of plants as units. Prerequisites, Botany 2 and 3. Two recitations and one laboratory period, second term. One and one half credits. Fee, $1.50.

W. F., 1 hr., rm. 178; Th., 6, 7, 8 hrs., rm. 180.

5. PLANT PATHOLOGY. A study of parasitic plants causing diseases of the higher plants. Two lectures and one laboratory period, first term. Prerequisites, Botany 2, 3 and 4. One and one half credits. Fee, $1.50.

T. Th., 3 hr., rm. 178; Th., 6, 7, 8 hrs., rm. 180.

ADVANCED ELECTIVES.

Prerequisites, Botany 2, 3 and 4. Time, fee, and credit to be arranged with the instructor.

6. ECONOMIC BOTANY. A study of useful plants and plant products. This course is presented by lectures, assigned readings, and reports.

7. ECOLOGY. A study of plant relations and adaptation to particular environment. The course consists largely of field work and reports of investigations are required.

8. ADVANCED HISTOLOGY. Special work will be arranged for students who may desire more histology than can be given in Botany 3. Students will be advised to take up a critical and exhaustive study of the structure of one or two definite plants, or special organs in a group of closely related plants. As the work

is designed to train students for original research, "methods" re ceive careful attention. Laboratory only. One or two terms.

9. ALGAE AND FUNGI. A systematic study of the THALLOPHYTES. One term.

10. MOSSES AND FERNS. A systematic study of these groups. One term.

11. SEED PLANTS. Advanced work in the classification of the flowering plants will be arranged for students especially interested in this subject. Field and herbarium work will be required, and special problems may be taken up. One or two terms.

12. FOREST BOTANY. Plants of the forest cover will be studied by themselves, both as to their classification and ecology.

13. POISONOUS PLANTS. A course for Veterinary Science students, being a study of plants commonly supposed to be poisonous to animals. Lectures, field and laboratory work. An herbarium is required. Prerequisite, Botany 2. Three hours, second term. One and one half credits.

CHEMISTRY.

PROFESSOR STEWART.
ASSISTANT PROFESSOR GREAVES.
ASSISTANT PROFESSOR PORTER
MR. HIRST.
MR. ALDOUS.
MR. RALPH.

1a. ELEMENTARY INORGANIC CHEMISTRY. This course deals with the important facts and fundamental theories of chemistry, and with the application of chemistry in the arts and manufactures. The laws of chemical combination, the writing of reactions, and the solving of chemical problems are given special, careful con-

sideration. Three recitations throughout the year. Three credits. Professor Porter.

Sec. 1, T. Th. S., 1 hr.; sec. 2, T. Th. S., 3 hr.; sec. 3, W. F. S., 4 hr.; rm. 227.

1b. ELEMENTARY PRACTICAL CHEMISTRY. This course supplements 1a and furnishes the necessary practical preparation for qualitative analysis. The non-metallic elements are studied with reference to their combinations with each other; the facts and theories of the lecture room are tested by experiment. Two laboratory periods, first term. One credit. Fee, $1.00. Deposit, $3.00. Professor Porter.

Sec. 1, T. Th., 6, 7, 8 hrs.; sec. 2, W. F., 1, 2, 3 hrs.; sec. 3, W. F., 6, 7, 8 hrs.; rm. 229.

1c. QUALITATIVE ANALYSIS. This course runs parallel with, and supplements, the descriptive study of metals and their compounds. Each student is required to analyze and report on a number of unknown substances. Two laboratory periods, second term. One credit. Fee, $1.00. Deposit, $3.00. Prof. Porter.

Three sections, same as 1b.

2. ORGANIC CHEMISTRY. This course embraces a brief survey of the more important reactions and compounds of the fatty and aromatic series of hydro-carbons and their derivatives, together with a full discussion of the nature and influence of molecular structure. Three recitations, first term. One and one half credits. Professor Greaves.

T. Th. S., 3 hr., Woman's Bldg., rm. 105.

2a. ELEMENTARY ORGANIC PREPARATIONS. The laboratory work includes the preparation and study of a limited number of compounds and a study of the carbohydrates, fats and proteins. Prerequisites, Chemistry 1 and 2. Two laboratory periods throughout the year. Two credits. Fee, $2.00. Deposit, $3.00.

3. PLANT AND ANIMAL CHEMISTRY. Lectures and assigned readings on the chemical problems of agriculture. After a study of the fundamental principles of organic chemistry, a systematic

study is made of the carbohydrates, fats, and proteins. Three hours throughout the year. Three credits. Professor Porter.

T., 2 hr., W. F., 1 hr.; rm. 227.

4. CHEMISTRY OF FOODS. A laboratory study of the various classes of foods and a detection of some of the common adulterants, preservatives and substitutes. Three laboratory periods, second term. One and one-half credits. Fee, $1.50. Deposit, $3.00. Richard and Woodman, *Air, Water and Food.* Professor Greaves.

T. Th. S., 6, 7, 8 hrs., rm. 225.

5a. CHEMISTRY OF THE SOIL. A study of the methods of the analysis of soils in their relation to crop production; soils of the arid and humid regions; alkali soils, their nature and composition, utilization and reclamation; soil fertility and methods of maintenance; the value, composition, and preservation of barnyard manure. Prerequisite, Chemistry 1. Three hours, second term. One and one half credits. Hopkins, *Soil Fertility and Permanent Agriculture.* Professor Stewart.

T., 5 hr., W. F., 3 hr., rm. 227.

5b. CHEMISTRY OF THE SOIL. A laboratory course in the study of the soil. Soils, crops, and fertilizers are analysed for phosphorus, nitrogen and potassium. The fixation of the potassium and phosphorus in the soil, and the influence of the different plant foods on the growth of the plant, are studied experimentally in the laboratory. Prerequisites, Chemistry 1 and 5. Two laboratory periods. One and one half credits. Fee, $1.50. Deposit, $3.00. Hopkins and Pettit, *Soil Fertility.* Professor Stewart.

T. Th., 6, 7, 8 hrs., rm. 225.

6. ANALYSIS OF FOODS AND FEEDING STUFFS. After becoming somewhat familiar with the common methods of quantitative analysis the student analyzes various products such as milk, butter, etc. Three laboratory periods throughout the year. Three credits. Fee, $3.00. Deposit, $3.00. Lincoln and Walton, *Elementary Quantitative Analysis.* Professor Stewart.

W. F. S., 6. 7, 8 hrs., rm. 225.

7. PHYSIOLOGICAL CHEMISTRY. In this course the student considers the chemical changes going on in the living animal body; the essential composition of foods and the changes through which they pass in the animal economy; the chemistry of secretions and excretions, and of the blood and tissues. Prerequisites, Chemistry 1 and 2. Three recitations, second term. One and one half credits. Long, *Physiological Chemistry*. Professor Greaves.

T. Th. S., 3 hr., Woman's Bldg., rm. 105.

8. ELEMENTARY PHYSICAL CHEMISTRY. Lectures and recitations on some of the fundamental laws and theories of chemistry, including the atomic theory, kinetic theory of gases, gaseous, liquid, and solid states, solutions, thermo-chemistry, electro-chemistry, chemical statics and dynamics. Two lectures throughout the year. Two credits. Not given in 1910-1911.

9. INDUSTRIAL CHEMISTRY. Lectures and assigned reading on special chemical industries, e. g. the manufacture of sulphuric acid, soda, commercial fertilizers, lime and cements, glass and porcelain, pigments, sugar, starch, alcohol, soap, and explosives. Prerequisites Chemistry 1, and 3. Three hours second term. One and one half credits. Not given in 1910-1911.

10. QUANTITATIVE ANALYSIS. This is mainly a laboratory course, giving the student practice in the typical methods of gravimetric and volumetric analysis. One lecture and two laboratory periods, first term. One and one half credits. Fee, $1.50. Deposit, $3.00. Professor Porter.

W. F., 6, 7, 8 hrs., S., 6 hr., Woman's Bldg., rm. 205.

11. ADVANCED QUALITATIVE ANALYSIS. This is mainly a laboratory course in qualitative analysis. Required of students in Agricultural Chemistry. Three laboratory periods throughout the year. Three credits. Fee, $3.00. Deposit, $3.00.

12. RESEARCH WORK. The laboratories of the College and Experiment Station are open to students with the necessary preparation who desire to pursue special independent studies in chemistry. The researches carried on by the chemistry department of

the Experiment Station are of great aid to the students who are engaged in the solution of scientific problems. Elective. Time and credit to be arranged with the instructor.

13. PHYSIOLOGICAL CHEMISTRY. Given for students who are specializing in Agricultural Chemistry. Some of the subjects treated are: the carbohydrates, their metabolism in plant and animal organisms; the proteins, their value in the plant and animal economy; the relationship between the fats, carbohydrates and proteins; the importance of inorganic substances in the building of cells and tissues; the chemistry of the blood and tissues. Prerequisites, Chemistry 1, 3, and 6. Three recitations and two laboratory periods, second term. Two and one half credits. Fee, $1.00. Deposit, $3.00. Professor Greaves.

14. SPECIAL COURSES IN QUANTITATIVE ANALYSIS. Courses are offered in special phases of quantitative analysis to students who are qualified.

a—Water analysis.

b—Food analysis.

c—Soil analysis.

d—Urine analysis.

e—Gas analysis.

Elective. Time and credit to be arranged with the instructor.

DAIRYING.

PROFESSOR CAINE III.
MR. S. L. BINGHAM.

1. ELEMENTS OF DAIRYING. The secretion and composition of milk; testing for fat, acid and adulterants; dairy sanitation; pasteurization; separation; manufacture of butter and cheese on the farm. Two lectures and one laboratory period, second term. Three credits.

T. Th., 3 hr., rm. 126; F., 6, 7, 8 hrs., rm. 55.

2. INSPECTING AND TESTING DAIRY PRODUCTS. A study of the Babcock test; acid tests; methods of detecting preservatives and adulterations in milk and its products. Prerequisites, Dairying 1 and one term's work in Chemistry. Two laboratory periods. Two credits.

3. DAIRY FARM MANAGEMENT. Selecting cows by appearance and by test; herd management, care, feeding, breeding; arrangement and construction of dairy farm buildings; dairy farming as related to other branches of agriculture. Each student will be required to submit an original plan of a complete dairy farm, with figures showing its estimated cost, the expense of operating, and the profits to be derived from the business. Two hours, first term.

W. F., 1 hr., rm. 126.

4. BUTTERMAKING. A course designed to meet the needs of creamery men. Receiving, sampling and separation of milk; pasteurization; preparation and use of starters; ripening of cream; principles of churning, salting, working and packing butter; creamery accounting, construction of creameries. Prerequisite, Dairying 1. One lecture and two laboratory periods. Three credits.

5. CHEESEMAKING. A course for cheese factory operators; a study of the manufacture of the different kinds of cheese; the principles involved in the setting, cutting, heating milling, salting, pressing, and curing of cheese; cheese factory construction. Prerequisite, Dairying 1. One lecture and one laboratory period of six hours. Three credits.

6. DAIRY BACTERIOLOGY. A study of the kinds and number of bacteria in milk, cream, butter, and cheese, and of their effect upon the quality of the various dairy products. Prerequisites, Dairying 1 and Chemistry. Two laboratory periods. Two credits.

7. RESEARCH WORK. A study of various important dairy subjects; a digest of recent dairy work of the Experiment Station. Only advanced students will be allowed to take this course. One credit.

ECONOMICS.

PROFESSOR THOMAS.
ASSISTANT PROFESSOR HENDRICKS.

1. ELEMENTS OF ECONOMICS. This course endeavors to explain the laws of man's economic activity. It is, therefore, the basis of a scientific understanding of industrial conditions. Some of the topics studied are: economic wants, value, rent, wages, profits, interest. Three hours throughout the year. Three credits. Prof. Hendricks.

T. Th. S., 1 hr., rm. 107.

2. AGRICULTURAL ECONOMICS. The first part of this course will be similar to Economics 1, but the second term will be devoted chiefly to the study of the agricultural conditions of the United States and, particularly, of the Rocky Mountain Region. Three hours throughout the year. Three credits. Prof. Thomas.

T. Th. S., 4 hr., rm. 175.

3. HISTORY OF COMMERCE. Its development in Egypt, Greece, Rome, Florence, Medieval Europe; the commercial nations of modern times. Three hours throughout the year. Three credits.

4. ELEMENTS OF SOCIOLOGY. A general course in the foundations and principles of sociology, including a careful study of the social organs, social structure, and social activities. Three hours throughout the year. Three credits.

5. MONEY AND BANKING. Forms and laws of money; the money question; credit and banking; the money market and foreign exchanges. Three hours throughout the year. Three credits.

6. PUBLIC AND CORPORATION FINANCE. A course dealing chiefly with the principles underlying public and corporative expenditures, incomes, debts, and administration. Three hours throughout the year. Three credits. Prof. Hendricks.

T. Th. F., 7 hr., rm. 107.

7. TAXATION. A study of the methods of federal and state taxation, including the customs and internal revenue duties, direct income, business and inheritance taxes, and general property and corporation taxes. Three hours, second term. One and one half credits.

8. ECONOMIC AND COMMERCIAL GEOGRAPHY. Economic and commercial geography of the United States; resources and leading industries of the different sections of the country with special reference to the Rocky Mountain States. Three hours throughout the year. Three credits. Prof. Hendricks.

W. F. S., 5 hr., rm. 107.

9. MARKETING OF PRODUCTS. The methods now practiced in the organization of the selling branch of industrial and merchandising business. The principal subjects in this field are: publicity agency, advertising, forms and correspondence, credits and discounts. Two hours throughout the year. Two credits.

10. RAILWAY TRANSPORTATION AND PRACTICE. The development of the railway system, railway finance, railway statistics; the theory of rates, methods of public control in Europe, Australia, and America. Three hours, first term. One and one half credits. Prof. Hendricks.

T., 5 hr., W. F., 4 hr., rm. 107.

11. INDUSTRIAL AND COMMERCIAL LAW. A study of the elementary principles of law relating to common business transactions, including contracts, sales, promissory notes and bills of exchange, contracts of common carriers, agency, partnership and corporations. Three hours throughout the year. Three credits. Prof. Thomas.

T. Th. F., 3 hr., rm. 175.

15. A RESEARCH COURSE IN ECONOMICS. Time and credit to be arranged with the instructor.

ENGLISH.

PROFESSOR LARSEN.
ASSISTANT PROFESSOR PEDERSEN.
MISS HUNTSMAN.
MISS KYLE.
MISS STEWART.
MRS. CLARK.
MISS MANNING.

1. COMPOSITION, GRAMMAR, CLASSICS. Elementary composition, with special emphasis on grammatical correctness. Three short themes or one longer composition required weekly. Several elementary classics are read. Designed for all students not prepared to do first year high school work. Five hours throughout the year. Five credits. Miss Stewart.

Fifth hr., rm. 352.

4. ELEMENTARY COMPOSITION AND CLASSICS. The student is required to write two short themes a week and a longer theme once a month. Spelling and the correct use of the dictionary receive careful attention. A considerable amount of reading is assigned, both for careful study and for outside work, and pupils are required to memorize passages from the texts studied in the class room. Regular first year high school work. Five hours throughout the year. Five credits.

Sec. 1, 1 hr., sec. 2, 2 hr., rm. 358, Mrs. Clark. Sec. 3, 3 hr., rm. 356, Prof. Pedersen. Sec. 4, 4 hr., rm. 358, Miss Manning. Sec. 5, 5 hr., 358, Mrs. Clark. Sec. 6, 7 hr., rm. 360, Miss Kyle. Sec. 7, 8 hr., rm. 358, Miss Manning.

5. ENGLISH COMPOSITION. Class room discussions of the principles of composition; themes, assigned readings, and conferences. It is intended to make this an extremely practical course, and a large amount of composition is required During the entire year three one-page themes are prepared each week; longer themes are written monthly. A certain number of classics are carefully studied in class, and others are assigned for outside reading. Sec-

ond year high school work. Five hours throughout the year. Five credits.

Sec. 1, 1 hr., rm. 356, Prof. Pedersen. Sec. 2, 2 hr., rm. 359, Miss Huntsman. Sec. 3, 3 hr., rm. 360, Miss Kyle. Sec. 4, 5 hr., rm. 360, Miss Kyle. Sec. 5, 5 hr., rm. 359, Miss Huntsman.

5a. College Entrance Requirements. Literature and Composition. A course in the careful study of classic masterpieces, especially those designated as College Entrance Requirements, supplemented by outside reading and regular work in composition. Third year high school work. Five hours throughout the year. Five credits. Not given in 1910-1911.

6. English Literature. History and development of English literature from the Anglo-Saxon period to the present day. All the important authors are studied and a great deal of prescribed reading furnishes material for class-room discussions and written reports. The student is required to commit a number of poems or parts of poems to memory. Freshman English. Three hours throughout the year. Three credits.

Sec. 1, T. Th. S., 2 hr., rm. 352, Prof. Larsen. Sec. 2, T. Th. S., 3 hr., rm. 359, Miss Huntsman. Sec. 3, W. F. S., 5 hr., rm. 356, Prof. Pedersen.

7. Advanced Rhetoric. Lectures, recitations, assigned readings, themes, and conferences. A comprehensive course in College Rhetoric, with special attention to the forms of prose discourse. The practical work consists of themes, oral discussions, and debates. A certain amount of outside reading is prescribed. Three hours throughout the year. Three credits. Prof. Larsen.

Sec. 1, T. Th. S., 1 hr.; sec. 2, W. F. S., 4 hr.; rm. 352.

ELECTIVES.

Only five, at the most six, elective courses will be given in any one year, hence, before registering, students will please consult with the head of the department. Prerequisite for all, except 22, 23 and 24, English 6 or its equivalent.

8. The Elizabethan Drama. The origin and development of the drama in England; its history to the closing of the

theatres in 1642. Incidentally the technique and various types of the early drama receive attention. Lectures, readings and reports. Three hours throughout the year. Three credits.

9. THE ROMANTIC MOVEMENT. The origin and growth of romanticism in English prose and poetry of the eighteenth and nineteenth centuries; foreign influences and parallels. Three hours throughout the year. Not to be given in 1910-1911.

10. SHAKSPERE. A course in Elizabethan English based on the careful, detailed study of six of Shakspere's plays. Textual interpretation; some outside reading. Three hours throughout the year. Three credits. Alternates with 10a Will be given in 1910-1911.

10a. SHAKSPERE. A comprehensive study of his development as a dramatist, including the reading of all his plays and sonnets. Lectures and reports; supplementary reading. Three hours throughout the year. Not to be given in 1910-1911.

11a. THE SHORT-STORY. A study of this special type of fiction, consisting of lectures and recitations, much outside reading, and the composition of stories. Three hours, first term. One or one and one half credits. Prof. Larsen.

11b. THE MODERN DRAMA. A study of the stage of to-day and of recent and living dramatists. Lectures, readings and reports. Three hours, second term. One and one-half credits. Prof. Larsen.

12. AMERICAN LITERATURE from the Colonial times to the present, keeping in view contemporary development in England. Lectures, assigned readings, reports. Three hours throughout the year. Three credits. Not to be given in 1910-11.

13a. THE ENGLISH NOVEL. Its origin, development and most important types. The short-story receives some attention. Lectures, class-room discussions, readings and reports. Three hours, first term. One and one half credits. Prof. Larsen.

13b. TYPES OF FICTION in the eighteenth and nineteenth centuries. Lectures, assigned readings and reports. Three hours, second term. One and one half credits. Prof. Larsen.

14. MILTON and his contemporaries. A careful study of the times, life and works of Milton, together with a survey of contemporary literature in England. Three hours, first term. Not to be given in 1910-1911.

15. THE ENGLISH ESSAYISTS. Lectures and reports, oral and written, on the essayists from Bacon to Stevenson. Assigned readings and seminaries. Three hours, second term. Not to be given in 1910-1911.

16a. ROMANTIC POETS OF THE EARLY NINETEENTH CENTURY. A study of the poetry of Wordsworth, Coleridge, Scott, Byron, Shelley, and minor poets. Lectures, readings and reports. Three hours, first term. One and one half credits.

16b. STUDIES IN THE VICTORIAN POETS: Tennyson, the Brownings, Matthew Arnold, the Pre-Raphaelites, minor poets. Lectures, readings and reports. A continuation of English 16a. Three hours, second term. One and one half credits.

17. THE SEVENTEENTH CENTURY. A study of the most important works produced in England between 1600 and 1700, due emphasis being placed on the periods following the Elizabethan. Three hours throughout the year. Three credits. Prof. Pedersen.

18. THE EIGHTEENTH CENTURY. A study of the main currents of English literature between 1700 and 1800, prefaced by a historical survey of the century. Chiefly a reading course, with due emphasis on the lives of the great writers. Lectures and reports. Three hours throughout the year. Not to be given in 1910-1911.

19. THE NINETEENTH CENTURY. The culmination of romanticism, the rise of the novel, the Victorian poets and essayists. Lectures, readings and reports. Three hours throughout the year. Not to be given in 1910-1911.

English 17, 18 and 19 will be given successively every three years, beginning with English 17 in 1910-1911.

20. ARGUMENTATION AND DEBATING. A course for college

students offering them a maximum of practice in debating, and argumentative writing and speaking. Three hours throughout the year. Three credits. Prof. Larsen.

21. THE BIBLE AS ENGLISH LITERATURE. Lectures, assigned readings, and reports. The entire Bible will be read and its history studied. Considerable attention is given to the historical setting of the various books. Three hours throughout the year. Not to be given in 1910-1911.

22. ELOCUTION I. This course is designed for the development of the power of vocal expression and also as a general interpretative course in literature. A variety of the best literary selections are studied from the oral standpoint with the view of making them more intelligible to the reader and listener in their content and purpose. Prerequisite, English 4. Three hours throughout the year. Three credits. Miss Stewart.

23. ELOCUTION II. In this course the principles of literary expression are applied in the main, to the interpretative study of dramatic literature. Shakspere and some of the modern dramatists are carefully studied interpretatively. Prerequisite, Elocution I. Two hours throughout the year. Two credits. Miss Stewart.

24. PUBLIC SPEAKING. Practical training in the various forms of public speaking: the formal address, the debate, the eulogy, the oration, the short, impromptu speech, the toast. The aim of this course is to train the pupil to think on his feet, and to deliver himself intelligently, logically, effectively and with ease. Prerequisite, English 5. Three hours, either term. One and one half credits. Miss Huntsman.

25. JOURNALISM. A course in magazine and newspaper writing with special attention to college journalism. Prerequisite, English 7. Two hours. Two credits. Profs. Arnold and Larsen.

EXTENSION DEPARTMENT.

PRESIDENT WIDTSOE.
PROFESSOR MERRILL.
PROFESSOR BALL.
PROFESSOR HUNTINGTON.
PROFESSOR STEWART.
PROFESSOR FREDERICK.
PROFESSOR TITUS.
PROFESSOR CAINE III.
ASSISTANT PROF. TURPIN.
MISS DUDLEY.

The College Extension Department is organized with the view of taking up those questions which affect the life of the rural community. It is the aim of the Department to stimulate an interest in attractive and healthful home surroundings, to create a desire for neat and well-ordered farmsteads, and to seek by every legitimate means to direct in an intelligent way the labor expended on the farms. The work of the Department consists of answering questions by correspondence, giving lectures at farmers' institutes and commercial clubs, and conducting institutes.

During the past year farmers' and housekeepers' schools of one week's duration were held in Washington, Iron, Millard, Juab, Sevier, San Pete, Davis, Boxelder, and Utah Counties. Farmers' institutes of two or three days duration were held in the other counties of the state.

The Department also co-operated with the Oregon Short Line R. R. in conducting a special institute train through Davis, Boxelder and Cache Counties in the interest of potato-growing and orchard heating.

During the coming year it is the purpose to hold three farmers' and housekeepers' schools, and the rest of the counties will be visited by the farmers' institute lecturers. Wherever the

schools are held there must be a guarantee that at least 100 men and 50 women will be in attendance, who will together pay a fee of $125.00 to assist in defraying expenses.

The subjects discussed at these schools and institutes will meet the needs of the various localities. Separate sessions are held for the men and women in the forenoon and afternoon, these sessions being devoted to lectures and demonstrations on the practical problems of the farm and home. The evening sessions, at which there are lectures on subjects of general interest to the community at large, are held conjointly.

The subjects discussed at the men's sessions include soils, field-crops, farm animals, dairying, poultry, irrigation, arid farming, horticulture, insect pests, diseases of the farm animals, farmers' organizations, marketing the farm products, etc.

Improvements in methods of housekeeping have not kept pace with the introduction of improved machinery on the farm, and the farmers' wives and daughters are beginning to realize that the time has come when the kitchen, at least, must be remodelled and many appliances and conveniences added. Not only are we offering courses in this line of work at the College, but we are willing to bring those courses to the doors of those who cannot leave their homes.

In connection with the farmers' schools, a week's school in Domestic Science is given for women. Practical lectures will be given on such subjects as, bread-making, home decorations, house plants, nursing the sick in the home, cheese and butter-making. Demonstrations on meats, soups, sauces, salads, creams, jellies, cakes, form a very important phase of this work. The beneficial results of these schools are varied, such as exchanging ideas; learning how to do common every-day duties in a simple manner; enabling us to economize in the most precious commodity we possess, viz.—time; and learning how to do things from a scientific standpoint.

FARM ENGINEERING.

PROFESSOR DREW.

2. PLANE SURVEYING. The general methods of plane and topographic surveying and the use, care and adjustment of instruments. The field work is adapted to the requirements of the agriculturists in irrigation, drainage and land surveying. Two hours throughout the year. Two credits.

3. FARM MECHANICS. This course deals with the tools and machinery of the farm, their development, design, construction, operation, draft, durability and care. A study of steam and gasoline engines is included. Three hours, second term. One and one half credits.

4. RURAL ENGINEERING. The principles of rural road construction; arrangement, cost and design of farm buildings; fences, gates, and material for their construction; the laying out of the farm and related problems. Three hours, first term. One and one half credits.

5. HYDRAULICS. This course will meet the wants of the agriculturist rather than the requirements of the engineer. The flow of water in natural and artificial open channels, in pipes and flumes; the elementary laws of liquids in motion and at rest, and the elementary principles of water power development. Five hours throughout the year. Five credits.

6. ROAD CONSTRUCTION. Such questions as establishing the grade, drainage, and roadbed; road materials, including different kinds of earth, gravel and stones; the slope of the road surface; rock crushing, rolling, etc. The cost of building different kinds of roads and the proper manner of doing the various operations economically, will be fully discussed. Elective. Prerequisites, surveying and mechanical drawing. Five hours, first term. Two and one half credits.

7. ROAD MAINTENANCE. The effect of the width of tires upon the road, keeping the road in proper form, adding materials to worn surfaces, keeping the drainage channels clean, employment

2. PATHOGENIC BACTERIOLOGY. A course covering the fundamentals of the subject: morphology, classification, biology, distribution, function, cultural and staining characters, methods of cultivation, theories of immunity, the principles of applied bacteriology. A discussion of disease producing organisms. Three lectures a week for one term. One and one-half credits.

3. SOIL BACTERIOLOGY. A course covering the principles of soil bacteriology and fitting the student for original investigation. Exercises involving questions of relation of depth, moisture, character of soil, temperature, chemical reaction, and æration, to bacterial life; ammonification, nitrification, denitrification, nitrogen fixation, soil inoculation. Prerequisite, Bacteriology 2. Six hours a week for one term. Laboratory work, lectures and reports. One and one-half credits.

4. DAIRY BACTERIOLOGY. A course covering the principles of dairy bacteriology. A consideration of the bacteria of milk, butter, and cheese; infectious diseases in their relation to the dairy; contamination by air, water, and utensils; desirable and undesirable fermentations. Prerequisite, Bacteriology 2. Six hours a week for one term. Laboratory work, lectures, and reports. One and one-half credits.

5. HOUSEHOLD BACTERIOLOGY. A study of bacteria in their relation to household economy; bacteria in milk, water and other foods; milk and water contamination; effect of cooling and pasteurization upon milk; yeasts, molds and fermentation; bacteriology in relation to canning and preservation; minimum, optimum and maximum temperatures, and thermal death point of important household species; action of disinfectants. Prerequisite, Bacteriology 2. Six hours a week. Laboratory work, reports and discussion. One and one-half credits.

6. RESEARCH WORK. The laboratory and library facilities are especially arranged to meet the needs of advanced students desiring to undertake bacteriological investigation with reference to agriculture, household science, the industries, sanitary science, and veterinary science. Time and credit to be arranged.

7. SEMINAR. The advanced students and others interested will meet to discuss current literature and to hear the results of original investigation. Credit may be received for attendance at these meetings.

BOTANY.

PROFESSOR C. N. JENSEN.
MR. G. L. ZUNDEL.

1. GENERAL BOTANY. This course aims to give a broad, general insight into the fundamental principles of botany. It deals with general morphology, physiology, ecology, and life history of representative plants. Considerable attention is given to the classification of representative species. The student must collect and identify fifty specimens. One lecture, one recitation, and five hours of laboratory throughout the year. Three credits.

Botany 1 is prerequisite for all the following courses:

2. FLOWERING PLANTS. Principles of classification of angiosperms and gymnosperms with special reference to grasses, composites, poisonous plants, weeds, and timber trees. This course is designed to meet the needs of students interested in forestry and those desiring more taxonomic work than can be obtained in Botany 1. One lecture and five hours of laboratory, twenty weeks in the fall and spring. One and one-half credits.

3. HISTOLOGY. This course includes a study of the cell and its contents, minute anatomy of plants, and histological technique. Special emphasis is placed on cell function, development of tissue into structures and organs, and preparation of material for microscopic study. One lecture and five hours laboratory work, one term. One and one-half credits.

4. PLANT PHYSIOLOGY. A study of the processes and functions of plants, including osmosis and absorption, transpira-

gin, composition and chemical, geological, and agricultural characteristics of soil. Elective. Prerequisites, Geology 2 and Chemistry 1. Lectures and reading. Two hours, first term. One credit.

6. ADVANCED PHYSIOGRAPHY. This course is intended for students of college grade who wish to obtain a more complete knowledge of physiographic features and processes than can be given in Geology 1. A careful study of the physiographic development of the United States is taken up. Lectures will be supplemented by field work and laboratory work, and by considerable outside reading. Elective. Prerequisites, Geology 1 and 2, and Chemistry 1. Two hours, second term. One credit.

7. PETROLOGY. A systematic study of rocks and the rock-forming minerals. Particular attention is given to the origin and formation of the different kinds of igneous rocks and methods for the determination of the minerals which compose them. Elective. Prerequisites, Geology 2 and 4, and Chemistry 1. Lectures, reading and laboratory work. Pirsson, *Rocks and Rock-forming Minerals.* Two hours throughout the year. Two credits.

8. FIELD GEOLOGY. Includes a complete study of the structural and areal geology of Utah and the Intermountain region. Methods employed in field work and the mapping of a region from geological field notes are carefully studied. During the year the students will work out the geology of an assigned area. Lectures supplemented by reading. Elective. Prerequisites, Geology 2, 3, 4, and Chemistry 1. Two recitations, one afternoon field work or laboratory throughout the year.

HISTORY.

ASSISTANT PROFESSOR DALE.

1. GREEK AND ROMAN HISTORY. An elementary course in Ancient History. It is the purpose of this work gradually to give the student a broad view of history. Such reading is done as is necessary to supplement the text. Greek history occupies the first

term; Roman, the second. Three hours throughout the year. Three Credits.

T. Th. S., 1 hr., rm. 361.

2. UNITED STATES HISTORY. A study of social life, economic conditions, political development, and historical literature. Lectures are occasionally given, and library work is required. Three hours throughout the year. Three credits.

Sec. 1, W. F. S., 5 hr.; sec. 2, T. Th. S., 7 hr.; sec. 3, T. Th. S., 2 hr.; rm. 361.

3. ENGLISH HISTORY. Racial traits, constitutional growth, social life at different stages, English conservatism, colonial systems, and pauperism, are some of the topics discussed. Elective. Prerequisite, History 1. Three hours throughout the year. Three credits.

4. MODERN EUROPEAN HISTORY. A study of European history from Charlemagne to the present time. Among the topics discussed are: the growth of monarchies, the French Revolution, formation of the German Empire, development of the Swiss Confederation, the Napoleonic wars. Three hours throughout the year. Three credits.

W. F. S., 3 hr., rm. 361.

HOME ECONOMICS.*

PROFESSOR HUNTINGTON.
ASSOCIATE PROFESSOR COOPER.
ASSISTANT PROFESSOR COOK.
MISS CROOKSTON.
MISS DUDLEY.
MISS BROWN.
MISS KERR.

DOMESTIC SCIENCE.

1. SANITATION AND FOOD. This course considers sanitation applied to food, and the simple principles of cooking and serving.

*All courses in Home Economics are given in the new Woman's Building.

5a. SOILS. A study of the methods of the analysis of soils in their relation to crop production; soils of the arid and humid regions; alkali soils, their nature and composition, utilization and reclamation; soil fertility and methods of maintenance; the value, composition and preservation of barn-yard manure. Prerequisite, Chemistry 1. Three lectures and two laboratory periods, second term. Four credits.

5b. SOILS. A laboratory course in the study of the soil. Soils, crops, and fertilizers are analyzed for phosphorus in the soil, and the influence of the different plant foods on the growth of the plant, are studied in the laboratory. Prerequisites, Chemistry 1, 5a. Two laboratory periods. One credit.

6. QUANTITATIVE ANALYSIS. After becoming somewhat familiar with the common methods of quantitative analysis the student analyzes various products, such as milk, butter, etc. Three laboratory periods throughout the year. Three credits.

7. PHYSIOLOGICAL CHEMISTRY. In this course the student considers the chemical changes going on in the living animal body; the essential composition of foods and the changes through which they pass in the animal economy; the chemistry of secretions and excretions, and of the blood and tissues. Prerequisites, Chemistry 1 and 2. Three recitations, second term. One and one-half credits.

8. HOUSEHOLD CHEMISTRY. A quantitative chemical study of the composition of the air of the household; a study of the composition of water and its contamination, and of the composition of foods and their adulterations. One recitation and three laboratory periods, second term. Two credits.

9. INDUSTRIAL CHEMISTRY. Lectures and assigned reading on special chemical industries, e. g. the manufacture of sulphuric acid, soda, commercial fertilizers, lime and cements, glass and porcelain, pigments, sugar, starch, alcohol, soap, and explosives. Prerequisite, Chemistry 1. Three hours throughout the year. Three credits.

10. ADVANCED ORGANIC CHEMISTRY. In this course a systematic study is made of the compounds of carbon from the point of view of systematic organic chemistry. This course is designed for students who intend to make chemistry a profession. Two recitations and two laboratory periods throughout the year. Four credits.

11. ADVANCED QUALITATIVE ANALYSIS. This is mainly a laboratory course in qualitative analysis. Three laboratory periods throughout the year. Three credits.

12. RESEARCH WORK. The laboratories of the College and Experiment Station are open to students with the necessary preparation who desire to pursue independent studies in chemistry. The researches carried on by the chemistry department of the Experiment Station are of great aid to the students who are engaged in the solution of scientific problems. Time and credit to be arranged with the instructor.

13. PHYSIOLOGICAL CHEMISTRY. Given for students who are specializing in Agricultural Chemistry. Some of the subjects treated are: the carbohydrates, their metabolism in plant and animal organisms; the proteins, their value in the plant and animal economy; the relationship between the fats, carbohydrates and proteins; the importance of inorganic substances in the building of cells and tissues; the chemistry of the blood and tissues. Prerequisites, Chemistry 1, 3 and 6. Three recitations and two laboratory periods, second term. Two and one-half credits.

14. SPECIAL COURSES IN QUANTITATIVE ANALYSIS. Courses are offered in special phases of quantitative analysis to students who are qualified.

a—Water analysis.

b—Food analysis.

c—Soil analysis.

d—Urine analysis.

e—Gas analysis.

Time and credit to be arranged with the instructor.

15. SEMINAR. Members of the chemical faculty and the

tions of living. It includes a discussion of the metabolism of the food-stuffs; dietaries and their construction; the relation of diet to health; and the economy of food. Prerequisites, Chemistry 7, Domestic Science 10. Two lectures and one laboratory period throughout the year. Three credits. Prof. Huntington.

W. F., 4 hr., rm. 104; T., 1, 2, 3 hrs., rm. 201.

12. ADVANCED FOODS. This course treats of the economic side of food. A study is made of the food laws; economical methods of purchasing food; the cost of food as influenced by the cost of fuel and service; a comparison of food cooked at home and bought ready to eat; labor saving devices. Some lessons in advanced cooking are given. Prerequisites, Domestic Science 10, Economics 2, Chemistry 4. One lecture and two laboratory periods, first term. One and one half credits. Prof. Cooper.

T. Th., 4, 5 hrs., rm. 201; S., 4 hr., rm. 105.

13. TEACHERS' COURSE IN HOME ECONOMICS. This course is designed for those students who expect to teach Domestic Science and Art. It includes a review of the Home Economics movement; a critical study of college, normal, and secondary school work from the standpoint of Domestic Science and Domestic Art; practical work in planning equipments and in estimating the cost; and in teaching with supervision. Three hours throughout the year. Three credits. Profs. Huntington and Cook.

W. F. S., 3 hr., rm. 104.

Opportunity for advanced work in Domestic Science will be offered to students who are qualified for it.

DOMESTIC ART.

1. PLAIN SEWING. Students are taught the fundamental principles of hand and machine sewing. Practice is given in the various hand stitches; in machine sewing; in the use and care of different makes of machines; the drafting of simple patterns; and the use of bought patterns. Each student makes an apron and a

suit of underwear. Eight hours, first term. One and one half credits. Miss Crookston.

Sec. 1, W. Th. F. S., 2, 3 hrs., rm. 301. Sec. 2, T. W. Th. F., 7, 8 hrs., rm. 301.

2. PLAIN SEWING. A continuation of course 1. The appropriate and economic use of materials is discussed. A shirt waist and a simple wash dress are made. Eight hours, second term. One and one half credits.

Same as Domestic Art 1.

3. DRESSMAKING. This course includes the making and use of patterns; and the choosing and economical cutting of materials. Each student makes a skirt and waist of woolen or silk material, and also a fitted lining. The students fit each other under the supervision of the instructor. Prerequisites, Domestic Art 1 and 2, Art 2. Eight hours, first term. One and one half credits. Professor Cook.

T. Th. F. S., 7, 8 hrs., rm. 304.

4. DRESSMAKING. A continuation of course 3. Each student fits and finishes a one-piece gown. Eight hours, second term. One and one half credits.

Same as Domestic Art 3.

6. APPLIED ART. This course treats of the application of color and design of textiles; the teaching of fundamental stitches of needle-work; the marking of household linen; French embroidery; the designing and making of a sofa pillow cover or table runner. Prerequisites, Art 2, and either Art 4 or Domestic Science 8. Six hours, second term. Two credits. Prof. Cook, Miss Kerr.

T. Th., 4, 5 hrs., S., 5, 6 hrs., rm. 303.

7. PLAIN SEWING. Arranged for students in the College Preparatory Course. Same as courses 1 and 2 except that less time is required and consequently less is accomplished than by those taking courses 1 and 2. In this course the fundamental principles of plain sewing are taught. Five hours throughout the year. Two credits. Miss Crookston.

Daily, 1 hr., rm. 301

11. ADVANCED DRESSMAKING. This course includes the study of materials; their economic, artistic and hygienic values; dress as a factor in life; history of costume; modeling in paper and crinoline from copies and original designs; the making of two costumes. Prerequisites, Domestic Art 1, 2, 3, 4, and either Art 4 or Domestic Science 8. Lectures and laboratory work. Eight hours throughout the year. Three credits. Prof. Cook.

Daily, 9 hr., W., 7, 8, 9, hrs., Th., 1, 2, 3 hrs., rm. 304.

13. MILLINERY. This course includes the designing, construction, and trimming of hats; the making and alteration of wire and buckram frames; the covering of frames with silk, velvet, straw or other suitable materials; selection of materials; their suitability and durability. Prerequisite, Art 2. Lecture and laboratory work. Four hours throughout the year. Two credits. Prof. Cook, Miss Kerr.

T. Th., 7, 8 hr., rm. 303.

14. TEXTILES. A study of the beginning of the textile industry; examination of textile fibres under the microscope; the testing of manufactured materials for adulteration; economic problems involved in the purchase of textiles; and the care of textiles in the household, including the effect of laundry reagents upon them. Prerequisites, Chemistry 4, Botany 3, 4. and 6, Economics 2. First term, two lectures, three laboratory periods. One and one half credits.

Opportunities for advanced work in Domestic Art will be offered to students who are qualified for it.

HORTICULTURE.

PROFESSOR ———.

1. POMOLOGY. This course deals with the theory and practice of fruit growing. Such practical questions as the following are carefully considered: selection of site for an orchard, with ref-

erence to soil, exposure, markets, and general climatic conditions; planting and laying out an orchard; profitable varieties; the general care and management, cultivation, irrigation, pruning and spraying. Three hours, first term. One and one half credits.

W. F. S., 7 hr., rm. 176.

2. VEGETABLE GARDENING. The origin, history and botanical relationships of garden vegetables; soil, fertilizers and general cultivation; planting, transplanting, rotating, harvesting, storing, and marketing crops. Bailey, *Principles of Vegetable Gardening.* Three hours, second term.

W. F. S., 1 hr., rm. 176.

3. PLANT BREEDING. This course gives a more thorough knowledge of the principles underlying the improvement of plants. The opinions of leading scientists in relation to variation, heredity, hybridization, are studied. Three hours, first term. One and one half credits.

W. F. S., 1 hr., rm. 176.

4. EVOLUTION OF PLANTS. A sequel to Plant Breeding. Particular attention is given to the origin and domestication of those plants commonly cultivated. Three hours, second term. One and one half credits.

T. Th. S., 2 hr., rm. 176.

5. INVESTIGATION. Seniors in Horticulture and in Entomology are allowed to carry on investigations in the subjects in which they have special interest. Elective. Two laboratory periods a week throughout the year. One credit.

6. LANDSCAPE GARDENING. A study of ornamental plants and methods of grouping the same in laying out public or private grounds. Students are required to submit plans showing the application of principles studied to certain problems. Elective. Second term. Time and credits to be arranged with the instructor.

7. HORTICULTURAL LITERATURE. A critical study and examination of books, bulletins, reports and magazine articles, dealing

with horticultural subjects. Elective. Time and credits to be arranged with the instructor.

8. ADVANCED POMOLOGY. To students who desire to elect advanced work in Pomology, certain problems dealing strictly with the raising and handling of fruits will be assigned for careful study. Elective. Time and credit to be arranged with instructor.

IRRIGATION AND DRAINAGE.

PROFESSOR J. W. JENSEN.

The law which prohibits the College from giving degrees in engineering, also prohibits the University of Utah from giving instruction in irrigation. This eliminates from both schools the possibility of training young men for irrigation engineering—one of the most vital branches of engineering in the West. To meet this unfortunate condition the State School of Mines and the Agricultural College offer, jointly, a course leading to the degree of Bachelor of Science in Irrigation Engineering. The first years of this course are given by the Agricultural College, and are identical with the college course in Irrigation and Drainage. The last two years, which deal almost wholly with the technical work in engineering, are given by the School of Mines at Salt Lake City.

1. FARM IRRIGATION AND DRAINAGE. This course is designed especially to meet the requirements of the student who can spend but a limited time in this subject. Lectures are given on field irrigation and methods of farm drainage. Field excursions are made to farms which are being drained and the practical side of the work is emphasized. Three hours, one term. One and one half credits.

2. SOILS AND WATER. The effect of the soil and moisture *W. F. S., 5 hr.*

environment upon plant production and the economic use of irrigation water. Three hours throughout the year. Three credits.

3. FARM DRAINAGE. A general treatment of the subject of drainage of lands in the arid section with special reference to laying out and constructing various kinds of under drains. Three hours, second term. One and one half credits.

4. IRRIGATION. This course is designed to meet the practical problems encountered in the operation of canal systems, including sources of supply and methods of securing and improving such supplies. Particular reference is made to canal management, methods of measuring and dividing water and preventing seepage losses. Three hours, one term. One and one half credits.

5. IRRIGATION. This course includes surveys for farm and district drainage systems, with estimates of cost; a study of the best system of operation to meet various conditions. State and Federal laws relating to irrigation and drainage, including methods of appropriating water and forming irrigation and drainage districts, are studied. Three hours thoughout the year. Three credits.

7. IRRIGATION. This course includes special investigations in connection with the Experiment Station work in irrigation or drainage.

LIBRARY WORK.

MISS SMITH.

The subject includes the study of general reference books as enclyclopedias, dictionaries, atlases, clyclopedia of special subjects, indexes to periodicals and general literature, handbooks of infor-

mation, and U. S. public documents with their special catalogues and indexes. Talks are given on the classification and cataloguing of books in the library, explaining their arrangement on the shelves and the use of the card catalogue. The object of the course is to familiarize the student with the library and to teach him how to obtain information quickly. One hour throughout the year. One credit.

Sec. 1, T., 4 hr., sec. 2, Th., 4 hr; rm. 201.

MATHEMATICS.

PROFESSOR J. W. JENSEN.
ASSISTANT PROFESSOR PARKER.
MR. WALKER.
MR. SAXER.
MR. WATSON.

1. ARITHMETIC. A thorough treatment of elementary arithmetic. Required of students not graduated from the district schools, who are admitted to the Manual Training Courses. Five hours throughout the year. Five credits.

Fourth hr., rm. 176.

2. ARITHMETIC AND ALGEBRA.

(a) *Advanced Arithmetic.* Special attention is given to the nature, origin and development of number. The class recitation hour is devoted to thorough consideration of the fundamental processes of arithmetic, including contracted methods of multiplication and division, common and decimal fractions, factors and multiples, mensuration, the metric system of weights and measures, square and cube root, proportion, percentage and interest, and practical problems. First term.

(b) *Algebra.* A thorough treatment of the fundamental operations, use of parenthesis, factoring, highest common factor,

lowest common multiple, fractions and simple equations. Second term.

Five hours throughout the year. Five credits. One section gives special attention to Commercial Arithmetic.

Sec. 1, 1 hr., rm. 76, Prof. Parker. Sec. 2, 7 hr., rm. 281, Mr. Walker. Sec. 3, 3 hr., rm. 76, Prof. Parker. Sec. 4, 4 hr., rm. 76, Prof. Parker. Sec. 5, 5 hr., rm. 279, Mr. Saxer. Sec. 6, 2 hr., rm. 283, Mr. Saxer.

3. ALGEBRA, GEOMETRY.

(a) *Higher Algebra.* After a brief review of the subjects treated in Course 2 (b), the folllowing subjects are considered: simple equations, inequalities, involution and evolution, theory of exponents, radicals. Wells, *Essentials of Algebra.* First term.

(b) *Plane Geometry.* The general properties of polygons; problems of construction, and determination of areas; regular polygons and circles, with problems in construction, and methods of determining the ratio of the circumference to the diameter; maxima and minima. Special attention is given to the development of the power of logical thinking, and of accuracy and conciseness of expression. Wells, *The Essentials of Geometry.* Second term.

Five hours throughout the year. Five credits.

Sec. 1, 1 hr., sec. 2, 3 hr., sec. 3, 5 hr., rm. 281, Mr. Walker.

4. GEOMETRY, ALGEBRA, TRIGONOMETRY.

(a) *Solid Geometry.* Wells, *Geometry,* First third of year.

(b) *Advanced Algebra.* A continuation of Course 3 (a); includes a thorough drill in some of the important principles of higher algebra. Second third of year.

(c) *Trigonometry.* The deduction of general trigonometric formulae, the solution of plane triangles, and practice in the use of logarithmic tables. Lyman and Goddard, *Trigonometry.* Last third of year.

Five hours throughout the year. Five credits. Prof. Jensen.

Sec. 1, 2 hr., sec. 2, 3 hr., rm. 279.

5. ANALYTIC GEOMETRY, CALCULUS.

(a) *Analytic Geometry.* The analytic geomtery of the straight line, the circle and the conic sections, including a discus-

sion of the general equations of the second degree, and some special examples in transcendental and higher plane curves.

(b) *Differential Calculus.* The development of the fundamental principles and formulae of the differential calculus; applications to various problems in plane geometry and analysis, such as indeterminate forms, maxima and minima, curvature, expansions of functions in series, evolutes and involutes, and curve tracing.

(c) *Integral Calculus.* Integration of various forms; development of the formulae of the integral calculus; application in rectification of curves, quadrature of plain and curved surfaces, cubature of volumes. Elective. Prerequisite, Mathematics 4.

Five hours throughout the year. Five credits. Prof. Jensen. *Fourth hr., rm. 279.*

6. MODERN GEOMETRY. This course treats the most important theorems and examples connected with harmonics, anharmonics, involution, projection, including homology, and reciprocation. Cremona, *Projective Geometry;* Russell, *Treatise on Pure Geometry;* Laughlan, *Modern Pure Geometry.* Elective. Prerequisite, Mathematics 5. Three hours throughout the year. Three credits.

7. DIFFERENTIAL AND INTEGRAL CALCULUS, ADVANCED COURSE. This course embraces the elements of the theory of functions of imaginary variables; the various methods of integration systematically treated; the elements of the theory of the elliptic functions; the mechanical and geometrical applications of the calculus treated more fully than in course 5; and some of the more important cases of differential equations. Todhunter, *Differential Calculus,* and Williamson, *Integral Calculus.* Elective. Prerequisite, Mathematics 5. Five hours throughout the year. Five credits.

8. GENERAL ASTRONOMY. A first course in astronomy, consisting of lectures supplemented by field work with the telescope and transit. Elective to college students. Three hours, one term. One and one half credits.

MECHANIC ARTS.

PROFESSOR DREW.
MR. HANSEN.
MR. PULLEY.
MR. NEWEY.
MR. MADSEN.
MR. WEBB.

TECHNOLOGY.

1. The properties and characteristics of the materials used in construction; preparation for use; tests of the strength and quality of materials; their preservation. Tests are made of chains and welded bars of iron, of the force required to drive various kinds of nails, of the holding power of nails and screws. Two hours throughout the year. One credit.

MECHANICAL DRAWING.

1. (a) MECHANICAL DRAWING. This course consists of a thorough drill in the elementary principles of projection, including linear perspective and the more common conventions of mechanical drawing. Prerequisites, Art 1, 2 or 3. Nine hours throughout the year. Three credits.

T. Th. F. S., 4, 5 hrs., rm. 280.

(b) DRAWING AND DESIGN. Adapted to the line of shop work which the student is pursuing and intended to give practice in design with consideration of proper proportion for strength as well as for aesthetic qualities. The student is expected to make his own designs for his work in the shops. Prerequisites, Art 2 and

Mechanical Drawing 1 (a). Nine hours throughout the year. Three credits. Mr. Pulley.

CARPENTRY.

1. (a) Rudimentary exercises in sawing, ripping, planing, mortising, dovetailing, and general joinery, and the application of these to simple articles of furniture. Correct methods of using and handling tools are emphasized. Fifteen hours, first term. Two and one half credits.

(b) Sharpening and adjusting of carpenter's tools, and saw filing, followed by practice in making panels, doors, and sashes, and in simple cabinet work. Fifteen hours, second term. Two and one half credits. Fee, $5.00. Deposit, $3.00. Mr. Hansen, Mr. Madsen.

Daily, 1, 2, 3 hrs., or 4, 5, 6 hrs., or 6, 7, 8 hrs., Shops.

2. (a) Plain cabinet making, concluding with the construction of a model carpenter's work bench. First term.

(b) Wood turning and other machine work in wood, and the construction of a standard carpenter's tool chest. Second term. Prerequisite, course 1 (b).

Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Hansen, Mr. Madsen.

Daily, 6, 7, 8 hrs., Shops.

3. The principles and practice gained in the foregoing courses are applied to frame house building. If possible, practice in building a regular house is given, but when such opportunity cannot be had, special parts, such as a section of wall, including doors and windows, hips, and valleys in roofs, are built in the shops. Prerequisite, course 2, but student desiring to specialize in house-building may be permitted to take this course at an earlier date. Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Hansen, Mr. Madsen.

Daily, 6, 7, 8 hrs., Shops.

4. The students in this course are allowed to specialize either in cabinet making, including carving and finishing, or in the inside finishing of houses, including work in stair-building. The selection and design of the work is left largely to the student. Each design must be complete in itself, and must be finished during the year. Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Hansen, Mr. Madsen.

Daily, 6, 7, 8 hrs., Shops.

5. A series of selected exercises from courses 1 (a) and 2 (b). Six hours, first term. Two credits. Fee, $1.00. Deposit, $3.00. Mr. Hansen, Mr. Madsen.

T. Th. S., 4, 5 hrs., Shops.

FORGING AND CARRIAGE BUILDING.

1. (a) Preliminary exercises, such as drawing, bending, twisting, and shaping, followed by exercises in iron welding, making tongs, and other forge tools. Accuracy in methods and results is insisted upon. First term.

(b). Practice in steel and iron welds, and general work in steel forging and dressing. Chisels, punches, reamers, hammers, wrenches, andirons, and ornamental gates, etc., are sample exercises. Second term. Prerequisite, course 1 (a).

Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Newey.

Daily, 1, 2, 3 hrs., or 4, 5, 6 hrs., or 6, 7, 8 hrs., Shops.

2. (a) Advanced exercises in iron and steel; axle and tire setting, resetting and tempering springs, and horse-shoeing. First term.

(b). A continuation of horse-shoeing; elementary carriage woodwork, including sawing, planing, mortising, the use of the draw-knife, and spoke shaves, making the woodwork of selected vehicles from shop drawings. Second term. Prerequisite, course 1. Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Newey.

Daily, 6, 7, 8 hrs., Shops.

3. Advanced horse-shoeing, wheelwrighting, and elementary carriage building, concluding with the construction of an approved vehicle, constitute the work of the third year. Prerequisite, course 2. Fifteen hours throughout the year. Fee, $5.00. Deposit, $3.00. Mr. Newey.

Daily, 6, 7, 8 hrs., Shops.

4. A series of selected exercises from course 1 (a), followed by work in horse-shoeing and in repairing agricultural implements. Six hours, second term. Two credits. Fee, $1.00. Deposit, $3.00. Mr. Newey.

T. Th. S., 4, 5 hrs., Shops

MACHINE WORK.

1. (a) Elementary forging, concluding with the making, dressing and tempering of lathe and planer tools; special work in chipping, filing, hand polishing, and scraping. First term.

(b). Preliminary exercises in drilling, planing, straight and taper turning, accompanied by instruction in the care and use of machinery. Second term.

Fifteen hours, throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Pulley.

Daily, 6, 7, 8 hrs., Shops.

2. (a). Exercises in boring and chucking in the lathe, thread cutting, polishing and milling. Cone pulleys, bearings, stuffing-box-glands, grind-stone shaft, are sample exercises. First term.

(b). The manufacture of gear wheels, shaft-couplings, jack-screws, tap wrenches, eccentrics, and cranks for steam engines constitutes the work of the second term. Prerequisite, course 1.

Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, $3.00. Mr. Pulley.

Daily, 6, 7, 8 hrs., Shops.

3. (a). The work of this course is principally making engine connecting rods, mandrels, taps, spiral drills, counter-bores, etc., giving practice on the grinding machine. First term.

(b). Practice in making fluted reamers, grinding and making milling cutters, special attention being paid to the forms of the cutting edges. Second term.

Fifteen hours throughout the year. Five credits. Prerequisite, course 2. Fee, $5.00. Deposit, $3.00. Mr. Pulley.

Daily, 6, 7, 8 hrs., Shops.

4. Actual machine construction, factory methods being emphasized. Speed lathes, sensitive drills and power hack-saws may be taken as sample exercises. Prerequisite, course 3. Fifteen hours throughout the year. Five credits. Fee, $5.00. Deposit, Deposit, $3.00. Mr. Pulley.

Daily, 6, 7, 8 hrs., Shops. Mr. Pulley.

FOUNDRY WORK.

1. Thorough practice in moulding and general foundry work, including iron and brass casting. The patterns chosen illustrate a wide range of work, the course being intended to give a general knowledge of foundry practice. Elective. Six hours, first term. Two credits.

2. Special moulding, emphasizing such work as will be required in connection with the work of machine design. Elective. Six hours, second term. Two credits.

SLOYD.

Intended primarily for younger students who are not sufficiently developed physically to carry the heavier work of the regular Mechanic Arts course. It is also well adapted for teachers who desire to qualify themselves for teaching Sloyd in the district schools. The best Swedish and American methods are followed.

1. (a). Simple household and school-room articles, such as pointers, bread-boards, clothes-horses, foot-stools, scoops, etc., constitute the exercises of this course. Elective. Four hours, first term. Two credits.

(b). Elementary turning and scrolling, simple carving, and the completion of a small cabinet. Elective to students who have completed 1 (a). Four hours, second term. Two credits.

MILITARY SCIENCE AND TACTICS.

LIEUTENANT CAFFEY.

Military instruction at the College is not a matter of choice with the authorities or the students. The Congress of the United States requires this instruction in return for large appropriations; it is thus an obligation—an obligation in return for the advantages of free education.

The aim of the department is to qualify young men for positions as commissioned officers of volunteer forces. All able-bodied male students of the College *below Senior and above First Year* are enrolled in the Military Department.

A uniform must be worn by all students when at drill. Arrangements have been made by which the uniform can be obtained through the Secretary of the College at actual cost, about fifteen dollars. The attention of students intending to enter college is called to the fact that this uniform has been found more serviceable than civilian clothes of the same price, and that all must be prepared to order the uniform when they enter.

The organization conforms to the company and battalion organization of the regular army. The officers and non-commissioned officers are selected after competitive examinations. In general the officers are taken from the higher college classes, the non-commissioned officers from the lower.

A cadet band is maintained under the immediate charge of the Director of the School of Music. It appears with the cadet battalion at parades, reviews and other ceremonies.

PRACTICAL.

Four hours a week throughout the year. Required of all, except seniors and first year students. Infantry—school of the soldier, squad, company and battalion. The ceremonies of guard

mounting, parade and review; advance and rear guard; outposts; practice marches; target practice.

For target practice the college has excellent indoor and outdoor ranges. The U. S. government gives an ample allowance for ammunition.

THEORETICAL.

One hour a week throughout the year.

First Year (in the Military Department.)

Infantry Drill Regulations.

Manual of Guard Duty.

Second Year.

Infantry Drill Regulations (Review.)

A Military Primer.

Small Arms Firing Regulations.

Third Year.

Military Field Engineering.

Field Service Regulations.

Lectures on the Art and Science of War.

Fourth Year.

Military Law.

Lectures on the Art and Science of War.

The satisfactory completion of both the practical and the theoretical work prescribed for any one year entitles the student to one hour's credit.

ORGANIZATION 1909-1910.

MAJOR, W. L. JONES.
1st LT. BATT. ADJT., W. M. BALL.
2nd. LT. BATT. Q AND COMSY., J. S. WELCH.
SERGEANT MAJOR, TAYLOR CARMICHAEL.
COLOR SERGEANT, EARL GOODWIN.
DRUM MAJOR, L. RICHARDSON.

Captains—*Company A,* M. S. Smart; *Company B,* H. T. Plant; *Company C,* L. Westerholm.

First Lieutenants—*Company A,* James T. Steed; *Company B,* J. L. Peterson, S. Jackson Major; *Company C,* George L. Morrison.

Second Lieutenants—*Company A,* David Sharp; *Company B,* Howard Maughan; *Company C,* John L. Montrose.

Sergeants—*Company A,* M. O. Maughan, C. L. Merrill, Ivan Hobson, H. E. Jones, Verne Pace. *Company B,* Elmer Brossard, J. A. Willey, Ralph Wyatt, Virgil L. Minear, John C. Lambert. *Company C,* W. H. Powell, R. E. Walker, M S. Turner, W. R. Hougaard, J. E. Webb, Ernest Mohr.

Corporals—*Company A,* E. G. Carter, C. G. Busby, J. B. Decker, A. Hansen. *Company B,* Frank Pendleton, R. H. Maughan, R. L. Allen, J. O. Pence. *Company C,* R. J. Kewley, Ward McAlister, Ray P. Cahoon, E. Holmgren, Wilbur Thain.

MODERN LANGUAGES AND LATIN.

PROFESSOR ARNOLD.

FRENCH.

1. FIRST YEAR FRENCH. Chardenal, *French Grammar,* and Guerber, *Contes et Legendes,* form the basis of the grammatical and conversational work. Three or four modern texts are read, such as Dumas' *Les Trois Mousquetaires,* About's *Le Roi des Montagnes,* and Halevy's *L'Abbe Constantin.* Four hours throughout the year. Four credits. Prof. Arnold.

T. W. Th. F., 4 hr., rm. 277.

2. SECOND YEAR FRENCH. Francois' *French Composition* is the basis of a grammatical review and of writing in French.

Lavisse's *Histoire de France* is used as subject matter for conversation, while the work in reading consists in translating works of the more important of the nineteenth century authors. During the second term a weekly composition in French is required. Prerequisite, course 1 or an equivalent. Three hours throughout the year. Three credits. Prof. Arnold.

W. F. S., 3 hr., rm. 277.

3. THIRD YEAR FRENCH. Three elective one-hour courses. a—Conversation. b—Rapid reading of French periodicals on horticulture, stockbreeding, or domestic science subjects. c—Rapid reading of French classics, varying each year. Course b may be given in two divisions to suit those who elect it. Prerequisites for all the courses, French 1 and 2, or equivalent. Students may elect any part or all of French 3. Each division counts one credit.

GERMAN.

1. FIRST YEAR GERMAN. Ball, *Elements of German* and Bernhardt, *German Composition,* form the basis of the grammatical and written work. The work in reading begins with Wenckebach's *Glueck Auf,* and is followed by three or four easy texts. Several poems are memorized. Four hours throughout the year. Four credits.

Sec. 1, T. W. Th. F., 4 hr., rm. 359, Mr. Geo. C. Jensen. Sec. 2, T. W. Th. F., 1 hr., rm. 277, Prof. Arnold.

2. SECOND YEAR GERMAN. Bernhardt, *German Composition* is finished and work in original German composition is begun. Andrea, *Erzaehlungen aus der deutscen Geschichte* is used as basis for conversation and foundation for future understanding of German literature. Many texts are rapidly read, selected from the works of Riehl, Sudermann, Wildenbruch, Freytag, Heine, and other nineteenth century authors, with one scientific text. Three hours throughout the year. Three credits.

W. F. S., 2 hr., rm. 277, Prof. Arnold.

3. THIRD YEAR GERMAN. Three elective one-hour courses. a—Conversation. b—Scientific German. c—Rapid reading of German classics, varying each year. Prerequisites for a, b and c, German 1 and 2, or equivalent. Students may elect any part or all of German 3. Each division counts one credit.

SPANISH.

1. FIRST YEAR SPANISH. Giese, *First Year in Spanish;* Matzke, *First Spanish Readings;* Valdes, *Jose;* Alarcon, *El Capitan Veneno.* Optional with French or German in the Commercial Course. Three hours throughout the year. Three credits.

T. Th., 2 hr., S., 4 hr., rm. 277, Prof. Arnold.

2. SECOND YEAR SPANISH. Ford, *Spanish Composition;* Picatoste, *Historia de Espana* as basis for conversation; rapid reading of such modern texts as Valera's *Commendador Mendoza;* Galdos, *Dona Perfecta* and *Electra;* Breton, *Quien es ella?;* and one classical play. Prerequisite, course 1. Three hours throughout the year. Three credits.

LATIN.

Offered to students in three year courses, and to students in college work who have not presented parallel courses as entrance requirements:

1. FIRST YEAR LATIN. Collar and Daniel, *First Year Latin; Viri Romae.* Drill on essentials of Latin grammar; comparison with English grammar, acquiring of vocabulary; English words derived from Latin; selections for reading. Four hours throughout the year. Four credits.

2. SECOND YEAR LATIN. Greenough, D'Ooge and Daniel, *Second Year Latin;* D'Ooge, *Latin Composition based on Caesar;* Bennett, *Latin Grammar;* selected readings from Part I, *Second Year Latin;* an equivalent of four books from selections from

Caesar; oral and written composition. Attention is given to etymology of English derivatives and cognates; accuracy and facility in translating into idiomatic English; sight translation. Prerequisite, Latin 1. Three hours throughout the year. Three credits.

MUSIC.

PROFESSOR THATCHER.
MRS. LINNARTZ
MR. CLARK.
MISS MEYERS.

The following courses in music are arranged with the two-fold idea of laying a sure foundation for professional work along any of the lines of this art, and to fit the student for the proper application and fullest enjoyment of the classic compositions of famous composers. Theory of music as exemplified in the study of harmony, counterpoint and musical form, will be considered, and as far as possible urged upon the student in both vocal and instrumental departments. Ensemble work may be had in the quartette, choir, band, and orchestra organizations. These advantages, together with those furnished by free concerts and recitals, constitute the strongest features of a Conservatory Course and will be open to all students of the College.

A certificate of graduation will be given upon the completion of any of the following courses:

FOUR YEAR PIANO COURSE. Completion of regular four years' work as prescribed, together with one year of vocal music and one year of harmony.

FOUR YEAR VOCAL COURSE. Completion of four years' regular prescribed work, together with two years of piano and one year of harmony.

FOUR YEAR VIOLIN OF VIOLONCELLO COURSE. Completion of four years' regular prescribed work, together with two years of piano and one year of harmony.

FOUR YEAR COMPOSITION COURSE. Regular prescribed work, together with three years on piano, violin, cello, or cornet.

VOICE CULTURE AND ART OF SINGING.

FIRST YEAR. Breathing, study of vowel forms, elementary vocalization, easy songs.

SECOND YEAR. Vocalization, solfeggio, songs.

THIRD YEAR. Vocal studies, songs, arias, solo parts in easy operas, first year harmony, piano.

FOURTH YEAR. Advanced studies, English classic songs, German and Italian songs, arias, second year piano.

PIANOFORTE.

FIRST YEAR. Position, hand culture, rhythm, scales, elementary work from Gurlitt, Beyer, Czerny and others.

SECOND YEAR. Easy studies and sonatinas by Bertini, Clementi, Kuhlau, Kohler, Loeschorn; easy pieces.

THIRD YEAR. Studies by Czerny, Dorn, Hiller, Gobbaert, and Craemer, Sonatas by Mozart, Haydn and others; first year voice and singing.

FOURTH YEAR. Studies by Craemer, Kessler, Clementi, *Gradus ad Parnassum,* solo pieces by Schubert, Mendelssohn, Chopin, Raff and others; first year harmony.

ORGAN.

FIRST YEAR. A standard method, and easy studies and pieces.

SECOND YEAR. Parallels piano course; carefully selected pieces suitable for the organ.

VIOLIN.

FIRST YEAR. David School, Book I. Sitt Opus 35.

SECOND YEAR. David School, Book II. Studies by Kayser; easy solos and duets; orchestra practice; first year piano.

THIRD YEAR. Kreutzer, 42 Exercises; studies by Fiorilli; orchestra; second year piano.

FOURTH YEAR. Rode, 24 exercises; Rovilli, 12 exercises; Garinni, 24 exercises; Don't *Gradus;* concertos, Viotti, Mendelssohn, etc.; orchestra; first year harmony.

VIOLONCELLO.

FIRST YEAR. Part of Kummer's method for Violoncello with easy pieces.

SECOND YEAR.. Balance of Kummer's method; easy studies by Dotzauer; easy pieces; orchestra practice, first year piano.

THIRD YEAR. Studies by Dotzauer; pieces moderately difficult; cello parts to easy trios and quartettes; orchestra; second year piano.

FOURTH YEAR. Balance of studies by Dotzauer; pieces of more advanced grades; cello parts to trios, quartettes, etc.; orchestra; harmony.

CORNET AND OTHER BRASS INSTRUMENTS.

The course of study for these various instruments corresponds in general with that for string instruments.

MANDOLIN AND GUITAR.

FIRST TWO TERMS. First, second and third position; part of a standard method, and easy pieces.

LAST TWO TERMS. Balance of method; more advanced work and *ensemble* playing.

HARMONY AND COMPOSITION.

FIRST YEAR. Goetschius, *Tone Relations;* first year of piano or other instruments.

SECOND YEAR. Advanced harmony; simple counterpoint; melody writing; second year piano, violin, etc.

THIRD YEAR. Counterpoint; smaller forms; vocal and instrumental; third year piano, violin, etc.

FOURTH YEAR. Large forms; instrumentation.

GENERAL COURSES.

The following courses are open to students without charge.

THREE YEARS' VOCAL COURSE, 2 credits each year.

a. Practice.
   1. Study of Tone.
   2. Choral Singing.
   3. Choir (Chapel) and Solo Work.

b. Theory.
   1. Study of Notation.
      Music Copying.
   2. Music Theory, from Text.
   3. History of Music, from Text.

BAND AND ORCHESTRA.

Four hours a week will be devoted to this work. One credit.

TUITION.

For Term of Fifteen Weeks—Payable in Advance.

(No entrance fee will be charged special students in music.)

VOICE. (Private Instruction.)
One lesson a week $15.00
Advanced, one lesson a week 22.50

PIANO.
Private instruction; one lesson a week $15.00
Private instruction; two lessons a week 25.00

REED ORGAN.
First year. Private instruction; one lesson a week ... $10.00
Second Year. Private instruction; one lesson a week.. 15.00

VIOLIN. Private instruction; one lesson a week..... $15.00
Advanced. Private instruction 22.50

VIOLONCELLO.
Private instruction. One lesson a week $10.00

CORONET AND BAND INSTRUMENTS.
Class Lessons. One lesson a week ..... $ 7.50
Private Instruction. One lesson a week 10.00

MANDOLIN AND GUITAR.
One lesson a week ..... $ 7.50
Two lesson a week 10.00

HARMONY.
Class of three; two lessons a week $10.00

REGISTRATION IN MUSIC WORK, 1909-10.

Choir	72
Male Glee Club	10
String Quartette	4
Band	30
Orchestra	18
Mandolin and Guitar Club	12
Private Pupils	56
	202

PHYSICAL EDUCATION.

PROFESSOR TEETZEL.
MISS STEWART.

It is the aim of the Department of Physical Education to foster hygienic habits among the students, and so direct their exercise that they may have a physical development fit to support and make efficient the mental development which they seek in attending the institution. This is accomplished, first, by giving them the needed opportunity for gymnastic exercises; second, by encouraging athletic games, thereby stimulating an interest in their physical efficiency and in the pleasure of physical activity; and, third, by giving them a guiding knowledge of the principles of physical education. All the work is based upon careful physical examinations.

PHYSICAL EDUCATION FOR MEN.

1. ELEMENTARY COURSE. Open to all male students of the institution. Three hours a week. One credit.

(a) *Gymnasium Exercises.* These consist of vigorous drills

with dumb bells, Indian clubs, wands, etc., and gymnasium games under the supervision of the instructor.

(b) *Lectures.* The gymnasium work is supplemented by lectures on personal hygiene, the physiology of exercise, first aid to the injured, etc.

PHYSICAL EDUCATION FOR WOMEN.

Two years of Physical Education are required of all High School girls of the College. Beginning with the students entering in 1910-11 all college women will be required to take one year's work in Physical Education. The work of the courses will be arranged to be both recreative and creative; remedial and preventive. As nearly as possible the work will be individual and based upon a physical examination. Students will be required to wear the regulation gymnasium suit and shoes. The suits may be ordered through the Secretary of the College at an actual cost of about four dollars.

1. PHYSICAL EDUCATION FOR THE BEGINNERS. The object of this course is to establish a good posture and to strengthen vital functions. The work will consist of Swedish body building work —some tactics, folk dancing and indoor and outdoor games.

2. PHYSICAL EDUCATION II. This work is for second-year students, and will be built upon the first year's work. It will also include work with light apparatus, advanced folk dancing, Gilbert dancing, basket ball and tennis.

3. PHYSICAL EDUCATION III. An advanced course for college women. It will consist of regular formative and corrective body building work, supplemented by folk and classic dancing, apparatus work and games. It will also include lecture work upon the hygiene of exercise and the principles of physical development.

PHYSICS.

MR. SAXER.

1. ELEMENTARY PHYSICS. A first course in the elements of Physics, presented mainly from the experimental standpoint. The lectures are illustrated by numerous demonstrations, and students spend two periods a week in laboratory. Millikan and Gale, *A First Course in Physics.* Two recitations and two laboratory periods throughout the year. Three credits.

Sec. 1, T. Th., 1 hr., rm. 283; S., 1, 2 hrs., Th., 6, 7 hrs., rm. 284. Sec. 2, W. F., 3 hr., rm. 283; W. F., 6, 7 hrs., rm. 284.

2. GENERAL PHYSICS. Lectures, demonstrations, recitations and student laboratory work covering the whole field of Physics as far as the time will permit. Watson, *A Text Book of Physics.* Elective. Four hours throughout the year. Four credits.

3. MECHANICS, MOLECULAR PHYSICS, AND HEAT. Class room and laboratory work covering selected chapters from *Mechanics and Heat;* also the kinetic theory, capillarity, solution, electrolysis, and elementary thermodynamics. Elective. Three hours throughout the year. Three credits.

4. ELECTRICITY, LIGHT AND SOUND. Of the same grade and conducted in the same way as course 3. In addition to the selected work in electricity and sound, diffraction, dispersion, interference, and polarization of light will be taken up, as well as radioactivity and the electron theory. Elective. Three hours throughout the year. Three credits.

POLITICAL SCIENCE.

PROFESSOR THOMAS.
ASSISTANT PROFESSOR HENDRICKS.

1. GOVERNMENT. Our European ancestors, origin of states and state institutions, English and American governments compared, state and foreign service, the treasury, money and coinage, banks, the post office, and executive departments, legislation, the

constitution, federal and state powers, political parties, party issues. Three hours throughout the year. Three credits. Prof. Hendricks.

W. F. S., 2 hr., rm. 107.

2. (a). CONSTITUTIONAL LAW. The Constitution; the rise of the American Union; distribution and powers of the government; powers of Congress; powers of the Executive; the judicial departments; checks and balances of governments; government of the territory; the admission of new states; amendments to the constitution; civil rights and their guarantees.

(b). INTERNATIONAL LAW. Persons concerned, rights and duties of state, territorial jurisdiction, jurisdiction on high seas, agents of the state nationality, treaties, settlement of disputes, war and its effects, military occupation, hostilities, neutrality, contraband, blockade. Elective. Three hours throughout the year. Three credits.

3. COMPARATIVE STUDY OF GOVERNMENTS. A comparative study of the various systems of government,—Greece, Rome, Great Britain, Germany, France, Switzerland, United States, etc. Three hours, second term. One and one half credits. Prof. Hendricks.

T. Th. S., 4 hr., rm. 107.

4. CONTRACTS. Assent and the necessity of its communications; offers and their expiration or revocation; consideration; contracts under seal; joint and several contracts; conditional contracts; duress; discharge of contracts by rescission; novation, accord and satisfaction; release. Three hours throughout the year. Three credits. Prof. Thomas.

T. Th. S., 5 hr., rm. 175.

STENOGRAPHY AND TYPEWRITING.

MR. CANUTE PETERSON.
MR. DAY.

1. STENOGRAPHY I. This is a thorough, practical course, designed for the two-fold purpose of preparing the student for

actual work and also laying a foundation for rapid reporting. After the principles of the text are mastered, the dictation of various forms of commercial correspondence is taken up. Graham's *Phonography,* one of the most successful of the many excellent Pitmanic systems, is taught. Five hours throughout the year. Four credits. Mr. Peterson.

Third hr., rm. 305.

2. STENOGRAPHY II. After a thorough review of the text books, advanced correspondence work, legal documents, speeches, specifications, editorial matter, court testimony, etc., are taken up. This course is designed especially for students who desire to qualify for the United States Civil Service, or for reporting work. A study of public meetings, court procedure, and reporting of public meetings, and trials. Much transcribing on the typewriter is required. Five hours throughout the year. Three credits. Mr. Peterson.

Eighth hr., rm. 305.

TYPEWRITING.

1. TYPEWRITING I. Beginning with simple exercises, the student learns correct fingering and the proper manipulation of the typewriter. Special attention is given to the care and mechanism of the machine. Five hours a week throughout the year. One credit. Mrs. Day.

Sec. 1, 1 hr., sec. 2, 7 hr., rm. 303.

2. TYPEWRITING II. A special course for those taking Stenography. In addition to the elementary principles given in Typewriting I, students make copies of correctly written correspondence, legal forms, etc.; also personal composition and dictation. As soon as moderate speed is attained, the work includes transcription of shorthand notes. One hour daily throughout the year. Two credits. Mrs. Day.

Fourth hr., rm. 303.

VETERINARY SCIENCE.

PROFESSOR FREDERICK.

1. VETERINARY ELEMENTS. This course considers briefly elementary anatomy and physiology and the common ailments of domestic animals; the most prevalent contagious diseases, their causes, symptoms, course, diagnosis and treatment; measures for their prevention and cure. Free clinics are held each week. The aim is to teach the student how to care for and treat the animals on the farm. Three hours, one term. One and one half credits.

2 and 3. COMPARATIVE ANATOMY OF THE DOMESTIC ANIMALS. A series of lectures, including the study of the bones, articulations, muscles, circulatory apparatus, the nervous system, the respiratory system, and the organs of digestion, the urino-genital apparatus, and the organs of special sense, supplemented by demonstrations from mounted skeletons, prepared specimens and charts. The student is required to make two complete dissections of the horse and such parts of other animals as may be deemed necessary. Elective. Three hours throughout the year. Three credits.

4. PHYSIOLOGY. A study of the physical and chemical laws as they are related to physiology, and the general properties of animal cells, their origin, development and growth; the special physiology of the various organs and tissues of the animal body. Elective. Three hours throughout the year. Three credits.

5. SANITARY SCIENCE. A discussion of the various causes of disease; the manner in which disease is propagated and spread, including the part played by meat and milk; the effect of environment, including ventilation, lighting, and draining of stables; preventive measures, including disinfection, vaccination, and quarantine. Elective. Three hours throughout the year. Three credits.

6. EXAMINATION FOR SOUNDNESS. Lectures and practical examinations. The student is made familiar with the method of

examination, and what to consider as unsoundness. Elective. Three hours throughout the year. Three credits.

7. OBSTETRICS. A review of obstetrical anatomy, reproduction, hygiene of pregnant animals, pathology of gestation, normal parturition, and diseases of the young animals. Elective. Three hours, second term. One and one half credits.

8. CLINICS. Free clinics are held at the hospital, and all students taking any of the courses in Veterinary Science are required to attend and assist in the work. It consists of free examination and treatment of the numerous cases brought in, furnishing the clinic with abundant material for observation and actual application of the work of the class.

ZOOLOGY AND ENTOMOLOGY.

PROFESSOR BALL.
PROFESSSOR ——.
MR. HOFF.

ZOOLOGY.

1. ELEMENTARY ANATOMY AND PHYSIOLOGY. The structure and function of different parts of the human body, especial attention being given to the principles that underlie the care of the body. Special lectures are given on diet, ventilation, exercise, use of medicines, and other hygienic topics. The laboratory work familiarizes the student with the human skeleton as compared with that of other animals. The microscopic study of tissues is taken up by means of prepared slides. Two recitations and one laboratory period throughout the year. Two credits. Mr. Hoff.

Sec. 1, W. F., 2 hr., rm. 131; S., 1, 2 hrs., rm. 134; Sec. 2, T Th., 4 hr., rm. 129; S., 1, 2 hrs., rm. 134. Sec. 3, T. Th. 3 hr., rm. 129; W., 6, 7, 8 hrs., rm. 134. Sec. 4, W. F., 1 hr., rm. 131; Th., 6, 7, 8 hrs., rm. 134.

2. GENERAL ZOOLOGY. In this course the student begins with the lowest invertebrates, a typical example of each group being studied in detail and dissected in the laboratory, and the re-

lated forms discussed. The higher forms are taken up in their natural order, the invertebrates being studied the first term, and the vertebrates, the second. Two lectures and one laboratory period throughout the year. Three credits. Prof. Titus, Mr. Hoff.

Sec. 1, T. Th., 4 hr., rm. 131; T., 6, 7, 8 hrs., rm. 130. Sec 2, W. F., 2 hr., rm. 134; S., 4, 5, 6 hrs., rm. 130.

3. PRINCIPLES OF BREEDING. The principles of variation, selection, adaptation, heredity and kindred subjects in their relation to evolution. Especial attention is paid to the recent discoveries in the laws of heredity, and the fundamental principles underlying animal breeding. Elective. Prerequisite, Course 2. Three lectures, one term. One and one half credits. *Alternates with Zoology 6. Will be given 1910-11.* Dr. Ball.

T., 5 hr., W. F., 4 hr., rm. 134.

4. ADVANCED PHYSIOLOGY. The phenomena of life, chemical composition of the body, physiology of the cell, nutrition, circulation, nervous system and sense organs, and other related subjects are discussed. Elective. Prerequisite, Zoology 1 and 2, and Chemistry 1. Three hours, second term. One and one half credits.

5. HISTOLOGY. Lectures on the development of the elementary tissues and the formation and functions of the organs and tissues of the body. Prepared slides of human and other vertebrate tissues are used in the laboratory. The student becomes familiar with the methods of examination and permanent preparation of tissues. Elective. One lecture and two laboratory periods throughout the year. Three credits.

6. EMBRYOLOGY. The general principles of animal development, beginning with the cell and taking up the formation of the embryo and foetal membranes in the vertebrates. Special attention is paid to the development of the chick and the higher animals. Prerequisite, Course 2. Two recitations and one laboratory period, one term. One and one half credits. *Alternates with Zoology 3. Not given 1910-11.*

7. ADVANCED VERTEBRATE ZOOLOGY. Students in this course take up the comparative anatomy of the higher vertebrates and

the classification of the more common forms of the intermountain region. Elective. Prerequisite, Course 2. One recitation and one laboratory period, one term. One credit.

8. ECONOMIC ORNITHOLOGY. The food-habits and classification of the common birds and their general relations to agricultural interests. Elective. One recitation and one laboratory period, one term. One credit.

9. ANIMAL PARASITES. A consideration of the principal external and internal parasites of man and the domestic animals; their classification and identification; remedial and preventive measures for their control. Two recitations and one laboratory period one term. One and one half credits.

ENTOMOLOGY.

1. ECONOMIC ENTOMOLOGY. A series of lectures on the principal injurious and beneficial insects of the intermountain region. Life-histories of these insects are discussed. The student will become familiar with the use of spraying apparatus and the preparation of spraying mixtures and other insecticides, and with general remedial and cultural methods of controlling injurious insects. Three recitations, one term. One and one half credits. Prof. Titus, Mr. Hoff.

W. F. S., 4 hr., rm. 129.

2. GENERAL ENTOMOLOGY. A general knowledge of structure, habits, and classification of insects with methods of preparation for study, will be given in this course. A properly mounted, labeled and classified collection will be required of each student. Two recitations and one laboratory period throughout the year. Three credits. Prof. Titus.

T. Th., 1 hr., rm. 134, F., 6, 7, 8 hrs., rm. 130.

3. ADVANCED ECONOMIC ENTOMOLOGY. Lectures relating to classification and distribution of insects with special attention to the local fauna and their relations as beneficial and injurious

species. Prerequisite, Course 1 or 2. Elective. Two lectures and one laboratory period, one term. One and one half credits. Prof. Titus.

T. Th., 3 hr., W., 6, 7, 8 hrs., rm. 132.

4. ENTOMOLOGICAL LITERATURE. Designed for students taking advanced work in Entomology. Bulletins and reports dealing with the subject are examined; the history of economic problems receives attention. Prerequisite, course 1 or 2. Elective. One and one half or three credits.

5. ADVANCED SYSTEMATIC ENTOMOLOGY. Research work for students specializing in entomology. They will be expected to select a group of insects, study their classification and relation to other groups, and to examine the literature relating to the subject. Elective. Time and credit to be arranged with the instructor.

Alumni Association.

In April, 1899, President J. M. Tanner suggested to Miss Anna Beers, '98 and Charles A. Jensen, '97 the desirability of organizing all the degree graduates of the College into an Alumni Association. This was the initial step in the direction of the present firmly established organization. Miss Beers and Mr. Jensen prepared, and sent to each of the 34 graduates, a circular letter urging attendance at Commencement, 1899, in order to form a society. They met with a very hearty response. Meetings were held June 13 and 14, 1899; a constitution and by-laws were discussed and adopted; and the following officers were elected: President, Lewis A. Merrill, '95; secretary, Anna Beers, '98; treasurer, Arthur Stover, '99. Since that time the following alumni have served as presidents of the associations:

1900-01, John T. Caine, Jr., '94.
1901-02, William H. Homer, Jr., '00.
1902-03, Rose Homer, '00.
1903-04, William Peterson, '99.
1904-05, Joseph W. Jensen, '00.
1905-06, Robert Stewart, '02.
1906-07, Charles Walter Porter, '05.
1907-08, James Christian Hogenson, '99.
1908-09' Christian Larsen, '96.

The officers for the current year, 1909-10, are Christian Larsen, '96, president; Lewis A. Merrill, '95, Eunice E. Jacobson, '08, A. C. Nebeker, '03, vice presidents; and J. L. Coburn, '05, secretary and treasurer.

The U. A. C. Alumni Association includes all graduates who hold degrees from any of the courses in the College. It now numbers 140 living members. William Bernard Dougall, '94, Mrs. Anna Sponberg McCarty, '97, and John Simon Baker, '99, have died. With three exceptions all of the 143 graduates have received the degree of Bachelor of Science (B. S.), the particular course being specified in the diploma. In the first two classes. the

degree of Bachelor of Civil Engineering (B. C. E.), was given, and W. B. Dougall, '94, A. B. Larson, '94, and W. F. Culmer, '95, were graduated with this degree.

The Association has been of rather slow growth. One hundred forty-three members in sixteen years is not a mushroom growth. But indications point to far more rapid increase in the future. Last year's class of twenty members was the largest in the history of the School. This year, at Commencement, the Association will be augmented by nearly forty loyal new members, the class of 1910, and judging by the present numbers in the class of 1911 there will be a still greater number of recruits next year.

The graduates of the U. A. C. have uniformly been highly successful in their careers. The list of present occupations shows how large a number fill important and responsible positions. Fully one-third of the entire number are engaged in teaching, most of them in high schools and colleges. Many are heads of departments or principals of schools. The alumnae have won fame for the U. A. C. by their excellent work in organizing and developing departments of domestic science and arts. Another third are engaged in engineering and the various branches of commerce, including banking. Of the remaining third, twelve are in the employ of the Federal Government, chiefly the Department of Agriculture; ten are enrolled as students in Cornell, Columbia, U. of Chicago, U. of Illinois, and U. of California; twenty are married alumnae; the rest are doctors, chemists, farmers, horticulturists, army officers, and missionaries. Of the twenty married alumnae all but two were at some time engaged in teaching.

During the last year, the Association published the first volume of the *U. A. C. Graduate,* a copiously illustrated royal 8vo. of 270 pages, containing an account of the work done by every member since graduating, and many other matters of interest. The efficiency of the education imparted by the U. A. C. is demonstrated in the life of every one of her alumni.

MEMBERS OF U. A. C. ALUMNI ASSOCIATION.

ARRANGED IN ORDER OF SENIORITY OF GRADUATION.

1894.

1. Bernard Dougall. (Deceased.)
2. Robert W. Erwin.
3. Martha Hoyt.
4. Andrew B. Larsen.
5. John T. Caine, Jr.
6. Joseph E. Shepard.

1895.

7. Will Fred Culmer.
8. Lewis A. Merrill.

1896.

9. Willard S. Langton.
10. Christian Larsen.
11. Walter W. McLaughlin.
12. Amos N. Merrill.
13. Lorin A. Merrill.
14. Josiah L. Rhead.
15. Joseph R. Thomson.

1897.

16. John H. Bankhead.
17. Olla Barker.
18. Clara Louisa Foster.
19. Alfred A. Hart.
20. Hermoine S. Hart.
21. Thomas H. Humpherys.
22. Charles A. Jensen.
23. Victoria Lundberg.
24. Rachel N. Maughan.
25. Charles Pond.
26. Mamie Smith.
27. Anna Sponberg. (Deceased.)
28. John Stewart.
29. Osborne J. P. Widtsoe.

1898.

30. Frederick H. Atkinson.
31. Anna Beers.
32. Mabel Bullen.
33. Joel J. Harris.
34. A. Ray Irvine.

1899.

35. John S. Baker. (Deceased.)
36. William D. Beers.
37. Ethel Bullen.
38. Robert J. Gordon.
39. James C. Hogenson.
40. Fred W. Merrill.
41. Joseph H. Peterson.
42. William Peterson.
43. Walter W. Simmonds.
44. Arthur P. Stover.

1900.

45. Stanley Crawford.
46. Burton P. Fleming.
47. Rose Homer.
48. William H Homer, Jr.
49. Joseph W. Jensen.
50. Elizabeth C. Maughan.
51. Joseph W. Nelson.
52. George F. Taylor.

1901.

53. Blanche Cooper.
54. Esther Evans.
55. Mary Almeda Perry.
56. Charles B. Smith.
57. Mattie E. Stover.

1902.

58. Amanda Holmgren.
59. Edward P. Pulley.
60. Robert Stewart.

1903.

61. John T. Caine III.
62. Thomas C. Callister, Jr.
63. Charles F. Brown.
64. Grace Fisher.
65. Lydia Holmgren.
66. Josephine Maughan.
67. May Maughan.
68. Ambrose P. Merrill.

69. Aquilla C. Nebeker.
70. Frederick D. Pyle.

1904.

71. Edmund Crawford.
72. Geneva Egbert.
73. Joseph E. Greaves.
74. Ray H. Fisher.
75. Roy F. Homer.
76. William M. Jardine.
77. Charles A. McCausland.
78. Samuel P. Morgan
79. Elmer G. Peterson.
80. David E. Stephens.
81. Warren G. Swendson.
82. Franklin L. West.
83. Ray B. West.

1905.

84. Richard S. Ballantyne.
85. James E. Barrack.
86. Verna P. Bowman.
87. Blanche E. Caine.
88. John L. Coburn.
89. Eva Farr.
90. John J. Fredrickson.
91. James T. Jardine.
92. Hazel Love.
93. Ella Maughan.
94. Melvin C. Merrill.
95. Eugenio S. Peirce.
96. Charles W. Porter
97. Samuel G. Rich.
98. Roy Rudolph.
99. Mary E. Rudolph.
100. James H. Smith.
101. Joseph E. Taylor.
102. John H. Tuttle.

1906.

103. Irvin Allred.
104. Mildred Forgeon.
105. Minnie Peterson.

1907.

106. F. D. Farrell.
107. James L. Kearns.
108. Fred Mathews.
109. Frank Moench.
110. Aaron Olsen.
111. Preston G. Peterson
112. Inez Powell.
113. Ben F. Riter, Jr.

1908.

114. Heber Carver.
115. Alva Hansen.
116. George R. Hill.
117. Russell K. Homer.
118. Ellis Hudman.
119. C. Nephi Jensen.
120. Hans E. Jensen.
121. Eunice E. Jacobson
122. Eugene Santschi.
123. William L. Walker.

1909.

124. Robert Hugh Adams.
125. Jessie C. Anderson.
126. Earl Bennion.
127. Ernest Carroll.
128. Philip Vincent Cardon.
129. William P. Day.
130. Robert J. Evans.
131. Charles E. Fleming.
132. Leon Fonnesbeck.
133. Nellie Hayball.
134. Ernest P. Hoff.
135. John R. Horton.
136. Julius H. Jacobson.
137. Ethel Lee.
138. Lizzie O. McKay.
139. Daniel L. Pack.
140. Ina R. Stratford.
141. George M. Turpin.
142. Cadmus Wallace.
143. Edward H. Walters.

OCCUPATIONS AND ADDRESSES OF THE UTAH AGRICULTURAL COLLEGE ALUMNI.

1. Hugh R. Adams, Teaching.....High School, Hyrum, Utah
2. Miss Jessie C. Anderson....Teaching, Snow Academy, Ephraim, Utah
3. Irvin Allred, Engineering.....Bureau of Lands, Manila, P. I.
4. Frederick H. Atkinson, Book-keeping.....
.....Oregon Lumber Co., Baker City, Ore.
5. John S. Baker (Deceased)
6. Richard S. Ballantyne, Engineering.....
.....1161 Bueno Ave., Salt Lake City, Utah
7. John H. Bankhead, Banking.....
.....Thatcher Bros. Banking Co., Logan, Utah
8. Mrs. Olla Barker Thomas, Married...51 So. 27th St., Ogden, Utah
9. James E. Barrack, Commerce.....Fairbanks, Alaska
10. Mrs. Anna Beers Petty, Married..2210 Jefferson Ave, Ogden, Utah
11. Wm. D. Beers, Engineering.....Northport, Washington
12. Earl Bennion, Horticulture.....R. F. D. No. 7, Murray, Utah
13. Miss Verna P. Bowman.....Heyburn, Idaho
14. Charles F. Brown, Government Expert U. S. Department of Agriculture.....2540 So. 7th E., Salt Lake City, Utah
15. Mrs. Ethel Bullen Webb, Married.....Richmond, Utah
16. Mrs. Mabel Bullen Young, Married.....Wheaton, Illinois
17. Miss Blanche E. Caine, Teaching.....
.....City High School, Salt Lake City, Utah
18. John T. Caine, Jr., Registrar U. A. C.....Logan, Utah
19. John T. Caine III, Teaching, Prof. Animal Husbandry U. A. C.
..... Logan, Utah
20. Thomas C. Callister, Engineering.....Fillmore, Utah
21. Philip V. Cardon, Government Expert, U. S. Dept. of Agriculture .....Nephi, Utah
22. Ernest Carroll, Student U. of Illinois.....Urbana, Ill.
23. Heber Carver, Engineering.....Preston, Idaho
24. John L. Coburn, Financial Secretary U. A. C.....Logan, Utah
25. Miss Blanche Cooper, Teaching, Associate Prof. of Home Economics, U. A. C.....Logan, Utah
26. Edmund Crawford, Banking, Cashier Emery County Bank...
.....Castle Dale, Utah
27. Stanley Crawford, Engineering.....Manti, Utah
28. Will Fred Culmer, Commerce, Mgr. Culmer Paint & Glass Co. .....Salt Lake City, Utah

29. William P. Day, Horticulture.....Brigham City, Utah
30. Bernard Dougall (Deceased)
31. Mrs. Geneva Egbert Chase, Married.....
.....R. F. D. No. 1, Farmington, Utah
32. Robert W. Erwin, Steel Expert.....
.....703 Bank of Commerce Bldg., St. Louis, Mo.
33. Mrs. Esther Evans Davis, Married.....Malad, Idaho
34. Robert J. Evans, Student, Cornell University .....Ithaca, N. Y.
35. Miss Eva Farr, Teaching .....High School, Ogden, Utah
36. F. D. Farrell, Agricultural Expert, Director Experiment Station..
.....Caldwell, Idaho
37. Miss Grace Fisher, Teaching, Stout Training School.....
.....Menominee, Wisconsin
38. Ray H. Fisher, Medicine.....Oxford, Idaho
39. Burton P. Fleming, Teaching, Prof. Mechanical Engineering, University of Iowa.....Iowa City, Iowa
40. Chas. E. Fleming, Student, Cornell University.....Ithaca, N. Y.
41. Leon Fonnesbeck, Student, Law School, Chicago University
..... Chicago, Illinois
42. Mrs. Mildred Forgeon Rich, Married.....Burley, Idaho
43. Mrs. Clara Foster Bacon, Married.....Logan, Utah
44. John J. Fredrickson, Real Estate.....Malad, Idaho
45. Robert J. Gordon, Dominion Surveyor.....
.....Lethbridge, Alberta, Canada
46. Joseph E. Greaves, Teaching, Asst. Prof. of Chemistry, U. A. C.....Logan, Utah
47. Alva Hansen, Teaching, Weber Academy.....Ogden, Utah
48. Joel J. Harris, Teaching.....Adams Ave., Ogden, Utah
49. Alfred J. Hart, Teaching.....Bloomington, Idaho
50. Miss S. Hermoine Hart, County Supt. of Public Instruction
.....Paris, Idaho
51. Mrs. Nellie Hayball Bennion, Married, R.F.D. No. 7, Murray, Utah
52. George R. Hill, Student, Cornell University .....Ithaca, N. Y.
53. J. C. Hogenson, Teaching, Prof. of Agronomy, U. A. C.,
..... Logan, Utah
54. Ernest P. Hoff, Teaching, Instructor in Zoology, U. A. C.
..... Logan, Utah
55. Mrs. Amanda Holmgren Santschi, Married.....Ft. Douglas, Utah
56. Miss Lydia Holmgren.....Cardston, Canada
57. Mrs. Rose Homer Widtsoe, Married.....
.....397 N. Main, Salt Lake City, Utah
58. Roy F. Homer, Teaching, Principal High School.....Nephi, Utah

59. Russel K. Homer, Horticulture.....Pleasant Grove, Utah
60. Wm. H. Homer, Jr., Teaching, Prof. of Horticulture, U. A. C. ..... Logan, Utah
61. John R. Horton, Government Expert, U. S. Dept. of Agriculture, Bureau of Entomology.....Washington, D. C.
62. Mrs. Martha Hoyt Myrick, Married....Marion, Summit Co., Utah
63. Ellis Hudman, Engineering.....Encampment, Wyoming
64. Thomas H. Humpherys, Engineering .....Logan, Utah
65. A. Ray Irvine, Medicine.....Salt Lake City, Utah
66. Miss Eunice E. Jacobson, Teaching, Ricks Academy Rexburg, Ida.
67. Julius H. Jacobson, Farming.....Blackfoot, Idaho
68. James T. Jardine, Forestry, U. S. Dept. of Agriculture, Forestry Service.....Washington, D. C.
69. William Jardine, Government Expert, U. S. Department of Agriculture, Bureau of Plant Industry.....Washington, D. C.
70. Charles A. Jensen, Government Expert, U. S. Dept. of Agriculture, Bureau of Plant Industry.....Washington, D. C.
71. Christian N. Jensen, Student, U. of California.....Berkeley, Cal.
72. Hans E. Jensen, Teaching, Snow Academy.....Ephraim, Utah
73. Jos. W. Jensen, Teaching, Prof. of Mechanic Arts, U. A. C. ..... Logan, Utah
74. J. L. Kearns, Teaching, Principal High School....Park City, Utah
75. Willard S. Langton, Teaching, Prof. of Mathematics, U. A. C. ..... Logan, Utah
76. Andrew B. Larsen, Engineering, U. S. Reclamation Service, ...259 So. 2nd East, Provo, Utah
77. Christian Larsen, Teaching, Prof. of English, U.A.C., Logan, Utah
78. Miss Ethel Lee .....Hoytsville, Utah
79. Miss Hazel Love, Teaching, Instructor in Home Economics.. U. A. C. .....Logan, Utah
80. Mrs. Victoria Lundberg Anderson, Married..... .....Box 184, Pocatello, Idaho
81. Charles A. McCausland, Book-keeping...Box 23, Meridian, Idaho
82. Miss Lizzie O. McKay, Teaching, Instructor in Home Economics, U. A. C.....Logan, Utah
83. Walter W. McLaughlin, Government Expert, U. S. Dept. of Agriculture .....Logan, Utah
84. Fred Mathews, Teaching, High School.....Springville, Utah
85. Miss Elizabeth Maughan, Student, Columbia University..... .....New York City, N. Y.
86. Mrs. Ella Maughan Hull, Married.....Whitney, Idaho
87. Miss Josephine Maughan, Teaching, High School..Shelley, Idaho

88. Mrs. May Maughan Snow, Married.....Provo, Utah
89. Mrs. Rachel Maughan Wadsworth, Married.....Shelley, Idaho
90. Amos N. Merrill, Teaching, Prof. of Agriculture, B. Y. U.....
.....Provo, Utah
91. Ambrose P. Merrill, Engineering.....Provo, Utah
92. Fred W. Merrill, Teaching, Murdock Academy.....Beaver, Utah
93. Lewis A. Merrill, Supt. of U. A. C. Extension Dept.....
..... 906 Newhouse Bldg., Salt Lake City, Utah
94. Lorin A. Merrill, Horticulture.....Logan, Utah
95. Melvin C. Merrill, Horticulture, Director Experiment Station
.....Baguio, Benguet, Philippine Islands
96. Frank Moench, Engineering..Evans Bldg., American Falls, Idaho
97. Samuel P. Morgan, Engineering.....Franklin, Idaho
98. Aquilla C. Nebeker, Engineering, Scranton Min. Co.....
.....Topliff, Tooele County, Utah
99. Joseph W. Nelson, Government Expert, U. S. Dept. of Agriculture, Bureau of Soils.....Washington, D. C.
100. Aaron Olsen, Teaching, High School.....Park City, Utah
101. Daniel L. Pack, Horticulture.....Provo, Utah
102. Eugenio S. Peirce, Engineering .....Boise, Idaho
103. Miss Mary Almeda Perry, Book-keeping.....Vernal, Utah
104. Elmer G. Peterson, Student, Cornell University.....Ithaca, N. Y.
105. Jos. H. Peterson, Farming.....Huntsville, Utah
106. Mrs. Minnie Peterson Isgreen, Married.....
.....447 So. 11th East, Salt Lake City, Utah
107. Preston G. Peterson, Mining, Iron King Cons. Mining Co.
..... Provo, Utah
108. William Peterson, Engineering, Elk Coal Co.....Diamondville, Wyo.
109. Charles Pond, Commerce.....Lewiston, Utah
110. Charles W. Porter, Teaching, Asst. Prof. of Chemistry, U. A. C. .....Logan, Utah
111. Miss Inez Powell, Teaching, Branch Normal.....Cedar City, Utah
112. Edward P. Pulley, Teaching, Instructor in Mechanic Arts, U. A. C. .....Logan Utah
113. Frederick D. Pyle, Engineering.....Mitchell, Nebraska
114. Josiah L. Rhead, Engineering.....Coalville, Utah
115. Samuel G. Rich, Banking, Cashier Burley National Bank....
..... Burley, Idaho
116. Benjamin F. Riter, Jr., Student, Law School, Columbia University ..... New York
117. Mrs. Mary Rudolph Hillman, Married.....Oxford, Idaho
118. Roy Rudolph, Commerce.....Logan, Utah

119. Eugene Santschi, Army..... Fort Douglas, Utah
120. Jos. E. Shepard, Banking, Cashier Cache Valley Banking Co. ..... Logan, Utah
121. Walter W. Simmonds, Commerce.....Salmon City, Idaho
122. Charles B. Smith, Engineering.....Box Y, Twin Falls, Idaho
123. James H. Smith, Engineering.....Spokane, Washington
124. Mrs. Mamie Smith Larsen, Teaching.....Dingle, Idaho
125. Mrs. Anna Sponberg McCarty (Deceased)
126. David E. Stephens, Government Expert, U. S. Department of Agriculture, Bureau of Plant Industry.....Washington, D. C.
127. John Stewart, Chemist, Sugar Factory.....Logan, Utah
128. Robert Stewart, Teaching, Prof. of Chemistry, U.A.C.,Logan, Utah
129. Arthur P. Stover, Engineering, U. S. Reclamation Service, ...207 Tilford Bldg., Portland, Ore.
130. Miss Mattie E. Stover, Chemist, Agricultural Laboratory, U. of California.....Berkeley, Cal.
131. Miss Ina Stratford, Teaching, High School...Brigham City, Utah
132. Warren G. Swenson, Engineering.....Boise, Idaho
133. Geo. F. Taylor, Missionary..... .....28 Catherine St., Subiaco, West Australia
134. J. Edward Taylor, State Horticultural Inspector..... .....Sharon Bldg, Salt Lake City, Utah
135. Joseph R. Thomson, Farming.....Richmond, Utah
136. George M. Turpin, Teaching, Instructor in Poultry, U. A. C. ..... Logan, Utah
137. John Henry Tuttle, Engineering, City Engineer's Office..... .....Salt Lake City, Utah
138. William L. Walker, Teaching, Instructor in Mathematics, U. A. C. .....Logan, Utah
139. Cadmus Wallace, Commerce.....Logan, Utah
140. Edward H. Walters, Government Expert, U. S. Dept. of Agriculture .....Washington, D. C.
141. Franklin L. West, Student, U. of Chicago.....Chicago, Ill
142. Ray B. West, Engineering .....313, 28th Street, Ogden, Utah
143. Osborne J. P. Widtsoe, Teaching, Prof. of English, L. D. S. U. .....Salt Lake City, Utah

ALUMNI STATISTICS.

Number of Members Living, 140: Alumni, 103; Alumnae 37.
Number of Members Deceased, 3: Alumni 2; Alumna 1.
Married Alumni, 73; Single, 30.
Married Alumnae, 20; Single 17.

OCCUPATIONS:

Teaching	Grade School	Past, 30; Present, 3
	High School	Past, 12; Present, 17
	College Work	Past, 20; Present, 25
Government Service	Philippine Service	Past, 1; Present, 1
	U. S. Department of Agriculture	Past, 4; Present, 10
	U. S. Reclamation Service	Past, 6; Present, 2
Professional Work	Physicians and Surgeons, 2	
	Chemists, 1	
	Horticultural Inspectors, 1	
Engineering, 25		
Business	For themselves, 6	
	For others, 10	
Practical Agriculture	Horticulture, 6	
	Farming, 6	
	Poultry, 1	
Postgraduate Work	Past, 30	
	Present, 10	
Total, 40		

UNIVERSITIES ATTENDED:

Cornell University,	9
Columbia University,	6
Harvard University,	6
Iowa State College,	3
Medico-Chirurgical College,	1
Michigan Agricultural College,	2
Leland Stanford Jr. University,	1
Ohio State University,	1
University of California,	6
University of Chicago,	8
University of Colorado,	1
University of Illinois,	3
University of Michigan,	1
University of Nebraska,	1
University of Utah,	1
Grand Total,	50
Less names repeated,	10
Total,	40

Sixteenth Annual Commencement.

June, 1909.

GRADUATES WITH DEGREES.

Bachelor of Science in Agriculture.

Earl Bennion ..... Murray
Ernest Carroll ..... Orderville
Philip Vincent Cardon ..... Logan
William Parley Day ..... Fillmore
Robert James Evans ..... Lehi
Charles Elliot Fleming ..... Logan
Julius Hall Jacobsen ..... Logan
Daniel Lambert Pack ..... Kamas
George Melvin Turpin ..... Murray
Cadmus Wallace ..... Logan

Bachelor of Science in Domestic Science.

Jessie Anderson ..... Toquerville
Ethel Lee ..... Hoytsville
Lizzie O. McKay ..... Ogden
Ina Stratford ..... Logan

Bachelor of Science in General Science.

Hugh Robert Adams ..... Logan
Leon Fonnesbeck ..... Logan
Nellie Hayball ..... Logan
Ernest Prior Hoff ..... Logan
John Raymond Horton ..... Ogden
Edward Haslam Walters ..... Logan

GRADUATES WITH CERTIFICATES

Agriculture.

Howard Maughan ..... Logan

Domestic Arts.

Cora Elma Greenhalgh ..... Logan
Viola May Hale ..... Logan
Rachel Cecelia Jones ..... Logan

Commerce.

Hervin Bunderson ..... Logan
George Cahoon ..... Logan
Louise Dunlop ..... Logan
Levon Oscar Halgren ..... Logan
Wilford Fred Heyrand ..... Providence
Berdie Eleanor Johnson ..... Salt Lake City
Sarah Carolyn Johnson ..... Salt Lake City
Frank William Laurenson ..... Downey, Idaho
Alfred Peter Monson ..... Pleasant Grove
Melvin Shrives Smart ..... Salt Lake City
Samuel Van Tunks ..... Logan
Raymond Waters ..... Logan

Mechanic Arts.

Byron Alder ..... Manti
Sidney Aldous ..... Huntsville

List of Students 1909-10.

In the following list A. stands for Agriculture; D. S. for Domestic Science; C. for Commerce; M. A. for Mechanic Arts; G. S. for General Science; M. for Music.

GRADUATES.

Cardon, Philip Vincent (A.) ..... Logan
Coburn, John L. (A.) ..... Wellsville

SENIORS.

Aldous, Alfred Evan (A.) ..... Ogden
Allred, Rodney Chase (A.) ..... Lehi
Anderson, Carl L. (G. S.) ..... Logan
Ballantyne, Alando Bannerman (A.) ..... Collinston
Barrett, Charles Elmer (A.) ..... Logan
Barrows, Harry Percy (A.) ..... Ogden
Bartlett, Helen L. (D. S.) ..... Salt Lake City
Bennion, Ethel (D. S.) ..... Taylorsville
Bullen, Asa (C.) ..... Richmond
Burton, Ephraim Fielding (A.) ..... Ogden
Curtis, Ray Barker (C.) ..... Victor, Idaho
Dixon, Veda (D. S.) ..... Payson
Dudley, Florence I. (D. S.) ..... Logan
Grue, Joseph (G. S.) ..... Plain City
Hendricks, Odessie L. (D. S.) ..... Logan
Hirst, Charles Tarry (G. S.) ..... Logan
Kewley, Alice (D. S.) ..... Logan
Lee, Orville Leonard (C.) ..... Hyde Park
Leigh, Amy Jennie (D. S.) ..... Cedar City
Lewis, Agnes (D. S.) ..... Coalville
Lloyd, Orson Gunnell (A.) ..... Logan
Manning, Amelia (D. S.) ..... Slaterville
Maughan, Inez (G. S.) ..... Logan
Maughan, Lavinia (G. S.) ..... Logan
McOmie, Alexander M. (A.) ..... Lehi
Oldham, William Brown (A.) ..... Paradise
Parrish, Clara (D. S.) ..... Centerville
Pence, James Dunbar (C.) ..... Mt. Home, Idaho
Perry, Susannah (D. S.) ..... Cedar City
Peterson, Erastus (A.) ..... Richfield
Peterson, Dean Freeman (A.) ..... Scipio
Peterson, Willard Larsen (C.) ..... Mendon
Rasmussen, Aaron (C.) ..... Clarkston

Riter, William Corlett (A.) ..... Logan
Sadler, Vincent Alff (A.) ..... Salt Lake City
Saxer, Arthur H. (G. S.) ..... Logan
Smith, Winnifred (D. S.) ..... Logan
Sonne, Nora (D. S.) ..... Logan
Stewart, James Haslam (A.) ..... Wellsville
Stewart, Robert Haslam (A.) ..... Wellsville
Watson, Edward Hamilton (A.) ..... Salt Lake City
Wyatt, Franklin A. (A.) ..... Wellsville

JUNIORS.

Alder, Byron (A.) ..... Manti
Allen, James J. (G. S.) ..... Wellsville
Andrews, Junius James (A) ..... Logan
Armstrong, James Arthur (C.) ..... Ephraim
Ball, Wilbur Mansfield (A.) ..... Logan
Beagley, LeRoy (A.) ..... Nephi
Bowman, Albert Elijah (A.) ..... Ogden
Brown, Frank Martin (A.) ..... Liberty, Idaho
Brown, Robert Bruce (A.) ..... Liberty, Idaho
Brossard, Edgar (G. S.) ..... Logan
Busby, Clifton George (A.) ..... Salt Lake City
Carlyon, Elizabeth (G. S.) ..... Logan
Christensen, Anna (D. S.) ..... Salt Lake City
Christensen, Samuel (C.) ..... Hyde Park
Cooley, Abraham C. (A.) ..... Salt Lake City
Comish, Newell Howland (C.) ..... Mt. Home
Cook, Lashbrook Laker (A.) ..... Garden City
Costley, Maggie (D. S.) ..... Logan
Egbert, Ivan (A.) ..... Logan
Froerer, Fred (A.) ..... Huntsville
Frazee, V. Elizabeth (D. S.) ..... Salt Lake City
Gurjar, Anant Madhov (A.) ..... Logan
Hancock, Heber C. (A.) ..... Ogden
Havenor, Elda (D. S.) ..... Salt Lake City
Hendricks, Edith (D. S.) ..... Richmond
Hendricks, Jessie (D. S.) ..... Richmond
Holden, James (A.) ..... Logan
Howell, Barbara (G. S.) ..... Logan
Jensen, Lucile (D. S.) ..... Brigham
Johnson, Arthur (C.) ..... Logan
Jones, William LeRoy (A.) ..... Logan
Kerr, Coral (D. S.) ..... Logan
Knapp, Alma J. (A.) ..... Logan
Lambert, John Carlos (A.) ..... Kamas
Maughan, Merrill O. (G. S.) ..... Logan
Merrill, Charles Leo (A.) ..... Richmond
Morrison, George L. (A.) ..... Franklin, Idaho
Nelson, August Levi (A.) ..... Crescent
Nelson, Mathew A. (A.) ..... Logan
Nelson, Sterling (G. S.) ..... Logan

Nibley, Annie (D. S.) ..... Logan
Olsen, John K. (A.) ..... Ephraim
Paddock, John Stephens (A.) ..... Wisdom, Montana
Peterson, Jesse Larsen (A.) ..... Petersboro
Plant, Henry Thomas (C.) ..... Richmond
Quayle, William Littlefair (A.) ..... Logan
Ralph, Ephraim Thomas (A.) ..... Brigham
Rich, Juanita (D. S.) ..... Blackfoot, Idaho
Robinson, Earl (A.) ..... Richmond
Robinson, David Earl (G. S.) ..... Logan
Sessions, James Wiley (A.) ..... Marion, Idaho
Smith, William R. (A.) ..... Logan
Snow, Charles, Jr. (A.) ..... Teasdale
Stratford, Alfred Edgar (A.) ..... Ogden
Walker, Genevieve Peterson (D. S.) ..... Logan
Welch, John S. (G. S.) ..... Paradise
Winsor, Luther Merkins (A.) ..... Enterprise
Willey, Joseph Angus (A.) ..... Layton
Woolley, Vern Clark (G. S.) ..... Grantsville
Wrigley, Robert Lecourn (A.) ..... American Fork
Zundel, George Lorenzo (A.) ..... Brigham City

SOPHOMORES.

Anderson, Andrew (G. S.) ..... Salt Lake City
Barrett, Adeline Patti (C.) ..... Logan
Beesley, John O. (A.) ..... Provo
Burke, Asahel Woodruff (A.) ..... Cedar City
Bunderson, Hervin (C.) ..... Logan
Burnham, Ivie May (D. S.) ..... Logan
Caine, George Ballif (A.) ..... Logan
Cahoon, George W. (C.) ..... Deseret
Carmichael, Taylor Montgomery (A.) ..... Salt Lake City
Crookston, Lucile (D. S.) ..... Logan
Daniels, Virginia (D. S.) ..... Logan
Davenport, Ethel (D. S.) ..... Manti
Ellis, James (G. S.) ..... Ogden
Frew, William A. (A.) ..... Logan
Goodwin, Earl (G. S.) ..... Logan
Hanson, Helvie (G. S.) ..... Logan
Hendrickson, M. Irene (D. S.) ..... Logan
Heyrand, Wilford Frederick (C.) ..... Lorenzo, Idaho
Hyde, Clara (D. S.) ..... Logan
Izatt, Angus (A.) ..... Logan
Jardine, Lenora (D. S.) ..... Logan
Jones, Clarence Edwin (A.) ..... Cedar City
Jones, Jenkins W. (A.) ..... Cherry Creek
Major, Stonewall Jackson (A.) ..... Ogden
Martineau, Bryant Sherman (A.) ..... Logan
Martineau, Charles Freeman (A.) ..... Logan
Martineau, Vere L. (A.) ..... Logan
Maughan, Howard John (A.) ..... River Heights

Monson, Alfred (G. S.) ..... Pleasant Grove
Morrell, Winnifred (D. S.) ..... Logan
Mortensen, Enoch Bernard (A.) ..... Levan
McCune, Ross Hamilton (A.) ..... Ogden
McKay, Katharine (D. S.) ..... Ogden
Nelson, Eleda (D. S.) ..... Logan
Olsen, Joseph William (G. S.) ..... Crescent
Ormsby, Lulu (G. S.) ..... Rexburg, Idaho
Osmond, James George (C.) ..... Bloomington, Ida.
Otte, Joseph E. (M. A.) ..... Logan
Pace, Vernon Willard (C.) ..... Loa
Perkins, Daniel B. (A.) ..... Monticello
Peterson, Canute (C.) ..... Logan
Porter, Ralph O. (G. S.) ..... Porterville
Richardson, Lester Amon (A.) ..... Ogden
Rigby, Elmer Clark (G. S.) ..... Newton
Secrist, Jesse Avern (C.) ..... Logan
Sharp, David (A.) ..... Vernon
Smart, Melvin S. (C.) ..... Salt Lake City
Smith, William Leroy (C.) ..... Logan
Sorenson, Mrs. Nellie (D. S.) ..... Logan
Stevens, Leroy A. (C.) ..... Logan
Stucke, Alfred (A.) ..... Santa Clara
Taylor, Marion (C.) ..... Logan
Thain, Wilbur (C.) ..... Logan
Turner, Simpson Montgomery (A.) ..... Logan
Webb, Joseph Eugene (C.) ..... Richmond
Wendelboe, Diamond (G. S.) ..... Logan
Westerholm, Ludwig (C.) ..... Ivers, Idaho
Woolley, William George (A.) ..... Salt Lake City
Woodbury, George Jerimah (A.) ..... St. George

FRESHMEN.

Adair, Ira (G. S). ..... Logan
Allen, Merle (A.) ..... Cove
Anderson, Adeline (G. S.) ..... Greenville
Barrett, Edward Lewis (A.) ..... Logan
Batt, William B. (A.) ..... Logan
Bell, Clyde Q. (A.) ..... Glenwood
Borgeson, Andrew A. (A.) ..... Santaquin
Brossard, Rowland Elmer (A.) ..... Logan
Brossard, Fred (G. S.) ..... Logan
Bullen, Milton (G. S.) ..... Logan
Burton, Vilate Pearl (G. S.) ..... Ogden
Carter, Ezra G. (A.) ..... Preston, Ida.
Christensen, Wallace (A.) ..... Layton
Christiansen, Archie L. (A.) ..... Fountain Green
Clark, William L. (G. S.) ..... Provo
Cole, Truman J. (G. S.) ..... Logan
Cook, Alfonzo Laker (A.) ..... Garden City
Costley, Blanche (D. S.) ..... St. Anthony, Ida.

Costley, Grant (A.) ..... St. Anthony, Ida.
Costley, Richard (C.) ..... Ogden
Crockett, Vernon (A.) ..... Logan
Dalton, William Shanks (A.) ..... Willard
Day, Mrs. Bessie W. (D. S.) ..... Kanab
Decker, J. B. (A.) ..... Monticello
Eames, Aerial G. (A.) ..... Preston, Ida.
Farnsworth, Karl (A.) ..... Logan
Fister, George Morgan (G. S.) ..... Logan
Frederickson, Ida (D. S.) ..... Malad, Idaho
Greenhalgh, Violet Maurine (C.) ..... Logan
Halls, Francis William (A.) ..... Mancos, Colo.
Hansen, Henry L. (A.) ..... Salt Lake City
Haslam, James Jones (C.) ..... Wellsville
Hayball, Edith (D. S.) ..... Logan
Hayball, Lucile (D. S.) ..... Logan
Haws, Wesley Walter (A.) ..... Logan
Hendrickson, Guy M. (G. S.) ..... Logan
Hobson, Ivan (A.) ..... Ogden
Hunsaker, Veda (D. S.) ..... Honeyville
Hunsaker, LeGrand (A.) ..... Honeyville
Jackson, Frank (A.) ..... Randolph
Jensen, Sylvia (C.) ..... Logan
Johnson, Myrtle Ivy (D. S.) ..... Logan
Jones, Albert Edwin (A.) ..... Logan
Johnson, Elmer (G. S.) ..... Logan
Kewley, Robert James (A.) ..... Logan
Knudson, Warren William (A.) ..... Brigham
Lee, Lucile (D. S.) ..... Hoytsville
Lewis, Clair (C.) ..... Logan
Lewis, Ward (G. S.) ..... Coalville
Lewis, Lorin (A.) ..... Lewiston
Lindsay, George William (A.) ..... Logan
Lloyd, Sadie (D. S.) ..... Salt Lake City
Madsen, Vera (C.) ..... Logan
Maughan, Russell L. (A.) ..... River Heights
Minear, Virgil L. (A.) ..... Salt Lake City
Mohr, Ernest (A.) ..... Logan
Morgan, Willis B. (A.) ..... Collinston
Morrell, Della (D. S.) ..... Logan
Muir, William S. (G. S.) ..... Logan
McAlister, Ward (A.) ..... Logan
Nelson, Anthon (G. S.) ..... Honeyville
Nelson, Etta (D. S.) ..... Logan
Peart, Marguerite (D. S.) ..... Logan
Peterson, Ray Hugh (G. S.) ..... Preston, Idaho
Peterson, Vern (A.) ..... Richfield
Pond, Zera Whittle (G. S.) ..... Lewiston
Powell, William Hartlett (A.) ..... Salt Lake City
Price, Robert Leatham (A.) ..... Wellsville
Reeder, John F. (G. S.) ..... Hyde Park
Robinson, John C. (G. S.) ..... Lyman, Idaho

Smith, Leslie Albert (A.) ..... Logan
Smith, Heber Lawrence (A.) ..... Logan
Sneddon, James Yates (G. S.) ..... Glencore, Wyo.
Stoddard, David D. (G. S.) ..... Logan
VanOrden, Elbert Clark (G. S.) ..... Lewiston
VanOrden, J. Bertrand (G. S.) ..... Lewiston
Walker, Leveir Esmond (A.) ..... Logan
Walker, Della Eleanore (C.) ..... Logan
Waugh, William Francis (A.) ..... Logan
Woodbury, Orrin Nelson (A.) ..... St. George
Wyatt, Ralph A. (A.) ..... Wellsville

SPECIALS

Allen, Alburn E. (G. S.) ..... Providence
Armstrong, Florence J. (D. S.) ..... Ephraim
Bjarnason, Lofter (G. S.) ..... Logan
Bowen, Edith (G. S.) ..... Logan
Clark, Edward J. (G. S.) ..... Logan
Clark, Samuel E. (M.) ..... St. Charles
Cole, Ira A. (G. S.) ..... Logan
Cook, Edith (D. S.) ..... Logan
Cragun, Hyrum (G. S.) ..... Ogden
Cranney, Vera (M.) ..... Logan
Daines, George S. (G. S.) ..... Hyde Park
Decker, Mrs. Pearl A. (G. S.) ..... Monticello
England, Virginia (M.) ..... Logan
Ensign, George Calvin (A.) ..... Ogden
Greenhalgh, Eurilla (M.) ..... Logan
Hammond, Diantha (G. S.) ..... Providence
Hansen, Anna (G. S.) ..... Ogden
Harding, George David (G. S.) ..... Logan
Hawkes, Nellie May (G. S.) ..... Logan
Hendrickson, E. Vera (G. S.) ..... Logan
Howell, Mary (M.) ..... Logan
Jensen, Ethel (M.) ..... Logan
Johnson, Mabel (G. S.) ..... Logan
Lund, Lettie (M.) ..... Logan
Munro, Florence (G. S.) ..... Logan
Nebeker, Luella (G. S.) ..... Logan
Nebeker, Phebe (G. S.) ..... Logan
Peterson, John H. (A.) ..... Smithfield
Peterson, Othelia (G. S.) ..... Logan
Reese, George L. (G. S.) ..... Benson
Reese, Mary Norma (G. S.) ..... Benson
Rudolph, Mrs. Josephine Yates (G. S.) ..... Logan
Sorenson, John P. (G. S.) ..... Logan
Stewart, William H. (G. S.) ..... Logan
Woolf, Grace M. (D. S.) ..... Logan

AGRICULTURE.

THIRD YEAR.

Clark, Wallace R. ..... Morgan
Oldham, Lloyd P. ..... Paradise
Pendleton, Frank H. ..... Logan
Roundy, Edward S. ..... Benson

SECOND YEAR.

Aldous, Clarence M. ..... Huntsville
Allen, Robert Leslie ..... Colonia Juarez, Mex.
Anderson, Ernest L. ..... Logan
Anderson, Hans Christian ..... Colonia Diaz, Mex.
Bell, Floyd ..... Glenwood
Bernhisel, Everett Clark ..... Lewiston
Burnett, Grover ..... Logan
Caine, Alfred Ballif ..... Logan
Dorrien, Hugh Carleton ..... Soda Springs, Ida.
Goodwin, Charles ..... Logan
Hamilton, Ray Kennedy ..... Deseret
Hansen, Peter ..... Tremonton
Holmgren, Edwin J. ..... Bear River City
Hougaard, Wilford Ray ..... Logan
Hughes, Rowland ..... Logan
Jensen, Wilmer C. ..... Huntsville
Johnson, Michael, Jr. ..... College
Keaton, George D. ..... Logan
Lee, Fay Warren ..... Hoytsville
Lemmon, Henry J. ..... Logan
Lau, Joseph Cyril ..... Soda Springs
Madsen, Ray Mathew ..... Gunnison
Morrell, Thomas Heber ..... Logan
Morgan, Samuel ..... Logan
McCombs, Ezra Fisk ..... Logan
Nelson, Gus Andrew ..... Logan
Orme, Gilbert C. ..... Tooele
Owens, Stephens Lester ..... Willard
Pace, Sid ..... Castleton
Peart, John Kenneth ..... Logan
Rich, Walker Smith ..... Blackfoot, Ida.
Sharp, John Ajax ..... Vernon
Smith, Fred K. ..... Logan
Smith, Lewis Calder ..... Logan
Smith, Raymond ..... Logan
Southworth, Walter J. ..... Oakley, Ida.
Tanaka, Torizo ..... Logan
Thomas, James ..... Logan
Todd, Douglas McClean ..... Salt Lake City

Tuft, John W. ..... Centerfield
Willie, Allen L. ..... Mendon
Winsor, Walter F. ..... Enterprise

FIRST YEAR.

Adams, Basil Harris ..... Tremonton
Adams, Earl Dennis ..... Tremonton
Baddley, Leo William ..... Willard
Baird, Lorenzo ..... Logan
Baugh, Francis Heber, Jr. ..... Logan
Birch, Byron ..... Hoytsville
Bricker, George ..... Venice
Brossard, Howard Sylvester ..... Logan
Burke, Charles Walter ..... Hinkley
Christensen, Aaron Erastus ..... Bear River City
Clayton, Irving Emerson ..... Salt Lake City
Clayton, Charles Heber ..... Garland
Cook, Junius M. ..... Ogden
Cox, Alonzo E. ..... Ferron
Cowan, John Ray ..... Payson
Criddle, Lawrence Irvin ..... Hooper
Darley, Evan Owen ..... Wellsville
Dunn, Samuel C. ..... Ogden
Erickson, Harold Guy ..... Gunnison
Farrell, Martin Alexander ..... Eden
Fowles, Jacob T. ..... Fairview
Gardner, Grandison ..... Pine Valley
Harris, David Earl ..... Lago, Idaho
Jensen, Clinton ..... Logan
Jensen, Ernest E. ..... Garland
Jones, David W. ..... Cherry Creek, Ida.
Justesen, Leroy ..... Deseret
Keller, Joseph Franklin ..... Logan
Killpack, Calvin Lamar ..... Ferron
Lambert, Alfred William ..... Kamas
Leatham, John Steele ..... Wellsville
Lee, Henry Stanley ..... Logan
Lott, Peter Herman ..... Joseph
Merrill, Rosco Cyril ..... Richmond
Miles, Douglas ..... Smithfield
Miles, John Edward ..... Paradise
Munk, Newell E. ..... King
McAlister, Wallace ..... Logan
Nelson, Everett ..... Heber City
Nielson, George W. ..... Hyrum
Owen, Cyril Benson ..... Wellsville
Oyler, Joseph ..... East Garland
Pederson, Moses Benjamin ..... Logan
Perkins, Evan Owen ..... Wellsville
Perkins, John Glenn ..... Wellsville
Peterson, Vernon ..... Logan

Peterson, Victor A. ..... Logan
Pocock, Joseph Harvey ..... Tooele
Pond, Letho T. ..... Thatcher, Idaho
Russell, Daniel Lawrence ..... East Mill Creek
Sorenson, Ellick Joseph ..... Bear River City
Seeley, James H. ..... Mt. Pleasant
Steele, Parley Bunker ..... Panguitch
Tolley, Eugene ..... Nephi
Thatcher, Nathan Davis ..... Thatcher, Idaho
Thompson, Thomas H. ..... Spring City
Vibrans, Lewis Cresty ..... Cokeville, Wyo.
Welling, Franklin Moroni ..... Garland
Willis, Fred Carson ..... Logan
Wood, Charles Warren ..... Huntsville
Woodall, Wallace John ..... Soda Springs, Ida
Woodland, Noah Lorenzo ..... Richmond
Woolley, John Franklin ..... Grantsville
Williams, Sylvester C. ..... Teasdale
Zwahlen, Samuel Henry ..... Ferron

FORESTRY.

Adamson, Jesse Willis ..... Meadow
Alsop, John Daniel ..... Jackson, Wyo.
Anderson, Joseph Franklin ..... Ephraim
Arthur, Scipha Burt ..... Mackay, Ida.
Bach, James Frederick ..... Oakley, Ida.
Baker, Philip ..... Thurber
Bagley, Edward Carroll ..... Koosharem
Brough, Walter Fanthorp ..... Nephi
Beam, Chas. Alexandria ..... St. Anthony
Borston, Glidden John ..... Afton, Wyo.
Bowen, William Jones ..... Spanish Fork
Bretherton, George Willis ..... Belmont
Burke, Robert Emmett ..... Ely, Nev.
Butler, Frank Murray ..... Wayan
Carpenter, Grant ..... Vernal
Christensen, Edward Morris ..... Forney, Ida.
DeLong, James Honston ..... Circleville
Deviney, Charles Harry ..... Jackson, Wyo.
Dodds, William Reese ..... Panguitch
Fetherolf, Nathan Jacob ..... Salt Lake City
Fotheringham, Edmund ..... Circleville
Foster, Joseph Donny ..... Provo
Graham, Fred ..... Afton, Wyo.
Gray, Charles Thaddeus ..... Boise, Ida.
Gunther, Albert ..... Jackson, Wyo.
Hardy, Albert A. ..... Vernal
Hatch, Marvin M. ..... Scipio
Hedreck, Frank ..... Boise, Ida.
Henrie, Samuel Erastus ..... Panguitch
Herrick, Coit Elisha ..... Ferron

Huffman, Edgar Penwell ..... Mackay, Ida.
Job, Wallin Thomas ..... Challis, Ida.
Joise, Ernest Preston ..... Auburn, Wyo.
Kerby, David Henry ..... Crawford, Ida.
McCall, James Donson ..... McCall
McCoy, Melvin Ray ..... Ketchum, Ida.
McNamara, Hubert Andrew ..... Lamoille, Nev.
McPheters, Herbert Graham ..... Hinkley
McPheters, Wallace ..... Ketchum, Ida.
Maelzer, Julius Godfrey ..... Mackay, Ida.
Moody, Joseph Milton ..... St. George
Peterson, Truman Roy ..... Oakley, Ida.
Porter, Joseph Jared ..... Escalante
Riddle, Wallace Monroe ..... Panguitch
Robins, Clark Henry ..... Scipio
Robins, James Wells ..... Scipio
Romero, Andrew ..... Mt. Pleasant
Say, Arthur Percival ..... Pebble, Ida.
Smith, Joseph Mikel ..... Draper
Smith, Richard Lee ..... Garrison
Smith, William Wiley ..... Jackson, Wyo.
Smith, William Willie ..... Murray
Snow, Ellis Bernard ..... Indian Valley, Ida.
Stoddard, Samuel Williamson ..... Spencer, Ida.
Swan, William ..... Salmon
Swift, Hamilton Hunt ..... Ketchum, Ida.
Taylor, Ed ..... Moab
Tremewan, Will Henry ..... Elko, Nev.
Tuft, Albert Henry ..... Moroni
Ward, Elizah ..... Wilson, Wyo.
Williams, David Henry ..... Ferron
Woolstenhulme, Thomas E. ..... Theodore

HORTICULTURAL INSPECTION.

Brereton, R. W. ..... Provo
Behunin, Joseph ..... Ferron
Busby, Thomas B. ..... Logan
Davis, Elisha H. ..... Lehi
Ensign, Dewey Richards ..... Ogden
Fenton, Nelson T. ..... Pleasant Grove
Gadd, Albert V. ..... Nephi
Green, James W. ..... Tremonton
Hammond, Alma ..... Providence
Hansen, Peter ..... Paradise
Isaacson, Carl ..... Brigham City
Jeffs, Arthur James ..... Castle Dale
Kesler, Murray ..... Nephi
Kemsley, Jesse ..... Ogden
Leigh, Samuel ..... Cedar City
Molyneaux, Willard ..... Mona
Mohr, Aaron P. ..... Elgin

Nebeker, Hyrum ..... Laketown
Olsen, Gideon E., Jr. ..... Paradise
Phillips, Hyrum ..... Morgan
Reese, Howard ..... King
Reese, William Griffith ..... King
Rydalch, William M. ..... Grantsville
Simpson, Leon Lee ..... Salt Lake City
Smith, James Osborn ..... East Mill Creek
Smith, Joseph Milkel ..... Draper
Stay, Joseph Charley ..... Salt Lake City
Telford, Samuel Robinson ..... Richmond
Williams, Nephi ..... Bear River City
Wright, William James ..... Coalville

ROUND-UP.

Allred, Aaron ..... Lehi
Allred, Gurnett ..... Lehi
Almond, James ..... Logan
Ball, Leroy A. ..... Logan
Boyden, James ..... Provo
Boswell, Stephen ..... Nephi
Broby, Niels R. ..... Wellsville
Bickmore, W. R. ..... Richmond
Chadwick, Joseph Albert ..... North Ogden
Clark, George A. ..... Garland
Clark, Lawrence W. ..... Morgan
Clark, Wilford Woodruff, Jr. ..... Montpelier, Ida.
Cook, Joseph W. ..... Paris, Ida.
Crookston, Nicholas Oscar ..... Greenville
Dalley, Milton F. ..... Logan
Eschler, Eugene ..... Paris, Ida.
Eschler, Gottfried ..... Paris, Ida.
Fisher, Victor Russell ..... Oxford, Ida.
Fox, James W. ..... Murray
Fuhriman, Godfrey ..... Pocatello
Fuhriman, Godfrey Jared ..... Pocatello
Fuller, George A. ..... Eden
Gray, James ..... Randolph
Hall, George H. ..... Huntsville
Hall, George H. ..... Ogden
Halls, John ..... Huntsville
Hammond, Nathaniel R. ..... Canada
Hansen, George D. ..... West Portage
Hansen, R. C. ..... Huntsville
Harper, William F. ..... Smithfield
Hoalst, Charles R. ..... Moore, Ida.
Homer, Nels Russell ..... Farr West
Hurren, James William David ..... Hyde Park
Hyde, Wilford Andrew ..... Afton, Wyo.
James, William Thomas ..... Paradise
Jackson, Alma O., Jr. ..... Avon

Jackson, David ..... Logan
Jensen, Aaron Leroy ..... Geneva
Jones, B. Wowell ..... Dewey
Larsen, Edward ..... Logan
Larsen, Grover Elgin ..... Logan
Larsen, Niels C. ..... Ferron
Livingston, Archibald ..... Gunnison
Madsen, Teddy E. ..... Mount Pleasant
Manning, Henry ..... Garland
Marshall, Charles F. ..... Franklin
Martineau, Nephi ..... Benson
Maughan, John H. ..... Logan
McMullin, A. O. ..... South Jordan
McMurdie, David Milton ..... Paradise
Newburn, D. A. ..... Tremonton
Nielson, Peter W. ..... Logan
Olsen, James G. ..... Ephraim
Olssen, Carl J. ..... Logan
Owens, Silas S. ..... Panquitch
Oyler, John O., Jr. ..... Garland
Page, Duke ..... Riverton
Page, Gwynne ..... Riverton
Parker, Gilbert ..... Hooper
Peterson, H. C. ..... Logan
Peterson, Parley ..... Castle Dale
Peterson, Peter C. ..... Richmond
Peterson, Peter T. ..... Logan
Pohl, Edward ..... Logan
Rasmussen, George ..... Wellsville
Reese, Andrew James ..... Benson
Reese, Alma Victor ..... Benson
Reese, Charles Albert ..... Benson
Reese, R. O. ..... Benson
Rich, John E. ..... St. Charles
Rich, Ray C. ..... St. Charles
Sammons, O. C. ..... Logan
Singleton, John W. ..... Hooper
Smyth, Ada C. ..... Fountain Green
Sorenson, Soren P. R. ..... Logan
Stallings, Virgil B. ..... Eden
Steed, Amasa Merlin ..... Farmington
Stookey, M. M. ..... Clover
Swain, Joseph F. ..... Clarkston
Thurston, S. B. ..... Hyde Park
Turpin, Leroy ..... Murray
Waldron, Walter G. ..... Morgan
Walker, Frank L. ..... Logan
Welch, Parley J. ..... Paradise
Wheatley, Seth ..... Honeyville
Woodward, Cecil ..... Franklin, Ida.
Zollinger, William ..... Providence

DOMESTIC SCIENCE.

SECOND YEAR.

Adams, Janetta ..... Logan
Barney, Malinda ..... Cowley, Wyo.
Bullen, Edith ..... Richmond
Hatch, Ella ..... Logan
Hofheins, Florence ..... Gunnison
Holmgren, Andrea ..... Bear River City
Holmgren, Ruth ..... Bear River City
Homer, Ruth ..... Logan
Jardine, Nessie H. ..... Charleston
Lee, Winnifred ..... Hoytsville
Nielson, Pearl ..... Logan
Peterson, Nettie ..... Logan
Richardson, Ivie ..... Ogden
Smurthwaite, Florence ..... Logan
Snow, Emma Jane ..... Teasdale
Wadman, Ruby ..... Logan

FIRST YEAR.

Bates, Ada J. ..... Logan
Barrow, Ethel ..... Warren
Buehler, Evelyn ..... Salt Lake City
Cahoon, Bertha ..... Murray
Cederlund, Vivian ..... Logan
Christensen, Gladys L. ..... Logan
Crompton, Erma ..... Garland
Dahle, Ethel ..... Logan
Dahle, Elizabeth ..... Logan
Daniels, Madella O. ..... Logan
Hodson, Edith ..... Warren
Jardine, Irene ..... Clarkston
Johnson, Eldora ..... Logan
Johnson, Otilla ..... Logan
Johnson, Roselyn ..... Spanish Fork
Johnson, Ruth ..... Logan
Jones, Amelia ..... Logan
Mahoney, Chloe Beatrice ..... Albion, Ida.
Mason, La Verne ..... Riverside
Metcalf, Talula Emma ..... Gunnison
Meldrum, Grace E. ..... Tremonton
Miles, Jennie ..... Paradise
Nyman, Rachel ..... Greenville
Porter, Delila ..... Logan
Rigby, Ida ..... Newton
Smith, Ethel ..... Logan
Walker, Laura P. ..... Eden
Young, Helen Shirley ..... Logan

COMMERCE.

THIRD YEAR.

Cowley, Abner I.	Venice
Horsley, Leroy C.	Logan
Jansen, Gilbert L.	Gunnison
Montrose, John L.	Logan
Munro, Mamie	Logan
Nelson, Mamie Cornelia	Glenwood
Oldroyd, Lorin	Price
Pace, Henry A.	Logan
Peterson, Clara Matilda	Logan
Tarbet, Agnes	Lago, Ida.
Wright, Leslie	

SECOND YEAR.

Barber, Walter Farrell	Logan
Barber, Wynona	Logan
Busby, Thomas Delancy	Lewiston
Bybee, Jefferson	Logan
Caine, Arthur Hugh	Murray
Cahoon, Ray Procter	American Fork
Chipman, Thomas L.	Greenville
Crookston, Newell James	Huntsville
Felt, Earl	Logan
Gill, Jesse C.	Idaho Falls
Hansen, Albert Levi	Logan
Hart, Viola Genevieve	Richmond
Hendricks, Ortensia	College
Johnson, Henry	Alexander, Ida.
Johnson, John	Ferron
Killpack, Gertrude	Mendon
Larsen, May	Downey, Ida.
Laurenson, Edward	Blackfoot, Ida.
Lindsay, James Edward	Lewiston
Litz, William Edward	Rockland, Ida.
Morris, Edward	Logan
Nelson, Harriet	Greenville
Nelson, Lewis E.	Greenville
Nyman, Della	Logan
Palmer, Alfred Allen	Mt. Home, Ida.
Pence, John Otto	Richmond
Peterson, Pearl	Lewiston
Pond, Irene	Logan
Redford, Lou	Mt. Pleasant
Romero, Amy H.	Logan
Walters, Sara	St. George
Woodbury, Joseph R.	Logan
Woolf, Ruby	

FIRST YEAR.

Allred, Clark ..... Deseret
Anderson, Alvida ..... Greenville
Anderson, Joseph A. ..... Logan
Barber, Seth Langton ..... Logan
Bartlett, Allen ..... Salt Lake City
Bassett, Ross Crook ..... Lago, Ida.
Beatie, Leroy ..... Salt Lake City
Bjork, Anna Laura ..... Murray
Boyle, John Milton ..... Arco, Ida.
Carter, J. Irwin ..... Park Valley
Cowley, Charles Harold ..... Logan
Crockett, Eva ..... Logan
Eakins, Charles Alexander ..... Salt Lake City
Edwards, Clinton Moroni ..... Gunnison
Edwards, Mae ..... Logan
Eliason, Alfred Archie ..... Grantsville
Emett, Elsie ..... Cedar City
Forbes, Clarence G. ..... Layton
Haslam, Grover M. ..... Wellsville
Hoalst, Louis Abner ..... Logan
Jensen, Orin ..... Geneva
Johnson, David ..... Alexandria
Johnson, Thorber Cannon ..... Spanish Fork
Kartchner, Orrin Karl ..... Logan
Killpack, W. L. ..... Ferron
Korupkat, Tirzah ..... Logan
Leatham, Howard P. ..... Wellsville
Lindquist, George Alonzo ..... Wellsville
McCulloch, Lillian ..... Logan
MacKenzie, Katie ..... Logan
McGarry, Margaret McKay ..... Independence
McMurdie, Samuel M. ..... Paradise
Nebeker, Vilate ..... Logan
Nielson, George W. ..... Hyrum
Nisson, Clarence W. ..... Logan
Nokes, Benjamin Hamilton ..... Riverton
Nyman, Vilate ..... Greenville
Olsen, Florence ..... Logan
Ormond, Lillie M. ..... Greenville
Pace, Barlow Wilford ..... Loa
Penrod, George Marion ..... Warren
Perkins, Vira ..... Monticello
Roberts, Joseph James ..... Paradise
Robinson, Elmer Charles ..... Logan
Sjostrom, Joseph Emil ..... Logan

WINTER COURSE.

Carlson, Raymond ..... Logan
Coburn, Fred L. ..... Wellsville

Day, Glen ..... Layton
Howard, Dewey ..... Rockland, Ida.
Jensen, Ezra ..... Garland
Johnson, Frank ..... Tremonton
McIntire, Oscar ..... Price
McKinnon, Ernest ..... Randolph
Mizer, Thomas ..... Logan
Owens, Earl ..... Garland
Picot, Alfred George ..... Logan
Rigby, Parley ..... Newton
Turner, George Cleveland ..... Logan
Ware, Leo ..... Layton
Wiggill, Emmett Whiteside ..... Layton

MANUAL TRAINING DOMESTIC SCIENCE.

THIRD YEAR.

Adams, Katie ..... Layton
Cole, Zina ..... Willard
Fuller, Lyda ..... Eden
Holden, Mittie ..... Logan
Nyman, Teenie ..... Greenville
Reese, Wanda ..... King

SECOND YEAR.

Adams, Gretta ..... Logan
Collett, Imogene ..... Cokeville, Wyo.
Forgeon, Muriel ..... Cokeville, Wyo.
Hale, Sarah Annie ..... Logan
Harris, Charlotte ..... Glendale
Holden, Susie ..... Logan
Nelson, Jennie ..... Greenville

FIRST YEAR.

Adair, Josie ..... Logan
Beal, Mazie ..... Richfield
Bell, Lexie ..... Glenwood
Coleman, Sarah Malinda ..... Teasdale
Conant, Gladys ..... Kelton
Crookston, Elease ..... Logan
Davis, Gwendolia ..... Logan
Hall, Ethel ..... Logan
Jorgesen, Grace V. ..... Hyde Park
Jorgesen, Vera Laven ..... Hyde Park
Larsen, Edith Lucinda ..... Newton
Lee, Hazel Jane ..... Leorin, Ida.
Lindquist, Verna ..... Logan
Mason, Camilla ..... Fielding
Mohr, Anna Lenia ..... Logan

Morgan, Kate ..... Logan
Oldroyd, Colleen ..... Glenwood
Osmond, Effie ..... Logan
Oyler, Clara ..... Garland
Pendleton, Nellie ..... Logan
Peterson, Clarice M. ..... Logan
Peterson, Caroline ..... Logan
Peterson, Stella ..... Brigham
Poulter, Cordelia ..... Logan
Smith, Margaret Irma ..... Providence
Snow, Hazel May ..... Teasdale
Tarbet, Emma ..... King
Tarbet, Zella ..... King
Wilson, Katie ..... Teasdale

WINTER COURSE.

Arthur, Mrs. Mabel Paxton ..... Mackay, Ida.
Brough, Mrs. Emma Anderson ..... Nephi
Johnson, Myrtle ..... Logan
Woolstenhulme, Mrs. Thyrza Pack ..... Kamas

HOUSEKEEPERS' CONFERENCE.

Adamson, Mrs. F. K. ..... Meadows, Ida.
Burdette, Miss ..... Logan
Clark, Mrs. ..... Logan
Fleming, Mrs. Nancy B. ..... Logan
Johnson, Olive ..... Logan
Nielson, Katharine ..... Huntsville
Smith, Emily ..... Logan
Smurthwaite, Mrs. Florence ..... Logan
Stephenson, Mabel ..... Holden
Stewart, Mrs. Jane ..... Logan
Thomas, Sadie ..... Logan
Walker, Eva Aurila ..... Logan

MECHANIC ARTS.

FOURTH YEAR.

Alder, John Alfred ..... Manti
Webb, Heber Jarvis ..... St. George

THIRD YEAR.

Barber, Herbert R. ..... Logan
Gorton, Ralph S. ..... Logan
Steed, James T. ..... Tremonton
Walters, Alexander Herron ..... Logan
Wright, Joseph M. ..... Hinkley

SECOND YEAR.

Barrett, Vernon ..... Logan
Brinkerhoff, Royal ..... Thurber
Haws, Vaughan ..... Logan
John, Henry E. ..... Samaria
Kallstrom, Herbert ..... Logan
Linford, Preston ..... Panguitch
Petersen, Nils Andrew ..... Huntsville
Sessions, Charles Elmer ..... Syracuse
Singleton, Morris ..... Ferron
Thomson, George Asa ..... Richmond
Whitehead, Chester ..... St. George
Worley, Eugene ..... Logan

FIRST YEAR.

Ackerson, Rolla ..... Modena
Adams, William E. ..... Layton
Allen, Jesse R. ..... Teasdale
Bair, Joseph LeRoy ..... Alpine
Berrett, Edward ..... North Ogden
Reus, Rudeth ..... Soda Springs, Ida.
Beus, William ..... Soda Springs, Ida.
Cahoon, Arthur ..... Deseret
Chambers, William Leonidas ..... Eden
Clays, Charley Peter ..... Bingham
Crookston, Robert Burns ..... Greenville
Danielson, David Hirst ..... Paradise
Davidson, Hans Arthur ..... Fairview
Edlefsen, Edlef ..... Logan
Elson, Nicholas Ormes ..... Corinne
Embley, Junius S. ..... Centerfield
Evans, William ..... Panguitch
Felt, Arthur William ..... Huntsville
Fisher, Asael ..... Meadow
Forsey, David ..... Mammoth
Froerer, Don Carlos ..... Huntsville
Froerer, Junius ..... Huntsville
Furner, George Thomas ..... Mammoth
Galli, Clarence Joseph ..... Midway
Grover, Millard ..... Garland
Hand, Heber ..... Benjamin
Hedden, Joseph William ..... Logan
Jelte, Harlow Edward ..... Smithfield
Jorgensen, William H. ..... Logan
Kelley, Conrad A. ..... Logan
Madsen, Brigham ..... Riverton
Mason, William Mum ..... Riverton
Merrill, William Paul ..... Richmond
Moore, George ..... Moab

Nelson, James Horace ..... Huntsville
Pace, Marion ..... Salina
Painter, Thomas, Jr. ..... Evanston
Peart, Norman Clyde ..... Logan
Pederson, Arthur ..... Hinkley
Perry, Raymond ..... Cedar City
Reese, Andrew Lee ..... King
Richardson, Jacob Z. ..... Ogden
Smith, Donald ..... Logan
Thompson, Fred ..... Spring City
Wadley, Joseph ..... Lindon
Walters, Malcolm Ava ..... Tooele
Watkins, Thomas R. ..... Logan
Willey, Owen ..... Layton
Woolley, Alonzo ..... Grantsville
Zbinden, Ulrich ..... Logan

WINTER COURSE.

Abrams, Charles ..... Logan
Adams, Asa ..... Layton
Anderson, Carlesilie ..... Bear River City
Anderson, Ernest Raymond ..... Moroni
Ballam, Willard ..... Hyde Park
Ballard, Henry W. ..... Benson
Benson, Guy ..... Logan
Bunker, Benjamin ..... Bunkerville, Nev.
Crookston, Byron ..... Logan
Crookston, Nicholas ..... Logan
Dahle, LaVere ..... Charleston
Doutre, Stephen ..... Logan
Goodwin, Robert ..... Logan
Hansen, Leonard ..... American Fork
Hansen, Andrew Walters ..... Logan
Hobbs, Albert ..... Logan
Hodge, William B. ..... Logan
Holmes, Robert F. ..... Liberty
Hunsaker, Horace ..... Honeyville
Ipson, Hazell A. ..... Ogden
Izatt, William ..... Logan
Johnson, Austin ..... Richmond
Johnson, Oliver ..... Logan
McClellan, Flintoff C. ..... Payson
Miller, Henry W. ..... Newton
Muir, Frank ..... Logan
Neal, Burt ..... Ogden
Payne, Myron ..... Hooper
Parry, Edward H. ..... Cedar City
Porter, Victor ..... Porterville
Powers, George ..... Smithfield
Shaw, John Riley ..... Ogden
Spencer, Alvin ..... Riverton

Summers, Arthur ..... Avon
Washburn, A. Leo ..... Wales
Wood, Thomas W. ..... Huntsville
Wursten, John ..... Logan

COLLEGE PREPARATORY.

SECOND YEAR.

Bell, Ivan E. ..... Glenwood
Benson, Gretta ..... Helena, Mont.
Bullen, Bryant ..... Richmond
Carlson, Olgo M. ..... Smithfield
Cragun, LaVon ..... Smithfield
Davis, John ..... Logan
DeWitt, Millicent Gladys ..... Logan
Frew, Eugene ..... Hooper
Goodwin, Nettie ..... Logan
Griffin, Amos ..... Newton
Haycock, Frank ..... Panguitch
Johnson, Theodore R. ..... Grantsville
Linnartz, Emma ..... Logan
Mason, Louise ..... Fielding
Merrill, Alberto Eugene ..... Smithfield
McGregor, Charles ..... Logan
Nelson, Olof H. ..... Logan
Peterson, Lester ..... Logan
Pond, William Leon ..... Lewiston
Powell, Lorin ..... Salt Lake City
Preston, Verne M. ..... Logan
Rose, Guy ..... Greenville
Rose, Wallace ..... Greenville
Sammons, Neil Frank ..... Logan
Stephenson, Mattie ..... Holden
Stoops, Robert C. ..... Logan
Watts, Joseph H. ..... Smithfield
Wood, Arthur S. ..... Monticello

FIRST YEAR.

Aldous, Tura M. ..... Huntsville
Baylis, Thomas A. ..... Logan
Gray, Leo ..... Logan
Hansen, Bernard ..... Providence
Linnartz, Anna L. ..... Logan
Molyneaux, Alma Ray ..... Logan
Odgers, Milton M. ..... Cherry Creek, Nev.
Peterson, Hugh Geddes ..... Preston
Skanchy, Fritjof ..... Logan
Sorenson, Niels ..... Mayfield

OPTIONALS.

Alder, Mrs. Jennie (D. S.) ..... Manti
Bailey, Henry J. (M.) ..... Logan
Crookston, Agnes (D. S.) ..... Logan
Curtis, Arthur (M.) ..... Robin, Ida.
Eccles, Marie (D. S.) ..... Logan
Farnsworth, Emily S. (D. S.) ..... Logan
Frederick, Maurine (D. S.) ..... Providence
Hammond, Alta (D. S.) ..... Logan
Izatt, Irene (C.) ..... Logan
Lambert, Mrs. Laura (D. S.) ..... Kamas
Mace, S. Jane (D. S.) ..... Kanab
Madsen, Ilta (M.) ..... Logan
Maelzer, Mrs. Theresa W. (D. S.) ..... Logan
Murdock, LaVerne (M.) ..... Logan
McChrystal, Jason (M. A.) ..... Logan
Nelson, Essie (D. S.) ..... Logan
Olsen, John Emil (G. S.) ..... Logan
O'Rell, Charlotte (D. A.) ..... Hyrum
Parry, Vaughn (G. S.) ..... Logan
Peterson, Eleda (D. S.) ..... Logan
Purser, James (A). ..... Logan
Purser, Mrs. Martha (D. S.) ..... Logan
Riggs, Emily (D. S.) ..... Kanab
Seymour, Gladys (G. S.) ..... Kamas
Snow, Lucina (C.) ..... Teasdale
Stewart, Vernal (A.) ..... Milburn
Sulser, Della (D. S.) ..... Midway
Wood, Jennie (G. S.) ..... Monticello

SUMMER SCHOOL.

Allen, A. E. ..... Logan
Allen, Priscilla ..... Logan
Anderson, Ida ..... Logan
Andrews, Michael, Jr. ..... Logan
Armstrong, Lucy ..... Logan
Baker, Bertha ..... Clarkston
Barnard, Nellie ..... Deweyville
Barrows, Harry Percy ..... Logan
Benson, Hazel ..... Newton
Benson, John ..... Garden City
Benson, Norma ..... Newton
Bickmore, Margaret ..... Paradise
Bitter, Martha ..... Collinston
Bradford, H. Lee ..... Spanish Fork
Breitenbucher, Hermina ..... Logan
Cardon, Isabella Roundy ..... Benson
Cassatt, Grace D. ..... Logan
Christensen, Jennie ..... Hyrum
Clark, E. J. ..... Logan

Cragun, Pearl ..... Ogden
Cranney, Vera ..... Logan
Crookston, Jean ..... Greenville
Crookston, Lucile ..... Greenville
Curtis, Ray Barker ..... Logan
Danielson, Rose ..... Paradise
Dixon, Veda ..... Payson
Dunford, Alice ..... Salt Lake City
Erickson, Esther ..... Logan
Farr, Eva ..... Logan
Farrell, Gladys ..... Smithfield
Farrell, Lorraine ..... Logan
Gardner, George ..... Pine Valley
Gardner, Lavina ..... Pine Valley
Goodwin, Edna ..... Logan
Grant, Mary A. ..... Hyde Park
Greene, Margaret ..... Layton
Harvey, Ray ..... Millville
Hawkes, Nellie ..... Logan
Hayball, Edith ..... Logan
Hickman, Joseph ..... Tremont
Hill, Bessie ..... Wellsville
Hillyard, Inez ..... Smithfield
Hirst, Charles T. ..... Logan
Hoopes, George A. ..... Logan
Humpherys, Emmeline ..... Paris
Hunsaker, Martha ..... Honeyville
Hunsaker, Pallie ..... Honeyville
Hyde, Clara ..... Logan
Johnson, Andrew ..... Cove
Jones, Hilda ..... Logan
Jones, Rose ..... Logan
Jones, Mamie ..... Logan
Kewley, Alice ..... Logan
Kewley, Ann ..... Logan
Killpack, F. A. ..... Ferron
King, Priscilla ..... Logan
Larsen, Mamie ..... Preston
Liljenquist, Katie ..... Hyrum
Mattson, Edith ..... St. Charles
Mattson, Millie ..... St. Charles
Maughan, Inez ..... Logan
Monro, Florence ..... Logan
Morrison, John A. ..... Whitney, Ida.
Munk, Elizabeth ..... Logan
McCracken, Sadie ..... Smithfield
Nelson, Eleda ..... Logan
Nelson, Freda ..... Brigham City
Nelson, F. O. ..... Richmond
Nish, Bertha ..... Clarkston
Noble, Maggie ..... Smithfield
Nyman, Teenie ..... Greenville

Olsen, Emily ..... Paradise
Olsen, Evalyn ..... Logan
Olsen, Hilda ..... Hyrum
Parkinson, Elva ..... Hyrum
Parkinson, Louise S. ..... Logan
Parrish, Clara ..... Centerville
Parry, Esther ..... Hyrum
Peterson, Emma ..... Santaquin
Peterson, Esther ..... Hyrum
Peterson, Clara V. ..... Santaquin
Peterson, John H. ..... Smithfield
Peterson, William L. ..... Logan
Ralph, Ephraim T. ..... Brigham
Reese, Jesse ..... Benson
Reese, LeRoy ..... Benson
Redford, Mary L. ..... Logan
Redford, Nora ..... Logan
Ricks, Reda ..... Logan
Richards, Carrie ..... Fielding
Rohiver, Alice ..... Penrose
Roundy, Almeda ..... Benson
Shaw, Minnie ..... Paradise
Shipley, Elizabeth ..... Paradise
Shipley, W. C. ..... Paradise
Shipp, Baird ..... Logan
Smith, Rose ..... Brigham
Smith, Willis A. ..... Lewiston
Sonne, Nora ..... Logan
Sorenson, Lettie C. ..... Hyrum
Standley, Lucy ..... Logan
Stewart, James H. ..... Wellsville
Stewart, Robert H. ..... Wellsville
Stoops, Josephine ..... Logan
Stoops, Margaret ..... Logan
Tarbet, Florence ..... Logan
Thompson, Eunice ..... Tremont
Tovey, James C. ..... Malad
Watkins, Aurilla ..... Brigham
Whiting, Alice ..... Logan
Wilde, Zera ..... Brigham
Wilson, Esther ..... Hyrum
Woods, Francis ..... Lewiston
Woodbury, Orrin N. ..... St .George
Woodbury, George J. ..... St .George

SUMMARY OF COURSES.

Agriculture	412
Domestic Science and Arts	169
Commerce	138
General Science	73
Mechanic Arts	108
Music	11
College Preparatory	38
Summer School	115
	1,064
Names repeated	20
Total registration	1,044

SUMMARY BY YEARS.

Graduates	2
Seniors	42
Juniors	61
Sophomores	59
Freshmen	81
Fourth Year (with rank of Sophomore)	2
Third Year (with rank of Freshman)	26
Specials	35
Total of College Grade	308
Second Year	139
First Year	227
Optionals	28
Winter Course	247
Forestry	62
Horticultural Inspection	30
Commerce	15
Domestic Arts	4
Housekeepers' Conference	12
Mechanic Arts	37
Round-up	87
Total High School and Winter Courses	641
Summer School	115
	1,064
Less name repeated	20
Total registration	1,044

INDEX.