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Agricultural College of Utah

BULLETIN

GENERAL CATALOG

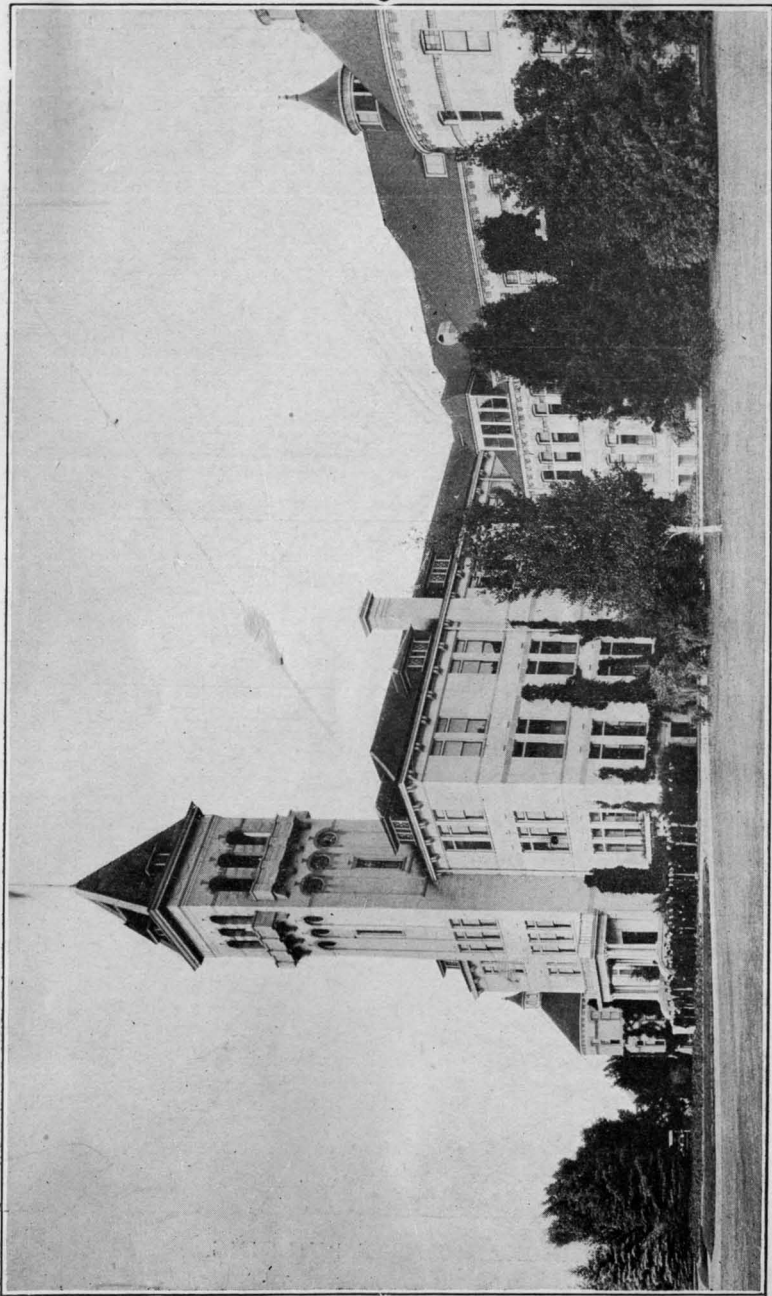
1920-1921

Thirty-first Year

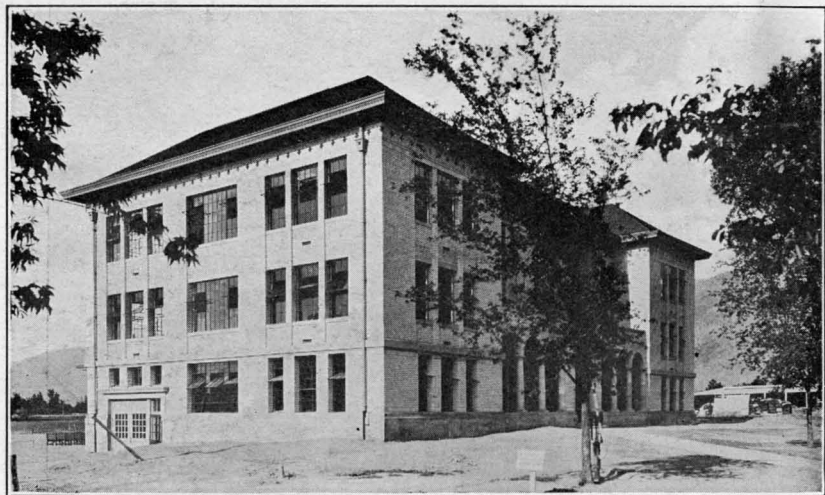
With List of Students for 1919-1920

LOGAN, UTAH

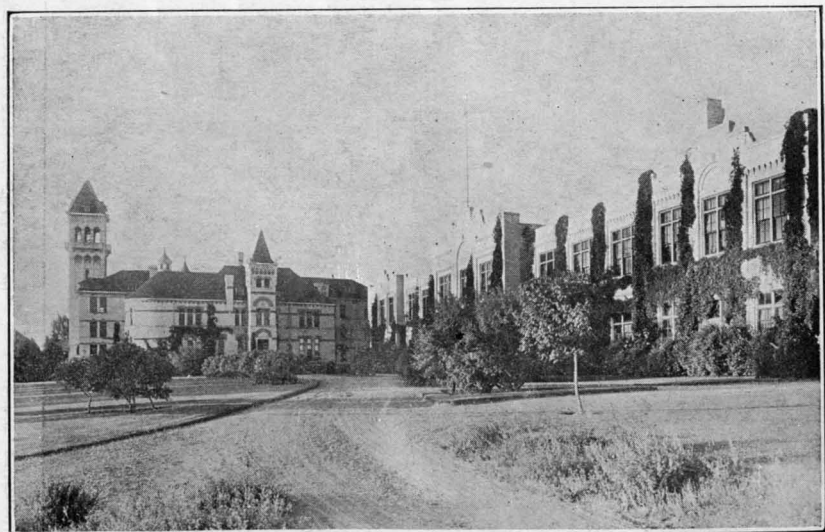
Published by the College
July, 1920



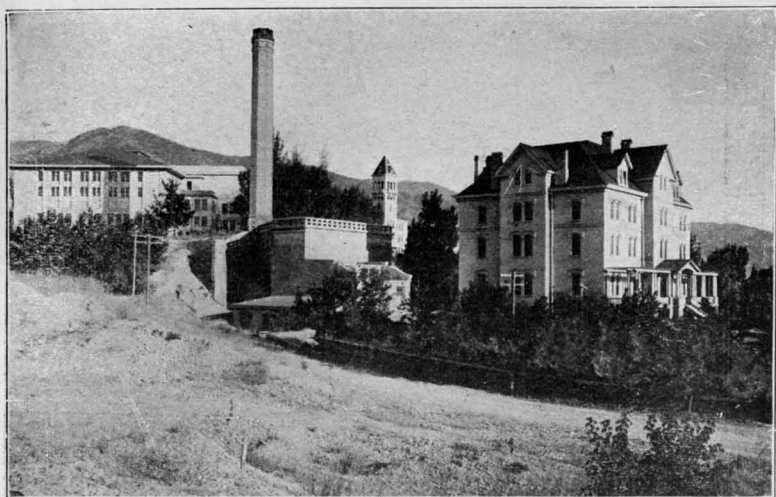
MAIN BUILDING



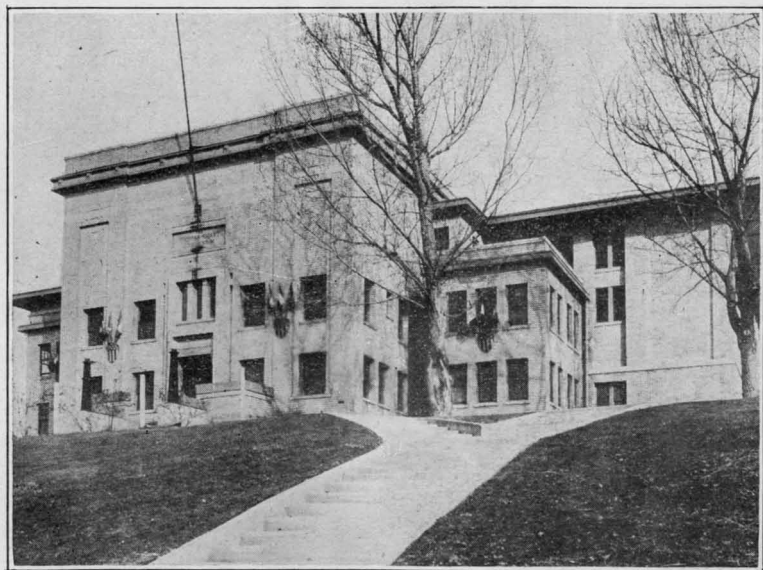
LIVESTOCK BUILDING



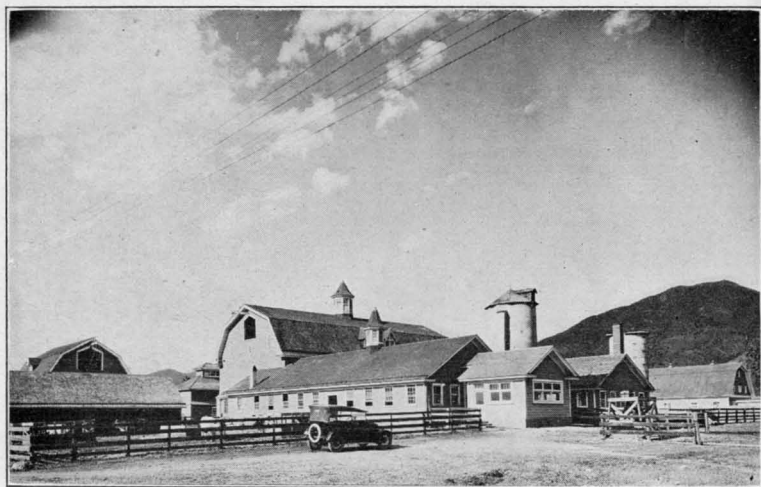
MECHANIC ARTS BUILDING.
Main Building in Background



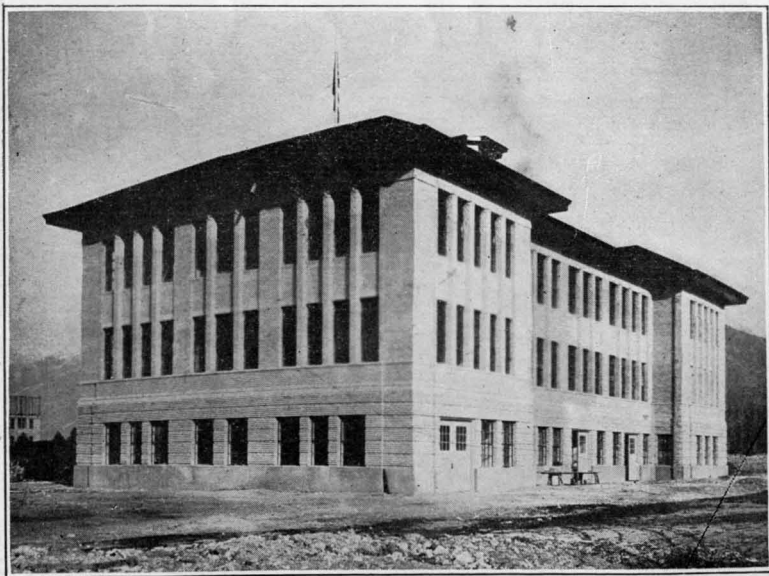
WOMEN'S BUILDING, RIGHT, HEATING PLANT, CENTER,
THOMAS SMART GYMNASIUM, LEFT
Tower of Main Building in center background.



THOMAS SMART GYMNASIUM



SHEEP CATTLE AND HORSE BARN, COLLEGE FARM



AGRICULTURAL ENGINEERING BUILDING

CALENDAR FOR 1920

JANUARY							APRIL							JULY							OCTOBER													
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S							
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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	31

FEBRUARY							MAY							AUGUST							NOVEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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15	16	17	18	19	20	21	9	10	11	12	13	14	15	15	16	17	18	19	20	21	14	15	16	17	18	19	20
22	23	24	25	26	27	28	16	17	18	19	20	21	22	22	23	24	25	26	27	28	21	22	23	24	25	26	27
29	23	24	25	26	27	28	29	29	30	28	29	30
..	30	31

MARCH							JUNE							SEPTEMBER							DECEMBER						
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..

CALENDAR FOR 1921

JANUARY							APRIL							JULY							OCTOBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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17	18	19	20	21	22	23	17	18	19	20	21	22	23	17	18	19	20	21	22	23	16	17	18	19	20	21	22
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30	31	31	30	31

FEBRUARY							MAY							AUGUST							NOVEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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6	7	8	9	10	11	12	8	9	10	11	12	13	14	7	8	9	10	11	12	13	6	7	8	9	10	11	12
13	14	15	16	17	18	19	15	16	17	18	19	20	21	14	15	16	17	18	19	20	13	14	15	16	17	18	19
20	21	22	23	24	25	26	22	23	24	25	26	27	28	21	22	23	24	25	26	27	20	21	22	23	24	25	26
27	28	29	30	31	28	29	30	31	27	28	29	30
..

MARCH							JUNE							SEPTEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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6	7	8	9	10	11	12	5	6	7	8	9	10	11	4	5	6	7	8	9	10	4	5	6	7	8	9	10
13	14	15	16	17	18	19	12	13	14	15	16	17	18	11	12	13	14	15	16	17	11	12	13	14	15	16	17
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27	28	29	30	31	26	27	28	29	30	25	26	27	28	29	30	..	25	26	27	28	29	30	31
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College Calendar for 1920-21

(Twelve weeks constitute a quarter; six weeks constitute a term.)

FALL QUARTER

September 13, Monday	Entrance examinations. Registration of former students and of new students admitted and certificates.
September 14, Tuesday	Classes organized.
October 25, Monday	Mid-term begins.
October 29, Friday	Periwig Club Play.
November 5, Friday	Agricultural Club Ball.
November 24, Wednesday	Fall quarter ends.
November 25-28,	Thanksgiving Recess.

WINTER QUARTER

November 29, Monday	Winter quarter begins
December 10, Friday	Debate Try-outs.
December 23—Jan. 4	Christmas Recess.
January 17-22	Farmers' Convention and Housekeepers' Conference at Cedar City.
January 24, Monday	Mid-Term begins.
January 24-29	Extension Division Convention at Logan.
Jan. 24-Feb. 5	Scoutmasters' Convention.
January 24, Monday	Oratorical Contest, Sons of American Revolution Medal.
Jan. 31-Feb. 5	Farmers' Convention and Housekeepers' Conference at Logan.
Jan. 31-Feb. 12	Exhibition of Arts and Crafts by Utah artists.
February 3, 4, 5	College Play.
February 4, Friday	Commercial Club Ball.
February 12, Saturday	Lincoln's Birthday.
February 14, Monday	Oratorical Contest—Hendricks Medal
February 21, Monday	Military Ball.
February 22, Tuesday	Washington's Birthday.
February 24, 25	College Opera.
March 5, Saturday	Winter quarter ends.

SPRING QUARTER

March 7, Monday	Spring quarter begins.
March 7-14	Fifth Annual Glee Club tour.
March 14, Monday	Oratorical Contest—Casto Medal.
March 18, Friday	Junior Promenade.
March 25, Friday	Freshman Play.
April 15, Friday	Arbor Day.
April 18, Monday	Mid-term begins
April 18-25	Annual Junior Extension week for High School Agricultural and Home Economics Clubs.
April 22, Friday	"A" Day.
April 25, Monday	College Science Contest—William Peterson Medal.
May 2, Monday	Senior Chapel
May 9, Monday	Conferring of Scholarships and other honors.
May 14, Saturday	May festival.
May 28, Saturday	Spring quarter ends.
May 28, Saturday	Annual Alumni business meeting and social.
May 29, Sunday	Baccalaureate Sermon.
May 30, Monday	Commencement and Alumni Ball

SUMMER QUARTER

June 6, Monday	Summer quarter begins.
June 10, Friday	Reception to Summer School stu- dents.
June 25, Saturday	Annual excursion.
July 4, Monday	Independence Day.
July 15, Friday	First-term ends.
July 18, Monday	Second term begins.
July 25, Monday.	Pioneer Day.
August 26, Friday.	Summer quarter ends.

Board of Trustees

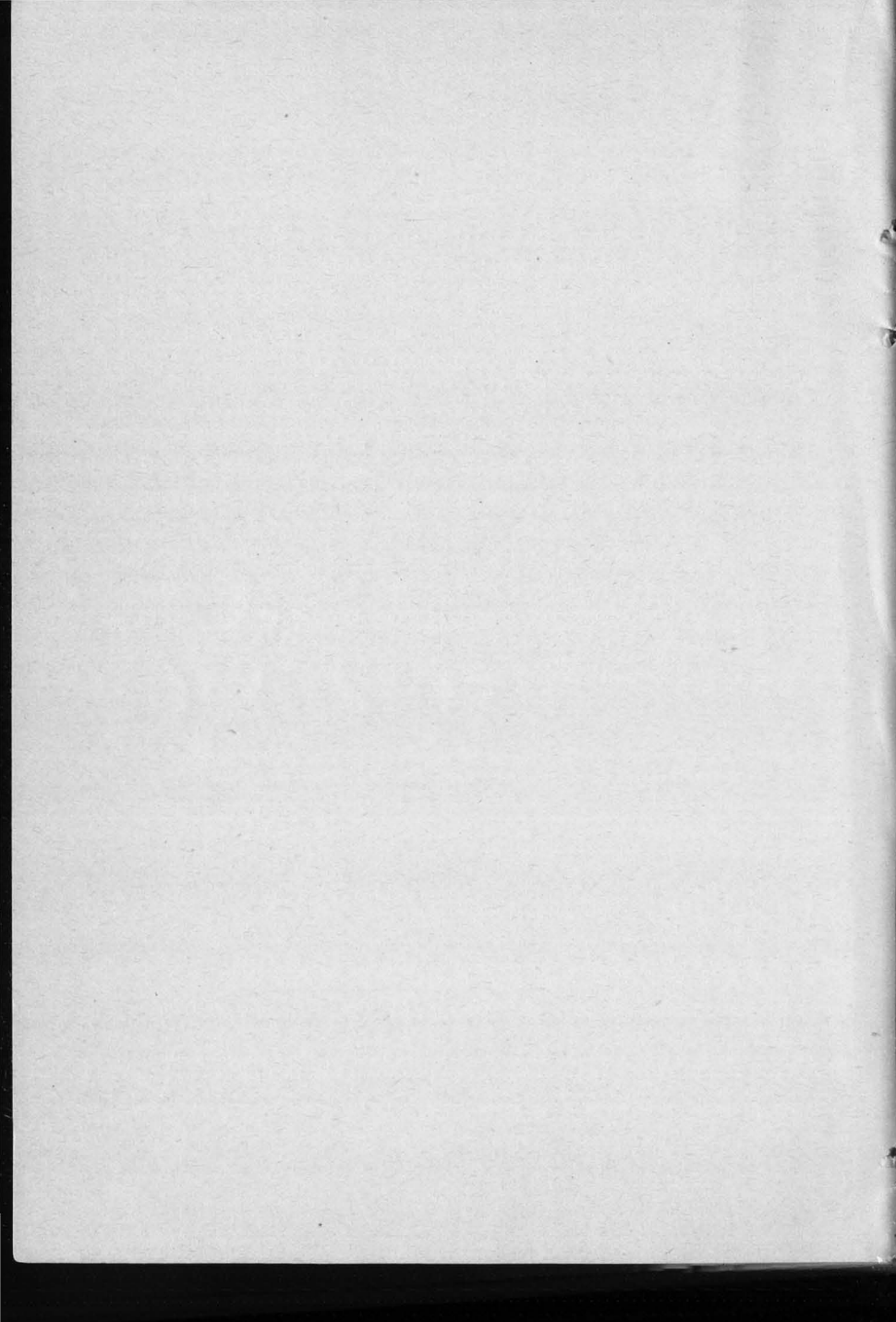
ANTHONY W. IVINS	Salt Lake City, Utah
LORENZO N. STOHL	Salt Lake City, Utah
JOHN DERN	Salt Lake City, Utah
JOHN C. SHARP	Salt Lake City, Utah
ANGUS T. WRIGHT	Ogden, Utah
GEORGE T. ODELL	Salt Lake City, Utah
LOIS HAYBALL	Logan, Utah
A. G. BARBER	Logan, Utah
FRANK B. STEPHENS	Salt Lake City, Utah
JOHN D. PETERS	Brigham City, Utah
GEORGE W. SKIDMORE	Logan, Utah
W. S. HANSEN	Fielding, Utah
HARDEN BENNION, Secretary of State, ex-officio.	Salt Lake City

OFFICERS OF THE BOARD OF TRUSTEES

A. W. IVINS	President
JOHN DERN	Vice-President
JOHN L. COBURN	Secretary and Treasurer

STANDING COMMITTEES OF THE BOARD OF TRUSTEES

- Executive Committee—A. W. Ivins, John Dern, Lorenzo N. Stohl.
Agriculture—A. G. Barber, John C. Sharp, W. S. Hansen.
Mechanic Arts—George Skidmore, Harden Bennion, Angus T. Wright.
Agricultural Engineering—George T. Odell, John D. Peters, Frank B. Stephens.
Home Economics—Lois Hayball, A. G. Barber, Frank B. Stephens.
Commerce—Angus T. Wright, Frank B. Stephens, George W. Skidmore.
Experiment Station—W. S. Hansen, Lois Hayball, George W. Skidmore.
Extension Work—Lois Hayball, Harden Bennion, John D. Peters.
Faculty and Course of Study—Frank B. Stephens, A. G. Barber, John D. Peters.
Live Stock—John C. Sharp, W. S. Hansen, Harden Bennion.
Buildings and Grounds—Angus T. Wright, John Dern, George T. Odell, A. G. Barber, Lois Hayball.
Power, Heat and Light—John Dern, John C. Sharp, Angus T. Wright, A. G. Barber, Harden Bennion.
Branch of the Agricultural College—John D. Peters, John C. Sharp, W. S. Hansen.
Legislation and Finance—Harden Bennion, Frank B. Stephens, John C. Sharp, George T. Odell, A. G. Barber, John D. Peters.



Officers of Administration and Instruction†

The College Faculty

(Arranged in Groups in the Order of Seniority of Appointment.)

ELMER GEORGE PETERSON, A. M., Ph. D.
President

GEORGE WASHINGTON THATCHER, B. S.
Professor of Music

WILLIAM PETERSON, B. S.
Professor of Geology
State Geologist

HYRUM JOHN FREDERICK, D. V. M.
Professor of Veterinary Science

FRANK RUSSELL ARNOLD, A. M.
Professor of Modern Languages

JAMES CHRISTIAN HOGENSON, M. S. A.
In Charge Farmers' Institutes and Agricultural Correspondence
Study, Extension Division

JOHN THOMAS CAINE, B. S.
Auditor

FRANKLIN LORENZO WEST, Ph. D.
Director, School of General Science
Professor of Physics

FRANKLIN STEWART HARRIS, Ph. D.
Director, Experiment Station
Professor of Agronomy

JOSEPH EAMES GREAVES, M. S., Ph. D.
Professor of Bacteriology and Physiological Chemistry

CALVIN FLETCHER, B. Pd.
Professor of Applied Arts

†The College Council consists of the President and all members of the faculty with the rank of Professor, Associate Professor, or Assistant Professor.

AGRICULTURAL COLLEGE OF UTAH

RAY BENEDICT WEST, C. E.

Director, Schools of Agricultural Engineering and Mechanic Arts
Professor of Agricultural EngineeringROBERT JAMES EVANS, Ph. D.
Director, Extension DivisionGEORGE RICHARD HILL, Ph. D.
Director, School of Agriculture
Professor of Botany and Plant PathologyJAMES HENRY LINFORD, D. D.
Director, Summer School
Superintendent, Correspondence-Study DepartmentARTHUR HERBERT SAXER, M. S., Ph. D.
Acting Director, School of Home Economics
Professor of MathematicsNIELS ALVIN PEDERSEN, A. M.
Professor of EnglishWILLIAM ERNEST CARROLL, M. S., Ph. D.
Professor of Animal HusbandryGEORGE B. HENDRICKS, A. M.
Director, School of Commerce and Business Administration
Professor of EconomicsPARLEY ERASTUS PETERSON, A. B., C. P. A.
Professor of Accounting
RegistrarFRANKLIN DAVID DAINES, A. M.
Professor of HistoryJONATHAN SOCKWELL POWELL
Professor of Fine ArtJOHN L. COBURN, B. S.
Secretary, Treasurer, and Purchasing AgentMELVIN CLARENCE MERRILL, S. M., A. M., Ph. D.
Professor of HorticultureJESSIE WHITACRE, B. S.
Professor of Foods and DieteticsJOHANNA MOEN, B. S.
Professor of Domestic ArtsRUSSELL PETER HARTLE, Lieutenant-Colonel, U. S. A.
Professor of Military Science and Tactics

EDGAR BERNARD BROSSARD, M. S., Ph. D.
 Professor of Farm Management

REUBEN L. HILL, Ph. D.
 Professor of Chemistry
 In Charge Human Nutrition Investigations, Experiment Station

GEORGE BALLIF CAINE, A. M.
 Professor of Dairy Husbandry

ORSON WINSO ISRAELSEN, M. S.
 Professor of Irrigation and Drainage

GEORGE STEWART, M. S.
 Professor of Agronomy

RENA BAKER MAYCOCK
 Acting State Leader, Home Demonstration Work, Extension

MILTON HYRUM HARRIS, Ph. D.
 State Leader, Junior Extension Work, Extension

WILLIAM L. WANLASS, Ph. D.
 Professor of Business Administration

HAROLD RAYMOND HAGAN, M. S.*
 Professor of Zoology

BLANCHE COOPER, B. S.
 Associate in Human Nutrition Investigations, Experiment Station

AUGUST J. HANSEN, B. S.
 Associate Professor of Wood Work and House Building

AARON NEWHEY, B. S.
 Associate Professor of Forging and Carriage Building

Associate Professor of Farm Mechanics

CHARLES ROBERT JOHNSON
 Associate Professor of Music

WILLARD GARDNER, Ph. D.
 Associate Professor of Physics

DAVID STOUT JENNINGS, Ph. D.
 In Charge Soil Survey, Experiment Station

BERT LORIN RICHARDS, Ph. D.
 Associate Professor of Botany and Plant Pathology

*On leave of absence until January 1, 1921.

AGRICULTURAL COLLEGE OF UTAH

BOOKER T. PRESTON, M. D.

Medical Supervisor of Students

Acting Assistant Surgeon—U. S. Public Health Service

BYRON ALDER, B. S.

Assistant Professor of Poultry Husbandry

Assistant Professor of English

CHARLES TARY HIRST, M. S.

Assistant Professor of Chemistry

LUTHER MARTIN WINSOR, B. S.

In cooperation with United States Department of Agriculture

Assistant Professor of Irrigation, Extension

SARA HUNTSMAN, B. S.

Assistant Professor of Public Speaking

CHARLOTTE KYLE, A. M.

Assistant Professor of English

DAVID EARLE ROBINSON, B. S.

Assistant Professor of History

Instructor in Advertising

JOSEPH R. JENSEN, A. B.

Assistant Professor of Physical Education

WILLIAM WHITE OWENS, B. S.

County Agent Leader, Extension

RAYMOND J. BECRAFT, B. S.

Assistant Professor of Range Management

E. LOWELL ROMNEY, A. B.

Assistant Professor of Physical Education

In Charge of Competitive Athletics

JOHN A. HOAG, CAPTAIN COAST ARTILLERY, U. S. A.

Assistant Professor of Military Science and Tactics

AMY LYMAN MERRILL, B. S.

Assistant Professor of Household Administration

Superintendent of Practice Home

TRACY H. ABELL, M. S.

Assistant Professor of Horticulture

EZRA G. CARTER, M. S.

Assistant Professor of Bacteriology

ALBERT H. POWELL
Assistant Professor of Auto and Tractor Work

BEN. R. ELDRIDGE, B. S.
Assistant Professor of Dairying, Extension

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Assistant Professor of Agricultural Extension

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Assistant Professor of Agricultural Extension

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Assistant Professor of Agricultural Extension

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Assistant Professor of Agricultural Extension

ROSE HOMER WIDTSOE
Assistant Professor of Home Economics Extension

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Assistant Professor of Agricultural Extension

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Assistant Professor of Agricultural Extension

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Assistant Professor of Agricultural Extension

ROZINA SKIDMORE, B. S.
Assistant Professor of Domestic Arts, Extension

HENRY OBERHANSLEY, A. B.*
Assistant State Leader, Junior Extension Work, Extension

*On leave of absence.

AGRICULTURAL COLLEGE OF UTAH

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Assistant Professor of Agricultural Extension

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Assistant Professor of Home Economics Extension

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EFFIE WEBB
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Assistant Professor of Economics, Correspondence Study

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Instructor in Domestic Art

DON WARREN PITTMAN, M. S.
Instructor in Agronomy

AARON F. BRACKEN, B. S.
In cooperation with United States Department of Agriculture

*On leave of absence.

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Acting Librarian

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DAN ARTHUR SWENSON, B. S.
Instructor in Wood Work

HERBERT JOHN PACK, B. S.
Instructor in Zoology

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Secretary to the President

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Farm Foreman

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WINIFRED SMITH, B. S.
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EMIL HANSEN
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Superintendent of Grounds and Greenhouses

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MINNIE T. SMITH
Instructor in Home Economics Extension

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FOREST SLAUGH
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Instructor in Agricultural Extension

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Assistant in Soil Surveys, Experiment Station

ARTHUR FIFE, B. S.
Assistant in Irrigation and Drainage

DAVID HUGHES
Assistant in Wood Work

ABBY GROESBECK
Assistant, Registrar's Office

JAMES McGRATH, Sergeant U. S. A. (Retired)
Assistant in Military Science and Tactics

O. BLANCHE CONDIT PITTMAN, A. B.
Clerk, Experiment Station

IDA R. MITCHELL
Clerk, Extension Division

CHARLES BATT
Superintendent of Water, Heat, Sewerage and Lighting Plant

RASMUS OLUF LARSON
Superintendent of Buildings

Standing Committees

1920-1921

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

Graduation—Professor Saxer.

Attendance and Scholarship—Professors Daines, J. S. Powell, Hartle, Jensen, Miss Carlson.

Student Affairs—Professors Jensen, Amy Lyman Merrill.

Publicity—Professors Arnold, Robinson.

Exhibits—Professors Owens, Fletcher, Hansen, Moen, Israelsen.

Entrance—Professors Wanlass, Hirst.

Debating—Professors Pedersen, Hendricks, Daines, Wanlass, Miss Smith.

Student Employment—Professor George B. Caine, Mr. W. J. Merrill.

Student Body Organization—Professors Brossard, Jensen, Romney.

Graduate Employment—Professor George R. Hill, Jr.

Schedule—Professor Saxer.

Lyceum Course—Mr. Coburn.

Graduate Work—Professors F. S. Harris, F. L. West, Brossard.

Campus Improvements—Professors M. C. Merrill, Ray B. West, Fletcher, George R. Hill, Jr., Mr. Emil Hansen.

Athletic Council—Professors F. L. West (ch.), George B. Caine, Romney, (representing the Faculty); Professors Ray B. West, George R. Hill, Jr., and Mr. John H. Bankhead (representing the Alumni), and three representatives of the Student Body.

College Editor—Professor Robinson.

Finance and Awards—Professors Hendricks, Linford, Mr. Coburn.

Library—Professors Fletcher, F. S. Harris.

Advanced Standing—Professor Richards.

Boy Scout Activity—Professors George R. Hill, Jr., Hogen-son, M. H. Harris, Richards, Preston.

High School Relations—Professors Pedersen, M. C. Merrill, Robinson.

Experiment Station Staff

ELMER G. PETERSON, Ph. D.	President
F. S. HARRIS, Ph. D.	Director and Agronomist
WM. PETERSON, B. S.	Geologist
H. J. FREDERICK, D. V. M.	Veterinarian
F. L. WEST, Ph. D.	Physicist
J. E. GREAVES, Ph. D.	Chemist and Bacteriologist
W. E. CARROLL, Ph. D.	Animal Husbandman
BYRON, ALDER, B. S.	Poultryman
GEORGE R. HILL, Jr., Ph. D.	Botanist
O. W. ISRAELSEN, M. S.	Irrigation and Drainage Engineer
H. R. HAGAN, S. M.	Entomologist
M. C. MERRILL, Ph. D.	Horticulturist
D. S. JENNINGS, Ph. D.	Soil Survey
R. J. BECRAFT, B. S.	Range Management
GEORGE STEWART, M. S.	Field Crops
R. L. HILL, Ph. D.	Human Nutrition
E. B. BROSSARD, Ph. D.	Farm Management
GEORGE B. CAINE, M. A.	Dairying
L. M. WINSOR, B. S.	Irrigation Engineer
C. T. HIRST, M. S.	Associate Chemist
WILLARD GARDNER, Ph. D.	Associate Physicist
B. L. RICHARDS, Ph. D.	Associate Botanist
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EZRA G. CARTER, M. S.	Associate Bacteriologist
M. D. THOMAS, B. Sc.	Associate in Human Nutrition
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A. F. BRACKEN, B. S.	Assistant Agronomist
T. H. ABELL, M. S.	Assistant Horticulturist
YEPPA LUND, M. S.	Assistant Bacteriologist
I. J. JENSEN, B. S.	Assistant Agronomist
L. F. NUFFER, B. S.	Assistant Botanist
ARTHUR FIFE, B. S.	Assistant in Irrigation
N. E. EDLEFSEN, B. S.	Assistant Physicist
SCOTT P. EWING, B. S.	Assistant Physicist
G. E. KING, B. S.	Assistant Entomologist
A. L. WILSON, B. S.	Superintendent Davis County Farm
PETER NELSON, B. S.	Farm Superintendent
HERBERT J. PACK, B. S.	Assistant Entomologist
BLANCHE CONDIT PITTMAN, A. B.	Clerk and Librarian
K. B. SAULS, B. S.	Secretary to the Director

Extension Division Staff

ADMINISTRATION

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R. J. EvansDirectorLogan

SPECIALISTS

Byron AlderPoultryLogan
H. J. FrederickVeterinarianLogan
J. C. HogensonInstitutes and SchoolsLogan
Ben R. EldredgeDairymanSalt Lake City
R. J. BecraftRange ManagementLogan
Rozina SkidmoreDomestic ArtLogan
Blanche CooperChild WelfareLogan
Vanez WilsonIrrigation and DrainageLogan

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R. H. StewartBox Elder CountyBrigham City
H. A. ChristiansenBeaver CountyBeaver
W. P. ThomasWeber CountyOgden
Alma EsplinIron CountyCedar City
J. H. WittwerUintah CountyVernal
R. L. WrigleyCache CountyLogan
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O. P. MadsenWasatch CountyHeber City
A. E. SmithWayne CountyLoa
W. J. ThayneDavis CountyFarmington
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Hugh HurstKane CountyKanab
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S. R. BoswellSummit CountyCoalville
J. R. TippettsWashington CountySt. George
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C. M. AldousPiute CountyJunction
V. L. MartineauSalt Lake CountySalt Lake City
DeLore NicholsMorgan CountyMorgan

HOME DEMONSTRATION AGENTS

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Amy J. LeighAsst. Home Demonstration Leader....Logan
Hettie WhiteUtah CountyProvo
Anna EdmundsSalt Lake CountySalt Lake City
Ellen AgrenWeber CountyOgden
Rose Homer Widtsoe, Salt Lake CitySalt Lake City
Leah P. JenningsSalt Lake CitySalt Lake City
Minnie J. SmithWayne CountyLoa
Christine B. Clayton, Iron CountyCedar City
Mabel B. YoungDavis CountyFarmington
Effie WebbBox Elder CountyBrigham City

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 Weber County Ogden
Chase Kearn Cache County Logan
Forest Slauch Iron County Cedar City
Ardath Price	..... Uintah County	..... Vernal

CORRESPONDENCE STUDY

J. H. Linford	..... Superintendent	..... Logan
J. C. Hogenson	..... Agriculture	..... Logan
Leon D. Hardy Economics-History Logan

COMMUNITY SERVICE BUREAU

F. R. Arnold In Charge Logan
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EXTENSION OFFICE

Ida R. Mitchell Chief Clerk Logan
Vera Carlson Stenographer Logan

IN COOPERATION WITH THE U. S. DEPARTMENT OF
AGRICULTURE

B. B. Richards Rodent Control Salt Lake City
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Branch Agricultural College of Utah at Cedar City

OFFICERS OF ADMINISTRATION AND FACULTY

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President

ROY F. HOMER, B. S.
Principal

PARLEY DALLEY, B. S.
Instructor in Chemistry and Physics

JOHN L. COBURN, B. S.
Financial Secretary

JOHN S. CHRISTENSEN, B. S.
Director of Physical Education, Assistant Instructor in
Animal Husbandry

GEORGE H. LUNT, A. B.
Instructor in History and Economics

Instructor in Commercial Subjects

JOHN H. PENDLETON, B. S.
Instructor in Woodwork, Mechanical Drawing and Mathematics

LOTTIE H. KUNZ, B. S.
Instructor in English

Instructor in Piano and Vocal
Director of Chorus

EVA S. THOMAS
Instructor in Domestic Art

H. PEYTON JOHNSON
Instructor in Violin
Director of Band and Orchestra

F. C. BRAITHWAITE, B. S.
Instructor in Art; Registrar

ANNA W. E. PETTIGREW
Librarian

Instructor in Agriculture; Superintendent of Farms

GEORGE A. CROFT, B. S.

Instructor in Ironwork, Machine, Automobile and Tractor

CHRISTINE B. CLAYTON, B. S.

Instructor in Domestic Science; Iron County Home Demonstrator

EVA BUYS

Instructor in Physical Education for Women

MATILDA PETERSON

Primary Supervisor in Charge of Training

H. CLAUDE LEWIS, B. S.

Instructor in Psychology and Education

Secretary

WILLIAM FLANIGAN

Engineer

CHARLES SLAUGHTER

Superintendent of Buildings and Grounds

Farm Bureau Presidents

Robert White	Beaver, Beaver	County
John F. Burton	Garland City, Box	Elder County
A. Z. Marshall	Wellington, Carbon	County
Ephraim Bergeson	Cornish, Cache	County
George E. Holt	Farmington, Davis	County
H. L. Adams	Parowan, Iron	County
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Lee R. Taylor	Payson, Utah	County
A. Theodore Johnson	Vernal, Uintah	County
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John M. McKellar	Tooele, Tooele	County
Geo. A. Huntington	Midway, Wasatch	County
Ernest McClellan	Loa, Wayne	County
John H. Schmutz	St. George, Washington	County
J. R. Beus	Hooper, Weber	County
Nephi Sargent	Hoytsville, Summit	County
James Petersen	Castledale, Emery	County

AGRICULTURAL COLLEGE OF UTAH

LOCATION

The Agricultural College of Utah is in Logan, the county seat of Cache county, one of the most prosperous agricultural counties in the State. The city has a population, thrifty and progressive, of about 10,000; it is quiet, orderly, clean, and generally attractive, with neat homes, substantial public buildings, electric lights, a sewer, and a water system. The main streets are paved and cement walks ramify the city; an excellent street car line extends from the station to the College, and the interurban connects Logan with other towns of the valley as well as with Salt Lake City.

The College, uniquely situated on a broad hill overlooking the city, one mile east of Main street, commands a view of the entire valley and surrounding mountain ranges. The site of the College was formed by the receding waters of prehistoric Lake Bonneville which built an enormous delta at the mouth of Logan canyon upon which the College buildings and farm are located. The beauty and geological significance of the location are perhaps unsurpassed. A few hundred yards to the south is the Logan river. A mile to the east is a magnificent mountain range with a picturesque canyon. In other directions are the towns and farms of Cache County distinctly visible through the clear atmosphere. The valley is a fertile, slightly uneven plain, 4,600 feet above sea level, about twelve by sixty miles in dimensions, almost entirely under cultivation, and surrounded by the Wasatch mountains. It is one of the most attractive and healthful valleys in the West.

POLICY

The Agricultural College of Utah provides, in accordance with the spirit of the law under which it was organized, a liberal, thoro, and practical education. The two extremes in education, empiricism and the purely theoretical, are avoided; for the practical is based upon, and united with, the thoroughly scientific. In addition to the practical work of the different courses, students are given thoro training in the sciences, mathematics, history, English, art, modern languages, and other related subjects. The object is to foster all that makes for right living, good citizenship, and high efficiency.

Under this general policy, the special purpose of the Agricultural College of Utah is to be of service in the upbuilding of the State and the great West to which it belongs. The instruction in agriculture and agricultural engineering, therefore, deals with the special problems relating to the conquest of the great areas of unoccupied lands, the proper use of the water supply, and the kinds of crop or live stock which in Utah may be made most profitable; instruction in mechanic arts points out the most promising trades and teaches them so as to meet the needs of the State; instruction in commerce relates to the undeveloped resources and the present commercial conditions of the State, and investigates the principles and methods to be applied in the commercial growth of Utah; instruction in home economics teaches the women right living and economic independence 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.

HISTORY

The Agricultural College of Utah was founded March 8th, 1888, when the Legislative Assembly accepted the terms of the national law passed by Congress on July 2nd, 1862. Under this Act of Congress, and the Enabling Act providing for the admission of Utah to the Union, 20,000 acres of land were granted to the State from the sale of which 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 Adams Act of 1906, the State receives an additional \$15,000 annually for research work by the Experiment Station. Under the Morrill Act of 1890, amended by the Nelson Act of 1907, the State receives \$50,000 annually for instruction at the Agricultural College. Under the Lever Act, the State received, in 1917-18, about \$15,000 which will increase for four years, for agricultural extension work to be done by the Agricultural College.

These federal appropriations, together with the annual income from the land-grant fund, represent the income received from the general government. Since 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 provide additional instruction and for general maintenance. These needs have been generously met in the past by the 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 build the College. Since that time the State has, from time to time, appropriated sufficient funds to erect and maintain all the buildings described in a later section, besides providing largely for instruction, experimentation, and extension work.

By legislative action, the College receives annually 28.34 percent. of 28 percent. of the total tax revenue of the State,

after deducting the revenue from 2.4 mills on the total State valuation (which is not to be exceeded), set aside for the support of the elementary and the high schools. In the same ratio the College will participate in the revenue from the recent occupational tax. The State, moreover, provides \$10,000 annually for extension purposes, \$15,000 for experimental work, and an increasing fund for farm and home demonstrations.

In September, 1890, the institution was first opened for the admission of students. Degree courses were 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 many improvements have been made in the courses; some have been abandoned; various special, practical, year and winter courses in commerce, mechanic arts, and home economics have been added; the standard of the college work has been raised. 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 Business Administration, and the School of General Science, and in 1911 the School of Agricultural Engineering.

In 1913, the Branch Normal School at Cedar City was made a branch of the Agricultural College and is so maintained.

In December, in 1918, the Board of Trustees authorized the establishment of an Agricultural Engineering Experiment Station to include the departments of irrigation and drainage, roads, farm machinery and transportation, manufacture of agricultural products, rural architecture and buildings, and rural sanitation and public health. The Utah Agricultural College is the first such institution in the United States to establish an agricultural engineering experiment station as a distinct division.

Since 1917, the Institution has consistently aided the Federal Government in war and post-war programs. During 1917-18, the College trained 492 young men in its Reserve Officers' Training Corps. Six hundred eighty soldier mechanics were trained at the Institution during the summer of 1918. With

the establishment at the College in the fall of 1918 of a unit of the Students' Army Training Corps, seven hundred twenty-four men were given collegiate and vocational military training. A large percentage of former U. A. C. students who saw service were commissioned.

The College gave valuable instruction in problems of increased production and consumption through its class room work. Twenty-five years of untiring experimentation showed excellent results when applied by Experiment Station specialists to concrete problems of production. The value to the State of the war service of the Extension Division was conservatively estimated at \$4,738,027.00.

GOVERNMENT

The government of the College is vested primarily in the Board of Trustees and, under their control, in 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 thirteen members. Twelve are appointed by the Governor with the approval of the State Senate; the thirteenth is the Secretary of State who is *ex officio* a member. 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, to employ the instructing force and other officers of the College, and to formulate the general policy of the institution.

Between sessions, the power of the trustees rests with an executive committee, whose actions are referred to the Board for approval. In addition, there are committees, largely advisory, that deal with the general interests of the College.

THE DIRECTORS' COUNCIL consists of the President, the

Directors of the various schools,—Agriculture, Home Economics, Agricultural Engineering, Commerce, Mechanic Arts, General Science, and Summer Quarter—the Director of the Experiment Station, and the Director of the Extension Division. This body has immediate supervision of 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 College and all members of the faculty holding the rank of professor, associate professor, or assistant professor. 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, ranking professors, the instructors, and the assistants. As an administrative body it is concerned with the ordinary questions of methods and discipline and with various other 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 phases of college life. The conduct of the student in his college home and his regularity in performing college duties; the publications of the College and of the students; the interests of the students on the athletic field, in the amusement halls, and in their various organizations,—all are within the province of appropriate committees.

THE EXPERIMENT STATION STAFF consists of the President of the College, the Director of the Station, and the heads, with their assistants, of the departments of the Station. This body is employed in the investigation of problems peculiar to agriculture in this part of the country. 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 by the administrative bodies of the College.

ADMISSION AND GRADUATION

ADMISSION. Entrance to the freshman class is based upon a certificate of graduation from an accredited high school; or upon the presenting of 15 approved high school units of work; or upon examination, in case of students of special training not obtained in high school.

A high school unit is equivalent to four preparatory credits that are one hour in length and extend over a period of 36 weeks or of five that are forty-five minutes in length and extend over the same period of time.

A student may be ranked as a conditioned Freshman provided he is deficient in not more than one and one-half units of high school work. This deficiency must be removed, however, before the student is admitted to Junior standing.

Students who have more than one and one-half units of high school deficiency can not enter unless they are 18 years of age, in which case they must register in the vocational courses. (See page 67.)

ADVANCED STANDING. Advanced standing for college work taken after completion of four years of high school may be granted at any time by the Committee on Advanced Standing provided the student presents satisfactory evidence that the work offered is equivalent to the work for which he wishes to substitute it.

Advanced standing or college credit for excess high school

units may be allowed at the time the student is given Junior class standing provided:

(a) That the work for which advanced credit is sought be as advanced as the work given in the Freshman year;

(b) That in each subject the work be approved by the department concerned; and

(c) That not more than nine hours of the first two years of his college work and none of the work submitted for advanced credit, shall have a grade lower than "B."

The ratio of transfer shall be nine (9) credits for one unit of high school work, unless otherwise recommended by the department concerned.

Twenty-seven (27) credit-hours shall be the maximum acceptable on an excess transfer from high school.

Advanced Senior College standing for excess junior college credits over ninety quarter hours may be allowed at the time the student is given senior class standing provided:

(a) That no subject be transferred with a grade lower than "B";

(b) That not to exceed twelve quarter hours above the ninety be transferred;

(c) That not more than six hours of work below "B" in grade be done at the Utah Agricultural College during the Junior year; and

(d) That the approval of the department or departments concerned in the transfer be obtained.

CLASS STANDING. Students are ranked as Freshmen, Sophomores, Juniors, and Seniors at the time they enter, and this rank, when once fixed, is not changed during the school year.

Thirty-six hours (36) of approved college work, in addition to the prescribed entrance requirements, are required for Sophomore rank; eighty-one hours for Junior rank (see pages 32-33.) and one hundred thirty hours for Senior rank. The foregoing requirements are to be exclusive of the required courses in Physical Education and Drill.

ADMISSION TO VOCATIONAL COURSES. Only persons 18 years or over are admitted to the vocational courses. No examination is required for admission to these courses."

To graduate from any of the schools, or to obtain class standing, special students not having the prescribed entrance requirements, must satisfy a committee, by special examination, of their ability to pass the entrance requirements. This committee shall consist of the committee on entrance, the professor of English, and two members of the faculty from the school in which the student wants to do his major work. Application for the examination, which must be taken not later than the beginning of the Junior year, may be made to the Registrar the first of the last week of any quarter.

REGISTRATION. The fall quarter opens Monday, September 13; the winter quarter, Monday, November 29; and the spring quarter, Monday, March 7. It is of decided advantage to register upon the opening date.

Students entering more than one week after the opening of the fall quarter must pay an extra fee of \$2.50. Students entering for the winter or spring quarter must be fully registered before the opening of the quarter or pay an extra fee of \$2.50. The amount of work for which any student will be allowed to register will be reduced by one and one-half credit hours for each week or fraction thereof that the student is late in registration.

Fifteen hours, exclusive of Physical Education and Drill, is the normal registration for any one term. A student may, however, with the consent of the school director, register for seventeen hours.

QUARTER HOURS. A quarter hour of credit is the credit given for one hour of lecture or three hours of laboratory work each week for twelve weeks. This is the basis upon which credits are now calculated at the College.

SEMESTER HOURS. Semester hours of credit were employed at the College previous to September 1, 1918. A semes-

ter hour is the same as a quarter hour, except that the period is eighteen weeks.

Semester hours may be converted into quarter hours by multiplying by one and one-half.

JUNIOR AND SENIOR COLLEGE COURSES

The collegiate work of the institution is divided into two divisions: Junior College courses and Senior College courses.

JUNIOR COLLEGE COURSES. Any student who has met the entrance requirements imposed upon the Freshman class may pursue any of the Junior College courses provided he has had the necessary prerequisites.

SENIOR COLLEGE COURSES. Any student wishing to pursue Senior College courses in any subject must first obtain full Junior class standing and have completed the Junior College requirements in that subject, provided that any student having the necessary qualifications may pursue a Senior College course after receiving the permission of the instructor of the course and the director of the school in which he is registered.

JUNIOR CLASS STANDING. To obtain Junior class standing a student must have completely satisfied the entrance requirements. He must have satisfied all of the Junior College requirements in Physical Education and Drill, and, in addition, present eighty-one hours of Junior College work which shall include forty-eight hours of the work in the required groups. (See pages 63 and following.)

GRADUATION. The degree of Bachelor of Science in Agriculture, Home Economics, Agricultural Engineering, Commerce, Mechanic Arts, or General Science, is conferred upon those who present 15 units of high school work and full Junior class standing together with 54 hours of work from the Senior College and sufficient work from either college to make the total number of hours presented equal to 180 exclusive of the required courses in physical Education and Drill. (See pages 159 and 165.) A student who has been excused from Physical Education or Drill for

physical disability or other valid reason must present an equivalent amount of other work for graduation. The student must meet all of the general requirements of the College (see pages 40-41) and all of the group requirements of the school from which he wishes to graduate. (See pages 63 and following.)

OTHER REQUIREMENTS FOR GRADUATION. The student must have been in attendance at least one school year preceding the conferring of the degree. He must have no grade lower than "D" in any subject used for graduation. Four-fifths of his term grades must be "C" or better. He must be of good moral character. He must have discharged all college fees. He must be recommended for graduation by the faculty of the school in which he is doing his major work, and must receive the favorable vote of two-thirds of the members of the College Council. Unless he secures an excuse in writing from the Committee on Graduation, he must be present in person at the commencement exercises at which he secures his degree.

No student may be recommended to the College Council for graduation as long as he has any deficient grades in any subject used toward graduation. Students who expect to graduate at the June commencement must have their work in shape for presentation to the College Council at least 60 days before commencement.

GRADUATION AT THE CLOSE OF THE SUMMER QUARTER. Any student who can satisfy the requirements for graduation by the close of the Summer Quarter may be presented to the College Council in May. Such students are listed with the class of the following year and receive their public graduation at the following Commencement. The graduation of such students, however, will be certified to by the proper authorities of the College as soon as their work is completed, *provided* it is completed before September 15 of the year in which they are passed upon for graduation.

The College Council is the only body that has the authority

to waive or abridge in any way the foregoing requirements for graduation.

REQUIREMENTS FOR ADVANCED DEGREES

THE MASTER'S DEGREE

The degree of Master of Science may be granted on the completion of the following requirements:

The candidate must have been in actual residence at the College at least one (1) year after receiving the Bachelor's degree, and must obtain fifty-one (51) credits for work in addition to the 180 College credits and 15 High School units required for the Bachelor's degree.

To be admitted to the candidacy for the Master's degree the student must have his course of study approved by November 1 by the faculty of the school in which his major subject is taken.

A thesis covering work done in the major department must be prepared by May 1, and must be accepted by the faculty of the department.

The candidate must successfully pass an oral examination, which will be given by the heads of departments of the School in which the major subject is taken.

THE DOCTOR'S DEGREE

4

The degree of Doctor of Philosophy may be granted within certain departments of the College on the completion of the following requirements:

The candidate must have been in actual residence at a standard college or university at least three school years equivalent to nine quarters after having obtained a standard bachelor's degree, residence while an instructor not included. At least one of these years of residence must be at the Utah Agricultural College.

The candidate must satisfy the requirements of a major and

two minor departments, these departments to be selected by the candidate with the approval of the Committee on Graduate Work from such departments and only such as are approved by the College Council and are equipped to give this type of work.

A thesis covering work done in the major department representing a high grade of research must be completed by May of the year of graduation and must be accepted by the three men in charge of the candidate's major and minor work together with the Committee on Graduate Work .

The candidate must satisfy the Department of Modern Languages that he has a reading knowledge of at least two foreign languages by November 1, previous to the commencement in which the degree is to be conferred.

The final requirements for graduation must be approved by the College Council by November 1, previous to the commencement at which the degree is to be conferred.

The candidate must successfully pass a public, oral examination which will be given under the direction of the Committee on Graduate Work by the three professors in charge of his major and minor work together with such heads of departments of related subjects as may be determined by the professors in charge of the major and minor work.

Registration of candidates for advanced degrees is to be made through the Committee on Graduate Work.

ORGANIZATION.

The work of the College falls into three distinct divisions: first, the Experimental Division, having for its object the discovery of new truth or the new application of established truth, for the advancement of life; second, the College proper, giving instruction, especially to young people, on the home campus of the College; third, the Extension Division, which carries instruction to the people who can not come to the College campus.

To accomplish this work the following administrative divis-

ions exist, each of which draws upon the departments for its instructional or experimental force:

I. Experimentation.

1. The Agricultural Experiment Station.
2. The Agricultural Engineering Experiment Station.

II. Instruction on the College Campus—the College Proper

3. The School of Agriculture.
4. The School of Home Economics.
5. The School of Agricultural Engineering.
6. The School of Mechanic Arts.
7. The School of Commerce and Business Administration.
8. The School of General Science.
9. The Summer Quarter.

III. Instruction beyond the College campus.

10. The Extension Division.

The instructional and investigational force and equipment necessary to carry out the work of the above divisions are organized into departments, of co-ordinate authority, each of which represents a somewhat definite field of knowledge. All officers of instruction or experimentation belong to one or another of these departments. One professor, designated head, carries the administrative responsibility of the department. At present the College maintains forty-seven departments.

THE STUDENT BODY ORGANIZATION

The Student Body Organization embraces all the students of the institution. Its prime object is to foster a proper spirit of college loyalty and to give the students practice in managing public affairs. It also secures dispatch and efficiency, as well as uniformity, in the administration of all matters pertaining to the entire student body and induces all students to participate in college activities. The organization provides each member with a maximum of proper athletic, theatrical, and social recreation at a minimum expense, viz., \$10 annually. This society has com-

trol, under faculty direction, of the following student activities:

1. *Athletics*, including all inter-class and intercollegiate contests in football, baseball, basketball, and track events. The Agricultural College is a member of the Rocky Mountain Conference, a fact which insures an interesting athletic program.

2. *Musicals*, including all public performances of the Band, the Orchestra, and musical clubs.

3. *Theatricals*. In the past, *A Midsummer Night's Dream*, *She Stoops to Conquer*, *Pygmalion*, *Milestones*, *The Admirable Crichton*, *What Every Woman Knows*, and various other productions, have been presented.

4. *Debating and Public Speaking*. Triangular debating arrangements have been made whereby, annually, the Agricultural College debates the University of Utah and the Brigham Young University on the same question. Interstate debates are also held. Those who make places on the teams not only win awards but are admitted to membership in the Agora, an honorary debating fraternity. Interest in inter-class debating, for which the Thomas medals are given, is keen.

The annual oratorical contests for the Hendricks medal, for the Casto medal, for that given by The Sons of the American Revolution, and for the chance to represent the College in the Inter-collegiate Peace contests, maintain among the students an active interest in extemporaneous public speaking. For dates of these contests, see college calendar, page 5.

5. *Student Publications*. The students of the College, under the direction of the faculty of English, publish a weekly school paper, *Student Life*. The junior class publishes the College year book, named *The Buzzer*; the Quill Club, the *Agi-Literose*; the Agricultural Club, *The Ag. Club Link*; the Beaux Art guild, *The Magpie*.

6. *Lyceum Course*. Each year the Student Body presents, in connection with the B. Y. College, from six to eight lectures, readers, or musical attractions, of national or local repute. These entertainments are free to members of the Student Body.

STUDENT CLUBS

Not affiliated with the Student Body organization, but standing largely for the interests of the various schools, are the following clubs:

The Agricultural Club, which aims to promote interest in scientific agriculture. The club has effected similar organizations in the high schools of the State. Special lectures, often illustrated, are given at intervals throughout the season.

The Agricultural Engineering Society, which aims to stimulate the interest of students in the more practical side of the work embraced by the engineering courses. Men of repute are invited to discuss questions before the society. It also aims to promote the interest of the students socially.

The Home Economics Club, which is composed of the students in domestic science and arts. The object of the club is to keep students in touch with movements in their field and to promote interest in home economics. Many home economic societies in the high schools of the State are affiliated with this organization.

The Commercial Club, working to promote the interests of the School of Commerce and Business Administration, 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 of the State, on topics of special interest to the business man. All commercial students are eligible to membership.

The Mechanic Arts Association, designed to promote the social and intellectual interest of its members. All the teachers and all the regularly enrolled students of mechanic arts are eligible to membership. Monthly meetings are held throughout the year, at some of which lectures are given by specialists.

Gamma Sigma Delta, a chapter of the national honorary fraternity for students in agriculture. Members are chosen for

scholarship from the upper two-fifths of the junior and senior classes in agriculture.

Phi Kappa Phi, a chapter of the national honorary fraternity.

The Agora, a fraternal organization open to men from the intercollegiate debating teams. Its purpose is to foster debating in the College and to keep alive among the old debaters an interest in such contests.

The Chemistry Club, organized to promote interest in chemistry.

The Be-No Club, organized to foster scholarship, fellowship, and loyalty.

The Benedicts' Club, designed to promote the social welfare of married students and to lower their expenses by co-operative buying.

The Periwig Club, composed of students prominent in dramatics. This club produces annually several plays.

The Booklovers' Club, organized for the study of subjects related to English literature but not usually treated in the classroom.

The Quill Club, an organization of writers.

The Camera Club, a group of students interested in artistic photography.

The Cosmos Club, organized for the study of world politics.

Le Cercle Francais, maintained by students in French for practice in speaking the language.

Beaux Arts Guild, designed to encourage interest in the various phases of Art by lectures and informal social meetings.

Alpha Sigma Nu, a senior honorary society. Membership is maintained by elections from the Junior class held each spring.

Various other clubs, as well as a number of fraternities and sororities, are also in successful operation.

STUDENT EXPENSES

Tuition is free. Utah students pay an annual entrance fee of \$10.00; students from other states pay \$25.00. A uniform

laboratory and library fee of \$5.00 for the school year or of \$2.00 for each quarter if the student is not in attendance for three quarters, a gymnasium fee of \$1.00 for each quarter, and a withdrawal deposit of \$1.00, are charged every student.

Every regular student must pay a Student Body fee of \$10.00 if registered for three quarters, of \$7.00 if registered for two quarters, and of \$4.00 if registered for one quarter, for which a membership card is issued admitting him to all the activities controlled by the Student Body organizations: athletic events—football, basketball, baseball, 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.

The Utah Agricultural College has been designated by law as an Institution where units of the Reserve Officers' Training Corps are maintained. As such it has promised the Government to give certain military instruction of a definite kind and character.

Every physically fit male student who registers at the College becomes automatically a member of the Reserve Officers' Training Corps and subscribes to the military requirements of the institution.

In order to remain and receive instruction at the College or to graduate finally from the College, the student must be in attendance at all military classes and do satisfactory work in them.

The student, by registration at the Institution, obligates himself to conform to such requirements as are or may be prescribed by the College Council under the regulations of the Reserve Officers' Training corps. These requirements, at present, are as follows: Two years of required military training, followed by two years of optional military training. Free uniforms are furnished by the War Department to those taking the required work. Those taking the last two years receive, in addition to free uniforms, commutation of subsistence. The requirements will vary slightly according to the military units to be established.

During the year 1920-21, the units to be maintained at the College include Coast Artillery, Motor Transport, and Infantry.

All women students who are physically fit must take Physical Education during the first two years of their college work at the Institution, or until they have satisfactorily completed Physical Education 11 and 12 or their equivalents. All vocational women students must register in Physical Education 10.

Each student taking Physical Education must provide herself with gymnasium suits and gymnasium shoes. Cost, about \$6.00.

Each student in Foods and Dietetics courses must provide herself with the following: two hair nets, one or two white petticoats, two washable white uniforms, two white work aprons.

The uniforms and aprons must be of the standard designs provided by the Textiles and Clothing Department.

Materials should be procured after consultation with the instructors in charge.

All graduates from the School of Home Economics who desire to qualify as teachers in home economics under the Smith-Hughes Act must spend a period of six weeks in residence at the Practice Home. The expenses are \$7.00 per week for board and room.

The fee charged for a diploma of graduation is \$5.00.

Good board and room in a private home costs from \$6 to \$7.50 a week. By renting rooms and boarding themselves, students are able to reduce considerably the cost of room and board.

The College maintains a modern, well equipped cafeteria where, at cost, students may get three well cooked meals daily.

The cost of necessary books and stationary ranges from \$15 to \$30 a year.

Students are held responsible for any injury done by them to the College property.

The following table furnishes an estimate of the actual yearly expenses of students attending the Utah Agricultural College:

	Lowest	Average	Liberal
Tuition, books, fees, etc.....	\$ 40	\$ 40	\$ 40
Room and board	200	225	270
Incidentals or miscellaneous	40	80	135
	\$280	\$345	\$445
Total			

The Senior Loan Fund, maintained by the Student Body, has helped many students.

SCHOLARSHIPS AND AWARDS

The Johansen Scholarship Fund of \$5,000, a gift of the late Mrs. Johanna Johansen, provides three scholarships annually, each worth approximately \$120, for the help of worthy students of Junior or Senior rank.

The One Thousand Dollar Liberty Bond Endowment yields a loan fund of \$40, which is to be loaned by the Directors' Council to a student who has made formal application before April 2, and who has need of financial help, and who has demonstrated a high degree of scholarship in the work of previous quarters.

The U. A. C. Faculty Women's League endows the Institution with a fund of \$50, to be given annually as a scholarship to a worthy and deserving student of the School of Home Economics.

The Lois Hayball Medal is to be awarded annually to a Junior or Senior student in the School of Home Economics on the following basis:

- (a) Qualities of womanhood.
- (b) Evidence of application of Home Economic principles in every relation of daily life.
- (c) Proficiency in scholastic attainments.

The Thomas Medal, a gift of Professor George Thomas, is given each year to winners of the inter-class debating series.

The Hendricks Medal, a gift of Professor George B. Hen-

dricks, is awarded yearly to the student who delivers the best extemporaneous speech.

The Casto Medal, a gift of Professor George D. Casto, is presented annually for the best memorized speech.

The Sons of the American Revolution award a medal annually for the best patriotic speech.

The West Medal, a gift of Professor Frank L. West, is given each year to the winner of the highest number of points in the inter-class track and field meet.

The Utah Agricultural College Science Medal, a gift of Professor William Peterson is given each year to the student writing the best review of recent scientific research in either mathematics, physics, chemistry, geology, zoology, botany, or astronomy.

Scholarship A's are given at the close of each year to the six highest ranking students.

A list of the recipients of various honors will be found at the back of the catalog.

Several further awards are given for athletic and other student-body activities.

BUILDINGS AND EQUIPMENT

The College now has nearly thirty buildings, all modern, well lighted and heated, and all carefully planned.

THE MAIN BUILDING 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, and many class rooms and laboratories.

THE WOMEN'S BUILDING is one of the largest and best equipped structures devoted entirely to domestic science and arts in the inter-mountain region.

THE THOMAS SMART GYMNASIUM is one of the finest and

most complete college gymnasiums in the Rocky Mountain region. It contains a main exercise hall, 114 by 70 feet, the equipment of which can be quickly put in place or hoisted out of the way, to suit any need. Ten feet above the main floor is a running-track, a hand-ball court, and a wrestling and boxing room. The large pool, shower and steam baths, and dressing rooms with steel lockers, are ideal.

THE EXPERIMENT STATION is a two-story brick structure 45 feet long and 35 feet wide, containing the offices of the station staff, a reading room, and a dark room for photography.

THE MECHANIC ARTS BUILDING, a two-story brick structure, has a floor area of 40,000 square feet, and contains the wood-working department, machine shops, forging rooms, foundry, carriage building rooms, mechanic arts museum, drafting rooms, blue-printing room, room for painting and staining, and class rooms,—all well equipped.

THE CHEMISTRY BUILDING, containing three stories, thoroly modern in plan and equipment, is occupied by the Departments of Chemistry, Physics, and Bacteriology.

THE LIVE-STOCK BUILDING of three stories is exceptionally well fitted with facilities for the study of dairying, hog, horse, and sheep husbandry, and range management.

THE AGRICULTURAL ENGINEERING BUILDING, an excellently arranged three story brick structure, houses the Departments of Irrigation and Drainage, Surveying, Hydraulics, Mechanical Drawing, Architecture, Household Sanitation, Farm Mechanics, including auto and tractor work, and some related phases of the work of the Institution.

THE PLANT INDUSTRY BUILDING is a four story brick building, thoroly modern in arrangement. It houses the departments of Agronomy, Botany and Plant Pathology, and Horticulture.

THE BARNs contain the various breeds of cattle, horses, sheep and hogs most common in the western section.

THE HORSE BARN is the most modern structure of its kind that can be built.

THE STOCK JUDGING PAVILION makes it possible to do judging in all kinds of weather.

THE POULTRY YARDS are equipped with various types of buildings to accomodate about one thousand fowls; a brooder house with a capacity of 2500 chicks; and a modern incubator cellar with standard incubators of several makes and designs. The laboratory is well supplied with different styles and sizes of incubators, brooders, food hoppers, etc., suited to use in study of the management of large and small flocks.

THE GREENHOUSES are prepared for laboratory instruction in the propagation of horticultural plants, and in the practice of floriculture and vegetable gardening.

THE VETERINARY HOSPITAL contains a well-equipped dispensary, operating room, and stalls for patients.

THE VEGETATION HOUSE will be ready this fall. It will form the first unit of a new and extensive greenhouse system.

THE SEED HOUSE is designed as a store house for the seeds of the Department of Agronomy.

THE HEATING PLANT, in order to take care of the many new buildings on the College Campus, has been doubled in size and will insure properly heated laboratories and class rooms.

EQUIPMENT

The Bacteriological Laboratory is well equipped with modern apparatus. To encourage careful work, the students are provided with individual lockers.

The Chemical Laboratories are modern and thoroly equipped.

The Physical Laboratory Equipment is complete, consisting of all the necessary apparatus for class demonstration. Gas, compressed air, continuous and alternating current electrical power, etc., are available.

The Physiological Laboratory is supplied with an excellent collection of native animals, skeletons, both articulated and disarticulated, many enlarged models of organs, a *papier mache* manikin, and complete slides of all the tissues.

The Zoological and Entomological Laboratory is equipped with water and gas, improved instruments, embryological models, skeletons from the vertebrate groups, collections of mounted birds, mammals, reptiles, fishes, and insects.

The Botanical and Plant Pathological Laboratory is well equipped for general work as well as for research. The department maintains a good working library in connection with the laboratory.

The Department of Agronomy is provided with a large collection of agricultural plants, seeds, and soils, representing the main crops and types of soil of the inter-mountain region.

The College farms are equipped with the best and latest implements and machinery for carrying on work scientifically. 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.

The farm crops laboratory, equipped with gas, has a large supply of farm crops on hand and is well supplied with apparatus.

The Commercial Rooms, occupying the entire third floor of the front of the Main building, are specially designed and furnished for business. The room for typewriting contains a full complement of standard machines.

The College Museum contains many specimens illustrative of geology, mineralogy, paleontology, and vertebrate and invertebrate zoology, including a large series of the insects of the inter-mountain 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 museum, are appreciated. All gifts are labeled and preserved and the name of the donor is recorded.

The Art Rooms, composed of six studios, are supplied with plain and adjustable tables, easels and model stands, individual

lockers, cases for materials, casts from the old masters in sculpture, reproductions of great paintings, still-life models, and draperies, as well as with a valuable collection of ceramics, textiles, and books on art.

The rooms are further supplied with a kiln for china firing, and equipment for work in ceramics, pottery, art leather, art tal, and jewelry.

The Library occupies the entire front of the second floor of Main building. It is the laboratory for every course given at College and contains about 33,500 books and a large number pamphlets. The books are classified by the Dewey decimal system and there is a complete dictionary card catalog. The shelf list, also on cards, forms a classified catalog for official use.

The library, a depository for United States public documents, receives practically all material printed by the government. The files of the United States Department of Agriculture and the publications of the Experiment Stations are nearly complete; the bulletins are bound and made easy of access by the printed card catalogs. There are one hundred and forty periodicals on the subscription list, besides about one hundred which are received as exchanges for publications of the College and of the Experiment Station. Practically all the newspapers of the State are on file in the Reading Room. The Reading Room is beautifully furnished in oak and contains many oil paintings and pieces of statuary.

The land occupied by the College embraces about 142 acres. Of this, thirty-five acres constitute the campus, laid out with flower-beds, broad stretches of lawn, tennis courts, wide drives, and walks.

Immediately east of the Main building is the quadrangle of about ten acres. The Adams athletic field is one-fourth mile west of the campus. The farms comprise 97 acres; the orchards and the small fruit and vegetable gardens, 10 acres.

In order to enlarge the experimental and instructional opportunities of the faculty and students of the college, the State Leg-

islature in 1919 authorized the expenditure of \$25,000 to purchase additional farm land.

Other farms are maintained, under the direction of the Experiment Station, in various parts of the State.

The equipment of the Branch Agricultural College is described in the circular of that institution.

THE EXPERIMENT STATION

The Agricultural Experiment Station is a division of the College, supported by Federal and State appropriations supplemented by the receipts from the sales of farm products. The Station was created for the purpose of discovering new truths that may be applied in agriculture, and for making new applications of well-established laws. Essentially devoted to research, it does the most advanced work of the College. It is composed of seventeen departments with a staff of over thirty highly-trained specialists who are investigating over fifty distinct projects.

The 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 another good. Acting on the suggestions thus obtained, the scientists begin new investigations, in the hope that truths of great value to the farmer may be discovered.

The Station confines its efforts as far as possible to the particular problems of the inter-mountain region. Irrigation, the foundation of western agriculture, has received greatest attention. Elaborate experimental plats have been equipped, where the value of different quantities of water and methods of application have been studied and the underlying principles brought out.

Dry-farming problems are only second in importance to those of irrigation in the development of the West. A number of experimental dry-farm are maintained on which every effort

is made to increase production. Many of the present investigations involve the water-holding capacity of soils, the water requirements of crops, the movement of plant foods, and other questions fundamental to all systems of agriculture.

Other problems vitally affecting the agriculture of the West are under investigation. Alkali, the big problem of all arid and semi-arid countries is receiving considerable attention. Breeding experiments for the improvement of sugar beets, potatoes, cereals, alfalfa, and poultry are in progress. Insect pests and plant diseases affecting western crops and orchards are under constant surveillance. The micro-organisms of the soil, which have recently been found to be an important factor in agriculture, are being studied. The development of better cropping methods, the dairy industry, and the range lands of the State are receiving attention together with various livestock rations. Plant disease, horticultural, and soil surveys are now in progress. Among the last projects to be started are human nutrition investigations and a study of the farm management problems of Utah.

Bulletins containing the results of experimental work, and circulars containing timely and practical information on various subjects are issued at irregular intervals. These are mailed free of charge to all persons requesting them.

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

The Station is always glad to assist the advanced students in any investigation they wish to undertake.

THE AGRICULTURAL ENGINEERING EXPERIMENT STATION

The Board of Trustees established in 1918 an Agricultural Engineering Experiment Station as a separate division of the work of the College. The organization of the agricultural engineering experiment station is a logical development of the work of the College following the organization in 1911 of the School of Agricultural Engineering. It will enable the college to use part of its funds, both federal and state, in the investigation of the many problems which confront the development of agriculture on the engineering side.

The profession of rural engineering is almost a realization. The farmer must, therefore, be advised fully in regard to engineering as it affects rural communities. That there was a direct need for this organization, is evidenced by the fact that much work which is properly a part of the work of such a station has been carried on informally by various departments of the college. The work of the Agricultural Engineering Experiment Station will continue in a more complete way the work which has thus already been undertaken informally and it will branch out ultimately to include all of those problems wherein the profession of engineering touches that of agriculture.

As organized at present, the Agricultural Engineering Experiment Station consists of the Departments of Irrigation and Drainage, Roads, Farm Machinery and Transportation, Manufacture of Agricultural Products, Rural Architecture and Buildings, and Rural Sanitation and Public Health. Complete programs for work have already been outlined in these different departments and comprehensive investigations are under way.

In the Department of Irrigation and Drainage the plan is to study in detail irrigation institutions best suited for Utah; to determine what irrigation practices result in maximum crop pro-

duction; to investigate water measurement devices and engineering structures used in the transmission of water from intake to farm; to study special types of distribution systems with an idea of determining which are at once the most efficient and most economical; to study the management and operation of irrigation systems; to determine what trench machines work best under western conditions, and to make a complete investigation of well-drilling machinery, methods of well-boring, ways of locating the under-ground water supply, and the determination of the best fuels to use in pumping.

The Department of Roads will pay particular attention to the development of a type of road which will at once stand the wear of heavy farm traffic and yet be easy to construct and utilize local materials in its makeup. In these investigations various gravels and sands to be found in different sections of Utah will be studied in order to determine their value as road materials. The importance of such a type of road cannot be overestimated because it will tend to a rapid improvement of rural roads thruout the state. The construction of bridges will also be studied.

The rapid development of the farm tractor and the great increase in the use of farm machinery in general have made it necessary that there be available complete information concerning the best types of farm machinery for western conditions. The Department of Farm Machinery and Transportation has outlined very liberal projects for investigation. Briefly stated, they are as follows: The practicability of tractors in intermountain farming, including the effects of high altitudes and steep slopes on the power of the tractor, the effect on cultivation and yield of the soil-packing tendency of the tractor, and the effect of dust on the life of the engine; the economic value of the motor truck in hauling farm products; the future of gas power on the farm used for either pumping plants or for electric lighting plants; the improvement of beet cultivating and beet harvesting machinery; the efficiency of the small combined harvester for dry farming; a

comparison of kerosene and gasoline as fuels for farm tractors, and a study of proper lubricants for the gas motor.

The manufacture of agricultural products has been little studied in Utah and the field for investigation here offered to the new experiment station is very broad. The proposed investigations cover the manufacture and preserving of food products; the care and utilization of clothing; the production of raw materials on the farm; the manufacture of foodstuffs, including the processes of milling, canning, pickling and evaporating; the manufacture of textiles; and the utilization of by-products from manufacturing establishments.

The Department of Rural Architecture and Buildings will study the entire architectural problem as applied to the rural community. This will include, not only the proper planning of farm homes, barns, and other structures, but the ventilating, heating, and lighting problems to be met with away from the urban centers. A careful study will be made of proper building materials and of farm equipment.

The Department of Rural Sanitation and Public Health will deal with the problems of the health of the rural community. These will include a study of the sanitation of milk and water supplies; the sanitation of food; the sanitation of the home, including sanitary problems as they apply to location, heating, lighting, ventilation and sewage disposal of the farm home; the prevention of diseases; and studies in nutrition and child welfare.

THE EXTENSION DIVISION

Organized for the purpose of disseminating the work of the College and the United States Department of Agriculture among the people of the State, as far as practicable, and for the further purpose of beginning new work outside the College, which may be of service to the people of the State, the Extension Division serves two purposes: it carries an organized instruction in the various subjects included in the College curriculum, and

it performs personal and community service of a more directly practical nature. The Extension Division is the joint representative in Utah of the United States Department of Agriculture and the Utah Agricultural College.

ADMINISTRATION.

The Extension Division, in its administration, is divided into departments, as follows:

Administration	Junior Extension Work.
Specialists	Institutes and Schools
County Agent Work	Correspondence Study
Home Demonstration Work.	Community Service Bureau

A corps of specialists is maintained at the College for the purpose of giving special aid to the Extension agents in the counties and otherwise promoting their special lines of work.

County Agricultural Agents are maintained in most of the counties of the State. Their chief work consists in aiding the farm bureaus in developing and executing a program of agricultural improvement, in making necessary calls to individual farms, in supplying market quotations, and in otherwise rendering service to the farmer.

County and city home agents are maintained in a number of counties and cities of the State. The purpose of this work is to develop and carry out a definite program of home improvement which is done by working through organizations and by individual calls as far as possible. This work is carried on through the home section of the farm bureaus.

County Club Agents are maintained for the purpose of organizing junior units of the farm bureaus and supervising and assisting the boys and girls in carrying out definite projects of the bureaus. Under this plan the primary purpose is to develop leadership and train boys and girls in better methods of farm and home practice.

The Department of Institutes and Schools conducts meetings and courses among the farmers, housewives, and schools of the State. This work will be done through the farm bureaus cooperating with such other organizations as may be interested. These meetings may be single or one day meetings, called institutes; or they may be systematically organized courses in one or many subjects, called schools. The Annual Farmers' Round-Up and Housekeepers' Conference at the Agricultural College at Logan and the Branch Agricultural College at Cedar City come under this department.

The Correspondence Study Department. One of the recent developments of college organization is the establishing of correspondence study departments in order to extend college opportunities to the fireside. The Utah Agricultural College was one of the first educational institutions in the inter-mountain region to establish such a department and the results have been very satisfactory.

Correspondence study furnishes an excellent opportunity for systematic instruction to the student preparing for high school or college, the teacher, the professional or business man, the club woman,—to all who cannot leave home.

Admission to correspondence work. Students must be eighteen years of age or graduates of the public school.

Scope. Courses offered:

1. Academic studies which, under certain restrictions, count toward a degree.
2. Practical studies designed to advance men and women in a given occupation.
3. Reading Courses for the farmer: short, practical, non-credit courses in agronomy, animal husbandry, horticulture, farm machinery, bee-keeping, etc.
4. Reading Courses for the housewife: short, practical, non-credit courses in sanitation, home management, cooking service, sewing, home decoration home care of the sick, etc.
5. Reading Courses for the business man: short, practical,

non-credit courses in analysis of retail merchandising, retail store accounting, bookkeeping for the wholesale grocer, bookkeeping for cooperative grain elevators and creameries.

6. Preparatory or high school courses.

7. Grade studies.

A special bulletin of the corresponding study department will be mailed to any one interested.

The work of the Community Service Bureau designed to help Utah towns and villages in community celebrations, club work, and school life includes (a) play service, (b) club service, (c) community service, (d) debate service, and (e) library service.

Publications of real value to the rural communities are issued in the form of circulars as occasions demand.

COLLEGE PROPER

ORGANIZATION.

For the purpose of efficient administration, the instruction on the campus or in the College proper is divided into seven schools: (1) The School of Agriculture; (2) The School of Home Economics; (3) The School of Agricultural Engineering; (4) The School of Commerce and Business Administration; (5) The School of Mechanic Arts; (6) The School of General Science; (7) The Summer Quarter.

The School of Agriculture offers a four-year college course with opportunity to major in agronomy, horticulture, animal husbandry and dairying, agricultural chemistry, bacteriology plant pathology, veterinary science, or economic entomology.

The School of Home Economics offers a four-year college course with opportunity to major in foods and dietetics, household administration, institutional management or textiles and clothing.

The School of Agricultural Engineering offers a four-year college course with the opportunity to major in irrigation and

drainage, farm mechanics, agricultural surveying, roads, rural architecture, rural sanitation, or agricultural technology.

The School of Commerce and Business Administration offers a four-year college course with the opportunity to major in accounting, economics, political science, sociology, finance and banking, or history.

The School of Mechanic Arts offers, in addition to shorter trade courses, a four-year college course in mechanic arts, with the opportunity to major in woodwork, iron work, or machine work.

The School of General Science offers a four-year college course in general science.

The Summer Quarter offers instruction during twelve weeks of the summer, after the regular term has closed, in most of the subjects taught during the winter.

Each school also offers *Practical Year and Winter Courses* which may be taken by mature students fitted to follow them.

For *Normal Training*, see index.

THE SCHOOL OF AGRICULTURE

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 excellent 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 in the State and National Government. The supply of such men does not equal the demand.

Experience having shown that practically all of the students who take agriculture come from the farms, it is assumed that they are acquainted with the various manual operations of farm work. The design of the school is, therefore, to teach the sciences that underlie practical agriculture, and to offer sufficient supplementary studies to develop the agricultural student to the intellectual level of the educated in the other professions. The agricultural courses are planned to lay a foundation upon which the student can build a successful career as a farmer or develop into a specialist in agriculture.

The general and departmental 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 not obtainable from books alone.

For subjects in which the student may major or minor see Required Work for Graduation.

THE SCHOOL OF HOME ECONOMICS

The steady growth of Home Economics courses in leading colleges and universities indicates the ever increasing realization that the well conducted home is the most important factor in the development of healthful and capable citizenship. But the multiplying complexities of modern life demand further that those in charge of the family understand much that is beyond the exact limits of the home. Hence the stress laid on the study of childhood and adolescence, the causes underlying the high cost of living, and the problems of social, industrial, and civic life.

The State of Utah wisely introduced courses in home management when the College was organized, and the support which has been accorded to the work by the public shows the wisdom which prompted this provision.

Year by year increased facilities have become available for the students in the School of Home Economics, and the most

recent addition to its efficiency, the College Practice Home, testifies to the sustained faith of the Board of Trustees in this department of College activity. Groups of six senior students reside in the Practice Home for successive periods of six weeks each, sharing the work of the household under the supervision of a woman who is professionally trained and who has had many years of experience in her own home. Here the young women have the opportunity to test out the practical work of their foregoing College courses.

The technical work in this school is organized into three departments, each dealing with one of the three equally important and interrelated phases of Home Economics. These are the Departments of Food and Dietetics, Household Administration, and Textiles and Clothing. The course as a whole includes certain foundational courses in science and art that are prerequisite to the technical work, and the so-called cultural courses, which must be included both to make a true Home Economics Course and to meet the College graduation requirements. This combination is well designed to fit women for the following professions: (1) Home Keeping, (2) Teaching of Home Economics, (3) Home Economics Extension Work. It also prepares women to hold various positions in the social and industrial organizations, for instance, as sanitary inspectors, dietitians, health visitors, and designers and household decorators.

The completion of the Home Economics course requires four years of College work, and leads to the degree of Bachelor of Science.

The vocational courses in Home Economics are offered to women who are unable to take the regular course and yet desire limited training in this work.

THE SCHOOL OF AGRICULTURAL ENGINEERING

The rural problem has many phases. An adequate and self-perpetuating country life cannot be made simply by teaching peo-

ple how to raise grain and fruit, and how to manage and improve livestock. The country might be filled with farmers well trained in these branches and still lack many of the elements necessary for a well-balanced and efficient rural community. Many problems having to do with the entire community rather than with the individual farmer must be solved by men with training for that kind of work rather than by those trained to produce crops and livestock on a single farm. Again, many questions on the individual farm have to do with construction rather than with production from the soil. These questions can be properly answered only by men with special training.

In the past, agricultural colleges have given their attention to the direct questions of farming, but now the entire rural problem must be met. The farm must be a desirable and healthful place to live. The buildings must be so arranged and constructed as to give the maximum of efficiency and comfort and at the same time have proper sanitary provision. The rural roads must be such that the farmer can move his crops with small expense, and go to town with comfort and speed. The machinery of the farm must be so constructed and cared for that it will be reliable and work economically. The limited supply of irrigation water must be so used as to produce maximum returns. There must be factories to change the raw materials of the farm into high-priced finished products. All these necessities demand men trained for them.

To meet the demand, the College has organized a School of Agricultural Engineering designed to enable men to solve all but the most technical engineering problems of an entire rural community. The courses are very helpful to the farmer who does not wish to do the work of a trained engineer.

Students may major in irrigation and drainage, farm mechanics, agricultural surveying, farm and public roads, rural architecture, rural sanitation and public health, agricultural technology, and art. These courses all lead to the degree of Bachelor of Science.

THE SCHOOL OF COMMERCE AND BUSINESS ADMINISTRATION

The purpose of the School of Commerce and Business Administration is to give opportunity for a liberal education with special emphasis upon the commercial and industrial phases of life. Persons who complete the commercial courses are prepared to assume leadership and responsibility in business and in various industries and professions. In order to meet the growing demands and to keep pace with recent tendencies in business education, students may major in economics, political science, sociology, accounting, finance and banking, history, and marketing.

In addition to these college courses, vocational courses are offered.

For the professions of law and medicine, the commercial courses afford excellent preparation. Graduates are prepared for positions as teachers in commercial schools. The demand for qualified teachers is greater than the supply, and many desirable positions as industrial managers are open to those who are qualified.

The European War created an intense demand for men trained in foreign service and foreign trade. The Federal Bureau of Education has requested all colleges of the country to offer courses in preparation for such service. Accordingly, the School of Commerce and Business Administration has outlined a four years' course designed to fit students for foreign trade and diplomatic service. Especial emphasis will be placed on our South American commerce.

THE SCHOOL OF MECHANIC ARTS

This school offers three-year trade courses in contracting and building, forging and carriage work, and automobile repairing; a two-year trade course in painting and interior decoration;

and a four-year college course leading to the degree of Bachelor of Science. These afford opportunities for persons endowed with mechanical ability to develop their powers and to enjoy working where nature intended. The life of the trained mechanic is as free as any and his efforts bring good wages.

The information offered finds application in every industrial activity and is much demanded by the rapid growth in the mechanical and industrial pursuits. As more and more of the work of man is done by machinery and labor-saving devices, it is desirable to obtain information that will enable man to meet the new conditions intelligently. The many applications of electricity and gas power in the factory, shop, home, and on the farm, and the advent of the automobile demand a knowledge of materials, tools, machines, and processes.

The agricultural student can obtain in the School of Mechanic Arts just the information he needs to enable him to do the constructive work in farm buildings and the repair work necessary in operating machinery, thereby making farm life more profitable and desirable. Those who intend to enter engineering will find no better preparation than that offered in the mechanic arts courses. In the shops a knowledge of the nature of materials, methods of construction, and operation of machinery, can be had better than elsewhere. The demand for manual training teachers is far in advance of the supply.

The drafting rooms give thoro work in the methods of making mechanical drawings, and afford opportunity to specialize in the line of work the student is pursuing, such as architectural, carriage, machine, and agricultural drawing.

Students may major in wood work, iron work, machine and automobile work, mechanical drawing, technology of mechanic arts, and art. Vocational courses are also offered.

All products of the shop are the property of the school, students being allowed to take away specimens of their work only by permission.

THE SCHOOL OF GENERAL SCIENCE

To carry out the work of the several technical schools of the College, an efficient instructing force and complete modern equipment have been provided in the natural and physical sciences, as well as in English, 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. 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.

For subjects in which students may major or minor, see Requirements for Graduation.

SUMMER QUARTER

The College maintains, as an integral part of its work, a summer session, beginning early in June, and continuing for twelve weeks, divided into two terms of six weeks each. Each department of the College is represented, the courses of instruction being arranged to meet the particular needs of summer students. For the benefit of teachers, special courses in education are provided 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 the State Board of Education to accept summer quarter credits in individual subjects in lieu of examination. An entrance fee of \$6 is charged. Board and rooms can be secured throughout the

city at the usual prices. The special summer quarter 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 Normal School of the State 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 is credited the candidates for the professional degree.

Graduates from the degree courses in home economics, agriculture, mechanic arts, commerce and general science, of the Agricultural College, are given the normal certificate upon the completion of one year of professional work at the State Normal School.

SCHEDULE OF WORK REQUIRED FOR GRADUATION

The student is advised to read carefully the requirements for admission and graduation on pages 31 to 35 inclusive. These are briefly summarized as follows:

A student must present 15 units of high school work for entrance, must complete all the required work in physical education and drill, and in addition, must present 180 quarter hours of college work before receiving his diploma. The student should carefully note that 54 hours of the required 180 hours of college work must be chosen from courses listed among the Senior College courses.

Technical Division.

Major Subject24 hours

Twenty-four hours forming a major subject must be chosen by the candidate in some one department. The student must con-

sult with the professor in charge of his major subject and secure his approval of the proposed combination of courses. This should be done as early as possible and must be done not later than the beginning of the Senior Year.

Minor Subjects18 hours

Eighteen hours forming the minor subjects must be chosen in some other department or departments of the same school.

General Division.

Biological Science Group18 hours
 Exact Science Group18 hours
 Language Group24 hours
 Social Science Group18 hours
 Special Group18 hours

The special group is additional work in one or more of the above groups in the general division and will be designated by the School Director.

Electives42 hours

These electives are entirely at the disposal of the student.

The departments from which the major and minor subjects may be elected and the subjects included in the various groups of the General Division are listed below.

REQUIRED WORK.

Technical Division.

Major, 24 hours in one department.

Minors, 18 hours in some other department or departments of the same school.

SCHOOL OF AGRICULTURE.

Agronomy	Dairying
Animal Husbandry	Entomology
Art (minor only)	Farm Management
Bacteriology	Horticulture
Botany and Plant Pathology	Veterinary Science
Chemistry	

SCHOOL OF AGRICULTURAL ENGINEERING.

Art	Irrigation and Drainage
Agricultural Surveying	Roads
Agricultural Technology	Rural Architecture
Farm Mechanics	Rural Sanitation

SCHOOL OF COMMERCE AND BUSINESS ADMINISTRATION.

Accounting and Business Practice	Political Science
Art (minor only)	Sociology
Economics	Stenography (minor only)
History	Typewriting (minor only)
Finance and Banking	Marketing
	Business Administration

SCHOOL OF HOME ECONOMICS.

Art (minor only)	Household Administration
Textiles and Clothing	Music (minor only)
Foods and Dietetics	

SCHOOL OF MECHANIC ARTS.

Art	Machine and Automobile Work
Iron Work	Wood Work
Mechanical Drawing	Technology of Mechanic Arts

SCHOOL OF GENERAL SCIENCE.

Art	Geology
Bacteriology	Library Work (minor only)
Botany	Mathematics
Chemistry	Music
English	Physics
Entomology	Physiology
Foreign Languages	Zoology

The departments from which the general subjects may be elected are grouped as follows:

REQUIRED WORK.

General Division.

BIOLOGICAL SCIENCE GROUP (18 hours).

Bacteriology	Physiology
Botany	Veterinary Science
Entomology	Zoology

EXACT SCIENCE GROUP (18 hours).

Accounting	Mathematics
Chemistry	Physics
Geology	Surveying

LANGUAGE GROUP (24 hours).

English	Latin
French	Spanish
German	

SOCIAL SCIENCE GROUP (18 hours).

Economics	Political Science
History	Sociology
Finance and Banking	Business Administration

SPECIAL GROUPS (18 hours).

ELECTIVES (42 hours).

VOCATIONAL COURSES

Vocational courses in agriculture, home economics, mechanic arts, and commerce and business administration have been added to the regular work of the school. In these, emphasis is given subject matter which can be put to immediate and practical application on the farm, in the shop, in business, or in the home.

No scholastic prerequisites are required for entering the vocational courses except that the student must have acquired 13½ high school units or be over eighteen years of age.

For full description of the vocational courses see departments concerned. All courses lettered "a," "b," "c," etc., are strictly vocational. Some of the elementary courses of college grade may be entered by vocational students, however, after consultation with the head of the department.

COURSES UNDER THE SMITH-HUGHES ACT IN AGRICULTURE

Suggested Course in Agriculture for Students Preparing for
Teachers in Agriculture under the Smith-Hughes Act.

Freshman Year:			I	II	III	Sophomore Year:			I	II	III
Chemistry	.....	5	5	5	5	Physics	.....	3	3	3	3
Botany	.....	5	5	5	5	Elocution	.....	3	3		
English	.....	2	2	2	2	Zoology	.....	5			
Agronomy (Crops)	.....	4	4			Anatomy	.....		5		
Horticulture	.....				4	Physiology	.....				5
			—	—	—	Psychology	.....				5
			16	16	16	Veterinary Science	.....	4			
						Animal Husband- ry	.....		5	3	
									—	—	—
									15	16	16
Junior Year:			I	II	III	Senior Year:			I	II	III
Geology	.....	5	5			Plant or Animal Breeding	.....		5		
Agronomy (Soils)	.....	4				Dairying	.....		4		
Irrigation	.....	5				Methods of Teach- ing Agriculture	.....		3		
Economics 2	.....		3	3		Rural Education	.....		3		
Science of Ed.	.....			5		Teacher Training	.....				5
English	.....		5			Farm Buildings	.....	3			
Farm Mech.	.....	5				Surveying	.....				3
Bacteriology	.....				5	Critic Work	.....				3
Secondary Ed.	.....				5	Sociology	.....	3	3		
Elective	.....		3			Farm Management	.....	5			
			—	—	—	Feeds and Feeding	.....	5			
			19	16	18	Horticulture	.....				5
									—	—	—
									16	18	16

IN HOME ECONOMICS.

Suggestive grouping of subject matter for four year course of training for teachers of Home Economics under the Smith-Hughes Act.

Students who desire to be recommended as teachers in Home Economics under the Smith-Hughes Act must complete substantially the following courses. The remainder of the work is elective.

Freshman Year

Textiles I (Elementary Dress-making, review of technic.)	Chemistry I (Inorganic Chemistry.)
Art 1-21-2 (Design, color, composition.)	English 7 (Freshman composition and rhetoric.)
Zoology I and Botany I (Elementary Zoology and Botany.)	Household Administration 2 (Home nursing.)
Or Physics I and Botany I (Elementary Physics and Botany.)	Physical Education 11 (3 hours per week.)

Sophomore Year

Foods II (Preparation and preservation of foods.)	Chemistry 16 ³ (Organic Chemistry).
Physiology I and II (Human Physiology.)	Economics I (General economics.)
Textiles 2a and 2b (Study of textiles and textile fabrics).	Education I (Education Psychology).
Bacteriology II (General Bacteriology.)	Physical Education 12 (Three hours per week).

Junior Year

Household Administration 22a (Home furnishing and decoration).	Science of Education.
Bacteriology 8 (Sanitation and Public Health).	Secondary Education.
English or Language (3 hours thruout the year).	Textiles 5 (Costume history, designing, and modeling).
	Textiles 6 (Advanced dressmaking).

Senior Year

Chemistry 7 (Physiological Chemistry).	Education 8 (Practice teaching).
Foods 4 (Dietetics and Nutrition).	Household Administration 23 (Practice Home).
Sociology I and II (Principles of Sociology, Applied Sociology).	Household Administration 21 (Household Management).
Education 7 (Methods of teaching Home Economics).	Household Administration 25 (Mothercraft and Child Welfare).

Prospective students are urged to include in their high school courses such elementary sciences as Chemistry, Physics, Botany, and Zoology and thereby increase the amount of election which they may enjoy during their college course.

TRADE COURSES

Three year courses, to prepare students for a trade, are given in the following lines of work: wood work, forging, machine and automobile work, and in interior decoration. Two years courses are given in the following lines of work: show card and sign writing, art metalry, china painting, and fabric decoration.

Students wishing to prepare for a trade in any of the above lines should make arrangements with the heads of departments concerned. Upon completion of the work outlined and upon the

approval of the College Council, they will receive a letter of recommendation stating their proficiency in the work.

RELATION BETWEEN U. OF U. and U. A. C.

The University of Utah and the Agricultural College of Utah are the two institutions maintained by the State for the higher education of its citizens. They have been assigned separate and sharply defined parts of the field of human knowledge. The laws defining these divisions are printed below.

In spite of the existing laws, much misunderstanding exists as to the work that may be done by either of the institutions. To set doubts at rest, the agreement printed below, which is merely an interpretation of the law, has been ratified by the Board of Regents of the University of Utah and by the Board of Trustees of the Utah Agricultural College.

To the Agricultural College, alone, has been assigned the collegiate work in all branches of agriculture, irrigation, agricultural engineering, home economics, including domestic science and art, commerce, and mechanical arts. To do properly the work thus assigned, first class departments must be maintained in practically all of the arts and sciences. All the work of the Agricultural College is, however, done with a view to its application in the fields belonging to the College. Moreover, the College is the conservator, as far as an educational institution may be such, of the industrial development of the State, excluding pure engineering and normal work, which are specifically assigned to the University of Utah.

STATE LAWS RELATING TO THE WORK OF THE TWO INSTITUTIONS

2292. Courses of Study in the University. The University, until otherwise provided for by law, shall be the highest branch of the system of public education. As far as practicable its courses and methods shall be arranged to supplement the instruc-

tion of the subordinate branches of such system, with a view to afford a thoro education to students of both sexes in the arts, the sciences, literature, and the civil professions, including engineering; but the University must not include in its courses agriculture, except elementary agriculture as is or may be prescribed in the normal course, horticulture, animal industry, veterinary science, domestic science and art, except as is or may be prescribed in the normal course, and instruction in irrigation as applied to the measurement, distribution, and application of water for agricultural purposes. Approved March 9, 1911.

2087. Courses of Study in the Agricultural College. The courses of instruction in the Agricultural College, until otherwise provided by law, shall comprise agriculture, horticulture, forestry, animal industry, veterinary science, domestic science and art, elementary commerce, elementary surveying, instruction in irrigation as applied to the measurement, distribution, and application of water for agricultural purposes, for which a degree in engineering in agriculture may be given, military science and tactics, history, language, and the various branches of mathematics, and natural science, and mechanic arts, with special reference to the liberal and practical education of the industrial classes. But the Agricultural College shall not give courses in liberal arts, pedagogy, the profession of law or medicine, or engineering, except agricultural engineering. Approved March 9, 1911.

UNIVERSITY OF UTAH-AGRICULTURAL COLLEGE
AGREEMENT

Proposition 1

The School of Education of the University of Utah shall give all the courses necessary to prepare teachers and supervisors in the elementary schools in all subjects taught in these schools; but the University shall not offer the technical work in agriculture and domestic science and domestic art, needed to prepare special

teachers of these subjects in secondary schools. The University shall not offer advanced courses in agriculture, domestic science, and domestic arts; it may offer elementary courses in these subjects—high school courses—and educational courses, i. e., the methods of teaching these subjects.

It is understood that in these subjects courses suitable for third and fourth year high school students are also suitable for freshmen and sophomores in the college who have not had these courses. Such courses may be taught in the School of Education of the University, and students of college grade may receive college credit upon completion of these courses.

The Agricultural College shall not offer courses in education, but shall advise all students preparing to teach to attend the State School of Education to receive instruction and training in professional education subjects. The School of Education shall advise all students wishing to become special teachers of agriculture, domestic science, or domestic arts in high schools to go to the State Agricultural College for their technical work of college grade in these subjects.

Extension courses may be established at either institution by the other, the extension teachers to be selected by the institution in charge of the work under the law and under this agreement and the extension plans and teachers are to be agreed upon by the proper officials of both institutions.

It is understood that the institution doing the work by extension is responsible for the organization and operation of the work.

Departments of Instruction.

1. Accounting and Business Practice.
2. Agricultural Engineering.
 - a. Agricultural Surveying.
 - b. Roads.
 - c. Rural Architecture.
 - d. Rural Sanitation.
3. Agronomy.
4. Animal Husbandry.
 - a. Poultry Husbandry.
5. Art.
6. Bacteriology and Physiological Chemistry.
7. Botany.
8. Business Administration.
9. Chemistry.
10. Correspondence Studies.
11. Dairy Husbandry.
12. Economics.
13. English.
14. Entomology.
15. Farm Management.
16. Farm Management, Extension.
17. Farm and Auto Mechanics.
18. Finance and Banking.
19. Food and Dietetics.
20. Geology.
21. History.
22. Home Management, Extension.
23. Horticulture.
24. Household Administration.
25. Irrigation and Drainage.
26. Junior Extension.
27. Library Economy.
28. Marketing.
29. Mathematics.
30. Mechanic Arts.
 - a. Forging and General Blacksmithing.
 - b. Machine and Automobile Work.
 - c. Mechanical Drawing.
 - d. Woodwork and House-building.
31. Methods in Experimentation and Extension.
32. Military Science and Tactics.
33. Modern Languages and Latin.
34. Music.
35. Physical Education.
 - a. For Men.
 - b. For Women.
36. Physics.
37. Physiology.
38. Political Science.
39. Public Speaking.
40. Range Management.
41. Rural Leadership.
42. Rural Public Health.
43. Sociology.
44. Stenography and Typewriting.
45. Textiles and Clothing.
46. Veterinary Science.
47. Zoology.

RECITATION TABLE.

The recitation hours are sixty minutes in duration and begin at 8:00 a. m. The following shows the entire schedule:

1 hour,	8:00— 9:00
2 hour,	9:00—10:00
3 hour,	10:00—11:00
4 hour,	11:00—12:00
5 hour,	12:00— 1:00
6 hour,	1:00— 2:00
7 hour,	2:00— 3:00
8 hour,	3:00— 4:00
9 hour,	4:00— 5:00

From 11:30 a. m. to 2 p. m. the cafeteria, or college restaurant, is open. Morning and evening meals will also be served in the cafeteria.

On Mondays, the sixth period (from 1:00 to 2:00) is devoted to chapel exercises, on Wednesdays to Student Body meetings and on Fridays this period is left open for miscellaneous meetings.

Courses of Instruction

ACCOUNTING AND BUSINESS PRACTICE.

PROFESSOR P. E. PETERSON.

MR. _____

VOCATIONAL COURSES.

The aim of these courses is to develop the students within a short time to assume positions as bookkeepers and office employees. Thoro drill in principles and abundant practice in the making of entries in modern books of account and in the preparation of statements are given.

Accounting practice periods extend thru the seventh, eighth and ninth hours daily. All accounting practice work should be done during these hours.

a. **ELEMENTARY BOOKKEEPING.** Thoro drill in the principles of double entry and in the preparation of financial statements. Two lectures and six hours practice each week. Fall quarter. Four credits.

Lec. Th. S. 11.00.

b. **INTERMEDIATE BOOKKEEPING.** A continuation of accounting "a." Bookkeeping for a wholesale business. Emphasis is laid on labor saving devices and analysis of statements. Two lectures and six hours practice each week. Winter and Spring quarters. Four credits each quarter.

Lec. Th. S. 11:00.

c. **ADVANCED BOOKKEEPING.** Methods in such special businesses as banking, commission, real estate, railway stations, etc. Two lectures and six hours practice work each week. Fall and Winter quarters. Four credits each quarter.

Lec. W. F. 9:00.

d. **BOOKKEEPING BY MACHINERY AND OFFICE PRACTICE.** Actual bookkeeping practice in the various school offices (bank, railway and commercial). As far as practicable all work will be done on the various bookkeeping machines. Students should consult instructor before registering. Two lectures and six hours practice work each week. Spring quarter. Four credits.

Lec. W. F. 9:00.

JUNIOR COLLEGE COURSES.

One of the results of recent commercial development has been the growth in importance of accounts to business men. A knowledge of accountancy is indispensable. Business efficiency and scientific management demand that accountants be more than mere bookkeepers. Men claiming professional standing in the accounting profession must be men of broad, fundamental training in the arts and sciences as well as in the technic of their profession.

1a. **BOOKKEEPING TECHNIC.** A great number of students who enter the college have had no previous training in bookkeeping. In order that students may be prepared to take up the work in principles of accounting it is necessary that they first receive a thoro grounding in the technic of bookkeeping. Two lectures and six hours of practice work each week. Sec. 1, Fall quarter; four credits; sec. 2, Winter and Spring quarters; four credits each quarter.

Sec. 1, Lec. Th. S. 9:00.

Professor Peterson

Sec. 2, Lec. Th. S. 10:00.

Mr. _____

1b. **FARM BOOKKEEPING.** Principles of bookkeeping with special application to the farm. Two lectures and six hours of practice work each week. Winter quarter. Four credits.

Lec. Th. S. 12:00.

1c. **BOOKKEEPING FOR COOPERATIVE INSTITUTIONS.** Prin-

ciples of bookkeeping with special application to the needs of students in marketing—work includes a discussion of the leading types of associations such as cooperative creameries, grain elevators and live stock and fruit shipping associations. Two lectures and six hours practice work each week. Fall quarter. Four credits.

Lec. M. T. 9:00.

2. PRINCIPLES OF ACCOUNTING. For Freshman students. The study of principles with sufficient practice to give proficiency in the handling of accounts. Designed to meet the needs of general business students. Two lectures and six practice hours each week. Winter and Spring quarters. Four credits each quarter.

Lec. Th. S. 9:00.

Professor Peterson

5. ADVANCED THEORY OF ACCOUNTS. For Sophomore students. A study of the principles of valuation of balance sheets, depreciation, principal and interest in valuations, profit and loss accounts, consolidation and mergers, consolidated balance sheets and branch accounts. Two lectures and six hours of practice work each week. Fall and Winter quarters. Four credits each quarter.

Lec. M. F. 9:00.

Professor Peterson

SENIOR COLLEGE COURSES.

3. SYSTEMS OF ACCOUNTS. A study of the leading accounting systems. Fall quarter, study of building and loan, life and fire insurance and banking; Winter quarter, trust companies, retail and department stores; Spring quarter railway and municipal accounts. Fall, Winter and Spring quarters. Three credits each quarter.

(Not given in 1920-21).

4a. COST THEORY. A study of the underlying principles of

costs which may be applied in practice in accordance with the needs of any situation. As practice work a complete cost set will be worked out. Two lectures and six hours practice work per week. Fall quarter. Four credits.

Lec. M. F. 10:00.

Professor Peterson

4b. COST PRACTICE. Typical cost systems with abundant practice in the formulation of systems and in the working out of special methods suitable to different lines of industry. Two lectures and six hours practice work. Winter quarter. Four credits.

Lec. M. F. 10:00.

Professor Peterson

6. AUDITING. Study of the principles and practice of auditing. For Senior students who plan to enter the accounting profession. Fall, Winter and Spring quarters. Three credits each quarter.

Lec. M. W. F. 11:00.

Professor Peterson

7. HOUSEHOLD ACCOUNTS. (Household Administration 27). The practical application of accounting principles to home problems. Two lectures and six hours practice work per week. Spring quarter. Four credits.

Lec. M. F. 9:00.

Professor Peterson

8. FARM ACCOUNTING. Applications of the principles of cost accounting to the needs of the farming business. Two lectures and six hours practice work per week. Spring quarter. Four credits.

Lec. M. F. 10:00.

Professor Peterson

OFFICE MANAGEMENT.

PROFESSOR P. E. PETERSON.

MISS—————

VOCATIONAL COURSES.

a. CALCULATOR OPERATION. Method of operating calcula-

tors. Accuracy and speed secured. Five practice hours each week. Fall quarter. One credit.

Sec. 1, 9:00.

Sec. 2, 10:00.

Sec. 3, 2:00.

b. CALCULATOR OPERATION. Advanced work on the calculator for increased skill. Five practice hours each week. Fall and Winter quarters. One credit each quarter.

Sec. 1, 9:00.

Sec. 2, 2:00.

c. ADDING MACHINE OPERATION. Study of the use and correct operation of the adding machine. Accuracy and speed secured. Five practice hours each week. Winter quarter. One hour credit.

Time to be arranged with instructor.

d. ELLIOTT-FISHER MACHINE OPERATION. Instruction in the operation of the Elliott-Fisher bookkeeping machine. Five practice hours each week. One hour credit.

Time to be arranged with instructor.

e. OFFICE TRAINING FOR STENOGRAPHERS. Should parallel or follow the advanced shorthand course. The course is planned to give the student practical experience in office routine work. Spring quarter. Three credits.

M. W. F. 2:00.

JUNIOR COLLEGE COURSES.

1. OFFICE MANAGEMENT. Study of the organization and layout of an office; selection, training, and securing of efficiency from office employees; office records and filing, etc. Three lectures.

(Not given in 1920-21).

AGRICULTURAL ENGINEERING.**AGRICULTURAL SURVEYING.**

PROFESSOR RAY B. WEST.

JUNIOR COLLEGE COURSES.

1a. FARM SURVEYING. For students of agriculture. Practice in the handling of surveying instruments that may be purchased by the average farmer. Running of ditch lines, grading and leveling of land, retracing of section lines and the laying out of the drains. Spring quarter. Three credits.

Lec. Th. 1:00; lab. M. W. 2:00 to 5:00 *Professor West*

1. SURVEYING FOR AGRICULTURAL ENGINEERING STUDENTS.

This is a more thorough course than course 1a, and covers in addition to the above a study of the instruments generally used by engineers, topographic surveying, hydrographic surveying, and some mine and city surveying. Prerequisite, Trigonometry. Fall and Spring quarters. Three credits each quarter.

Lec. Th. 1:00; lab. M. W. 2:00 to 5:00 *Professor West*

3. SOIL AND OTHER AGRICULTURAL SURVEYS. The methods of preparing maps of a given agricultural area, and surveys of the various agricultural interests within the area. Any quarter. Three credits.

(Not given in 1920-21) *Professor West*

4. MAPPING. Practice in the mapping of the various kinds of surveys that may be encountered by the agricultural engineer. Winter quarter. Three credits.

Lab. M. W. F. 2:00 to 5:00 *Professor West*

SENIOR COLLEGE COURSES.

2. CANAL AND ROAD SURVEYING. Instruction and practice in the application of the surveying methods used in the laying out and construction of canals and roads. Prerequisite, Surveying 1. Open to Junior College students. Fall quarter. Five credits.

Lec. T. Th. S. 8:00; lab. T. Th. 2:00 to 5:00 *Professor West*

ROADS.

PROFESSOR RAY B. WEST.

JUNIOR COLLEGE COURSES.

1. ROAD CONSTRUCTION. Road location, grade, drainage, resistance to traction, road materials, cost of construction and of machinery for preparing road material. Fall quarter. Five credits.

Daily, except Monday, 9:00 *Professor West*

2. ROAD MAINTENANCE. Width of tires and size of wheels, keeping up the road, repairing worn surfaces, maintaining drainage, employment of labor, cost of maintenance, comparison of different road machines. Prerequisite, Roads 1. Winter quarter. Five credits.

Daily, except Monday, 9:00. *Professor West*

3. BRIDGE BUILDING. Methods of bridge construction, materials used and the amount of stress on arches of various kinds; the relative cost, strength and durability of different bridges. Special mention is given to small bridges and culverts. Any quarter. Three credits. *Professor West*

SENIOR COLLEGE COURSES.

4. ROAD MATERIALS. A study of the various materials used in the construction and maintenance of roads. Special attention is given to the materials available to Utah farmers. Prerequisites, Geology 2 and 4. Spring quarter. Three credits.

Lec. T. Th. 9:00; lab. F. 2:00 to 5:00. *Professor West*

RURAL ARCHITECTURE.

PROFESSOR RAY B. WEST

PROFESSOR FLETCHER

JUNIOR COLLEGE COURSES.

1. FARM STRUCTURES. The arrangement, design, and construction of barns, stables, poultry houses, silos and other farm structures. Winter quarter. Three credits.

Lec. M. W. F. 11:00. *Professor West*

3. MATERIALS OF CONSTRUCTION. (Technology of Mechanic Arts 7). The chemistry of iron, steel, the alloys, etc., and their special use in machine parts; strength, composition and proper use of the woods, plaster, glass, glue, paints, cement, brick, etc., in building. Fall quarter. Five credits.

Daily, except T. 10:00.

Professor West

5. CONCRETE CONSTRUCTION FOR AGRICULTURAL PURPOSES. Various mixtures of cement and their uses; the use of concrete in the making of barns, water troughs, posts, etc. Spring quarter. Three credits. Hours to be arranged.

(Not given in 1920-21.)

Professor West

8. PLANNING OF FARM STRUCTURES AND HOMES. The making of plans for farm buildings, including complete specifications, cost of materials and erection. Hours to be arranged.

(Not given in 1920-21.)

Professor West

9. HOUSE BUILDING AND CONTRACTING. (Technology of Mechanic Arts 5). Various methods of construction; the frame, two brick, three brick, stucco, shingle, cement block and stuccoed hollow tile; cost and economy of each; interior finishing. Spring quarter. Five credits.

Daily except T. 10:00.

Professor West

SENIOR COLLEGE COURSES.

4. MECHANICS OF FRAMED STRUCTURES. The strength and the design of joints in timber framing. Holding power of nails, screws, drift bolts, etc. Design of beams, columns and simple trusses in wood. Prerequisites, Trigonometry and plain Physics. Winter quarter. Five credits.

Daily, except T. 10:00.

Professor West

6. REINFORCED CONCRETE. The design of beams, columns and floor slabs in reinforced concrete, and the application of the

principles of design to retaining walls, cisterns, etc. Three credits.

(Not given in 1920-21.)

Professor West

10a. RURAL ARCHITECTURE. Architectural composition. Study of the principles of composition as applied to buildings, emphasis being put on correction of common errors in the design of elevations. For related work see Art 24 and Horticulture 8. Open to Junior College students. Ten studio hours. Fall quarter. Three credits.

Hours to be arranged.

Professor Fletcher

10b. ARCHITECTURAL COMPOSITION. Continuation of course 10a with special attention to the relation of all the parts of the exterior and architectural effect in environment. For related work see Art 24 and Horticulture 8. Prerequisite, Course 10a. Open to Junior College students. Ten studio hours. Winter quarter. Three credits.

Hours to be arranged.

Professor Fletcher

11. STYLES IN ARCHITECTURE. Study of the great styles or periods of architecture with special attention to those phases most vital to an understanding of modern building. Open to Junior College students. Ten studio hours. Spring quarter. Three credits.

Hours to be arranged.

Professor Fletcher

RURAL SANITATION.

PROFESSOR GREAVES

PROFESSOR RAY B. WEST

ASSISTANT PROFESSOR CARTER

JUNIOR COLLEGE COURSES.

2. PARASITOLOGY (Zoology 5). The classification, morphology, and life history of animal parasites. The disease-produc-

ing protozoans, flukes, tapeworms and round worms receive special study. Arthropods as external parasites and carriers of pathogenic organisms receive attention. Fall quarter. Four credits.

Lec. T. Th. S. 9:00; lab. M. 2:00 to 5:00. *Mr. ———*

SENIOR COLLEGE COURSES.

3. SANITATION (Bacteriology 8). Principles of sanitation; nature of disease, its spread and means of prevention and disinfection; sanitary arranging and construction of farm buildings. Prerequisite, Bacteriology 1. Fall and Winter quarters. Three credits each quarter.

T. Th. S. 11:00.

Professor Greaves

4. SANITARY ANALYSIS (Bacteriology 6). Methods used by the sanitary inspector in examining water, milk and other foods. Prerequisites, Chemistry 6 and Bacteriology 1 or 2. Breakage deposit of \$2.50. Time and credit to be arranged.

(Not given in 1920-21).

5. DAIRY BACTERIOLOGY. (Lecture) (Bacteriology 5a). The bacteria of milk, butter and cheese; communicable diseases in their relation to the dairy; contamination by air, water, utensils; desirable and undesirable fermentation. Winter quarter. Two credits.

T. Th. 8:00.

Assistant Professor Carter

6. RURAL WATER SUPPLY AND WASTE DISPOSAL. Methods of (a) supplying farm and rural communities with sanitary water; (b) handling waste of the farm and small town. Spring quarter. Three credits.

(Not given in 1920-21).

Professor West

7. DAIRY BACTERIOLOGY. (Laboratory) (Bacteriology 5b). Methods used in the bacteriological examination of milk and

dairy products. May accompany Dairy Bacteriology 5. Breakage deposit, \$2.50. Winter quarter. Three credits.

M. W. F. 2:00 to 5:00. *Assistant Professor Carter*

8. SANITARY STATISTICS (Bacteriology 9). Vital statistics showing the effects of sanitary precautions upon health in cities and rural communities. Fall quarter. Two credits.

T. Th. 8:00. *Assistant Professor Carter*

AGRONOMY.

PROFESSOR F. S. HARRIS.

PROFESSOR STEWART.

MR. PITTMAN.

MR. JENSEN.

Note.—Students who major in Agronomy are required to take courses 1, 2 or 3, 6, 8 or 9 and 12. Irrigation 1 and Farm Management 3 will be accepted toward a major in Agronomy.

VOCATIONAL COURSES.

a. ELEMENTARY AGRONOMY. Practical information on crops and soils for short practical-course students. Registration limited to 40 students. Winter quarter. Four credits.

Lec. M. W. F. 10:00; lab. T. or Th. 2:00 to 5:00.

Mr. Jensen

b. DRY-FARMING. The methods best adapted to the growing of profitable crops on arid lands; the treatment of the soil; the soils and crops best adapted to arid-farming; the regions offering favorable conditions for its successful practice. Winter quarter. Three credits.

T. Th. S. 10:00.

Mr. Jensen

JUNIOR COLLEGE COURSES.

1a. CROP PRODUCTION. Essentials in the production of principal field crops; small-grains, corn, potatoes, sugar beets, alfalfa and pastures. Designed for students not in the School of Agriculture and for others wishing minimum work in crops. Must be preceded or accompanied by Chemistry 1. Limited to 40 students. Winter quarter. Five credits.

Lec. M. W. Th. F. 11:00; lab. W. 2:00 to 5:00

Professor Stewart

1. CEREAL CROPS. The history, cultivation, production and marketing of cereal crops; a basis for judging and grading plant products. Must be preceded or accompanied by Chemistry 1. Botany 2 recommended. Limited to 40 students. Winter quarter. Four credits.

Lec. M. W. F. 9:00; lab. T. 2:00 to 5:00

Professor Stewart

2. ROOT CROPS. Sugar beets, potatoes, mangles, turnips, other root crops and beans. Cultural methods, market types and commercial possibilities are studied in detail. Must be preceded or accompanied by Chemistry 1. Botany 2 recommended. Limited to 40 students. Fall quarter. Four credits.

Lec. M. W. F. 9:00; lab. T. 2:00 to 5:00.

Professor Stewart

3. FORAGE AND MISCELLANEOUS CROPS. Alfalfa, clovers, grasses and other crops. Methods of handling hay, meadow and pasture management, and soiling crops are discussed. Must be preceded or accompanied by Chemistry 1; Botany 2 recommended. Limited to 40 students. Spring quarter. Four credits.

Lec. M. W. F. 9:00; lab. T. 2:00 to 5:00.

Professor Stewart

SENIOR COLLEGE COURSES.

4. SEEDS AND WEEDS. Seeds and their impurities; quality and preservation of seeds; their storage, shrinkage, vitality, etc.; the common weeds of Utah; methods of identifying and eradicating them; field work. Prerequisites, Botany 2 and Agronomy 1 or 3. Not given unless 10 students apply. Fall quarter. Two credits.

Lec. Th. 1:00; lab. Th. 2:00 to 5:00.

Professor Stewart

5. JUDGING AND GRADING CROPS. The various methods of scoring grains and other crops; judging crops and identifying varieties; types demanded by the market; grading of market types. Prerequisite, Agronomy 1; Agronomy 2 and 3, and Horticulture 1 preferred. Not given unless 10 students apply. Spring quarter. Two credits.

Lec. Th. 1:00; lab. Th. 2:00 to 5:00.

Professor Stewart

6. SOILS. Review of the entire field of soil study; designed as a foundation course for all students of agriculture. Prerequisite, Chemistry 1 (High School chemistry not adequate.) Lecture limited to 40 students and laboratory sections to 24 students each. Fall quarter. Four credits.

Lec. M. W. F. 11:00; lab. M. or F. 2:00 to 5:00.

Professor Stewart and Mr. Pittman

7. COMPARATIVE SOILS. Soils of Utah; their origin, composition and agricultural value; soil provinces of the United States, especially those of the arid regions; the soil survey. Prerequisites, Agronomy 6 and Geology 2. Not given unless 10 students apply. Winter quarter. Two credits.

Lec. Th. S. 9:00.

Professor—————

8. MANAGEMENT OF ARID SOILS. The composition, nature and management of soils of arid regions; special attention to water relations, alkali, rotations, manure, tillage and other problems in the management of arid soils. Prerequisites, Agronomy 6 and Geology 2. Winter quarter. Three credits.

Lec. Th. S. 10:00; lab. W. 2:00 to 5:00.

Professor F. S. Harris

9. PRACTICAL PLANT BREEDING. Varieties of field crops and their adaptation, selection and improvement; attention to the methods of plant-breeding as practiced in America and Europe. Prerequisites, Agronomy 1 and 2 or 3; Genetics (Zoology 7); and Botany 2. Not given unless 10 students apply. Spring quarter. Four credits.

Lec. M. W. F. 11:00; lab. W. 2:00 to 5:00.

Professor Stewart

11. ADVANCED LABORATORY IN SOILS. Chemical and mechanical analysis or special laboratory work. Three hours or more, any quarter.

Hours to be arranged.

Professor Harris

12. SEMINAR. Current agronomic literature; agricultural problems; assigned topics. Required of seniors in agronomy; open also to juniors. Winter quarter. One credit.

Professor Stewart

13. RESEARCH. Seniors specializing in agronomy may elect research in any branch of the subject. Time and credit to be arranged with the instructor.

Professors Harris and Stewart

14. HISTORY OF AGRICULTURE (History 8). Development of agriculture, with emphasis on social and scientific phases; the successive steps by which modern agriculture has attained its present status. Winter quarter. Two, three or four credits.

T. Th. S. 9:00.

Professor Stewart

(Not given in 1920-21).

ANIMAL HUSBANDRY.

PROFESSOR CARROLL.
PROFESSOR GEORGE B. CAINE.
ASSISTANT PROFESSOR ALDER.

VOCATIONAL COURSES.

c. FEEDING AND MANAGEMENT. A non-technical course dealing with the practice of feeding and management of different classes of livestock. Winter quarter. Five credits.

Daily except Saturday, 9:00. *Professor Carroll*

JUNIOR COLLEGE COURSES.

1. MARKET TYPES. The judging of market types of horses, cattle, sheep and swine. Some score card practice is given, but most of the work is comparative judging of groups of animals. Five credits.

Sec. 1, Fall quarter Lec., T. Th. S. 9:00; Lab. W. F. 2:00-5:00. *Professor Caine*

Sec. 2, Winter quarter Lec. M. W. F. 11:00; Lab. W. F. 2:00 to 5:00. *Professor Caine*

2. BREED TYPES. The origin, history and characteristics of the different breeds of horses, cattle, sheep and swine, especial stress being laid upon their adaptability to western conditions. Fall quarter. Five credits.

Daily except Tuesday, 10:00. *Professor Caine*

3a. PRACTICAL FEEDING. (For students not majoring in Animal Husbandry.) How the animal uses its feed; classes of feeds; compounding rations for different purposes and for different classes of animals. Prerequisites, Agronomy 1 and 3 or

1a. Fall quarter. Five credits.

Daily, except Saturday, 8:00. *Professor Carroll*

6. BEEF CATTLE PRODUCTION. The practical methods of beef production, including a consideration of range practice, feeding for market, fitting for show, the general care and management. Winter quarter. Three credits.

T. Th. S. 9:00.

Professor Caine

7. HORSE HUSBANDRY. Market types, handling of breeding and growing horses, fitting for show and sale and practical methods of handling and training horses. Winter quarter. Three credits.

(Not given in 1920-21.)

Professor Caine

8. SWINE MANAGEMENT. The management of the breeding herd, fattening for market and fitting for show. Spring quarter. Three credits.

(Not given in 1920-21.)

Professor Caine

9. SHEEP HUSBANDRY. General care on range and farm, fattening for market, fitting for show and work in grading and sorting wool. Spring quarter. Three credits.

T. Th. S. 9:00

Professor Caine

SENIOR COLLEGE COURSES.

3. ANIMAL NUTRITION. The anatomy and physiology of the digestive system; the purpose of nutrition; the theory and practice of feeding, with especial reference to Utah conditions. Prerequisites, Organic Chemistry or Physiology 2 and Agronomy 1a. Winter and Spring quarters. Five credits each quarter.

Daily except Saturday, 8:00.

Professor Carroll

3b. LABORATORY COURSE. Laboratory work including the actual feeding of different classes of livestock for different purposes can be arranged for a limited number of students.

4. PRINCIPLES OF BREEDING AND HERD BOOK STUDY. An

application of the principles of breeding to practical breeding operations; the place of animal breeding on the farm; methods of selection; aids to selection; grading; cross breeding; line breeding; inbreeding; herd books; pedigrees of noted individuals of the important breeds. Prerequisite, Genetics. Spring quarter. Five credits.

Daily except Saturday, 9:00.

Professor Carroll

5. **ADVANCED STOCK JUDGING.** The judging of groups of animals of all classes. Attendance at the State Fair and at all accessible county fairs is required. Prerequisites, Animal Husbandry 1 and 2. Fall quarter. Three credits.

Lab. M. T. Th. 2:00 to 5:00.

Professor Caine

10. **THE FIELD OF ANIMAL HUSBANDRY.** A brief survey of the field of animal husbandry in relation to other branches of agriculture; the economics of the livestock business and a brief consideration of the various opportunities in livestock. Designed as an informational course for students not registered in the School of Agriculture. Fall quarter.

M. W. F. 9:00.

Professor Carroll

20. **RESEARCH.** Advanced students may elect research work in any phase of animal husbandry. Time and credit to be arranged with the department.

25. **SEMINAR.** Round table discussions of current literature and special phases of animal husbandry and dairying by advanced students and instructors of the department. One meeting a week. Time to be arranged.

Professors Carroll and Caine

POULTRY HUSBANDRY.

VOCATIONAL COURSES.

a. **PRACTICAL POULTRY RAISING.** A study of the fundamental principles involved in successful poultry raising. Not

given unless ten students apply. Winter quarter. Four credits.

Lec. M. W. F. 9:00; lab. Th. 2:00 to 5:00.

Assistant Professor Alder

b. **SHORT PRACTICAL COURSE.** A short practical course covering a period of two weeks. The student can spend all day or half the day studying problems of successful poultry raising.

Time to be arranged.

Assistant Professor Alder

JUNIOR COLLEGE COURSES.

1. **GENERAL POULTRY.** A study of breeds, judging, breeding, incubation, brooding housing feeding and marketing. Fall or Winter quarter. Four credits.

Lec. M. W. F. 11:00; lab. T. 2:00 to 5:00.

Assistant Professor Alder

1a. **GENERAL POULTRY.** Same as Poultry 1 except that no laboratory work is given. Fall or Winter quarter. Three credits.

M. W. F. 11:00.

Assistant Professor Alder

1b. **GENERAL POULTRY.** This course is planned to meet the needs of Home Economic students. Not given unless ten students apply. Spring quarter. Two credits.

T. Th. 11:00.

Assistant Professor Alder

2. **INCUBATION AND BROODING.** Practical and experimental work; the factors which influence the hatching quality of eggs and the raising of chicks. Prerequisite Poultry 1. Spring quarter. Two credits.

W. F. 11:00.

Assistant Professor Alder

3. **POULTRY MANAGEMENT.** The housing, care, feeding and management of different breeds under western conditions. Prerequisite Poultry 1. Winter quarter. Two credits.

Th. S. 11:00.

Assistant Professor Alder

4. BREEDS AND BREEDING. The origin and development of the breeds and varieties of poultry; practice in judging; a review of the literature on breeding for utility and exhibition. Prerequisite, Poultry 1. Winter quarter. Three credits.

Lec. T. Th. 10:00; lab. by special arrangement.

(Not given in 1920-21.)

Assistant Professor Alder

SENIOR COLLEGE COURSES.

25. RESEARCH. Research work in special problems. Prerequisite Poultry 1. Time and credit to be arranged.

Assistant Professor Alder

ART DEPARTMENTS.

APPLIED ART.

PROFESSOR FLETCHER

MISS MAURINE PETERSON

JUNIOR COLLEGE COURSES.

21. DESIGN. Study of the principles of design in pattern, color, house furnishings, and costume. Prerequisite Art 1. Winter quarter. Two credits.

Sec. a. T. Th. S. 11:00

Professor Powell

Sec. b. T. Th. S. 8:00.

Professor Fletcher

Sec. c. M. W. F. 8:00.

Miss Peterson

24. HOME IMPROVEMENT. Design in the architecture of home buildings and grounds. Common errors in the composition of cottage exteriors, interiors and landscape gardens discussed and remedies suggested. For related work see Horticulture 8 and Rural Architecture 10. Spring quarter. Three credits.

(Not given in 1920-21.)

Professor Fletcher

26. FURNITURE DESIGN. Furniture and ornamental metal

design. Any quarter. Three hours per week each quarter for one hour of credit.

Hours to be arranged as in Art 27. *Professor Fletcher*

SENIOR COLLEGE COURSES.

22a. HOUSE FURNISHING. (Household Administration 22a). House furnishing and decoration. Consideration of the principles governing good taste in house exterior and garden designs, wall decoration, floors, ceilings, color and furniture selection and arrangement. Prerequisites Art 1, 21, and 2 or their equivalents. Open to students in the Junior College. Winter quarter. Four credits.

T. Th. S. 9:00; lab. Th. or F. 2:00 to 5:00.

Professor Fletcher

22b. HOME FURNISHING. (Household Administration 22b). Textiles and drapery, tableware, pottery, pictures, sculpture, flowers and the assembling of all features which go to make home beautiful. Open to students in the Junior College. Spring quarter. Four credits.

Lec. T. Th. S. 9:00; lab. Th. or F. 2:00 to 5:00.

Professor Fletcher

25. INTERIOR DECORATION. Interior design and decoration for specialists and tradesmen. Wall tinting and decoration, house painting, wood finishing, furnishing and draping and making of sketches for the client. Any phase of the work may be taken up to suit the needs of the student. Before registering for this course students must consult the instructor. Open to students in the Junior College. Any quarter. Three hours in studio for each credit.

Hours to be arranged.

Professor Fletcher

27. STUDIO. Hours selected must be arranged with the instructor in charge. Open to students in Junior College. Sec. 1,

one credit; sec. 2, two credits; sec. 3, three credits. (Three hours work in studio each week for one quarter for one credit).

- 27a. Pottery.
- 27b. China decoration and design.
- 27c. Copper, brass, and silver smithing. The underlying principles of metal treatment, including sawing, raising, soldering, repousse and enameling.
- 27d. Jewelry. Stone setting, hard soldering, enameling, repousse, chasing, casting, etc.
- 27e. Basketry, weaving and bead work.
- 27f. Leather work, including tooling and modeling, etching, piercing, applique, inlay, dyeing, etc.
- 27g. Show card and sign writing, advertising arrangement, etc.
- 27h. Textile decoration, combining block printing, stenciling, batik and needle craft.
- 27i. Wood ornamentation, including enamelac, carving, inlay, jesso work, staining and painting.
- 27j. Architectural composition. Advanced. Prerequisites, Rural Architecture 10 and 11.
- 27k. Special design for crafts or commercial purposes. Parallel to Art Needlework.
Hours to be arranged.

Professor Fletcher and Miss Peterson

Note: One or more examples of each student's work may be retained by the department but compensation may be allowed for material.

FINE ART.

PROFESSOR POWELL.

JUNIOR COLLEGE COURSES.

1. COMPOSITION. Nature analysis and application to design. A study of composition of line and form and the princi-

ples of good taste. Prerequisite or parallel to Textiles and Clothing 1. Fall quarter Two credits.

Sec. a—T Th. S. 11:00.

Professor Powell

Sec. b—T. Th. S. 8:00.

Professor Fletcher

Sec. c.—M. W F 8:00.

Miss Peterson

2. ART APPRECIATION. The aim of this course will be to develop judgment and taste. A study of the principles of composition and design and their application to painting, sculpture and architecture. Spring quarter Two credits.

Sec. a—T Th. S. 11:00.

Professor Powell

Sec. b—T Th. S. 8:00.

Professor Fletcher

Sec. c.—M. W F 8:00.

Miss Peterson

3. INDUSTRIAL DRAWING AND TECHNICAL SKETCHING. Free hand drawing and sketching in straight line projection and pictorial methods. The principles of perspective and free hand lettering. The aim of this course is to develop a proficiency in free hand sketching for engineers, inventors, designers, draftsmen, mechanics and contractors. Any quarter Three studio hours, 1 credit. Student may elect 1 or more credits.

Daily, except Saturday, 2:00 to 5:00. *Professor Powell*

4. HISTORY OF ART AND APPRECIATION Illustrated lectures and discussions. This course is given so students may gain an acquaintance with painting, sculpture and architecture and develop a taste for the best art. Winter quarter One credit. Given if ten students apply

Th. 1:00.

Professor Powell

5. STUDIO. Before registering, students must consult with instructor in charge. Sec. 1, one credit; sec. 2, two credits, sec. 3, three credits. (Three hours in studio for one credit.) Students may elect one or more credits.

- 5a. Free Hand Drawing from ornament, antique, still life, animals and life.
- 5b. Painting in oil, water color, pastel from still life, landscape, animals and life.
- 5c. Sculpture modeling in wax and clay and casting in plaster, from ornament, antique and life.
- 5d. Illustration, including cartooning and caricature, for book, magazine and newspaper
- 5e. Illustration for advertising, designing posters and pictorial advertisements and advertising arrangement. Art 27g, Lettering, must accompany or precede this course for at least one quarter
- 5f. Illustration for scientific purposes, given conjointly with the departments of Agronomy, Botany, Entomology, etc.
- 5g. Pictorial composition and critical judgment of pictures adapted to the layman, photographer and the painter
Daily, except Saturday, 2:00 to 5:00. *Professor Powell*
6. HISTORY OF ART (History 10) Winter quarter. Three credits. Given if ten students apply.
M. W F 11:00. *Professor Powell*
7. AESTHETICS (English 21) The principles of beauty as fundamental to all the arts. Spring quarter Five credits.
Daily, except Tuesday, 10:00. *Professor Fletcher*

BACTERIOLOGY AND PHYSIOLOGICAL CHEMISTRY.

PROFESSOR GREAVES.

ASSISTANT PROFESSOR CARTER.

MR. LUND.

JUNIOR COLLEGE COURSES.

1. GENERAL AGRICULTURAL BACTERIOLOGY Biology and significance of bacteria. Breakage deposit, \$2.50. Fall, Winter and Spring quarters. Five credits each quarter

Fall quarter—Agricultural Bacteriology.

Lec. M. W. F 11:00, lab. W F 2:00 to 5:00.

Winter quarter—General Bacteriology

Lec. M. W F 11:00, lab. W F 2:00 to 5:00.

Professor Greaves

Spring quarter—Household Bacteriology.

Lec. T Th. S. 8:00, lab. W F 2:00 to 5:00.

Assistant Professor Carter

SENIOR COLLEGE COURSES.

3. PATHOGENIC BACTERIOLOGY (Rural Public Health). Fundamentals, morphology, biology, function, etc. The pathogenic bacteria are considered in relation to specific diseases, especially with regard to the subject of immunity Prerequisite, Bacteriology 1 or 2. Breakage deposit, \$2.50. Spring quarter Five credits.

Lec. M. W. F 11:00, lab. W F 2:00 to 5:00.

Professor Greaves

4a. SOIL BACTERIOLOGY (Lecture) Bacteria are considered in relation to soil fertility Influence of physical and chemical properties of a soil upon its bacterial life, ammonification, nitrification and nitrogen fixation. Chemical methods of interpreting bacterial fermentations. Winter quarter Two credits.

T Th. 1:00.

Professor Greaves

4b. SOIL BACTERIOLOGY. (Laboratory) Methods used in bacteriological investigation. May accompany Bacteriology 4a. Prerequisite, Bacteriology 1 Breakage deposit, \$2.50. Winter quarter Three credits.

Lab. M. W F 2:00 to 5:00.

Professor Greaves

5a. DAIRY BACTERIOLOGY (Lecture) (Rural Sanitation 5) The bacteria of milk, butter and cheese, communicable diseases

in their relation to the dairy; contamination by air, water, utensils, desirable and undesirable fermentation. Winter quarter
Two credits.

T Th. 8:00.

Assistant Professor Carter

5b. DAIRY BACTERIOLOGY (Laboratory) (Rural Sanitation 7) Methods used in the bacteriological examination of milk and dairy products. May accompany Bacteriology 5a. Prerequisite, Bacteriology 1 or 2. Breakage deposit, \$2.50. Winter quarter Three credits.

Lab. M. W F. 2:00 to 5:00.

Assistant Professor Carter

6. SANITARY ANALYSIS. (Rural Sanitation 4) Methods used by the sanitary inspector in examining water, milk, and other foods. Prerequisites, Chemistry 6 and Bacteriology 1 or 2. Breakage deposit, \$2.50. Time and credit to be arranged.

(Not given in 1920-21)

7 RESEARCH The laboratory and library facilities are especially arranged for advanced students in bacteriological investigation in agriculture, household science, the industries, sanitary science and veterinary science. Time and credit to be arranged.

Professor Greaves

8. SANITATION (Rural Sanitation 3) Principles of sanitation, nature of disease, its spread and means of prevention and disinfection, sanitary arranging and construction of farm buildings. Prerequisite, Bacteriology 1 or 2. Fall and Winter quarters. Three credits each quarter

T Th. S. 11:00.

Professor Greaves

9. SANITARY STATISTICS. (Rural Sanitation 8). Vital statistics showing the effects of sanitary precautions upon health in cities and rural communities. Fall quarter Two credits.

T. Th. 8:00.

Assistant Professor Carter

10. **PHYSIOLOGICAL CHEMISTRY.** (Chemistry 7). The transformations going on in the plant and animal organism. Prerequisite, Chemistry 2 or 18. Fall quarter. Five credits.

Daily, except Saturday 8:00.

Professor Greaves

11. **PHYSIOLOGICAL CHEMISTRY.** (Laboratory). May accompany the preceding course. Breakage deposit, \$2.50. Fall quarter. Two credits.

(Not given in 1920-21).

13. **ADVANCED BIOCHEMISTRY.** The chemicals in the plant and animal organism. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 9:00.

Professor Greaves

14. **SCHOOL SANITATION.** Sanitary problems confronting the teacher in the rural and urban district. Spring quarter. Three credits.

T. Th. S. 11:00.

Professor Greaves

15. **ADVANCED BIOCHEMISTRY.** Bacteriological and chemical methods used in the diagnosing of diseases. Winter quarter. Five credits.

(Not given in 1920-21).

BOTANY.

PROFESSOR GEORGE R. HILL, JR.

ASSOCIATE PROFESSOR RICHARDS.

MR. NUFFER.

Courses 2, 3, 4, 5 or 8 or 11, and 13 required of students majoring in Botany.

VOCATIONAL COURSES.

a. ELEMENTARY PLANT PATHOLOGY. Plant diseases of Utah, their nature, cause and control. For practical course students. Winter quarter. Three credits.

Lec. Th. S. 12:00; lab. F. 2:00-5:00.

Professor Hill, Associate Professor Richards and Mr. Nuffer

JUNIOR COLLEGE COURSES.

1. GENERAL BOTANY. A brief survey of the field of plant life; the nature and development of plants; plant parts and their functions; the food of plants; the relation of plants to human needs; noteworthy wild and cultivated plants.

Sec. 1. Fall and Winter quarters. Three credits each quarter
Lec. Th. S. 11:00; lab. W. 2:00-5:00.

Sec. 2. Spring quarter. Five credits.

Lec. M. W. F. 9:00; lab. W. F. 2:00 to 5:00.

Associate Professor Richards and Mr. Nuffer

2a, 2b, 2c. PLANT PHYSIOLOGY, ANATOMY, MORPHOLOGY, AND CLASSIFICATION. Plant physiology in relation to crop production is the basis of this course. Designed especially for students in agriculture. Required for major or minor in botany. Prerequisite or parallel, Chemistry 1. Students may register for Botany 2b or Botany 2c without 2a only by permission. Fall, Winter and Spring quarters. Five credits each quarter.

Lec. Sec. 1. M. W. F. 8:00. Sec. 2. T. Th. S. 8:00.

Labs. M. or T. and Th. or F. 2:00 to 5:00.

Professor Hill and Mr. Nuffer

SENIOR COLLEGE COURSES.

3. FLOWERING PLANTS. Our common plants and their relationships; special emphasis given to economic plants. Two lectures, and one, two or three laboratory periods. Prerequisite.

Botany 1 or Botany 2. Spring quarter. Three, four or five credits.

Lec. Th. S. 10:00; lab. Th. 2:00 to 5:00 and any other afternoon.

Associate Professor Richards and Mr. Nuffer

3a. A CONTINUATION OF COURSE 3, extending through the summer; a consideration of the general summer flora or of particular families and their distribution. A laboratory course. Prerequisite, Botany 3. Two to five credits according to work done.

Associate Professor Richards and Mr. Nuffer

4. PLANT PHYSIOLOGY. An advanced course dealing with the water relations of plants; absorption, metabolism, and growth and factors affecting it. Prerequisite, Botany 2. Five Credits.

(Not given in 1920-21).

Professor Hill

5a. PLANT PATHOLOGY. The history, nature, cause and control of plant diseases. Prerequisite, Botany 1 or 2. Fall quarter. Three credits.

Lec. Th. S. 10:00; lab. Th. 2:00 to 5:00.

Associate Professor Richards

5b. APPLIED PLANT PATHOLOGY. A continuation of 5a. Prerequisite, Botany 5a. Two lectures and one to three laboratory periods. Winter quarter. Three to five credits.

Lec. Th. S. 10:00; lab. Th. 2:00 to 5:00.

Associate Professor Richards

6. MYCOLOGY.

(Not given in 1920-21).

7. MORPHOLOGY.

(Not given in 1920-21).

8. MATERIALS AND METHODS IN BOTANICAL TECHNIC. Col-

lection and preservation of botanical specimens. Preparation of botanical materials and slides for class room study and exhibition purposes. Designed particularly for teachers of botany. Prerequisite, Botany 1 or 2. A laboratory course. Any quarter. Two to five credits.

Associate Professor Richards

10. DENDROLOGY. Structure and properties of wood; economic woods, their identification and uses. Prerequisite, Botany 1 or 2. Physics I should also precede the course. One lecture and one laboratory period. Spring quarter. Two credits. Time to be arranged.

Professor Hill

11. ECOLOGY. The distribution and adptation of plants in relation to temperature, nature, light, soil alkali and other environmental factors.

(Not given in 1920-21).

12. SEMINAR. Current literature in the field of botany. One hour a week. Fall, Winter and Spring quarters. One credit each quarter. Time to be arranged.

Professor Hill

13. RESEARCH. Open to qualified Senior College Students. Time and credit to be arranged.

Professor Hill or Associate Professor Richards

BUSINESS ADMINISTRATION.

PROFESSOR WANLASS.

PROFESSOR HENDRICKS.

ASSISTANT PROFESSOR ROBINSON.

VOCATIONAL COURSES.

a. ECONOMICS OF BUSINESS. An elementary course dealing with the laws of economics, and designed for the students

in the short, practical course. Winter Quarter. Three credits.
M. W. F. 2:00.

b. BUSINESS ORGANIZATION. Elementary course in the organization of business designed especially for students in short, practical courses. Fall quarter, first term. One and a half credits.

M. W. F. 2:00.

c. ELEMENTARY BUSINESS FINANCE. Elementary study of the methods in financing a business under modern industrial conditions; designed for students in short, practical courses. Fall quarter, second term. One and a half credits.

M. W. F. 2:00.

JUNIOR COLLEGE COURSES.

1. BUSINESS ORGANIZATION AND MANagements. A study of modern business organization and management, as an introduction to the work in efficiency engineering. Winter quarter. Two credits.

T. Th. 1:00.

Professor Wanlass

2. CREDITS AND COLLECTIONS. A study of the principles of modern business in the practical work of the collection and credit departments of business firms.

3. ADVERTISING. The literature of advertising; the makeup of advertisements for newspapers and magazines; the psychology of advertising; much practical experience in the writing of advertisements. Prerequisite, Economics 1 or 2. Fall quarter. Three credits.

M. 2:00 to 5:00.

Assistant Professor Robinson

4. SALESMANSHIP. A study of the underlying principles as they apply not only to the salesman but to the sales manager.

Practical demonstrations will be required of students. Prerequisite, Economics 1 or 2. Winter quarter. Three credits.

M. 2:00 to 5:00.

Assistant Professor Robinson

5. INSURANCE. A discussion of fundamental principles of insurance. Attention will be given to the practices of modern insurance companies as they affect the insured, the beneficiary and the State. Prerequisite, Economics 1 or 2. Spring quarter. Three credits.

M. 2:00 to 5:00.

Assistant Professor Robinson

6. BUDGETS. Attention of budgetary systems used by corporations, cities, states and federal government. Spring quarter. Two credits.

T. Th. 1:00.

Professor Wanlass

7. EXECUTIVE CONTROL. A study of the executive and his work in the field of modern business. Spring quarter. Three credits.

(Not given in 1920-21).

CHEMISTRY.

PROFESSOR R. L. HILL.

PROFESSOR F. L. WEST.

PROFESSOR GREAVES.

ASSISTANT PROFESSOR HIRST.

MR. _____

JUNIOR COLLEGE COURSES.

1. INORGANIC CHEMISTRY. The properties and preparation of the elements and their ordinary compounds. The quantitative laws of chemical combination and their applications. The ef-

fects of temperature and concentration in displacing chemical equilibria.

Sec. 1. Arranged for students in Home Economics. A portion of the first hour of the laboratory period will be used as a lecture and laboratory quiz hour. Fall, Winter and Spring quarters. Three credits each quarter.

Lec. T. Th. 1:00; lab. T. or F. 2:00 to 5:00.

Professor R. L. Hill and Assistant Professor Hirst

Sec. 2. Quiz hour to be taken during laboratory period. Fall and Winter quarters. Five credits each quarter.

Lec. M. W. F. 8:00; lab. M. W. 2:00 to 5:00.

Professor R. L. Hill

Sec. 3. The first hour of the laboratory period will be used as a lecture and laboratory quiz hour. Fall and Winter quarters. Five credits each quarter.

Lec. M. W. F. 11:00; lab. M. W. 2:00 to 5:00.

Professor R. L. Hill

Sec. 4. Winter and Spring quarters. Five credits each quarter.

Lec. T. Th. S. 9:00; lab. W. F. 2:00 to 5:00.

Assistant Professor Hirst

1a. INORGANIC CHEMISTRY. Arranged especially for students who have had high school chemistry. Prerequisite, high school chemistry. Winter and Spring quarters. Five credits each quarter.

Lec. M. W. F. 9:00; lab. W. F. 2:00 to 5:00.

Assistant Professor Hirst

2. ORGANIC CHEMISTRY. Fundamental principles of organic chemistry. The chemistry of the carbon compounds. Special attention will be paid to the chemistry of proteins, carbohydrates and fats. Prerequisite, Chemistry 1. Winter and Spring quarters. Four credits each quarter.

Lec. M. W. F. 10:00; lab. W. or F. 2:00 to 5:00.

Assistant Professor Hirst

3. ORGANIC CHEMISTRY. A course arranged especially for students in home economics. This course in most respects will duplicate the lecture work in Chemistry 2. Special emphasis will be placed on the chemistry of proteins, carbohydrates, fats, food adulterants, preservatives, common disinfectants and anaesthetics. Prerequisite, Chemistry 1 or 1a. Fall and Winter quarters. Three credits each quarter.

Lec. T. Th. S. 8:00.

Professor R. L. Hill

3a. ORGANIC CHEMISTRY. A laboratory course dealing with the fundamental principles of organic chemistry. This course is designed for students in Chemistry 3. Fall or Winter quarter. Two credits each quarter.

Lab. T. Th. 2:00 to 5:00.

Professor R. L. Hill

4. QUALITATIVE ANALYSIS. A course in the theory and practice of inorganic qualitative analysis. Prerequisite, Chemistry 1. Winter and Spring quarters. Three credits each quarter.

Lec. T. 2:00; lab. T. 3:00 to 5:00; Th. F. 2:00 to 5:00.

Assistant Professor Hirst

5. ORGANIC AGRICULTURAL CHEMISTRY. A course giving fundamental principles of organic chemistry and applying them to plant and animal life. This course is offered to meet the needs of students who desire a general knowledge of organic chemistry and its relation to agriculture but who have insufficient time to take the more advanced courses in chemistry. Students majoring in chemistry, foods or animal nutrition should register for Chemistry 2 or 3. Prerequisite, Chemistry 1 or 1a. Fall and Winter quarters. Four credits each quarter.

Lec. T. Th. S. 9:00; lab. M. or W. 2:00 to 5:00.

Professor R. L. Hill

SENIOR COLLEGE COURSES.

6. QUANTITATIVE ANALYSIS. A course in the theory and application of the fundamental principles of gravimetric and volumetric analysis to inorganic, agricultural and food analysis. Prerequisites, Chemistry 1 and 4. Winter and Spring quarters. Three credits each quarter.

Lec. Th. 2:00; lab. Th. 3:00 to 5:00; T. F. 2:00 to 5:00.

Assistant Professor Hirst

7. PHYSIOLOGICAL CHEMISTRY. (Bacteriology and Physiological Chemistry 10). The chemical transformations occurring in plant and animal organisms. Prerequisite, Chemistry 2 or 3. Fall quarter. Five credits.

Daily, except Saturday at 8:00.

Professor Greaves

8. INDUSTRIAL CHEMISTRY. The application of chemistry in the manufacture and uses of various substances such as cements, fertilizers, gases, explosives, paints, pigments, soaps, sugar, starch, paper, potash, salt, sulphuric acid and in the smelting of ores will be studied. Arrangements will be made for the class to visit the leading industrial plants of the State. Three lectures and thirty-six hours of field work visiting industrial plants. Winter quarter. Four credits.

Lec. T. Th. S. 9:00; field work to be arranged with class.

(Not given in 1920-21.)

Professor R. L. Hill

10. SPECIAL COURSE IN QUANTITATIVE ANALYSIS. Prerequisite Chemistry 6. Time and credit to be arranged with instructor.

- a. Water analysis.
- b. Food analysis.
- c. Soil analysis.
- d. Urine analysis.
- e. Gas analysis.

Professor R. L. Hill and Assistant Professor Hirst

13. GENERAL ORGANIC REACTIONS. A consideration of the more important reactions employed in synthetic organic chemistry. Prerequisite, Chemistry 2 or equivalent. Will be given if registration justifies. Spring quarter. Two credits.

Th. S. 11:00.

Assistant Professor Hirst

14. THE NITROGEN COMPOUNDS. A course devoted primarily to the proteins, alkaloids and purine derivatives. Prerequisite Chemistry 2. Winter quarter. Two credits.

W. F. 8:00.

(Not given in 1920-21.)

15. ORGANIC PREPARATIONS. An advanced laboratory course in practical laboratory methods of synthetic organic chemistry. Prerequisite, Chemistry 2. Fall or Winter quarter. Three credits.

Time to be arranged.

Professor R. L. Hill

16. PHYSICAL CHEMISTRY. (Physics 5). The kinetic theory, solutions, thermo-chemistry and electro-chemistry. Prerequisites, Chemistry 1 and Physics 1. Three lectures a week. Fall and Winter quarters. Three credits each quarter.

Lec. M. W. F. 8:00.

Professor F. L. West

17. HISTORY OF CHEMISTRY. Fall, Winter and Spring quarters. Two credits each quarter.

Lec. T. Th. 8:00.

(Not given in 1920-21.)

18. RESEARCH. Senior students specializing in chemistry may elect research in any branch of the subject. Time and credit to be arranged with the instructor.

Professor R. L. Hill

DAIRY HUSBANDRY.

PROFESSOR GEORGE B. CAINE.

Mr. _____

JUNIOR COLLEGE COURSES.

1. ELEMENTS OF DAIRYING. The secretion and composition of milk; testing for fat, acid and adulterants; dairy sanitation; pasteurization; separation; making of butter and cheese. Fall and Winter quarters. Five credits each quarter.

Lec. M. W. F. 9:00; lab. to be arranged.

Mr. _____

2. DAIRY TECHNOLOGY. The production, preparation, and food value of sanitary, certified, modified, fermented, dried and condensed milks, the manufacture of butter, cheese, soft cheese, ice cream, renovated butter, oleomargarine, milk sugar, casein, etc. Prerequisites, Dairy 1, Chemistry 1 and Bacteriology 1. Winter and Spring quarters. Six credits each quarter.

Daily, except Saturday 11:00; lab. to be arranged.

Mr. _____

SENIOR COLLEGE COURSES.

3. DAIRY PRODUCTION. A brief review of breeds of dairy cows; starting a herd; systems of herd records; calf feeding; herd management. Each student submits an original plan of a dairy farm, estimating values of property, expense of operation and profits to be derived. Spring quarter. Six credits.

Daily, except Saturday 10:00. *Professor George B. Caine*

4. BUTTERMILK. Designed to meet the needs of the creameryman. Prerequisite, Dairying 1. Time and credit to be arranged.

Mr. _____

5. CHEESE MAKING. The manufacture, curing and storage of the various standard kinds of cheese. Prerequisite, Dairy 1. Time and credit to be arranged.

Mr. _____

6. RESEARCH WORK. Important dairy subjects; a digest of recent dairy work of the experiment station. Time and credit to be arranged with the department.

ECONOMICS.

PROFESSOR HENDRICKS.

PROFESSOR WANLASS.

JUNIOR COLLEGE COURSES.

1. ELEMENTS OF ECONOMICS. The laws of man's economic activity, as the basis of a scientific understanding of industrial conditions. Topics: economic want, value, rent, wages, profits, interests. Fall, Winter and Spring quarters. Three credits each quarter.

Sec. 1, M. W. F. 8:00.

Sec. 2, M. W. F. 11:00.

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

(Not given in 1920-21).

5. INDUSTRIAL RESOURCES. The resources of the United States, with special emphasis on Western agricultural, pastoral, mineral, soil and water resources. See Geology 3.

(Not given in 1920-21).

6. FINANCIAL AND ECONOMIC HISTORY OF THE UNITED

STATES. The principal events of our political life and their economic causation; the history of the tariff, money and banking, agriculture, manufacturing, etc. Fall and Winter quarters. Three credits each quarter.

T. Th. S. 9:00.

12. AGRICULTURAL ECONOMICS. Economic principles underlying farm management, land tenure, general farming operations and rural life. Special attention is given to western conditions. Prerequisite, Economics 1 or 2. Fall quarter. Three credits.

T. Th. S. 10:00.

13. RURAL CREDITS. Land settlement, cooperative banking and other agrarian legislation. Winter quarter. Three credits.

M. W. F. 11:00.

(Not given in 1920-21).



SENIOR COLLEGE COURSES.

14. GENERAL ECONOMICS. A comprehensive study of the fundamentals of economic theory. Prerequisite, High School Economics or Senior College standing. Winter and Spring quarters.

T. Th. S. 10:00.

17. LABOR PROBLEMS. A discussion of fundamental principles underlying the labor problem. Attention will be given to boycotts, strikes, lockouts, industrial arbitration, labor legislation. The subtle relationships between labor and capital will be considered. Prerequisite, Economics 1 or 6. Spring quarter. Three credits.

T. Th. S. 9:00.

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

9. RECENT NOVEL.

(Not given in 1920-21).

Professor Pedersen

10. SHAKSPERE. Detailed study in class of six plays: Macbeth, Henry the Fourth, King Lear, Hamlet, Othello, Twelfth Night. Collateral reading: various other Shakesporean plays as well as a biography. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. S. 9:00.

Professor Pedersen

11. MODERN DRAMA. Study of the drama from Ibsen to the present day. Representative plays from Great Britain, Spain, Scandinavia, Italy, France, Germany and America are included in the survey. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. 1:00.

Professor Pedersen

12. AMERICAN LITERATURE. From Colonial times to the present. Spring quarter. Three credits.

M. W. F. 8:00.

Professor Pedersen

14. ENGLISH PROSE OF THE NINETEENTH CENTURY.

(Not given in 1920-21).

Assistant Professor Kyle

16. WORLD MASTERPIECES. Study of the chief classics of general literature. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 10:00.

(Will be given provided 10 students call for it.)

19. ENGLISH POETS OF THE NINETEENTH CENTURY. Fall, Winter and Spring quarters. Three credits each quarter

M. W. F. 10:00.

Assistant Professor Kyle

20. DEBATING. Fall and Winter quarters. Two credits each quarter.

M. F. 8:00.

Professor Pedersen

21. AESTHETICS. (Art 7). Study of the correlation of the fine arts and the principles governing sound judgment in each. Spring quarter. Five credits.

Daily, except Tuesday 10:00. *Professor Fletcher*

25. JOURNALISM. News collecting, history of journalism in America. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 1:00. *Professor Arnold*

27. THE SHORT STORY. Literary and technical study of the short story. Fall quarter. Three credits.

T. Th. S. 8:00.

30. LITERATURE FOR CHILDREN.

(Not given in 1920-21). *Professor Pedersen*

ENTOMOLOGY.

PROFESSOR HAGAN.*

MR. PACK.

MR. KING.

See Department of Zoology for related work.

VOCATIONAL COURSES.

a. Bee-Keeping. Methods and technique of bee-keeping. Manipulation of colonies, the apiary, hives, transferring, feeding, Extracting, diseases and improvement are given attention. Fall, Winter and Spring quarters. Three credits each quarter.

Hours to be arranged.

*On leave of absence until January 1, 1921.

JUNIOR COLLEGE COURSES.

1. AGRICULTURAL ENTOMOLOGY. A general study of the insects of the intermountain region and of methods of control Winter quarter. Three credits.

T. Th. S. 8:00.

2. SYSTEMATIC ENTOMOLOGY. Enough of the structure of insects is studied to enable the student to use the tables employed in classification. Each student must collect, mount, and properly identify a representative collection of insects found in the vicinity of Logan. Fall, Winter and Spring quarters. Three credits each quarter.

Hours to be arranged.

3. ECONOMIC ENTOMOLOGY. This course treats in detail insects of the inter-mountain region and, in addition, those of considerable importance in other states. The structure, classification, metamorphosis, habits and economic relations of insects are carefully studied. Reports required. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. S. 10:00.

SENIOR COLLEGE COURSES.

4. ENTOMOLOGICAL LITERATURE. Each student investigates and reports on the literature of some insect or insects of economic importance within his state. Historical development of entomology, current entomological literature and bibliographies are considered. Prerequisite, Entomology 2 or 3. Fall, Winter and Spring quarters. Three credits each quarter.

(Not given in 1920-21).

5. RESEARCH. Students may select or will be assigned certain problems dealing with different phases of entomology. The amount of credit will depend on the nature of the problems

and the time spent. Thesis. Prerequisite, Entomology 2 or 3. Hours and credit to be arranged.

FARM MANAGEMENT.

PROFESSOR E. B. BROSSARD.

VOCATIONAL COURSES.

a. FARM MANAGEMENT. A study of essential farm records and problems involved in choosing, buying, planning, organizing and managing a farm. Discussions of proper size, balance, diversity, and quality of farm business; relation of livestock, crops, pastures and ranges; efficient use of equipment and man and horse labor. Winter quarter. Five credits.

(Not given in 1920-21.)

Professor Brossard

SENIOR COLLEGE COURSES.

1. FARM MANAGEMENT. Simple farm accounts to determine labor income; single enterprise accounts; feed, labor, production and miscellaneous records; complete farm cost accounts. Special emphasis is given to the analysis and interpretation of results and their application in the organization and management of the farm. Fall quarter. Five credits.

Daily, except T. 10:00.

Professor Brossard

2. FARM MANAGEMENT. A study of the problems involved in choosing, buying, planning, organizing and managing a farm; size, balance, diversity and quality of farm business; relation of livestock, crops, pastures and ranges; the efficient use of equipment and man and horse labor. Winter quarter. Three credits.

M. W. F. 9:00.

Professor Brossard

3. FARM MANAGEMENT. A study of the problems involved

in choosing, buying, planning, organizing and managing a farm; size, balance, diversity, and quality of farm business; relation of livestock, crops, pastures and ranges; the efficient use of equipment and man and horse labor. Prerequisites, Farm Management 1, Economics 1, Animal Husbandry 3a, and Agronomy 1, 6, and 2 or 3. Winter quarter. Five credits.

Daily, except Tuesday 10:00.

Professor Brossard

4. FARM MANAGEMENT. A study of the natural and economic factors affecting types of farming in Utah, the United States and other countries, with discussions of the problems of land settlement, land tenure, land utilization, contracts and leases. Spring quarter. Five credits.

Daily, except Tuesday 10:00.

Professor Brossard

5. FARM MANAGEMENT. (Seminar) Discussions of current Farm Management literature; assigned topics. Required of senior and graduate students in Farm Management. Fall, Winter and Spring quarters. One credit each quarter. Time to be arranged.

Professor Brossard

6. FARM MANAGEMENT. (Research). Special investigations of problems in Farm Management. Only those senior and graduate students who present an acceptable plan for an investigation will be admitted. Credit will be granted according to the work done.

Time to be arranged.

Professor Brossard

FARM AND AUTO MECHANICS.

ASSOCIATE PROFESSOR ———

ASSOCIATE PROFESSOR NEWAY.

ASSISTANT PROFESSOR A. H. POWELL.

VOCATIONAL COURSES.

Courses a, c, b, i and w are offered with a view of fitting men to become efficient auto and farm mechanics. About two-

fifths of the time is devoted to lecture and recitation work and three-fifths to actual practical work.

a. **AUTOMOBILE AND TRACTOR COURSE.** Arranged for men who wish to specialize in auto mechanics. Full time devoted to machine work, auto forging, shop mathematics and the study of gas motors. Fall, Winter, Spring and Summer quarters. Three credits each quarter.

Sections 1, 2 and 4—Auto Mechanics.

Section 3—Tractor Mechanics.

c. **ADVANCED AUTO REPAIR.** A continuation of the automobile work in course a. Special emphasis will be given to standard methods of repair, shop equipment and shop management. Three hours daily 8:00 to 11:00. Any quarter. Eight credits.

b. **STORAGE BATTERY REPAIR.** A study of the various types of storage batteries. Considerable time will be given to battery troubles and repairs. Three hours daily 8:00 to 11:00. Fall, Winter or Spring quarter. Eight credits.

i. **AUTO STARTING, LIGHTING AND IGNITION.** Arranged for students who wish to become expert in this line of work. Considerable time devoted to trouble hunting and repair. Three hours daily 2:00 to 5:00. Fall, Winter or Spring quarter. Eight credits.

w. **OXY-ACETYLENE WELDING.** A study of the properties of various metals. Considerable practice is afforded in welding steel, cast iron, aluminum and other metals used in motor construction. Three hours daily 2:00 to 5:00. Winter and Spring quarter. Eight credits.

JUNIOR COLLEGE COURSES.

1. **FARM MACHINERY.** Tillage, cultivating, harvesting,

pumping and general labor saving machinery. Fall quarter. Three credits.

Lec. W. F. 8:00; lab. M. 2:00 to 5:00.

(Not given in 1920-21).

2. FARM MOTORS. The design, operation, care and adjustment of gasoline engines used on the farm, including the stationary engine, the tractor, the automobile and motor truck. Any quarter. Five credits.

Sections 1 and 2 reserved for Winter course students only.

Lec. M. W. F. 8:00 Winter or Spring quarter.

Lab. Sec. 1, T. Th. 2:00 to 5:00, Winter quarter.

Sec. 2, W. F. 2:00 to 5:00 Winter quarter.

Sec. 3, T. Th. 2:00 to 5:00, Spring quarter.

SENIOR COLLEGE COURSES.

3. APPLIED FARM MECHANICS. Arranged for teachers in agriculture and men preparing to qualify in Smith-Hughes work. A study of modern machinery, farm motors and farm appliances. Fall quarter. Five credits.

Lec. T. Th. S. 8:00; lab. T. Th. 2:00 to 5:00.

5. ADVANCED FARM MOTORS. A thorough analysis of ignition devices for all gas engines, the care of the storage battery, magnetos, locating engine troubles; a study of farm electric lighting. Spring quarter. Five credits.

Lec. T. Th. S. 8:00; lab. M. W. 2:00 to 5:00.

FINANCE AND BANKING.

PROFESSOR HENDRICKS.

PROFESSOR WANLASS.

SENIOR COLLEGE COURSES.

1. MONEY. A general survey of the laws and forms of money and credit; the money question; the money market; experi-

ence and legislation of recent times. Fall quarter. Three credits.
M. W. F. 9:00.

2. **BANKING.** History and theory of banking in the United States and foreign countries, foreign exchanges. Three hours. Winter quarter. Three credits.

M. W. F. 9:00.

3. **PUBLIC FINANCE.** The principles of public expenditures, revenues and administration. Fall quarter. Three credits.

T. Th. S. 11:00.

4. **TAXATION.** The methods of federal and state taxation, including the customs and internal revenue duties; income, business, inheritance, general property and corporation taxes. Winter quarter. Three credits.

T. Th. S. 11:00.

5. **CORPORATION FINANCE.** Corporate incomes, expenditures, debts, and administration; the laws governing the growth of corporations and their relation to the State. Open to Junior College students upon permission by instructor. Spring quarter. Three credits.

M. W. F. 9:00.

7. **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. Spring quarter. Three credits.

T. Th. S. 11:00.

FOODS AND DIETETICS.

PROFESSOR WHITACRE.

MISS ———

VOCATIONAL COURSES.

a. **FOOD FOR THE FAMILY.** Nutritional, economical and sanitary influences affecting choice of food; study of food to

meet dietary needs of the normal family. Practice in food preparation. Lecture-laboratory combination of work. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. S. 9:00 to 12:00. *Miss* _____

A course similar to Foods "a" will be organized for the Winter quarter if a sufficient number apply for the course. Three credits.

M. W. F. 9:00 to 12:00. *Professor Whitacre*

JUNIOR COLLEGE COURSES.

2. FOOD ECONOMICS. General methods of food production, distribution and preservation. Study of principles underlying choice of food and practice in technic of preparation of human food. Prerequisites, Chemistry 1, Physics 1 and Botany 1 or Zoology 1; Prerequisite or parallel, Physiology 1. Fall, Winter and Spring quarters. Four credits each quarter.

Lec. T. Th. 1:00; lab. M. W. or T. Th. 2:00 to 5:00.

Professor Whitacre and Miss _____

SENIOR COLLEGE COURSES.

3. SPECIAL DIETS. Choice and preparation of food under conditions that present definite problems; as for infants and children, school lunches and the sick. Laboratory practice in preparation of foods suitable to demands in given instances. Collateral reading. Prerequisite, Foods 4. Spring quarter. Three credits.

Lec. M. W. 11:00; lab. F. 2:00 to 5:00.

Professor Whitacre

4. DIETETICS. The principles of human nutrition. Human dietary needs; nutritive value of foods. Practice in construction of dietaries to meet given needs. Prerequisites, Chemistry 3 and 7, Bacteriology 1 and Foods 2. Winter and Spring quarters. Five credits each quarter.

Lec. M. W. F. 8:00; lab. T. Th. 8:00 to 11:00.

Professor Whitacre

5. **FOOD ENGINEERING.** The economics, sanitary and aesthetic principles involved in the purchase, preparation, preservation and serving of food. The essentials in the planning of kitchen and dining room, the arrangement of furniture and equipment and the management of the work connected with home food problems, as factors conducive to the greatest efficiency. Prerequisites, Art 1 or 21; Economics 1; Foods 2. Prerequisites or parallel, Textiles 2a and 2b. Fall quarter. Three credits.

Lec. T. Th. 9:00; lab. S. 9:00 to 12:00. *Professor Whittacre*

GEOLOGY.

PROFESSOR WILLIAM PETERSON.

VOCATIONAL COURSES.

a. **PHYSIOGRAPHY.** Special emphasis on the intermountain region. Given if ten or more students apply. Winter quarter. Three credits.

M. W. F. 8:00.

Professor Peterson

SENIOR COLLEGE COURSES.

2. **GENERAL GEOLOGY.** Dynamic, structural and historical geology. The changes the earth's surface is now undergoing and the forces which produce them as a means of interpreting the past. Laboratory study of the common rocks and rock-forming minerals, with special stress on the soil product resulting from rock disintegration. A careful study of the geological development of the North American continent. Field trips with written reports. Prerequisites, Chemistry 1, Zoology 2. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. S. 9:00.

Professor Peterson

3. **ECONOMIC GEOLOGY.** The first part of the course will deal with the non-metals with special emphasis on mineral fertilizers; the second part, with metals, their origin and economic uses. Any quarter may be taken without the others. Prerequisite, Geology 2. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. S. 11:00.

Professor Peterson

4. **MINERALOGY.** Individual laboratory work in blow-pipe analysis and determinative mineralogy. Prerequisite, Chemistry 1. One recitation and two laboratory periods. Students may start any time. Credit in proportion to work. Given if ten or more students apply.

Professor Peterson

5. **GEOLOGY OF GROUND WATER.** A study of structure to determine the cause of springs, artesian wells, etc. Structural characteristics that will yield water, either through tunneling or boring. Prerequisites, Geology 1 or 2, and Physics 1. Spring quarter. Five credits.

Daily except M. 8:00.

Professor Peterson

6. **ADVANCED PHYSIOGRAPHY.** For students who wish a more complete knowledge of physiographic features and processes than can be given in Geology 1. Prerequisite, Geology 2. Fall quarter. Three credits.

(Not given in 1920-21).

7. **PETROLOGY.** The origin and formation of the different kinds of igneous rocks and methods for the determination of the minerals which compose them. Prerequisites, Geology 2 and 4, and Chemistry 1. Lectures, reading and laboratory work. Either quarter. Credit to be arranged.

(Not given in 1920-21).

8. Field methods necessary in mapping the detailed geology of an assigned area. Time and credit to be arranged.

Professor Peterson

9. LOCAL GEOLOGY. The relief of Utah and bordering states. Relation of the country rock and physical features to productive land areas. One piece of relief modeling is required from each student. Prerequisite, Geology 2. Fall quarter. Three hours, two or three credits. Laboratory to be arranged.

Professor Peterson

10. GEOLOGY. Relief modeling, methods by which any topographic map may be converted into a true relief model, including either the geology or detailed geography as the student may select. Either Fall or Winter quarter. Two or three credits.

Hours to be arranged.

Professor Peterson

11. AGRICULTURAL GEOLOGY. Local geology in the valleys of Utah. A detailed study will be made of the rock formations surrounding each valley, and the character of soils from the disintegration of these rocks. The course will be prefaced by a study of structural and relief features of the State as well as a general survey of the drainage systems as they have influenced the disposition of disintegrated rock in the forming of soil. Winter quarter. Three credits.

T. Th. S. 8:00.

Professor Peterson

HISTORY.

PROFESSOR DAINES.

ASSISTANT PROFESSOR ROBINSON.

VOCATIONAL COURSES.

e. HISTORY OF UTAH. For vocational students. The fur traders, the explorers and the pioneers of Utah, and the establishment of governmental institutions. Winter quarter. Three credits.

M. W. F. 10:00.

Professor Daines

and institutions. Fall and Winter quarters. Three credits each quarter.

(Not given in 1920-21.)

13a. UNITED STATES HISTORY. Political and Social History of America to 1830. Fall quarter. Three credits.

M. W. F. 8:00.

Professor Daines

13b. UNITED STATES HISTORY. A continuation of 13a. Winter quarter. Three credits.

M. W. F. 8:00.

Professor Daines

15a. WORLD POLITICS. A study of the principles and practices governing international relations of the immediate and more remote past. Fall quarter. Two credits.

Th. S. 10:00.

Professor Daines

b. WORLD POLITICS. A continuation of 15a. Winter quarter. Two credits.

Th. S. 10:00.

Professor Daines

15c. WORLD POLITICS. A continuation of 15b. Spring quarter. Two credits.

Th. S. 10:00.

Professor Daines

HORTICULTURE.

PROFESSOR M. C. MERRILL

ASSISTANT PROFESSOR ABELL.

MR. EMIL HANSEN.

The following courses are required of all students majoring in Horticulture: 2, 4, 5, 8, 11, 12, 14 and 16.

VOCATIONAL COURSES.

a. FRUIT GROWING IN THE WEST. A study of the princi-

ples and practices governing fruit production in arid regions. Fall quarter. Three credits.

Lec. W. F. 8:00; lab. M. 2:00 to 5:00. *Professor Merrill*

b. PRACTICAL HORTICULTURE. Horticultural operations. Budding, grafting, pruning, spraying, plant propagation, greenhouse and nursery practice. Winter quarter. Three credits.

Lec. W. F. 8:00; lab. M. 2:00 to 5:00.

Assistant Professor Abell and Mr. Hansen

c. THE PRINCIPLES OF GARDENING. Planning, planting and care of gardens. Study of varieties and garden operations. Production emphasized. Spring quarter. Three credits.

Lec. W. F. 8:00; lab. M. 2:00 to 5:00.

Assistant Professor Abell

JUNIOR COLLEGE COURSES.

1a, 1b, 1c. PRINCIPLES OF HORTICULTURE. Course in general horticulture designed especially for agricultural students not specializing in horticulture, but who desire to become acquainted with the general field of horticultural information and practice. Fall, Winter and Spring quarters. Each quarter's work is complete and may be taken separately. Prerequisite, Botany 2. Three credits, each quarter.

Fall quarter (1a) Orchard and Small Fruits.

Lec. Th. S. 11:00; lab. W. 2:00 to 5:00. *Professor Merrill*

Winter quarter (1b) Horticultural Technic and Plant Propagation.

Lec. Th. S. 11:00; lab. W. 2:00 to 5:00.

Professor Merrill and Mr. Hansen

Spring quarter (1c) Vegetable and Landscape Gardening. This course is also planned to meet the needs of Home Economics students.

Lec. Th. S. 11:00; lab. W. 2:00 to 5:00.

Assistant Professor Abell and Mr. Hansen

2. **POMOLOGY.** Principles underlying home and commercial fruit growing. Fall quarter. Three credits.

T. Th. S. 8:00.

Professor Merrill

3. **PLANT PROPAGATION.** Methods in horticultural technic. Studies in budding, grafting, reproduction by seeds and vegetative parts and nursery practice. Prerequisite, Botany 1 or 2. Winter quarter. Three credits.

(Not given in 1920-21).

4. **PRACTICAL POMOLOGY.** Practical problems pertaining to orchard practice—pruning, frost injury and prevention, planting, spraying, thinning, fertilizing and growth of cover crops. Prerequisite, Horticulture 2. Spring quarter. Three credits.

Lec. Th. 1:00; lab. T. Th. 2:00 to 5:00.

Assistant Professor Abell

5. **OLERICULTURE.** Principles and practices underlying production of vegetable crops, and methods of handling for home and commercial purposes. Study of varieties and their adaptations. Fall quarter. Three credits.

Lec. W. F. 11:00; lab. T. 2:00 to 5:00.

Assistant Professor Abell

6. **PLANTS UNDER GLASS.** Vegetable forcing. Crops grown in cold frames, hot-beds and greenhouses. Soil composting and manuring. Prerequisite, Horticulture 5. Winter quarter. Three credits.

(Not given in 1920-21).

7. **SMALL FRUITS.** Propagating, cultivating, pruning, harvesting and marketing of berries, currants and grapes. History and characteristics of varieties. Spring quarter. Three credits.

Lec. W. F. 10:00; lab. F. 2:00 to 5:00. *Professor Merrill*

8. **LANDSCAPE GARDENING.** Principles underlying home

and city beautification. Preparation of ground, selection and grouping of ornamental plants, care of lawns, designing of plans. Prerequisite, Botany 2. Fall quarter. Three credits.

Lec. W. F. 10:00; lab. Th. 2:00 to 5:00.

Assistant Professor Abell and Mr. Hansen

SENIOR COLLEGE COURSES.

1. GENERAL HORTICULTURE. Study of the various phases of horticulture from the view point of correlation with general or specialized farming. Intended primarily for Senior College agricultural students not specializing in horticulture. Spring quarter. Five credits.

Lec. T. Th. S. 8:00; lab. T. Th. 2:00 to 5:00.

Professor Merrill

9. LANDSCAPE DESIGN. Advanced practice in landscape art. Prerequisite, Horticulture 8. Winter quarter. Three credits.

(Not given in 1920-21).

10. HOME FLORICULTURE. Propagation and care of plants useful for home decoration. Exterior plantings, flower beds and borders. Designed for students in Home Economics as well as for horticultural students. Spring quarter. Three credits.

Lec. W. F. 11:00; lab. F. 2:00 to 5:00.

Assistant Professor Abell and Mr. Hansen

11. SYSTEMATIC POMOLOGY. Variety characteristics and adaptations. Fruit scoring and preparation for judging fruit exhibits. Prerequisites, Horticulture 2 and 4. Fall quarter. Three credits.

(Not given in 1920-21).

12. PLANT BREEDING. Fundamentals of Mendelism, genetics, and biometry. Study of hereditary characters, environmental

variations and practical plant breeding work. Prerequisites, Horticulture 3 and Botany 2. Spring quarter. Five credits.

Lec. T. Th. S. 10:00; lab. M. W. 2:00 to 5:00.

Professor Merrill

13. HORTICULTURAL BY-PRODUCTS. Utilization of waste materials. Biochemistry of processes in plant products. Ripening, storage, decay, fermentation, canning operations. Prerequisites, Horticulture 2, 5 and 7, Botany 4, Chemistry 3, and Bacteriology 1. Fall quarter. Four credits.

(Not given in 1920-21).

14. HISTORY OF CULTIVATED PLANTS. Historical consideration of wild plants in nature from earliest times and their gradual adaptation to the uses of man. Winter quarter. Two credits.

W. F. 10:00.

Professor Merrill

15. EXPERIMENTAL HORTICULTURE. Preparation for research in horticulture. History and tendencies of horticultural research throughout the world. Critical study of bulletins, theses and research publications. Extensive reading and reports. Reading knowledge of French and German desirable. Prerequisites, Horticulture 2, 3, 4, 5, 6, 7, 11 and 12, Botany 2 and 4, Chemistry 3, and Entomology 1. Five credits. Spring quarter.

Hours to be arranged.

Professor Merrill and Assistant Professor Abell

16. SEMINAR. Review of current literature. For advanced students. One hour a week. One credit each quarter.

Time to be arranged.

Professor Merrill and Assistant Professor Abell

17. RESEARCH. For students with adequate preparation.

Time and credit to be arranged.

Professor Merrill and Assistant Professor Abell

HOUSEHOLD ADMINISTRATION.

PROFESSOR FLETCHER.
 PROFESSOR PEDERSEN.
 PROFESSOR P. E. PETERSON.
 PROFESSOR WHITACRE.
 PROFESSOR MOEN.
 PROFESSOR PRESTON, M. D.
 ASSISTANT PROFESSOR AMY L. MERRILL.
 MISS KUNZ.

Students doing their major work in Household Administration must include at least 21 hours of Senior College work in this department.

JUNIOR COLLEGE COURSES.

1. PERSONAL ACCOUNTS. Keeping accurate records of each student's expenditures during college life, a critical and comparative study of students' spending habits as shown by the actual accounts kept and consideration of the principles underlying wise buying. Open to all college women. Fall, Winter and Spring quarters. One credit each quarter.

Friday 12:00. *Professors Whitacre and Moen*

2. HOME NURSING. Scope of home nursing; treatment of common ailments. Care of the sick. Use of drugs and patent medicines. Fall quarter. Three credits.

T. Th. S. 10:00. *Dr. Preston and Miss Kunz*

11a. HISTORY OF DOMESTIC ARCHITECTURE. (History 11a.) History of the house from primitive times to the present. Fall quarter. Three credits.

M. W. F. 9:00. *Professor Fletcher*

11b. HISTORY OF FURNITURE. (History 11b.) History of interior decoration and furniture styles. Winter quarter. Three credits.

M. W. F. 9:00. *Professor Fletcher*

SENIOR COLLEGE COURSES.

22a. HOUSE FURNISHING. (Art 22a). House furnishing and decoration. Consideration of the principles governing good taste in house exteriors and garden designs, wall decoration, floors, ceilings, color and furniture selection and arrangements. Prerequisites, Art 1, 21, 2, or their equivalents. Winter quarter. Four credits.

Lec. T. Th. S. 9:00; lab. Th. or F. 2:00 to 5:00.

Professor Fletcher

22b. HOME FURNISHING. (Art 22b). Textiles and drapery, tableware, pottery and bric-a-brac, pictures, sculpture, flowers, will be treated upon together with the assembling of all features which go to make the home beautiful. Prerequisite, Household Administration 22a. Spring quarter. Four credits.

Lec. T. Th. S. 9:00; lab. Th. or F. 2:00 to 5:00.

Professor Fletcher

23. HOUSEWIFERY. Six weeks are spent in residence in the Practice Home, where an opportunity is given to apply to home conditions the principles of home economics as studied in the College. The remaining six weeks of the quarter, the study of the business of the home will be taken up, including practice in laundry work. A fee of \$7.00 per week will be charged while in residence at Practice Home. Three lectures and one laboratory during time not in residence. Any quarter. Five credits.

Lec. M. W. F. 9:00; lab. to be arranged.

Assistant Professor Merrill

25. MOTHERCRAFT AND CHILD WELFARE. Growth and development of the foetus, correct and incorrect impressions concerning the prenatal influence, physiological changes during pregnancy, care of the expectant mother, care of the infant, causes and prevention of infant mortality and vital questions of

the adolescent period will be considered. Spring quarter. Three credits.

M. W. F. 10:00.

Professor Preston

27. HOUSEHOLD ACCOUNTS. (Accounting 7). The practical application of accounting principles to home problems. Two lectures and six hours laboratory work per week. Spring quarter. Four credits.

Lec. M. F. 9:00.

Professor P. E. Peterson

30. LITERATURE FOR CHILDREN. Study of the child and institutional factors affecting him; the child and the book; the adolescent and the book; types of literature for children; contributions to children's literature of Greece, Rome and other countries. Spring quarter. Two credits.

(Not given in 1920-21).

Professor N. A. Pedersen

IRRIGATION AND DRAINAGE.

PROFESSOR ISRAELSEN.

PROFESSOR RAY B. WEST.

MR. FIFE.

Students who major in Irrigation and Drainage will be required to complete courses 1, 2, 4, and 6 or their equivalents, and to present a thesis concerning some special problem to be assigned by the Department.

VOCATIONAL COURSES.

a. FARMERS' COURSE IN IRRIGATION AND DRAINAGE. Practical information on measurement of irrigation water, construction of small headgates and ditches, methods of handling irrigation water on different types of soil and common problems in farm drainage. Winter quarter. Three credits.

M. W. F. 9:00.

Mr. Fife

b. WATER MASTERS' SHORT COURSE. Practical information in condensed form concerning water measurement, capacities of different soils to absorb and retain water, irrigation of porous upland soils, water requirement of crops, preparation of land for irrigation, boring wells and installation of pumps for irrigation purposes, water right doctrines and other equally important irrigation problems. Two weeks beginning February 7 and ending February 19.

Professor Israelsen, Mr. Fife, and others

JUNIOR COLLEGE COURSES.

1. IRRIGATION AND DRAINAGE PRACTICE. Water measurement, effect of soil and plant on time and frequency of irrigation, duty of water, design of farm ditches and preparation of land for irrigation, pumping for irrigation and methods of farm drainage. Fall quarter designed especially for students in Agricultural Engineering and Spring quarter for students in Agriculture. This course may be applied as major or minor in the Department of Agronomy. Sec. 1, Fall quarter; Sec. 2, Spring quarter. Five credits.

Lec. M. W. F. 11:00; lab. W. F. 2:00 to 5:00.

Professor Israelsen and Mr. Fife

2. HYDRAULICS. Laws of liquids in motion and at rest, flow in natural and artificial channels and elementary principles of water power development. Prerequisite, Mathematics 2 or its equivalent. Fall and Winter quarters. Three credits each quarter.

T. Th. S. 8:00.

Professor Israelsen

SENIOR COLLEGE COURSES.

3. DESIGN OF DRAINAGE SYSTEMS. Preliminary survey, location of drains, flow in drains and in open channels and construction of drainage systems with special reference to the drain-

age of irrigated lands. Prerequisite, Hydraulics. Spring quarter. Five credits.

Lec. T. Th. S. 8:00; lab. T. Th. 2:00 to 5:00.

(Not given in 1920-21).

Professor Israelsen

4. DESIGN OF IRRIGATION SYSTEMS. Sources of water supply diversion works, canal alignment and cross section, flumes, drops and spillways. Prerequisites, Hydraulics and Strength of Materials. Fall and Spring quarters. Five credits each quarter.

Lec. M. W. F. 8:00; lab. T. Th. 2:00 to 5:00.

Professor Israelsen

5. MANAGEMENT AND OPERATION OF IRRIGATION SYSTEMS. Delivery of water to irrigators, annual water charges, operation costs. Fall quarter. Three credits.

M. W. F. 12:00.

Professor Israelsen

(Not given in 1920-21).

6. IRRIGATION INSTITUTIONS. (Given by the Departments of Irrigation and Drainage and Political Science, jointly.) Water right doctrines, laws governing the adjudication and acquirement of water rights and the distribution of water, organization of irrigation enterprises. Prerequisite or parallel, a general course in Economics or Sociology. Fall and Winter quarters. Three credits each quarter.

M. W. F. 8:00.

Fall Quarter, Judge Bullen

Winter Quarter, Professor Israelsen

7. SEMINAR. Papers and discussions upon problems concerning some phase of irrigation or drainage development. Required of students who major in irrigation and drainage. Winter quarter. One credit. Hour to be arranged with instructor.

Professor Israelsen, Professor West and Mr. Fife

8. RESEARCH. Seniors who major in irrigation and drain-

age may elect special problems for investigation. Hours and credits to be arranged with instructor.

Professor Israelsen and Professor West

Note.—Agronomy 6 (Soils) and Geology 5 (Ground Water) may be applied toward a major or a minor in the Department of Irrigation and Drainage, School of Agricultural Engineering.

LIBRARY ECONOMY.

MISS HATTIE SMITH.

1. GENERAL REFERENCE. Classification and arrangement of books; the card catalog; reference books. Text: "List of Reference Books in the Utah Agricultural College Library." Fall, Winter and Spring quarters. One credit each quarter.

Th. 1:00.

Miss Smith

MARKETING.

PROFESSOR WANLASS.

SENIOR COLLEGE COURSES.

1. AGRICULTURAL COMMERCE. This course will cover the basic facts necessary to a clear understanding of the problems in marketing. Supply and demand of farm products, prices and production, the economic relations of the farmer, the middleman and the consumer will receive special consideration. Prerequisite, Economics 1 or 2. Will be given if ten students apply. Fall quarter. Three credits.

M. W. F. 9:00.

2. **MARKETING OF FARM PRODUCTS.** Problems of marketing specific farm products, such as livestock, grains, potatoes, hay, dairy products and poultry products, etc., will be considered from the standpoint of the economic forces which give rise to such problems. Possibilities of improvement of the present systems will be considered. Prerequisite, Economics 1 or 2. Winter quarter. Three credits.

M. W. F. 9:00.

3. **COOPERATION IN AGRICULTURE.** Growth of the cooperative movements with the viewpoint of showing their strength and weakness. Typical cooperative enterprises will be studied in detail. Principles of cooperation and the practicability of their application will receive first consideration. Prerequisites, Economics 1 and 2. Spring quarter. Three credits.

M. W. F. 9:00.

MATHEMATICS.

PROFESSOR SAXER.

MR. EDLEFSEN.

VOCATIONAL COURSES.

a. **VOCATIONAL ALGEBRA.** A brief course in elementary algebra. Daily for twelve weeks during the Summer quarter.

b. **PLANE GEOMETRY.** Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 9:00.

Mr. Edlefsen

w. **ARITHMETIC.** Applied or vocational arithmetic for winter course students. Winter quarter. Three credits.

M. W. F. 11:00.

Mr. _____

e. **SHORT COURSE.** Select work from Forge Practice "a," for agricultural, automobile and tractor students who cannot spend each day in the shops. Fall, Winter and Spring quarters. Sections 1, 2 and 3, three credits each quarter. Section 4, two credits each quarter.

Sec. 1, M. W. F. 8:00 to 11:00.

Sec. 2, T. Th. S. 8:00 to 11:00.

Sec. 3, M. W. F. 2:00 to 5:00.

Sec. 4, T. Th. 2:00 to 5:00.

Section 1 reserved for course "d" men in Fall and Spring quarters. Beginners taken in all four sections Winter quarter and Sec. 2, 3, 4 Fall and Spring quarters.

Associate Professor Newey

d. **ADVANCED SHORT COURSE.** For students who have had some work, but cannot fit the regular schedule. Work selected from regular courses. Time and credit to be arranged with the instructor.

Associate Professor Newey

JUNIOR COLLEGE COURSES.

1, 2, 3. **FORGE SHOP OPERATIONS.** Advanced forging and general repair work, including plow work, spring work, axle and tire setting and horseshoeing. Prerequisite, Forge Practice. Fall, Winter and Spring quarters. Five credits each quarter.

Sec. 1. Daily except Saturday, 8:00 to 11:00.

Sec. 2. Daily except Saturday, 2:00 to 5:00.

Associate Professor Newey

4, 5, 6. **ADVANCED SHOP PRACTICE.** In this course the student may emphasize any line of blacksmith work that suits his particular needs. Prerequisite, Forge Shop Operations. Credit

also in Senior course. Fall, Winter and Spring quarters. Five credits each quarter.

Sec. 1. Daily except Saturday, 8:00 to 11:00.

Sec. 2. Daily except Saturday, 2:00 to 5:00.

Associate Professor Newey

7, 8, 9. AUTOMOBILE REPAIRS. The work consists of repairing and building bodies, wheels and springs. Prerequisite, Forge Shop Operations. Fall, Winter and Spring quarters. Five credits each quarter.

Sec. 1. Daily except Saturday, 8:00 to 11:00.

Sec. 2. Daily except Saturday, 2:00 to 5:00.

Associate Professor Newey

6. SHOP PROBLEMS. The application of mathematics to the trades; practical methods of estimating quantities of material, calculating costs and finding speeds of machines; the use of geometry in the trades. Fall, Winter or Spring quarter. Three credits.

T. Th. S. 11:00 to 12:00.

Associate Professor Newey

FOUNDRY. Operated for demonstration and the making of castings. If a sufficient number of students apply, the foundry will be run for instructional purposes also.

Associate Professor Newey

MACHINE AND AUTOMOBILE WORK.

ASSISTANT PROFESSOR A. H. POWELL.

In the following courses a study will be made of the tools, methods, and materials used in the construction, care, and repair of machinery and automobiles, with special emphasis on making the tools. Problems relating to the work, as the speed of pulleys, gears, drills, etc., will be required. The exercises are chosen with reference to their practical application in automobile and tractor work.

LABORATORY SCHEDULE.

Sec. 1. T. Th. S. 8:00 to 11:00.

Sec. 2. M. W. F. 8:00 to 11:00.

Sec. 3. T. Th. 2:00 to 5:00.

Sec. 4. M. W. F. 2:00 to 5:00.

Section 2 reserved for short course men in Fall and Spring quarters. Beginners taken in all four sections. Winter quarter and Sections 1, 3, and 4, Fall and Spring quarters.

VOCATIONAL COURSES.

c. SHORT COURSE. Exercises selected from courses 1, 2, and 3. Fall, Winter, or Spring quarters. Three credits each quarter.

Lab. Sec. 1, 3 or 4. *Assistant Professor A. H. Powell*

d. ADVANCED SHORT COURSE. Continuation of course c. Three credits each quarter.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

JUNIOR COLLEGE COURSES.

1. BENCH WORK. Filing, chipping, drilling, fitting, grinding, tap and die work. Three credits each quarter.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

3. ELEMENTARY PLANER, SHAPER, AND LATHE WORK. Planing and shaping of angular and irregular surfaces. Elementary turning. Five credits each quarter.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

4. LATHE WORK. (Continued). Mandrel and chuck work. Angular facing and boring. Five credits each quarter.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

5. ADVANCED LATHE WORK AND MILLING MACHINE. Thread cutting and fitting, making of drive and running fits, bolts, screws and repair parts. Five credits each quarter.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

6. LATHE AND MILLING MACHINE WORK. (Continued). Spur gears, bevel gears, face plate work, couplings, etc. Three credits each quarter.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

7, 8, 9. LATHE MILLING AND GRINDING MACHINE. Involving operations connected with the making of simple tools and machine parts. Five credits per course.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

10, 11, 12. SIMPLE MACHINE CONSTRUCTION. Model engines, jigs and fixtures, manufacturing. Five credits per course.

Lab. Sec. 2. *Assistant Professor A. H. Powell*

13. MATERIALS OF MACHINES. Time and credits to be arranged.

Assistant Professor A. H. Powell

14. MECHANISM. Time and credits to be arranged.

Assistant Professor A. H. Powell

MECHANICAL DRAWING.

PROFESSOR J. S. POWELL.

PROFESSOR RAY B. WEST.

MR. _____

Drawing rooms are open daily from 8:00 to 5:00. Supervised instructions given from 8:00 to 11:00. Three hours a week are required for each credit.

JUNIOR COLLEGE COURSES.

1. AGRICULTURAL DRAWING.

1a. FARM CONSTRUCTION. Working drawings of feed racks, gates, etc., in straight line projection. Lettering and reading of plans. Fall or Winter quarter. Two credits.

1b. FARM STRUCTURES. Drawing and designing of poultry houses, swine houses, granaries, garages and other farm buildings. Prerequisite 1a. Winter or Spring quarter. Two credits.

1c. MAPS AND TOPOGRAPHICAL DRAWING. Drawing of grounds, gardens and farm maps. Prerequisite 1b. Spring quarter. Two credits.

Professor Powell and Mr.——

For advanced farm structures see Rural Architecture 8.

2. DRAWING FOR BUILDERS AND MECHANICS. These courses are planned to correlate with the work of the student in the shops.

2a. DRAWING OF SHOP EXERCISES. Freehand sketching and rendering in straight line projection. Reading of plans and lettering. Fall or Winter quarter. Two credits.

2b. STRUCTURAL DETAILS. Drawing of walls, windows, roof details and furniture. Forging exercises and machine parts. Prerequisite 2a. Winter or Spring quarter. Two credits.

2c. BUILDING DETAILS. Drawing of simple plans, elevations and details. Problems in carriage and automobile bodies and machine parts. Spring quarter. Two credits.

Lectures for 1 and 2. *Professor Powell and Mr.——*

3. MECHANICAL DRAWING.

3a. THE USE AND CARE OF INSTRUMENTS. Applied geom-

eetry and orthographic projection. Fall or Winter quarter. Three credits.

3b. DEVELOPING SURFACES AND INTERSECTIONS. Prerequisite 3a. Winter or Spring quarter. Three credits.

3c. TECHNICAL SKETCHING. Pictorial representations and perspectives. Prerequisite 3b. Spring quarter.

Professor Powell

4. ARCHITECTURAL DRAWING. Prerequisite, Mechanical Drawing 3a, 3b, and 3c.

4a. Drawing of plans, elevations, etc. Any quarter. Three credits.

4b. Drawings of plans, elevations, sections and details. Prerequisite, Mechanical Drawing 4a. Any quarter. Three credits.

4c. Drawings of plans of grounds, gardens and out-buildings. Prerequisite, Mechanical Drawing 4b. Any quarter. Three credits.

Professor Powell and Mr.———

For Architectural Composition, see Rural Architecture 10 and 11.

Architectural drawing may be used as a major or minor in Rural Architecture.

5. ENGINEERING DRAWING. The drawing of engineering structures in orthographic projection. Prerequisite, Drawing 1, 2 or 3. Any quarter. Three credits.

Professor West

6. LETTERING AND DESIGNING OF COMMERCIAL AND OTHER FORMS. Freehand sketching and lettering, making of graphical charts and plotting of data. Designing accounting organizations and statistical forms. Three hours in drawing for one credit. Student may elect one or more credits, any quarter.

Professor Powell and Mr.———

7. DESCRIPTIVE GEOMETRY. Of practical value to the me-

chanic and engineer in reading working drawings and in solving graphical problems. The point, line, plane and simple solid are studied. Prerequisite, Drawing 1, 2, or 4.

Professor West

WOODWORK AND HOUSEBUILDING.

ASSOCIATE PROFESSOR HANSEN.

MR. SWENSON.

MR. HUGHES.

The shops are open daily, except Saturday, from 8:00 to 12:00 and from 2:00 to 5:00 and Saturday from 8:00 to 12:00. The courses scheduled may be taken at any time when the shops are open.

(Lectures are included in the laboratory periods).

VOCATIONAL COURSES.

a, b, c. FUNDAMENTALS. Scarfing, mortising, dovetailing and jointing; panels, sashes, doors and cupboards. Thoro practice in tool sharpening and proper handling of tools are emphasized. Three hours any five days a week. Fall, Winter and Spring quarters. Five credits each quarter.

Associate Professor Hansen

d. FARM CARPENTRY. Making simple articles used on the farm such as nail boxes, troughs, feed hoppers, trestles, gates, grindstone frames, beehives, etc.; also rafter cutting and tool sharpening. Nine hours a week. May be had any quarter. May also be completed in two weeks by working all day. Three credits.

Associate Professor Hanson

e. SHORT COURSE FOR BEGINNERS. For students who cannot spend every day in the shops. Nine hours a week, any quarter. Three credits.

Associate Professor Hanson

JUNIOR COLLEGE COURSES.

1, 2, 3. MACHINE WORK. The use of wood-working machinery, building a modern work bench and tool chest; also elementary and advanced wood turning. Prerequisite, Carpentry c. Three hours daily any 5 days a week. Fall, Winter and Spring quarters. Five credits each quarter.

Mr. Swenson

4, 5, 6. CABINET MAKING AND HOUSEBUILDING. Furniture in fir and oak, staining, fuming and finishing; framing, roofing, door and window frames. Prerequisite, Carpentry 3. Three hours any five days a week. Fall, Winter and Spring quarters. Five credits each quarter.

Mr. Swenson

SENIOR COLLEGE COURSES.

7, 8, 9. FANCY FURNITURE. Mahogany and other expensive woods are used; veneering, inlaying, and hand polishing. Prerequisite Carpentry 6. Three hours daily, any five days a week. Fall, Winter and Spring quarters. Five credits each quarter.

Mr. Swenson

10. WOOD CARVING. Simple articles in straight and curved lines, simple conventional ornaments and natural foliage. Time and credits to be arranged with the instructor.

Mr. Hughes

11. PATTERN MAKING. Time and credits to be arranged with the instructor.

Mr. Swenson

12. ADVANCED SHORT COURSE. For students who have had some work and want to continue without taking the regular courses. Time and credit to be arranged with the instructor in charge.

Mr. Swenson

13. PICTURE FRAMING. Making of simple mouldings and frames, finishings, mat cutting, mounting and fitting. May be had in connection with the advanced courses in woodwork. Time and credit to be arranged with the instructor.

Mr. Swenson

14. WOOD FINISHING. (Technology of Mechanic Arts 4). Paints, pigments, oils and their manufacture. Water, oil and spirit stains; wash finish. Varnishes,—kinds and their preparation; rubbing and hand polish. May be taken any quarter if four or more students apply. Three lectures a week, one quarter. Three credits.

Time to be arranged with the instructor.

Associate Professor Hansen

METHODS IN EXPERIMENTATION AND EXTENSION

METHODS IN EXTENSION.

These courses will be given by members of the Extension Division Staff. Hours and credits are to be arranged.

AGRICULTURAL SECTION.

This course is to acquaint advanced students with the rapidly growing work of the Extension Division and to act as a fitting school for practically trained agriculturists who plan to enter Extension work but whose knowledge is not organized according to college standards. The course will also act as a cementing force among Extension workers. The lecture material will be given during different weeks and the demonstrations of certain different subjects grouped during a few weeks in order to enable County Agents and others to take advantage of them.

1a. METHODS IN EXTENSION. Lectures and demonstrations in the methods of instruction in agricultural extension work. Two lectures a week, Fall, Winter, and Spring quarters.

HOME ECONOMICS SECTION.

The ever-increasing need for workers in the Extension field makes imperative a more intensive training in Extension methods than is obtained in a Home Economics course. This course is designed to cover the activities that come within the range of the home and particularly those of the farm home. Students desiring recommendations for Extension work in this or other States should take this course.

Actual experience work in Home Economics, general study of phases of Extension work, program making, preparation of talks, preparing demonstrations and exhibits, project making, reports, are all included.

1b. METHODS IN EXTENSION. Lectures and demonstrations in the methods of instruction in home economics extension work. Two lectures a week, Fall, Winter, and Spring quarters.

CLUB WORK SECTION

3. METHODS IN EXTENSION.

To develop local leadership among the young people of the state. It may be taken by senior high school students and others qualified to do the work. The work consists of acting as local leader for a group of at least five boys or five girls who are members of a club and are working on a project outlined by the Junior Extension Department. Monthly reports and a final report of their work must be sent to the Junior Extension Department. The work will require six months to complete.

College credit will be given to those who do satisfactory work.

man and Sophomore grade. Fall, Winter and Spring quarters. Three credits each quarter.

T. 10:00 to 1:00.

The Military Department

ADVANCED COURSE. Designed primarily for students of Junior and Senior grade. Fall, Winter and Spring quarters. Five credits each quarter.

M. W. F. 11:00; T. 10:00 to 12:00. *The Military Department*

MODERN LANGUAGES AND LATIN.

PROFESSOR ARNOLD.

JUNIOR COLLEGE COURSES.

FRENCH.

1. FIRST YEAR FRENCH. Walther and Ballard's Beginner's French for grammar and conversation. About 400 pages of easy prose are read. Fall, Winter and Spring quarters. Three credits each quarter.

Sec. 1, M. W. F. 8:00; Sec. 2, M. W. F. 11:00.

Professor Arnold

2. SECOND YEAR FRENCH. Francois' French Composition for grammatical review and writing in French; Lavieste's Histoire de France for conversation; translating works of nineteenth century authors. Prerequisite, French 1. Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 10:00.

Professor Arnold

GERMAN.

1. FIRST YEAR GERMAN. Grammar, reading and conversation. Fall, Winter and Spring quarters. Three credits each quarter.

T. Th. S. 8:00.

Professor Arnold

LATIN.

LATIN 1. Grammar and reading and study of English vocabulary. Fall, Winter and Spring quarters. Two credits each quarter.

Th. S. 10:00.

Professor Arnold

SENIOR COLLEGE COURSES.

FRENCH.

3. ADVANCED FRENCH. Reading course in Balzac's novels. This course may be taken privately in the form of weekly reports. Prerequisite, two years of French. Fall, Winter and Spring quarters. One credit each quarter.

T. 12:00.

Professor Arnold

4. ADVANCED FRENCH. French conversation. Games, dictation, and learning of a one-act play. Fall, Winter and Spring quarters. One credit each quarter.

F. 12:00.

Professor Arnold

5. ADVANCED FRENCH. Research work in French Home Economics. Lectures and outside readings. Fall, Winter and Spring quarters. One credit each quarter.

Professor Arnold

6. ADVANCED FRENCH. Research work in French science and agriculture, particularly horticulture. Lectures and outside readings. Fall, Winter and Spring quarters. One credit each quarter.

Professor Arnold

Hours must be arranged for French 5, and 6, with the instructor.

GERMAN.

3. SCIENTIFIC GERMAN. Rapid reading of scientific texts during first half year with private reading in different subjects according to the course of each student. Specially recommended for students who have had two years' work in German in high school or college and are planning to do advanced work in agronomy, botany, or other sciences. Fall, Winter and Spring quarters.

Hours to be arranged with instructor. *Professor Arnold*

SPANISH.

SPANISH 1. Grammar, conversation and reading. Winter quarter. Four credits.

T. Th. F. S. 9:00. *Professor Arnold*

SPANISH 1. Grammar, reading and conversation. Spring quarter. Two credits.

T. Th. 9:00. *Professor Arnold*

SPANISH 2. Business correspondence, reading and conversation. Fall quarter. Three credits.

T. Th. S. 9:00. *Professor Arnold*

JOURNALISM. (English 25) News collecting, history of journalism in America. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 1:00. *Professor Arnold*

 MUSIC.

PROFESSOR THATCHER

ASSOCIATE PROFESSOR JOHNSON

MR. SMITH

Students may enter the College orchestra or band without taking any other music course. One credit each quarter.

1. ELEMENTARY THEORY. Reviews the ground work necessary for students desiring a thorough knowledge of music. Keys, scales, intervals, melody writing, sight singing. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 9:00.

Professor Thatcher

2a. APPRECIATION AND HISTORY OF MUSIC. From text. Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 11:00.

Professor Thatcher

2b. ANALYSIS AND CRITICISM. Arranged to supplement private music study. Fall quarter. Two credits.

T. Th. 10:00.

Professor Thatcher

2c. AMERICAN MUSIC. Winter quarter. Two credits.

T. Th. 10:00.

Professor Thatcher

3. ELEMENTARY HARMONY. Text used. Home study, 6 hours as a minimum. Applied music, individual and ensemble. Prerequisite, 2 years' study, piano or equivalent. Fall, Winter and Spring quarters. Five credits each quarter.

M. W. F. 10:00.

Professor Thatcher

4. ADVANCED HARMONY AND ANALYSIS. Applied music, individual and ensemble. Prerequisite, Music 3. Home study increased for this course. Five hours, Fall, Winter and Spring quarters. Five credits each quarter.

Time to be arranged.

Professor Thatcher

5. COUNTERPOINT AND SMALL FORMS. Applied music, individual and ensemble. Prerequisite, Music 4. Fall, Winter and Spring quarters. Five credits each quarter.

Hours to be arranged.

Professor Thatcher

6. ORCHESTRA CLASS. Provides study of standard orchestra works. 2 hours a week. One credit each quarter.

Hours to be arranged.

Professor Thatcher

7. CHOR. To furnish music for chapel exercises and special occasions. Three hours per week. Fall, Winter and Spring quarters. One credit each quarter.

M. W. F. 12:00.

Associate Professor Johnson

8a. GLEE CLUB. An organization of men. Membership is limited in number and decided by competition. Three hours a week. Days and hours of practice to be arranged. Fall, Winter and Spring quarters.

Associate Professor Johnson

8b. LADIES' CHORUS. Membership is limited and decided by competition. Three hours a week. The Glee Club and Ladies' Chorus join in giving the college opera. Fall, Winter and Spring quarters.

Associate Professor Johnson

9. PUBLIC SCHOOL MUSIC. Ability to play and sing required. Applied music in choir or glee club. Deals with theory and methods of teaching, music supervision, programs. Three hours per week. Any quarter. Two credits.

Hours to be arranged.

Associate Professor Johnson

10. BAND. To provide for study and practice of band instruments and to furnish music for athletic meets and outdoor gatherings. Fall, Winter and Spring quarters. One credit each quarter.

Mr. Smith

Private Instruction may be had (the pupil paying the teacher's fee) in the following: Voice, Piano, Violin, Orchestral and Band Instruments. One credit a quarter in each course will be allowed if pupil is enrolled in Applied Music only.

Recitals by advanced students are given once a month.

PHYSICAL EDUCATION.

PROFESSOR W. B. PRESTON, M. D.

Medical Supervisor of Students

ASSISTANT PROFESSOR JENSEN.

ASSISTANT PROFESSOR ROMNEY.

MISS CARLSON.

Physical education is arranged to give each student sufficient exercise to maintain physical health and a high degree of mental efficiency.

After careful physical examination work is prescribed to meet the need of each individual. Physical training is required of all students.

Adequate opportunity is afforded students to take part in class games and contests. Inter class sports are open to students who have never won a letter or who are not trying for the teams.

Athletic competition with colleges and universities in the State and Rocky Mountain Conference forms an interesting part of the work. The promotion of honor and college spirit through athletic games and meets constitutes an important feature of the department.

PHYSICAL EDUCATION FOR MEN.

1. FOOTBALL. Practice in football technic, equipment; theory of defensive and offensive play; study of rules, duties of officials, schedule making, and general preparation for coaching. Fall quarter.

Daily, 5:00.

2. TRACK AND FIELD ATHLETICS. Instruction and practice; how to choose men for different events; track rules and duties

of officials; theory of training for endurance, speed, skill, strength; problems of temperament, climate, traveling, and professionalism. Spring quarter.

Daily, 5:00.

3. BASKETBALL. Instruction and practice; history, principles and technic of the game; methods of training and coaching; study of rules and duties of officials. Winter quarter.

Daily, 5:00.

4. BASEBALL. Instruction and practice. Spring quarter.

Daily, 5:00.

5. GYMNASIUM WORK. Required of all students. Swedish gymnastics, callisthenic drills and gymnasium games. Students taking the course must learn to swim before receiving credit. Fall, Winter, and Spring quarters. Eight sections.

PHYSICAL EDUCATION FOR WOMEN.

MISS CARLSON.

The chief purpose of the department is for the physical betterment of the women of the institution. It strives to develop such physical habits as make for vigor and efficiency, and counteract the sedentary life of the student.

10. ELEMENTARY GYMNASICS. A course in elementary gymnastics planned to meet the needs of those who have had no physical education. For all girls registered as vocational students. Fall, Winter and Spring quarters. One credit each quarter.

T. Th. 1:00.

Miss Carlson

11. PRACTICAL GYMNASICS. Designed to furnish activity of such a kind and in such a manner as will secure erect car-

riage and good motor control. The course consists of lectures in hygiene, general gymnastics, folk dancing, plays and games. Required for graduation. Fall, Winter and Spring quarters. One credit each quarter.

Sec. 1. T. Th. S. 11:00; sec. 2 M. W. F. 10:00.

Miss Carlson

12. ADVANCED PRACTICAL GYMNASTICS. A continuation of Physical Education 11. Required for graduation. Prerequisite, Physical Education 11. Fall, Winter and Spring quarters. One credit each quarter.

Sec. 1. T. Th. S. 10:00; sec. 2. M. W. F. 11:00.

Miss Carlson

13. AESTHETIC DANCING. A course in dancing technic, fundamentals of interpretive work and descriptive dances. Prerequisite or parallel course, Physical Education 11. Fall, Winter and Spring quarters. One credit each quarter.

M. W. F. 2:00.

Miss Carlson

14. PLAYS AND GAMES. A practical course designed to make students more proficient in playing the more common competitive games as baseball, volley ball, hockey, tennis and hand ball. Prerequisites, Physical Education 11 and 12. Fall, Winter and Spring quarters. One credit each quarter.

T. Th. 2:00.

Miss Carlson

15. SOCIAL DANCING. Instruction in standardized modern dances for men and women. Winter quarter.

W. 5:00.

Miss Carlson

16. INTERPRETIVE DANCING. A course in advanced technic, descriptive, dramatic dancing and dance composition. Prerequisite, Physical Education 13. Fall, Winter and Spring quarters. One credit each quarter.

M. W. F. 3:00.

Miss Carlson

10. DIRECT AND ALTERNATING CURRENT ELECTRICITY AND ITS APPLICATION TO INDUSTRY. Winter and Spring quarters. Three credits each quarter.

M. W. F. 9:00.

Professor West

12. SEMINAR. Fall, Winter and Spring quarters. Two credits each quarter.

Professor West

PHYSIOLOGY.

PROFESSOR GREAVES.

ASSISTANT PROFESSOR CARTER.

JUNIOR COLLEGE COURSE.

1. PHYSIOLOGY. A discussion of movement, sensation, circulation, respiration, digestion, absorption, metabolism and excretion. Questions of hygiene are considered in detail. Fall, Winter or Spring quarter. Five credits.

Sec. 1. Fall quarter. Daily except Saturday 9:00.

Sec. 2. Winter quarter. Daily except Saturday, 9:00.

Sec. 3. Spring quarter. Daily except Tuesday, 10:00.

Assistant Professor Carter

SENIOR COLLEGE COURSE.

2. PHYSIOLOGY. An advanced course in special phases of physiology. Special emphasis will be placed upon the structure and function of the nervous system. Three credits.

(Not given in 1920-21).

POLITICAL SCIENCE.

PROFESSOR HENDRICKS.

PROFESSOR DAINES.

PROFESSOR WANLASS.

JUDGE BULLEN.

For related work see History, Economics and Sociology.

VOCATIONAL COURSES.

a. INDUSTRIAL AND COMMERCIAL LAW. 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. Winter and Spring quarters. Three credits each quarter.

M. W. F. 8:00.

Judge Bullen

b. CIVICS. United States government; for the practical student. Spring quarter. Three credits.

M. W. F. 2:00.

Professor————

JUNIOR COLLEGE COURSES.

1a. THEORY OF GOVERNMENT. The principles and structure of politically organized society. Fall quarter. Three credits.

M. W. F. 11:00.

Professor Daines

1b. COMPARATIVE GOVERNMENT. A study of the form and workings of the important present day governments of the world. Winter quarter. Three credits.

M. W. F. 11:00.

Professor Daines

1c. POLITICAL PARTIES. A study of the government of the United States and of the leading European States as affected by the political parties. Spring quarter. Three credits.

M. W. F. 11:00.

Professor Daines

2. MUNICIPAL GOVERNMENT. A thoro study of governmental practices and problems in our American cities. Fall quarter. Two credits.

T. Th. 1:00.

Professor Wanlass

4. CONTRACTS. The law of contracts, agency, partnership and commercial paper. Fall and Winter quarters. Three credits each quarter.

T. Th. S. 8:00.

Judge Bullen

5. THE LAW OF REAL ESTATE. Sales, debtor and creditor, suretyship, insurance, banks and bankruptcy, and corporations. Fall and Winter quarters. Three credits each quarter.

(Not given in 1920-21.)

SENIOR COLLEGE COURSES.

6. IRRIGATION LAW OR THE LAW OF WATERS. (Given by the Departments of Political Science and Irrigation and Drainage jointly.) The right of appropriation, natural and artificial water courses, limitation of use, protection of rights, disposal of rights, percolating water, distribution of water, etc. Fall and Winter quarters. Three credits each quarter.

M. W. F. 8:00.

Fall quarter Judge Bullen

Winter quarter Professor Israelsen

7. AMERICAN DIPLOMACY. Study of the principles and practice of American diplomacy. Spring quarter. Three credits.

(Not given in 1920-21).

8. AMERICAN CONSULAR SERVICE. Critical analysis of our consular service.

(Not given in 1920-21).

PUBLIC SPEAKING.

ASSISTANT PROFESSOR HUNTSMAN.

JUNIOR COLLEGE COURSES.

1. VOCAL EXPRESSION. A study of the principles of expressive reading and the vocal interpretation of literature with supplementary work in voice development and bodily expression. Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 11:00.

Assistant Professor Huntsman

2. VOCAL INTERPRETATION. A course in the vocal interpretation of literature. The aim of the course will be to develop the ability to interpret the printed page with adequate vocal and emotional response. Ballads, lyrics, short stories and scenes from Shakespeare's plays and from modern plays of literary merit will be assigned for study. Prerequisite, Public Speaking 1. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 11:00.

Assistant Professor Huntsman

3. EXTEMPORANEOUS SPEAKING. Practice in extemporaneous speaking on subjects of current interest with some attention to the preparation of speech outlines. Supplementary work in voice development and the correction of defects in speech. Occasional practice assignments in reading. Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 9:00.

Assistant Professor Huntsman

4. VOICE TRAINING. The training of the speaking voice. A study of the fundamental principles of correct voice production and their application to reading and speaking. Corrective exercises for such faults as nasality, breathiness, feebleness of tone, harshness of voice, speaker's sore throat, lispings, stammering, etc.

Fall, Winter and Spring quarters. One hour a week. One credit each quarter.

Time to be arranged.

Assistant Professor Huntsman

SENIOR COLLEGE COURSES.

5. PUBLIC SPEAKING. A study of the principles of effective public speaking with practice in the preparation and delivery of speeches adapted to various audiences. Occasional practice assignments from the masterpieces of oratory. Prerequisite, Public Speaking 3. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 10:00.

Assistant Professor Huntsman

6. INTERPRETATIVE READING. The oral interpretation of poetry, chiefly of the nineteenth century. Prerequisites, Public Speaking 1 and 2. Fall quarter. Two credits.

T. Th. 1:00.

Assistant Professor Huntsman

7. BIBLE READING. A study of selected portions of the Old and New Testament with a view to their effective oral rendering. Prerequisites, Public Speaking 1 and 2. Winter quarter. Two credits.

T. Th. 1:00.

Assistant Professor Huntsman

8. PUBLIC READING. A course in the preparation of poems, stories and scenes from novels and plays for public presentation. Prerequisites, Public Speaking 1 and 2. Open to a limited number of students in order of application. Spring quarter. Two credits.

T. Th. 1:00.

Assistant Professor Huntsman

9. DRAMATIC INTERPRETATION. A laboratory course in the Modern Drama. The plays of Ibsen, Hauptmann, Maeterlinck, Shaw, Galsworthy, Yeats, Synge and other contemporary dramatists will be studied from the interpretative side. Members of

the class will vocally interpret characters and scenes assigned for individual study and several plays will be presented to the public as part of the class work. Prerequisites, Public Speaking 1 and 2. Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 8:00.

Assistant Professor Huntsman

10. PLAY PRODUCTION. The reading and discussion of a wide range of plays suited to amateur acting. This course is particularly designed for those who intend to direct the production of plays in high schools, clubs, etc. Some attention will be given to the staging and costuming of plays and to the art of "make-up." A one act play will be presented by the class for practical experience in play production. First term of Summer quarter. Three credits.

Hours to be arranged.

Assistant Professor Huntsman

11. PAGEANT PRODUCTION. A course in pageant writing and production. The class will write and produce an original pageant as part of the class work. First term of Summer quarter. Three credits.

Hours to be arranged.

Assistant Professor Huntsman

RANGE MANAGEMENT.

ASSISTANT PROFESSOR BECRAFT.

VOCATIONAL COURSES.

a. ELEMENTARY RANGE MANAGEMENT. Practical range problems including methods of handling live stock. Winter quarter. Three credits.

M. W. F. 8:00.

Assistant Professor Becraft

b. ELEMENTARY FORESTRY. Practical phases of timber production and forest management, mensuration and protection. Winter quarter. Three credits.

M. W. F. 11:00.

Assistant Professor Becraft

JUNIOR COLLEGE COURSES.

1. RANGE MANAGEMENT. A general course including history, forage plants, poisonous plants, range improvement, reconnaissance, carrying capacity and methods of handling live-stock. Prerequisite, Botany 2. Winter quarter. Three credits.
M. W. F. 9:00. *Assistant Professor Becraft*

7. FORESTRY. A general introductory course including silviculture and forest management, mensuration, utilization, protection and economics. Prerequisite, Botany 1 or 2. Winter quarter. Three credits.
M. W. F. 10:00. *Assistant Professor Becraft*

SENIOR COLLEGE COURSES.

8. RESEARCH. For students specializing in Range Management. Time and credit to be arranged with instructor.
Assistant Professor Becraft

RURAL LEADERSHIP.

JUNIOR COLLEGE COURSES.

1. VOCATIONAL PSYCHOLOGY.* Five lectures. Winter quarter. Five credits.
Daily, except Tuesday, 11:00. *Assistant Professor Beeley*
*Given at the Utah Agricultural College by the University of Utah.

SENIOR COLLEGE COURSES.

2. SCIENCE OF EDUCATION.* Five lectures. Winter quarter. Five credits.
Daily, except Monday, 8:00. *Assistant Professor Beeley*

3. RURAL EDUCATION.* Five lectures. Spring quarter. Five credits.
Daily, except Monday, 9:00. *Professor Steiner*

4. SECONDARY EDUCATION.* Three lectures. Winter quarter. Three credits.

T. Th. S. 10:00.

Assistant Professor Beeley

5. METHODS OF TEACHING AGRICULTURE.* Five lectures. Spring quarter. Five credits.

Daily, except Monday, 8:00.

Professor Steiner

6. TEACHER TRAINING IN AGRICULTURE.* The student will teach a class in high school agriculture under supervision during the quarter. Spring quarter. Credits to be arranged.

Professor Steiner

7. METHODS OF TEACHING HOME ECONOMICS.* Five lectures. Spring quarter. Five credits.

Daily, except Saturday, 11:00.

Professor ———

8. TEACHER TRAINING IN HOME ECONOMICS.* Supervised training in the teaching of high school home economics. Spring quarter. Credits to be arranged.

Professor ———

9. ETHICS. A general survey of the field of ethics, including the criterion of the moral, the beginning and growth of morality, theory of the moral life, social organization and the individual, ethics of the economic life, and the family. Spring quarter. Five credits.

(Not given in 1920-21).

Professor Fletcher

10. PROJECT MANAGEMENT. To train leaders and supervisors for agricultural project work and to give them actual experience in writing and working out projects, keeping records, making out reports, etc.

Winter and Spring quarters. Three credits each quarter.

Hours to be arranged.

Professor Hogenson

11. SCOUTMASTERSHIP. A course in the organization, management, and leadership of the boy scout troop. First aid, signalling, handicraft, camping, athletics and games, stories, trees, birds, rocks, stars, etc; the problems and aims of the boy scout movement. One lecture and one laboratory period. Hikes will be arranged. Spring quarter. Two credits.

Lec. M. 11:00; lab. To be arranged.

Committee in charge:

Professor George R. Hill, Jr.

Professor Hogenson

Professor M. H. Harris

Professor Fletcher

RURAL PUBLIC HEALTH.

PROFESSOR GREAVES.

PROFESSOR W. B. PRESTON, M. D.

PROFESSOR RAY B. WEST.

PROFESSOR FREDERICK.

PROFESSOR WHITACRE.

ASSISTANT PROFESSOR CARTER.

MISS KUNZ.

JUNIOR COLLEGE COURSES.

1. PATHOGENIC BACTERIOLOGY (Bacteriology 3). Fundamentals, morphology, biology, function, etc. The pathogenic bacteria are considered in relation to specific diseases especially with regards the subject of immunity. Breakage deposit \$2.50. Prerequisite Bacteriology 1 or 2. Spring quarter. Five credits.

Lec. M. W. F. 11:00; lab. W. F. 2:00 to 5:00.

Professor Greaves

2. PHYSIOLOGY. (Physiology 1) A discussion of movement, sensation, circulation, respiration, digestion, absorption, metabolism and excretion. Questions of hygiene are considered in detail. Fall, Winter or Spring quarter. Five credits.

Sec. 1. Fall quarter. Daily except Saturday 9:00.

Sec. 2. Winter quarter. Daily except Saturday 9:00.

Sec. 3. Spring quarter. Daily except Tuesday 10:00.

Assistant Professor Carter

3. RURAL WATER SUPPLY AND WASTE DISPOSAL (Rural Sanitation 6). Methods of (a) supplying farm and rural communities with sanitary water; (b) handling waste of the farm and small town. Spring quarter. Three credits.

(Not given in 1920-21)

Professor West

4. PARASITOLOGY (Zoology 5). The classification, structure, and life history of animal parasites; these include the pathogenic protozoans, flukes, tapeworms, roundworms, and arthropods that act as carriers of organisms injurious to man and the domestic animals. Fall quarter. Four credits.

Lec. T. Th. S. 9:00; lab. M. 2:00 to 5:00.

5. FIRST AID. Treatment of emergencies and accidents. Two sections. Winter quarter. Two credits.

Hours to be arranged.

Professor Preston

6. HOME NURSING (Household Administration 2). Scope of home nursing. Treatment of common ailments. Care of sick. use of drugs and patent medicines. Fall quarter. Three credits.

T. Th. S.

Professor Preston and Miss Kuntz

SENIOR COLLEGE COURSES.

7. SANITATION (Bacteriology 8). Principles of sanitation; nature of disease, its spread, and means of prevention and disinfection; sanitary arrangement and construction of farm buildings. Prerequisite, Bacteriology 1 or 2. Fall and Winter quarters. Three credits each quarter.

T. Th. S. 11:00.

Professor Greaves

8. **ADVANCED PHYSIOLOGY.** (Physiology 2) An advanced course in special phases of physiology. Special emphasis will be placed upon the structure and function of the nervous system. Three credits.

(Not given in 1920-21).

9. **EUGENICS** (Zoology 8). The principles of genetics as applied to the human race. Attention is given the historical development and needs for eugenics, the inheritance of physical, mental, and moral traits; human crosses, consanguinous marriages, eugenic procedure, and other principles which influence the innate qualities of human beings. Prerequisite, Zoology 7. Spring quarter. Four credits.

W. Th. F. S. 11:00.

10. **DAIRY BACTERIOLOGY** (lecture). (Bacteriology 5a.) The bacteria of milk, butter and cheese; communicable diseases in their relation to the dairy; contamination by air, water, utensils; desirable and undesirable fermentation. Winter quarter. Two credits.

T. Th. 8:00.

Assistant Professor Carter

11. **DAIRY BACTERIOLOGY** (laboratory), (Bacteriology 5b.) Methods used in the bacteriological examination of milk and dairy products. May accompany Bacteriology 5a. Breakage deposit, \$2.50. Prerequisite, Bacteriology 1 or 2. Winter quarter. Three credits.

Lab. M. W. F. 2:00 to 5:00.

Assistant Professor Carter

13. **SPECIAL DIETS** (Foods 3). Choice and preparation of food under conditions that present definite problems; as for infants and children, school lunches, and the sick. Laboratory practice in preparation of foods suitable to demands in given instances. Collateral reading. Prerequisite Foods 4. Spring quarter. Three credits.

Lec. M. W. 11:00; lab. F. 2:00 to 5:00. *Professor Whitacre*

14. SANITARY STATISTICS (Bacteriology 9) Vital statistics showing the effect of sanitary precautions upon health in cities and rural communities. Fall quarter Two credits.

T. Th. 8:00.

Assistant Professor Carter

15. SCHOOL SANITATION (Bacteriology 14). Sanitary problems confronting the teacher in the rural and urban districts. Spring quarter Three credits.

T Th. S. 11:00.

Assistant Professor Carter

16. SANITARY ANALYSIS (Bacteriology 6) Methods used by the sanitary inspector in examining water, milk, and other foods. Breakage deposit \$2.50. Prerequisites, Chemistry 6 and Bacteriology 1 or 2. Time and credit to be arranged.

(Not given in 1920-21)

Professor Greaves

18. PUBLIC HEALTH AND PREVENTATIVE MEDICINE. Lecture, demonstration, and clinic course. Cases will be shown of the various communicable and preventable diseases. Emphasis will be placed upon their detection and diagnosis and methods of prevention and eradication. Actual practice under direction of a physician in inspection and health supervision of schools will form a part of this course. Prerequisites Physiology 2 and Bacteriology 8. One lecture and three hours clinic per week. Fall, Winter, and Spring quarters. Hours to be arranged with instructor.

Professor Preston

19. ADVANCED BIO-CHEMISTRY (Bacteriology 15) Bacteriological and Chemical methods used in diagnosing of diseases. Winter quarter. Five credits.

(Not given 1920-21)

Professor Greaves

20. SANITARY INSPECTION. (Veterinary Science 20.) Inspection of slaughter houses, packing houses, butcher shops, etc., and means of detection of communicable diseases and spoilage in meat products. Prerequisite, Bact. 2. One quarter Three credits.

Professor Frederick

Students who wish to specialize in Public Health work will be required to present for graduation 24 hours credit to be selected from this group of subjects. They must include Rural Public Health 18. (Public Health and Preventative Medicine) in addition to the fulfilling of all other requirements.

SOCIOLOGY.

PROFESSOR HENDRICKS.

JUNIOR COLLEGE COURSES.

2. RURAL SOCIOLOGY The principles of sociological science applied to the problems of modern agricultural and rural communities. Fall quarter Three credits.

M. W. F. 10:00.

SENIOR COLLEGE COURSES.

1 PRINCIPLES OF SOCIOLOGY. The foundations of sociology, social organs, social structure and social activities. Winter quarter Three credits.

M. W. F. 10:00.

3. APPLIED SOCIOLOGY Concrete applications of sociological principles to modern urban problems of general political conditions. Spring quarter. Three credits.

M. W. F. 10:00.

STENOGRAPHY AND TYPEWRITING.

PROFESSOR P. E. PETERSON.
MR. HOWELL.*

STENOGRAPHY.

VOCATIONAL COURSES.

a. The fundamental rules of the Isaac Pitman system of shorthand, the Centenary edition being used. Fall, Winter and Spring quarters. Four credits each quarter.

Daily, except Saturday 2:00.

b. The rules of the system will be thoroly reviewed and applied. Attainment of speed will feature the course, which will be open to the writers of any system of shorthand. Work in the Spring quarter will include office training and business practice, so that students may become familiar with the use of modern office appliances. Fall, Winter and Spring quarters. Four credits each quarter.

Daily, except Tuesday, 11:00.

Special. A special class will be held for such students as desire to take stenography during the Winter quarter, the work given being the same as Stenography a. Winter quarter. Four credits.

Daily, except Saturday 9:00.

JUNIOR COLLEGE COURSES.

1. Confined exclusively to students of College grade. An intensive course with the object of preparing students for teaching positions. Fall, Winter and Spring quarters. Three credits each quarter.

Daily, except Tuesday 9:00.

*On leave of absence.

2. Advanced stenography; speed course. Five hours, Fall, Winter and Spring quarters. Four credits each quarter. Daily, except Tuesday 11:00.

PENMANSHIP.

In this class it will be sought to develop a free, legible business handwriting. Fall, Winter and Spring quarters. One credit. T. Th. S. 9:00.

TYPEWRITING.

The typewriting room is open from 8:00 to 5:00. Students must arrange with instructor for practice periods.

VOCATIONAL COURSES.

a. BEGINNING COURSE. Correct fingering and proper manipulation of the machine. Fall, Winter and Spring quarters. One credit each quarter.

b. SECOND YEAR COURSE. Daily exercises in which accuracy is required. Fall, Winter and Spring quarters. One credit each quarter.

TEXTILES AND CLOTHING.

PROFESSOR JOHANNA MOEN.

MISS LAVINA RICHARDSON.

MRS. RAE ORMSBY.

Students who elect textiles and Clothing as their major are required to complete the following courses: Textiles and Clothing 1, 2, 5 and 6.

VOCATIONAL COURSES.

a. **HAND SEWING AND GARMENT MAKING.** Planned for students who can spend only a short time at the College. Training in hand and machine sewing. Drafting and use of commercial patterns. Selection of suitable materials for underwear and dresses. Design and construction of simple garments. Fall quarter. Will be repeated in Winter and Spring quarters. Four credits.

Daily, except Saturday, 2:00 to 4:00.

Mrs. Ormsby

b. **HOUSEHOLD TEXTILES AND DRESSMAKING.** Training in intelligent purchase and use of various fabrics for clothing; pattern manipulation; repair and use of worn materials, with construction of undergarments and dresses. Fall, Winter and Spring quarters. Two credits each quarter.

M. W. F. 10:00 to 12:00.

Mrs. Ormsby

JUNIOR COLLEGE COURSES.

1. **REVIEW OF TECHNIC AND ELEMENTARY DRESSMAKING.** The application of hand and machine sewing to underwear, children's clothing and simple dresses. Drafting, designing, use of patterns and consideration of suitable materials. Prerequisites or parallel, Art 1 and 21. Sections 1, 2 and 4, Fall, Winter and Spring quarters. Two credits each quarter. Section 3, Winter and Spring quarters. Three credits each quarter.

Sec. 1, M. W. 2:00 to 5:00.

Professor Moen

Sec. 2, T. Th. 2:00 to 5:00.

Miss Richardson

Sec. 3, M. W. F. 2:00 to 5:00.

Miss Richardson

Sec. 4, T. Th. 10:00 to 1:00.

Mrs. Ormsby

2a. **TEXTILE FABRICS.** This course considers the primitive forms and present methods of carding, spinning, weaving and finishing of cotton, wool, silk, linen and other important fibres,

and their properties and values in relation to manufacture and use. Fall quarter. Three credits.

M. W. F. 9:00.

Professor Moen

2b. ECONOMICS OF TEXTILES. Identification and grading of textile materials, their names, prices and widths. Qualitative testing. Training in selection of ready-made clothing and household furnishings, clothing budgets, etc. Prerequisites, Clothing 1b and Textiles 2a. Winter quarter. Three credits.

M. W. F. 9:00.

Professor Moen

2c. CHEMISTRY OF TEXTILES. Chemical methods for the identification and estimation of the textile fibres, including complete quantitative determination of cotton, wool, silk and linen substances in fabrics. Chemistry of dyeing and bleaching. Prerequisites, Chemistry 3, Textiles and Clothing 2a. and 2b. Spring quarter. Three credits.

Hours to be arranged.

Assistant Professor Hirst

3. MILLINERY. Designing and drafting patterns for hats; construction of frames from buckram, rice net and wire; various methods of covering foundations. Preparation of trimmings. Renovation of materials. Prerequisites or parallel, Art 1 and 21. Sections 1 and 2, two credits each quarter. Sections 3, three credits.

Sec. 1, Fall and Winter quarters, W. F. 10:00 to 12:00.

Sec. 2, Winter and Spring quarters, T. Th. 10:00 to 12:00.

Sec. 3, Fall quarter, M. W. F. 2:00 to 4:00.

Miss Richardson

4. HANDWORK AND WEAVING. Lectures and laboratory work including practical instruction in the fundamental stitches applicable to household furnishings and clothing. The selection, preparation, care and repair of bed linen, table linen, draperies,

etc. Simple weaving, crocheting, knitting and tatting. Prerequisite or parallel, Art 27k and Clothing 1. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 10:00 to 12:00.

Professor Moen

SENIOR COLLEGE COURSES.

5a. HISTORY OF COSTUME. A study of Egyptian, Grecian, Roman, early and modern French costumes. Three lectures. Fall quarter. Three credits.

M. W. F. 10:00.

Professor Fletcher

5b. COSTUME DESIGN. Design in costume, rhythm of line, harmony of color. Sketching gowns and hats; study of styles suitable to various types. Winter quarter. Three credits.

M. W. F. 10:00 to 12:00.

Professor Fletcher

5c. APPLICATION OF COSTUME DESIGN. Practical training in the use and adaptation for different individuals and purposes, designs made in Textiles and Clothing 5b as well as designs taken from current fashion magazines. Modeling in paper and crinoline and making of one costume. Prerequisites, Textiles and Clothing 11 and 5a and 5b, or their equivalents. Spring quarter. Three credits.

M. W. F. 10:00 to 12:00.

Professor Moen

6. ADVANCED DRESSMAKING. The application to costume of line and color harmony. Pattern making and draping with materials. Construction of dresses in cotton, wool and silk materials, with special emphasis on the technic of dressmaking. Prerequisites, Clothing 1, 2, 5. Fall, Winter and Spring quarters. Two credits each quarter.

T. Th. 2:00 to 5:00.

Professor Moen

VETERINARY SCIENCE

PROFESSOR FREDERICK

VOCATIONAL COURSES.

a. Elementary veterinary science for vocational students.
Fall quarter. Repeated Winter quarter. Four credits.

Lec. T. Th. S. 8:00; clinic W. 2:00 to 5:00 Fall quarter.

Lec. M. W. F. 10:00; clinic Th. 2:00 to 5:00 Winter quarter.

Professor Frederick

JUNIOR COLLEGE COURSES.

1. VETERINARY ELEMENTS. Introduction to anatomy and physiology and the common ailments of domestic animals; the most prevalent diseases, their distribution, causes, symptoms, course, diagnosis and treatment; observation and practice in the free weekly clinics. Fall or Winter quarter. Four credits.

Lec. T. Th. S. 8:00; clinic W. 2:00 to 5:00 Fall quarter.

Lec. M. W. F. 10:00; clinic Th. 2:00 to 5:00 Winter quarter.

Professor Frederick

2. COMPARATIVE ANATOMY. Especially for students in agriculture and animal husbandry; also students wishing to follow veterinary science. This course is supplemented with practical work in dissection and illustrated by skeletons and models. Fall, Winter and Spring quarters. Three credits each quarter.

M. W. F. 11:00.

Professor Frederick

(Not given in 1920-21).

3. OBSTETRICS. Obstetrical anatomy, reproduction, hygiene of pregnant animals. Obstetric operations, accidents of parturition and diseases of the new-born. The college herd and the surrounding stock breeding community give ample oppor-

tunity for practical work. Winter and Spring quarters. Two credits each quarter

Th. S. 11:00.

Professor Frederick

4. **PHYSIOLOGY** The vital functions of the different species of domestic animals and those of the human body are compared, the physical and chemical laws as related to physiology; the general properties of animal cells,—their origin, development and growth; special physiology of the various organs and tissues of the animal body Given if 10 students register. Fall, Winter and Spring quarters. Three credits each quarter.

Lec. M. W F 9:00.

Professor Frederick

5 **CLINICS.** Free clinics at the hospital in which students of veterinary science must assist. The numerous cases represent all diseases common to this locality and furnish the clinic with abundant material for observation and practice. Hours and credits to be arranged. Fall, Winter and Spring quarters.

Clinic W Th. 2:00 to 5:00, Veterinary Hospital.

Professor Frederick

6. **PRINCIPLES OF HORSE SHOEING.** The anatomy and physiology of the horse's foot; the form of the foot and the direction of the limb, variations in the light of the foot, styles of going, shoeing of normal and irregular feet, winter shoeing, correction of defects in gait and methods of shoeing hoofs defective in form or diseased. Winter quarter, repeated Spring quarter. Three credits.

T Th. S. 9:00.

Professor Frederick

SENIOR COLLEGE COURSES.

7 **HYGIENE AND INFECTIOUS DISEASES.** A continuation of Veterinary Science 1 A discussion of water and food supply, disinfection, care and management of animals and feeding of sick animals.

The common infectious diseases prevalent here, methods which should be adopted in their control and eradication. Tests applied for diagnosis, vaccination and serum treatment of animals. Winter or Spring quarter Four credits.

Clinics W or Th. 2:00 to 5:00, Veterinary Hospital.

Sec. 1—T Th. S. 8:00 Winter quarter.

Sec. 2—M. W F 10:00 Spring quarter

Professor Frederick

8. ANATOMY AND PHYSIOLOGY A study of the form, structure and functions of the animal body Attention is given to all domestic animals and students are required to locate and point out the parts related to the form, movement and utility of the animal. Fall and Winter quarters. Three credits each quarter

Lec. T Th. 1:00, clinic W. or Th. 2:00 to 5:00, Veterinary Hospital.

Professor Frederick

20. SANITARY INSPECTION Inspection of slaughter houses, dairies, packing houses, butcher shops, etc., and means of detection of communicable diseases and spoilage in meat products. Prerequisite, Bact. 2. One quarter. Three credits.

Hours to be arranged.

Professor Frederick

ZOOLOGY.

PROFESSOR HAGAN *

MR. PACK.

See Entomology for related work.

JUNIOR COLLEGE COURSES.

1 ELEMENTARY GENERAL ZOOLOGY A study of morphology, physiology, differentiation, adaptation and other zoological prin-

*On leave of absence until January 1, 1921.

principles. A brief survey of the animal kingdom is undertaken so that the student will be able to identify the general groups. This course is intended for those who have not studied zoology before and who desire only a general view of the subject. Students in Home Economics, Mechanic Arts, Agricultural Engineering and Commerce may take the course, but those in General Science and Agriculture and all students desiring a more comprehensive study should take Zoology 3. Sec. 1, Fall and Winter quarters, sec. 2, Winter and Spring quarters. Three credits each quarter

Sec. 1. Lec. M. W 9:00; lab. T or F 2:00 to 5:00.

Sec. 2. Lec. W F 10:00, lab. Th. or F 2:00 to 5:00.

3. GENERAL ZOOLOGY. A systematic study of the animal kingdom, its general classification and the relation of the various groups of animals to each other. Emphasis is placed upon structural characteristics, development, function and relation of organs in the different groups. Winter and Spring quarters. Five credits each quarter

Lec. T Th. S 9:00, lab. M. W 2:00 to 5:00.

4. ECONOMIC ZOOLOGY. Study of the feeding and breeding habits of intermountain vertebrates, their economic relation to agricultural interests. Methods for the control of injurious vertebrates and for the encouragement of beneficial ones are considered. Spring quarter. Four credits.

Lec. M. W F 9:00, lab. T 2:00 to 5:00.

5. PARASITOLOGY (Rural Sanitation 2) The classification morphology and life history of animal parasites. The disease-producing protozoans, flukes, tapeworms and roundworms receive special study. Arthropods as external parasites and carriers of pathogenic organisms receive attention. Fall quarter. Four credits.

Lec. T Th. S. 9:00, lab. M. 2:00 to 5:00.

SENIOR COLLEGE COURSES.

6. **ADVANCED ZOOLOGY** The classification, morphology, and comparative anatomy of the vertebrates. Prerequisite, Zoology 1 or 3. Fall and Winter quarters. Five credits each quarter. Hours to be arranged.

7. **GENETICS.** This course considers the biological principles of life and the inheritance of characters. A study of the germ cells with reference to heredity. The questions of variation, mutation, the inheritance of acquired characters, pure lines, Mendelism, sex determination and genetic principles generally are the main subjects of discussion. Prerequisite, Zoology 3 or equivalent. Winter quarter. Four credits.

W Th. F S. 11:00.

8. **EUGENICS.** The principles of genetics as applied to the human race. Attention is given the historical development of and needs for eugenics, the inheritance of physical, mental and moral traits, human crosses, consanguineous marriages, eugenic procedure and other principles which influence the innate qualities of human beings. Prerequisite, Zoology 7. Spring quarter. Four credits.

W Th. F S. 11:00.

9. **HISTOLOGY AND EMBRYOLOGY** A general course of histology and embryology with special reference to man. Fall quarter, lectures and laboratory work on the principles of technic and a study of epithelial tissue. Winter quarter, completes work in histology and continues with a treatment of the germ cells, their maturation and fertilization. Spring quarter, comparative study of the embryological development of amphioxus, frog and man. Prerequisite, General Zoology. Fall, Winter and Spring quarters. Four credits each quarter.

(Not given in 1920-21)

10. **RESEARCH.** The student who wishes to engage in some line of original research and is qualified to do so may elect and study some topic from eugenics, ecology, morphology or other zoological subjects. Thesis. Time and credits to be arranged.

Twenty-Sixth Annual Commencement

GRADUATES WITH DEGREE OF BACHELOR OF SCIENCE

AGRICULTURE

Agronomy

Christiansen, Ole
Jackson, Dorrell Philo
Olson, Harry John

Pixton, Robert Carter
Williams, Howell Mifflin

Animal Husbandry

Hatch, Sumner

Petersen, Carl Werner

Botany

Kirkham, James Arno

Mecham, Lucian, Jr.

Chemistry

Ramsperger, Herman Carl

Entomology

Morgan, Samuel

AGRICULTURAL ENGINEERING

Fife, Arthur

White, Azmon Dennis

COMMERCE

Baker, Dan
Burroyne, David Alvin
Clawson, Elmer Charles
Cowley, Moses Foss
Hatch, Lorenzo Hill

Meeks, Heber
Prescott, Eric Stanley Lochmohr
Ward, George Art
Webb, Joseph Eugene
Wilson, Jesse Thorlof

GENERAL SCIENCE

Barber, Ellen
Barber, Solon Ray
Bennion, LaVon
Cardon, Grace
Cox, David Jehu
Harding, George David
Kirkbride, James William
Lovendale, Laura

Neilson, Neils Peter
Peterson, William Overn
Preston, Marion Smith
Rogers, Lucile Parkinson
Rosengreen, Enid Josephine
Shaw, Bessie Harrison
Smith, David Winter
Thain, Mary Aldyth

HOME ECONOMICS

Bayles, Emma Juliette	Parkinson, Karma Benson
Bennion, Lora	Porter, Alberta Smith
Burnham, Edna	Poulson, Oleta
Farnsworth, Mrs. Esther	Smith, Margaret Iva
Gubler, Helen Anna	Smith, Olena Wright
Larson, Naomi	Smith, Rachel Irene
Leigh, Caroline	Smith, Winnifred Gertrude
Lindquist, Eva	Solomon, Leah
Lowry, Ivy	Taylor, Jennie Bertha
Mason, LaVon	Thatcher, Helen
Merrill, Ortencia Hendricks	White, Edna
Morrison, Bessie	White, Luella
Osmond, Ruby Hermoine	Young, Stella

GRADUATE WITH DEGREE OF MASTER OF SCIENCE

Carter, Ezra Grover

Honors, 1919-1920

Scholarship The following students have been selected as deserving special distinction for high achievement in scholarship. They have, accordingly, received either a "Scholarship A" or "Honorable Mention."

Scholarship "A":

Peter Johnson	Aldyth Vernon
Glen Loveless	Florence Walker
W I. Poulter	Geneva Wells
Lois Vernon	

Honorable Mention.

Margaret Carroll	Marie Day
George M. Bateman	Elfrieda Frederick
Constance Christensen	Erastus Diehl

*Debating**Inter-Collegiate Debating*

Morris Christensen	A. Hulme Nebeker
John Hendricks	Adren Aitken
King Hendricks	LeRoy Funk
Wallace McBride	Robert Pixton
W J Merrill	LeRoy Hansen

Oratory

The Hendricks Medal Won By

A. Hulme Nebeker

The Casto Medal Won By

Laura Andrus

The Sons of the American Revolution Medal Won By

LeRoy Hansen

Special Awards The following received Student Body "A" pins

Dramatics

Anna Egbert

ElRay Christiansen

Opera

Gladys Smith

Scholarships The following students were awarded the Johansen scholarships for 1919-1920

David E. Heywood

Anous M. Maughan

George Dewey Clyde

Student Body Officers

V Delroy Gardner

President

Adeliene Barber

Vice-President

Geneva Rich

Secretary

"Student Life" Staff

George Barber

Managing Editor

A. Russel Croft

Editor

E. W. Robinson

Business Manager

"Buzzer" Staff

Wallace McBride

Editor

Coulson Wright

Business Manager

The Lois Hayball Medal, given for the best student in home economics, was won by Louise Bird.

The Thomas Medals, given to the best inter-class debaters, were won by Robert Pixton and Leo Rallison.

The William Peterson Medal, given to the author of the best paper on some selected scientific subject, was won by E. W. Robinson.

The Howell Medal, given to the best inter-collegiate debater, was won by Morris Christensen.

List of Students, 1919-1920

In the following list "a" stands for agriculture; "aema" for agricultural engineering and mechanic arts; "ho" for home economics; "c" commerce; "g" for general science; "ss" for summer school; "G" for graduate; "S" for Senior; "J" for junior; "So" for sophomore; "F" for freshman; "V" for vocational; "Fed" for federal; "Sp" for special.

Abbot, Israel a-Fed-F	St. George
Adams, Delbert J. aema-V	American Fork
Adams, Geo. L. aema-V	Logan
Adams, LaVerde c-F	Parowan
Adams, Marion a-V	Parowan
Adams, Max S. aema-Fed-V	Pemberton, West Va.
Adams, Roy L. aema-Fed-V	Denver, Colo.
Affleck, Modena c-V	Logan
Ahlstrom, Rufus aema-V	Manti
Aitken, Adren g-Fed-J	Preston, Idaho
Alder, Ferdinand C. ss	Manti
Aldous, Horace aema-V	Huntsville
Aldous, Lester a-V	Huntsville
Aldrich, Max aema-F	Mt. Pleasant
Aldrich, Melba V., ho-F	Mt. Pleasant
Allen, Albert B., a-J	Nephi
Allen, Heber, F. a-Sp	Raymond, Alta, Canada
Allen, R. Leslie aema-V	Blanding
Allen, Wm. J. g-Sp	Wellsville, Utah
Allgaier, Henry aema-V	Hyrum
Allred, Thatcher a-So	Blackfoot, Idaho
Allred, Theras O., a-F	Logan
Allred, Wilson H., aema-Fed-V	Monticello
Alston, Roy L., a-Fed-J	Salt Lake City
Alvord, Harold S., ss-c-F	Logan
Alvord, Lewis G., c-Sp	Logan
Amussen, Eleonora, c-F <i>Leona Galick</i>	Logan
Anderson, Esther g-F	Spanish Fork
Anderson, Ferris L., a-F	Lehi
Anderson, F. Ellis, aema-V	Oak City
Anderson, G. Dewey, a-V	Ogden
Anderson, Howard W., a-V	Shelley, Idaho
Anderson, Irving P., a-V	Blackfoot, Idaho
Anderson, Jas. A., aema-So	Spanish Fork
Anderson, Laurine, g-F	Salt Lake City

Anderson, Mabel, ho-Sp	Brigham
Anderson, Margaret, ss	Logan
Anderson, Mary, ho-F	Logan
Anderson, Maud A., ho-F	Salt Lake City
Anderson, Rachel, c-F	Lehi
Anderson, Peter G., a-Sp	Wales
Anderson, Stanley R., aema-Sp-ss	Salt Lake City
Anderson, Waldo M., c-F	Logan
Anderson, Woodruff H., a-F	Logan
Anderson, Clara M., ss-g-Sp	Hyrum
Andrus, Annie c-V	Spanish Fork
Andrus, Ernest aema-F	Eureka
Andrus, Laura, ss-ho-So	Spanish Fork
Andrus, Lenard M., ss-aema-S	Spanish Fork
Andrus, Leora M., ss	Spanish Fork
Andrus, Lester, a-Fed-F	Spanish Fork
Andrus, Lucy, ss-c-So	Spanish Fork
Arave, Vernal L., a-Fed-V	Idaho Falls, Idaho
Arbon, Eva, ss	Ogden
Archibald, Gilbert, aema-V	Clarkston
Ashman, H. Edward, a-Fed-V	Salt Lake City
Atkinson, Edna Mae, hoV	Logan
Austin, E. Gean, g-Sp	Montpelier, Idaho
Austin, Herbert, aema-V	Lehi
Avedian, Giragos, a-S	Sivas, Armenia
Bachman, Blaine, c-F	Eden
Bachman, Comfort, ho-So	Eden
Backman, Frank A., aema-F	Santaquin
Backman, Geo. A., a-Sp	Santaquin
Bagley, Merrill, g-F	Koosharem
Bailey, Reed W., g-F	<i>Logan</i>
Bailey, Thos. K., c-F	Nephi
Bailey, Walter, aema-V	Arbon, Idaho
Bair, Marion L., a-F	Nephi
Baker, Ernest J., g-Sp	Richmond
Baker, Merle R., aema-V	Monroe
Baker, Milton F., aema-V	Oxford, Idaho
Baker, Milton F., aema-V	Mesa, Arizona
Ballantyne, Bessie, ss	Logan
Ballard, Afton, ss	Logan
Ballard, Carmen, ss	Logan
Ballif, Rachel, ho-F	Logan
Ballif, Serge C., g-F	Preston, Idaho
Barber, Adaliene, g-S	<i>Mrs. Reed Bailey?</i>
Barber, Frances, ss	Logan
Barber, Geo. P., ss-a-S	Logan
Barber, Ruth, g-So	Logan
Barber, Solon R., ss	<i>Mrs. Bailey?</i>
Barber, W. Wendell, c-F	Logan
Barker, J. Roy, aema-So	Collbran, Colo.
Barker, Lena, ho-S	Ogden
Barker, Mignon, ho-J	Salt Lake City
Barlow, Fielding B., a-S	Logan
Barnard, Nellie, ss	Garland

Barney, Archie F., a-S-Fed	Logan
Barney, Malinda, ss	Ogden
Barrett, A. Leone, g-V	Logan
Barson, Leree, ho-V	Clarkston
Barson, Peter E., aema-V	Clarkston, Utah
Barton, Aldon K., a-V	Manti
Barton, Edward S., a-Sp	Manti
Bastow, Garfield, aema-J	Logan
Bastow, Ivan S., a-V	Logan
Bateman, Alfred H., a-F	Logan
Bateman, Geo. M., g-J	Logan
Bateman, Geo. Q., a-J	Sandy
Bateman, J. Robert, a-S	Sandy
Bateman, Rella M., ho-So	Sandy
Baxter, Holley E., ho-So	Salt Lake City
Bayles, Emma J., ss	Blanding
Beach, Floyd M., a-Fed-V	Bloomington, Mich.
Beane, Wayne C., a-Fed-V	Salt Lake City
Beatty, Elizabeth K., ho-V	Logan
Beckstead, Lois, g-F	Preston, Idaho
Becraft, Ireta Harris, ho-S	Logan
Bedka, Gladys L., ho-So	Oakley, Idaho
Bell, Otto, aema-Fed-V	Heber
Bell, Wm. H., a-F	Logan
Belnap, Fawn L., ho-F	Hooper
Belnap, H. Earl, ss	Ogden
Belnap, LaVern, ho-F	Hooper
Belnap, Stanton, c-F ? <i>Shankar</i>	Ogden
Bench, Lyle A., a-F	Price
Bennett, Elizabeth, ss	Salt Lake City
Bennett, Maybell, ss	Downey, Idaho
Bennion, Deane, ho-F	Vernal
Bennion, Elma, g-F	Logan
Bennion, Erma, g-F	Logan
Bennion, Leland, a-V	Vernal
Bennion, Sterling A., a-V	Salt Lake City
Benson, Ezra T., a-F	Whitney, Idaho
Benson, Karl E., a-V	Logan
Bergeson, Abraham, c-V	Logan
Bernston, Ariel J., ss	Logan
Bernston, Milton R., c-V <i>S.L.C. ?</i>	Logan
Berthelson, Junius G., a-F-Fed	Penrose, Wyo.
Bigler, Horace J., c-F	Garland
Bingham, Heber E., aema-V	Logan
Bingham, J. Martin, a-V	Ogden
Birch, Ivy, c-V	Duchesne
Birch, Rex, aema-V	Duchesne
Bird, Louise, ss-ho-S	Springville
Bird, Margaret L., g-F	Springville
Bjorkman, Chas. P., aema-F	Heber
Bjorkman, Swen R., a-F	Heber
Black, Thos., a-V-Fed	Coalville
Blackhurst, Gordon, g-V	Smithfield

Blanch, Geo. T., aema-V	Ogden
Blood, Heber L., a-F	Malad, Idaho
Blumenthal, Earl B., c-V	Provo
Blythe, Ethel, c-V	Logan
Boe, Ole, aema-V-Fed	Mayville, No. Dak.
Bonham, Clarkson S., aema-V-Fed	Shiloh, N. J.
Boothe, Clyde, a-V	Honeyville
Boothe, Norris, a-V	Honeyville
Boothe, Reed, g-V	Honeyville
Boswell, Carlos, aema-V	Coalville
Bowen, Edith V., ss	Logan
Bowen, Gladys, ho-F	Honeyville
Bowen, Leslie, aema-S	Spanish Fork
Bowman, May, ss	Lovelock, Nev.
Bowman, Will W., a-F	Ogden
Boyce, Clarence L., a-V	Lewisville, Idaho
Boyden, Ruby, ss	Manti
Bracken, Rulon H., a-So	Freedom, Wyo.
Brandow, Arthur H., aema-V	Lark
Brazzale, Frank, aema-V-Fed	Italy
Brimley, Wilford C., c-F	Logan
Brinton, Harold c-V-Fed	Murray
Brossard Laura C., ho-S	Logan
Broughton, Warren S., aema-V-Fed	Rawlins, Wyo.
Brown, Bessie, ss	Hyrum
Brown, Eva E., ss	Ogden
Brown, Henry, a-V	Ogden
Brown, Jennie, ss-g-Sp	Hyrum
Brown, Merl W., a-V-Fed	Levan
Brown, Walter, a-V	Arco, Idaho
Brummett, Wesley B. a-V-Fed	Duchesne
Brunyer, F. Jos., aema-F	Park City
Bryan, Alexander J., a-F	Tooele
Buchanan, Mary, c-F	Richfield
Buck, W. Edwin, aema-V	Taylor
Buckmaster, Wm. C., aema-V-Fed	Thermopolis, Wyo.
Buckwalter, Mildred, ss-ho-Sp	American Fork
Budge, Preston M., g-F	Logan
Budge, Thelma, ho-V	Logan
Budge, Winnifred I., ss	Logan
Bullen, Helen, ss	Logan
Bullen, H. Kieth, aema-F	Logan
Bunting, Hubert, aema-V	Kanab
Burgoyne, John M., aema-F	Montpelier, Idaho
Burgoyne, Lucile, ss	Logan
Burgoyne, Phyllis, c-So	Montpelier, Idaho
Burgoyne, Richard M., aema-V	Montpelier, Idaho
Burnham, Janet, ss	Logan
Bush, A. Harold, g-F	Malad, Idaho
Butcher, Oliver D. aema-V-Fed	Salt Lake City
Butler, Ray H., a-F	Payson
Buxton, John Jr., aema-V	Tetonia, Idaho
Cain, Turner, aema-V-Fed	Long Mont, Colo.

Caine, Kinnie C., ho-F	Logan
Calderwood, Edna D., ss	Salt Lake City
Caler, John O., aema-V-Fed	Logan
Call, Bertis D., a-F	Malad, Idaho
Call, Leone, ho-F	Afton, Wyo.
Call, Orvis A., a-V-Fed	Ogden
Call, Rose A., ho-V	Logan
Calton, Clifton, aema-V	Providence
Cameron, John G., aema-V-Fed	Blackfoot, Idaho
Campbell, Alma R., c-V	Logan
Campbell, Alonzo Clem, g-So	Logan
Campbell, Archie, aema-V-Fed	Las Animas, Colo.
Campbell, G. Leonard, c-V	Rexburg, Idaho
Campbell, Harvey B., aema-F	Preston, Idaho
Campbell, Omega, c-V	Providence
Cannon, Douglas Q., a-S	Salt Lake City
Cardon, Margaret, ss	Logan
Cardon, Nellie, ss	Logan
Cardon, Rebecca, ss	Logan
Cardon, Rula, ss-g-F	Logan
Carlisle, Wallace J., c-V	Logan
Carlson, Betty, c-V	Logan
Carlson, Elva G., ho-F	Logan
Carlson, John W., a-F	Logan
Carpenter, Ruth, ss	Preston, Idaho
Carr, Lot, aema-V	Ogden
Carroll, Margaret K., ho-J	Orderville
Carroll, Rulon J., a-F	Orderville
Carson, Randle B., c-V	Salem
Carter, Alma Devier, aema-V	Idaho Falls, Idaho
Carter, Chas. H., aema-F	Vernal
Carter, Lawrence, aema-V	Vernal
Caseman, Aftie B., g-F	Monroe
Chamberlain, Karl S., a-V-Fed	Provo
Chamberlain, Walter A., aema-V	Pleasant View
Chambers, Wm. J., aema-V-Fed	Minneapolis, Minn.
Cheney, J. Otis, aema-V	Laketown, Utah
Cherry, Alfred K., c-F	Mt. Pleasant
Cherry, Winona K., ho-F	Mt. Pleasant
Child, Estella, c-V	Chester
Child, Maude, ho-V	Chester
Child, Victor C., aema-V	Chester
Chilton, Oral J., g-V	Lehi
Chipman, Irene, ho-F <i>Mrs. A. Randall?</i>	American Fork
Chipman, Merle S., ho-F	American Fork
Christensen, C. Cecil, c-F	Logan
Christensen, Constance, g-F	Malad, Idaho
Christensen, Elsie, ss	Sterling, Idaho
Christensen, Emille, a-V-Fed	Brigham
Christensen, Erval, aema-F	Provo
Christensen, Hyrum M., aema-F	Tremonton
Christensen, J. Morris, c-Sp <i>Salt Lake Pioneer</i>	Logan
Christensen, Jos., a-V-Fed	Salt Lake City

Christensen, Leon P., aema-S	Brigham
Christensen, Leona E., ho-V	Central, Idaho
Christensen, Myron S., aema-V	Fairview
Christensen, O. Edward, g-V	Gunnison
Christensen, Parley A., ss	Logan
Christensen, Reuben H., aema-V	Fairview
Christensen, Scott S., g-F	Wellsville
Christensen, Thelma, ho-F	Monroe
Christiansen, El Ray L., a-S	Mayfield
Christiansen, Jos. R., a-Sp	Fountain Green
Christiansen, Nels W., g-G	Hyrum
Church, Parvin, aema-V	Kanab
Clark, Horald G., c-S	Morgan
Clark, John A., a-F	Oakley, Idaho
Clark, Josephine, ho-F	Farmington
Clark, S. Cyril, c-F	Newton
Clark, Orson R., a-F	Farmington
Clark, Reuben, aema-V	Coalville
Clark, T. Leroy, aema-V	Ogden
Clawson, J. Harold, c-S	Providence
Clegg, Martello, a-F	Heber
Clegg, Rue L. a-F	Heber
Clegg, Wm. D. a-V	Bench, Idaho
Clyde, Don, a-F	Heber
Clyde, G. Dewey, aema-So	Springville
Clyde, Harry S., aema-F	Springville
Clyde, Ora P., ho-Sp	Springville
Coffey, Wm. M., aema-V-Fed	Bucklin, Kansas
Coffman, W. Elmo, aema-S	Springville
Colby, Estella, ss	Mendon
Cole, Frank M., a-V	Preston, Idaho
Comish, Reata, ho-So	Franklin, Idaho
Condie, J. Ira, g-V	Logan
Condie, Thos. L., c-V	Logan
Condit, S. Amanda, g-J	Logan
Connors, Carl W., aema-V-Fed	Denver, Colo.
Conroy, Maurice R., c-F	Ogden
Conway, Fred J., a-So	Ogden
Conway, Herman M., a-Sp-Fed	Seymour, Ind.
Conway, Margaret, ho-V	Seymour, Ind.
Cook, Leah, ho-F	Springville
Cook, Mary L., ss	Murray
Cook, Merlin N., g-So	Willard
Cooley, Chas. E., a-F	Ogden
Coray, Clarence A., aema-F	Ogden
Corbett, Melvin, aema-F	Smithfield
Cotter, Ralph U., a-G	Lehi
Countryman, Ova E., aema-V	Bingham Canyon
Covey, George, aema-V	Ogden
Cowan, Clarence, aema-V	Payson
Cowan, Glenn, a-V	Payson
Cowley, Carol E., ho-F	Salt Lake City
Cox, Verona, ho-F	Fairview

Coy, Frances Jos., aema-V-Fed	Plain City
Coyle, C. Bain, aema-V-Fed	Westmoreland, Kansas
Candall, Irwin R., c-F	Springville
Crane, Anna, g-F	Logan
Crane, Danford, aema-V	Draper
— Cranney, Clara, ss	Logan
Cravens, F. Leroy, aema-V	Richmond
Crawford, Darrell, c-V	Logan
Critchfield, Ann, ho-F	Oakley
Critchlow, Frances, ss	Hyrum
Crittenden, Chauncey, aema-V	Hoytsville
Croft, Alfred Russell, a-S	Ogden
Croft, Gordon Y., a-F	Ogden
Crook, Laurance M., ss-aema-F-Fed	Payson
— Crookston, Edna, ho-So	Logan
— Crookston, Lourn E., a-S	Logan
Crookston, Ruth, ss	Logan
Crowther, Marilla, ss	Logan
Cundick, Milton, aema-F	Sandy
Currell, Daisy E., ho-V	Logan
— Daines, Carmen, ss	Logan
Daines, Luella P., ho-Sp	Logan
— Daines, Sadie R., g-F	Logan
Daley, David E., c-V-Fed	Provo
Dalley, Marguerite, ss	Preston, Idaho
Dalton, Edward, aema-V	Parowan
Dalton, Hiram E., aema-Sp-Fed	Visalia, California
Dame, John L. c-V	Fillmore
Dance, Theodore, aema-V	Blackfoot, Idaho
Daniels, E. Fay, ho-V	Logan
— Daniels, Virginia, ss	Logan
Danielson, Marie, ss	Lewiston
Datwyler, Catherine, ho-V	Logan
Datwyler, Martha, ho-V	Logan
Davidson, Mervyn, aema-V-Fed	Logan
Day, LeRoy, a-V	Oakley, Idaho
Day, Marie, ho-F	Draper
Dean, Amelia, ho-Sp	Beaver
Dean, H. Elmer, ss	Salt Lake City
Dee, Glenn S., ss-c-F	Ogden
Denney, J. Claude, aema-V	Byron, Wyo.
Denning, Earl, c-V	Idaho Falls, Idaho
Denning, Wm. V., c-V	Idaho Falls, Idaho
Dewey, E. Wm., a-F	Sandy
Dickson, Desmond, aema-V	Morgan
Dieckman, Adolph R., a-V-Fed	Rupert, Idaho
Diehl, Clair M., aema-V-Fed	Atlanta, Ga.
Diehl, Erastus J., a-V-Fed	Filer, Idaho
Diehl, Vira W., c-F	Filer, Idaho
Diener, Wm. H., aema-V-Fed	Sheridan, Wyo.
Disney, Wilber C., c-F	Rupert, Idaho
Donelson, Phenoy C., a-F-Fed	Salt Lake City
Dorius, Paul F., c-F	Salt Lake City

Draney, Jos. E., aema-V-Fed	Ogden
Dudley, A. Demarr, a-F	Jensen
Duke, Fay, a-F	Heber
Duke, G. Boyd, a-V	Heber
Dunbar, Irene, ss	Logan
Dunlop, Jeanne, c-V	Logan
Dunn, Blanche, ho-F	Blackfoot, Idaho
Durham, Belle, g-F	Logan
Durham, Vera, g-So	Logan
Dustman, Jos. E., a-V	Deweyville
Dutson, John S., aema-V	Afton, Wyo.
Eager, Jas. H., a-V-Fed	Nephi
Eager, Mattie C., ho-Sp	Nephi
Eames, Leona, c-F	Logan
Earl, Ernest G., aema-V	Logan
Eastman, Eric E., a-G	Hollywood, California
Eberle, Lillie L., ho-S	Ogden
Edlefsen, Edlef, ss	Logan
Edmunds, Charlotte, ss	Logan
Edmunds, Ruby, ho-F	Salt Lake City
Edmunds, Don Carlos, c-V	Logan
Edwards, Margarete, g-F	Logan
Edwards, Thos. W., c-F	McCammon, Idaho
Edwards, Wm. J., aema-F	Spanish Fork
Egbert, Anna, g-So	Lewiston
Egbert, Del Mar, a-F	Logan
Egbert, VaLois, c-V	Logan
— Eggen, Silas T., aema-V-Fed <i>Logan?</i>	Salt Lake City
Eickstadt, John F., aema-V-Fed	Alexandria, Minn.
Eldredge, Elbert, a-V	Woods Cross
Ellerman, Adele, ss	Logan
Ellis, Geo. F., aema-V-Fed	Layton
Ellis, Reuben A., aema-F	Pleasant Grove
Ellsworth, Von T., a-F	Rigby, Idaho
Engemann, Herbert H., s-F	Eureka
Engemann, Marguerite, g-J	Eureka
Ennis, Geo. H., aema-V-Fed	Minneapolis, Minn.
Erickson, Albert, aema-F	Logan
Erickson, Elgin W., a-F	Sandy
Erickson, Florence Vernetta, c-V	Logan
Erickson, Mabel, ss	Logan
Erickson, Chas., a-V	Salt Lake City
Esplin, Evelyn, ho-J	Orderville
Etter, John J., aema-V-Fed	Albuquerque, New Mexico
Evans, Blanche, ho-F	Lehi
Evans, Dora, g-F-ss	Nephi
Evans, Daisy M., g-F	Malad, Idaho
Evans, Hilton B., a-So	Spanish Fork
Evans, Jas. W. J. a-F	Malad, Idaho
Evans, Leone, ho-F	Salt Lake City
Evans, Morrill, a-J	Lehi
Evans, Ruth, c-F	Ogden
— Ewing, Scott P., ss-g-S <i>Brown Mountain</i>	Smithfield

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Fackrell, Otto E., aema-V-Fed	Woods Cross
Farmer, Jesse, aema-V	Byron, Wyo.
Falck, Louis, c-F	Ogden
Farnsworth, Farrell D., aema-V	Salt Lake City
Farnsworth; Idella, g-F	Richfield
Farrell, Janet E., g-V	Logan
Farrington, Carrie I., ss	Ogden
Fay Everett D., aema-Sp-Fed	Woodhull, Ill.
Feil, Fred C., c-V	Ogden
Felix, Adolph, aema-V	Logan
Felt, Rhea, c-V	Manti
Ferguson, Bruce D., aema-So	Spanish Fork
Fernlund, Geo. B., ss	Ogden
Finch, Nancy E., g-J	Salt Lake City
Finlayson, Erma, ss	Logan
Finley, Minnie, g-F	Springville
Finnegan, John V., a-V-Fed	Litchfield, Ill.
Fish, Lynwood L., aema-V-Fed	Logan
Fish, Murland W., g-V	Logan
Fjeld, Marie L., ss	Lehi
Fjeld, Virgil A., ss	Lehi
Flamm, Helena, ho-F	Rexburg, Idaho
Flanders, Della W., ho-So	Logan
Flanders, H. Edward, g-So	Logan
Fletcher, Samuel H., g-F	Preston, Idaho
Fogelberg, Thelma, c-F	Logan
Ford, Rulon G., a-F	Farmington
Fordham, Geo. A., ss	Greenville
Fornoff, Homer S., aema-F	Ogden
Forrer, C. Avilda, ho-V	Midway
Forrer, Karl W., aema-V	Midway
Forsgren, Hazel, ho-F	Brigham
Foutin, Vivian E., aema-V	Widtsoe
Foutz, Nadine, ho-J	Ogden
Frame, A. David, aema-V	Murray
Francis, Marjorie A., ho-V	Pocatello, Idaho
Francom, Elva, c-F	Payson
Fraze, Glenn D., a-V-Fed	Logan
Frazier, Edward G., a-V-Fed	Weldona, Colo.
Frederick, Elfriede, g-F	Logan
Frederickson, Dewey J., a-V	Malad, Idaho
Frederickson, John, aema-V	Vernon
Frischknecht, Carl, aema-F	Manti
Frongner, Sybil, ss-ho-J	Hyrum
Fugal, Delbert, aema-V	Pleasant Grove
Fuhriman, J. Lester, aema-V	Providence
Fuhriman, Leonard, aema-V	Providence
Fuhriman, Walter U., a-F	Providence
Fuller, Dora, ss-ho-J	Eden
Funk, Caroline B., ss	Logan
Funk, LeRoy C., a-So	Richmond
Gailey, Evelyn, ho-J	Kaysville
Gardner, Geo., ss	Logan

Gardner, Kumen S., aema-F	Pine Valley
Gardner, Leroi B., a-F	Lehi
Gardner, Marian, ho-F	Afton, Wyo.
Gardner, V. Delroy, a-J <i>uac</i>	Murray
Garr, Lone, ho-V	Millville
Garrett, Leon D., c-S	Nephi
Garvaglia, Peter, aema-V-Fed	Turbigo, Italy
Geddes, Elva P., ho-F	Banida, Idaho
Geddes, Lenald K., ss-g-Sp	Coulam, Idaho
Gibbons, Olga B., ss	Logan
Gibby, Lionel, g-V	Roy
Gibson, Murl H., ss-aema-V-Fed	Enoch
Goodrich, Geo. R., a-V	Vernal
Gordon, W. Erle, aema-V	Smithfield
Gospill, Howard W., a-F	Milford
Gowans, Max L., a-F	Tooele
Gray, Gladys, c-F	Cleveland, Idaho
Green, Chloe, c-V	Logan
Green, Wm., a-V-Fed	Salt Lake City
Green, Raymond W., a-F-Fed	Wellsville
Greenhalgh, Alma, c-V	Logan
Griffin, Annie, ho-V	Clarkston
Griffiths, Harry J., aema-V-Fed	Buffalo, Mont.
Griffiths, Robert E., c-F	Smithfield
Grimaud, Virginia, c-F	Logan
Groebli, Daniel, aema-V	Logan
Groesbeck, W. Berton, g-F	Springville
Grover, Lloyd F., aema-V	Fielding
Gubler, Helen A., g-G	Santa Clara
Gubler, Louis J., aema-V	Santa Clara
Gubler, Walter P., aema-V	Santa Clara
Gunderson, Ada, ss	Mt. Pleasant
Gunderson, Vern H., ss	Mt. Pleasant
Gunnell, Elsie, g-Sp	Wellsville
Gustavson, Ernest L., a-V-Fed	Vernon
Hadfield, W. Edward, a-F	Salt Lake City
Hadley, Lawrence, aema-V	Taylor
Haglund, Nels G., aema-V-Fed	Rawlins, Wyo.
Haight, Anna, g-V	Oakley, Idaho
Hale, Geneva, ss	Preston, Idaho
Halgren, John D., g-Sp	St. Anthony, Idaho
Hall, Alva D., aema-V	Ogden
Hall, Calder S., a-F	Hyrum
Hall, G. Raymond c-V	Ogden
Hall, Ira K., aema-V	Malad, Idaho
Hall, R. Afton, aema-V	Malta, Idaho
Hancock, Heber, aema-V	Ogden
Hanson, Anthon, aema-V	Logan
Hanson, Carol M., ho-F	Bountiful
Hanson, Clarence J., a-S	Salt Lake City
Hanson, Clarice T., ho-F	Providence
Hanson, Earl A., c-V	Logan
Hanson, Ernest Leroy, g-Sp	Logan

Hanson, Ernest R., a-So	Salt Lake City
Hanson, Esther, ho-V	Salt Lake City
Hanson, Eualalia, g-F	Brigham
Hanson, Evan O., aema-V	Fountain Green
Hanson, Franklin, aema-V	Sterling
Hanson, Monta, c-V	Logan
Hanson, Orlin, aema-F	Tremonton
Hansen, Percy, aema-Sp	Salt Lake City
Hanson, Q. David, a-F	Richfield
Hansen, Willard M., c-Sp	Salt Lake City
Harmon, Geo. A., g-So	Rigby, Idaho
Harmon, Irwin W., ss	St. George
Harmon, Winnie M., ss	St. George
Harmston, Albert F., aema-V-Fed	Roosevelt
Harper, Rex, a-F	Payson
Harper, Thos. R., a-V	Honeyville
Harris, Alfredo, a-V-Fed	Pagosa Springs, Colo.
Harris, Frank A., aema-V	Blue Creek
Harris, Ireta, ss	Logan
Harris, Karl O., ss-aema-F	Logan
Harris, Lamar W., c-F	Tremonton
Harrison, Alton, g-V	Logan
Harrison, J. Alfred, aema-V-Fed	La Point
Harrison, Thos., aema-V	Ogden
Hart, Carl E., aema-V-Fed	Keenesburg, Colo.
Hart, Chas. J., a-So	Salt Lake City
Hartman, Fred L., a-V-Fed	Alamosa, Colo.
Harvey, Hugh, a-J	Heber
Hatch, Aura C., a-F	Franklin, Idaho
Hatch, Geneva, ho-F	Woods Cross
Hatch, Katherine C., ho-F	Franklin, Idaho
Hatch, Lafayette T., c-F	Logan
Hatch, Mary, c-F	Woods Cross
Hawkes, Nellie M., ss	Logan
Hawkins, Annie, c-V	Logan
Haws, Arlington, aema-V	Logan
Haws, Gladys, ho-V	Logan
Haws, Mabel, ho-V	Logan
Haycock, Gilbert F., aema-V	Wellsville
Hayes, Edward A., g-F	Grace, Idaho
Hayes, John F., aema-F	Salt Lake City
Hayward, Clem J., ss	Paris, Idaho
Heckmann, Wm. C., a-F	Salt Lake City
Heggie, Felecia, ho-So	Clarkston
Hendricks, Fern, ho-F	Logan
Hendricks, Ira King, g-F	Richmond
Hendricks, John A., ss-c-S	Logan
Hendricks, Nada A., c-V	Logan
Henderson, S. Wanda, ss	Logan
Henrie, Irvn L., aema-So	Manti
Henrie, Wm., aema-V	I etonia, Idaho
Heslop, Herbert, aema-V	Ogden
Heywood, David, a-So	Thatcher, Arizona

Heywood, Emma, ho-V	Panguitch
Heywood, Ida, ho-J	Panguitch
Hicken, Wm. Ray, aema-V-Fed	Meeker, Colo.
Hickle, Homer A., aema-V-Fed	Divide, Colo.
Hickman, Juanita, ss	Logan
Hill, Gladys, g-Sp	Wellsville
Hilliard, Ethel, ho-F	Smithfield
Hinckley, Afton, ss	Hinckley
Hinckley, Claude, a-Sp	Ogden
Hinckley, Paul B., g-F	Ogden
Hinckley, Rulon T., a-F	Hinckley
Hinman, Karl G., c-J	Farmington
Hintze, Alvin B., a-So	Murray
Hoffman, Nathaniel, aema-V-Fed	Denver, Colo.
Hogenson, Lydia B., ss-g-Sp	Logan
Hokanson, Ola, aema-V	Grover, Wyo.
Holibaugh, C. Lloyd, aema-V-Fed	Los Angeles, Cal.
Holley, Geo. V., aema-V	Slaterville
Holm, Adelaide, ss	Hyrum
Holm, Stanley A., c-F	Hyrum
Holmberg, Ernest J., aema-V-Fed	Ft. Lupton, Colo.
Holmes, Waldo H., c-V	Montpelier, Idaho
Holman, Burton, a-V	Fountain Green
Homer, Harold W., aema-V	Smithfield
Homer, Leo K., a-So	Logan
Hooper, John C., g-V	Hooper
Hopkins, Sybil V., c-F	Logan
Horsley, Shirley C., ss	Brigham
Hortin, Glen M., a-V	Oakley
Hortin, W. Eugene, a-Sp	Oakley
Howard, L. Elbert, aema-V	Huntington
Howells, Alice E., ho-J	Salt Lake City
Hubbard, Julia V., ho-So	Willard
Hubbard, Marguerite, g-F	Willard
Hubbard, Walter I., a-F	Grace, Idaho
Hudman, Orson, aema-V	Idaho Falls, Idaho
Huff, Wm. L., a-So	Tremonton
Hughes, Jessie, c-V	Spanish Fork
Humphreys, Elzo, g-F	Paris, Idaho
Hunsaker, Ruby, ho-F	Honeyville
Hunter, W. Spencer, a-F	Lewisville, Idaho
Huntington, Clifford H., a-V	Tooele
Hurst, Wm. F., a-V	Logan
Hyde, Rosel H., aema-F	Downey, Idaho
Hyde, Wendell, g-V	Logan
Ipsen, N. Ruel, aema-V	Malad, Idaho
Jack, Lorenzo, a-V	Oakley, Idaho
Jackson, J. Murle, a-F	Woods Cross
Jackson, Miriam, ho-F	Logan
Jacobs, Clifton G., aema-V	Grace, Idaho
Jacobs, Helena, ho-S	Rexburg, Idaho
Jacobs, Wm. L., aema-V-Fed	Ten Sleep, Wyo.
Jacobson, Alma E., ss	Oak City

Jacques, Chas. W., c-F	Logan
James, David W., aema-F	Paradise
James, Jennie, ss	Logan
Jamison, Eleanore, ss	Salt Lake City
Jardine, Wanda, c-V	Logan
Jarvis, Lester A., aema-J	Salt Lake City
Jenkins, Howard M., a-F	Arimo, Idaho
Jenkins, Leslie M., ss-g-Sp	Logan
Jenkins, Louie, c-F	Freedom, Wyo.
Jenkins, McKinley, c-So	Malad, Idaho
Jenkins, Paul K., ss	Logan
Jenkins, Wallace L., aema-V	Malad, Idaho
Jensen, Daniel B., aema-V	Richfield
Jensen, Earl, aema-V	Duchesne
Jensen, Elial A., aema-Sp	Centerfield
Jensen, Evelyn, g-V	Logan
Jensen, Hazel M., ss	Bear River City
Jensen, Irving J., a-G	Hyrum
Jensen, LaVern, ho-F	Brigham
Jensen, Leona, ss	Logan
Jensen, Leslie O., a-V	Manti
Jensen, Lillian, g-Sp	Mendon
Jensen, Mary, ss	Brigham
Jensen, Nora, ss-c-V	Millville
Jensen, Pearl, ss	Hyrum
Jensen, R. Elwood, g-V	Tremonton
Jensen, Stella M., ho-V	Logan
Jensen, Stuard C., aema-V	Brigham
Jeppesen, Bartell T., aema-V	Logan
Jeppesen, Cleion, a-F	Willard
Jeppesen, Hazel, ho-F	Geneva
Jeppson, J. Rufus, ss	Ogden
Jerling, Harry C., a-F	American Fork
Jerman, I. Donald, aema-J	Santaquin
Jessop, E. Donald, ss	Millville
Johnson, Alta, ho-So	Grantsville
Johnson, Christian W., ss	Nephi
Johnson, Clover V., c-V	Logan
Johnson, Della, ho-F	Burley, Idaho
Johnson, Greta, ho-F	Richfield
Johnson, Hannah J., ho-Sp	Randolph
Johnson, Hyrum E., ss	Pleasant Grove
Johnson, McCoy, a-F	Grantsville
Johnson, Madolynn, ss	Spanish Fork
Johnson, Naomi M., g-So	Logan
Johnson, Reginald M., aema-V	Roosevelt
Johnson, Ruby J., ss	Logan
Johnson, Viggo A., aema-V	Downey, Idaho
Johnson, Vilda, ho-V	Avon
Johnson, Afton E., ho-F	Hooper
Johnston, Peter R., a-V	Blackfoot, Idaho
Johnston, Owen H., a-V	Vernal
Jones, Caroline A., ho-V	Cedar City

Jones, Clarence W., c-V	Rigby, Idaho
Jones, E. Luella P., ss-ho-So	Logan
Jones, Franklin L., aema-V-Fed	Sandy
Jones, Gladys, ho-F	Salt Lake City
Jones, Howard T., aema-V	Sunnyside
Jones, Hyrum P., c-S-Fed	Enoch
Jones, Lawrence W., a-F	Monroe
Jones, Lorin W., aema-V	Spanish Fork
Jones, Lulu M., ss	Wellsville
Jones, Mary C., ho-F	Salt Lake City
Jones, Thornton, aema-V	Enoch
Jones, Titus, aema-V-Fed	Duchesne
Jones, Verdean, a-V	Idaho Falls, Idaho
Jonsson, Hilma C., ss	Logan
Jonsson, Reuben L., g-So	Logan
Jorgensen, Ernest, aema-V-Fed	Manti
Jorgensen, H. Armeda, ho-V	Logan
Jorgensen, Lyman L., aema-V-Fed	Ephraim
Jorgensen, Osmond, c-F	Logan
Jory, Ted, a-V-Fed	Logan
Josephson, Ephraim L., g-Sp	Brigham
Judd, Marguerite, g-F	Salt Lake City
Kaskey, Richard, ss	Boston, Mass.
Kavanaugh, Robt. J., aema-V-Fed	Kansas City, Mo.
Kearl, Chase, a-S	Laketown
Kearl, Frank J., aema-V	Laketown
Keenan, T. Vincent, aema-V-Fed	Pueblo, Colo.
Keller, Adria D., ss	Mink Creek, Idaho
Kelly, Elmer J., a-V	Bancroft, Idaho
Kelly, Eric J., a-V-Fed	Fort Lyons, Colo.
Kelly, Frederick H., a-V-Fed	Leamington
Kelley, Russell M., aema-Sp-Fed	Canton, Kansas
Kelley, Vea R., a-V-Fed	Salt Lake City
Kennedy, Clifford, aema-V	Randolph
Kenner, R. Lee, a-So	Manti
Kenner, Vera, ho-F	Manti
Kent, Mary, ss	Lewiston
Kent, Verna, ss	Lewiston
Keoppel, Phillip, a-V-Fed	Denver, Colo.
Kern, Andrew, aema-V-Fed	Genesee, Idaho
Khan, Abbas K., ss-aema-So	Teheran, Persia
Khan, Allah K., aema-So	Teheran, Persia
Khan, Ameen, a-S	Teheran, Persia
Khan, Seyed Jafar, a-S	Teheran, Persia
Kidgell, Ariel, aema-V	Logan
Killpack, J. Movell, a-V	Huntington
Killpack, McLloyd, a-So	Ferron
Killpack, Maralda, c-V	Ferron
Killpack, Zona, c-V	Ferron
Kimball, Chase R., g-So	Driggs, Idaho
Kincaid, Wm. H., aema-V-Fed	Logan
King, Fay g-F	Kamas
King, Geo. E., a-G	Logan

King, John J., aema-V	Logan
King, Ona J., ho-S	Kamas
King, Ralph T., aema-V-Fed	Illif, Colo.
Kirk, Harvey, a-F	Tooele
Kirkham, Martha A., ho-So	Lehi
Knight, Geo. C., a-Sp-Fed	Kamas
Knudson, Florence, g-F	Brigham
Kotter, Guinivere, ss	Brigham
Kotter, Horace, g-V	Brigham
Kotter, L. Wallace, c-V	Brigham
Kugler, Steve M., a-V-Fed	Denver, Colo.
Kuhn, Edward, a-V	Reno, Nevada
Kunz, Anthon, aema-F	Logan
Kunz, Frank F., a-F	Bern, Idaho
LaBeau, Arthur, aema-V-Fed	Silver City, New Mex.
Lamb, Elsie, ho-F	Farmington
Lamborn, Willard, a-V	Laketown
Langton, Lucie G., g-F	Shelley, Idaho
Langton, W. Gibbs, g-F	<i>N.Y. City</i> Logan
Larsen, Dean M., a-V	Manti
Larsen, Edna M., ss	Logan
Larsen, Ezra A., aema-F	Preston, Idaho
Larsen, Floyd C., a-V	Logan
Larsen, Gayland L., aema-V	Hollister, Idaho
Larsen, Herbert, c-So	Logan
Larsen, Lelia, ss	Richmond
Larsen, L. Leland, a-Sp	Manti
Larsen, Orpha, ss	Mendon
Larsen, Parley R., c-V-Fed	Logan
Larsen, Radia P., g-So	Preston, Idaho
Larsen, Raymond, a-V	Preston, Idaho
Larsen, Victor, g-Sp	Logan
Last, Chas. H., aema-So	Lewiston
Latimer, Jas. L., a-V-Fed	Salt Lake City
Laub, Emma K., ss-g-S	Logan
Laurent, John, aema-V-F	Salt Lake City
Lee, Clarence B., a-V	Kimberley, Idaho
Lee, Olivia, ho-So	Brigham
Leigh, Carrie, ss	Cedar City
Lemoine, Forest, aema-V-Fed	Pineville, La.
Lemon, Frank D., a-V	Ferron
Lewis, Doyl M., aema-F	Marion
Lewis, M. Wilford, c-V	Kamas
Lewis, Reva, ho-F	Payson
Lewis, Vera G., ss-g-V	Logan
Liljenquist, Harold, aema-V	Hyrum
Lindquist, Eva, ss	Salt Lake City
Lindquist, Gladys M., c-V	Logan
Lindsay, Agnes, ho-F	Heber
Lindsay, Ray, c-So	Ogden
Lindsay, Wm., ss-c-S	Logan
Linford, Arthur J., aema-F	Garland
Linford, Leon B., g-F	<i>Kimberley, Ind.</i> Logan

Linford, Mary H., ho-Sp	Logan
Linford, Maurice B., a-F	Logan
Livingston, Jas. A., aema-V-Fed	Denver, Colo.
Lloyd, Annie H., ss	Logan
Lloyd, Geo. J., aema-V-Fed	Salt Lake City
Loberg, Bjarne I., a-V-Fed	Minneapolis, Minn.
Long, Elmer R., aema-V-Fed	St. Bernice, Ind.
Loose, Clarence C., c-V	Provo
Losee, Wm. A., a-F	Spanish Fork
Lothyan, Whitney, aema-V-Fed	Manassa, Colo.
Love, Edwin M., ss	Murray
Loveless, Glenn L., a-F	Payson
Lovendale, Laura E., ss	Salt Lake City
Lowe, Aletha D., ho-V	Franklin, Idaho
Loyd, Earl J., a-V-Fed	Rantoul, Kansas
Luke, Harold, a-F	Heber
Luke, Pearl, g-F	Salt Lake City
Lund, Frederick M., aema-V-Fed	Nelson, Minn.
Lund, Yeppa, ss-a-G	Logan
Macbeth, Glenn E., a-S	Ogden
McAllister, Martin L., ss-aema-V-Fed	Kanab
McBride, W. Wallace, c-J	Logan
McCann, Blanche, ss	Smithfield
McClellan, Edwin L., a-F	Colonia, Juarez, Chih., Mexico
McClenahan, Myrle, ss	Mt. Pleasant
McCune, Leeta, ho-So	Nephi
McDonald, Grace, ho-S	Murray
McDonald, Howard, aema-J	Murray
McDonald, James E., c-F	Whitehall, Mont.
McDonald, Jed, aema-V	Ferron
McDonald, Loa S., ho-J	Murray
McFarland, Blaine A., g-Sp	Ogden
MacFarlane, Donald C., a-F	St. George
McGraw, Orestes K., a-Sp	Salt Lake City
McKay, Morgan P., a-J	Logan
McLeod, Delgarno, aema-V-Fed	Rush, Colo.
McMullin, Thos. H., a-J	Heber
McMullin, Urban B., a-V	Sandy
McNiel, Inez I., ss	Logan
Madison, J. Jack, aema-F	Spivey, Kansas
Madsen, Alice, c-F	Price
Madsen, Annie M., ho-V	Deweyville
Madsen, Newel J., c-F	Logan
Madsen, Richard A., a-Sp	Deweyville
Madsen, Willis N., aema-V	Price
Magleby, Grant W., a-F	Monroe
Magleby, Herbert A., a-F	Monroe
Magleby, Karl J., a-So	Monroe
Magleby, Rulon T., a-J	Monroe
Manning, Ella, ho-F	Fish Haven, Idaho
Manning, J. Walter, aema-V	Farmington
Manson, Cleon J., g-V	Monroe
Marchant, Elizabeth M., ho-F	Peoa

Marchbanks, Leo, a-Sp-Fed	Mapleton
Marshall, Arthur B., aema-V	Logan
Marshall, Curtis H., aema-V	Pleasant View
Marshall, Frederick W., a-V	Logan
Martin, Mary H., g-V	Manti
Matthews, Hilma, ho-So	Oakley, Idaho
Maughan, Angus M., a-J-ss	Logan
Maughan, Chas. P., aema-F	Wellsville
Maughan, Elsie E., ho-F	Logan
Maughan, Jas. C., aema-V	Benson
Maughan, Jos. S., a-F	Wellsville
Maughan, Wilford P., aema-V	Wellsville
Maw, Rufus R., aema-V	Ogden
Mawhinney, Will E., aema-F	Park City
Maxwel, Cleone, ho-F	Peoa
Mayers, Leland A., a-F	Salt Lake City
Mecham, Sybil, ss	Preston, Idaho
Meikle, Marian, ho-V	Smithfield
Meikle, W. Lafayette, c-F	Drigg, Idaho
Mellor, Leslie Lee, a-F	Manti
Mellor, Lester D., a-F	Manti
Memmott, Cleon L., a-S	Nephi
Mendenhall, Blanche, ho-J	Springville
Mendenhall, Lovell, aema-V	Thatcher, Idaho
Merrill, Edna E., ss-g-S	Logan
Merrill, Effie E., ss-ho-J	Logan
Merrill, Glenn W., aema-F	Preston, Idaho
Merrill, Loila D., ss-ho-So	Logan
Merrill, Millie L., ss-ho-V	<i>Miss Millie - Starky, store</i> Logan
Merrill, Milton R., a-Sp	<i>U.S.C.</i> Logan
Merrill, O. David, aema-E	Richmond
Merrill, Oretta D., ho-Sp	Logan
Merrill, Ray S., a-F	Richmond
Merrill, Wilford J., c-So	Richmond
Midgley, Alvin R., a-F	Wales
Miller, Earl A., aema-V-Fed	Brashear, Mo.
Miller, Elna, ss-ho-S	Logan
Miller, Glen, a-V	Farmington
Miller, Hortin C., aema-F	Logan
Miller, H., Julian, c-J	Logan
Miller, Irvin S., ss-g-V	Logan
Miller, Minnie W., a-V	Salt Lake City
Miller, Philip D., aema-F	Ogden
Miller, S. Leo, aema-V	Tremonton
Mills, Clarence, aema-F	Payson
Miner, Milo, a-F	Fairview
Mitchell, J. Harold, a-F	Parowan
Mitton, Melvin, aema-V	Wellsville
Moffett, Wells, aema-V	Kenilworth
Moench, Howard, c-V	Logan
Mohr, Andrew, a-So	Logan
Mohr, Mabel L., c-V	Logan
Monson, Ezra P., c-F	Franklin, Idaho

Monson, Matthias P., c-V	Franklin, Idaho
Monson, W. Russell, aema-Sp	Hyrum
Montgomery, I. Kimball, aema	Ogden
Moore, Blanche M., ho-V	Toepka, Kansas
Moore, Myrtle, g-V	Logan
Morgan, Drusilla M., ss	Logan
Morgan, Norman F., ss-a-S	Logan
Morrell, T. Heber, a-S	Logan
Morris, Laval S., a-F	Sugar Station
Morris, Richard A., a-Sp	St. George
Mortensen, Penn B., aema-V-Fed	Sanford, Colo.
Moser, Erwin U., a-F	Logan
Moss, Ezra, a-V	Woods Cross
Moulton, Dewey, a-V	Heber
Muir, Lee, aema-V	Wayan, Idaho
Mullen, Marl A., aema-Sp	Vandergrift, Pa.
Murdock, Clarence, a-F	Heber
Murdock, Irvine B., a-V-Fed	Grand Junction Colo.
Murdock, Ralph C., a-V	Duchesne
Nagle, Harold E., c-So	Filer, Idaho
Nebeker, A. Hulme, g-S	Laketown, Utah
Nebeker, Sidney J., a-F	Laketown
Neddo, Ella P., a-Sp	Providence
Neddo, Geo. W., aema-V	Providence
Nelson, Annie C., ho-So	Moroni
Nelson, Carl E., g-F	Logan
Nelson, Cecelia, c-V	Logan
Nelson, Cloe, ss	Huntsville
Nelson, Erma, c-V	Logan
Nelson, Cyrus E., aema-V	Logan
Nelson, Hazel, ho-F	Logan
Nelson, J. Rulon, a-V	Ferron
Nelson, Kenneth, c-F	Provo
Nelson, Myra, g-Sp	Logan
Nelson, Parley LeRoi, a-F	Richmond
Nelson, Peter, g-S	Mink Creek, Idaho
Nelson, Peter C., a-V-Fed	Provo
Nelson, Raymond P., a-V	Huntsville
Nelson, Rebecca A., c-V	Logan
Nelson, Vern, aema-V	Preston, Idaho
Nelson, W. Ray, a-F	Heber
Netcher, Ray C., a-V	Trenton
Neves, Vernon, aema-V	Millville
Newman, Jay C., a-V	Holliday
Nibley, Chas. W., III c-So	Logan
Nicholes, David, a-V-Fed	Lamont, Idaho
Nielsen, Beatrice, ss-ho-J	Logan
Nielsen, Clyde J., aema-V-Fed	Purcell, Colo.
Nielsen, David H., aema-V	Manti
Nielsen, Ellen C., ss-ho-Sp	Logan
Nielsen, Eva Joy, g-G	Ephraim
Nielsen, Hazel, g-Sp	Hyde Park
Nielsen, Leo H., c-F	Union, Oregon

Nielsen, May, ss	Hyrum
Nielsen, Ralph J., aema-V	Spanish Fork
Nielsen, Reuben L., aema-V	Lapoint
Nielsen, Royal F., c-F	Monroe
Nielsen, Vera, ss	Logan
Nielsen, Vina, ss	Huntsville
Nord, Eric S., ss-aema-V-Fed	Salt Lake City
Norman, Henry O., aema-V	Paradise
Nuffer, Louis F., a-G	Logan
Nuffer, Luther J., aema-V	Swan Lake, Idaho
Nuffer, Myron D., a-Sp	Preston, Idaho
Nuffer, Raymond, aema-F	Preston, Idaho
Oberhansly, E. Pearl, g-So	Provo
Oberhansly, Henry E., a-G <i>u.c.</i>	Payson
Odell, Afton, ss-g-F	Logan
Odell, Florence L., ss	Logan
Oldham, Heber A., aema-V-Fed	Murray
Olesen, Einar B., c-So	Logan
Oliver, Ethelyn, ho-S <i>Mo. J. E. Muns</i>	Sandy
Oliverson, L. Earl, a-V	Franklin, Idaho
Olsen, Cliff, aema-V	College Ward
Olsen, Delno, a-V	College Ward
Olsen, E. Winnie, ho-V	College Ward
Olsen, Elva, c-V	Logan
Olsen, Esther A., c-V	Logan
Olsen, Henry C., g-F	Ogden
Olsen, Homer C., a-V	Monroe
Olsen, Jess H., a-V	Mackay, Idaho
Olsen, Leander, g-S	Moroni
Olsen, Leona, ho-V	College Ward
Olsen, Lester W., aema-V	College Ward
Olsen, Lillie, ss-c-V	Logan
Olsen, Raymond L., ss-c-F	Logan
Olsen, Silvy, c-V	College Ward
Olsen, Sylvan, c-So	Logan
Orme, John A., ss-g-V	Nephi
Ormsby, Leila, ss	Salt Lake City
Osmond, I. Fern, ho-F	Logan
Osmond, Ruby H., ss	Logan
Owens, Luella B., g-V	Logan
Owens, Serena, ss	Preston, Idaho
Owen, Vern, a-So	Peterson
Pack, Mignon, g-F	Kamas
Pack, Rodney X., g-F	Woods Cross
Pack, Rowene, g-F	Kamas
Packer, Grant P., a-F	Preston, Idaho
Packer, Vera, c-V	Logan
Palmer, Della, ho-F	Malad, Idaho
Palmer, Gladys, ho-F	Bountiful
Palmer, W. Wendell, a-F	Logan
Parke, Ralph, a-F-Fed	Kamas
Parker, Ianthus R., a-F	Hinckley
Parkes, Wm. S., ss	Nephi

Parkinson, Adeline, ss	Logan
Parkinson, Frank L., aema-F	Hyrum
Parkinson, J. Maurice, a-F	Wellsville
Parkinson, Wallace B., g-So	Logan
Parry, J. Waldo, c-S	Richfield
Parry, Martha P., ss	Logan
Parry, Wilford E., a-V-Fed	Logan
Partridge, Raymond, a-G	Provo
Passey, Naomi, ss	Ogden
Patrick, Inga A., ss	Logan
Paulson, Signe, g-F	Logan
Peacock, Mildred B., ho-F	Manti
Pearce, Jos. S., a-V-Fed	Roosevelt
Peck, Arthur B., c-F	Malad, Idaho
Peck, Bramwell L., g-F	Sugar City, Idaho
Peck, Raymond M., g-V	Murtaugh, Idaho
Pedersen, Lyman C., c-F	Logan
Pedersen, Marie, g-F	Logan
Pehrson, Anthon Jr., aema-V	Logan
Perry, Doris, c-V	Blackfoot, Idaho
Perry, P. Weston, a-F	Price
Peterson, Bert E., aema-V	Mt. Pleasant
Peterson, Carroll D., a-F	Hyrum
Peterson, Deta, ss	Logan
Peterson, Edwin F., a-V-Fed	Salina
Peterson, Maurine M., ss-g-S	Logan
Peterson, Merrill, aema-F	Logan
Peterson, Mignon, ss	Richfield
Peterson, Millie, ss-c-V	Logan
Peterson, Viola, c-F	Smithfield
Phillips, John D., a-So	Idaho Falls, Idaho
Picco, John P., aema-V	Salt Lake City
Picot, Stanley A., c-V	Logan
Pippin, Roscoe, aema-V-Fed	Gillette, Wyo.
Pixton, Emma, ho-V	Logan
Pixton, Robert L., a-J	Logan
Pokriots, Eli D., aema-V-Fed	Denver, Colo.
Pond, C. Angus, aema-V	Lewiston
Porter, Wilford D., g-So	Logan
Poulsen, Vance C., aema-V	Idaho Falls, Idaho
Poulter, Ina, ss	Ogden
Poulter, W. Lrvin, a-S	Logan
Poulton, J. Wesley, aema-V	Oakley, Idaho
Powell, A. H., ss	Logan
Pratt, Veda, ss	Preston, Idaho
Prescott, E. Stanley L., ss-c-G	Sydney, Australia
Price, Ardath L., a-S	Provo
Price, Chas., a-J	Beaver
Price, Maud, g-F	Idaho Falls, Idaho
Probst, Francis A., aema-V	Midway
Pugh, Jesse E., aema-V-Fed	Monterey, Cal.
Pulsipher, H. Russell, ss	Avon
Querry, Hattie Bell, ho-F	Mt. Home, Idaho

Rainey, Verna, g-V	Logan
Rallison, R. Leo, a-J	Preston, Idaho
Rampton, Lauren E., aema-V-Fed	Farmington
Ramsperger, Albert G., g-So	Logan
Ramsperger, Herman C., ss	Logan
Rand, Julian B., aema-V	Kamas
Rasmussen, Erba, ho-F	Mt. Pleasant
Reece, Jennie A., ho-So	Payson
Redd, Herbert H., a-Sp	Monticello
Redden, Richard E., a-V	Hoytsville
Redington, Ray W., aema-V	Oxford, Idaho
Reed, Jos., ss-a-S <i>here this sum - see his card</i>	Salt Lake City
Rees, Simpson M., c-V	Benson
Reid, Elma, ho-So	Logan
Reid, Geo. D., aema-V	Logan
Rex, Myrtle L., ho-Sp	Logan
Rice, Inez, ss	Logan
Rice, O. LeGrande, aema-F	Logan
Rich, Geneva, g-J <i>Mrs. Clyde Worley</i>	Logan
Rich, Irene, ho-S <i>Old Gardner</i>	Logan
Rich, Letty, g-So	Logan
Richards, Iva L., ss-g-F	Logan
Richards, M. Alta, g-V	Logan
Richardson, Ivie, ss	Logan
Richardson, Rufus D., a-F	Francis
Ricks, Edna, ss	Rexburg, Idaho
Ricks, Paul, c-F	Logan
Rigby, B. Stanley, c-V	Juniper, Idaho
Rigby, Golden H., c-V	Newton
Rigby, M. Amos, aema-V	Newton
Riser, Florence L., ss-c-V	Ogden
Riter, Wm. E., a-Sp	Logan
Rix, Jas. H., aema-V-Fed	Pueblo, Colo.
Roberts, Arvilla, ho-F	Kaysville
Roberts, Clarence, a-F	Woods Cross
Roberts, Clinton, aema-V	Eureka
Roberts, Willard S., a-V-Fed	Salt Lake City
Robertson, Cecil, aema-V	Blackfoot, Idaho
Robertson, J. Dewey, aema-V	Blackfoot, Idaho
Robins, Leon A., a-F	Layton
Robinson, Beth, g-F	Fielding
Robinson, Eugene W., a-S	Salt Lake City
Robinson, Ivel H., aema-V	Salt Lake City
Robinson, Jos. L., g-So	Logan
Robinson, LaRue, g-F	Fielding
Robinson, Vernon G., a-V	Laketown
Robinson, Thos. B., aema-V-Fed	Ogden
Robison, Geo. A., ss-a-J	Hinckley
Robson, Alvin, g-V	Plain City
Rogers, David W., a-Sp	Pima, Arizona
Rogers, Dean A., aema-V	Logan
Rogers, John H., aema-V-Fed	Salt Lake City
Romney, Gordon M., c-So	Colonia, Juarez, Chih., Mex.

Ronshka, Carl, a-V-Fed	Denver, Colo.
Rosengreen, Eldon J., aema-V	Logan
Rosengreen, Ruby L., g-V	Logan
Roskelley, Lorenzo, aema-Sp	Smithfield
Ross, Harold J., a-V-Fed	Denver, Colo.
Rosser, J. Clifford, aema-V	Hiawatha
Rott, Anton, aema-V-Fed	Chicago, Ill.
Rowland, Priscilla, ho-F	Logan
Rowley, Inger A., c-V	Logan
Rowley, Monroe, g-V	Murtaugh
Royslance, Elda, g-F	Rigby, Idaho
Royslance, Hattie W., ho-Sp	Logan
Roylance, Helen, ho-F	Springville
Rude, Clarence, aema-V-Fed	Ada, Minn.
Ruff, Enid E., ss	Logan
Russell, Emma D., ho-G	Springville
Russell, Geo. E., aema-S	Springville
Ruud, Edna, c-V	Logan
Sabath, Julius A., aema-V-Fed	Cincinnati, Ohio
Salzner, Viola L., ho-F	Salt Lake City
Samuels, Lorenzo S., aema-V	Salt Lake City
Sanford, Ralph B., a-Sp	Delta
Sauer, Dorothea, ss	Sheldon, Iowa
Sauls, Kiefer B., c-S-ss	Storrs
Savage, Willis J., a-So	Hyrum
Sax, Ira C., arma-V-Fed	Wendell, Idaho
Schank, Lafayette, a-V	Salt Lake City
Schaub, Vesta, ss	Logan
Scherer, Karl W., g-F	Provo
Schow, Spencer, c-F	Milford
Schwartz, Marguerite, ho-V	Logan
Seaman, Geo. A., a-F	Morgan
Seegmiller, Carlos, aema-V	Ogden
Seegmiller, Chas. R., a-F	St. George
Seeley, Chesley P., c-F	Mt. Pleasant
Sevy, Fern, ho-F	Richfield
Sharp, Lavon B., g-S	Salt Lake City
Shaw, Bessie H., g-Sp	Logan
Shaw, Clarke C., a-V-Fed	Myton
Shaw, Earl W., a-V	Tetonia, Idaho
Shaw, Wilford L., a-V	Omaha, Neb.
Shelton, Lyle, c-V	Magrath, Alta, Canada
Shepard, Dorothy A., ss-g-V	Logan
Shimmin, E. Pearl, g-F	Vernal
Shir., Winfield S., aema-V-Fed	Salt Lake City
Shy, Wm. H., aema-V-Fed	Cheyenne Wells, Colo.
Siegfried, Joshua F., aema-F	Bear River City
Simister, Ray C., aema-V	Ogden
Simmons, Leo T., c-F	Oakley, Idaho
Simpson, Ruth, g-Sp	Logan
Skanchy, Verna, ss-ho-J	Logan
Skidmore, Albert L., aema-Sp	Benmore
Skidmore, Elmer G., a-F	Richmond

Skidmore, Verna M., ss	Preston, Idaho
Slack, Arthur, a-V-Fed	Toquerville
Slaugh, Leonard, aema-V	Vernal
Smart, Nellie B., ss	Logan
Smart, T. Lawrence, a-V	Roosevelt
Smith, Abbie, ho-F	Logan
Smith, Ardella B., ho-F	Logan
Smith, Arthur B., a-J	Logan
Smith, Bertram W., g-So	Logan
Smith, Beulah, c-V	Providence
Smith, Bruce V., c-V	Vernal
Smith, Calvin, aema-V	Logan
Smith, Chas., aema-V	Sandy
Smith, Douglas, c-Sp	Heber
Smith, Driver E., ss-c-J	Logan
Smith, Elmer C., g-F	Logan
Smith, Gwendolyn, g-F	Logan
Smith, Inez, ho-F	Logan
Smith, John F., ss	Beaver
Smith, Jos. F., aema-F	Providence
Smith, LaPriel, ss	Logan
Smith, Laura, ho-V	Smithfield
Smith, LaVoy, aema-V	Draper
Smith, Malcolm W., aema-V	Logan
Smith, Margaret A., ho-V	Greybull, Wyo.
Smith, Marjorie, ss	Logan
Smith, Mary W., g-F	Logan
Smith, Moroni W., a-F	Parowan
Smith, Norma I., ss	Logan
Smith, Olena W., ss	Logan
Smith, Ralph A., g-J	Logan
Smith, Rulon, aema-V	Logan
Smith, Seymour E., c-V	Logan
Smith, Wm. J., aema-V-Fed	Salt Lake City
Smith, Winnifred G., ss	Beaver
Snedaker, Grace G., ss	Ogden
Snedaker, John F., ss	Ogden
Snow, Wm. J., ss	Richfield
Solomon, Leah, ss	Salt Lake City
Sorensen, Adella M., ss	Hyrum
Sorensen, Evelyn V., ss-g-So	Brigham
Sorensen, Ferra J., aema-V	Axtell
Sorensen, Ivan C., a-V	Ogden
Sorensen, Jens M., aema-V-Fed	Erwin, So. Dak.
Sorensen, Orson J., aema-V	Hyrum
Southwick, Edward W., a-V	Lehi
Spande, Sybil, g-So	Logan
Spencer, Bessie, ss	Kanab
Spencer, J. Lester, a-F	Escalante
Spencer, Ruth H., ho-F	Ogden
Spencer, Sidney K., c-Sp	Salt Lake City
Sperry, Ruth, ss	Nephi
Squires, Geo. E., a-V	Manti

Stander, David E., c-F	Bear River City
Stanger, Albert G., a-F	Idaho Falls, Idaho
Steed, T. Jos., a-F	Layton
Stephens, Myrthyn, aema-V	Logan
Stevens, G. Ord, aema-V	Brigham
Stevens, Justus M., aema-F	Fairview
Stevens, Mead W., aema-V	Salt Lake City
Stevenson, Clifford A., aema-So	Logan
Stevenson, Sadie B., ss-g-V	Logan
Stewart, Harry G., aema-F-Fed	Lehi
Stewart, John B., aema-V	Lehi
Stewart, Wynona B., g-Sp	Logan
Stock, Sidney R., g-J	Fish Haven, Idaho
Stock, Wesley, aema-V	Fish Haven, Idaho
Storrs, Norven L., a-F	American Fork
Stookey, Bernice, ss	Clover
Stowell, Caseel, ss	Logan
Strange, Sheldon F., a-V	Salt Lake City
Strickland, John B., aema-V-Fed	Albuquerque, New Mex.
Stringham, Chariton J., g-F	Woods Cross
Strong, LeRoy H., g-F	Logan
Stuart, Barbara, ss	Wellsville
Sullivan, Edward D., a-V-Fed	Spokane, Wash.
Summers, Edwin S., aema-V	Paradise
Sumsion, Glen W., aema-So	Springville
Sutherland, Earl C., aema-F	Logan
Sutherland, Thos. G., aema-F	Logan
Sutton, Wm. H., a-J	Paris, Idaho
Swann, Marie, ho-F	Preston, Idaho
Swapp, Addie L., ss	Kanab
Swetin, Jos., a-Sp	Gunnison
Swetin, Zlata, ho-V	Logan
Swindlehurst, Phyllis, ss	Beaver
Swinyard, Wm. O., ss	Logan
Tabor, Chas. S., aema-V-Fed	Boston, Mass.
Taggart, Warren J., a-V-Fed	Lewiston
Talmage, Lucile, g-J	Salt Lake City
Tanner, Arthur E., a-F	Payson
Tanner, C. Ruth, ss	Salt Lake City
Taylor, Arthur C., a-V	Loa
Taylor, Clifton a-V	Parowan
Taylor, David M., ss	Payson
Taylor, Geo. E., a-Sp	Woods Cross
Taylor, Jas. P., aema-F	Ogden
Taylor, Melvin, a-F-Fed	Murray
Taylor, Ruth C., ho-F	Salt Lake City
Taylor, Thos. G., aema-V	Salt Lake City
Taylor, Witt E., aema-V	Woods Cross
Tebbs, Mae, ho-V	Panguitch
Telford, Cassie, ss	Lewiston
Telford, Eugene, c-V	Grace, Idaho
Thacker, Fay E., aema-V	Heber
Thain, Geo. W., c-So	Logan

Thatcher, Eulalia, ss	Logan
Thatcher, Franklin D., ss	Logan
Thatcher, Hanna, ss	Logan
Thatcher, Leora, ss	Logan
Thatcher, Lettie, ss	Logan
Thatcher, Patience, ss	Logan
Thomas, Evangeline, g-Sp	Salt Lake City
Thomas, John M., aema-V	Vernal
Thomas, Kate, ss	Malad, Idaho
Thomas, Lilaine M., ss	Logan
Thomas, Luella, ho-So	Plain City
Thomas, Melvin R., c-F	Malad, Idaho
Thomas, Ream, aema-V	Ogden
Thompson, Blair G., aema-V	Sterling
Thomson, Bertha Fernanda, ho-F	Ephraim
Thomson, Wendell J., g-F	Richmond
Thorley, Alldridge R., c-F	Cedar City
Thorpe, Lyman T., ss	Providence
Thueson, Ivan O., a-V	Sugar City, Idaho
Tibbitts, Ira J., aema-V	Providence
Tibbitts, John R., aema-V-Fed	Denver, Colo.
Tingey, Delmar C., a-So	u.u.l. Brigham
Tingey, Perry, aema-V	Gray, Idaho
Tinpetts, John R., a-S	St. George
Titensor, Roscoe, c-So	Logan
Tolley, Lee D., a-V-Fed	Nephi
Tolman, Nathan, ss-g-Sp	Logan
Toombs, Wm. W., aema-V	Logan
Townsend, Frank K., aema-V-Fed	Colorado Springs, Colo.
Transtrum, James, a-V	St. Charles, Idaho
Tucker, E. Amasa, aema-V	Myton
Tueller, Adolph C., g-F	e. Paris, Idaho
Tueller, Gottfred J., a-F	Paris, Idaho
Tueller, La Mont E., a-F	Paris, Idaho
Turley, Clarence F., a-F	Colonia, Juarez, Chih. Mex.
Turley, E. Carlyle, a-F	Colonia, Juarez, Chih. Mex.
Turner, Marjorie E., g-F	Ogden
Tuttle, Josephin N., ho-Sp	Spanish Fork
Tuttle, Ray L., a-S	Spanish Fork
Urie, Jas. M., c-Sp	Park City
Vernon, Aldyth, ss-g-J	Logan
Vernon, Lais, ss-g-J	Mrs. Hale - pri man Logan
Wade, Earl C., aema-V	Ogden
Wadsworth, Pratt, c-F	Ogden
Walker, Florence, ho-F	American Fork
Walker, Rufus H., a-V-Fed	Sandy
Wall, Jessie M., ho-So	Colonia, Juarez, Chih. Mex.
Wall, John E., a-F	Colonia, Juarez, Chih. Mex.
Wallace, Mae R., ho-F	Logan
Wallace, Victor A., aema-V	Ogden
Walters, Frank E., a-F	Tooele
Walton, Reuben H., a-V-Fed	Afton, Wyo.
Ward, Huburt C., aema-Sp	Preston, Idaho

Warden, Harry A., a-V-Fed	.. . . .	Salt Lake City
Warnick, Reed W., a-Sp	.. . . .	Pleasant Grove
Waterbly, Gladys, ho-V	.. . . .	Logan
Wardle, Hyrum, a-V	.. . . .	Sandy
Watson, Margaret A., ho-Sp	.. . . .	Magrath, Alta, Canada
Wayman, Wallace R., aema-Sp	.. . . .	Logan
Webb, Nellie, ss	.. . . .	Preston, Idaho
Webster, Lola M., ss	.. . . .	Rexburg, Idaho
Weiler, Dorothy, ho-F	.. . . .	Salt Lake City
Welch, Florence, ss	.. . . .	Paradise
Welch, N Eugene, a-V	.. . . .	Paradise
Wells, Geneva, ho-S	.. . . .	Salt Lake City
Wennergren, Leona, ho-V	.. . . .	Newton
Wennergren, Lorraine, c-V	.. . . .	Logan
West, E. Ruth, g-Sp	.. . . .	Sugar City, Idaho
West, Marcus, aema-F	.. . . .	Sugar City, Idaho
Whetten, Henry A., a-Sp	.. . . .	Colonia, Juarez, Chih. Mex.
White, Edna, ss	.. . . .	Beaver
White, Hobart G., a-F	.. . . .	Beaver
White, Rulon, a-F	.. . . .	Willard
Whitehead, Melvin, c-F	.. . . .	Bench, Idaho
Whiteley, Ira J., aema-V	.. . . .	Liberty
Whitesides, Fern, ho-F	.. . . .	Layton
Whitesides, Mary E., ho-F	.. . . .	Layton
Whitmore, Lynn S., aema-F	.. . . .	Midway
Whitney, Byron M., aema-V	.. . . .	Logan
Whitney, Leone, ho-V	.. . . .	Cornish
Whitney, Mary, ho-V	.. . . .	Logan
Whitney, Robert B., aema-V	.. . . .	Logan
Whitney, Roscoe M., c-F	.. . . .	Logan
Whittaker, Hazel, g-Sp	.. . . .	Circleville
Whitworth, Marie L., c-V	.. . . .	Deer Lodge, Mont.
Whornham, George, a-F	.. . . .	Beaver
Wight, Chas T., aema-V	.. . . .	Malad, Idaho
Wilhelm, Larene, ho-V	.. . . .	Logan
Wilkes, Oliver, c-V	.. . . .	Bedford, Wyo.
Wilkes, Wm. E., aema-V	.. . . .	Logan
Wilkins, Chas. H., aema-V	.. . . .	Idaho Falls, Idaho
Willesen, Willie H., aema-V-Fed	.. . . .	Clearbrook, Minn.
Willes, John W., g-F	.. . . .	Pocatello, Idaho
Williams, Agnes, ho-F	.. . . .	Logan
Williams, Edgar L., g-Sp	.. . . .	Wellsville
Williams, Jas., aema-V	.. . . .	Oxford, Idaho
Williams, John V., a-F	.. . . .	Malad, Idaho
Williams, Ray B., aema-V-Fed	.. . . .	Salt Lake City
Williams, Wallace M., aema-V	.. . . .	Lewiston
Williams, Vivian R., aema-V	.. . . .	Farmington
Willie, Vernal H., a-So	.. . . .	Mendon
Willis, J. Lane, aema-V	.. . . .	Laketown
Willmore, Rebecca, c-V	.. . . .	Logan
Wilson, Larene, ss	.. . . .	Hyrum
Wilson, Harold W., aema-V	.. . . .	Lind, Washington
Wilson, Leslie H., aema-V-Fed	.. . . .	Payson

Wilson, Marion L., g-V	Salt Lake City
Wilson, Milton T., aema-F	Logan
Wilson, Vanez T., aema-S	Logan
Wilson, Wm. W., a-V	Logan
Winberg, J. Conrad, aema-Sp	Lehi
Wines, Jas. B., aema-V	Ruby Valley, Nevada
Winn, Carl D., aema-F-Fed	Lehi
Wintch, Ardary M., aema-V-Fed	Manti
Winter, Andrew, aema-V	Salt Lake City
Winters, Wm. Ford, aema-V	Hoytsville
Wirick, Grant H., a-V-Fed	Salt Lake City
Witbeck, Haller, a-V	Vernal
Wolfe, Jos. H., a-V-Fed	Sedalia, Mo.
Wood, Cassie H., ss	Logan
Wood, Grace S., ss	Trenton
Woodbury, Aretta, ss	Logan
Woodbury, Eugene, g-F	Cedar City
Woodhouse, Everett E., aema-F	Idaho Falls, Idaho
Woodruff, Eunice, ss	Smithfield
Woodruff, Helen Mar, ho-F	Salt Lake City
Woodruff, Leo W., aema-V	Smithfield
Woodside, Jean R., ss	Logan
Woodside, Margaret J., ss-g-So	Logan
Woodside, T. Clyde, c-F	Logan
Woodward, Ernest B., aema-F	Wellsville
Woodward, Grant T., ss	Franklin, Idaho
Worley, J. Clyde, g-J	Logan
Worley, K. Blanche, ho-F	Logan
Worley, Margaret, ss	Logan
Wort, Jess, aema-V	Jackson, Wyo.
Worthington, Warren E., aema-V	Oakley, Idaho
Wray, Chas. C., c-V-Fed	Salt Lake City
Wright, Chas. C., g-Sp	Logan
Wright, Jack B., c-F	Ogden
Wyatt, Elizabeth, g-So	Wellsville
Yeates, Lorna, ss	Logan
Yergensen, I. Lapreal, ho-V	Monroe
Young, Brigham R., c-V	Idaho Falls, Idaho
Young, Lena, ss	Idaho Falls, Idaho
Young, Vernon, a-F-Fed	Monticello
Zobell, Delos, a-F	Salt Lake City

JUNIOR EXTENSION SHORT COURSE, LOGAN, UTAH

Anderson, Jennie	Pleasant Grove
Anderson, Mary	Lehi
Bailey, Pauline	Monticello
Baker, Leah	Bicknell
Bayles, Del.	Blanding
Bird, Oril	Springville
Boswell, Edgar	Nephi
Bryan, Maurice	Tooele
Burningham, Josephine	Bountiful

Bybee, Melba	Hooper
Childs, Florence	Springville
Christensen, Hazel B.	Brigham
Clark, LeGrande	Coalville
Collett, Cora	Roosevelt
Cornwall, Sidney	Murray
Cowley, Allen	Richfield
Crook, Royal D.,	Heber
Davis, Orel	Salt Lake City
Davis, Rex	Spanish Fork
Evans, Minnie	Spanish Fork
Farrer, Virginia	Murray
Ferguson, Eugene	Spanish Fork
Fisher, Eldred C.	Woods Cross
Francom, Alice	Nephi
Gardner, Elias	Spanish Fork
Garrett, Eleda	Nephi
Garrett, Glen	Nephi
Garrett, Lawrence	Nephi
Garrett, Rulon	Nephi
Gowers, Clarence	Nephi
Gunn, Elma	Coalville
Reed Halverson	Spanish Fork
Hanks, Urban	Bicknell
Hansen, Blaine	Spanish Fork
Hayes, Emmett	Pleasant Grove
Hicken, Geneve	Heber
Holdaway, Marjorie	Pleasant Grove
Holmes, LaMar	Salem
Howard, Paul	Springville
Howe, Earl	Murray
Hurst, Vera	Payson
Ivie, Leon	Salina
Johnson, Clara	Redmond
Johnson, Verdin	Vernal
Jones, Bert	Spanish Fork
Jones, Clifford	Monroe
Jones, Maurice	Provo
King, Allie	Kamas
Kirkham, Raymond	Lehi
Larson, Bardell	Mt. Pleasant
Lewis, Emery	Kamas
Lindberg, Alfred	Tooele
McBride, Virginia	Tooele
Madson, Augusta	Brigham
Madsen, Sophrona	Mt. Pleasant
Marcil, Alta	Payson
Markham, Ira	Spanish Fork
Nelson, Nial	Monroe
Nichols, Mark	Brigham
Nicholson, David	Roosevelt
Nielsen, Beatrice	Spanish Fork
Prout, Dorothy F.	Ogden

Smith, Florence	Salt Lake City
Smith, Lavern	Sandy
Stoker, Anna	Price
Stookey, Ella	Clover
Straw, Mabel	Springville
Swensen, Russel	Pleasant Grove
Thomas, Aletha	Spanish Fork
Thurgood, Don J.	Provo
Tuft, Madge	Monroe
Vernon, Stella	Vernal
Walker, Nora	Layton
Watts, Clifford	Sandy
Whitmore, Ora	Midvale
Williams, Elwood	Ogden
Williams, Grace	Murray
Wing, Velma	Lehi

JUNIOR EXTENSION SHORT COURSE, BRANCH AGRICULTURAL COLLEGE, CEDAR CITY, UTAH

Culmsee, Carlton	Nada
Day, W. Scott	Parowan
Dalley, Jesse	Summit
Esplin, Thomas	Orderville
Faghamic, Louise	Ursine, Nevada
Hunter, Catherine	Cedar City
Jones, Belle	Cedar City
Jones, Mary	Cedar City
Lambson, V.	Circleville
Mitchell, Josephine	Parowan
Rogerson, Lucile	Enoch
Schmitz, Rose	New Harmony
White, Virgie	Summit
Woodward, Claire	Widtsoe

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