Summer 1950

General Catalogue 1950, Summer

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SUMMER SCHOOL

ANNOUNCEMENT FOR 1950

June 5 — August 18

FIRST SESSION
June 5 — July 14

SECOND SESSION
July 17 — August 18

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When You Come to Register
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WILSON, WARREN B., B.S., M.A.
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TEACHER PLACEMENT—Professors Carlisle, Humpherys, Cawley, Morti-mer, Burke, Florence H. White.
Utah State Agricultural College Summer School

Summer quarters have achieved a significant place in American collegiate institutions, partly because they are organized to meet the needs of many different groups of people. There are always some students who carry on with their regular scholarship program, there are the elementary and secondary teachers meeting certification requirements or proceeding toward advanced degrees as they continue their regular teaching course, and finally there are many special groups who use a week or two weeks or longer for special work specifically adapted to their professions or avocations.

The Utah State Agricultural College Summer School is organized to meet these diverse needs. This year, 1950, there will be many regular students. Returning service men and women feel the necessity of speeding up their educational training because of the time they have spent in the service. The College program is designed to meet this need. There will be a full quarter of work for those who want it. During the period June 5 to August 18, students may earn as much credit as during any quarter of the year. Some classes will continue through eleven weeks, others will carry through the first session only but they will be followed by courses which begin and continue to completion in the second session.

Teachers will be returning in greater numbers this year. There is the pressure for degrees and further training stimulated by generally adopted salary schedules which give substantial monetary recognition to additional course work. Others find it necessary to complete certification requirements.

SECOND SESSION

Regularly scheduled second session classes will begin Monday, July 17, and continue for five weeks, to August 18. The same rules as apply in the first session limit the amount of credit a student may take. Any regular college course which is not definitely scheduled for the second session in the catalog or the schedule bulletin will be given in that period if ten students petition the Summer Quarter Dean and join the class. Credit in the second session is computed on the basis of one hour of credit for 12 one-hour lecture periods or 12 three-hour laboratory periods. Registration forms will not be accepted after the close of any session period in which the classes are given.

Students who desire to register for credit in research problems or field studies must make the necessary arrangements with the Registrar's Office at the beginning of the session in which the work is done. Credits allowed and fees charged for this type of study will depend on the time spent and the work accomplished.

REGISTRATION

Registration for the Summer Quarter will take place Monday, June 5, in the Main Reading Room of the Library, beginning at 8 a.m. and continuing to 3 p.m. Students who fail to complete registration on Monday may do so any succeeding afternoon from 1 to 4 p.m. in the Summer School office (M125). The first step in registration is to call at the Registrar's Office to obtain registration forms and instructions.
There will be no special registration period for the second session. New students or students making changes or additions can complete the registration process any time during the first week of the second session.

The student load during the Summer Quarter is determined by the Deans of the various Schools. Seven and one-half hours per session are considered a normal load.

Scheduled classes, whether first or second session, may not be given if fewer than eight students register.

All graduate students must register with the Dean of the Graduate School, Dr. J. Stewart Williams, who will be in the Main Reading Room of the library on Monday, June 5; thereafter, at his office in the Main building.

Summer School Fees for 1950

<table>
<thead>
<tr>
<th>Fees</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Registration for Summer Quarter</td>
<td>$15.00</td>
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<tr>
<td>Tuition for Summer Quarter</td>
<td>20.00</td>
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<tr>
<td>Registration for either session</td>
<td>10.00</td>
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<tr>
<td>Tuition for either session</td>
<td>10.00</td>
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<tr>
<td>Materials and Laboratory Fee Summer Quarter</td>
<td>3.00</td>
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<tr>
<td>Student Body Activity Fee</td>
<td>1.50</td>
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<tr>
<td>Registration for three credits or less</td>
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<tr>
<td>Registration for five credits or less</td>
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<tr>
<td>Coaching School fee</td>
<td>10.00</td>
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<tr>
<td>Drivers Training Institute</td>
<td>10.00</td>
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<tr>
<td>Auditor’s fee (per course)</td>
<td>3.00</td>
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<tr>
<td>P.E. 176—Camping Trip Packing and Equipment Rental</td>
<td>16.00</td>
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<tr>
<td>Transportation</td>
<td>7.00</td>
</tr>
<tr>
<td>Aeronautics—37, 137, 138, 139—$10.00 per clock hour for dual instruction and $8.00 per clock hour for solo instruction.</td>
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<tr>
<td>Forestry Camp fees</td>
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<tr>
<td>Registration and Tuition</td>
<td>35.00</td>
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<tr>
<td>Laboratory fee</td>
<td>25.00</td>
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<tr>
<td>(Board provided on cost basis)</td>
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<tr>
<td>Library fee for Children’s Literature</td>
<td>1.50</td>
</tr>
<tr>
<td>Music Clinic (non-credit)</td>
<td>5.00</td>
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<tr>
<td>Physical Education 73 (golf) fee</td>
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</table>

PRIVATE INSTRUCTORS IN MUSIC FOR SUMMER SESSIONS

<table>
<thead>
<tr>
<th>INSTRUCTORS</th>
<th>Fee For First Term 1 Credit Hr.</th>
<th>Fee For Second Term 1 Credit Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. W. Christiansen</td>
<td>21.00</td>
<td>17.50</td>
</tr>
<tr>
<td>Mrs. N. W. Christiansen</td>
<td>18.00</td>
<td>15.00</td>
</tr>
<tr>
<td>S. E. Clark</td>
<td>18.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Mrs. Maxine Greenwood</td>
<td>15.00</td>
<td>12.50</td>
</tr>
<tr>
<td>Thelma Lundquist</td>
<td>12.00</td>
<td>10.00</td>
</tr>
<tr>
<td>George Fahtz</td>
<td>18.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Mischa Poznanski</td>
<td>16.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Mrs. G. W. Thatcher</td>
<td>21.00</td>
<td>17.50</td>
</tr>
<tr>
<td>Potience Thatcher</td>
<td>18.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Eldon Torbensen</td>
<td>18.00</td>
<td>18.00</td>
</tr>
<tr>
<td>Mrs. Walter Welte</td>
<td>18.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Walter Welte</td>
<td>21.00</td>
<td>17.50</td>
</tr>
</tbody>
</table>
PRIVATE INSTRUCTORS IN SPEECH

Harold Hansen
Stuart Hardman
Merlin Mecham
Floyd Morgan
Chester J. Myers
Rex E. Robinson
Gwendella Thornley

$17.50 per credit hour either session
17.50 per credit hour either session
17.50 per credit hour either session
17.50 per credit hour either session
17.50 per credit hour either session
17.50 per credit hour either session

Each session consists of 10 lessons per credit hour.

THE GRADUATE SCHOOL

J. Stewart Williams, Dean

Objectives and Organization

The Graduate School is organized to serve the educational needs of men and women who have completed their undergraduate work and who desire to qualify themselves for professional services or who may wish to identify themselves with a program of higher education leading to a teaching or research career on the college or university level. In all advanced work, effort is made to bring the student into direct contact with the basic research and teaching activities in his chosen field to the end that he may obtain a comprehensive view of a specialized field of knowledge together with the training essential for effective teaching or independent investigation. In graduate work the aim is to achieve a high standard of scholarship rather than to fulfill routine course requirements.

Departments that offer graduate work in related fields or in natural educational areas cooperate (1) to determine the needs for graduate work within the educational areas; (2) to provide fundamental and basic work or training within the areas; (3) to foster the spirit of scholarship and research and to determine standards of achievement characteristic of the areas involved; and (4) to promote standards and give institutional character to graduate work beyond that which is made possible by independent departmental direction.

Graduate work is directed by a Graduate Council, which consists of the Dean of the Graduate School and seven members of the faculty appointed by the President. The scope of the Graduate School covers all graduate study in the college.

Admission to Graduate School

A graduate with a Bachelor's degree from Utah State Agricultural College or from any other accredited college or university may be admitted to the Graduate School (see No. 3, Requirements). Seniors in the College, who have an average of "B" or better in all their courses in their Junior and Senior year and who at the beginning of any quarter lack not more than five quarter credits to complete all requirements for the Bachelor's degree, may be allowed to register for a limited amount of graduate work. All courses so selected for graduate credit must be approved in advance by the Head of the Department and by the Dean of the Graduate School. In no case will graduate credit be allowed if the student's total credit for which he is registered during the quarter exceeds 16 credits.
Students are admitted to graduate studies in social work who have taken a Bachelor’s degree with: (1) a major in social work; or (2) a major in sociology, economics, political science or psychology and have a total of not less than 36 credits in these four departments; or (3) a major in child development, physical education, public health or education and who have 25 credits in one of the four social sciences above listed with a fair balance among them. Students over 35 years of age are admitted only by special arrangement.

Admission to the Graduate School does not imply admission to candidacy for an advanced degree. Such admission is granted by the Dean of the Graduate School only on recommendation of the Head of the Department and of a special examining and advisory committee as explained below. All students registering in the Graduate School must have their registration card signed by the Dean of the Graduate School.

Students who wish to register in the Graduate School should submit their application at least one month before the opening of the quarter in which they wish to matriculate. In all cases, students who are not graduates from the Utah State Agricultural College must provide a certificate of graduation and a transcript of credit taken in other institutions. If his transcript of credit does not accompany the application, a date should be specified at which transcript will be provided. Blanks for making application can be had from the Registrar’s office or from the office of the Graduate School.

**MASTER'S DEGREE**

All approved graduate courses in the College lead to the Master of Science Degree. Majors for the Master of Science Degree are offered in all the basic biological, physical, and social sciences, and in the various educational, industrial, and professional areas as follows: Animal Industry, Crop and Soil Science, Education and Psychology, Forest, Range, and Wildlife Management, Home Economics, Irrigation and Drainage, and Microbiology. The specific departments or groups of the departments (over 35 in all) in which the Master of Science Degree is given, together with the course service provided by the departments, may be determined by consulting the departmental statements provided in the catalog under the various undergraduate schools of the College.

**Requirements and Procedures for Obtaining a Master of Science Degree**

1. **Acceptance for Registration as a Candidate for a Master's Degree.** A student who has been registered in the Graduate School for one quarter and who has satisfied the Department in which he proposes to do his graduate work may be admitted to candidacy for a Master of Science degree upon the written recommendations of the Head of his Department and of a special examining and advisory committee appointed by the Dean of the Graduate School. All students working to become candidates for a Master of Science Degree will apply directly to the Graduate Dean. Application blanks are available at the office of the Graduate School.

2. **Major Professor and Advisory Committee.** The applicant will be assigned by the Dean of the Graduate School to a major professor who in all cases will be a member of the teaching staff of the Department in which the student has chosen to do his major work and who will be chosen in consultation with the student and the Head of the Department involved. The Major Professor will advise the student in the planning and the prosecution of his course of study and in his
research work and will function as chairman of the student’s Advisory and Examining Committee. The Major professor will be aided by an Examining and Advisory Committee consisting of himself as chairman and at least three other members chosen from the faculty of the Major Department or closely related Departments. A fifth member, completing the committee personnel, may be chosen from the faculty of the English Department. The committee is responsible for all examinations dealing with the candidate’s work.

In instances where the thesis chosen by the applicant is based on research supported by the Experiment Station or by Federal or other outside agencies, the applicant with the advice of the Major Professor and the Head of the Department may be assigned to a special Thesis Director. This thesis director may not be a member of the teaching staff or of the Major Department in which the student is majoring. The Thesis Director will become a member of the student’s committee, directly responsible for the student’s research and thesis, and will function in this connection with the Major Professor in directing the student’s educational program. The Dean of the Graduate School and the Head of the Department in which the student is specializing are ex-officio members of all committees and advisory groups.

3. Qualifying Examination and General Requirements. By examination of the records of the student’s scholastic work and by special examination both oral and written, the advisory and examining committee shall satisfy itself as to the adequacy of the student’s preparation and advisability of his pursuing Graduate work.

No student, however, will be admitted to candidacy until he has completed at least one quarter’s work in residence with an average of “B” or better, and who has not received an average of “B” grade in his Junior and Senior years of undergraduate studies. Exceptions may be made where it is shown by the head of the Department that the student has special aptitudes which are not measured by his scholastic record.

4. Program of Study. If the Advisory Committee is convinced that the preparation and ability of the student are such as to give reasonable assurance of success in advanced studies, then, with him, the committee under the direction of the Major Professor shall plan a program of study which will meet all requirements for the Master of Science degree. The program must include in general:

(a) At least three quarters of residence. Four summer sessions with residence research culminating in a thesis may be accepted as fulfilling residence requirements. Under no condition will extension credit or credit transferred from other institutions be permitted to shorten the period of residence.

(b) At least 45 credits in courses numbered 100 or over in addition to any lower or upper division courses which may be necessary to strengthen the undergraduate preparation in his major or minor subjects.

(c) At least ten credits exclusive of work connected with the thesis in courses numbered 200 or above.

(d) A thesis with 9 to 15 credits. All courses allowed toward graduation shall be in the major department or closely related fields and must be completed with a grade of “B” or above. Under no condition will more than 16 credits be allowed in any one quarter, with 12 hours as a maximum for students on a one-half time basis.

Any modification of these requirements requiring action of the Dean of the Graduate School will be considered only if they are submitted by the chairman of the applicant’s Advisory Committee and as part of the student’s entire proposed program of study.
The candidate will submit his proposed programs of course study and research and make application to the Dean of Graduate School on blanks provided at the office of the Graduate School. This application must be accompanied by a critical statement of the student's thesis and by a general plan of his research procedure.

5. Time Limitation for Application. Application for admittance to candidacy must be made before the student has completed more than one-third of the credits allowed toward his Master's Degree. The application should be submitted by the end of the first six weeks of the quarter preceding that in which he completes his work and is to be graduated. In no case will application be honored later than the last week of this same quarter.

Notice of admission to candidacy, together with a letter of instruction, concerning the thesis form, and final examination, will be sent to the candidate by the Dean. A form on which to make application for graduation will also be enclosed with the letter. This form calls for the payment of a fee of $10.00 for official checking and binding two copies of the thesis.

Thesis

Each candidate for a Master of Science Degree must present a thesis on a topic within the field of his major subject which must represent from 9 to 15 hours of the credit presented for his degree. In all cases the thesis must represent a contribution to the field of knowledge based on the student's own research or a treatment and presentation of known subject matter from a new point of view. After tentative approval by the Department, the thesis must be typewritten in standard form and submitted to the student's Examining Committee at least two weeks before the date of his final examination. A typewritten and carbon copy of the final draft properly signed by the Major Professor, the Head of the Department, a representative for the Library, and the Dean of the Graduate School must be submitted to the Librarian of the College to be deposited in the Library of the College one week prior to date of graduation. If the student is to be graduated at the June commencement, the thesis must be submitted in its final form by May 20 preceding commencement.

Examination

Each candidate for a Master of Science Degree will be required to pass a comprehensive final examination on the subjects of his Graduate study and on his thesis. This examination may be oral or written as his committee may decide and is open to all faculty members and officials of the Graduate School. Arrangements for the time and place of the examination will be made by the Dean of the Graduate School upon the recommendation of the Major Professor or Head of the Department. A member of the Advisory Committee, other than the Major Professor or a representative of the Graduate council, will be appointed to act as chairman of the examination and will submit to the Graduate Council the results of the examination. For candidates who are to receive their degree at the June commencement, the date of the final examination must not be later than April 3. When the examination is passed and the thesis submitted and deposited with the Librarian, the Dean of the Graduate School will present the name of the candidate to the College faculty for approval. He will also instruct the candidate regarding attendance at commencement and on the necessary matters relating to his graduation.
Time Limit for Completing Work for a Master’s Degree

Work for a Master of Science Degree must be completed within six years from the date of matriculation as a regular student in the Graduate School if the work is done wholly or in part during the regular academic year. If the work is done entirely in summer sessions, a maximum of seven years is allowed. Older work may be revalidated by examination.

Extension Courses

Credit toward a Master of Science Degree will not be granted for correspondence study. The amount of extension credit to be allowed will be determined in consideration of the student’s entire course program. In no case will more than 9 quarter hours be recognized as counting toward a degree. All extension courses for which graduate credit is sought must be regularly registered for through the Graduate School and must have the sanction of the Head of the Department in which the student is doing his Graduate work.

All students who satisfy the requirements for graduation by the close of the Summer Quarter are listed with the class of the following year and will receive their public graduation at the following Commencement. The graduation of such students, however, will be certified by proper authorities of the College as soon as their work is completed.

CLASS SCHEDULE

The schedule of classes will be available on registration day, June 5. Some classes will begin at 7 a.m. throughout the Summer Quarter. Four periods are scheduled during the morning hours: 7, 8, 9, and 10. Bells ring on the hour and classes begin immediately and continue for fifty minutes to 7:50, 8:50, 9:50, etc. The 11 a.m. hour is kept open as a lecture period during the first session and no classes are scheduled at that hour. Afternoon classes begin at 1 p.m. and continue on the hour until 5 p.m. During the second session meeting hours of classes not listed in the schedule bulletin may be arranged by agreement of students and teachers.

COACHING SCHOOL

This year the Annual Summer School for Coaches will be the twenty-fourth consecutive Coaching School conducted at Utah State Agricultural College. The school through the past years has the reputation of being the most outstanding Summer Coaching School in the country and this year’s school will be of the same high caliber as schools of past years.

The visiting coaches selected for 1950 are Jess Neely of Rice Institute, Houston, Texas, for football and Bruce Drake, University of Oklahoma, for basketball. Both men have been outstanding in their coaching fields, having coached teams that have gained national recognition during the past years. They are both enthusiastic and vigorous and their method of instruction should be well accepted by everyone. The largest enrollment in the history of the program is expected, many high school and college coaches throughout the Intermountain area having already indicated their intention to attend. New methods will be discussed and the school will present an excellent opportunity for football and basketball coaches to improve their own coaching methods.

A course will also be offered in Athletic Training. The instructor will be Roland “Kickapoo” Logan. His training course will be similar to the one offered at the 1949 Coaching School. Football classes will
be scheduled in the mornings, and basketball and athletic training will be scheduled in the afternoons. One hour of college credit may be earned by registrants in this course. Registration in the school have free playing privileges at the Logan Golf and Country Club. Dates of the School are June 5 to 9 inclusive.

DRIVERS' TRAINING INSTITUTE

The Drivers' Training Institute will be conducted for one week, May 29 to June 2. The course is designed to train the men and women who will teach drivers' programs in the high schools of Utah and surrounding states. It is approved by the American Automobile Association and all of the safety organizations of the country. Registrants must make application prior to May 25. This program has been developed because of the increased emphasis on drivers' training programs in the secondary schools. The State Department of Education is cooperating with the College in the Institute.

DISTRIBUTIVE EDUCATION

An intensive course of training for teachers and prospective teachers of Distributive Education will be offered during the first three weeks, June 6 to June 24. This work is offered in cooperation with the State Department of Public Instruction. (See Dept. of Business Adm. for course offerings).

EDUCATIONAL TOURS

The College has adopted provisions whereby academic credit may be earned for guided educational tours. Arrangements for granting credit for such tours are under the direction of the Extension Class Division. It is anticipated that during the Summer of 1950, at least one such tour to Mexico will be conducted. Preliminary plans are also under way for a guided tour to Hawaii. Other tours may be arranged. Interested individuals are asked to address their inquiries to the Division of Extension Classwork.

ENGINEERING SUMMER SURVEYING CAMP

The Summer Surveying Camp, C.E. 87, is conducted each year during the first Summer Session. The offerings include: Highway curves and earthwork, geodetic procedure in layout, and field establishment of triangulation nets, methods of precise chaining and leveling, triangulation and closing of the quadrangle. Special problems in topographic mapping and location of canals and highways follow the general phases to complete the course. The camp is conducted from the Utah State Agricultural College campus, which makes it possible for students to live at home or on the campus and affords the facilities of the Engineering School for lectures, drafting rooms, instrument storage, and office space. The field laboratory consists of a large area to the east of the campus on the Provo bench of old Lake Bonneville, and the steep and rugged west slope of the Wasatch Range. The area extends east to include mountain peaks which afford excellent triangulation station locations, and north and south a distance of some two and one-half miles each side of beautiful Logan Canyon. In this outdoor laboratory is included terrain ideal for all types of surveying work, including hydrographic work on Logan River and reservoir. Two hydro-electric plants are within the areas; one high head type and one low head type, with a combination hollow buttress dam and storage reservoir adjacent to it. Sheer canyon
walls, steep slopes, rolling hills, and flat bench lands, all within a three mile radius of the Utah State Agricultural College campus, make this an ideal out-door laboratory. The excellent summer climate helps make this an outstanding surveying camp.

**FAMILY LIFE INSTITUTE**

The annual Family Life Institute is scheduled for Monday, Tuesday, and Wednesday, June 26, 27, and 28. Dr. John E. Anderson, director of the Institute of Child Welfare, University of Minnesota, will be the leader. No charge is made for the Institute, and both students and people of surrounding communities are invited to participate. The first meeting preceded by preliminary registration will be held in the auditorium of the Main Building on Monday, June 26, at 9 a.m.

**FORESTRY SUMMER CAMP**

The School of Forest, Range, and Wildlife Management owns or controls 3,000 acres of forest and range land approximately 25 miles from the campus within the Cache National Forest, where summer camp facilities are established. Eleven weeks of field instruction is given at the Tony Grove Summer Camp and is required for graduation for all students in the School of Forest, Range, and Wildlife Management. Attendance at this camp is required between the sophomore and junior year and is prerequisite to the technical courses of the junior and senior years.

There are five instruction courses offered at summer camp with a total of 16 credits, and students in the School of Forest, Range and Wildlife Management are required to take all five courses. This summer camp opens Monday, June 5 and continues for a period of 11 weeks.

**GIRLS’ STATE**

This annual conference is under the direction of the state organization of the American Legion Auxiliary. It will be held on the campus during the week of June 25. Faculty members will cooperate by giving lectures and conducting course work.

**STATE CONFERENCE FOR HOMEMAKING TEACHERS**

The annual conference for homemaking teachers in the state will be held on the campus July 10-14. A workshop will be conducted as part of this conference. All departments in the School of Home Economics Education, and visiting faculty in the School of Home Economics will cooperate in conducting this workshop. See description in bulletin of work offered in the Home Economics Education Department for a more detailed description of workshop.

**LIVING ACCOMMODATIONS**

The College Residence Hall on the campus will be available for some Summer School students. Reservations should be made immediately. The College cafeteria will serve meals through the day. Other board and room accommodations can be obtained near the campus at reasonable cost. Some small apartments are also available for the Summer Quarter. Recently acquired facilities will be available for veterans, both married and unmarried. The College maintains a Housing Bureau which is prepared to aid students in making satisfactory living arrangements. Mr. C. L. Pocock is director of this Bureau, and interested students should write or consult him.
MUSIC CLINIC

The Summer School sponsored a music clinic in band and orchestra for several years immediately preceding the war. This program was revived in 1948 and has proved so successful that it is being continued this year. This clinic includes chorus, band, and orchestra. The clinic will be conducted Monday, June 12, to Friday, June 23, inclusive. It is expected to appeal to all music directors of the area and to high school and junior high school students who wish to sing or play under the direction of the most eminent men of the country.

Prof. Ralph E. Rush of the School of Music, University of Southern California will direct the band. Dr. William E. Knuth of San Francisco State College will direct the chorus and orchestra.

Housing and board will be provided at cost for students who come from a distance. Students will be housed under supervision in the Rural Arts Building. Students can participate in one or more of the programs. In addition, numerous activities are planned for the students, permitting them to enjoy a vacation and at the same time improve their musical performance. Students (high school and junior high) must express intention to register and make a deposit covering part of the board and room cost. Registration fee covering admission to the entire course is $5.

DEPARTMENT OF MILITARY AND AIR SCIENCE AND TACTICS—ADVANCED COURSE SUMMER CAMPS

Required as part of the Advanced Course in Military and Air Science and Tactics. For further information address this department at Utah State Agricultural College.

Duration: 6 weeks
Credits: 6
Dates: 15 June to 31 July (Approx.)
Pay: $75 per month
Mileage: $0.05 per mile from home to Camp and return.

Army Cadets

Anti-Aircraft Artillery
Fort Bliss (El Paso, Texas)

Quartermaster Corps
Fort Lewis (Seattle, Washington)
Camp Lee (Richmond, Virginia)

Ordnance Department
Aberdeen Proving Ground (Baltimore, Maryland)

Signal Corps
Fort Monmouth (Jersey City, New Jersey)

Chemical Corps
Fort Meade (Baltimore, Maryland)

Corps of Engineers
Fort Belvoir, Virginia (Washington, D.C.)

Armored Cavalry
Fort Knox (Louisville, Kentucky)

Infantry
Fort Benning (Columbus, Georgia)

Tank Destroyers
Camp Hood (Dallas, Texas)
Air Force Cadets

Lowry Air Force Base, Colorado (Denver)
Wright-Patterson Air Force Base, Ohio (Dayton)
Tinker Air Force Base, Oklahoma (Oklahoma City)
Brooks Air Force Base, Texas (San Antonio)
Hamilton Air Force Base, California (San Francisco)
Scott Air Force Base, Missouri (Kansas City)
Langley Air Force Base, Virginia (Newport News)
Stewart Air Force Base, New York (Newburg)

NURSERY SCHOOL

The College Nursery School will operate for the benefit of college students who bring their children and desire a means of caring for them during school hours. Enrollment, limited to 15 children, will be made up of 2, 3, and 4-year old children. Those students enrolled in Child Development classes will use the Nursery School as a laboratory for observing and working with pre-school children. School sessions: Monday through Friday—Morning hours according to need. First session only. Tuition: $5 for 6 weeks. Admission is by application only. Application must be made in writing on or before registration day. Children will be accepted in order of application.

POULTRY CONFERENCE

The 17th Annual Training School for qualifying poultry flock-selecting and pullorum disease-testing agents will be held at Utah State Agricultural College, August 14 to 16. An invitation will be extended to all who can attend.

SUMMER SCHOOL RECREATION

The Summer School offers a rich and varied program of recreation. A special Recreation Committee cooperating with various departments, sponsors many activities both on and off the campus, including:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Approx. Indiv. Cost</th>
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<tbody>
<tr>
<td>June 5 - 9</td>
<td>Social Recreation Party</td>
<td>No Cost</td>
</tr>
<tr>
<td>June 12 - 16</td>
<td>Bird Refuge</td>
<td>$1.00</td>
</tr>
<tr>
<td>June 12 - 16</td>
<td>Square Dance</td>
<td>No Cost</td>
</tr>
<tr>
<td>June</td>
<td>Bear Lake Excursion</td>
<td>$1.00</td>
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<tr>
<td>June 19 - 23</td>
<td>Old Juniper Hike</td>
<td>No Cost</td>
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<tr>
<td>June 26 - 30</td>
<td>Lawn Party</td>
<td>No Cost</td>
</tr>
<tr>
<td>June 26 - 30</td>
<td>Southern Utah Parks (Three days on a week-end)</td>
<td>$25.00 (Reservations needed)</td>
</tr>
<tr>
<td>July 3 - 8</td>
<td>Yellowstone Park (Three days on a week-end)</td>
<td>$25.00 (Reservations needed)</td>
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<tr>
<td>July 10 - 14</td>
<td>Formal Dance</td>
<td>No Cost</td>
</tr>
<tr>
<td>July 17 - 29</td>
<td>Ranger Hike</td>
<td>$30.00</td>
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The annual summer school hiking and camping trip will take place during the two weeks immediately following the first session of summer school—July 17-29. Course work in camp preparation, packing, and other details will be held during the first few days of the week of July 17, following which the expedition will be led into the Wind River Mountains of Wyoming for a ten-day period.
Through the summer school recreation committee, students can obtain assistance in planning to use many other sources of recreation. Suggested recreational activities include: picnics at one of the many camp areas in Logan Canyon, hikes to Mt. Logan and White Pine Lake, excursions to Minnetonka Cave, Bloomington Lake in the Wasatch Forest, and other interesting places. Picnic, camping and recreational equipment is available through the college for students at nominal rental fee. For further information address inquiries to Department of Physical Education or Dean of the Summer Session.

SCHOOL LUNCH PROGRAM

The fifth annual school lunchroom course will be conducted for the supervisors and managers of the school lunch rooms throughout the state. Classes will be arranged for each specific group of workers and in accordance with length of service rendered. Special attention will be given to individual problems in organization or management. Daily class schedules and group meetings to be announced. June 12 to 17, inclusive.

TEACHERS' CERTIFICATION

By attending the Summer Quarter of Utah State Agricultural College, students may meet any of the requirements for Utah certification with the exception of practice teaching; and, since the College is fully accredited, credit will be allowed for any subject completed in the Summer Quarter that forms part of the certification requirements of any state.

TEACHERS’ PLACEMENT BUREAU

A Teachers’ Placement Bureau functions in connection with the Summer School. All teachers seeking employment may register in this bureau. Superintendents and others who employ teachers will find it to their advantage to consult the list of applicants which will be furnished upon request. Interviews with applicants will also be arranged. The Bureau is located in the main building, Room 277.

UTAH STATE THEATRE WORKSHOP

Utah State’s Theatre Workshop had its beginning last summer, when two plays were presented in the first session. The French plays, Moliere’s comedy classic, “The Miser,” and Anouilh’s modern tragedy, “Antigone,” were successfully produced.

The actors and production crews are members of the class in drama production, Speech 150, and other interested students. Anyone connected with the College is invited and encouraged to participate. The plays are presented before college and local audiences in a well-equipped plant. An attempt is made to produce drama as near the professional level as possible.

Plans for this summer include three different productions, indicating a well-balanced program. A conventional drama, “The Far Off Hills,” a modern Irish comedy, will be presented in the Main Auditorium; an Arena type production of a classic comedy, either Moliere’s “The Would Be Gentleman,” or Wilde’s “The Importance of Being Earnest.” In the Arena production the actors are staged in the center of the auditorium with the audience seated in a circle about the playing area. The session will be rounded out by a modern play, either “The Mad Woman of Chaillot,” by Giraudoux or “The Flies,” by Sartre. High school as well as college students are invited to participate. Those who do may elect whether they will receive college credit or not. The
summer offering will be valuable to the teacher, the drama director of church or other organizations, or the recreational director, as well as the speech major or minor.

KEY TO BUILDINGS

M—Main
A—Mechanic Arts
E—Engineering
P—Plant Industry
L—Animal Industry
G—Gymnasium
N—Library
F—Forestry
W—Widtsoe Hall or Chemistry
H—Home Economics and Commons
MS—Military Science
FH—Field House
B—Technology Building

COURSES OF INSTRUCTION

AERONAUTICS

H. A. BUNTINE, Assistant Professor;
LOWELL P. SUMMERS, LOUIS KLEIN, JR., Instructors.

2. Model Airplane Building. The design and construction of model aircraft as a hobby, or for High School teachers. First session Summer School. T.Th. 1-4. 2 credits. Klein


33. Meteorology. Study of weather, maps, atmosphere, air masses, clouds and weather reports. Required by C.A.A. for any pilot rating above private. First session. Time arranged. 3 credits. Staff

34. Navigation. The study of maps, charts and other navigational problems. Required by the C.A.A. for any pilot rating above private. First session. Time arranged. 3 credits. Staff

34. Air Age Education. Designed primarily to assist teachers in presenting and integrating air age materials to the various academic levels. Course content includes: need for air-age education, aerodynamics, navigation, weather, economics of air transportation, use of audio-visual aids, and contributions of government agencies and air lines. First session. M.T.W.Th. 10-11. 2 credits. Buntine

37. Private Pilot Certificate. Flight School Primary. Flight training to meet C.A.A. requirements. Satisfactory completion of C.A.A. tests required for satisfactory completion. Prerequisites: Aero 31 and 32. Time arranged. 3 credits. Staff
AGRICULTURAL ECONOMICS AND MARKETING

W. P. THOMAS, Professor; V. L. ISRAELSEN, Associate Professor.


214. Research in Agricultural Economics. Credit and time arranged. First and second sessions.

215. Special Problems in Agricultural Economics. Credit and time arranged. First and second sessions.

AGRONOMY

D. W. THORNE, D. W. PITTMAN, D. C. TINGEY, Professors; LeMOYNE WILSON, STERLING TAYLOR, Assistant Professors.


114. Soil Survey. Time arranged. 3 credits. Either or both sessions. Students must arrange to spend 15 hours in Weber county in field work.

218. Special Problems in Agronomy. Subject, credit and time arranged.


AIR CONDITIONING AND REFRIGERATION

J. C. SHARP, Assistant Professor.

22. Air Conditioning, Commercial Types. (Technical and Shop.) Design, construction, operation, servicing, and repair of commercial air conditioning equipment. Includes air conditioning compressors, evaporators, duct work, air conditioning controls, pilot tubes, decibel meters, psychological aids, and comfort charts. A typical commercial air conditioning unit is assembled and used for analyses and correction of operational difficulties encountered in this type of equipment. Prerequisites: AC&R 21 and 61. (Tech. 3; Lab. 3) Both sessions.

161. Stokers and Oil Burners. Technical training in the principles, construction, operation and repair of the modern coal stokers and oil burners. Prerequisites: AC&R 22. Two lectures, one lab. First session. 3 credits.

193. Advanced Laboratory Work. Advanced laboratory work in the construction, testing, and repair of specialized air conditioning and refrigeration equipment. For junior and senior students majoring in Air Conditioning and Refrigeration. One lecture, two labs. Either session. 3 credits.

ANIMAL HUSBANDRY

L. L. MADSEN, Professor.

150. Animal Nutrition. Attention is given various fundamental phases of animal nutrition, including protein, carbohydrate, fat and mineral
metabolism, vitamins, content and deficiencies of range forage, and feed and forage poisoning. Prerequisites: Chem. 10, 11, 12, (or equivalent), and An. Hus. 10. 4 credits. Second session. M.T.W.Th. 8 and 10. L. L. Madsen

ART

CALVIN FLETCHER, Professor Emeritus; FLOYD V. CORNABY, Professor; MAX D. WEAVER, WARREN B. WILSON, Instructors.


2. Design Creation and Application. Problems in creating designs for application to specific projects. Instruction is adapted to the individual, satisfying the needs of teacher, homemaker, hobbyist, or scout, summer camp and recreational counselors. Room M335A. Daily 10-12. 2½ credits. Second session.

8-10. Drawing, Painting, and Illustration. Each credit desired represents thirty hours of work. Room M335B. Daily 10-12. 2 credits. Second session.


112. Ceramics. Art of making pottery, tiles, figurines, etc. Room M333. Daily 1-3. 2 credits. First session. Wilson


BACTERIOLOGY and PUBLIC HEALTH

W. WHITNEY SMITH, L. R. STEVENS, Professors; LEWIS W. JONES, Associate Professor.

Bact. 1. Elementary Bacteriology. 4 credits. 7 to 9 M.T.W.Th. 1 First session. Room P302. Stevens

P.H. 50. Elementary Public Health. 3 credits. 10 to 11 daily and one hour arranged. First session. Room P302. Jones

P.H. 155. School Health. 3 credits. 9 to 10 daily and one hour arranged. First session. Room P302. Smith

P.H. 155. School Health. 3 credits. 7 daily and one hour arranged. Second session. Room P302. Stevens

BOTANY

W. S. BOYLE, ARTHUR H. HOLMGREN, Assistant Professors.

SERVICE COURSES

25. Survey of the Plant Kingdom. 5 credits. First session.

Lecture, M.T.W.Th. 1 Labor. M.T.W.Th. 2-5 Boyle
SUMMER SESSION

30. Taxonomy of Vascular Plants. 5 credits. Second session.
Lecture, M.T.W.Th. 1
Laboratory, M.T.W.Th. 2-5
Prerequisite, Botany 23 Holmgren

BUSINESS ADMINISTRATION
(Including Accounting and Merchandising)

V. D. GARDNER, L. MARK NEUBERGER, Professors: INA DOTY, CLARA P. WEST, NORMAN S. CANNON, CHARLES S. ELLINGTON,
Assistant Professors.

Visiting Faculty

ROBERT A. NELSON, Former State Director of Vocational Business and Distributive Education, Utah State Department of Public Instruction.

Cannon

20. Problems of Small Business. A survey of problems encountered in starting a small business. Consideration is given problems encountered before operations are started, such as selecting the right type of business, form of business, permits, licenses, choosing a location, credit and financing. In addition, the problems and details of actual operating procedures such as accounting controls, insurance, taxes, buying and selling are considered in relation to various types of small business operation. Designed to aid the man just entering business. First session. 2½ credits. Daily 10.
Cannon

Cannon

Cannon

Cannon

157. Retail Advertising. Intended for those who, as business men in the retail field, will direct and assist in the preparation of retailer's advertising campaigns. Includes direct mail, radio, newspaper, window display and layout practices. Actual cases are studied and analyzed to lead the student to judge advertising effectiveness as a sales tool for the retailer. 2½ credits. Daily 7. First session.
Ellington

DISTRIBUTIVE EDUCATION

194. Principles and Objectives of Distributive Education. To acquaint students with the general philosophy and purposes of vocational distributive education, and to enable them to understand and appreciate its place in the modern educational program. The principles, objectives and standards that have been established in this field of education will be thoroughly considered. Students will study and com-
pare the principles and objectives of distributive education with those of other educational programs. 3 credits. First session. (First 3 weeks, June 5 to 23). Daily 9-11.

195. Part-Time Distributive Education. A study of the content, methods and devises to be used in part-time education programs. Emphasis will be placed on problems of coordination, selection of students, arrangement of a class schedule, supervision on the job and other phases of the cooperative part-time distributive education program in the high school. Requirements and standards of part-time vocational education will be treated. 3 credits. First session. (First three weeks, June 5 to 23). Daily 1-3.

CHEMISTRY

R. L. HILL, SHERWIN MAESER, DELBERT A. GREENWOOD, Professors; AUBREY LAWRENCE, Assistant Professor.

10-11. General Chemistry. Fundamental principles of inorganic chemistry. Both terms. 5 credits each term. Open to any matriculated students. Lecture daily 10, Lab daily 2-5.

15-115. Quantitative Analysis. Theory and practice of gravimetric and volumetric analysis. Prerequisite Chem. 5. The course is so designed that it presents a terminal course for majors in agriculture, home economics and premedical or predental students. Both terms. Lecture M.W. 8, Lab M.W.F. 2-5. 5 credits.


192-292, 193-293. Biochemistry. For senior and graduate students only. Time and credit arranged.


Hill

Physical Chemistry. A non-credit review course in physical chemistry for chemistry majors and others desiring a brief review of the field. Lecture daily 9. Both terms. Maeser

198-298. Research. Senior or Graduate Students in Chemistry may register for research in any branch of the subject. Time and credit arranged.

Staff

CHILD DEVELOPMENT AND PARENT EDUCATION

HELEN L. PORTER, Assistant Professor;
ORAL PUGMIRE, MARIAN AIKIN, Instructors.

Visiting Faculty

JOHN E. ANDERSON, Director, Institute of Child Welfare, University of Minnesota; MELBA JUDGE, Coordinator, Family Life Education, Ogden City Schools, Ogden, Utah

60s. Child Development and Guidance. Growth, development and guidance of the young child and a study of play materials which meet the developmental needs of the child from one to six years of age. A 9 to 10 o'clock hour must be free each day to allow for scheduling 3 weekly laboratory hours in the College Nursery School. Class schedules should be checked by instructor before registration is completed. 3 credits. 3 hour lab. arranged weekly. First session. Lectures at 8 daily.
174s. Nursery School Methods. Must parallel practice teaching. Special consideration will be given to understanding the needs of individual children in the nursery school, and evaluating the principles used in guiding them. Time and credit arranged. First session.

Aikin

175s. Practice Teaching in the Nursery School. Open to qualified Senior students. Check prerequisites with instructor before enrolling. Time and credit arranged. First session.
Pugmire-Aikin

140s. Special Problems in Child Development. Opportunity for individual study or development of a problem in Child Development. For qualified students majoring in Child Development upon consultation with instructor. Time and credit arranged. First session.

Staff

160s or 260s. Child Development Workshop for High School Home Economics Teachers. Using the group process to review and organize subject matter in the Child Development field for use in Home Economics Class. Workshop experience includes planning and setting up a play group in a local school situation to demonstrate a means of offering experience in observing and working with children, under a teacher-supervisor. 9-12 daily should be reserved for workshop class discussions, committee work, and observation in the College Nursery School and the Playgroup. 5 credits. 9-11 daily (Monday through Friday). First session.

Helen Porter—Coordinator
Oral Pugmire and Marion Aikin, Assistants
Melba Judge—Play Group Supervisor
John E. Anderson—Consultant

CLOTHING, TEXTILES, AND RELATED ARTS

BERTHA F. JOHNSON, Professor; FLORENCE GILMORE, Assistant Professor; MIGNON PERRY, JEAN DANCE, Instructors.

Visiting Faculty

MARY ATWATER, Visiting Professor

6. Dress Construction Problems. Open to beginners or more advanced students. May be taken first three weeks or second 3 weeks, or for 6 weeks. 2½ credits for six weeks, 1½ for three weeks. Time: Daily 9-11. Outside work required. Gilmore

125s. Fitting and Draping. Making of paper dress form or French lining and designing through draping on the form. Open to anyone having had costume design and dress construction to meet the instructor's requirement. 6 weeks—2½ credits. Daily 1-3. Outside work required. Johnson

41s or 141s. Weaving. Emphasis on the many different types and techniques of hand weaving. First 3 weeks, last 3 weeks or for 6 weeks. Credit arranged. 2½ credits for 6 weeks. 2½ credits first 3 weeks or 1½ credits for last 3 weeks. Lecture Sec. 1 Daily 8-11; Sec. 2 Daily 1-4. Lab time arranged. Mary Atwater-Perry

165s. Speed Methods in Tailoring. Application of speed techniques in tailoring women's suits and coats. Prerequisites, Clothing and Textiles 9, 24, 25, 115 for Home Economics Education and Clothing, Textiles and Related Arts majors. For others, sufficient clothing construction to satisfy instructor. May be taken first three weeks or second three weeks or for six weeks. 1½ credits for 3 weeks, 2½ credits for six weeks. Daily 9-11. Outside work required. Gilmore

190 or 290. Special Problems. Time and credit arranged. Johnson

DAIRY INDUSTRY

GEORGE B. CAIN, A. J. MORRIS, Professors; PAUL B. LARSEN, LLOYD HUNSAKER, Associate Professors.


103. Cheesemaking. 5 credits. Both sessions. Morris and Larsen

105. Management and Operation. 6 credits. Both sessions. Morris and Larsen


121. Milk Secretion. Milk secretion, physiology of milk secretion, anatomy and physiology and structure of cow's udder, veining and blood circulation as it affects milk secretion, factors that affect milk secretion. 3 credits. Daily at 9 and one hour arranged. First session. Hunsaker

150. Special Problems in Dairy Production. Arranged for a limited number of students. First session. Staff

154 or 254. Special Problems in Dairy Manufacturing. Credit arranged. Both sessions. Morris and Larsen

216. Research in Dairy Production. Arranged for a limited number of students. Both sessions. Staff

217. Research in Dairy Manufacturing. Credit arranged. Both sessions. Morris and Larsen

ECONOMICS

W. L. WANLASS, Professor; E. B. MURRAY, Associate Professor; LEO M. LOLL, JR., Assistant Professor.

52. Economic Problems. A continuation of Economics 51. The problems of labor, finance, economic instability, international economics, social waste, government control, and world economic systems. Required as a prerequisite to all senior college courses in the School of Commerce except in Agr. Econ. 5 credits. Both sessions. Loll and Wanlass

125. Trade-Unionism and Collective Bargaining. Development, structure, function, government, and philosophy of trade unions in United States; making and administering collective agreements; impact upon the system; policy issues. 2½ credits. First session. Murray

147. Social Security. A survey of the main divisions of social security legislation; workmen's compensation, legal minimum wage, regulation of hours, unemployment compensation, old age insurance, family wage systems, and health insurance. Prerequisites: one course in Economics and one in Political Science. 2½ credits. First session. Murray

150. Comparative Economic Systems. The more important present forms of economic organization: their history, theory, and practices. Emphasis of Capitalism, British Socialism, German Fascism, and Soviet Communism. 2½ credits. First session. Loll

103. **Principles of Elementary Education.** Aims, functions, work and attainable goals of the elementary school as an integral part of the American system of education; its relations with the community and the other schools of the American series. Part of the work of the course will be devoted to observation and analysis of practices and procedures in selected elementary schools within the vicinity of the College. 2½ credits. Daily 8. First session. Burke

107. **Teaching of Reading.** Objectives, standard of attainment at methods of reading instruction; diagnostic and remedial techniques at the elementary and secondary level; reading in the activity program. 2½ credits. Daily 9. Second session. Shaw

108. **Social Studies in Public Schools.** Social responsibilities and opportunities of children and youth under current social conditions. Both content and method in the social studies field will be considered. 2½ credits. Daily 11. Second session. Shaw

111. **Principles of Secondary Education.** Problems and principles involved in the learning process; relationships between learner, subject matter, and method; objectives, motivation, direction, discipline, evaluation, and other fundamental considerations. Prerequisite: Ed. Psych. 2½ credits. Daily 8. First session. Budge

113. **Principles of Guidance.** Major emphasis given to organization of guidance as a service, including individual and occupational differences, tests, measurements, and counseling. 2½ credits. Daily 10. First session. Van Shaar

114. **Organization and Administration.** Fundamental principles of organization and administration of schools in the American public school system with emphasis on Utah conditions. 2½ credits. Daily 9. First session. Staff

136. **Improvement of Teaching in Elementary Schools.** An analysis of the newer concepts of method and the basic factors affecting learning. Emphasis upon pupil growth, purposing, problem solving, and laboratory techniques in classroom procedure. Attention given to curriculum material. 2½ credits. Daily 10. First session. Burke

138. **Improvement of Teaching in Secondary Schools.** Designed to meet the needs of teachers, supervisors, and administrators. Emphasis will be upon recent developments in the improvement of teaching-learning situations and activities from the junior high school to the junior college. 2½ credits. Daily 10. First session. Budge

161. **Audio-Visual Aids in Education.** Emphasizes the importance of audio-visual aids in the school program. Building a workable program in which are utilized the newest materials and techniques. 2½ credits. Daily 1. First session. Hammond


181. **School Finance.** A study of the importance of finances in a school system and the principles and practices involved in the collecting and distributing of school revenues, with special reference to the conditions in Utah. 2½ credits. Daily 8. Second session. Jacobsen
188. School Shop Management. A consideration of the basic principles and practices in the management and operation of the school farm shop. A one-week course at Davis and Richfield school shops during the weeks of June 12 and 19 respectively. 1 1/2 credits. Humpherys and Coggin

189. Workshop Conference in Agricultural Education. A one-week’s workshop conference is planned for the week of July 10 at Cedar City for supervisors, teachers trainees, and supervising teachers in agricultural education in the eleven western states. Consideration will be given to the improvements of methods of training teachers of vocational agriculture. Credit arr. Humpherys and Sutherland


194. Principles and Objectives of Distributive Education. For description see Business Administration.

195. Part-time Distributive Education. For description see Business Administration.

201. Backgrounds of Modern Education. An integration of the history and philosophy of education as a basis for understanding modern education. The evolution of educational thought, the sources of great philosophies of education in relation to their times. 2 1/2 credits. Daily 9. First session. Staff

204. Social Foundations of Education. A study of the purposes and practices of education in the light of contemporary social, economic, industrial and political conditions. 2 1/2 credits. Daily 8. First session. Hartmann

205. Reading and Conference. Provides for individually directed study in the fields of one’s special interest and preparation. 1-2 credits arranged. Jacobson and Staff

206. Psychological Foundations of Education. An evaluation of educational practices in terms of newer principles and concepts in psychology. 2 1/2 credits. Daily 10. First session. Hartmann


215. The Secondary School Curriculum. A study of theory and practice in the field of secondary school curriculum. Consideration will be given to the offering in each of the major subject-matter fields in addition to an evaluation of various illustrations of new-type curricula now attracting attention in different parts of the country. 2 1/2 credits. Daily 9. First session. Carlisle

219. The Principal and His School. Practical problems confronting the principal in administration and supervision, in terms of the changing social scene and changing concepts of school administration. Problems of administration, supervision, curriculum, pupil personnel, school-community relations, as they apply to the work of the principal are all given consideration. 2 1/2 credits. Daily 10. First session. Noble


267. Introduction to Research. An inquiry into the nature and sources of research problems with a study of underlying principles and methods of working out such problems in education. Some attention is given thesis writing as a problem, related to research. 2 1/2 credits. Daily 7. First session. Carlisle
271. Research and Thesis Writing. Provides for individual work in thesis writing with the necessary guidance and criticism. Credit arranged. Time arranged.

ENGINEERING

J. E. CHRISTIANSEN, O. W. ISRAELSEN, C. H. MILLIGAN, ELDON M. STOCK, JOSEPH COULAM, Professors; A. ALVIN BISHOP, Associate Professor; B. L. EMBRY, WILLIS A. TINGEY, REYNOLD K. WATKINS, J. DONALD WADSWORTH, Assistant Professors; EDWARD A. DIONNE, Instructor.

C. E. 87. Summer Surveying Camp. Surveying, office and field practice with particular reference to the field and office application of the principles of topographic, land, route, and geodetic surveying. The student is responsible for his own transportation to the field and return each day, his living expenses, and the registration fee. Prerequisite, C.E. 85 and immunization for Rocky Mountain Spotted Fever. 7 credits. First Session. Daily 8 to 5.

Note: Any course listed in the General Catalog will be taught, upon the request of 8 or more students. Such request must be submitted in writing before May 15, 1950.

ENGLISH

N. A. PEDERSEN, Professor Emeritus; WALLACE J. VICKERS, Professor; IRA N. HAYWARD, HUBERT W. SMITH, Associate Professors; MAXWELL D. EDWARDS, Assistant Professor; DAN LUDLOW, Instructor.


10. Sophomore Composition. Required of all students not offering its equivalent. May not be taken in the freshman year. Emphasizes correctness and effectiveness in sentence, paragraph and theme; gives practice in organization and outlining of material, and in expository writings; demands clear, forceful expression, and requires a full third of a student's time. 5 credits. Daily 1. Both sessions.


41-141. Readings in Greek Literature. Provides an opportunity to become acquainted with Greek epics and dramas. 5 credits. Daily 8. Both sessions.

110. Advanced Composition. For students who have taken English 10 or 11; may be taken in place of English 19 by students who have received credit in English 17 and English 18 and who have transferred from Forestry or Engineering; may be taken by transfer students who have six credits in Composition. Emphasizes vocabulary, selection and clear, organization of material. 4 credits. M.T.W.Th. 9. Both sessions.

111. Technical Writing. Emphasis upon bibliography, research methods, and final form of the technical report. 4 credits. M.T.W.Th. 8. Both sessions.

134-234. Literary Criticism. Masterpieces of criticism from Plato and Aristotle to Croce studied to develop an awareness of critical standards throughout the ages. 5 credits. Daily 10. Both sessions.

191. The Victorian Period. A comprehensive review of the literary influences and personalities of the period with emphasis on the chief poets and prose masters of the age. 5 credits. Daily 10. Hayward

JOURNALISM

CARLTON CULMSEE, Professor

112. The Writing of Feature Articles. Lectures and practice in preparing feature articles for newspapers and magazines. Analysis of periodicals will be made to determine markets and what editors will buy. Daily 8. First session. 2½ credits. Culmsee

120. Agricultural Journalism. Problems of writing for or editing weekly newspapers and agricultural magazines. Intended to aid extension workers and others in preparing material for rural publications. 2½ credits. Daily 10.

ENTOMOLOGY

DATUS M. HAMMOND, G. F. KNOWLTON, Professors; J. SEDLEY STANFORD, Associate Professor.

102. Systematic Entomology. Each student must collect, properly mount and label a representative collection of insects containing at least 400 specimens, at least 125 species, and at least 15 orders. The whole collection must be arranged in phylogenetic sequence. Classification must include a correct placing of all specimens in orders. To be taken only with permission of instructor. Prerequisite: Ent. 13. Either or both sessions. 3 credits. Time arranged. Three labs. Knowlton

103 or 203. Systematic Entomology. Continuation of Ent. 102. The collection arranged for Ent. 102 must be enlarged to at least 700 specimens, 225 species, 100 families, and 18 orders. Classification will include a correct placing of all specimens in families. To be taken only with the permission of the instructor. Prerequisite: Ent. 101. Three labs. Either or both sessions. 3 credits. Time arranged. Knowlton

104 or 204. Systematic Entomology. Continuation of Ent. 103. Permission to take this course depends on the student's collection for Ent. 102 and 103. If his collection justifies further study, he may select one or two orders of insects and classify them to species. To be taken only with the permission of the instructor. Three labs. Either or both sessions. 3 credits. Time arranged. Knowlton

199. Minor Problems. Research problems similar to Ent. 210, but intended primarily for advanced undergraduate majors in Entomology. Time and credit arranged. Either or both sessions. Staff

210. Special Problems. Students may select or are assigned problems dealing with certain phases of Entomology. The amount of credit depends on nature of problem and time spent. Open to undergraduate students only by special permission. Prerequisites: Ent. 13, 103, and 108. Either or both sessions. Time and credit arranged. Staff

234. Readings in Entomology. Assigned readings of advanced nature. Either or both sessions. Time and credit arranged. Staff

250. Research and Thesis. For research connected with problem undertaken for partial fulfillment of requirement for Master of Science degree. Either or both sessions. Time and credit arranged. Staff
FOODS AND NUTRITION
E. O. GREAVES, U. VERMILLION, Professors.

101s. Catering. Planned to give a working knowledge of the techniques and management involved in catering to large groups of persons for special occasions; such occasions to be varied in their nature. Specific work assignments will include planning, purchasing and executing. No pre-requisites. Open to any student. Class limited to twelve. Summer. Lecture M.W. 9:00; Laboratory, 8 hrs. per week by special assignment. 1 1/2 credits, first three weeks. Vermillion

146s. Conservation and Technology of Food. A lecture and laboratory course in approved scientific, practical methods of food processing, preservation and storage and its influence upon the nutritive value of the foods. 2 1/2 credits. T.W.Th. 2 F. 2-5. First session. Greaves

FOREST, RANGE, AND WILDLIFE MANAGEMENT
LEWIS M. TURNER, J. W. FLOYD, T. W. DANIEL, G. H. KELKER, Professors; A. D. SMITH, C. M. BOWEN, Associate Professors; R. R. MOORE, W. F. SIGLER, Assistant Professors; C. M. Bowen in charge of Summer Camp.

Forestry

90. Improvements. Practical field problems in trail and telephone construction, the use of field radios; methods of fire prevention, detection and suppression; care and use of woods tools and horses in Forest, Range, and Wildlife work. Problems in construction, planning recreational areas, and water development. 3 credits. Summer Camp. Floyd and Turner

95. Camp Management. Planning and supervising the purchase of supplies, camp safety, camp sanitation and other camp management problems during forestry summer camp. One credit. Summer camp. Staff

96. Surveying. Practical field problems in surveying methods commonly employed in forest, range, and wildlife management. Type mapping. 3 credits. Summer camp. Floyd and Turner


Range

98. Range Practice. Field work in range management involving familiarization with vegetation, training in making reconnaissance, methods of studying vegetation and determining utilization. In addition, time will be devoted to range improvement and management planning. 3 credits. Summer camp. Smith

195. Range Problems. Individual study and research upon a selected range problem. 1-3 credits. Summer camp. Smith

200. Thesis. Original research and study on a problem in range management. This course is open only to graduate students. 1-15 credits. Summer Camp. Staff

Wildlife Management

99. Wildlife Practice. A survey of lakes and streams for improvement purposes and for restocking; the use of census methods for big game, game birds, and rodents; rodent identification and study of
deer and elk ranges. 3 credits. Summer Camp. Kelker and Sigler
170. Wildlife Problems. Individual study and research upon a
selected wildlife problem approved by the instructor. Prerequisite:
Wildlife 172. 1-5 credits. Staff
270. Advanced Wildlife Problems. Research problem chosen, the
project outlined and planned, and data collected by the student quali-
fied for investigations in Wildlife Management. 5-15 credits. Staff
272. Wildlife Thesis. Analysis, presentation, and interpretation of
field data for the graduate thesis. Prerequisite; Wildlife 270. 5-15 credits.
Staff

FORGE PRACTICE

J. DONALD WADSWORTH, Instructor

81a. Fundamental operations of forging, such as shaping, bending,
punching, hardening, tempering, and forge welding. Prepares students
for forging jobs in repair shops, construction camps, and industrial
maintenance shops. Excellent training for metal workers entering
present-day industries. First 6 weeks. 2 credits. Daily 7-9.
Wadsworth

A.E. 113. Farm Machinery Repair. Applied problems in farm machin-
ery repair and maintenance. Prerequisite: Forging 81a, and Welding
95, or equivalent. Second 6 weeks. 3 credits. Daily 8-11.
Wadsworth

GEOLOGY

J. STEWART WILLIAMS, Professor; M. V. COOMBS, Instructor.

1. Introductory Physical Geology. A general survey of the whole
field of physical geology for arts students and others who desire only
a broad introduction to the subject. 5 credits. First session. Daily 7-9.
Room M283.

HISTORY

JOEL E. RICKS, J. DUNCAN BRITE, Professors.

Daily 8. N312. Brite
N312. Ricks
229. Seminar in the Industrial Revolution. 2½ credits. Second ses-
238. Seminar in the History of the Far West. 2½ credits. First ses-

HOME ECONOMICS EDUCATION

HELEN CAWLEY, Associate Professor.

Visiting Faculty

LOIS MILLER, Homemaking Teacher
Edison High School
Minneapolis Public Schools
Minneapolis, Minn.

120s or 220s. Methods and Techniques in Teaching Home Economics.
Contributions of Home Economics to the educational program. Analysis
of teaching situations with special emphasis on home experience and
the Future Homemaker of America program; development of methods which will lead teachers to better understand the nature of learning process. Prerequisite or parallel: Psychology 102a. 2½ credits. Daily 1. Entire session.

(Class will be set up so members may be active participants in Education 195s taught by Mrs. Lois Miller during last three weeks of the first session of summer school.)

195s or 295s. **Curriculum Problems in Home Economics.** Class is especially planned for advanced undergraduate students in any area of home economics. Arrangements may be made with head of home economics education to use this credit as partial fulfillment of required work in Education 120. Graduate students may enroll in this class. 1½ credits. Daily 1. During period June 26-July 14. Miller-Cawley

195s or 295s. **Special Studies in Home Economics Education.** Class is planned to meet needs of in-service teachers who will be returning to summer school to fulfill certification requirements or who are interested in doing graduate study. Advanced undergraduate students may enroll in this class as a partial substitute for Education 121 by securing special permission from head of home economics education. 2½ credits. Daily 7-9 during period June 26-July 14. Miller

210s. **Research for Master's Thesis.** Credit arranged. Cawley

210s or 290s. **Workshop for Teachers of Home Economics.** This workshop will be held during the last week of the first session of summer school, July 10-14, as a part of the State Conference for Homemaking Teachers. Classes in four areas of homemaking—Child Development, Foods and Nutrition, Clothing and Textiles and Homemaking Education—will be offered. Teachers may select two of these areas for special consideration during the week. Workshop may be taken for credit if desired. An effort will be made to help homemaking teachers who are regularly enrolled in the summer session to plan programs that will fit in with the workshop program during the last week. 1½ credits. Time: Daily during week of July 10-14
Home Ec. Education—7-9 a.m.
Child Development—9-11 a.m.
Foods and Nutrition—1-3 p.m.
Clothing and Textiles—3-5 p.m.

**HORTICULTURE**

S. W. EDGECOMBE, Professor; ROBERT GERBER, Assistant Professor.


111. **Orchard Practice.** 1 credit. Time arranged. First session.

112. **Orchard Practice.** 1 credit. Time arranged. Second session.

153. **Seminar.** 1 credit. Time arranged. First session.

154. **Seminar.** 1 credit. Time arranged. Second session.

204a. **Research.** 1-10 credits. First session.

204b. **Research.** 1-10 credits. Second session.
HOUSEHOLD ADMINISTRATION

ORETTA M. CARLSON, Instructor.

149. **Home Management.** Principles of household management and efficiency. Laboratory work in the scientific consideration of household standards and organization. Required of all students for residence in the Home Management House. 2½ credits. Lecture: M.W.F. 2. Lab. arranged.

150. **Residence in the Home Management House.** A six weeks' resident course affording senior college and graduate women an opportunity to apply principles of scientific and practical management of actual home problems. Application for residence in the house should be made at an early date through the Dean of Home Economics. Prerequisite: H. Ad. 149, or concurrent registration, or the equivalent. 3 credits. Time to be arranged.

160. **Special Problems in Household Administration.** Time and arranged.

INDUSTRIAL EDUCATION

WILLIAM E. MORTIMER, Professor; E. L. FRANCE, C. D. McBRIDE, Assistant Professors; BERT V. ALLEN, FRED R. PRYOR, Instructors.

Visiting Faculty

DR. WILLIAM J. MICHEELS
Associate Professor of Industrial Education
University of Minnesota

VON H. ROBERTSON
State Director of Trade and Industrial Education
Utah State Department of Public Instruction

102. **Instructional Aids.** Instruction in the purposes, types, sources, preparation and proper use of audio and visual aids, including samples, models, charts, posters, slides, film strips, motion pictures, opaque projectors, recording machines, and other aids suitable for classroom and auditorium use. 2½ credits. First three weeks. Daily 8-11.

109. **Course of Study Building in Industrial Education.** To teach students to prepare and use a course of study consisting of the outline, analysis, progress charts, lesson plans, instruction sheets, references, tests, and other instructional material. Each student completes this work for one unit of instruction. 5 credits. First session. Daily 8-10.

113. **Driver Training and Traffic Safety.** A short intensive course of one week duration designed to meet the needs of those who are teaching Driver Education and Traffic Safety courses in the High Schools, and those who are planning to teach Driver Education. The latest available instructional materials and methods will be presented along with supervised practice. Arrangements for enrollment should be made with Professor E. L. France in the Automotive Department. 2 credits. May 29 through June 2.

123. **Curriculum Problems in Industrial Arts.** To teach prospective Junior High School industrial arts instructors the application of skills and knowledge acquired in basic shop courses. Prospective instructors construct projects that are suited to the work recommended by the State Department of Education. They also prepare lesson plans and teaching aids that supplement and aid teachers in carrying out the program. Prerequisites: Course of Study Building and basic shop courses in Wood,
Drawing, Metal, Electricity, and Crafts. Students may register for 2, 4, or 6 credits depending on the amount of time to be spent in the class. Both sessions. Lab. Daily 1-3, Lectures, M.W.F. 3. Mortimer

141. Art Metalwork. Laboratory work in embossing, sinking, engraving, etching and spinning operations. Work is done in copper, brass, and aluminum on projects designed for utility and artistic merit. Prerequisites: Art. 2, Machine Work 51b. 2 credits. First session. Daily 3-5.

252. Supervision of Industrial Education. Latest methods in supervision of Industrial Arts Education and Trade and Industrial Education. For administrators, supervisors, and teachers in service who are responsible for the improvement of industrial arts and vocational education through supervision, or for students who wish to prepare for supervision suitable for their situation. 3 credits. First session. Daily 1 plus one hour per week arranged. Robertson

255. Techniques in Writing Instruction Sheets. Principles underlying the development of instruction sheets for use in industrial arts and trade and industrial education programs. 2½ credits. First three weeks. Daily 2-4. Micheels

267. Reading and Conference. Provides for study in advanced and specialized problems in Industrial Education. Problems are selected with the approval of the department head, investigation being carried on under the direction of the major professor. Time and credit arranged. Mortimer and Micheels

271. Research and Thesis Writing. Provides for individual work in thesis writing in Industrial Education. The thesis is written in accordance with standard thesis requirements and under the direction of the major professor. Time and credit arranged. Mortimer

290. Advanced Studies Under Plan "B". Special library and seminar problems of studies designed to meet requirements for reports under plan "B". 2-3 credits each session. Time arranged. Mortimer

LANDSCAPE ARCHITECTURE

LAVAL S. MORRIS, Professor; KENJI SHIOZAWA, Assistant.

135. Travel Course. A major field trip to examine a variety of projects in land planning and design; town plans (with emphasis on residential areas), parks, parkways, cemeteries, airports, homes, civic centers and others. This course, starting early in June, will be conducted to the West Coast with stop-overs on the way. It will last two or three weeks and will require a written report shortly after the termination of the trip. Photographs are required to supplement notes and observations. Time and credit arranged.

LIBRARY SCIENCE

KING HENDRICKS, Director of Libraries:
MILTON ABRAMS, MAX BUEHLER, PEARL J. CARTER, Ass't Librarians;
ANNE SMITH, Instructor.


MACHINE TOOL TECHNOLOGY

FREDERICK PREATOR, Professor; G. MERRILL SHAW, Assistant Professor; W. KARL SOMERS, Instructor.

51. Machine Tool Practice. Training in the use of hand tools, and in bench work and tool sharpening, together with elementary training on drill press and engine lathe. Tools and machine parts are made that give practice in the operations essential to machine shop work. Included are assignments of reading on machine work subjects, and application of mathematics to machine work. 5 credits. Continues through both sessions. Daily 1-4. A102. Somers

56. Machine Practice for Engineers. This course is designed to acquaint engineering students with basic machine shop operations, which include the use of hand tools, bench work, tool sharpening, and elementary engine lathe and drill press operation. 2 credits. Either session. Time arranged. Somers

Mechanical Drawing

91, 92, 93. Mechanical Drawing. The use of instruments applied to template drawing, graphic solutions, and lettering; standard elements and symbols which make up working drawings used in industry. The theory of shape and its representation in orthographic projections, section, auxiliary views, revolutions, and size descriptions. Isometric drawings and the translation of orthographic views into pictorial drawings. 2 credits each course. Either session. Time arranged. Preator and Shaw

Note: Upon request of ten or more students, any of the courses listed in the regular catalog will be given.

MATHEMATICS

V. H. TINGEY, Professor; NEVILLE C. HUNSAKER, Associate Professor; MARY NELSON, Assistant Professor; JOSEPH K. EVERTON, Instructor.


Upon request of ten or more students any course listed in the regular catalog may be given.

MILITARY AND AIR SCIENCE AND TACTICS

See description of courses offered and other details of summer camp, in Introduction to this catalog.
## MODERN LANGUAGES AND LATIN

GEORGE A. MEYER, Professor; GEORGE C. JENSEN, Professor Emeritus; THELMA FOGERBERG, MARIAN L. NIELSEN, Associate Professors; ALDYTH THAN, Assistant Professor; JESSE G. NELSON, GORDON PORTER, Instructors.

### French

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<tr>
<td>101. Intermediate French</td>
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<td>Staff</td>
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<tr>
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<td>Staff</td>
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### German

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### MUSIC

N. WOODRUFF CHRISTIANSEN, WALTER WELTI, Professors; GEORGE PAHTZ, Instructor.

### Visiting Faculty

WILLIAM E. KNUTH, San Francisco State College; RALPH E. RUSH, University of Southern California; HOLLIS GRANGE, Band Director, Davis High School.

### 11-111. Harmony

Beginning students register for 11; students who have college credit for first year harmony, register for 111. Attention will be given to individual needs. 2 1/2 credits. First session. Daily 3. Room M252A.

### 17s-117s. String Ensembles

Offering an opportunity for trios, quartets, and other small units. One credit. Time arranged. PAHTZ

### 40s-140s. The Art of Enjoying Music

A general introductory course of wide popular appeal. Previous music training or study not required. 2 1/2 credits. First session. Daily 2. Moore Library. CHRISTIANSEN

### 77A. Concert Band

All members of the band will register for this course. High school graduates who meet college entrance requirements may receive one hour of college credit upon payment of registration fee. Daily 9-11, 3-4. (June 12-23) M32. RUSH

### 77B. Orchestra

All members of the orchestra will register for this course. Credit given as for 77A. Daily 11-12, 1-3. June 12-23. M32. KNAUTH

### 78. Marching Band

Open to students. June 12-23. Daily 5. Quadrangle. GRANGE

### 87s. Musical Literature for String Instruments

A study will be made by the use of recordings of standard concerti, trios, and quartets. Also biographical sketches of composers and performers. 2 1/2 credits. First session. Daily 9. Children's Library. PAHTZ

### 205. Orchestra and Band Development


### 177A. Concert Band Rehearsal

177B. Concert Orchestra Rehearsal. Rehearsal of program music for regular concerts. A demonstration of rehearsal methods and drill techniques. An observation course for directors. One credit. June 12-23. Daily 11-12, 1-3. Knuth 179s. The Marching Band and the Twirling Drum Major. A study of the fundamentals of marching and twirling. This course is designed to help the director or drum major who is a beginner or has had a limited amount of experience. ½ credit. June 12-23. Daily 11.

182s. Advanced Marching and Twirling. This class is for directors and student drum majors who know the fundamentals of marching and twirling. Will deal with stunt formations for football and basketball games and with original maneuvers for marching festivals. Attention will be given to twirling problems of the individuals. ½ credit. June 12-23. Daily 4. Grange

183s. Student Marching Band. A demonstration of rehearsal methods with the marching band. ½ credit. First two weeks. Daily 5. with the marching band. ½ credit. June 12-23. Daily 5. Grange

Vocal Music

24s. High School Chorus. Open to all high school students. Those who meet college entrance requirements will receive one hour of college credit. First two weeks. Daily 10 and 3. M207. Knuth 24s or 124s. Summer Chorus. A recreation class in singing. Open to all Summer School students. The chorus will prepare a program for presentation in the summer school assembly series and elsewhere. First session. M.W.F. 12:00. ½ credits. M207. Welti 28 or 128. Opera and its Background. A study of the historic background of opera from an appreciative basis and a review of some of the grand operas by means of recordings and general discussion. First session. One credit. Tues. Thurs. 12. M53. Welti

132. Choral Materials Workshop. A seminar conducted on a Workshop basis for choral conductors, supervisors, and classroom teachers desiring help in reviewing standard choral resources, new publications, program planning, the integrated program, and methods of choral training. Opportunity will be given to work on individual problems, and class members will conduct a selected choir for laboratory evaluation of music materials. Persons enrolled in this seminar will be expected to keep time free to attend the regular rehearsals of high school choir. ½ credits. First two weeks. Daily 1. M53. Knuth

Private Instruction Courses

53S-153S Vocal Walter Welti, Patience Thatcher, Maxine Greenwood
60S-160S Violin N. Woodruff Christiansen, Mischa Poznanski
63S-163S Cello George Pahtz
50S-150S Piano S. E. Clark, Jean C. Thatcher, Jeanne T. Welti, Lucy L. Christiansen, Thelma Lundquist
66S-166S Pipe Organ

Assistant Instructors

56S-156S Brass Instruments Eldon Torbensen
Woodwind Instruments Ralph E. Rush & William E. Knuth (June 12-23)
PHOTOGRAPHY
BERT V. ALLEN, FRED PRYOR, Instructors

51. General Photography. Principles and practices in the fundamentals of general photography. Training in the selection and use of cameras, lenses, meters, films, filters, lights, developers, and accessories. Two lectures, one 3-hr. lab. First session. Staff

151. Photographic Problems. Special problems in advanced photography. Designed to meet the needs of individual students in solving advanced photographic problems. Two lectures, two 2-hr. labs. First session. Staff

PHYSIOLOGY
DATUS HAMMOND, CLYDE BIDDULPH, Professors; THOMAS L. BAHLER, Assistant Professor.

4. General Physiology. For the student who desires a survey of physiology and who is not planning advanced intensive study in the field. It deals with the functioning of the human body with emphasis upon broad general biological principles. First session. 5 credits. Daily 8 to 10. Room H212. Bahler

160. Special Problems, Physiology. Special investigations in physiology are carried out in this laboratory course. Open to students who have taken Physiology 121, 122 or who have been granted special permission. Either or both sessions. 2 to 5 credits. Room H20. Staff

260. Research and Thesis. Research connected with problem undertaken for partial fulfillment of requirement for Master of Science degree. Either or both sessions. Time and credit to be arranged. Room H20. Staff

PHYSICAL EDUCATION AND RECREATION
H. B. HUNSAKER, W. B. PRESTON, Professors; ELIZABETH DUTTON, Associate Professor; J. K. VANDERHOFF, ISRAEL HEATON, MARY E. WHITNEY, DALE O. NELSON, Assistant Professors; LOIS DOWNS, BLANCHE CHAMBERLAIN, VAUGHN GORDON, Instructors.

Visiting Faculty

BRUCE DRAKE
Head Basketball Coach
University of Oklahoma

ROLAND LOGAN
Athletic Training

JESS NEELY
Director of Athletics
Head Football Coach
Rice Institute

Service Courses

25. Tennis (Elem.) Men and Women, 1 credit. First session.
   Sec. 1, Daily 2
   Sec. 2, Daily 8
   Sec. 3, Daily 1

25. Tennis. (Elem.) Men and Women, 1 credit. Second session.
   Daily 9


54. Swimming. (Elem.) 1 credit. First session.
   Sec. 1, Women, Daily 12
   Sec. 2, Men, Daily 3

   Staff

   Downs
   Vanderhoff
54. **Swimming.** (Elem.) Men and Women, 1 credit. Second session. Daily 10. Vanderhoff

62. **Archery.** (Elem.) Men and Women, 1 credit. First session. Sec. 1, Daily 9. Heaton

66. **Badminton.** (Elem.) Men and Women, 1 credit. First session. Sec. 1, Daily 10. Downs

73. **Golf.** (Elem.) Men and Women, 1 credit, Lab. fee. First session. Sec. 1, Daily 8. Vanderhoff. Sec. 2, Daily 9. Vanderhoff

73. **Golf.** (Elem.) Men and Women, 1 credit, Lab. fee. Second session. Daily 8. Vanderhoff

**Professional Courses**

85. **Organization of Intramurals.** A course for men and women physical education teachers desiring to study organization and supervision of junior and senior high school intramural programs. 2½ credits. Daily 9. First session. Downs

102. **Dance Composition.** Open to all students with a foundation in modern dance techniques. The group will be divided on the basis of experience into beginner, intermediate, and advanced work. 2½ credits. Daily 3. First session. Whitney


111. **Creative Rhythms for Schools.** Methods and materials in guiding the creative rhythmic experiences of students. Material applicable to elementary or secondary schools. 2½ credits. Daily 10. First session. Whitney

112. **Physical Education Curriculum for Elementary Schools.** Methods and practice in evaluating, developing and presenting a well-rounded curriculum of physical education for the elementary school, with emphasis on the rhythmic phase. 2½ credits. Daily 1. First session. Downs

113. **Construction of P.E. Equipment.** Construction of and practice in the use of rhythmic instruments and physical education equipment used in the elementary school program. 2½ credits. Daily 2. First session. Dutton


120B, 120F. **Coaching School.** Intensive short course. Football daily 9-12; basketball daily 1-4. One credit for each course. June 5-9. Whitesides, Neeley, Drake, Logan

121. **Techniques of Sports.** Techniques of boxing and wrestling and methods of class instruction in these sports. A syllabus is required. 2½ credits. Daily 9. Second session. Heaton

151. **Techniques of Modern Dance.** Advanced technique presented from the standpoint of the professional studio. Martha Graham technique will be stressed. 2½ credits. Daily 12-1. First session. Whitney

157. **Field Work Recreation.** (Prerequisite approval of department head) This course is designed to give practical experience in conducting recreational programs at playgrounds and camps under the supervision of the college recreation staff and the director of the program to which the individual is assigned. Students will be expected to plan and conduct programs in a variety of activities applying principles, methods, and techniques gained in his prerequisite work. 4 credits. Daily 10. First or second session. Heaton
SUMMER SESSION

176. Leadership, Camping and Hiking. (Men and Women) Designed for physical education and recreation leaders. Precamp training class in campcraft, camp cookery, first aid and safety, equipment to check, and menu planning. Bus trip to "high country." Hiking, camping, fishing. Return by bus. Lab. fee. 3 credits. First—second session. Hunsaker

184-284. Curriculum in Health Education. A study of the Utah Course of Study for Health Education in the secondary schools, including a study of the outstanding programs in the state. 2½ credits. Daily 10. First session. Hunsaker

199-299. Physical Education Seminar. A course designed for upper division and advanced students in physical education. Problems in physical education will be studied by the class members and presented to the class for class discussion. 2½ credits. Daily 8. Dutton

250. Reading and Conference. A course providing for individual directed study in physical education. 2½ credits. Time and credit arranged. First and second session. Hunsaker

271. Research, Thesis Writing. Provides for individual work in thesis writing with the necessary guidance and criticism. Time and credit arranged. First or second session. Hunsaker

Recreation Clinic

Morning 8 - 11
123A. Social Recreation. 1 credit. Heaton
125B. Square Dance and Folk Dance. 1 credit. Gordon
125A. Social Dance. 1 credit. Heaton

Afternoon 1 - 4
123C. Playground Dramatics—Pageantry. 1 credit. Meyers
124C. Nature Study. 1 credit. Stanford
125C. Out-of-Door Activities. 1 credit. Hunsaker

PHYSICS

WILLARD GARDNER, Professor Emeritus; ROLLAND PERRY, Professor; PHILIP J. HART, Associate Professor; JAY O. JENSEN, Assistant Professor.


POLITICAL SCIENCE

F. D. DAINES, Professor Emeritus; M. R. MERRILL, Professor; WENDELL B. ANDERSON, Assistant Professor; GORDON PORTER, Instructor

75. Latin American Governments. The various Latin American governments are discussed. Attention also is given political and economic relations of the United States with the Latin American states. First session. Daily 8. 2½ credits. G. Porter


115. State Government. Same as No. 15 above that supplemental research work will be expected for upper division credit. Second session. 2½ credits. Daily 8. Staff


140. American Legislation. Organization and procedure of legislative bodies. Influences at work in and the character of the output of the national and state legislatures. The laboratory method of approach is used as far as is feasible. Parliamentary law is emphasized. First session. 2½ credits. Daily 10. Anderson

175. Latin American Governments. Same as No. 75 above except that supplemental research work will be expected for upper division credit. First session. 2½ credits. Daily 8. G. Porter

POULTRY HUSBANDRY

C. I. DRAPER, Professor; A. B. STEPHENSON, Assistant Professor.

101. Poultry Production. 3 credits. Daily 9, extra hour arranged. First session. Stephenson

125. Special Problems. Time and credits arranged. First or second sessions. Draper

127. Advanced Poultry Practice. Time and credits arranged. First or second sessions. Stephens

210, 212, 214. Poultry Research. Time and credit arranged. First or second sessions. Draper

PSYCHOLOGY

ARDEN FRANDSEN, Professor; D. R. STONE, HEBER C. SHARP, Assistant Professors.

Visiting Faculty

JOHN E. ANDERSON, Director
Institute of Child Welfare
University of Minnesota

FRED M. FOWLER
Director of Guidance Services
Utah State Department of Public Instruction

53. Elementary General Psychology. General principles of human behavior and experience including: nature of personality; factors determining development; how we learn, observe, and think; motives of human conduct; dealing with people; and the maintenance of personal efficiency and mental health. Intended for Lower Division students in all schools of the College. 5 credits. Both sessions. Sharp
102. Educational Psychology. A professional course for prospective high school teachers intended to increase understanding of personality and to develop greater insight into the conditions for effective learning. Applications to development in adolescence of both normal and deviate personalities, to provisions for individual differences, and to learning junior and senior high school subjects are emphasized. Prerequisite: General Psychology. 5 credits. Both sessions.

105. Child Psychology. The roles of maturation, learning, and environmental conditions in the motor, mental, social, and emotional development of children from birth to adolescence. Generalizations with respect to individual differences, emotions, motivation, how children learn, observe, and think are applied to understanding and guiding children's behavior in home, school, and community. Prerequisite: General Psychology. 2½ credits. First session.

Anderson and Frandsen

112. Applications of Statistics to Education and Psychology. An elementary study of the statistical procedures used in handling test scores in the schools and of the concepts needed to read current educational and psychological literature. Second session. 2½ credits.

Stone

127 or 227. Psychology of Learning. A descriptive analysis of learning behavior in acquisition of language, motor skills, perceptual activities, ideational behavior, motives and emotions, social behavior, adjustive and maladjustive behavior, psychotherapy, and varied school subjects. A study of the explanatory theories of learning and applications to improvement of teaching in the above areas. Second session. 2½ credits.

Frandsen

181 or 281. Psychometrics Applied to Guidance, Adjustment Problems, and Remedial Teaching. For school counselors, personnel workers, social workers, and clinical psychologists. Consideration is given selection, evaluation, administration, interpretation, and practical uses of tests of intelligence, aptitudes, interests, personality and quality of personal and social adjustment. Prerequisites: General Psychology and Elementary Statistics. For seniors or graduate students. 2½ credits. Second session.

Sharp

182 or 282. Individual Diagnostic Intelligence Testing. The theory and techniques of individual diagnostic intelligence testing, including practice in the administration of (a) the Stanford-Binet and other individual tests especially suited to psychological examination of children and (b) the Wechsler-Bellevue and related tests for use with adolescents and adults. How to interpret test data so they will yield significant information on level of general ability, differential abilities, work methods, and on personality and adjustment will be studied. 5 credits. Both sessions, (a) first session, (b) second session.

Frandsen

183 or 283. Theory and Practice of Counseling and Psychotherapy. In educational and vocational guidance, in improving school achievement and worker efficiency, and in treating problems of personal and social maladjustments, the uses of the following procedures are studied: Non-directive counseling; directed problem-solving interviewing; giving advice, assurance, persuasion, and information; and of controlled family, school, club or camp, community, and institutional environments. Prerequisite: General Psychology. First session 2½ credits.

Stone

145. Mental Hygiene. Common personal and social adjustment problems of normal people. The course shows how people, in striving to attain a balanced satisfaction of motives in their major life activities, learn different modes of adjustment, effective patterns of behavior, a variety of maladjustive mechanisms, and non-adjustive reactions. It should aid in cultivating personal efficiency and mental health and
increase understanding of the human problems dealt with by parents, teachers, social workers, and personnel workers. Prerequisite: General Psychology. First session. 2½ credits. Sharp

187. Collection, classification, and uses in counseling of occupational information. First session. 2½ credits. Fowler

205. Seminar on Problems in Child and Adolescent Guidance. Two weeks of first session. 1 credit. Anderson

RADIO AND ELECTRONICS

CLAYTON CLARK, Associate Professor; WILLIAM L. JONES, Instructor.

Any course listed in the regular catalog will be given in the summer sessions upon petition of a sufficient number of students who may need and desire such a course.

SECRETARIAL SCIENCE

V. D. GARDNER, Professor; INA DOTY, CLARA P. WEST, Assistant Professors.


68. Beginning Transcription. Designed to develop skill and speed in transcription of letters from shorthand notes. 1 credit. Daily 10. First session. Room M305.

86. First-Quarter Typewriting. For students who have had no previous training in typewriting. Special attention to the development of typewriting for personal use. 1 credit. Daily 12. First session. Room M306.

191. Methods of Teaching Business Subjects. An analytical study of methods, materials, and devices used in teaching simplified Gregg shorthand and typewriting. Some opportunity will be given for observation and practice teaching. (Methods in business arithmetic will be included, if requested.) This course may be used for credit in education or in secretarial science. 3 credits. Daily 9-11. Second session. Room M308.

SOCIAL WORK

DON CARTER, EVELYN LEWIS, Assistant Professors.


177. Social Treatment of Children's Problems. An analysis of the child's behavior as a symptomatic expression of his needs; the formulation of treatment plans in accordance with these needs. 2½ credits. Daily 10. First session. Lewis
199. **Readings and Conference.** Credit and time arranged. Both sessions.

210-211. **Field Work.** Field work centers will be maintained in selected public and private agencies and supervision will be provided under college direction. Credit and time arranged. Both sessions.

**SOCILOGY**

JOSEPH A. GEDDES, Professor; JOSEPH N. SYMONS, LAWRENCE S. BEE, Associate Professors; CARMEN FREDRICKSON, Assistant Professor.

60-160. **Family I and Family II.** The social-emotional development of the child in the family. Material adjustment; social-cultural difference in family behavior; problems; ideological consideration. 2½ credits. Daily 9. First session.

156-256. **Social Institutions.** Similarities and differences in institutions as they emerge, grow and decline are appraised. Society's efforts to keep institutions attuned to the objectives for which they were organized are observed. 2½ credits. Daily 8. First session.

170. **Juvenile Delinquency.** The causes of delinquency are considered with the purpose of arriving at intelligent remedies. Various methods of home, social, and institutional treatment are studied; parental cooperation, personal supervision allied with probation and parole, institutional treatment, etc. 2½ credits. Daily 8. Second session.

199. **Readings and Conference.** Credit and time arranged. Both sessions.

201. **Research in Sociology.** For advanced students only. A project is organized and field work is carried on under supervision. Original studies are made. Time and credit arranged. Both sessions.

**SPEECH AND DRAMA**

CHESTER J. MYERS, Professor; REX E. ROBINSON, FLOYD T. MORGAN, HAROLD I. HANSEN, Associate Professors; GWENELLA THORNLEY, STUART HARDMAN, and MERLIN J. MECHAM, Instructors.

1s. **Public Speaking.** Elementary training in Public Speaking. Includes training in daily speaking situations, voice improvement. 5 credits. Daily 8 and 10. Both sessions.

5s. **Extempore Speech.** Designed to meet the specific needs of professional people in the practice of their profession. Basic principles of effective speaking, with emphasis on composition and delivery of the forms of address of greatest interest to those for whom the course is provided. 2½ credits. Daily 9. First session.
pl2-pl12. **Private Instruction.** Individual attention given in private to particular needs of the student in an effort to eliminate personal defects, develop skill, and solve individual speech training and to all those who are majoring in speech. Special fee. Time and credit arranged. 

Staff

18s-118s. **Story Telling.** The story as an educational factor; analysis and classification of typical stories with reference to each period of the child's development. Study of sources, adaptation of material; and actual practice in story telling. Consideration is given to stories of western pioneer life. The work is designed to meet the needs of student, teacher, recreational leader, church activity leader, librarian, and parent. 2½ credits. Daily 8. First session. M205. Myers

24s-124s. **Oral Interpretation: Lecture and Recital.** Various literary forms are studied for platform presentation. Reading from manuscript and from memory. Preparation and presentation of public recital in reading. 2½ credits. Daily 9. First session. M205. Myers

66-166. **Practical Theatre Production.** A course designed for teachers, MIA directors, recreation leaders, and Speech majors and minors. A course covering the problems of play selection for high school and community, casting, acting, directing, scenery, lighting, costume, make-up, and all phases of theatre production. Students will participate in the production of two UTAH STATE THEATRE summer presentations. Lecture and laboratory approach will be utilized. Students may register for 2 to 9 credit hours. Class will meet daily at 1, and the remaining hours by arrangement with the instructors. 2 to 9 credits. Daily 9, and by arrangement with instructors. STUDIO THEATRE. First session. Hansen, Morgan, Hardman

73-173. **Speech Clinic.** Application and discussion of methods applied to speech correction in the clinic. Training and practice through the supervised handling of selected cases. Students who have had one quarter of experience are allowed to participate in extension clinics. Prerequisite or corequisite, Speech 167. Consult the instructor for permission to register. Time and credit arranged. First session. Mecham


123. **Teaching of Speech.** (Education 123) The methods and problems peculiar to the teaching of speech. A study of the organization of courses and lesson plans is included. Students may register only with the permission of the instructor. 2½ credits. Daily 9. First session. Room M203. Myers

190. **Problems in Speech and Theatre.** Especially selected work, individually assigned, handled, and directed in consultation with the student. Special speech problems of merit and of mutual interest to student and instructor are investigated and reported upon in this course. Consult the instructor for permission to register. Credit and time arrangedu. Both sessions. Staff
VETERINARY SCIENCE

WAYNE BINNS, Professor; M. L. Miner, Associate Professor; H. M. NIELSEN, Assistant Professor.

200. Special Problems. Open to students who are majoring in some related field and who wish to study some particular phase of a disease in animals. Both sessions. Time and credit arranged.


50. Artificial Insemination of Cattle. This course is outlined for training students in artificial insemination of cattle and to train technicians for doing insemination in the Artificial Breeding Associations in the state. This course fulfills the requirements for the qualifications necessary for the student to be eligible to take the State Board Examination. First session. 8 to 5 daily for two weeks. June 5th to 17th.

WELDING

ANTON B. KEMP, Instructor; RAWSON CHILD, Assistant Instructor.

91. Acetylene Welding. 3 credits. Time arranged. First session.

94. Electric Welding. 3 credits. Time arranged. First session.

WOODWORK AND BUILDING CONSTRUCTION

JOSEPH COULAM, Professor; ROSS NYMAN, Instructor.

61, 62, 63. Joinery and Millwork. Basic training in hand tool and machine operations for students in Building Construction or for those who desire a working knowledge in wood for their own needs. The course includes a thorough study in the proper use, care and sharpening of hand tools, machine processes, safety measures, care and repair of machines, and sharpening of machine cutters. Assigned reading and application of mathematics to woodwork problems are integral parts of the course. 2-5 credits, each session.

67s. Woodwork for Ag Students. A brief course in the care and use of hand tools as well as the woodworking machines commonly found in Farm Mechanics shops. Projects in farm woodwork are built in connection with the course. Credit arranged. First session.
ZOOLOGY

DATUS M. HAMMOND, Professor; J. S. STANFORD, Associate Professor; M. H. GUNNELL, Assistant Professor; G. H. LINFORD, Instructor.

1. Principles of Biology. Basic principles of life as illustrated in plants and animals, with emphasis on concepts of fundamental importance, including organization of living things, energy relationships, growth, relation to environment, kinds of living things, reproduction, development, inheritance, and evolution. For lower division students, except those who elect Botany 24, 25, or Zoology 2 or 3 and 4. First session. 5 credits. Daily 7–9. Room M225. Gunnell

2. General Zoology. Both sessions. Room M228. Lecture T.Th. 1 p.m., and one hour arranged. Lab. T.Th. 2-5. 5 credits. Linford

111. Heredity. The facts and principles of inheritance, with emphasis on application to human beings. This includes a consideration of how characteristics are passed from parent to offspring, how the most important human characteristics are inherited, and how the human race as a whole is being influenced in its inherited qualities by various agencies and conditions. It is desirable but not essential that an introductory course in biology, physiology, zoology, or botany precede this course. First session. 4 credits. M.T.W.Th. 9–11. Room M225. Linford

123. Natural History of Animals, Zoology. The identification, habits, food, distribution and other features of the more common Utah animals are studied. Also, methods of collection and preparation of specimens for study, displays, and storage, are emphasized. Major consideration is given to insects, birds, and mammals. A considerable amount of laboratory time is spent in making observations in the field and some longer field trips are taken. Prerequisite: Zoology 1 or Zoology 3 and 4. First session. 4 credits. M.T.W.Th. 1–5. Room M230. Stanford

131 or 231. Organic Evolution. A critical study of the facts of evolution as obtained from a consideration of comparative anatomy, embryology, geographical distribution, blood tests, and other fields upon which the doctrine of evolution is based. Factors causing evolution are considered and discussions undertaken on other bodies of related thought. Prerequisite: Zoology 1 or 2, or 3 and 4, 111 or 112 recommended. First session. 3 credits. Daily 8–9 and one period arranged. Room M230. Hammond

199. Minor Problems. Deals with research problems similar to Zoology 201, but intended primarily for undergraduate majors in Zoology. Either or both sessions. Credit and time arranged. Staff

201. Special Problems. Zoology. The student who wishes to engage in some line of original research and is qualified to do so may elect and study some topic of Zoology. Open to undergraduates only by special arrangement with the department. Either or both sessions. Credit and time arranged. Staff

240. Research and Thesis. Zoology. Research connected with problem undertaken for partial fulfillment of requirement for Master of Science degree. Either or both sessions. Credit and time arranged. Staff