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I 9 5 3 SUMMER SCHOOL

UTAH STATE AGRICULTURAL COLLEGE BULLETIN

MARCH, 1953



The spacious new Student Unior Building, put into use just this year, will be utilized for many Summer School activities.

The Art Workshop, now in its third year, provides opportunities for teachers to work in all kinds of media for use by children in classroom art activities.

This catch of fish is symbolic of the Aggie Ranger Hike, scheduled again this summer for a primitive area of Yellowstone Park. Successful anglers find the fishing very good in Logan Canyon, just one mile east of the campus.

The remedial speech clinic serves as a demonstration center for college students and is of great assistance to the children enrolled. Miss Mary Jane Handy is in charge. Demonstration schools are also scheduled in kindergarten and elementary grades. **Utah State Agricultural College**

Bulletin

SUMMER SCHOOL ANNOUNCEMENT FOR 1953

June 8 — August 21

FIRST SESSION June 8 — July 17

SECOND SESSION

July 20 — August 21

Please Bring This Bulletin With You When You Come to Register

College Bulletins, Published by Utah State Agricultural College, at Logan, Utah. Issued Monthly, Vol. 52, No. 3, March 1953. Entered as second class matter September 10, 1918, at the Post Office at Logan, Utah, under act of August 24, 1912. Acceptance for mailing at special rate of postage provided in Section 1103, Act of October 3, 1917. Authorized August 22, 1918.

A Message from the President of the College

Utah State Agricultural College is a year-round institution. The Extension Service, reaching into all corners of the state, is always on duty, and the research work of the Experiment Stations never ends. The full quarter of the Summer School completes the program by increasing the instructional services of the College to a four quarter basis.

Moreover, the Summer School for many years has achieved a significance extending far beyond the borders of the state. Since 1924, visiting educators have come each year from many different parts of the nation to supplement the resident faculty in special fields. In fact, the eleven o'clock lecture series of the first session of the Summer School has come to be a unique tradition of this institution.

The offering for 1953 appears to be unusually rich. Basic courses in R. O. T. C. Air Force, as well as other courses for freshmen and lower division students, are again available. Upper division and graduate courses in all of the seven schools for students working towards advanced degrees have been carefully planned. The needs of teachers getting their schooling under provisions of the G. I. legislation have been kept in mind. Either the first or second session will qualify to keep the teacher's entitlement in force, and of course both meet the qualifications for Public Law 550 (Korean Bill).

A wide variety of short courses, institutes and workshops to meet the needs of special groups has been scheduled. Major professors in all departments will be on hand to guide thesis work.

The cool summer climate of Cache Valley, the variety of recreational opportunities, the wholesome community life in nearby areas, the beautiful campus and educational facilities of the College, all combine to make summer at U.S.A.C. a most delightful experience. Students, teachers, and citizens, generally, are invited to share it with us.

Kom Madsen

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UTAH STATE AGRICULTURAL COLLEGE BULLETIN

VICTOR E. SCHMIDT, Ph.D., Professor of Science Long Beach State College

MILTON SILVERMAN, Ph.D., Science Editor, San Francisco Chronicle

DARREL STUBBS, M.A., Graduate student University of Illinois

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LEORA THATCHER Guest Actress, Theatre Workshop New York, N. Y.

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HANSEN, BURRELL F., B.S., M.S., Assistant Professor of Speech

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UTAH STATE AGRICULTURAL COLLEGE BULLETIN

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Summer School Faculty Committees

- ATTENDANCE AND SCHOLARSHIP—Brite, Draper, Edwards, Richardson, Maj. Howard, Perry, Moore, Shaw.
- CREDITS AND ADMISSIONS—Sharp, Cannon, Boyle, Hayward, Jones, Registrar.
- FAMILY LIFE INSTITUTE—Gardner, Skidmore, Malin, Burke, Carter, Frandsen, Greaves, Farr, Huber.
- GRADUATE COUNCIL—Williams, Thorne, Gardner, Murray, Frandsen, Stoddart, Wilcox, Hendricks.
- GRADUATION—Myer, Carter, Mortimer, Kelker, Bennett, Stone, Bell.
- HEALTH EDUCATION—Stevens, Smith, Hunsaker, Carter, Skidmore, Vermillion.
- PERSONNEL AND GUIDANCE—Whitesides, Bell, Stone, Burns, Farr, Lewis, C. J. Skidmore.
- REGISTRATION—Jacobsen, Academic Deans, Registrar, Hayward, H. B. Hunsaker.
- SUMMER SCHOOL RECREATION—H. B. Hunsaker, N. W. Christiansen, Mortimer, G. Blaser, Morgan.
- TEACHER PLACEMENT—Carlisle, Richardson, Cawley, Mortimer.

Summer School Fees for 1953

Registration for Summer Quarter	515.00 20.00 10.00 10.00 3.00 1.50
Student Body Activity Fee	3.00
Student Body Activity Fee—Second Session only Registration for three credits or less	1.50
Registration for five credits or less	15.00
Coaching School fee	10.00
Auditor's fee (per course) (Does not apply to regularly registered students who may secure visitor's permits from Registrar's Office.)	3.00
P.E. 176—Camping Trip Packing and Equipment Rental Transportation	16.00
Aeronautics—37, 137, 138, 139—\$10.00 per clock hour for dual in- struction and \$8.00 per clock hour for solo instruction.	
Registration and Tuition Laboratory fee	35.00
A (Board provided on cost basis)	23.00
Forestry 96, 97; Range 98; Wildlife 99: \$5.00 lab fee in each course. Music Clinic (non-credit) Physical Education 73 (golf) fee	7.50 3.00 5.00
Diploma Fee Social Work Certificate	5.00
Master's Degree Fee for binding and proofing Thesis Special Examination—per credit hour Cap and Gown Rental:	- 5.00 2.00
Bachelor of Science	2.25 5.00

Private Instructors in Music

Rate per Lesson

M. H. Ombidanoonininininininininininininininininini	3.50
Mrs. N. W. Christiansen	3.00
S. E. Clark	3.00
Max Dalby	3.00
Mrs. Maxine Greenwood	2.50
Thelma Lundquist	2.00
Mrs. Wallace Odd	52.00
George Pahtz	3.00
Micha Poznanski	3.00
Patience Thatcher	3.00
Eldon Torbensen	3.00
Mrs. Walter Welti	3.00
Walter Welti	3.50
Irving Wassermann	3.00

All fees paid, with the exception of the registration fee, will be refunded to any student in residence who withdraws from school before the end of the quarter or either session, in proportion that the number of instructional weeks subsequent to withdrawal bears to the number of instructional weeks in the period covered by the fees paid.

Utah State Agricultural College

Utah State Agricultural College was established in 1888 under the provisions of the Land-Grant College Act. It serves the people of Utah and the intermountain west through three main divisions: (1) the instructional services of the college, (2) the Agricultural Experiment Station, and (3) the Cooperative Extension Service. The instructional services are organized in seven schools: Agriculture; Arts and Sciences; Commerce; Education; Engineering and Technology; Forest, Range, and Wildlife Management; and Home Economics. The Graduate School and the Summer School are also organized to render special services. Through all these schools, it is the policy of the college to make available to students opportunities for a broad program of collegiate education, including vocational, technical, scientific and so-called liberal education. The object is to foster all that makes the right living, good citizenship, vocational efficiency, and general culture. Fundamentally, the college has always considered the main function of education in its broadest sense to be the preservation and improvement of the democratic way of life.

All departments offer curricula leading to the B.S. degree; many offer the M.S.; and some the Ph.D. Detailed requirements for these degrees are listed in the general catalog.

The college is located one mile east of the center of Logan on the brow of a hill overlooking Cache Valley. One mile still further to the east is the entrance to scenic Logan Canyon through which Highway 89 leads on to Bear Lake and points east, or north through Wyoming to the South entrance of Yellowstone Park.

With its population of sixteen thousand, Logan serves as a delightful center of student life. The climate in the summer time seldom becomes oppressively warm, while the evening canyon breeze makes summer nights especially comfortable. Student enrollment at the college during the regular academic year has in recent years exceeded five thousand. Enrollment in the Summer School ranges from one thousand to fifteen hundred.

The 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 in their regular teaching positions, and finally there are many special groups who spend a week or two weeks or longer in short courses specifically adapted to their professions or avocations.

The Utah State Agricultural College Summer School is organized to meet these diverse needs. For many years it has been a significant part of the institution. Since 1924 the program has been expanded to include visiting professors from different parts of the nation who supplement the regular faculty in various departments in giving advanced courses, conducting institutes, or giving one or more special lectures. Lyceum numbers in music and drama are also a significant part of the summer program.

A full quarter of study is available this summer, divided into two sessions, the first of six weeks from June 8 to July 17, and the second from July 20 to August 21. Some courses in the first session are arranged to terminate in three weeks, thus making it possible for individuals to complete an intensive program for college credit if they cannot be on the campus for a longer period.

In general the 1953 summer offering has been planned to meet the needs of the groups indicated above. First, many regular students of undergraduate standing will wish to use the summer quarter to complete requirements earlier than otherwise possible. Similarly, many high school graduates may want to enroll in college this summer in order to get their advanced schooling started without delay. Most departments are offering freshman courses to meet these needs, as well as more advanced courses meeting graduation requirements. Second, teachers planning to renew certificates or meet certification requirements for Utah and surrounding states will find that specific courses have been listed to meet their needs. Course needs for other special groups have also been kept in mind, and suitable offerings made available. A third group which the Summer School seeks to serve directly is the large number of graduate students who find it advantageous to pursue their school work in the summer time. A detailed description of the policies of the graduate school is included later in this bulletin.

The list of short courses, workshops, and institutes is especially impressive this year. Each is described in some detail in a later section of this catalog.

REGISTRATION

The student load during the Summer Quarter is determined by the deans of the various schools. A maximum of nine credits may be taken the first session, and eight the second. Students are reminded that this number cannot be exceeded without the special approval of the dean of the school concerned. Nor will completion of correspondence study or extension class work paralleling Summer School be permitted if the combined total of credits exceeds the above figures unless special approval has been granted.

Students who desire to register for credit in research problems or field studies should 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.

the time spent and the work accomplished. Registration for the Summer Quarter will take place Monday, June 8 in the Main-Reading Room of the Library, beginning at 8 a.m. and continuing to 3 p.m. Classes will begin Tuesday morning, June 9. 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 (M276). The first step in registration is to call at the Registrar's Office to obtain registration forms and instruction. Students will find it to their advantage to send in the registration request form on the last page of this bulletin before registration day. Although this is not necessary it will insure that all previous records as well as registration forms will be ready for them on June 8.

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. Regularly scheduled second session classes will begin Monday, July 20, and continue five weeks, to August 21. 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 10 one-hour lecture periods or 10 three-hour laboratory periods. Registration forms for any session period will not be accepted after the period has ended.

Scheduled classes, whether first or second session, may not be given if fewer than eight students register. If it is possible to do so, any course listed in the general catalog will be given if eight or more students request it. Requests should be directed to the head of the department concerned.

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 Tuesday, June 8; thereafter, at his office in the Main building.

CLASS SCHEDULE

It is anticipated that all classes will meet at the time and place listed in this catalog. If changes are necessary, a corrected schedule will be available on registration day, June 8. 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 with students and teachers.

SPECIAL CONFERENCES, INSTITUTES, SHORT COURSES, AND WORKSHOPS

Coaching School—June 2-6

The twenty-seventh annual Coaching School at Utah State Agricultural College will feature "Bud" Wilkinson, football coach at University of Oklahoma, and Harry Combes, basketball coach at the University of Illinois. Discussion groups, demonstrations, and regular class work will be held for five consecutive days, June 2 through June 6. Individuals may enroll for either football or for basketball or both.

If possible, reservations for enrollment in the Coaching School should be sent in before the opening date, June 2. Registration in the School carries one credit for each course for the week. Free playing privileges at the Logan Golf and Country Club are extended to those who are enrolled.

Art Education Workshop—June 8-26

An art education workshop for teachers is again being held on the campus through the first three weeks of the summer session, June 8 to June 27. Three members of the State Curriculum Committee in Art are listed as special instructors for this course, although other members of the committee will cooperate. The workshop is planned for the regular classroom teacher. It is anticipated that theory and background amterial will be discussed but the major emphasis will be upon learning how to do what is called for in providing good art experiences for the child. Five credits may be earned by participating in the workshop and it is anticipated that this will take the full tirme of the teachers for the first three weeks. Students who enrolled in the workshop last year may do so again for more advanced work. New students, of course, may also enroll.

Girls' State—June 21-27

This annual conference is under the direction of the state organnization of the American Legion Auxiliary. It will be held on the campus during the week of June 21. Faculty members will cooperate by giving lectures and conducting course work.

Science Writing Workship—June 22-26

Dr. Milton Silverman, science editor of the San Francisco Chronicele, will conduct a workshop for persons interested in writing on scientific topics. Members of the USAC faculty will also assist in the discussions.

Roundup, League of Utah Writers—July 17-19

The State Roundup of the League of Utah Writers will be cconducted on the USAC campus in connection with summer school this year. John Mason Brown, noted author and dramatic critic, will be one of the speakers. Widely known experts on the novel, short story, poetry and publishing problems will address sessions of the cconference. Anyone interested in creative writing may attend.

Health Conference—June 17, 18, and 19

The annual Health Conference is scheduled for Wednesday, Thursday, and Friday, June 17, 18, and 19, respectively. Dr. Oliver E. Byrd, M. D., Professor of Education and Director, Department of Hlygiene, Stanford University, will be the leader. He will be supported by leaders from the Utah Department of Public Instruction, the Uttah Department of Health, the Utah Tuberculosis and Health Association; by visiting specialists in the fields of nutrition and physical education and recreation; and by local faculty members in the areas of nutrition, mental hygiene, physiology, physical education and recreation, and public health.

The Conference will deal particularly with problems of health within these cooperating fields and areas. Enrollees are especially solicited from public school leaders in nutrition, physical education and recreation, mental hygiene, and school health; and from state leaders in the various health departments, agencies, and associations organized and operating within the state.

See Public Health Course 158 for credit allowance.

Utah State Theatre Workshop—June 8-July 17

Utah State's Theatre Workshop is now in its fifth year. Plays that have been produced in the past summers are: "Antigone," Anouiilh; "The Importance of Being Earnest," Wilde; "Thunder Rock," Ardræy; "The Wingless Victory," Maxwell Anderson, and "The Lady's Not for Burning," Christopher Fry.

The actors and production crews are members of the class in Practical Theatre, Speech and Drama 66 and 166, and other interested students. Summer School students and townspeople are invited to participate. The plays are presented before college and local audiences in a well-equipped plant. An attempt is made to produce drama as $n\epsilon ar$ the professional level as possible.

Plans for this summer include a Nineteenth Century melodrama, ore or more group play readings and one major stage presentation, with Miss Leora Thatcher as guest actress.

Family Life Institute—June 29, 30 and July 1

The annual Family Life Institute is scheduled for Monday, Tuesdcy, and Wednesday, June 29 to July 1. Dr. H. Hardin Branch, M.D., Head of the Department of Psychiatry, College of Medicine, University of Utah, will be the leader. The Institute will deal with social and enotional growth in early childhood.

School Lunch Program—June 16-18

The eighth annual school lunch workers conference will be conducted for the supervisors and managers of school lunch programs during the three days, June 16-18. Daily programs will be announced. Mrs. Thelma Flanagan, Director of the School Lunch Supervision, Florida State Department of Public Instruction, will be the chief consultant. She will be assisted by leaders from the Utah State Department of Public Instruction.

Workshop for Teachers of English in Secondary Schools— June 8-July 17

A workshop for English teachers is scheduled for the entire six weeks of the first term with Miss Helen Olson of the Seattle Public Schools as the chief consultant. Scheduled as Education 152, the course will meet for two hours daily and will carry five credits. All phases of the English program in the junior and senior high school will be cassidered.

Language Arts Workshop—June 29 to July 17

A language arts workshop has been scheduled on an intensive basis for the three weeks, June 29 to July 17, with Miss Elizabeth Guilfoile, Miss Margaret Williams, and Mrs. Faun G. Hogge as consultants. All major phases of language arts in the elementary schools will be considered including reading, spelling, creative writing, and Erglish usage. The program will take the full time of the student ard five credits may be earned in the three weeks. See Education 196.

Music Camp—June 8-19

The Music Camp is one of the oldest in the West. Band, orchestra, and chorus are included. It is designed for music directors as well as high school students who qualify as performers. Directors and students are given an opportunity to perform and study under the direction of eminent music educators.

tion of eminent music educators. Clarence Sawhill of the University of California at Los Angeles, nctionally known music educator, will direct the band. Dr. William E. Knuth of San Francisco State College, former orchestral director at the Interlochen Music Camp, will have charge of the orchestra.

The chorus will be directed by Professor Walter Welti, head of the vocal music division of the USAC.

Students will be housed under supervision in the Rural Arts Building. Housing and board will be provided at cost. Students may participate in one or more of the programs. Numerous activities are planned for the students, permitting them to enjoy a vacation and at the same time improve their musical performance. Registration fee covering admission to the entire course, plus housing, is \$14.00. Students who do not require housing pay \$7.50 registration fee. Since registration in the Camp is limited, interested students and teachers should send

In the Camp is limited, interested students and teachers should send notification early concerning their intentions to enroll. Others cooperating with the Music Camp include Professor Roy E. Freeburg of San Francisco State College, Mr. Max Dalby, director of instrumental music in the Ogden City Schools, and Mr. Darrel Stubbs, woodwind specialist and graduate student at University of Illinois. Mr. Freeburg and Mr. Dalby will teach classes during the entire

six weeks of the first term.

LECTURE SERIES

A strong tradition of summer schools at Utah State has been to reserve the eleven o'clock hour each morning in the first session for the lecture series. This year a particularly distinguished list of speakers has been engaged, including: first week, Dr. Henry Neumann; second week, Dr. Oliver E. Byrd; third week, Dr. Milton Silverman; fourth week, Dr. H. Hardin Branch; fifth week, Dr. Ralph Nichols; and sixth week, Mr. John Mason Brown. More information about these individuals will be found in the final section of this catalog.

Students who wish to earn credit from the lecture program enroll in Pol. Science 170.

SUMMER SCHOOL AT BRANCH AGRICULTURAL COLLEGE

The Branch Agricultural College at Cedar City, Utah, also operates a Summer School for one session, scheduled this year from June 8 through July 17. Individuals interested in information concerning this session should address their inquiries to Director Daryl Chase, Branch Agricultural College, Cedar City, Utah.

GRADUATE SCHOOL

J. STEWART WILLIAMS, Dean

Organization

Graduate study is supervised by the Dean of the Graduate School, assisted by the Graduate Council. This Council consists of one representative from each of the seven schools of the college, the Division of Social Work, and the Libraries. Members of the council are appointed by the President in December of each year to serve a oneyear term commencing the first of July following.

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The Graduate Council for 1953-54 is as follows:

School of Agriculture—Professor Thorne

School of Arts and Sciences-Professor Gardner

School of Commerce—Professor Murray

School of Education—Professor Frandsen

School of Engineering—Professor M. Greaves School of Forest, Range and

Wildlife Management—Professor Stoddart School of Home Economics—Professor Wilcox Social Work (Division of)—Professor Don Carter Libraries—Professor Hendricks

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. Seniors in this college who have an average of "B" or better in all their courses in the junior and senior years, 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 in the Graduate School.

An application for admission, accompanied by transcripts of all previously earned credits and letters of recommendation, should be presented as far in advance of the day of registration as possible. All successful applicants must receive the approval of the department in which the student proposes to work.

Students who cannot qualify for the degree program in a particular field may be admitted to the Graduate School as non-candidate students. Admission to the Graduate School does not imply admission to candidacy for a higher degree.

Students are admitted to graduate studies in social work who have taken a bachelor's degree with (1) a major in social work; (2) a major in sociology, economics, political science or psychology, and who have a total of not fewer than 36 credits in these four departments; or (3) a major in child development, physical education, public health or education, and who also have 25 credits in one of the four social sciences listed above with a fair balance among them. Students over 35 years of age are admitted only by special arrangement.

Master of Science Degree

Majors for the Master of Science degree are offered in all the basic biological, physical, and social sciences and in various educational, industrial, and professional divisions of the college. The specific departments 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.

Qualifying Examinations: A qualifying examination is required by the Graduate School. This examination and any qualifying examination required by the student's department must be taken as soon as possible after registration. The results of these examinations become a part of the student's file in the graduate office. If a student is found to be deficient in the work basic to the field in which he proposes to study, he may be required to take undergraduate courses, which do not count in the minimum requirements for the Master's degree, to satisfy the deficiency. Supervisory Committee: When it has been determined that a student is acceptable as a possible candidate for a higher degree, the major professor will suggest a committee to assist him in guiding the student's program and in conducting necessary additional qualifying examinations and the final examination. When the student's program has been determined and approved by his committee, he will be advanced to candidacy for a degree. Advancement to candidacy must be accomplished before the end of the winter quarter if the student is to graduate at the following commencement. When the student's research is best supervised by a federal collaborator, or other person who is not a member of the regular teaching staff, such collaborator or other person may be designated as thesis director. The thesis director is a member of the student's committee.

Student Program: The student program for the Master of Science degree must include:

- 1. At least 15 credits taken on the Logan campus;
- 2. At least 45 credits in courses numbered 100 or above which are approved for graduate credit;
- 3. At least 10 credits, exclusive of thesis, in courses numbered 200 or above;
- 4. A thesis with 9 to 15 credits.

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 credit presented for his degree. 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 final approval by the department, the thesis must be typewritten in standard form; and a copy must be submitted to each member of the student's Advisory and Examining Committee at least two weeks before the date of his final examination. After approval by the committee and the department, and after the student has successfully passed the final examination, four copies of the final draft of the thesis must be deposited in the graduate office. Two copies will be deposited in the library, another sent to the department, and the fourth returned to the student.

Thesis Alternate: "Plan B" Reports: The supervisory committee may permit the substitution of three advanced reports, valued at 6 to 10 credits, for the regular thesis. These are known as "Plan B" reports. The Master's program is otherwise the same under the "Plan B."

Final Examination: Each candidate for a Master of Science degree is 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 or both 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 are made by the Dean of the Graduate School. A member of the Advisory and Examining Committee, other than the major professor, or a representative of the Graduate Council is appointed to act as chairman of the examination. For candidates 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 should be not later than May 10.

Time Limit: 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 ses-

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sions, a maximum of seven years is allowed. Older work may be re-validated by examination.

Extension Course Credit: The amount of extension or off-campus credit to be allowed will be determined in consideration of the student's entire course program. In no case will more than nine quarter hours of extension credit be allowed as counting toward a degree, and the total of off-campus credit may not exceed 15 hours, exclusive of thesis. 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. Credit toward a Master of Science degree is not granted for correspondence study.

Transfer Credit: A maximum of 9 quarter credits of graduate work satisfactorily completed at another approved Graduate School may be allowed toward a Master of Science degree. Credit Load: Maximum load for full-time graduate students is 16

Credit Load: Maximum load for full-time graduate students is 16 credits. Maximum for assistants engaged in teaching or research is 12 credits.

Master of Education Degree

The Master of Education degree provides more flexibility in meeting student professional needs. It differs from the Master of Science in education essentially in two ways: (1) the formal thesis is not required, rather the student submits at least two seminar reports completed in connection with his 200 series courses; and (2) there is provision for accepting a greater amount of credit from departments other than education.

Master's Degree in General Agriculture Under "Plan B"

The Dean of the School of Agriculture acts as major professor to students working for this degree. The students program must include a minimum of 6 credits each in the fields of Plant Science, Animal Science, and Agricultural Economics.

Degree of Irrigation Engineer

The School of Engineering and Technology offers a two-year graduate program in Irrigation Engineering leading to the degree of Irrigation Engineer. The plan of study for this degree is similar in many respects to plans at other western institutions for degrees of Civil Engineer, Mechanical Engineer, etc.

Special Requirements: The student program for the degree of Irrigation Engineer includes:

- 1. A minimum of 6 quarters of study, of which at least 3 quarters must be in residence at Utah State Agricultural College.
- 2. Completion of 90 credits of approved courses.
- 3. Completion of a minimum of 30 credits of graduate courses (200 series), exclusive of thesis.
- Completion of an adequate thesis based on a research program for which a maximum of 30 credits may be allowed by the committee.

For candidates who present the Master of Science degree in an appropriate field of engineering, and who have completed a thesis project for this degree, the requirements will be modified as follows: 1. A minimum of 3 quarters in residence.

- 2. Completion of a suitable program of study of not less than 45 credits, of which (a) at least 30 credits must be graduate courses (200 series),
 - and which may include
 - (b) a maximum of 20 credits for thesis.

The suggested curriculum for this degree is detailed in the section on engineering in the regular catalog.

Degree of Doctor of Philosophy

General: The degree of Doctor of Phylosophy (Ph.D.) is awarded by the Utah State Agricultural College in recognition of high attainment and productive scholarship in a special field of learning.

Admission to the Graduate School to work toward the degree of Doctor of Philosophy is obtained in the same manner as for the Master's degree. Qualifying examinations are similarly required, and the student's program is likewise directed by a supervisory committee.

Student Program: The student program for the Doctor of Philosophy degree must include:

- 1. Three years of full-time graduate study above the Bachelor's degree. If the student has a Master's degree, then two years will be required. The student's supervisory committee may recommend that part of this program be taken at other schools, but the last year must be spent in residence at Utah State Agricultural College;
- 2. A minimum of 135 credits of approved graduate study beyond the Bachelor's degree, 90 credits beyond the Master's degree;
- 3. A major field to which approximately two-thirds of the program is devoted, and a minor field to which approximately one-third of the time is devoted;
- 4. A research problem on which a thesis will be presented. Credits for this thesis may not exceed 45, and work on the thesis should ordinarily occupy most of the third year.

Language Requirement: A reading knowledge of at least one foreign language is required of all candidates. The particular language required will be that which meets best the applicant's needs. Requirement of a second language will be optional with the department in which the student is taking his major. The degree of proficiency of the applicant to use the required language in his chosen field and his knowledge of the grammar and structure of the language will be determined by a committee appointed by the Dean of the Graduate School from members of the Language departments.

The language examination should be taken before the beginning of the third year of study.

Preliminary Examination and Candidacy: Written and oral examinations are conducted by the supervisory committee and the departments concerned, usually in the last quarter of the second year of the stu-dent's work, to determine his fitness for admission to candidacy for the degree of Doctor of Philosophy.

Thesis: A completed dissertation approved by the department must be presented to the supervisory committee not later than May 1 of the year in which the student will graduate. The dissertation must show

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ability to do critical and independent research. It must present a contribution to knowledge in scholarly fashion.

Final Examination: The final examination in defense of the candidate's thesis will be conducted by the supervisory committee not later than two weeks before the date of commencement.

Teaching and Research Assistantships

A number of teaching and research assistantships in various departments of the college are available each year to graduate students. Teaching assistantships carry a stipend of \$810 for one-third teaching service on a nine-month basis. Remuneration for research assistantships may vary from \$810 to \$1,200 dependent upon the time of service involved. All assistantships are arranged so as to allow the student to complete work for his Master's degree in two years. At present, assistantships are available in the following departments: Animal Husbandry, Accounting and Business Administration, Agricultural Economics and Marketing, Architectural Engineering, Agronomy, Art, Auto Mechan-ics, Bacteriology and Public Health. Biochemistry, Botany and Plant Pathology, Chemistry, Child Development and Parental Education, Civil Engineering, Clothing and Textiles, Dairy Industry, Economics, Education, English, Entomology. Forest Management, Foods and Nutrition, Geology, Horticulture, Home Economics Education, History, Irrigation and Drainage, Music, Mathematics, Modern Languages, Physical Education, Physiology, Physics, Poultry, Psychology Range Management, Sociology, Speech and Drama, Technology, Veterinary Science, Vege-table Crops, Wildlife Management, and Zoology. Research Fellowships are available in: Animal Husbandry, Agricultural Economics and Marketing, Agronomy, Bacteriology, Botany and Plant Pathology, Chemistry, Dairy Industry, Entomology, Foods and Nutrition, Irrigation and Drain-age, Physiology; Range Management, Sociology, Vegetable Crops, Wildlife Management, and Zoology.

GRADUATION

Requirements for graduation in the various schools and departments of the College are listed in the general catalog. In most cases students can complete many of these requirements by attendance during summer quarters. In every department, one or more advisers are asigned to guide the student's work leading toward graduation. Students planning to attend during the summer are invited to write to the departments in which they are interested for evaluation of credits and other such guidance services.

Graduation exercises are held only once during the year—at the end of the spring quarter. Students who complete all requirements during the summer may receive official statements of completion by applying to the chairman of the Graduation Committee. Their degrees will be conferred at Commencement the following spring.

DEMONSTRATION SCHOOLS

A demonstration school including the middle grades of the elementary school will be conducted during the first session. Classes will start on June 9 and continue through July 1. Children of fourth, fifth, and sixth grades will be enrolled, with special preference being given to the children of Summer School faculty and students. Enrollment will be accepted in advance. Inquiries should be directed to Mrs. Edith Shaw, Principal of Whittier School, USAC.

The demonstration school will be conducted in connection with the class in Ed. 195, **Workshop in Elementary School Curriculum.** It will also serve as a laboratory for the Art Workshop and other courses dealing with special aspects of the elementary school curriculum.

A demonstration kindergarten will also be conducted during the six weeks of the first session.

SPEECH CLINIC

The Speech Clinic provides special classes meeting the needs for speech correction in this area. Special attention is given in the summer meetings to groups of children. The Clinic is also available to college students who have speech problems. The types of problems handled include stuttering, disorders of articulation, cleft palate, paralytic speech, foreign accent and dialectic speech, and voice problems.

The testing of hearing is an important part of the clinic services and available to all college students.

POULTRY CONFERENCE

The twentieth Annual Training School for the training and qualifying of poultry flock-testing and pullorum disease-testing agents will be held at the College during the month of August. Dates will be announced early in the summer. Those interested should write to the Department of Poultry Husbandry for detailed information.

LIVING ACCOMMODATIONS

The housing situation is better at Utah State than it has been for many years. Nearly any type of accommodation desired can be obtained through the College Housing Office or private home owners.

Many Logan City residents list their apartments, rooms, or board and room accommodations with the College Housing Office, Room 107, Main Building. Such listings may be had by anyone who wishes to call for them. The Housing Office has the following accommodations available for Summer School students:

Lund Hall, offers campus dormitory accommodations for women.

Kerr Hall, located in downtown Logan, offers housing for men students. Both of these halls have served summer school students satisfactorily for several summers.

"Pre-fab" and quonset apartments are available for couples or families on a monthly basis.

Lund Hall because of its size will also be available for some teachers or married couples who wish to remain on the campus. Some limitation in reservations for this hall is made so those desiring to live there should make reservations as early as possible.

On page 65 in this catalog there is a form for use in making application for housing. A five dollar deposit should be forwarded with the request for a dormitory reservation. A ten dollar deposit is required for a couple or family unit reservation.

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 8-11 a.m., first session only. Application for enrollment should be made in writing on or before registration day. Children will be accepted in order of application. Admission is by application only. Tuition: \$5.00 for six weeks.

TEACHERS' CERTIFICATES

By attending the Summer Quarter of Utah State Agricultural College, students may meet any of the requirements for Utah certification with the exception of student teaching. Experience indicates that summer school offerings at the College usually include essential courses required for certification in other states as well.

TEACHERS' PLACEMENT BUREAU

The College Teacher 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 276.

VETERANS' ADMINISTRATION

The College maintains a veterans' bureau on the campus where all GI students may receive guidance service and where provisions for the clearance of veterans for registration and so forth is made. In this connection, it should be pointed out that veterans under P.L. 346 who completed the Spring quarter may attend Summer School under the GI Bill, or they may take the usual summer vacation and in either case their entitlement will be active for the Fall quarter.

Veterans under P.L. 346 who attended Summer School last year and who have been teaching school during the regular school term may continue to attend Summer School under the GI Bill. In fact, they **must** attend at least one session of five weeks duration in order to keep their entitlement active. Either the first or second session at USAC will thus qualify. It will be necessary for such veterans to submit a statement from some responsible official of their school stating that they are employed as teachers and giving the beginning and ending dates of the school term.

Veterans who plan to take graduate work under P.L. 346 must make application for graduate work while they are still in training in undergraduate work. Applications made after graduation will not be granted.

Veterans who come under Public Law 550 (Korean Bill) will not be subject to the above requirements. Veterans under this bill must begin their training within two years after their discharge from the service and after that time they must not discontinue their training for more than twelve consecutive months.

UTAH STATE AGRICULTURAL COLLEGE BULLETIN

While summer school attendance is not required in this program, veterans will usually find it advantageous to plan their work on a fourquarter basis, including the summer term.

Further information may be obtained by addressing:

Utah State Agricultural College

Office of Veterans' Affairs

Logan, Utah

AGRICULTURAL ECONOMICS AND MARKETING

G. T. BLANCH, D. A. BROADBENT, V. L. ISRAELSEN, Professors; E. M. MORRISON, R. H. ANDERSON, Associate Professors; WELLS ALLRED, Assistant Professor; L. H. DAVIS, Instructor; W. P. THOMAS, Professor Emeritus.

102. Principles of Farm Management. Principles underlying organization, management, and financial success of farms. 3 credits. Daily at 7 and one hour arranged. First session. M178. Blanch

142. See Education 142. 162. Marketing Agricultural Products. Economic principles, marketing agencies, functions, and channels of distribution. 3 credits. Daily

at 10 and one hour arranged. Second session. M178. Allred 214. Research in Agricultural Economics. Thesis. Credit and time arranged. Both sessions. Staff

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

AGRICULTURAL EDUCATION

STANLEY S. RICHARDSON, Professor Visiting Faculty H. M. HAMLIN

288. **Special Problems.** For teachers of vocational agriculture who desire to develop a more practical program for future, young, and adult farmers. Held during Agricultural Teachers Summer Conference. Daily 8 to 11 for one week. 2 credits. First session. Rural Arts Building. Hamlin and Richardson

Note: If there is a need, the following courses will be offered during the four weeks after the completion of course No. 228: 225. **Special Problems in Agricultural Education**. A consideration of needs of individual students and special types of service. Daily 8 to 9 for four weeks. 1-2 credits. First session. MA 220. **Richardson**

124. **Methods of Teaching Farm Mechanics.** Scope of mechanics in agriculture, lesson planning, course of study preparation, shop equipment and management, skill requirements, and supervised practice. Daily 9 to 11 except Friday. 3 credits. First session. MA 220.

Richardson

AGRICULTURAL ENGINEERING

SPENCER H. DAINES, Associate Professor; J. DONALD WADSWORTH, Assistant Professor

121. Tractor Maintenance. Time and credit arranged.

Wadsworth 184. Ornamental Iron Work. Time and credit arranged. Wadsworth

AGRONOMY

D. W. THORNE, D. W. PITMAN, D. C. TINGEY, H. B. PETERSON, Professors; W. H. BENNETT, S. A. TAYLOR, Associate Professors; D. R. McALLISTER, Assistant Professor.

103. Forage Crops. Alfalfa, clovers and other farm forages; classification and methods of production, harvesting and storage; meadow and pasture management are discussed. Attention is given to the place of these crops in rotation, soil conservation, and erosion control. An assessment is made for field trips. 3 credits. Daily at 9, one class arranged. First session. P202.
107. Fertility and Management of Irrigated Soils. Methods and

107. Fertility and Management of Irrigated Soils. Methods and amounts of irrigation water application in relation to soils and crops. Fertilizer selection and use in relation to irrigation and soil management. The management and reclamation of saline soils. Organic matter maintenance in soils and fertilizer practices. Prequisite: Agronomy 56. 5 credits. Daily at 7 and 1. Second session. P202.

Peterson, Thorne

150. **Special Problems in Agronomy.** Conferences or library or laboratory investigations. Subject, time and credit arranged. Both sessions. **Staff**

218. **Special Problems in Agronomy.** Special Problems in crop production, crop breeding, soil fertility or other phases of agronomy work are investigated. Students review literature on the problem and conduct experiments in the laboratory or on field plots. Credit and time arranged. Both sessions. **Staff**

230. **Research and Thesis.** Outlining and conducting research in soils or farm crops and preparation of thesis. Credit and time arranged. Both sessions. **Staff**

ANIMAL HUSBANDRY

J. A. BENNETT, L. E. HARRIS, Professors; MILTON MADSEN, Associate Professor; HYRUM STEFFEN, Assistant Professor.

10. Feeds and Feeding. Differences in digestive tracts of farm animals and the physiology of digestion and feed utilization, the composition of feeds, the balancing of rations, and a discussion of feeding of farm animals. First session. 5 credits. Daily 8 and 11. AH 103. Steffen

110. Beef Production. Factors involved in economical production of beef cattle, including organization of the enterprise, breeds of beef cattle, selection of suitable breeding stock, production of maximum calf crop, handling and feeding of animals of different ages on the range and in the feed lot, and the marketing of surplus stock. Prerequisite: AH 10. Second session. 3 credits. Daily 8. AH 203. Bennett 201. Problems in Animal Breeding. Time and credit arranged.

201. Problems in Animal Breeding. Time and credit arranged. Bennett

210. Problems in Animal Nutrition. Time and credit arranged. Harris

220. Problems in Animal Production. Time and credit arranged. Madsen

230. Research in Animal Breeding. Time and credit arranged. Bennett

240. Research in Animal Nutrition. Time and credit arranged. Harris

250. Research in Animal Production. Time and credit arranged. Madsen and Steffen

ART

FLOYD V. CORNABY, H. REUBEN REYNOLDS, Professors; JESSE LARSON, Associate Professor, EVERETT THORPE, Assistant Professor.

Visiting Faculty

PAUL A. BONIFAS, HERBERT BARTLETT, DELBERT NAPPER.

1. Art Structure and Design. Creative approach to line, mass, form, pattern, texture, color, and their combined relationship to design construction. Room M335A. Daily 8-10. 3 credits. Second session.

Thorpe

2. Design Creation and Application. Problems in creating designs for application to specific projects. Room M335A. Daily 10-12. 3 credits. Second session. Thorpe

8-108. Drawing and Painting. Each credit desired represents thirty hours of work. Room M333B. Daily 10-12. 3 credits. Second session.

Larson

109. Watercolor Painting. Modern techniques. Room M333. Daily 3-5. 3 credits. First session. Cornaby

111. Fabric Design and Application. Projects in creating designs of character and beauty and applying them to suitable textiles in techniques of block print, stencil, hooked rug, tie and dye, freehand painting, batik. Room M333. Daily 8-10. 3 credits. Second session.

Larson

112. Ceramics. Art of making pottery, tiles, figurines, etc. Studio. First session. Section 1. Daily 9-11. Section 2. Daily 1-3. 3 credits.

Bonifas

114. Leathercraft. Design and construction of wallets, belts, bags, and related projects. Room M333. Daily 1-3. 3 credits. First session.

Cornaby

152. Art Methods for Elementary Grades. Methods of teaching drawing, painting, design and handwork in the elementary schools. Room 335Å. Daily 2. 3 credits. Second session. Staff 153-154. Art Education Workshop. This course is designed to give teachers a chance to explore the field of art experiences, to work with

many types of art media, to explore the background material and to develop a philosophy of art suited to the learning needs of the growing child. Attention will ge given to the correlation of the art program to the other subjects of the elementary curriculum and some time will be devoted to the place of research and methods for its use in art activities. This course is designed to give help to the regular classroom teacher. 3-5 credits. Daily 8-11, 1-4. First session. June 9 to June 26.

Bartlett Napper Reynolds

171. **Special Studio.** Individual work on specific problems. Room M335. Time arranged. Credit arranged. Both sessions.

Staff

BACTERIOLOGY AND PUBLIC HEALTH

KENNETH R. STEVENS, Professor LEWIS W. JONES, Associate Professor GARTH A. JAMES, Instructor

Bacteriology

Elementary Bacteriology. Basic concepts and practical applica-tions. 4 credits. 7 to 9 M T W Th. P-302. 1st Session.
 Stevens Jones

30

297. Advanced Bacteriological Problems. Special assignments, reports, and discussions. Preparation of a comprehensive and critical review. Time and credit arranged. Both Sessions. Staff

299. Thesis Research. Time and credit arranged. Both Sessions.

Public Health

155. School Health. Health training for state certification requirements in health education. 3 credits. 9 daily. P-302. 1st Session.

2nd Session, 9 daily with 5 class hours arranged. P-302. James

158. Workshop in Health Conference. Attendance required at all sessions of the Health Conference, hand in notes on each session, and submit a functional work project outline built upon one of the conference topics. 11/2 credits. June 17-19. Stevens 254. Advanced Public Health Problems. Special assignments, re-

254. Advanced Public Health Problems. Special assignments, reports, and discussions. Preparation of a comprehensive and critical review. Time and credit arrange. Both Sessions. Staff

BOTANY

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

20. **Common Plants of Utah.** A study of plants characteristic of the valleys and canyons of Utah. Wherever possible plants will be studied in their native habitat. Especially designed to aid teachers in the grades and secondary schools. 5 credits. MTWTh. 1. P-105. Lab MTWTh. 2-5. P-103. First session. **Holmgren**

25. **Elementary Botany.** A survey of the plant kingdom. Emphasis on comparative morphology and reproductive processes of representatives of the major groups of plants. 5 credits. Daily 1-5. Room P-105. Lab P-102. Second session. **Boyle**

BUSINESS ADMINISTRATION

V. D. GARDNER, Professor; STANFORD L. JOHNSON, Instructor.

63. Salemanship. The history, development and opportunities in sales work. The necessity and methods of securing proper preparation for sales work in order to meet problems encountered in both direct selling and retail selling are analyzed. The principles of preparing for interviews, proper presentation, gaining favorable attention, arousing the desire to buy, meeting objections, and creating acceptance are studied. For those who desire, special projects can be carried out in relation to a particular type of selling. Second session. 3 credits. Daily 10 and M 9. M354.

109. Accounting for Non-Commercial Students. For students in Engineering, Agriculture, Home Economics, Forestry, and other non-commercial students. An introductory course in accounting. First session. 3 credits. Daily 9. M353. Gardner 150. Managerial Accounting. This course emphasizes the use of accounting as a tool of control for management. Major aspects will

150. Managerial Accounting. This course emphasizes the use of accounting as a tool of control for management. Major aspects will include budget and managerial control, elements of an accounting system, and problems of cost interpretation. First session. 4 credits. Daily 8. M353. Gardner

157. Advertising for Small Business and the Retail Store. Studies of direct mail, radio, television, newspaper, window display, and layout practices. Designed to assist the student in judging advertising effectiveness as a sales tool for the small businessman. Second session. 3 credits. Daily 8 and F. 7. M354. Johnson

CHEMISTRY

SHERWIN MAESER, DELBERT A. GREENWOOD, Professors; MELVIN C. CANNON, Associate Professor

10-11. General Chemistry. Fundamental principles of inorganic chemistry. Both terms. 5 credits each term. Open to any matriculated students. Lecture daily at 10. Lab daily 2-5 W205. Staff

125-126. Applied Organic Chemistry. Biological applications are emphasized. Designed especially for students in Agriculture, Home Economics, and Nutrition. Both terms. 5 credits each term. Lecture Daily 8, Lab Daily 2-5. Prerequisite Chemistry 10 and 11, or equivalent. W205 Staff

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

BRUCE GARDNER, RUTH MALIN, Assistant Professors.

CD 125s. Parent Education. Training for adult leadership and parent education. Basic principles in the organization of adult study programs, and formulation and presentation of programs for adults. Methods for promoting group participation. Analysis of subject matter and evaluation of source materials in parent education, in terms of the needs of individual students. 3 credits. Daily 1. First session. C208. Gardner

CD 140s. Special Problems. Independent study for qualified students in Child Development, upon consultation with the instructor. Time and credit arranged. First session. Gardner

CD 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. 3 credits. Daily 7. First session. Malin

CD 175s. Practice Teaching in the Nursery School. An opportunity to apply principles of child guidance in the nursery school. Open to qualified students upon consultation with the instructor. 3 credits. Daily 8-11. First session. Malin

CIVIL ENGINEERING

J. E. CHRISTIANSEN, E. M. STOCK, Professors; A. ALVIN BISHOP, Associate Professor; WILLIS A. TINGEY, REYNOLD K. WATKINS, Assistant Professors.

Summer Surveying Camp

C. E. 87. Summer Surveying Camp. This camp is conducted each year during the three weeks preceding the opening of the fall term. The offerings include: Highway curves and earth work, geodetic procedure in layout, and field establishment of triangulation nets, methods of precise chaining and leveling, triangulation and closing of the quan-drangle. 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 execellent 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 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 a ideal outdoor laboratory. The excellent climate helps make this an outstanding surveying camp.

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. 4 credits. September 8 to 25. Daily 8 to 5. **Tingey and Staff**

CLOTHING, TEXTILES AND RELATED ARTS

FLORENCE GILMORE, Associate Professor. SHIRLEY HELD, Assistant Professor.

33. Home Furnishings. Planned to develop skill in selecting and techniques in making, remodeling, and caring for home furnishings. Laboratory includes instruction on making draperies, curtains, lamp shades, use of sewing machine attachments, refinishing and upholstering furniture. Open to all college girls. Daily 1-4. 3 credits. First session.

Held

140. Decorative Textiles. Historic textiles including study of textiles belonging to most of the outstanding civilizations and nations down to modern textiles with emphasis on possibilities for use as design inspiration. Laboratory work consists of developing designs for garments, costume accessories and home furnishings by means of various techniques including block printing, weaving, silk screen printing and stitchery. Open to all college girls. Daily 7-10. 3 credits. First session. Held

165. **Tailoring.** Application of techniques used in tailoring suits and coats Daily 1-4. 3 credits. First session. **Gilmore**

169. Newer Developments in Textiles. Designed for teachers and advanced students of Clothing and Textiles. Class includes a study of fibers, finishes, and materials being placed on the market and economic conditions affecting their production as well as factors influencing choice and care of present-day material. Pre-requisite: Textiles 24 or equivalent. MWF 10. 2 credits. First session. Gilmore

190 or 290. **Special Problems.** Independent study under direction of professor of a problem in the area of clothing or textiles. Time and credit arranged. First session. **Gilmore**

DAIRY INDUSTRY

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

109. Dairy Production. A brief review of the dairy industry. The place of dairying in a permanent system of agriculture. Origin of breeds, study of dairy type, brief review of breeds of dairy cattle. Factors to consider in selecting a breed. Selection of cows, systems of record keeping, selection, care, and management of the herd sire. 3 credits. Daily 10. 1 hr. arranged. AH103.

150. Special Problems in Dairy Production. Arranged for a limited number of students. Time and credit arranged. Both sessions. Staff 154 or 254. Special Problems in Dairy Manufacturing. Time and credit arranged. Both sessions. Morris and Larsen

216. **Research in Dairy Production.** Arranged for a limited number of students. Time and credit arranged. Both sessions. **Staff**

217. **Research in Dairy Manufacturing.** Time and credit arranged. Both sessions. **Morris and Larsen**

ECONOMICS

EVAN B. MURRAY, Professor; LEO M. LOLL, Assistant Professor

127. Social Security. 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. 3 credits. Daily 9. Second session. M353.

139. Economics of Security Markets. Analysis of organization and operation of stock and bond markets; security speculation; brokerage houses; exchange relations with other institutions; security price behavior; exchange regulation. 3 credits. Daily 9. First session. M353.

Loll

150. Comparative Economic Systems. The more important present forms of economic organization: their history, theory, and practices. Emphasis on Capitalism, British Socialism, German Facism and Soviet Communism. 3 credits. Daily 8. First session. M353. Loll

165. Money, Credit, and Prices. Structure and operations of money and financial institutions. Special attention given bimetallism, the gold standard, the money market, and the relation of money and credit to prices. Prerequisites: Econ. 51, 52. 3 credits. Daily 9. Second session. M357. Murray

EDUCATION

E. A. JACOBSEN, JOHN C. CARLISLE, STANLEY S. RICHARDSON, L. G. NOBLE, Professors; CASEEL BURKE, KEITH R. OAKES, EDITH SHAW, BEN VAN SHAAR, Assistant Professors; PEARL S. BUDGE, D. H. LUDLOW, Instructors.

Visiting Faculty

W. R. BLUNDELL, JOHN A. BUELKE, LOVELLE DOWNING, ELIZABETH GUILFOIL, H. M. HAMLIN, FAUN HOGGE, RALPH G. NICHOLS, HELEN F. OLSON, EARLE RUGG, VICTOR E. SCHMIDT, J. G. UMSTATTD, MARGARET WILLIAMS.

106. Student Teaching in Elementary School. Credit arranged. Enrollment only on consultation with instructor. Shaw

109. Methods and materials for Teaching Elementary Science. A course designed to give practical help to elementary school teachers who wish to teach science more effectively. Various areas of science are examined from the viewpoint of elementary school children, and related teaching techniques and materials are considered. Emphasis is placed on the construction of homemade equipment, the provision of science experiences outside the classroom, and the development of scientific attitudes. 3 credits. Daily 10. Schmidt

109b. **Teaching of Arithmetic.** Will deal the modern viewpoints and techniques of teaching arithmetic, and provide opportunity for creating instructional materials and devices. 3 credits. Daily 11. Second session.

Burke

111. Principles of Secondary Education. The background and present status of the secondary school in the United States. Problems of objectives, curriculm, methods, and pupil personnel are considered. 3 credits. Daily 10. Noble

113. **Principles of Guidance.** Major emphasis given to organization of guidance as a service, including individual and occupational differences, tests, measurement, and counseling. 3 credits. Daily 8.

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. 3 credits. Daily 9.

Van Shaar

124. **Methods of Teaching Farm Mechanics.** Scope of mechanics in agriculture, lesson planning, course of study preparation, shop equipment and management, skill requirements, and supervised practice. Daily 9 to 11 except Friday. 3 credits. First session. **Richardson**

141. The School and the Community. An intensive study of ways and means of utilizing the social resources of the community in desirable educational programs. 1 credit. Daily 8. June 8-19. Rugg

142. The School and the Community. An intensive study of the economic resources of Utah and the intermountain area. The course is designed to help teachers prepare for guiding community studies by their pupils. Designed for both elementary and secondary school teachers. 2 credits. Daily 8. June 22 to July 17. Blanch

143. Public Speaking for School Administrators. The course is designed to offer practical help for school administrators in the public speaking aspects of their school-community relationships. 1½ credits. Daily 8. June 29 to July 17. Nichols 151. Methods and Materials for Teaching Secondary Science. A

151. Methods and Materials for Teaching Secondary Science. A course dealing with the presentation of science concepts in the classroom, laboratory, and field. Considerable time is devoted to plamning and developing effective science teaching materials, techniques, and programs. Special emphasis is given to means of teaching habits of critical thinking. 3 credits. Daily 9. Schmidt

152. Workshop in English for Secondary Schools. The workshop will deal with all aspects of curriculum and methods in English in the secondary schools. Each participant will have opportunity to work on his particular problems and to develop suitable teaching guides. 5 credits. Daily 8-10. Budge and Olson

161. Audio-Visual Aids in Education. Emphasizes the importance of audio-visual aids in the school program. Building a working program in which are utilized the newest materials and techniques. 3 credits. Daily 9. Second session. Ludlow

162. Techniques and Development of Audio-Visual Aids. Theory and practice in the construction and use of visual-aids as an aid to teaching. 3 credits. Daily 1. Second session. Ludlow 181. School Finance. The importance of finances in a school sys-

181. School Finance. The importance of finances in a school system; principles and practices involved in collecting and distributing school revenues, with special reference to conditions in Utah. Problems of budgeting in school systems and in individual schools will be considered. Second session. Daily 11. Staff 182. History of Education. Major educational movements from early

182. **History of Education.** Major educational movements from early Greek to the present with emphasis on purposes, organization, instructional procedures, curriculum, etc., and their bearing on today's education. 3 credits. First session. Daily 2. **Noble**

195. Workshop in Elementary School Curriculum. Meeting two hours per day, the course will be developed along the workshop pattern in which class members will make an intensive study of the elementary school curriculum particularly with respect to its integrated aspects. In addition to participation in the class, students will be required to visit the demonstration school at periodical intervals where they will see in action such a curriculum for the middle grades. Daily 7-9. First session. Downing

196. Workshop in Language Arts in the Elementary School. An intensive study of the language arts in the elementary school, including spelling, reading, and English usage. Participants in the workshop will cooperate in the development of teaching guides for use in their own schools. 5 credits. Daily 9-11; 1-3. June 29 to July 17.

Guilfoile, Williams, Hogge

202. Modern Philosophies of Education. An inquiry into the sociological, psychological and the philosophical concepts that influence the course of education. 3 credits. Daily 8. Second session. Oakes 205. Reading and Conference. Provides for individually directed

205. **Reading and Conference.** Provides for individually directed study in subject of one's special interest and preparation. Credit and time arranged. **Staff**

208. Elementary School Supervision. An intensive study of problems in the field of supervision of the elementary school. Interrelationships among the staff members and cooperation with community leadership in developing the school program will be considered. Designed for elementary school principals, supervisors, and students in education preparing for such positions. 3 credits. Daily 8. Second session.

Buelke

213. Organization and Administration of Guidance. Development and evaluation of plans for utilization of school and community resources in guidance. 3 credits. Second session. Daily 9. Larsen

215. Secondary School Curriculum. An advanced course dealing with foundations of curriculum building in the junior and senior high school. Plans and procedures for organizing the faculty into curriculum study groups will be considered. Members of the class will have opportunity to develop course of study for their own teaching fields. 3 credits. Daily 10. Umstattd

223. Legal Aspects of School Administration. Emphasis is given to responsibilities and functions of local and district school administrators with interpretation of legal status, form, and procedure as established by statutes, legal opinions, and court decisions. 3 credits. Daily 11. Second session. Oakes

225. **Special Problems in Agricultural Education.** A consideration of needs of individual students and special types of service. Daily 8 to 9 for four weeks. 1-2 credits. First session. MA 220. **Richardson**

227. Utah School Survey. A study of the findings and recommendations of the Utah Public School Survey Commission. 3 credits. Daily 10. Second session. Jacobsen

228. School Business Management. An intensive study of the factors involved in the efficient business management of school systems and individual schools. For school administrators, clerks, and students preparing for these positions. $1\frac{1}{2}$ credits. Daily 9. June 29 to July 17.

Blundell

231. Supervision in the Secondary School. Principles of supervision applied to the secondary school. The role of the administrator as supervisor. Interrelationships among staff members and cooperation with community leadership in improving the school program will be considered. 3 credits. Daily 8. Umstattd

237. Problems in Secondary Education. An intensive study of selected current problems in secondary education. 1 credit. Daily 9. June 8-19. Rugg

241. Evaluative Procedures in Elementary Schools. Consideration to be given to the bases of evaluation, and modern evaluative techniques. Opportunity will be provided for individual development of district or school programs of evaluation. 3 credits. Daily 1. Second session.

Burke

242. Higher Education. A study of higher education in relation to its evolution, its role in society, its organization and administration, its curriculum, and its teaching staff. Designed to familiarize one with current problems confronting higher education. 3 credits. Daily 7.

Jacobsen

Problems in Elementary Education. A graduate course de-245 signed for administrators, supervisors, or other students working toward advanced degrees in elementary education. Major issues confronting the schools with respect to elementary education will be considered. 3 credits. Daily 9. Second session. Buelke

260. School Building Problems. A consideration of the essentials

260. School Building Problems. A consideration of the essentials in school buildings needed to serve today's schools. Detailed plans for elementary and secondary school buildings will be analyzed. 11/2 credits. Daily 10. June 29 to July 17. Blundell 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. Evaluating re-search literature is considered. Some attention is given thesis writing and problem soluted to recearch 2 andits. Daily 9 as a problem related to research. 3 credits. Daily 9. Carlisle

288. Special Problems in Agricultural Education. For teachers of vocational agriculture who desire to develop a more practical program for future, young, and adult farmers. Held during Agricultural Teachers Summer Conference. Daily 8 to 11 for one week. 2 credits. First Hamlin and Richardson session. Rural Arts Building.

ELECTRICAL ENGINEERING

LARRY S. COLE, Professor; CLAYTON CLARK, Associate Professor; WILLIAM L. JONES, Assistant Professor.

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.

ENGINEERING DRAWING

AUSTIN G. LOVELESS, Assistant Professor.

61, 62. **Engineering Drawing.** The use of drafting instruments, graphic solutions, applied geometry, lettering principles of shape and size description, sectioning, and standard elements and symbols which make up working drawings used in industry. Problems are included in sketching, and pictorial illustrations are made from orthographic views. 3 credits. Both sessions. Time arranged. TC 1. Loveless

93. Mechanical Drawing. An advanced course primarily for Technology students and those interested in drafting minor. Includes basic work in industrial drawing, including machine fasteners, developments for patterns, and the fundamentals of architectural, structural, welding, piping, and electrical drawings. Prerequisite: E.D 62. 3 credits. Both sessions. Time arranged. TC 1. Loveless

Note: The above courses will be taught provided a sufficient number (10 or more) students need and desire the course.

ENGLISH

WALLACE J. VICKERS, HUBERT W. SMITH, Professors; WENDELL M KECK, MOYLE Q. RICE, Associate Professors; MAXWELL D. EDWARDS, Assistant Professor; BLAIR HANSEN, ANNE SMITH, Instructors.

1. College Grammar. A thorough study of the English sentence, fundamental principles of the English language, and of English usage. The course should be helpful to teachers of English and language arts at all school levels. 5 credits. Daily 10-12. Second session. L305. Vickers

 Scientific Vocabulary. A study of word formation and derivation as a means of understanding scientific terms of increasing vocabulary.
 3 credits. Daily 10, L309. Hansen

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 writing; demands clear, forceful expression, and requires a full third of a student's time. 5 credits. Daily 9. Both sessions. L307.

Rice, H. W. Smith

24. Children's Literature. Introduction to the prose and poetry of childhood. Helpful to teachers and parents. 3 credits. Daily 10. First session. L301. A. Smith

40. World Literature. A survey course including a study of epic and romance, tragedy, comedy, and satire as these forms have appeared in Greek, Roman, Italian, French, and German literature. 3 credits. Daily 8. First session. L301. Hansen

110. Advanced Composition. For students who have taken English 10 or 11; may be taken in place of English 19 by students who have had English 17 and 18 and who have transferred from Forestry or Engineering; may be taken by transfer students who have six credits in composition. Emphasizes selection and clear organization of information. 4 credits. M.T.W.Th. 9. Both sessions. L307. **Rice, Edwards**

111. Technical Writing. Emphasis on bibliography, research methods, and final form of the technical report. Open to juniors and seniors only. 3 credits. Daily 8. First session. **Keck**

190. The Romantic Period. A brief study of the predecessors of romanticism; a study of the literature from 1798-1832, with emphasis on poetry. 5 credits. Daily 10. Both sessions. L307. Rice, Edwards

203. Tragedy. A study of the theory and practice of tragedy from Eschylus to the present. 3 credits. Daily 9. L301. Vickers

211. **Bibliography and Research Methods.** An intensive course in preparation of bibliography, use of source materials, and other problems of thesis writing. Open to graduate students only. 2 credits. M.T.W.Th. 9, L305. Keck

M.T.W.Th. 9. L305. 252. The New England Circle. Principal New England writers from Bryant to Henry Adams. 3 credits. Daily 8. L307. H. W. Smith

ENTOMOLOGY

DATUS M. HAMMOND, G. F. KNOWLTON, Professors.

102. Systematic Entomology. Each student must collect, properly mount and label a representative collection of insects containing at least 400 specimens, 125 species, and 15 orders, the collection to be arranged in phylogenetic sequence. Correctly place specimens in order. Two full day field trips will be taken. Prerequisite: Ent. 13 or 108. Time arranged. 3 credits. Either or both sessions. M228. **Knowlton** 103. Systematic Entomology. 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 specimens in families. Two full day field trips will be taken. To be taken only with the permission of the instructor. Prerequisite: Ent. 101. 3 credits. Time arranged. Either or both sessions. M228. **Knowlton**

210. Special Problems. Students may select or be 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. Time and credit arranged. Either or both sessions. **Staff**

250. **Research and Thesis.** For research connected with problem undertaken for partial fulfillment of requirements for Master of Science degree. Time and credit arranged. Either or both sessions. **Staff**

FOODS AND NUTRITION

UNA VERMILLION, Professor; EDNA PAGE, Assistant Professor. 5. **Principles of Nutrition.** The relation of food to the health of the individual; factors influencing the body's nutritive requirements; problems applicable to the interest of the individual student. Daily 10. 3 credits. First session. **Page**

24. Food Selection and Preparation. Principles of food selection and preparation. Open to all students. Lecture daily 1. Lab. T.W.Th. 2-5. 5 credits. First session. Page

101. 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 prerequisites. Open to any student. Class limit to twelve. Lecture T.Th. 10. Labs arranged. 11/2 credits. First session.

Vermillion

243. **Recent Developments in Nutrition.** Study of problems in nutrition selected according to needs of students. rPerequisite: Nutrition 141. Daily 8. 3 credits. First session. **Page**

160. **Special Problems.** Open to qualified students majoring in Foods and Nutrition upon consultation with instructor. Time and credit arranged. First session. **Page**

FOREST, RANGE, AND WILDLIFE MANAGEMENT

LEWIS M. TURNER, J. W. FLOYD, T. W. DANIEL, WILLIAM F. SIGLER, A. W. STOKES, G. H. KELKER, L. A. STODDART, Professors; A. D. SMITH, S. R. TOCHER, R. R. MOORE, J. B. LAW, Associate Professors; R. R. MOORE in charge of Summer Camp.

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. Seven 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 four instruction courses offered at summer camp with a total of nine credits, and students in the School of Forest, Range and Wildlife Management are required to take all four courses. This summer camp opens Monday, June 8, and continues for a period of seven weeks.

Forestry Management

96. Surveying. Practical field problems in surveying methods commonly employed in forest, range and wildlife management and developments. Type mapping. Lab. fee \$5.00. Summer camp (3) Staff 97. Forest Practice. Field studies in inventories, successional stages

97. Forest Practice. Field studies in inventories, successional stages and growth of stands of trees. Study of forest soils and related land uses. Lab. fee \$5.00. Summer camp (2) Staff

Range Management

98. **Range Practice.** Field practice in the problems of range land analysis and correlation of land uses. Lab. fee \$5.00. Summer camp (2) Staff

195. Range Problems. Individual study and research upon a selected range problem. (1-3) Staff

200. Range Thesis. Original research and study on a problem in range management. This course is open only to graduate students. (1-15)

Staff

Wildlife Management

99. Wildlife Practice. Integrated studies of wildlife populations in relation to other forms of life and to other land uses. Lab. fee \$5.00. Summer camp (2) Staff

170. Wildlife Problems. Individual study and research upon a selected wildlife problem approved by the instructor. Prerequisite: Wildlife 172. (1-5) Staff

270. Advanced Wildlife Problems. Research problem chosen, the project outlined and planned, and data collected by the student qualified for investigations in Wildlife Management. (5-15) Staff

GEOLOGY AND GEOGRAPHY

CLYDE T. HARDY, Assistant Professor.

1. Introductory Physical Geology. Introduction to study of geologic processes. 5 credits. First session. Daily 8-10. M287. Hardy

HISTORY

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

124a. The Renaissance (1250-1600). 3 credits. Second session. M-F 8, 1 hr. arranged. L303. Brite

127. Nineteenth Century Europe. Political and economic developments between 1815 and 1914. 3 credits. Second session. M-F 9, 1 hr. arranged. L303. Brite

132. History of the American Frontier. To the Mississippi. 3 credits. First session. Daily 8. L303. Ricks

276. Problems in the Constitutional History of the United States. 3 credits. First session. Daily 9. L303. Ricks

HOME ECONOMICS EDUCATION

HELEN L. CAWLEY, Associate Professor.

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 the home experience and the Future Homemaker's of America program. Prerequisite or parallel: Psychology 102a. 3 credits. Daily 9. First session. **Cawley**

199S. Special Problems in Home Economics Education. Independent study under direction of professor of a problem in home economics education developed around individual needs of students. 1-2 credits. Time arranged. First session. Cawley

210S. Research for Master's Thesis. Time and credit arranged. Cawley

HORTICULTURE

R. M. BULLOCK, Professor

156. **Special Problems.** 103 credits. First or second session. Time arranged. TB2. **Bullock**

204. **Research.** Original research in pomology or floriculture by graduate students taking a major or minor in horticulture. Registration by permission only. 1-10 credits. Time arranged. First session. TB2. Bullock

205. **Research.** Same as 204. 1-10 credits. Time arranged. Second session. TB2. Bullock

HOUSEHOLD ADMINISTRATION

WANETA A. WITTLER, Assistant Professor

55. **Family Finance.** Includes study of personal and family finance with emphasis on finance planning, investments and buymanship. 2 credits. First session. 9 M.T.W.Th. **Wittler**

49 or 149. **Principles of Home Management.** Includes a philosophy of homemaking and use of human and material resources as it relates to family living. 3 credits. First session. Daily 8. **Wittler**

150. Home Management House. Residence students are directed in practical management of home experiences. Required of all Home Economic majors. Elective for other students upon consultation with the advisor of Home Management House. Prerequisites: H. Ad. 49 or 149; F. N. 24 and 25. Time arranged. 4 credits. First session.

Wittler

160. Special Problems in Household Administration. Independent study under direction of professor of a problem in household administration in which upper division or graduate student has special interest or need. Consult department head before enrolling. Time and credit arranged. First session. Wittler

INDUSTRIAL EDUCATION

WILLIAM E. MORTIMER, Professor; G. MERRILL SHAW, Associate Professor, C. D. McBRIDE, Assistant Professor; CHARLES W. HAILES, VERN R. BEECHER, Instructors.

Visiting Faculty

ROBERT A. TINKHAM, A. E. ANDERSON

13. Driver Training. Designed for those who desire to learn to drive an automobile correctly and safely. Includes study of traffic rules and regulations essential to sound driving; physical qualifications and tests of drivers; general mechanics, operation, and servicing of the automobile; highway safety engineering; and actual supervised training in dual-controlled cars. 2 credits. First session. M.W.F. 3. Lab. arranged. T-7. Beecher

109. Course of Study Building in Industrial Education. Teaches students to prepare and use a course of study consisting of the outline, analysis, progress charts, lesson plans, instruction sheets, references, tests, and instructional schedules. Each student completes this work for one unit of intruction. 5 credits. First session. Daily 8-10. MA-219.

Shaw

111. **The General Shop.** Consists of a comprehensive study of the "General Shop" type of organization; its advantages and limitations; the content and organization of subject matter applicable to this type of organization, together with suitable methods of presenting subject matter. Class control and trends of the program are considered. 3 credits. First session. Lecture T.Th. 9. Lab. daily 1-3. MA-220.

Hailes, Anderson

113. Driver Education and Traffic Safety. To acquaint prospective teachers and others with available instructional materials in the field of driver education and the latest methods of presenting these materials in the classroom and on the road. Supervised practice is arranged for each student. First session. M.W.F. 2-4. Lab. arranged. T-7.

Beecher

118. Industrial Safety Education. Accident prevention in industry. A practical course for technical workers, supervisors, and foremen in the fundamentals of plant planning and operation for accident prevention. Special consideration is given to planning safety programs to meet the needs of particular situations as they are experienced by members of the class. 3 credits. First session. Daily 10. MA-220.

McBride

167. Special Problems in Industrial Education. For qualified students majoring in Industrial Education who wish to do specialized work not covered by other courses. Time and credit arranged. Either session. MA-221. Hailes, Shaw 251. Administration and Supervision of Industrial Education. The

251. Administration and Supervision of Industrial Education. The laws, regulations, and policies affecting Industrial Education programs; organization, supervision, and management necessary for successful operation of these programs. 3 credits. First session. Daily 10. MA-219.

Anderson

255. **Techniques in Writing Instruction Sheets.** Principles underlying development of instruction sheets for use in industrial arts and trade and industrial education programs. 3 credits. First session. Daily 8. MA-220. **Hailes**

267. **Reading and Conference.** Provides for study in advanced and specialized problems in Industrial Education. Problems are selected with approval of the department head. Investigation is carried on under direction of the major professor. Time and credit arranged. Either session. MA-102. Mortimer, Shaw

271. **Research and Thesis Writing.** Provides for individual work in 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. Either session. MA 102.

Mortimer, Shaw

275. Workshop In Project Development. A workshop for Industrial Arts teachers with emphasis on the design of projects for modern industrial arts shops. This course is planned to meet the needs of teachers for better designed projects which are in harmony with present day trends. MA-222. Tinkham

SUMMER SESSION

Section 1: First two weeks. Daily 8-11 and 2-5. 3 credits. Section 2: First session. Daily 1. 3 credits. 290. Advanced Studies Under Plan "B". Special library and semi-nar problems or studies designed to meet requirements for reports under plan "B". 2-3 credits. Either session. Time arranged. MA-102. Mortimer, Shaw

JOURNALISM

CARLTON CULMSEE, Professor

Special Problems in Journalism. 2 credits. First session. 185. Culmsee 186. Special Problems in Journalism. 2 credits. Second session. Culmsee

LANDSCAPE ARCHITECTURE

LAVAL S. MORRIS, Professor; KENJI SHIOZAWA, Assistant Professor 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 con-ducted to the National Parks in Southern Utah and Northern Arizona and from there to Phoenix, Arizona with stopovers on the way. It will last two to three weeks and will require a written report shortly after the termination of the trip. Photographs are required to supple-ment notes and observations. All students majoring in Landscape Architecture and Planning are required to take two travel courses before graduation. Time and credit arranged. First session. **Staff**

LIBRARY SCIENCE

KING HENDRICKS, Director of Libraries; MILTON ABRAMS, ELVA DEAN, JAMES TOLMAN, Assistant Professors; ANNE SMITH, Instructor.

100. **Reference Materials and Bibliography.** Principal reference tools in each field are studied. Reference materials for school, public, and college libraries are included. 3 credits. Daily 10. First session. Moore Library. Tolman

120. Cataloging and Classification. Classification of books accord-ing to the Dewey decimal system and cataloging instruction adapted primarily to the use of school and public libraries. 3 credits. Daily 9. First session. TJ6. Smith

121. Advanced Cataloging. A continuation of Library Science 120, which is a prerequisite to this course. 3 credits. Daily 9. First session. Room TJ4. Dean

150. School Library Administration. Theory of school library work with emphasis on demonstration and practical application. 3 credits. Daily 8. First session. Room TJ4. Abrams

155. Book Selection. Methods and principles of book selection and book ordering for school and public libraries. 3 credits. Daily 11. First session. Room TJ4.

156. Library Problems. Reading in professional library literature on current issues of librarionship, related especially to the school library. 3 credits. Daily 2. First session. Room TJ6. Smith 160. Art of the Book. The history of bookmaking and printing. 3 credits. Daily 1. First session. Room TJ4. Tolman

MATHEMATICS

V. H. TINGEY, Professor; MARY NELSON, Assistant Professor

34. Introduction to College Algebra. 3 credits. E304. Daily 10. Both sessions. Nelson

35. College Algebra. 5 credits. E304. Both sessions. Daily 9. Nelson

50. Descriptive Astronomy. 3 credits. M374. Daily 9. First session.

Tingey

MILITARY AND AIR SCIENCE AND TACTICS DEPARTMENTS 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: \$.05 per mile from home to Camp and return.

Army Cadets

Anti-Aircraft Artillery Fort Bliss (El Paso, Texas) Quartermaster Corps Fort Lee (Richmond, Virginia) Ordnance Corps 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.) Fort Lewis (Seattle, Washington) Armored Cavalry Fort Knox (Louisville, Kentucky) Camp Hood (Belton, Texas) Infantry Fort Benning (Columbus, Georgia) Fort Lewis, Washington

Air Force Cadets

The Department of Air Science and Tactics will offer A.S. 13 during the Summer quarter. This is the Spring quarter course. The freshman, upon completion, can enroll in the Fall quarter without repetition. A.S. 13 offers a study of the grand strategy of World War II and the projected strategy of future wars with emphasis on the modern polar concept of air power. It correlates the industrial power of nations or groups of nations with war strategy and potential. One (1) credit. First session. Lecture M.T.W. 11-1; Drill Th. 11-1. Room M.S. 207.

Staff

SUMMER SESSION

MODERN LANGUAGES AND LATIN

GEORGE A. MEYER, Professor; THELMA FOGELBERG, MARION L. NIELSEN, Associate Professors; ALDYTH THAIN, Assistant Professor; JESSE G. NELSON, GORDON PORTER, Instructors.

French

1. Elementary French. 5 credits. Daily 9 and 1. First session. M361. Staff

German

1. Elementary German. 5 credits. Daily 9 and 1. First session. M363. Staff

Spanish

1. Elementary Spanish. 5 credits. Daily 9 and 1. First session. M359. Staff

MUSIC

N. WOODRUFF CHRISTIANSEN, WALTER WELTI, Professors; JOHN PHILIP DALBY, Assistant Professor; GEORGE PAHTZ, MISCHA POZNANSKI, Instructors. **Visiting Faculty**

MAX DALBY, ROY E. FREEBURG, WILLIAM E. KNUTH, CLARENCE SAWHILL, DARRELL STUBBS

Instrumental Music

*18. Clinic Orchestra. All members of the orchestra 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 11 and 1. June 8-19. M32. Knuth *43. Clinic Band. All members of the band will register for this

course. Credit given as for music 18. Daily 9 and 3. June 8-19. M32.

Sawhill

71. Development of String Literature. A historical study of literature for string instruments from Corelli to the present time. Demonstrations of concert numbers. 21/2 credits. Daily 8. First session. M252A. Poznanski

176. Chromatic Harmony. Prerequisite: diatonic harmony. A study counterpoint based on techniques of the 16 century. For upper division and graduate students. $2l_2$ credits. First session. Time arranged.

M. Dalby

Chromatic Harmony. Prerequisite: diatonic harmnoy. A study 177. of chord embellishments. Analysis of corresponding musical literature. Composition in small forms. Daily 10. $2l_2$ credits. First session. M252A. Christiansen

184. String Ensembles. Offering an opportunity for trios, quartets, and other small units. One credit. Time arranged. M252A. Pahtz

190. Music in General Culture. A non-technical course aiming to increase the enjoyment and understanding of music lovers. Open to all interested persons. 21/2 credits. Daily 2. First session. Moore Library. Christiansen

204A. Band Methods and Materials. Methods and materials for the school band. Band organization and administration. Lectures, demonstrations, and discussions. 1 credit. Daily 11. June 8-19. Sawhill

204B. **Problems of the Band Director.** Continuation of 204B. 1½ credits. Daily 11. June 22-July 17. **M. Daiby**

206. Orchestra Methods and Materials. A course dealing with methods of stimulating and improving school organizations. 1 credit. Daily 4. June 8-19. M252A. Knuth

210. Development of Instrumental Forms. A historical study of instrumental forms as they developed through various periods. 21/2 credits. Daily 9. First session. M252A. Christiansen

220. Section Rehearsals. Enrollment limited. See departmental head. 1/2 credit. Daily 8. June 8-19. Staff

221A. Woodwind Clinic (Clarinet). An intensive study of the clarinet family with recommended methods of teaching. 1 credit. Daily 2. June 8-19. M. Dalby

221B. Woodwind Clinic (Double Reeds). Daily 10. 1 credit. June 8-19. Stubbs

224A. Band Instrument Techniques. Selection and teaching of students upkeep and repair of instruments. Discussion and demonstrations. 1 credit. Daily 3. June 8-19. M. Dalby

224B. Continuation of 224A. 1½ credits. Daily 3. June 22-July 17. M.Dalby

300. Thesis. Applicant must receive approval of department head. 5 to 10 credits. Time arranged. Staff

*All band and orchestra members will attend sectional rehearsals at 8:00 a.m.

During the Music Clinic a reading band, limited to teachers and selected students, will rehearse daily under the direction of Mr. Sawhill and Mr. Dalby.

Private Instruction

Credit will be given as follows:

7 lessons, 1 credit

11 lessons, 11/2 credits

15 lessons, 2 credits

21 lessons, 3 credits

See first section of catalog for fees. Time to be arranged with teacher selected.

50, 150. Piano.

56, 156. Wind Instruments.

60, 160. String Instruments.

66, 166. Pipe Organ.

Christiansen, Clark, Lundquist, Odd, Welti, Wasserman Dalby, Torbensen Christiansen, Poznanski, Pahtz. Clark

Vocal Music

26. Clinic Chorus. Open to all high school students. Those who meet college entrance requirements will receive one hour of college credit. June 8 to 19. Daily 10 and 2. Welti

126. Modern Choral Techniques. For directors who attend the choral rehearsals. June 8 and 19. Daily 10 and 2. Welti

135. Music Education in Elementary Schools. School music materials and practice for the elementary classroom teacher. Activities in singing, playing, rhythms, and creative music. For teachers, principals, and supervisors. No prerequisite. 3 credits. Daily 9. First session.

Freeburg

136. Music Education in Secondary Schools. Survey and practice of choral materials for junior and senior high schools. Methods of teaching vocal music will be emphasized. Prerequisite: the ability to read music and to sing. 3 credits. Daily 8. First session. Freeburg 153-253. Private Vocal Instruction. Time and credit arranged.

Welti

PHOTOGRAPHY

BERT V. ALLEN, Instructor

51. General Photography. Principles and pracitces 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-hour lab. 3 credits. Second session. Daily 1. T.Th. 2-5. TG. 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-hour labs. 3 credits. Second session. M.T.Th. 8, T.Th. 9-12. TG. Staff

PHYSICAL EDUCATION AND RECREATION

H. B. HUNSAKER, Professor; ISRAEL C. HEATON, Associate Professor; VAUGHN W. GORDON, LOIS DOWNS, Assistant Professors; RAY WATTERS, PAULINE FULLER, Instructors.

Visiting Faculty

GLENN ARNETT, LAURENCE E. MOREHOUSE

Service Courses

First Session

25.	Tennis (Elem.) Men and Women. 1 credit. Courts.	
	Section 1, Daily at 9.	Downs
	Section 2, Daily at 2.	Gordon
52.	Swimming (Elem.) Men and Women. 1 credit. Pool.	
	Section 1, Daily at 10.	Gordon
	Section 2, Daily at 2.	Staff
53.	Recreational Crafts. 1 credit. G-30.	
	the second s	Watters
54.		Watters
61.	Archery. 1 credit. F. H. Section 1. Daily 1.	Fuller
73.	Golf (Elem.) Men and Women. 1 credit. Course.	
	Section 1, Daily at 8.	Downs
	a 10 i	
	Second Session	
25.	Tennis (Elem.) Men and Women. 1 credit. Courts.	
	Section 1, Daily at 8.	Staff
52.	Swimming (Elem.) Men and Women. 1 credit. Pool.	
01.	Section 1, Daily at 9.	Staff
73.	Golf (Elem.) Men and Women. 1 credit. Course.	
	Section 1, Daily at 10.	Staff

^{168.} Social and Square Dance. 1 credit. M.G. Section 1, Daily at 1. Staff

PROFESSIONAL COURSES

First Session

55 & 154. First Aid and Safety. Standard American National Red Cross course in first aid with emphasis on practical se of the knowledge as applied to everyday life in varios occupations. Detailed demon-strations and practice. American Red Cross First Aid certificates may be obtained by students who pass a satisfactory examination. 3 credits. Daily at 9. Watters

85. Organization and Administration of Intramurals. Organization and administration of intramural sports in secondary schools. Sports, tournaments, units of competition, scoring systems, and co-ordination of intramural sports with physical education and athletics are considered. 3 credits. Daily at 10. Downs

106. Applied Anatomy and Physiology. The structure of the human body in relation to adaptations made by the healthy body during mild

and strenuous physical activity. Laboratory experience is included. 3 credits. Daily at 8. Morehouse 150. Dance Technique. Designed to teach techniques of a variety of dance types. Dances taught will be suitable for teaching purposes as well as for program material. 2 credits. Daily at 10. Fuller

153. Leadership in Dance. An advanced class in dance leadership to meet the needs of students who expect to teach social or square dancing in schools or churches. One quarter of social or square dancing should be taken as a prerequisite. Emphasis on methods of teaching group dancing and creation of original routines. A syllabus is required. 2 credits. Daily at 2. **Fuller**

157. Field Work in Recreation. (Prerequisite approval of department head). This course is designed to give practical experience in conducting recreational programs at playgrounds and campus 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. Credits arranged. Time arranged.

174. Life Saving and Water Safety. Prerequisite: Permission of the instructor. 2 credits. Daily at 3. Gordon

177S. Physical Education Curriculum for Elementary Schools. A course designed to give the theory of Physical Education for the Elementary grades. The various areas of elementary Physical Education program will be studied emphasizing Physical Education responsibility to the total education curriculum. 3 credits. Daily at 9. Arnett

180. Athletic Conditioning. Conditioning of men for the various sports. Principles, techniques and practices of athletic training. Special instruction given to taping, bandaging, massage and use of special methods and devices to prevent and care for injuries. 3 credits. Daily at 2. June 8 to July 20. Morehouse

182S. Material and Methods in Elementary Physical Education. A course designed for teachers desiring practical experience and knowledge of Physical Education activities for the elementary school grades with emphasis on current teaching techniques and methods. Class will acquaint students with games from each of the various areas of the elementary Physical Education curriculum. 3 credits. Daily at 1. Arnett

295. Problems in Physical Education. A course designed for graduate students. The course will deal with techniques of research, recognition of research problems, and a study of current research literature. 3 credits. Daily at 8.

Hunsaker

250. **Reading and Conference.** A course providing for individual directed study in Physical Education. Time and credit arranged. Hunsaker

271. **Research and Thesis Writing.** Provides for individual work in thesis writing with the necessary guidance and criticism. Time and credit arranged. **Hunsaker**

Second Session

157. Field Work in Recreation. (Prerequisite approval of department head.) This course is designed to give practical experience in conducting recreational programs at playgrounds and campus 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, emthods, and techniques gained in his prerequisite work. Credits arranged. Time arranged. Heaton

176. **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. Time arranged. First two weeks of second session. **Downs and Watters**

P. E. 158-258. Philosophy of Recreation. Designed, through wide reading and class discussion, to develop a sound philosophy of the importance of creative participation in wholesome leisure time activities to every member of our society. Recreation programs of various organizations are studied in an effort to understand the place of recreation in the world in which we live. Students are expected to read widely in areas related to recreation. 3 credits. Daily 8 to 10.

Heaton

299. Physical Education Seminar. A course designed for students who wish to do individual study on selected problems. It gives an opportunity for class reports and discussion. 3 credits. Daily at 8-10. Heaton

PHYSICS

ROLLAND PERRY, Professor; JAY O. JENSEN, Assistant Professor 3. Introductory Physics. 5 credits. First session. Daily 9-11. Room W110. 20. Machemica and Malagular Physica 5 credits. Path accession

20. Mechanics and Molecular Physics. 5 credits. Both sessions. Daily 8, Lab. M.W. 1 to 3 or 3 to 5. Room W110. Perry Other Courses Upon Sufficient Demand

PHYSIOLOGY

DATUS M. HAMMOND, CLYDE BIDDULPH, Professors;

GENE H. LINFORD, Instructor.

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. Second session. 5 credits. Daily 7-9. Room C212.

200. Special Problems, Physiology. Similar to 160 but for graduate students. Either or both sessions. Credit arranged. Room C20. Staff 260. Research and Thesis. Research connected with problem under-

taken for partial fulfillment of requirement for Master of Science degree. Either or both sessions. Time and credit to be arranged. Room C20.

Staff

POLITICAL SCIENCE

M. R. MERRILL, Professor; M. JUDD HARMON, Instructor. 102. International Political Relations. Psychological, economic, ra-cial, and other obstacles to international co-operation, as exemplified in recent events, including relations with Russia, aid to Western Europe, the North Atlantic Pact, control of atomic energy and other weapons of warfare. The program of the United Nations is discussed. First session, 3 credits, Daily 9, M356. Merrill 119. American Political Thought. The development of American

ideas concerning the State and political authority from colonial times to the present. The nature and purpose, modes of organizing and controlling political action in terms of historical and social origins; and applicability to modern problems. Second sessions. 2 credits. Daily 9. M356. Harmon

150. Recent Political Thought. Political ideas and political thinkers from the Utilitarians to the present time, with special emphasis on study of Karl Marx and his successors in the communist political philosophy. Second session. 2 credits. Daily 11. M356. Harmon 170. Current Problems. The summer school lecture program includes

discussions of many vital problems of our time. Students who wish to earn credit by attending these lectures may do so by enrolling at the time of registration. Reports will be required and a minimum of fifteen lectures must be included. 1 credit. Daily 11. First session. Staff

POULTRY HUSBANDRY

C. I. DRAPER, Professor; A. B. STEPHENSON, Associate Professor; J. O. ANDERSON, Assistant Professor.

1. General Poultry. Breeds, judging, incubation, brooding, feeding, marketing, designed to meet the needs of the students wishing a genaral knowledge of the poultry industry and the problems of production, and a foundation upon which other courses are built. 3 credits. Daily at 10. First session. AH-305.

101. **Poultry Production.** Poultry production problems, breeds, judg-ing, selection, feeding and management. 3 credits. Daily at 10. First session. AH-303. Staff

107. Poultry Feeds and Feeding. A study of nutrition problems, the feeds and methods of feeding. Developing rations for special needs and for farm mixing. Daily at 11. Extra hour arranged. Second session. AH-303. Prerequisite: Poultry 1. Staff

PSYCHOLOGY

ARDEN FRANDSEN, Professor; D. R. STONE, HEBER C. SHARP, Associate Professors; VERNON LARSEN, Director of Guidance Services, State Department of Public Instruction.

102. Secondary Educational Psychology. A professional course for prospective high school teachers intended to increase understanding of personality and to develop greater insight into conditions for effec-

tive 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. M280. Daily 10. Stone

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. 3 credits. First session. M281. Daily 9. 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. 3 credits. M281. Daily 11. Stone

145. Mental Hygiene. Common personal and social adjustment problems of normal persons. The course 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 or instructor's approval. 3 credits. First session. M281. Daily 2. Sharp

approval. 3 credits. First session. M281. Daily 2. Sharp 202. Psychology of Adolescence. A study of growth of psychological and social characteristics, of educational and guidance needs, and of adjustment problems met by adolescents in their schools, homes, and communities. Prerequisite: Educational Psychology. 3 credits. First session. M281. Daily 9. Stone

208. Advanced Educational Psychology of the Elementary School. Using the current literature—periodicals, yearbooks, and theoretical texts—, the elementary school curriculum, learning and methods of teaching, and provisions for individual differences will be studied intensively. The aims will be to find ways of improving instruction and also to help students develop graduate research studies through which instruction may be further improved. 3 credits. First session. M281. Daily 10. Frandsen

217. Research in Psychology. Credit and time arranged with the approval of a member of the Department of Psychology. 2-4 credits. Both sessions. Time arranged. Staff

281. **Psychometrics of Guidance.** For school counselors, personnel workers, social workers, and clinical psychologists. Consideration is given to 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. 5 credits. Both sessions. M280. Daily 1. Sharp

283. **Counseling.** 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 problemsolving interviewing; giving advice, assurance, persuasion, and information; play therapy; and use of controlled family, school, club or camp, community, and institutional environments. Prerequisite: General Psychology. 3 credits. Second session. M281. Daily 8. Larson

287. Occupational Information. Collection, classification and uses of occupational information in counseling. 3 credits. Second session. M281. Daily 2. Sharp

Educ. 213. Organization and Administration Guidance. 3 credits. Second session. M280. Daily 9. Larsen

UTAH STATE AGRICULTURAL COLLEGE BULLETIN

SECRETARIAL SCIENCE

V. D. GARDNER, Professor

65. Indexing and Filing. Practice in alphabetic, numeric, triplecheck automatic, subject, decimal, geographic, and soundex methods of filing. Indexing, coding, and filing of letters, cards, blueprints, catalogs, and other business forms. First session. 3 credits. Daily 10. M311.

86. First-Quarter Typewriting. For students who have had no previous training in typewriting. Designed to develop a thorough knowledge of the keyboard. Special attention to the developing of typewriting for personal use. First session. 1 credit. Daily 8. M306.

Staff

94. Burroughs Calculator. Practice in addition, multiplication, subtraction, and division on Burroughs calculators and the application of the machine to various business computations such as percentages, discounts, prorating, decimal equivalents, and constants. First session. 2 credits. Daily 9. M311.

99. **I.B.M. Machine Operation.** Theory and practice in the application of the I.B.M. machines to punch card accounting and statistical methods. Attention will be given to the latest techniques in sorting, tabulating, and summarizing of numerical data. First session. 2 credits. Daily 7-9. M29.

SOCIAL WORK

DON C. CARTER, Associate Professor.

162. Mental Hygiene. Social and cultural changes that have given rise to problems of adjustment. Reactions to stress: "preventive" growth and adaptation. First session: 3 credits. Daily 9. M353. Skidmore

165. **Culture and Personality.** The process of personality development, with emphasis on the influence of culture, social class, and the nature of personal experiences. 3 credits. Daily 10. 1 hour arr. Second session. M361.

178. **Adolescence.** The social behavior of the adolescent in relation to the groups, institutions and social structure in which he lives. 3 credits. Daily 9. 1 hour arranged. Second session. M361.

SOCIOLOGY

THEREL R. BLACK, WILLIAM DEHART, C. JAY SKIDMORE, Assistant Professors.

70. Introductory Sociology. Offered for students in all schools and departments of the college. Emphasis is placed upon developing the student's understanding of the social world about him, and how his social experience contributes to his personality development. Given as Soc. 70a in first session and as Soc. 70b in second session. Students desiring 5 hours credit are to take both sessions. Those desiring fewer credits may take either first session or second session. Soc. 10 or 70 is a prerequisite for all Upper Division Classes.

First session. 3 credits. Daily 9. M355. Second session. 2 credits. M.T.W.Th. 9. M355. DeHart Black

130. Introduction to Cultural Anthropology. Treatment of the attitudes, ideas, behavior, basic personality organization, and material results of selected primitive and contemporary cultures. Second session. 3 credits. Daily 10. 1 hour arranged. M355. Black 141. **Rural Community Organization and Leadership.** Analysis of forces and procedures at work in developing community organizations, with special emphasis on techniques of training to help make the community more effective. First session. 3 credits. Daily 10. M353.

DeHart

160. **Family Relations.** The social-emotional development of the child in the family. Marital adjustment; social-culture difference in family behavior; problems; ideological considerations. First session. 3 credits. Daily 8. M355. **Skidmore**

SPEECH AND DRAMA

CHESTER J. MYERS, Professor; REX E. ROBINSON, FLOYD T. MORGAN, Associate Professors; BURRELL F. HANSEN, GWENDELA THORNLEY, Assistant Professors; GEORGE TANNER, MARY JANE HANDY, Instructors.

Visiting Faculty

LEORA THATCHER, RALPH G. NICHOLS

4s. **Principles of Reading.** Effective oral and silent reading of literary selections. A preparatory course for understanding and appreciation of the printed page. Practice material includes both standard literature and everyday reading matter. 3 credits. Daily 9. Second session. M204.

Thornley

5s. **Extempore Speech.** Designed to meet the specific needs of professional people in the practice of their professions. 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. 3 credits. Daily 10. Second session. M204. **Thornley**

provided. 3 credits. Daily 10. Second session. M204. **Thornley** 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 problems. Recommended for everyone needing individual speech instruction, and to all speech majors. Special fee. Either session. Time and credit arranged. **Staff**

82s. **Radio Speech.** Analysis and development of the speech skills and speech forms as applied to radio. Development of acceptable standards of voice and articulation for radio presentation is emphasized. Effective organization and presentation of the various speech types utilized on the air-announcements, talks, program continuities, interview round-tables are included. 3 credits. Daily 9. First session. M204.

B. Hansen

107. **Speech Hygiene.** The techniques of normal speech and the development of normal and abnormal speech. Major consideration will be given to the prevention and correction of speech abnormalities. This course is primarily designed to fulfill the speech hygiene needs of prospective elementary school teachers. It is recommended for all secondary teachers. 3 credits. First session. Daily 8. **Handy**

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. 3 credits. Daily 10. First session. M203. Myers

124s. Oral Interpretation. Various literary forms are studied for platform presentation. The mastering of significant selections from great masters. Reading from manuscript and from memory. 3 credits. First session. Daily 9. Myers 166. Practical Theatre Production. 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 the 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 instructor. 2 to 9 credits. Daily 1, and by arrangement with the instructor. Studio Theatre. First session. M203.

Thatcher-Morgan

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. **Handy**

182. Radio Newscasting and Writing. Offered for credit in both Speech and Journalism departments. Study and application of principles of editing, organizing, writing and presenting news by radio. Three periods a week devoted to discussion and practice in writing and arrangement; two periods a week are held in the studios for analysis and presentation of news over the microphone. 3 credits. Daily 10. First session. M204. **B. Hansen**

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 arranged. Both sessions. **Staff**

200. Seminar in Speech. Emphasis on the various fields of Speech. Research problems. Either session. Time and credit arranged.

Staff

201. Thesis. Prerequisite: Graduate standing. Either session. Time and credit arranged. Staff

202. Seminar in Theatre. Prerequisite: Graduate standing. First session. Time and credit arranged. Morgan & Staff

203. Seminar in Public Speaking. Prerequisite: Graduate standing. Second session. Time and credit arranged. Staff

204. Seminar in Interpretation. Prerequisite: Graduate standing. First session. Time and credit arranged. Myers and Staff

206. Seminar in Radio. Prerequisite: graduate standing. Time and credit arranged. First session. B. Hansen and Staff

The Art of Listening. An intensive course dealing with "listening" as an aspect of the communicative arts. For teachers of language arts in elementary and secondary schools, and for others interested in this vital aspect of the education process. 1½ credits. Daily 10. June 29-July 17.

Public Speaking for School Administrators. The course is designed to offer practical help for school administrators in the public speaking aspects of their school-community relationships. 11/2 credits. Daily 8. Nichols

VEGETABLE CROPS

LEONARD H. POLLARD, Professor

160. Special Problems. Time and credit arranged. Both sessions. AH 310. Staff

210. **Research and Thesis.** Original research on vegetable crops and seed production or breeding problem for graduate students taking a major or minor in vegetable crops. One or more credits. Both sessions. AH 310. **Staff**

215. Special Problems. Time and credit arranged. Both sessions. AH 310. Staff

VETERINARY SCIENCE

WAYNE BINNS, Professor; M. L. MINER, Associate Professor; LeGRANDE SHUPE, Assistant Professor.

50. Artificial Insemination of Cattle. Outlined for training students in artificial insemination of cattle and to train technicians for doing insemination in the Artifical Breeding Associations in the State. Fulfills the requirements for the qualifications necessary for the student to be eligible to take the State Board Examination. 3 credits. Daily 8 to 5. June 1-13. First session. AH207. Miner and Shupe

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

210. **Research.** Outlining and conducting research on animal diseases. Both sessions. Time and credit arranged. Rm. VS. **Staff**

WELDING

97. Acetylene Welding. 3 credits. Daily 2-5. First session. A121. Kemp

WOODWORK AND BUILDING CONSTRUCTION

CHARLES N. MERKLEY, Associate Professor; D. H. SWENSON. Assistant Professor; ROSS A. NYMAN, Instructor.

61, 62, 63. Joinery and Millwork. Basic training in hand tool and machinery operations for students in Building Construction or for those who desire a working knowledge in wood for their own needs. The courses include 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. First session. Daily 10-1, 2-5, A162, A116, A166.

Merkley and Swenson

64. Building Construction. Steel square and roof framing. 2-5 credits. Daily 7-10. A162. Merkley and Nyman

171, 172, 173. **Cabinet Work.** The design and construction of furniture and cabinets including a study of the woods suitable for furniture and cabinet building, wood turning, inlaying, wood carving, and types of wood finishing. Projects are built in fine furniture and cabinets which include inlaying, overlaying, and carving. Prerequisites: W.W. 61, 62, 63. 2-5 credits. First session. Daily 10-1. All6, Al62, Al66.

Merkley and Swenson

ZOOLOGY

DATUS M. HAMMOND, Professor; J. S. STANFORD, Associate Professor;

GENE H. LINFORD, Instructor.

l. **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. 5 credits. Daily 7-9. First session. M-225. **Stanford**

111. Heredity. Facts and principles of inheritance, with emphasis on application to human beings. It is desirable but not essential that an introductory course in biology, physiology, or botany precede this course. 4 credits. Daily 9-11. First session. M-225. Linford

123. Natural History of Animals. The identification, natural history of habits, food, distribution and other features of common Utah animals. Also, methods of collection and preparation of specimens for study, display and storage. Major consideration given to insects, birds, and mammals. A considerable amount of laboratory time is spent in making observations in the field. Some long field trips are taken. Prerequisite: Zool. 1 or 3 and 4. 4 credits. First session. M-228. Stanford

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**

SUMMER SESSION

ABOUT THE VISITING FACULTY



GLEN W. ARNETT served for several years as director of Health and Physical Education in the Utah Department of Public Instruction, moving from this position a few years ago to accept a similar appointment in the San Diego school system. He has achieved recognition throughout the West in this field, an last year taught in the summer school at the University of Southern California.

HERBERT BARTLETT is a graduate of the U.S.A.C. Art Department and has done advanced work at N. Y. University. He has served as Supervisor of Jordan District for many years, and has given many lectures and demonstrations to teacher groups on art topics of timely interest. He has served as a faculty member at summer sessions at B.Y.U. and U.S.A.C. and is a member of the Curriculum Committee on Art for the Utah State Department of Public Instruction. He returns this year for his third assignment with the Summer School Art Workshop.





Dr. W. R. BLUNDELL is Assistant Superintendent of schools in charge of school buildings and business management at Evanston, Illinois. His Ph. D. is from Columbia where he worked with several field studies involving the evaluation of school buildings and the development of building programs.

PAUL A. BONIFAS: is Professor of Art, University of Washington. His background and training is in Paris, France, where he specialized in ceramics and pottery. In the U.S.A.C. summer school last year Professor Bonifas impressed students with his unique and sympathetic teaching methods and his unusual ability as a creative artist. It was in response to a strong student demand that he was invited to return again this summer.





Dr. H. HARDIN BRANCH is Head of the Department of Psychiatry in the University of Utah College of Medicine. He is known widely for his keen sight into problems of psychiatry and his ability as a speaker to convey his message to all types of audiences. He will serve as consultant to the Family Life Institute.

JOHN MASON BROWN is considered to be almost without a peer among American lecturers in the United States today. First known for his dramatic criticism he became Associate Editor of the **Saturday Review of Literature**. He has traveled widely, published many books and is now recognized for his work in literary criticism and his keen insight into National and International problems. He will lecture at the college daily throughout the week beginning July 13.





Dr. JOHN A. BUELKE is Associate Professor of Education at Western Michigan College of Education at Kalamazoo. He has supervised graduate work of students in elementary education in Michigan and has taught summer schools at the University of West Virginia.

Dr. OLIVER E. BYRD, M.D., is Professor of Education and Chairman of the Department of Hygeine at Stanford. He is an authority on Health Education and has conducted workshops in this field in different Universities in Western America. He was at the College in the summer of 1951 as a consultant to the Health Education Conference and returns in this capacity again this year.



SUMMER SESSION



HARRY COMBES is Head Basketball Coach at the University of Illinois. Since accepting the top position there, he has gained an unusually impressive national record in the basketball field. His team won the Big Ten Conference in 1949 and 1952. Previous to taking up college coaching he had won distinction as an athlete at Illinois, and subsequently coached basketball in Champaign High School where he established his reputation for winning teams.

MAX DALBY is Instructor in Instrumental Music at Ogden High School. His A.B. is from B.Y.U. and M.A. from San Diego State College. For three years he was supervisor of music in private schools at San Diego, preceeding which he was first chair clarinetist with the Utah State Symphony.





LOVELLE DOWNING is Supervisor of Elementary Education in the Modesto, California school system. Before going there she held similar positions in Idaho. Her M.A. is from Ohio State University. She has taught in summer schools in California and is returning to the College for a second appointment after being here in the summer of 1951.

MRS. THELMA FLANAGAN is Head of the Division of School Lunch in the State Department of Public Instruction of Florida. Nationally she is known as an authority in this field and comes to Utah to serve as lecturer in the three day conference here.





Dr. ROY E. FREEBURG is Chairman of Music Education at San Francisco State College. He will be remembered by Utah school people from his appearance at the Utah Education Association in the fall of 1951 as a speaker for the Department of Elementary Education and of Music Education. He is a member of the Board of Directors for the California— Western Music Educators Conference. He has published songs for elementary and junior high students, and he has been in great demand as a leader of music workshops in the Western States.

ELIZABETH GUILFOILE is co-chairman of the Committee on the Elementary Volume (in production) Curriculum Commission, Naional Council of Teachers of English. She is Principal of the Hoffman School at Cincinnati, Ohio. Her graduate work was at Columbia and she has taught summer school classes for teachers in Language Arts at the University of Indiana and at New York University.





Dr. H. M. HAMLIN is professor of Agricultural Education at the University of Illinois. He has had wide experience dealing with problems of agricultural education in high schools and has been in great demand as a consultant for conferences throughout the United States in this field.

FAUN G. HOGGE was for several years elementary supervisor in the school system at Rigby, Idaho, where her work in curriculum revision at the elementary level brought both State and national attention. She is at present completing requirements for the Master's Degree here at the College, and serving as a graduate assistant in the Department of Elementary Education.



SUMMER SESSION



Dr. WILLIAM E. KNUTH is head of the Music Department at San Francisco College. He has served widely in America as a guest instructor in music clinics dealing with both orchestra and chorus. This summer will be his third appearance as instructor in the U.S.A.C. Music Camp.

Dr. LAWRENCE E. MOOREHOUSE is Professor of Physical Education at the University of Southern California. His graduate work was at Iowa State University and during the war he served with the navy. He is author of several books including "Physiology of Exercise", "Swimming and Diving", "Kinesiology", and "Athletic Conditioning".





DELBERT NAPPER is a graduate of the U.S.A.C. Art Department and received his Master's Degree from U.S.A.C. in Education. Mr. Napper is a member of the Art Curriculum Committee and Supervisor of Art in Logan City Schools since 1945. He is recognized as a capable designer and an enthusiastic teacher with an excellent philosophy of the place of art in the education of the child.

Dr. HENRY NEUMANN is Leader of the Brooklyn Society for Ethical Culture and for many years has taught courses and lectured in the broad field of Character education. An understanding student of literature, his lectures are always characterized by genuine insight into problems of human behavior.





Dr. RALPH G. NICHOLS is Professor of Speech at the University of Minnesota. In recent years he has done considerable work and become recognized as an authority in the broad field of communications. He is especially interested in the art of listening, and will give courses on this subject during the three weeks he is at the College this summer.

MISS HELEN F. OLSON is a teacher of English in the Seattle School system. She is joint author of a series of English texts used in elementary and secondary schools. Last summer she was consultant for a workshop in the Teaching of English at the University of Utah and is returning for a summer at the College in response to requests from numerous secondary school teachers from this area.





Dr. EARLE RUGG is Head of the Division of Education at Colorado State College of Education, Greeley. Known for many years as one of America's leaders in Education he has helped to bring the institution at Greeley to its present high status in the field of teacher education. Author of several books, Dr. Rugg is particularly concerned about school and community relationships as well as graduate work in education.

CLARENCE E. SAWHILL is Director of Bands at the University of California, Los Angeles. Previous to that period he served for several years in the same position at the University of Southern California. Currently, President, of the College Band Directors National Association, he is recognized throughout America as a distinguished leader in this field. His experience includes ten years as a music educator in the public schools of the Mid-West before moving to California.



SUMMER SESSION



VICTOR E. SCHMIDT is a graduate of Cornell University with the Ph. D. in Geology. For several years he remained at this institution for teaching classes for teachers in the Teaching of Science. Recently he has been associated with the New York State Teachers College at Brockport, and during the past year has been visiting Professor of Science Education at Long Beach State College of Education, California. For five years he was editor of the Science Teachers Bulletin.

Dr. MILTON SILVERMAN is Science Editor of the San Francisco Chronicle. His Ph.D. is from Stanford University in biochemistry. For many years, however, in addition to continuing his research work he has specialized in reporting the scientific achievements of others. His book "Magic in a Bottle" became practically a best seller and in 1948 he was a participant in the exploration into the heart of China which returned with the "Dawn Redwoods". His one week series of lectures in the Summer School will deal with scientific subjects.





DARREL STUBBS will be remembered in Utah as a distinguished young performer on the oboe. He played for several seasons with the Utah Symphony and at present is doing graduate work in music at the University of Indiana.

MISS LEORA THATCHER still maintains her home in Logan, although for a number of years she has been recognized as an actress in the New York Theatre. Perhaps best remembered for her role in "Tobacco Road" which after a long run on Broadway toured the country, she has more recently been active in both radio nad television work as well as current Broadway plays. While at the college this summer she will do the principle role of the main theatre workshop production and serve as a consultant in other activities in this field.



UTAH STATE AGRICULTURAL COLLEGE BULLETIN

ROBERT A. TINKHAM is now associated with the Department of Industrial Arts Education at the University of Illinois. As a graduate student with Dr. Wm. J. Micheels, he gained distinction for his achievement in the field of project planning in Industrial Arts and in Industrial Arts Design. He has his Ph. D. from the University of Minnesota.





Dr. J. C. UMSTATTD is Professor of Secondary Education and Chairman of the Department of Curriculum and Instruction at the University of Texas. Previous to that time he was with Wayne University at Detroit. He is probably best known for his book "Secondary School Teaching" which first appeared in 1937, although he is the author of many other publications in the field. For two years immediately following the war he was Chief of Education in the Biarrits, France, American University. Last summer he was visiting professor at Harvard.

C. B. "BUD" WILKINSON is head football coach at the University of Oklahoma. He has been in great demand to serve in coaching schools throughout the country. Very few men in football can equal his record. At Oklahoma he has compiled, over a six year period, 54 victories, 7 losses and 2 ties. In 1951 he was named National Coach of the Year. Of his players, eleven have been elected to first positions on All American Teams.





MARGARET WILLIAMS is supervisor of elementary education in the Granite School District in Utah. She has been active in Elementary Education in Utah for many years and often serves on state committees in dealing with teaching and supervisory problems particularly in the social studies and language arts field.

SUMMER SESSION

APPLICATION FOR SUMMER SESSION HOUSING RESERVATION

Utah State Agricultural College

Instructions: Print or use typewriter. A deposit of \$5.00 for domitory or \$10.00 for apartment accommodations must accompany this application if you wish a place reserved. In the event that you are unable to come, notify us by June 10 and a refund will be granted.

Applicant's full name Sex Date							
Tuli name Sex Date							
Present Address							
Applicant's year in collegeAgeMarital Status							
If married, state number in family group							
Dates of period for which applying: From19to							
19							
Housing desired: 1st choice 2nd 3rd							
Check for \$5 or \$10 enclosed Money order enclosed							
I am planning to attend and will send deposit later.							
I plan to arive on (date)							

Mail to: College Housing Manager Utah State Agricultural College Logan, Utah

UTAH STATE AGRICULTURAL COLLEGE BULLETIN

Registration procedures at the College are made more convenient for all concerned if the student submits an application in advance. Please send in the form below at your convenience.

U.S.A.C. REQUEST FOR REGISTRATION MATERIALS

To the Registrar:

Date____

I am tentatively planning to enroll in the 1952 Summer Quarter. Please prepare registration materials for me. I expect to attend the session beginning ________ Print Name _______ Home Adress ______ Previously enrolled at U.S.A.C.? Yes [; No.]; Residence [; Extension [; Correspondence]. First quarter and year______ Last quarter and year______ _____Student No., if assigned ______ Male [; Female]. Single [; Married]. Citizen of U.S.A.? Yes [; No]. Date of birth ______ High school last attended ______ City and State _______ Other colleges attended, with location _______

Other Summer Schools in Rocky Mountain Area

Adams State Colloge, Alamosa, Colorado	June 10 to August 12
Brigham Young University, Provo, Utah	June 15 to August 21
Colorado A & M College, Fort Collins	June 22 to August 14
Colorado College, Colorado Springs	June 15 to August 7
Colorado School of Mines, Golden	July 13 to Sept. 9
Idaho State College, Pocatello	June 8 to July 31
Montana State College, Bozeman	June 15 to August 24
Montana State University, Missoula	June 15 to August 21
University of Colorado, Boulder	June 15 to August 25
University of Denver, Denver, Colorado	June 22 to August 28
University of Utah, Salt Lake City	June 13 to August 28
University of Wyoming, Laramie	June 15 to August 15
Western State College of Colorado, Gunnison	June 8 to August 7

RECREATION EVENTS AND LYCEUMS

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 evening lyceum programs. Events will be announced in the weekly edition of Student Life. The Summer School activity card admits students to all lyceums, lectures, theatre workshop productions, summer school parties, and similar activities.

The following major activities are announced in advance so that students can plan accordingly:

June 8, 9,	10 —	Theatre	Workshop	production,	a Nineteenth
		Century	melodram	ia	

- June 18 Music Camp Concert, Vocal and Orchestra
- June 19 Music Camp Concert, Band
- June 25 Old Juniper Hike and Party
- July 3-6 Yellowstone Park Trip Approximate cost per person, \$25.00
- July 9 Annual Smorgasbord for students and faculty
- July 11 Trips to Bear River Bay Bird Refuge and to Minnetonka Caves near Bear Lake
- July 13-16 Theatre Workshop Production
- July 17-20 Southern Parks Trip Approximate cost per person, \$25.00
- July 23-31 Aggie Ranger Hike to primitive area of Yellowstone Park. See Physical Education 176 for particulars.

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 School.

Calendar for Summer School 1953 and for Academic Year 1953-54

Summer Quarter, 1953

June 2, Tuesday, 8:00 a.m. June 6, Saturday June 8, Monday June 9, Tuesday July 17, Friday July 20, Monday July 24, Friday Aug. 21, Friday Sept. 8, Tuesday Sept. 8, Tuesday

Sept. 21, Monday Sept. 24, Thursday Sept. 25, Friday Sept. 26, Saturday Sept. 28, Monday Oct. 26, Monday

Nov. 25, Wednesday Nov. 30, Monday Dec. 15, Tuesday p.m. Dec. 18, Friday

Jan. 4, Monday Jan. 5, Tuesday Jan. 15, Friday

Mar. 9, Tuesday p.m. Mar. 12, Friday

Mar. 15, Monday Mar. 16, Tuesday Apr. 29, Thursday Apr. 30, Friday May 1, Saturday May 25, Tuesday p.m. May 28, Friday May 28, Friday evening May 29, Saturday Coaching School begins. Coaching School ends. Registration. Instruction begins. First session ends. Second session classes begin. Holiday. Second session ends. Engineering Camp begins. Engineering Camp ends.

Fall Quarter

First faculty meeting. Aptitude and other tests for new students. Registration, former students. Registration, new students. Instruction begins. Prospective graduates submit applications for candidacy to deans. Thanksgiving Recess, begins 12 noon. Classes resume. Examination period begins. Fall Quarter ends.

Winter Quarter

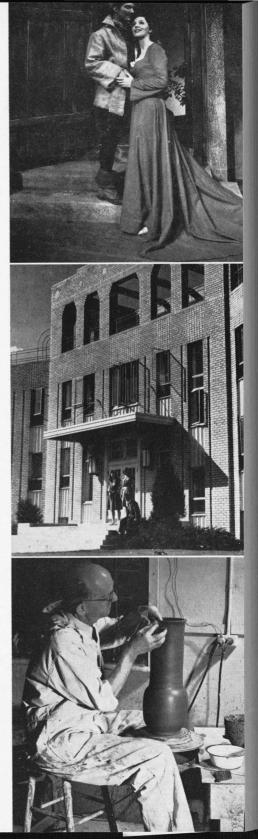
Registration. Instruction begins. Candidates submit applications for graduation to Registrar. Examination period begins. Winter Quarter ends.

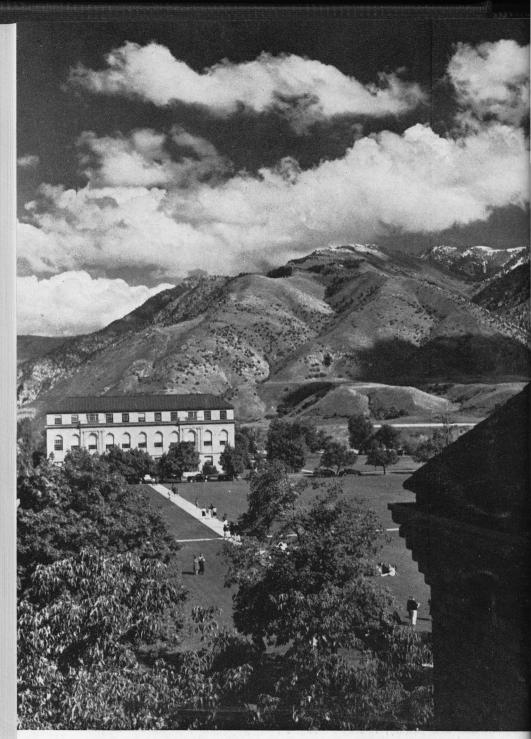
Spring Quarter

Registration. Instruction begins. Agathon begins. Agathon. Examination period begins. Spring Quarter ends, 5 p.m. Baccalaureate Service. 61st Commencement. Guest actress Consuello Young is shown with Vosco Call in a scene from the Summer Theatre Workshop production, "The Lady's Not for Burning". Miss Leora Thatcher will be on the staff as guest actress this year.

Housing facilities are ample at the College in the summer time. Lund Hall, on the campus, is conveniently located and offers excellent dormitory accommodations.

Professor Paul A. Bonifas, of the University of Washington, internationally known in ceramics and pottery, returns to Logan for a second summer.





Nature laid the foundation for a lovely campus at Utah State. Scenes like the above, looking east to the library and the Wasatch Mountains, are remembered by three generations of alumni members. The climate is delightful for summer study and recreation.