UNIVERSITY OF IDAHO
BULLETIN

VOLUME XXXV NUMBER 1
JANUARY, 1940

Catalog Number

For the 1939-1940 Sessions of the

University of Idaho

With Announcements for 1940-1941

PUBLISHED BY THE UNIVERSITY OF IDAHO, MOSCOW, IDAHO

Entered as second-class mail matter at the post office at Moscow, Idaho, October 5, 1906, under Act of July 16, 1894.

Contents

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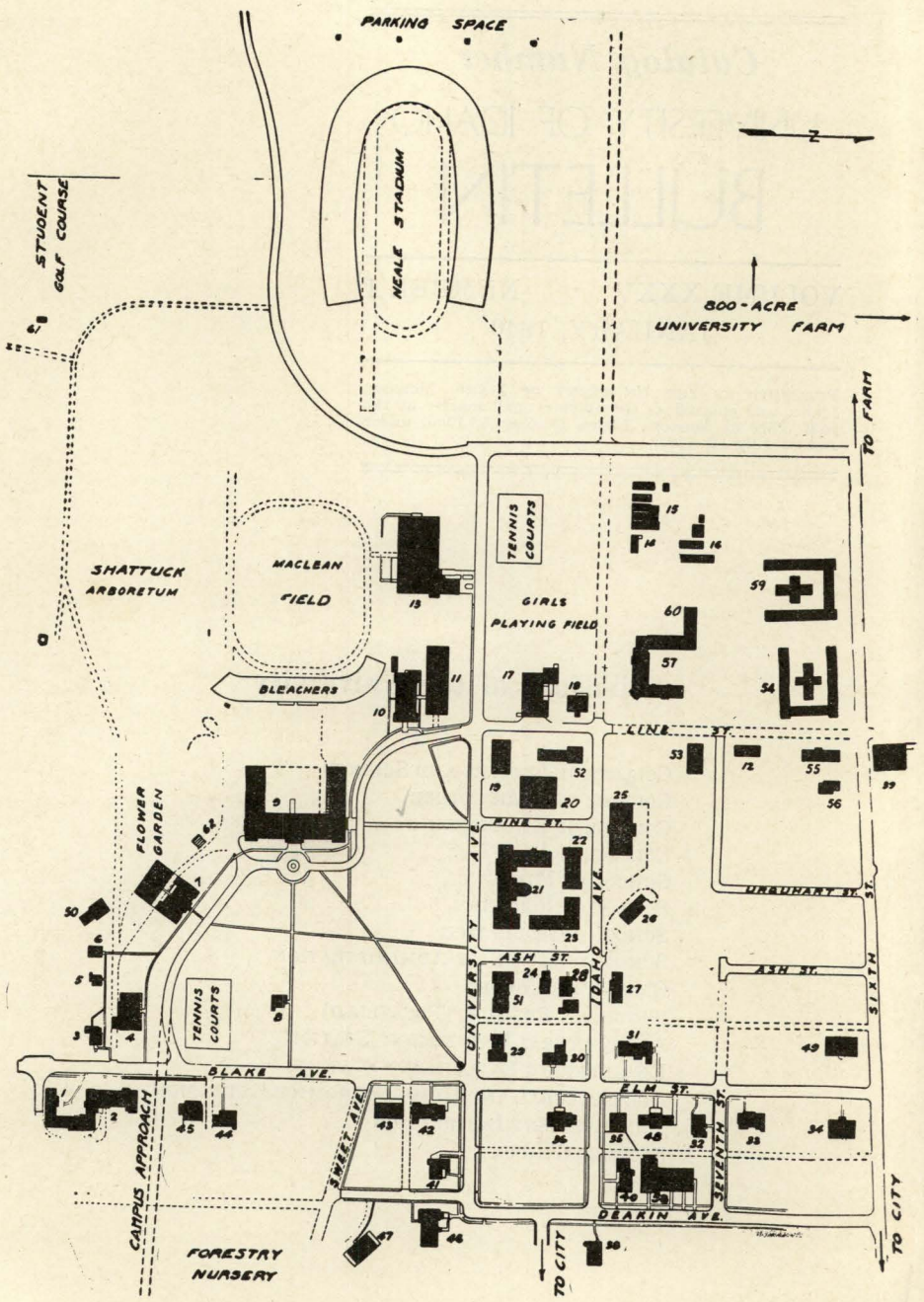
Divisions of the University

COLLEGE OF LETTERS AND SCIENCE
COLLEGE OF AGRICULTURE
COLLEGE OF ENGINEERING
COLLEGE OF LAW
SCHOOL OF MINES
SCHOOL OF FORESTRY
SCHOOL OF EDUCATION
SCHOOL OF BUSINESS ADMINISTRATION
GRADUATE SCHOOL
SOUTHERN BRANCH (POCATELLO)
AGRICULTURAL EXPERIMENT STATION
ENGINEERING EXPERIMENT STATION
AGRICULTURAL AND HOME ECONOMICS EXTENSION
NON-RESIDENT INSTRUCTION
SUMMER SCHOOL


PARKING SPACE
NEALE STADIUM
STUDENT GOLF COURSE
800-ACRE UNIVERSITY FARM
TO FARM
SHATTUCK ARBORETUM
MACLEAN FIELD
BLEACHERS
TENNIS COURTS
GIRLS PLAYING FIELD
FLOWER GARDEN
TENNIS COURTS
CLINE ST.
PINE ST.
ASH ST.
ASH ST.
UNIVERSITY AVE.
IDAHO AVE.
MAYHARY ST.
SIXTH ST.
BLAKE AVE.
ELM ST.
SEVENTH ST.
DEAKIN AVE.
SWEET AVE.
CAMPUS APPROACH
FORESTRY NURSERY
TO CITY
TO CITY

The University Campus

1. Hays Hall
2. Forney Hall
3. Center Cottage
4. Ridenbaugh Hall
5. Bartley Cottage
6. Music Hall Annex
7. Engineering Buildings
8. Music Hall
9. Administration Building
10. Women's Gymnasium
11. Art Building
12. Wood Conversion Laboratory
13. Memorial Gymnasium
14. Horticulture Sheds
15. Greenhouses
16. Agronomy Seed Houses
17. Mechanical Engineering and General Maintenance Shops
18. Dairy Building
19. University Hut
20. Metallurgy Building
21. Science Hall
22. Geology Building
23. Lindley Hall
24. Home Management House
25. Morrill Hall
26. Delta Tau Delta
27. Sigma Chi
28. Lindley Hall Annex
29. Phi Gamma Delta
30. Kappa Kappa Gamma
31. Beta Theta Pi
32. Alpha Chi Omega
33. Lambda Chi Alpha
34. Alpha Phi
35. Delta Gamma
36. Phi Delta Theta
38. Pi Beta Phi
39. Heating Plant
40. Alpha Tau Omega
41. Kappa Alpha Theta
42. Delta Chi
43. Kappa Sigma
44. Tau Kappa Epsilon
45. Gamma Phi Beta
46. L. D. S. Institute
47. Sigma Alpha Epsilon
48. Sigma Nu
49. Delta Delta Delta
50. Engineering Drawing Laboratory
51. Infirmary
52. University Classroom Building
53. Entomology Building
54. Idaho Club
55. Forestry Laboratory
56. Craig Cottage
57. Willis Sweet Hall
58. Student Union
59. Campus Club
60. Chrisman Hall
61. Golf Course Clubhouse
62. Old Steps Memorial

Calendar

1940-41

FIRST SEMESTER

	1940
Last Date for Mailing Permits to Register to New Students	Sept. 19
General Faculty Meeting	Sept. 25
Freshman Days	Sept. 26–27
Registration Days	Sept. 27–28
All University Exercises Begin	Sept. 30
Final Date for Registration of Graduate Students without Late Registration Fee	Oct. 5
Last Date for Change of Study List or Curriculum without Penalty for Failing Work	Oct. 12
Commercial Dairying Course Begins	Oct. 14
Final Date for Removal of Incompletes	Oct. 17
Armistice Day (Holiday)	Nov. 11
Midsemester Reports Due	Nov. 23
Thanksgiving Day (Holiday)	Nov. 28
Christmas Vacation Begins, 5:00 P. M. Friday	Dec. 20
	1941
Christmas Vacation Ends, 8:00 A. M. Monday	Jan. 6
Commercial Dairying Course, Second Term Begins	Jan. 6
Final Examinations	Feb. 1–8

SECOND SEMESTER

Registration Days	Feb. 10–11
All University Exercises Begin	Feb. 12
Last Date for Filing Applications for Baccalaureate Degrees in June, 1941	Feb. 15
Final Date for Registration of Graduate Students without Late Registration Fee	Feb. 18
Last Date for Change of Study List or Curriculum without Penalty for Failing Work	Feb. 21
Washington's Birthday (Holiday)	Feb. 22
Final Date for Removal of Incompletes	Mar. 1
Commercial Dairying Course, Second Term Ends	Mar. 14
Last Date for Filing Applications for Advanced Degrees in June, 1941	Mar. 15
Midsemester Reports Due (Friday)	Apr. 4
Easter Recess	Apr. 11–13
Memorial Day (Holiday)	May 30
Final Examinations	May 31–June 10
Baccalaureate Exercises	June 8
Commencement	June 9

SUMMER SCHOOL

Summer School Begins	June 16
Independence Day (Holiday)	July 4
Summer School Ends	July 25

PART I

General Information

General Information

THE State of Idaho maintains the University of Idaho "for the training of her future citizens to their highest usefulness in private life and public service."

Control of the University, together with all other public schools, is in the hands of the State Board of Education and Board of Regents of the University of Idaho. This board consists of five members appointed by the Governor, with the State Superintendent of Public Instruction ex-officio.*

The University of Idaho was established in January, 1889, by an Act of the Fifteenth Territorial Legislature. Classes began in October, 1892, with an enrollment of approximately 40 students.

From a humble beginning, before Idaho became a state, the University of Idaho has become one of the better-known state universities of the West. Its grand total enrollment numbers more than 22,000 students. Approximately 6,000 bachelor's and 900 master's degrees have been granted. In addition to instructing the youth of Idaho, the University extends technical and professional services to practically every industry and community of the State and reaches thousands through Agricultural Extension, Non-Resident Instruction, special short courses, and the Summer Session.

Although it is difficult to rate universities one against another, it is noteworthy that the University of Idaho has the two most significant marks of high rank—a chapter of Phi Beta Kappa, national scholastic society (since 1926), and one of Sigma Xi, national honorary scientific society (since 1922). Degrees and credits from the University of Idaho are accepted by every university in the United States.

The University of Idaho is on the fully credited list of the Association of American Universities; is an accredited member of the Northwest Association of Secondary and Higher Schools; is recognized by the American Association of University Women, the American Medical Association, the American Bar Association, and meets other standards as listed in the College Blue Book. The University also is a member of the Association of American State Universities, the American Association of Land-Grant Colleges and Universities, the Association of American Law Schools, and is accredited by the Association of American Medical Schools, by the Engineering Council for Professional Development, and by the Society of American Foresters.

STUDENT WELFARE.—In health and housing, recreation, physical exercise and athletic games, in religious activity, and in other ways the University of Idaho concerns itself with the welfare of its students. The student health program centers in the infirmary, one of the newest and finest buildings on the campus, where a full-time physician-director and six resident nurses care for the sick and undertake to develop among students a realization of the importance of good health and the means of attaining it. Entering students are given physical and medical examinations. A faculty committee on health and housing inspects all campus rooming houses occupied by students. Rapidly taking its place as the social center in student life is the Student Union, which has a restaurant, lounge, two ballrooms, student cooperative bookstore, and offices of the Associated Students and the student publications. The University has an all-year sports

* For members of the Board of Regents see Part VI.

program, reaching practically every student in the institution. Besides competition with other institutions in sports such as football, basketball, track, and baseball hundreds of students participate in the intramural athletics program of 15 sports, in which group teams meet each other. For everyone there is an excellent nine-hole golf course, eight tennis courts, a swimming pool, two large outdoor playing fields. Winter sports are growing in popularity at Idaho. Most students live in residence halls or in group houses under University supervision. Cooperating with these groups and counseling with individual students over their problems are a Dean of Women and a Dean of Men. Being a state-supported institution the University offers no sectarian instruction but, recognizing that most of its students come from devout homes, it cooperates with the 14 churches in Moscow in maintaining the religious contacts of its members in the student body. University students have 10 religious organizations, representing members of different faiths.

Physical Plant

The physical plant at Moscow is valued at approximately $2,900,000 and that of the Southern Branch at approximately $1,400,000. The University campus and college farm total about 1,100 acres. Agricultural substation farms include an additional 787.5 acres. The University has available approximately 12,200 acres of experimental forest land located from 8 to 40 miles from the University campus. The School of Forestry has received from the Forest Development Company of Lewiston gifts totalling 6,735 acres of forest land. The total holdings of the University in the Moscow Mountain Experimental Forest now amount to 6,895 acres, located 17 miles from the University campus. The Southern Branch campus proper covers 25 acres, with 150 acres of undeveloped land owned by the University immediately adjacent.

Few universities have a more beautiful campus than the University of Idaho. Its buildings offer an attractive architectural harmony. Grouped closely about the campus are 20 student-owned residences, 12 being fraternities and 8 sororities. Many of these student homes are outstanding examples of attractive architecture.

The massive Administration Building is the center of the Campus. It houses most of the administrative offices, the College of Letters and Science, College of Law, the School of Business Administration, School of Education, the University Library, and the auditorium. Other major buildings on the campus include Science Hall, Memorial Armory-Gymnasium, Women's Gymnasium, Infirmary, Engineering Building, Morrill Hall, Geology Building, Metallurgical Laboratory; Forney Hall, Hays Hall, and Ridenbaugh Hall, women's residences; Edward R. Chrisman Hall, Willis Sweet Hall, Lindley Hall, Campus Club, and the Idaho Club, men's residences; Dairy Building; Student Union; and more than a dozen buildings on the college farm. (See campus map at the front of the catalog.)

THE UNIVERSITY LIBRARY is primarily intended to serve the needs of the students and faculty of the University of Idaho in their study and research. It is a carefully selected and growing collection of books, periodicals, maps, and other printed material gathered to meet the varying requirements of undergraduate work and chosen with special reference to courses offered by the University.

In addition to professional and technical literature an effort is made to supply the best current and standard material for general and recreational reading. Each year some progress is made in acquir-

ing material for those interested in more advanced study and research, and it is hoped that as time goes on and as funds are made available, an adequate university library will be accumulated. Meanwhile emphasis is placed on making the greatest possible use of the collection already acquired. To this end the holdings are carefully cataloged and arranged, various indexes and bibliographical aids are provided, and a trained reference staff is on duty.

The library occupies two floors and the basement of the recently completed south wing of the Administration Building. The reading rooms are well lighted and attractive and provide excellent study accomodations. During the year the library is regularly open on week days from 7:45 a. m. to 5:00 p. m., and from 7:00 p. m. to 10:00 p. m., except Saturday when the closing hour is 5:00 p. m. On Sunday the library is open from 2:00 p. m. to 5:00 p. m. It is closed during official convocations and on legal holidays. During vacation the library is open approximately eight hours each week day, the exact hours being posted in advance.

Although the library is primarily for the use of the University community, all citizens of the State are welcome to use it as much as is possible without encroaching on campus needs.

Fields of Service

The University comprises 16 divisions, which will be found listed in detail in the front of this catalog. For latest enrollment figures and a complete directory of faculty see Parts VI and VII of this catalog. Except for the Pharmacy degree, granted at the Southern Branch, all of the degree-granting divisions of the University are at the Main Campus at Moscow. The work of the Southern Branch, which is a junior college except in Pharmacy, parallels the first two years at the Main Campus, enabling students to complete their work at Moscow for degrees without loss of time.

In addition to the Main Campus at Moscow and the Southern Branch at Pocatello, the University of Idaho maintains agricultural experimental farms at Moscow, Sandpoint, Caldwell, Aberdeen, and Tetonia; agricultural experimental field laboratories at Boise, Twin Falls, and Parma; agricultural and home economics extension offices in Boise, Pocatello, Burley, Rupert, and Moscow; extension service and cooperative field experimentation in nearly all counties; correspondence instruction in 162 separate courses; a Summer School at Moscow; and a wide range of public service touching all of the industries and professions of the State.

PUBLICATIONS

THE UNIVERSITY OF IDAHO BULLETIN series includes the *University Catalog;* information publications for alumni and prospective students; announcements of the several Schools, Colleges, and their curricula; research studies in Agriculture, Forestry, and Engineering; and the biennial report of the President.

AGRICULTURAL PUBLICATIONS.—The University publishes bi-monthly the *News Letter,* devoted to agricultural and 4-H Club news and articles. *Agricultural Experiment Station Bulletins* contain full accounts of results of investigations by the staff of the Experiment Station. *Agricultural Extension Bulletins* are published frequently to make available to farmers the latest agricultural knowledge in non-technical language. *The Annual Report of the Experiment Station* sets forth the program of the Station, its progress and results.

STUDENT PUBLICATIONS are *The Idaho Argonaut,* semi-weekly newspaper; *The Gem of the Mountains,* Associated Students' yearbook; *The Idaho Blue Bucket,* humorous quarterly; *The Idaho Engineer,* engineering students' semi-annual technical journal; *The Idaho Agriculturist,* agricultural students' annual; *The Idaho Miner,* mining students' semi-technical journal; and *The Idaho Forester,* semi-technical and popular annual publication of the students of the School of Forestry.

PUBLIC SERVICE BULLETINS.—State Bureau of Mines and Geology Bulletins present results of research and field investigation conducted by that division. Numerous publications of the College of Agriculture serve the needs of the agricultural industry of the State.

Student Residences

The University maintains the following residence halls:

Men	Capacity	Women	Capacity
*Idaho Club	118	*Ridenbaugh Hall	70
*Lindley Hall	150	Forney Hall	100
*Campus Club	118	Hays Hall	120
Chrisman Hall	108		
Willis Sweet Hall	198		

†RATES IN UNIVERSITY RESIDENCES.—Room rental is $36.00 a semester, payable in advance in Forney, Hays, Willis Sweet, and Chrisman Halls, and $27.00 a semester, payable in advance, in Ridenbaugh and Lindley Halls and in the Idaho and Campus Clubs. (Students who remain in these residences during the vacations must pay extra room rental on the above basis.) Board is $4.50 per week in University operated dining halls and must be paid two weeks in advance. Board in the cooperative dining halls averages approximately $13 to $14 per month. Students who room in University halls must also board there.

ROOM RESERVATION REQUIREMENTS.—A $5.00 room deposit is required of each applicant for accommodations in the University dormitories before reservation is effective. Should the applicant desire to cancel his reservation, he must notify the Bursar of the University in writing on or before September 1, 1940, otherwise the deposit will not be refunded.

This deposit may be sent to the Bursar at any time. Students who resided in the dormitories the previous semester have a prior right to room reservations providing their deposits are received on or before July 1, 1940. After this date, the remaining room reservations will be made in direct order of receipt of deposit.

Applications for room reservations should give the following information: full name (the use of initials is often confusing); address; dormitory preference (e.g. first and second choice). This information should be either typewritten or carefully printed. Checks or money orders should be made payable to the Bursar. Currency should not be sent through the mail.

Reservations unclaimed by noon of the day following the opening of University dormitories will be assigned to students on the waiting

* Dining halls operated under a cooperative plan.

† The University reserves the right to raise or lower rates for board and room in University halls at any time upon reasonable notice.

list in order of priority, *unless written arrangement has been made in advance.*

Room reservations are not transferable. Assignment of specific rooms in the dormitories will not be made until arrival of the student at the building where he has a reservation. Separate deposits and reservations are required for the Summer Session.

ROOM DEPOSIT REFUND.—A refund of deposit will be made only if the student moves from the hall on or before a specified date. For the University year 1940-41 this date will be October 2, 1940, for the first semester, and February 18, 1941, for the second semester. A check-out must be completed by midnight on these dates.

The Dormitory Director may grant a refund on a room deposit at a later date if in his opinion the circumstances in the particular case warrant such refund. Should the applicant remain in the hall permanently, this sum will be kept until the end of the college year as a guarantee deposit for the proper care of the rooms and furnishings. A refund of any balance remaining will be made to the student at that time.

WOMEN'S RESIDENCES.—Two hundred and ninety women can be housed by the University in the three women's halls. Rooms are arranged in suites for four and also in rooms for two occupants. Rooms are well lighted and heated and afford every comfort. Students are expected to provide the following articles: three pairs of single-bed sheets; three pillow slips; a counterpane; a pillow; suitable bedding; towels; bureau covers; mattress pad; drinking glass for room; soft soled slippers; couch cover; and one small rug, approximately 5 feet by 2½ feet in size. All articles should be plainly marked with the name of the owner. Much if not all the laundry can be done in the halls, as splendid equipment is provided. A charge of $1.50 a semester is asked for the upkeep of the laundries and use of the irons. Napkins are provided and laundered at a cost of $1.50 a semester in Hays and Forney Halls. All residents of the halls are requested to have their names plainly marked on the tops of their trunks. Bedding should be sent by parcel post several days in advance, addressed to the owner in care of the hall to which she has been assigned. Young women from out of town are required to live in the University residences or sorority houses unless expressly permitted by the Dean of Women to earn board and room in approved homes.

MEN'S RESIDENCES.—Six hundred and ninety-two men can be housed by the University in the five men's dormitories.

All men students residing in University dormitories are expected to provide the following articles: three pairs of sheets for single bed; three pillow slips; a bedspread; a pillow; suitable bedding; towels; dresser scarfs; drinking glass; broom; dust mop; fireproof wastebasket; and a small rug.

Additional information regarding the University residences may be obtained from the Director of Dormitories.

FRATERNITIES AND SORORITIES.—Twelve fraternities and eight sororities, all national, have chapters at the University of Idaho. Idaho's fraternity and sorority residences are among the finest possessed by any university. These twenty student residences, accommodating nearly 800 students, represent an investment of approximately $800,000 in private funds. Fraternities are: *Kappa Sigma, Phi Delta Theta, Beta Theta Pi, Sigma Nu, Sigma Alpha Epsilon, Phi Gamma Delta, Sigma Chi, Delta Chi, Alpha Tau Omega, Lambda Chi Alpha, Tau Kappa Epsilon,* and *Delta Tau Delta.* All are represented in the *Inter-Fraternity Council,* which unites them to serve the interests of the

University and to promote among themselves a spirit of good feeling and cooperation.

Sororities are: *Gamma Phi Beta, Delta Gamma, Kappa Kappa Gamma, Kappa Alpha Theta, Pi Beta Phi, Alpha Chi Omega, Alpha Phi,* and *Delta Delta Delta.* In the *Women's Pan-Hellenic Association* they are united to promote University and sorority interests and to prescribe rules under which invitations to sorority membership are extended.

Expenses

ANNUAL EXPENSE ESTIMATE.—Expenses for attending the University of Idaho vary with the tastes and financial means of the individual. The following table indicates the charges for which the University is primarily responsible:

University Expenses

	First Semester	Second Semester
General Deposit	$ 10.00 (refundable)	
Registration	5.00	$ 5.00
Health Fee	4.00	4.00
Extra-curricular	9.00	9.00
Membership, Associated Students	8.50	8.50
University Charges	$ 36.50	$ 26.50
Books and laboratory fees (estimated)	20.00	20.00
*Board and Room	77.00–117.00	77.00–117.00
	$133.50–$173.50	$123.50–$163.50

Added to the foregoing are widely varying incidental costs for which the individual is largely responsible, such as clothing, laundry, transportation, and incidentals; social and recreational expenditures; fraternal affiliations, etc. The minimum cost of a year at the University of Idaho, including personal expenses but not transportation, should not be set below $400. The majority, however, spend more; some spend much more. Students in technical and professional divisions are charged small fees for some laboratory classes which require special equipment. Music students pay special fees as described in the Music Department description in Part V of this catalog.

Since these expenses are spread throughout the year, a student coming to the University of Idaho in the fall needs about $125 to meet the first payments.

EMPLOYMENT.—University officials cannot promise employment to prospective students. The University, however, maintains a student employment bureau as a clearing house between prospective employers and qualified students. New students are strongly urged to come prepared to meet the expenses of the first year. Applications for employment should be addressed to the Dean of Men or Dean of Women.

For the past several years the federal government's National Youth Administration (NYA) has allotted funds for student employment at the University of Idaho. Applications for NYA employment should be made to the Administrative Secretary, University of Idaho.

* In University halls and cooperatives.

†FEES

To students coming to the University from points outside of the State of Idaho it is suggested that they bring their money in the form of money orders, certified bank drafts, or traveler's cheques, as in these forms they are easily negotiated without the long wait and inconvenience suffered by the student while personal checks are being sent through for collection by a local bank.

GENERAL DEPOSIT.—Each student is required, upon enrollment, to make a deposit of $10 with the Bursar. Against this deposit will be charged any damage to the University property for which the student is considered responsible. Such charges cover any breakage of laboratory equipment, damage or loss of library books, and shortage of military equipment. Classes frequently vote to charge special assessments against the balance of this fund.

REGISTRATION FEE.—A small registration fee is charged in all the higher educational institutions under the direction of the State Board of Education and Board of Regents of the University of Idaho. At the University this is $5 per semester.

HEALTH FEE.—The University maintains an infirmary with a resident physician and experienced nurses. Each student pays a health fee of $4 a semester, which entitles him to free clinical advice from the University physician and to the privilege of the infirmary under certain restrictions.

LABORATORY FEE.—Persons enrolling in certain laboratory courses are required to pay a nominal sum for materials and equipment used.

A.S.U.I. FEE.—A fee of $8.50 a semester is collected for the support of the various enterprises of the student body, known as the *Associated Students of the University of Idaho.* This entitles the student to a free copy of the semi-weekly student paper, the *Idaho Argonaut,* to admission to athletic contests, and to various other privileges. The A.S.U.I. also collects the class dues of 50 cents a semester. A.S.U.I. fees are fixed by the Constitution of the Associated Students.

EXTRA-CURRICULAR FEE.—An extra-curricular fee of $9.00 a semester is charged to pay a part of the cost of providing and maintaining facilities for athletic, social, and other extra-curricular activities.

LATE FILING FEE.—A late filing fee of $1 a day up to a maximum of $10 will be charged those students in residence whose registration blanks are not filed between the dates specified in the pre-registration schedule for the second semester.

LATE REGISTRATION FEE.—Students whose registration is not completed on either of the two registration days in the first semester or before the specified date in pre-registration procedure for the second semester, will be charged a late registration fee of $2 for the first day; and $1 additional each day thereafter up to a maximum of $5.

DIPLOMA FEE.—A diploma fee of $5 is charged all applicants for a degree from the University.

NON-RESIDENT TUITION.—Students not legal residents of the State of Idaho, who matriculate as undergraduates in a regular course beginning in September, 1940, are required to pay a tuition fee of $40 a semester, in addition to fees and charges required from students resident in Idaho. Legal residence cannot be acquired while attending

† The University reserves the right to raise or lower fees at any time upon reasonable notice.

college. *In the case of students who matriculated prior to September, 1940, the scale of fees as of the date of their matriculation shall continue to apply.*

REFUND OF FEES

GENERAL FEES.—Students who for any reason withdraw from the University during the first six weeks of a semester will be entitled to receive the following refunds on general fees paid for that semester:

> If withdrawal is made within the first two weeks of the semester eighty per cent (80%) will be refunded to the student; After two weeks and within four weeks, sixty per cent (60%); After four weeks and within six weeks, forty per cent (40%); After six weeks no refund will be allowed.

Application for these refunds must be made to the Bursar at the time of withdrawal and within the time limits mentioned.

ROOM RENT.—To receive a refund of rent in a hall, students must vacate their rooms on or before a specified date. For the 1940-41 University year this date will be October 2, 1940, for the first semester, and February 18, 1941, for the second semester. The check-out must be completed by midnight on these dates. If students occupy rooms longer than this time, rents are non-refundable. Students who remain in the halls during the Christmas vacation will pay extra room rental.

MUSIC FEES.—Tuition fees for private instruction in applied music may, upon prompt application by the students withdrawing, be refunded according to the following schedule: during the first two weeks of a semester, five-sixths; during the third and fourth weeks, two-thirds; fifth and sixth weeks, one-half; seventh and eighth weeks, one-third; ninth and tenth weeks, one-sixth. Application for this refund should be made to the director of the Curricula in Music, who will be responsible for the approval of the application.

GENERAL DEPOSIT.—The unused balance of the general deposit is refundable, provided withdrawal is in accord with the requirements of paragraph 21, under "Regulations," Part II.

CLASS DUES.—These are not University fees but are collected for the separate classes. They are held non-refundable.

Loan Funds

Note.—The Bursar is the proper University officer to contact for special information on any of the loan funds.

LOAN FUND OF STATE CLUB WOMEN.—In October, 1906, the Idaho State Federation of Women's Clubs established a scholarship fund for the University. Approximately $12,000 is now available. This money is loaned to junior and senior students, on note security, and is to be returned with interest at 6 per cent per annum from the time the borrower leaves college. The applicant must also be recommended by a State Federation Club and by his dean. Students interested should apply to Mrs. James J. Gill, 706 Deakin Avenue, Moscow, or to Mrs. F. W. Gail, 623 Urquhart Avenue, Moscow.

AMERICAN BANKER'S ASSOCIATION FOUNDATION LOAN FUND.—A loan of $250 is available each year to a senior student of banking and economics. Preference is given to former students in American Institute of Banking courses. The loan is without interest until the second January after graduation, when interest begins at the rate of 5 per cent. The loan is awarded by a committee comprised of two faculty members and one banker.

FUNDS OF CIVIC ORGANIZATIONS.—In 1921, the Rotary Club of Moscow voted an annual contribution of $100 to establish a fund to be loaned to worthy students, under supervision of the president of the University. The Moscow Chamber of Commerce pledged $100. The Chambers of Commerce of Coeur d'Alene and Kellogg contributed $100 each to this fund, and the Wallace Chamber of Commerce, $50. The Moscow Kiwanis Club is putting $200 a year into its student loan fund.

FUNDS OF STUDENT ORGANIZATIONS.—Funds of civic organizations, above described, have been increased by the Associated Students to a sum of $4,500, to which one per cent of the proceeds of A.S.U.I. fees is added each semester. An additional $675 of loan fund money has been accumulated from residues in treasuries of past classes and other student organizations.

KNIGHTS TEMPLAR EDUCATIONAL FOUNDATION.— Created by the Masons of Idaho belonging to the Commanderies of Knights Templar of Idaho for the purpose of assisting worthy young people of Idaho to finish their education. Loans are made to seniors, to those working on their master's degree, and to juniors on exception. William Wallin, Box 430, Pocatello, Idaho, chairman; Homer David, Moscow, secretary.

VERNON P. FAWCETT MEMORIAL FUND.—A $1,000 loan fund was established in 1921 by Mrs. W. H. Fawcett of Spokane in memory of her son, Vernon P. Fawcett, '14, who was drowned at Seaside, Oregon, August 15, 1921, while attempting to save the life of a young woman companion.

SURGICAL LOAN FUND.—A surgical loan fund of $300 was established in 1922 by Dr. E. R. Edson of Seattle, for the use of students who might need financial assistance in providing for surgical treatment. In 1930 the State Board of Education established a similar fund of $500.

Foundations, Scholarships, Prizes

THE BORAH FOUNDATION was established at the University of Idaho through the generosity of Salmon O. Levinson of Chicago, who donated to the University a fund to be known as the "William Edgar Borah Outlawry of War Foundation." The resolution of the State Board of Education and Regents of the University of Idaho, in accepting this Foundation explains the manner and purpose of its establishment in the following words: "In recognition of the priceless contribution of Senator William Edgar Borah to the cause of world peace through his masterly advocacy of the outlawry of war, and out of deep admiration and friendship for him, Salmon O. Levinson of Chicago offers to the Board of Regents of the University of Idaho to create and endow, to the amount of fifty thousand dollars, the William Edgar Borah Outlawry of War Foundation. The purpose of the Foundation is to establish in the University of Idaho a lectureship for the promotion of a better understanding of international relations, of the age-old struggle with the baffling problem of war, and of the vital part played in its solution by William Edgar Borah." The first lectures were given at the University in the fall of 1931 by Manley O. Hudson, Bemis Professor of International Law, Harvard University. These lectures have since been published in a book entitled, *Progress in International Organization.*

March 26, 1938, Mrs. Franklin D. Roosevelt visited the University under the auspices of the Borah Foundation and delivered a lecture on "Peace."

THE JEROME J. DAY SCHOLARSHIP.—Jerome J. Day of Wallace has established in the School of Mines a loan scholarship to be awarded each year to seniors in the School of Mines who are graduates of Idaho high schools and who, in the opinion of a committee of three, Mr. Day, the president of the University, and the dean of the School of Mines, are the most deserving applicants, as demonstrated by their college records. These loans are to run without interest until graduation and to bear interest at 6 per cent per annum from the date of graduation until repaid into the Day Scholarship Fund.

CARL RAYMOND GRAY SCHOLARSHIPS.—The Union Pacific Railway System offers a series of scholarships to the members of boys' and girls' clubs in agriculture and home economics, and students enrolled in Smith-Hughes Agriculture in high schools, in counties traversed by Union Pacific lines. The winner in each county receives as a prize either $100 to be applied toward a regular course in the College of Agriculture (or in Letters and Science in the case of a girl interested in Home Economics), or $50 to be applied toward a winter short course. The awards are being made as follows: $50 upon completion of registration and the students' establishment in the course to the satisfaction of the designated agricultural college official; $25 upon completion of registration for the second semester; and $25 upon completion of registration for the third semester of the course. The $50 award will be paid upon a similar certification of satisfactory completion of one month or more of work in a short course.

THE A. E. LARSON SCHOLARSHIP.—The A. E. Larson scholarship was granted by an act of the Board of Directors of the Sunshine Mining Company on September 5, 1938. The late Mr. Larson was for many years president of that great silver mining company. The scholarship was created to commemorate his name and his fine service and contribution to mining and the mineral industry in Idaho. This scholarship is to be awarded each year to four seniors in the School of Mines who have had their high school training in Idaho with preference given to those in the Coeur d'Alene mining district.

THE PHILO SHERMAN BENNETT PRIZE of $25 is awarded annually for an essay on a subject dealing with "The Principles of Free Government." The specific title is announced each year. The competition is limited to students in American Government.

THE POPE ORATORICAL CONTEST.—This is a contest sponsored by former U. S. Senator James P. Pope. Any student in the University is eligible to compete. Orations must be original, and they must not exceed a twelve-minute time limit. The contest is held the second week in March, and it is judged by five faculty members. First prize is $25; second prize, $15; and third prize, $10. The winner has his name inscribed on a bronze tablet and will represent the University in the Pacific League Oratorical Contest.

RHODES SCHOLARSHIP.—By the bequest of the late Cecil Rhodes, 32 scholarships at Oxford University are appropriated each year to students in the United States. For making the 32 appointments, the states of the Union are grouped into eight districts of six states each. In each state the committee of selection nominates from the candidates applying to it the two best men to appear before the district committee. Each district committee then selects from the 12 candidates so nominated not more than four to represent their states as Rhodes scholars at Oxford. States and district committees meet in December or January. Idaho is grouped with Washington, Oregon, Montana, Wyoming, and North Dakota. Each candidate must obtain the endorsement of the head of his college or university. He then should apply,

not later than the first of November to the secretary of the committee of selection for his state. The secretary for Idaho is C. G. Bowden, Boise. Further information may be obtained from Prof. Eugene Taylor, Chairman of the University of Idaho Rhodes Scholarship Committee.*

SEARS, ROEBUCK SCHOLARSHIPS.—Sears, Roebuck and Company initiated in 1939 twenty-five $100.00 scholarships (totalling $2,500.00) to aid farm boys and girls in the State of Idaho in the study of agriculture at the University of Idaho. The scholarships are awarded on the basis of activity in agricultural affairs, such as 4-H clubs and Future Farmer groups, and enthusiasm for practical agriculture as a life occupation. An applicant for one of these scholarships should get in touch with his or her county agricultural agent or high school teacher of Smith-Hughes agriculture.

SCHOLARSHIP AWARDS.—The Beulah Garrard Dale Scholarship Cup, presented by Mrs. H. C. Dale, is awarded each year to the women's group, the majority of whose members live in the same house or hall, which attains the highest scholastic average for the preceding year. A women's group winning the award three years in succession retains permanent possession of the cup.

In 1935 the Inter-Fraternity Council instituted a scholarship cup award. This award is made each semester to the men's fraternity affiliated with the council having the highest scholastic average the previous semester.

In 1936 the Idaho chapter of Phi Eta Sigma, national underclassman honorary, began to recognize outstanding scholastic achievement among the freshman men. Each year the name of the individual with the highest scholastic average for his first year at the University is engraved on a cup provided by the organization.

Alpha Zeta, agricultural honorary, presents each year a pen and pencil set to the sophomore student in the College of Agriculture who attains the highest grade average during his freshman year.

Sigma Tau, engineering honorary, presents each year an award to the sophomore student in the College of Engineering who attains the highest grade average during his freshman year.

Xi Sigma Pi, forestry honorary, presents each year to the most outstanding senior an award consisting of the initial fee in the Society of American Foresters and a year's subscription to the *Journal of Forestry*. In addition the names of the most outstanding man in each of the four classes are engraved on a plaque hung in Morrill Hall.

Alpha Kappa Psi, business honorary for men, engraves on a plaque the name of the senior man in the School of Business Administration who attains the highest average during the sophomore and junior years.

Phi Chi Theta, women's business honorary, presents each year to the senior woman in the School of Business Administration a key awarded on the basis of excellence in scholarship, personality, and character during her junior year.

Phi Upsilon Omicron, home economics honorary, engraves the name of the freshman woman outstanding in scholarship, activities, cooperation, and interest in Home Economics on a plaque which hangs in the department of Home Economics.

Delta Sigma Rho, debate honorary, presents each year an intramural debate cup to the women's group house winning the round robin tournament.

* Rhodes scholarship appointments have been temporarily discontinued for the duration of the war in Europe.

The Mary E. Forney Cup is awarded to the student living in Forney Hall outstanding in the following capabilities: scholarship, integrity, leadership, social adaptability, and physical development.

Mortar Board recognizes scholarship among women by engraving the name of the most outstanding sophomore woman on a plaque which is hung in the office of the Dean of Women.

The Sons of the American Revolution Trophy, awarded for excellence in early American History, is a bust of Washington, designed by Bianchini. This is held for a year by the group house or hall whose representative presented the best thesis the previous year in the courses in American History. The students winning first, second, and third places, receive, in addition, silver and bronze medals from the society and have their names engraved on the pedestal of the bust.

Student Organizations

GENERAL

The Associated Students of the University of Idaho is an organization of the entire student body chiefly concerned with extra-curricular activities. For administrative purposes these are under the general direction of a Graduate Manager, aided and advised by the Executive Board of the Associated Students. In athletics the University of Idaho is a member of the Pacific Coast Intercollegiate Athletic Conference. In debate and oratory the University is a member of the Pacific Coast Forensic League.

The Associated Women Students is an organization of all women students of the University, which seeks to regulate matters pertaining to the student life of its members which do not fall under the jurisdiction of the faculty, and to promote high standards of university life. Other women's organizations include the *Women's Athletic Association;* the *Women's "I" Club, Mortar Board* (senior women's national honor society); *Cardinal Key* (junior and senior women's national service organization); *Spurs* (sophomore women's national service organization); and *Dalda Dau Gamma* (women who reside outside the University halls and sorority houses.)

Men's organizations include the *"I" Club* (athletic lettermen); *Minor "I" Club* (minor sports lettermen); *Silver Lance* (senior men's local honorary); *Blue Key* (junior and senior men's national service fraternity); *Intercollegiate Knights* (underclassmen's national service organization); *Tau Mem Aleph* (men who reside outside the University halls or fraternities).

Other organizations include the *Cosmopolitan Club* (foreign students); *Idaho Clan* (children of former Idaho students); *International Relations Club;* and *House Manager's Club* (managers of group houses), *Independent Council.*

HONORARY, PROFESSIONAL, DEPARTMENTAL

Chapters of *Phi Beta Kappa* and *Sigma Xi,* the foremost college honorary societies, are found at the University of Idaho, *Sigma Xi* having been founded in 1922 and *Phi Beta Kappa* in 1926. At the beginning or end of the senior year, students who show evidence of scholarly tendency and future promise are chosen from the honor list of candidates for the Bachelor of Arts and Bachelor of Science degrees in the College of Letters and Science for membership in *Phi Beta Kappa.* Members of *Sigma Xi* are chosen from among senior

students who have given promise of future achievement in the field of science, and from among graduate students and faculty members on the completion of research work of merit. *Alpha Lambda Delta* is a sophomore women's and *Phi Eta Sigma* a sophomore men's honorary. Following is a list of other honorary, professional, and departmental organizations at the University of Idaho:

LETTERS AND SCIENCE.—*Phi Upsilon Omicron* (national home economics); *Sigma Delta Pi* (national honorary Spanish); *Alpha Tau Delta* (women's honorary pre-nursing); *Delta Sigma Rho* (national honorary debating); *Press Club* (men's journalism); *Theta Sigma* (women's journalism); *Idaho Chemistry Club* (chemistry majors); the *English Club* (fosters activities related to the work of the Department of English); the *Winged Helmet* (literary composition); the *Curtain* (acting, play-writing, or play production); *Home Economics Club* (affiliated with the American Home Economics Association and the State Federation of Women's Clubs); the *Pre-Medical Club* (pre-medical students); the *Attic Club* (art and architecture); and the *Maya Club* (architecture).

AGRICULTURE.—*Alpha Zeta* (national honorary agricultural); the *Agricultural Club* (students of agriculture).

ENGINEERING.—*Sigma Tau* (national honorary engineering society), the *Associated Engineers of the University of Idaho* (includes student chapters of the American Society of Agricultural Engineers, the American Institute of Electrical Engineers, the American Society of Mechanical Engineers, the American Society of Civil Engineers and the American Institute of Chemical Engineers.)

LAW.—The *Bench and Bar Association* (law students); the *Pre-Legal Association* (students preparing to enter the college of Law); *Phi Alpha Delta* (national professional legal).

MINES.—*Sigma Gamma Epsilon* (national professional for geology, mining, and metallurgy); the *Associated Miners* (affiliated with the American Institute of Mining and Metallurgical Engineers).

FORESTRY.—*Xi Sigma Pi* (national forestry honorary); the *Associated Foresters* (students and faculty of the School of Forestry).

EDUCATION.—*Kappa Delta Pi* (national honorary).

BUSINESS.—*Alpha Kappa Psi* (men's national professional); *Phi Chi Theta* (women's national professional); *Associated Business Students* (students in business).

MUSIC.—*Sigma Alpha Iota* (women's national honorary); *Phi Mu Alpha* (men's national honorary); *University Symphony Orchestra; Idaho Vandaleers* (mixed chorus); *University Singers; University Concert Band; University String Quartet; Treble Clef Club* (women).

MILITARY.—*Scabbard and Blade* (national honorary military).

PHYSICAL EDUCATION.—*Hell Divers' Club* (national society sponsoring swimming, life-saving, and first aid; men and women); *Manager's Club* (student athletic managers); and *Alpha Phi Chi* (intramural athletic managers).

Religious Activities

Religious activities among the students are promoted energetically by all of the Moscow churches, of which there are more than a dozen. Young peoples' societies and Sunday school classes of these churches are organized especially with a view to serving students' needs. Among the religious organizations of University people are the *Associated Students of the L. D. S. Institute; DeSmet Club* (Roman Catholic);

Episcopal Club; Kappa Phi (Methodist girls); *Lutheran Student Association of America; Roger Williams Club* (Baptist); *Wesley Foundation* (Methodist); *Westminster Guild* (Presbyterian girls); *Westminster Club* (Presbyterian). The *L. D. S. Institute* maintains a residence near the campus.

INTER-CHURCH COUNCIL.—The Idaho Inter-Church Council, formed in 1931, is an inter-denominational organization, representing the various churches having student membership. Its purpose is to foster cooperative effort in religious affairs among University students, such as the Easter Sunrise Service, the National Federated Students Day of Prayer, and semi-annual conferences with round-table discussions.

RELIGIOUS EDUCATION.—The Moscow L. D. S. Institute was established in 1928 by the Church of Jesus Christ of Latter-Day Saints in the belief that its members attending the University of Idaho should have the benefit of religious training. It is under the supervision of a director who serves as the religious teacher and adviser of students coming from L. D. S. homes.

The Idaho Institute of Christian Education was incorporated November 24, 1930, by a group of laymen and pastors of Evangelical Christian churches, for the purpose of making courses in Religion and Religious Education available to the students of the University of Idaho at Moscow. It is not part of the University but is under the management and direction of a board of trustees chosen by an association of laymen and pastors from the Baptist, Brethren, Christian, Congregational, Episcopal, Friends, Lutheran, Methodist, Nazarene, Presbyterial, and United Brethren churches.

Registration in courses offered by both institutes is open and without charge to any regularly matriculated students at the University. With the consent of his dean, any student may elect a total of eight credits in religious education toward a degree. Additional information and circulars concerning courses or facilities may be obtained from the respective directors.

PART II

Admission Requirements, Regulations, and Procedure

Admission to the University

APPLICANTS for admission to the University must present satisfactory evidence of good moral character.

Students are classified as graduates and undergraduates. Undergraduates are classified as regular students (freshmen, sophomores, juniors, and seniors) and special students.

CREDENTIALS.—Students applying for admission to the University are required to furnish credentials as follows:

(a) An original transcript of high school credits signed by the principal.

(b) Official transcripts and statements of honorable dismissal from each institution attended after high school graduation.

(c) Personal data on the regular application-for-admission blank.

Blanks for furnishing personal data and high school records may be obtained on application to the Registrar. College and normal school records should be furnished on the transcript blank of the institution at which the work was taken. All credentials should be sent directly to the Registrar, University of Idaho, Moscow, Idaho, not through the student. *Prompt attention to these details will avoid delay in registration and the additional expense of telegraphing.*

PERMITS TO REGISTER.—Applicants for admission whose credentials have been accepted will be mailed permits to register for the following semester. Applicants will be saved much inconvenience and uncertainty if all their credentials are received by the Registrar in sufficient time for the settlement of any question through correspondence. No permits will be mailed later than one week before the first day of registration for any session of the University, but applicants will be notified by collect telegram if credentials received after that time make them ineligible for admission.

ADMISSION AS REGULAR STUDENTS

ADMISSION BY CERTIFICATE.—Admission to the University by certificate is based upon credentials showing:

(a) Graduation from an accredited four-year high school and presentation of 15 acceptable units (Plan I) or

(b) Graduation from an accredited three-year senior high school and presentation of 12 acceptable units (Plan II).

A "unit" represents a high-school subject taught five times a week in periods of not less than 40 minutes' duration (laboratory 80), for a school year of at least 36 weeks. A certificate of secondary school record should be filled out and signed by the superintendent, principal, or other official of the school in which the work was done. It should show the length of each course in weeks, the number of recitations a week, the length of each recitation, and the grade of scholarship attained, including a record of all failures and conditions. All certificates accepted toward admission to the University become the property of the University, and are permanently filed among its records. They cannot be returned to the student, but certified copies will be issued if needed.

Academic units shall be defined as English (composition and literature), foreign language, mathematics, social science, and natural science.

Elective units may be taken from the academic subjects named as well as from vocational and other subjects commonly given in high schools, except that no credit will be given for the following:

(a) Military drill, spelling, penmanship, reviews, project work unless in conjunction with regular courses, and work which primarily is of the nature of extra-curricular activities.

(b) Less than one unit in foreign language, shorthand, typewriting, or bookkeeping.

(c) Less than one-half unit in any subject.

(d) More than one unit in physical education.

Requirements for admission to the various divisions of the University are shown in the tables under Plan I and Plan II.

PLAN I
Graduation From An Accredited Four-Year High School and Presentation of Fifteen Acceptable Units

The specific requirements and apportionment of required and elective units for entrance to the various divisions of the University are shown below. For admission with deficiencies in group requirements see page 26.

HIGH SCHOOL UNITS IN	DIVISIONS OF THE UNIVERSITY							
	Letters and Science	Agriculture	Engineering	Law	Mines	Forestry‡	Education§	Business
English	3	3	3	3	3	3	—	3
A Modern Language or Latin	2	—	—	2	—	—	—	2
Social Science	2	2	2	2	2	2	—	2
Mathematics Algebra	1	1	1	1	1	1	—	1
Plane Geometry	1	1	1	1	1	1	—	1
Advanced Algebra	—	—	½	—	½	—	—	—
Solid Geometry	—	—	½	—	½	—	—	—
Natural Science (unspecified)	2*	2*	1	2	1	2*	—	2
Physics	—	—	1	—	1	—	—	—
Unspecified Academic Units	—	—	—	—	—	2	—	—
Total Academic Units	11	9	10	11	10	11	—	11
Additional Academic, Vocational or Elective Units	4	6	5	4	5	4	—	4
Total Units Required	15	15	15	15†	15	15	—	15

* It is highly desirable for students planning to enter the College of Agriculture, the School of Forestry, or the B.S., B.S. (H.Ec.), or B.S. (Pre-Med.) curriculum of the College of Letters and Science to offer one unit in physics.

† Two years of college work also are required. (See page 27.)

‡ It is desirable for students planning to enter the School of Forestry to offer one additional unit in mathematics.

§ The requirement for admission to the School of Education is graduation from a four-year high school fully accredited by the State Board of Education.

PLAN II
Graduation from Accredited Senior High Schools Organized on the 6-3-3 Plan

1. Full admission to all divisions of the University shall be based upon 12 units completed in Grades X, XI, and XII.

2. Of the 12 units accepted for admission not to exceed three units may be non-academic. The academic units shall consist of a major (three units) and two minors (two units each) or four minors.

3. (a) English shall be either a major or a minor.

(b) Mathematics shall be a minor except that for admission to

the College of Engineering and School of Mines it shall be a major.

(c) At least one unit in *social science* and one unit in *natural science* must be included in the remaining academic units for admission to all divisions of the University. Students entering the College of Engineering or School of Mines should present physics as a *natural science.*

(d) A major or minor in foreign language shall be required for admission to the College of Letters and Science, College of Law, and School of Business Administration.

4. A major in foreign language may consist of a year of one language and two of another, but a minor must be a single language.

5. A unit of foreign language and a unit of mathematics may be accepted from work carried below Grade X toward a major or a minor although such course may not be counted as part of the nine required academic units.

The specific requirements for admission to the various divisions of the University are shown below. See a later paragraph for admission with deficiencies in group requirements.

HIGH SCHOOL UNITS IN	DIVISIONS OF THE UNIVERSITY							
	Letters and Science	Agriculture	Engineering	Law	Mines	Forestry§	Education‖	Business
English	2	2	2	2	2	2	—	2
A Modern Language or Latin	2*	—	—	2*	—	—	—	2*
Social Science	1	1	1	1	1	1	—	1
Mathematics Algebra	1*	1*	1*	1*	1*	1*	—	1*
Plane Geometry	1	1	1	1	1	1	—	1
Advanced Algebra	—	—	½	—	½	—	—	—
Solid Geometry	—	—	½	—	½	—	—	—
Natural Science (unspecified)	1†	1†	—	1	—	1†	—	1
Physics	—	—	1	—	1	—	—	—
Unspecified Academic Units	1–3	3–4	2–3	1–3	2–3	3–4	—	1–3
Total Academic Units	9	9	9	9	9	9	—	9
Additional Academic, Vocational or Elective Units	3	3	3	3	3	3	—	3
Total Units Required	12	12	12	12‡	12	12	—	12

* One unit may be earned in junior high school, in which case, however, the unit shall not count toward the nine academic units required from the senior high school.

† It is desirable for students planning to enter the College of Agriculture, the School of Forestry, or the B.S., B.S. (H.Ec.), or B.S. (Pre-Med.) curriculum of the College of Letters and Science to offer one unit in physics.

‡ Two years of college work also are required. (See page 27.)

§ It is desirable for students planning to enter the School of Forestry to offer one additional unit in mathematics.

‖ The requirement for admission to the School of Education is graduation from a three-year senior high school fully accredited by the State Board of Education.

SCHOLARSHIP REQUIREMENTS.—Students who qualify for admission under Plan I or Plan II, but who rank in the lowest one-fourth of their graduating class or who fail to present recommending grades in at least two-thirds of the required units will be admitted on warned

status. Unless otherwise restricted by the high school, recommending grades are those which are at least one "step" (letter or other symbol) above the lowest passing grade in a system using four passing grades, or, in a purely percentage system, grades which are in the upper three-fourths of the interval between the lowest passing grade and 100.

Students from accredited secondary schools who have completed the required number of acceptable units but have not graduated may be admitted upon special recommendation of the Principal, subject to the same grade regulations as graduates.

ADMISSION BY EXAMINATION.—Applicants for admission who have graduated from non-accredited high schools will be given a college ability test to determine their status in the University. All other applicants for admission to regular standing will be required to pass entrance examinations in fifteen units of acceptable work. Persons to whom either of these provisions may apply should write to the Registrar for detailed information and should send all available credentials regarding their previous work.

ADMISSION WITH DEFICIENCY IN GROUP REQUIREMENTS.—Students who qualify for admission to the University by certificate or by examination but whose preparatory work fails to follow the pattern of units specified in either Plan I or Plan II by the division of the University which they wish to enter may in most cases be admitted to that division with deficiences. Entrance deficiencies should be made up before the beginning of the sophomore year.

Students in the College of Letters and Science, School of Forestry, or School of Business Administration who present the specified number of academic units but are deficient in academic group requirements may make up the deficiency by college courses and without loss of college credit. Shorthand and bookkeeping up to a maximum of two units may be counted in lieu of academic units for this purpose by students in the School of Business Administration. Students who enter the College of Engineering or School of Mines with deficiencies in advanced algebra, solid geometry, or physics may make up the deficiencies in remedial sections of certain college courses to which the high school work is prerequisite. Other deficiencies are, in general, made up without college credit.

ADMISSION AS SPECIAL STUDENTS

Persons over 21 years of age, who are unable to meet the admission requirements for regular students and who desire to take special studies, may be admitted as special students upon presentation of satisfactory evidence that they are fully qualified to enter upon the work. Save in exceptional cases, students will not be admitted directly from the secondary schools to the status of special students.

Graduates of accredited high schools are not admitted as special students, but are expected to qualify for regular undergraduate standing in accordance with the general rules.

A special student is not eligible for any degree. Before being admitted to candidacy such student must attain regular standing and be in residence carrying a regular schedule of work for at least two years thereafter. Registration in any semester is dependent upon the record thus far made in the University.

ADMISSION TO ADVANCED UNDERGRADUATE STANDING

Students who have completed work in other universities and educational institutions of fully accredited standing with a satisfactory scholarship record, and who present certified statements of their records and honorable dismissal from each of the institutions attended

may be admitted to advanced standing. Credentials should include a certificate of secondary school record giving full information regarding the applicant's high school record, as well as separate transcripts from each of the institutions attended. These should be sent to the Registrar at least one month before the student expects to enter the University.

Students admitted to the University of Idaho from other educational institutions must have complied with the scholarship regulations for continuance in the institution or institutions which they have attended in addition to those which are applied to students enrolled in this institution. (See University Regulations, Sec. L and M.) Petitions for exceptions to these regulations should be presented to the Admissions Committee. Students entering the School of Forestry must have an average of "C" or better. (See also special requirements for admission to the College of Law.)

FROM NORMAL SCHOOLS.—Students from approved normal schools who present a satisfactory scholastic record are allowed credit for work which corresponds to University courses and given a class standing according to the number of their credits which may be applied as required or elective credits in the curriculum chosen. Those who have graduated from approved two-year normal schools subsequent to high school graduation are admitted to junior standing in the School of Education.

FROM JUNIOR COLLEGES.—Students from fully accredited junior colleges who present a satisfactory scholarship record receive credit for all work which is the equivalent of similar courses offered by the University, but in no case shall the amount of credit granted exceed one-half of the number of credits required for graduation from the curriculum in which the student registers in the University of Idaho.

FROM THE SOUTHERN BRANCH OF THE UNIVERSITY OF IDAHO.—Credits earned at the Southern Branch of the University of Idaho at Pocatello are considered on the same basis as credits earned at the University of Idaho at Moscow. In order to qualify for a degree a student who transfers from the Southern Branch must, of course, satisfy the specific and general requirements for graduation from the curriculum which he enters in the University. Applicants for transfer must fill out a petition-for-transfer card and have it approved by the executive dean of the Southern Branch. As soon as this card is filed in the registrar's office of the Southern Branch the student's complete credentials and record will be sent to the University of Idaho at Moscow.

ADMISSION TO THE COLLEGE OF LAW

Admission to the College of Law will be granted to holders of the bachelor's degree, and to applicants who have satisfied the entrance requirements listed on page 24 and in addition have completed 64 credits in acceptable courses of college grade.* These credits would

* In defining pre-legal requirements, the Association of American Law Schools, of which the College of Law is a member, has adopted the following rule and its interpretation:
Rule 6, section 2:
"It (the school) shall require of all candidates for any degree at the time of the commencement of their law study the completion of one-half of the work acceptable for a Bachelor's degree granted on the basis of a four-year period of study by the state university . . . .
(1) That the pre-legal work required by Article Six, section two shall be interpreted to mean work done in residence.
(2) That in meeting the requirements of Article Six, section two a candidate shall present at least sixty semester hours . . . exclusive of credit earned in non-theory courses in military science, hygiene, domestic arts, physical education, vocal or instrumental music, or other courses without intellectual content of substantial value."

ordinarily be earned in the College of Letters and Science or School of Business Administration. (See combination curricula in Letters and Science and Law page 46 and Business and Law page 88.) Three-fourths of the credits offered must be above grade D and the average must be 2.00 or above.

ADMISSION TO GRADUATE STANDING

A bachelor's degree from a college or university of acceptable standing is required for admission to graduate work. Certified transcripts of all undergraduate and previous graduate work are also required, and these should be sent to the Registrar of the University some time prior to registration days. For further regulations concerning graduate work see the statement of the Graduate School in Part III of the catalog.

Degrees Granted

FIRST DEGREES

The following baccalaureate degrees are conferred upon those who have completed successfully the prescribed courses of study and who have complied with other requirements laid down by the University:

COLLEGE OF LETTERS AND SCIENCE:
- Bachelor of Arts, B.A.
- Bachelor of Science, B.S.
- Bachelor of Science in Pre-Medical Studies, B.S. (Pre-Med.)
- Bachelor of Science in Home Economics, B.S. (H.Ec.)
- Bachelor of Science in Pre-Nursing Studies, B.S. (Pre-Nurs.)
- Bachelor of Music, B.M.

COLLEGE OF AGRICULTURE:
- Bachelor of Science in Agriculture, B.S. (Agr.)

COLLEGE OF ENGINEERING:
- Bachelor of Science in Civil Engineering, B.S. (C.E.)
- Bachelor of Science in Electrical Engineering, B.S. (E.E.)
- Bachelor of Science in Mechanical Engineering, B.S. (M.E.)
- Bachelor of Science in Chemical Engineering, B.S. (Chem.E.)
- Bachelor of Science in Agricultural Engineering, B.S. (A.E.)

COLLEGE OF LAW:
- Bachelor of Laws, LL.B.

SCHOOL OF MINES:
- Bachelor of Science in Mining Engineering, B.S. (Min.E.)
- Bachelor of Science in Metallurgical Engineering, B.S. (Met.E.)
- Bachelor of Science in Geology, B.S. (Geol.)
- Bachelor of Science in Geological Engineering, B.S. (Geol.E.)

SCHOOL OF FORESTRY:
- Bachelor of Science in Forestry, B.S. (For.)

SCHOOL OF EDUCATION:
- Bachelor of Science in Education, B.S. (Ed.)
- Bachelor of Science in Music Education, B.S. (Mus.Ed.)
- Bachelor of Science in Commercial Education, B.S. (Com.Ed.)

SCHOOL OF BUSINESS ADMINISTRATION:
- Bachelor of Science in Business, B.S. (Bus.)

SOUTHERN BRANCH:
- Bachelor of Science in Pharmacy, B.S. (Phar.)

ADVANCED DEGREES

The following advanced degrees are offered by the Graduate School of the University:

Master of Arts, M.A.
Master of Science, M.S.
Master of Science in Home Economics, M.S.(H.Ec.)
Master of Music, M.M.
Master of Science in Agriculture, M.S.(Agr.)
Master of Science in Civil Engineering, M.S.(C.E.)
Master of Science in Electrical Engineering, M.S.(E.E.)
Master of Science in Mechanical Engineering, M.S.(M.E.)
Master of Science in Chemical Engineering, M.S.(Chem.E.)
Master of Science in Agricultural Engineering, M.S.(A.E.)
Master of Science in Metallurgical Engineering, M.S.(Met.E.)
Master of Science in Mining Engineering, M.S.(Min.E.)
Master of Science in Geology, M.S.(Geol.)
Master of Science in Geological Engineering, M.S.(Geol.E.)
Master of Science in Forestry, M.S.(For.)
Master of Forestry, M.F.
Master of Science in Education, M.S.(Ed.)
Master of Science in Music Education, M.S.(Mus.Ed.)
Master of Science in Commercial Education, M.S.(Com.Ed.)
Master of Science in Business, M.S.(Bus.)

PROFESSIONAL DEGREES

The following professional degrees are offered in engineering and mining:

Civil Engineer, C.E.
Mechanical Engineer, M.E.
Electrical Engineer, E.E.
Chemical Engineer, Chem.E.
Agricultural Engineer, A.E.
Engineer of Mines, E.M.
Metallurgical Engineer, Met.E.
Geological Engineer, Geol.E.

For conditions of candidacy for an advanced degree, see the Graduate School, in Part III.

Regulations and Procedure

NOTE.—*Students are held individually responsible for the information contained in these pages. Failure to read and understand these regulations will not exempt a student from whatever penalties he may incur.*

A. MATRICULATION

An applicant for enrollment in any course offered by the University for college credit, except correspondence or non-resident courses, files certain personal data and credentials covering all previous academic work. (See pages 23 to 28.) After the University has accepted these credentials and issued a permit to register, the student's registration completes his matriculation.

B. REGISTRATION

1. ADMISSION TO CLASSES.—At the beginning of a University session each student makes out a study list in duplicate. After receiving his dean's written approval to these and paying his fees, (see Cata-

log, pages 12-13) he files his completed registration blank in the Registrar's office together with a class card for each course to be taken for credit or as an auditor. The class cards are immediately sent to the instructors concerned. Instructors do not admit students for whom they have no class cards.

2. AUDITORS.—Auditing a course consists of regularly attending without other participation and without credit. Only lectures may be audited. Written approval of the dean and the instructor is necessary to audit.

3. COURSES IN ABSENTIA.—Courses in absentia are those taken in exceptional cases by matriculated students while enrolled for resident work in the University, who, for schedule or other valid reasons, are unable to attend regular classes in such courses and who do the work by appointment with a resident instructor. Permission for taking courses in absentia must be obtained from the instructor and the Academic Council before beginning the work.

4. NON-RESIDENT COURSES.—Students are not permitted to carry non-resident or correspondence work for college credit in this or any other institution while in residence at the University of Idaho. Registration for non-resident courses offered by the University of Idaho is automatically cancelled if a student fails to complete the work before the end of his first week in residence. Reinstatement in such a course may be effected by the payment of $1.

C. CHANGES IN REGISTRATION

1. CHANGE OF STUDY-LIST.—After a student has registered he must follow his study-list. Instructors are not authorized to make changes in study-lists. Students may not drop a course by simply staying out of class. (See Regulation E-1.)

In case it is necessary for a student to drop or add a course or otherwise change his study-list, he must secure a "Change of Study-List" card from his dean. The proposed change must be approved by his dean, and, if more than two weeks of the session have passed, by the instructor concerned, and becomes effective only when the card is filed in the Registrar's office. A student who drops a course without following this procedure receives an "FW", which indicates failure caused by improper withdrawal.

2. CHANGE OF CURRICULUM.—A student may not change from one curriculum to another except by written permission of the deans concerned on a card which must be filed in the Registrar's office immediately. (See Regulation J-1.)

D. CREDIT

1. CREDIT DEFINED.—The value of each course is stated in semester credits. A credit requires one recitation (involving two hours of preparation) or one three-hour laboratory period or other combination of teacher contact and outside preparation involving a total of three clock hours a week throughout the semester. Each hour of lecture, recitation, or quiz, presupposes two hours of preparation. Any departure from the three-hour laboratory period must be approved by the head of the department and the dean.

2. NUMBER OF CREDITS.—The total number of credits for which a student may be registered shall not in any semester exceed 20, except upon approval of the Academic Council in advance.

3. CREDIT FOR LESS THAN ONE YEAR'S WORK.—In courses marked "n" (e.g., Fr. 1n-2) no credit is given for the first semester's work until that of the second semester is completed.

4. ADVANCED CREDIT.

a. *On Credential.*—Advanced credits are given for work done in accredited higher institutions in accordance with the regulations on pages 26-27. (Proficiency examinations are available without fee and without credit for students who wish to qualify for more advanced undergraduate courses than their credentials would seem to justify.)

b. *By Examination.*—Examinations for advanced credit in courses offered by the University but covering work done in non-accredited institutions, private study, or technical employment may be given to resident students registered as candidates for a degree from the University of Idaho under approved regulations of the Committee on Admissions and Advanced Credit.

Exemptions without credit may be given to those who pass proficiency tests. (See Sec. 4-a.)

5. REPEATED COURSES.—Students will receive no credit for courses taken in review. (See Reg. E-4.)

E. GRADES

1. Grades are reported as "A", (90-100) superior; "B", (80-89) high; "C", (70-79) average; "D", (60-69) barely passing; "F", (below 60) failure; "Inc.", incomplete work of passing grade, but for acceptable reason, not quite completed; "W", withdrawal by permission before a definite record is established or while the student is doing passing work; and "FW", withdrawal without permission. (See Regulation C-1.) "E", condition, is used at mid-semester only. In the case of graduate students registered in courses numbered above 200, a grade of "P" (passed) may be reported in place of "A" or "B" only.

Mid-semester as well as semester grades are filed in the Registrar's office, and semester grades of freshmen and sophomores are reported to their parents and high schools.

2. A grade of "F" denotes that the work of a student in a given subject is of such poor quality that credit may be obtained only by repeating and passing the course.

3. Except in case of error, a grade which has once been turned into the Registrar's office may not be changed.

4. In the computation of scholastic averages the following scale of grade points shall be used: A equals 4; B equals 3; C equals 2; D equals 1; and F equals 0. In figuring grade point averages, the student shall receive the grade points made the last time he takes the course.

F. INCOMPLETES

1. GRADES OF "INC."—An incomplete is given at the end of the semester only in case the student has been in attendance and done satisfactory work to a time within three weeks of the close of the semester, i.e., the end of the examination period, or within one week of the close of the Summer Session. It may not be given in the case of withdrawal from the University unless the withdrawal occurs within the last three weeks of the semester. If a final grade of "Inc." is given, the instructor shall indicate in writing on the class card what the student must do to remove the deficiency.

2. REMOVAL OF INCOMPLETES.—Incompletes should be removed within three weeks after the student's return to the University. Incompletes not made up before that date automatically become failures unless the student has previously filed in the Registrar's office a "Permit for Extension of Time" card, signed by his dean and the instructor concerned. A student allowed to register pending removal

of incompletes is not entitled to an extension of time. Unless special action is taken in advance, reregistration in a course for which "Inc." has been filed automatically changes the "Inc." to an "F".

G. WITHDRAWAL FROM THE UNIVERSITY

A student who wishes to withdraw from the University obtains an indefinite leave of absence from his dean and files it in the Registrar's office. He then receives a "W" in the courses in which he is passing and an "F" in all courses in which he is deficient. A student who withdraws without filing an "Indefinite Leave of Absence" card within the prescribed time forfeits any balance of his general deposit in the Bursar's office. (See Refund of Fees, p. 14.)

H. EXAMINATIONS

1. REGULAR FINAL EXAMINATIONS.—In all undergraduate courses regular final examinations are held at the end of each semester in accordance with the schedule published by the Registrar's office. An instructor giving a course for which a final examination is not an appropriate test of the work covered may dispense with such examination upon securing the written consent of the head of his department and the dean concerned.

A student who must be absent from a regular final examination shall present in advance to the instructor concerned permission from his dean to be absent.

A student who absents himself from a regular final examination without valid excuse receives an "F". If the excuse is valid, and the work of the semester satisfactory, the student receives an "Inc."

2. SPECIAL FINAL EXAMINATIONS.—A student, absent from a regular final examination, either by permission of his dean, or through sickness or other unavoidable cause, may take a special final examination under the following conditions:

a. He shall satisfy his dean as to his reasons for absence.

b. He shall, except in case of sickness or other unavoidable cause, pay a fee of $1 at the Cashier's office and get a receipt for the same.

c. He shall present this receipt to the Registrar who shall issue a card entitling the student to the examination.

d. He shall present this card to the instructor concerned and take the special examination at a time approved by him. (See Regulation F-2.)

I. MAJOR STUDY

An undergraduate major consists of 16 to 20 credits of advanced work in one department (courses numbered above 100 except when specifically noted in the departmental statements).

J. GENERAL UNIVERSITY REQUIREMENTS FOR GRADUATION

In addition to the general and specific requirements of his curriculum, a candidate for a baccalaureate degree must have met the following general University requirements:

1. *Residence Requirement.*—A candidate must do the work of his senior year in residence in the division from which he graduates. However, one who is registered in a six-year combined curriculum or in a pre-professional curriculum for which the required professional courses are not offered at the University of Idaho must do the work of the junior year in residence in the division concerned. If at the

conclusion of the year's residence he lacks eight or less credits, these may be made up by non-resident courses, (See Regulation J-6) or at another institution. In the case of the four-year curricula a year's work is interpreted as one-fourth of the total requirements for the degree sought. (In the College of Law, 26 semester credits constitute a year's work.)

2. *Grade Requirements.*—A candidate must have grades of "C" or above in three-fourths of the credits required in his curriculum and received in residence; however, in lieu of the above, beginning with the class of 1942, and for all matriculants after December, 1938, a grade point average of 2.00 in resident credits shall be required for graduation from any division of the University other than the College of Law. (For the requirements in the College of Law see page 66.)

3. *Requirement in Advanced Courses.*—A candidate must present a minimum of 36 semester credits of work in courses numbered above 100.

4. *Credits Earned in Upper Division.*—A candidate who has done his freshman and sophomore work in an institution whose curricula are essentially for students in their first two college years, must present at least 54 semester credits earned in the upper division of a degree-granting institution.

5. *Good English.*—A candidate for graduation shall be able to use good English. Otherwise, he may be required to take without credit such remedial work in composition as shall be deemed advisable by his dean and the head of the Department of English.

6. *Credit Limitations.*—A candidate may count toward a degree no more than (a) 8 credits in Organized Music, (b) 8 credits in non-sectarian courses in Religious Education, or, (c) 32 credits in non-resident or correspondence courses if such credits are permitted by the college concerned.

7. *Application for Baccalaureate Degree.*—A candidate for a baccalaureate degree must, at the beginning of his last semester or summer session in residence, file a petition to be admitted as a candidate and must pay the diploma fee of $5. No application for a degree at a given commencement will be accepted after February 15 preceding.

K. HONORS

Since 1907 a system of classified honors has been in effect. Honors given to members of a graduating class are announced at commencement. They are based upon the student's entire resident work at the University of Idaho, including the Southern Branch, but are granted only to those who have performed the work of their last two years in this institution. Honors are divided into two groups known as High Honors and Honors, respectively. To attain the former, a student must maintain an average of 3.66; to attain the latter, an average of 3.33. (For Honor List, see Part VII.)

Previous to 1939-40, Highest Honors were granted to those students who performed at least the work of the junior and senior years in residence in the University of Idaho with an average of 5.666, and High Honors were granted to those who maintained an average of 5.333. In figuring these honors, each credit of grade A counted 6, each credit of grade B counted 5, C counted 4, D counted 3, and F, failure, counted 1.

L. WARNED STATUS, WARNINGS, AND PROBATION

1. WARNED STATUS.—Warned status is the condition of a student who is eligible for registration or continuance in the University but

whose scholastic record is unsatisfactory according to a, b, or c below. Students on warned status may be required to reduce their study lists, outside employment, or extra-curricular activities.

a. *For High School Record.*—An applicant for admission who ranked in the lowest one-fourth of his high school graduating class or who fails to present recommending grades in at least two-thirds of his required units is admitted on warned status. If at the end of nine weeks his scholastic record shows grades of "C" or above in ten credits, he receives regular status; if not, his warned status continues until the end of the semester.

b. *Mid-Semester General Warning.*—A student is placed on warned status at mid-semester (1) if he has a grade of "D" or below in three or more courses, or (2) if he is passing in less than ten credits, (except that a student who passes in less than ten credits is not warned if he is passing in all but one course.)

c. *Semester Warning.*—A student whose record for any semester is such that he receives a grade of "D" or below in three or more courses is placed on warned status for his next semester, unless his grade point average is 2.00 or above. The record of a student allowed to register pending removal of incompletes will be rechecked three weeks after his registration, and incompletes not removed (except those in certain specified year-courses) will count against him in the operation of this rule. (See Regulation F-2.)

d. *Special Warning.*—An instructor may send a special written warning for a student at any time through the Registrar's office.

2. PROBATION.—Probation is the condition of a student who is permitted under special restrictions to be in residence in the University after failing to meet certain scholarship or conduct requirements.

a. *For Record at Another Institution.*—Students from other higher educational institutions, if admitted to the University of Idaho, are placed on probation for one semester unless they have complied with the scholarship requirements for continuance in those institutions as well as the requirements of this institution for continuance without probation or warned status.

b. *For Semester Record.*—A student whose record for any semester is such that the rule governing eligibility for reregistration (See Regulation M-1) operates against him is placed on probation for one semester at his next semester registration in the University.

c. *Penalty for Probation.*—A student on probation is disqualified from representing the University or any student organization in any extra-curricular activity.

M. ELIGIBILITY TO REREGISTER

1. A student is eligible to reregister if at the end of any semester he receives a passing grade in at least ten credits (a freshman or a special student at the end of his first semester, eight credits); except that a student who passes in less than ten credits is eligible to reregister if he is passing in all but one course. A student in the College of Law who passes in two-thirds of his work is eligible to reregister. A student who receives grades of incomplete in courses necessary to meet this requirement may register for the following semester pending removal of such incompletes within three weeks. (See also Regulations F-2 and L-2-b.)

2. A student who becomes ineligible to reregister is dropped from the rolls of the University. (See Regulation M-1.) He may reregister only upon the following conditions:

a. The first time he becomes ineligible to reregister he may be reinstated on probation (1) if he secures his dean's approval for immediate reinstatement; or (2) if he reregisters after the lapse of at least one semester.

b. The second time he becomes ineligible to reregister he may not be reinstated until after the lapse of one academic year and then only by petition to, and favorable action by, the Academic Council. If reinstated, his status is probationary.

N. ELIGIBILITY FOR EXTRA-CURRICULAR ACTIVITIES

In order to be eligible to represent the University or any student organization in any extra-curricular activity, a student must:

1. Be carrying at least twelve credits.

2. Have passed in at least ten credits in his last semester of residence previous to participation. (Entering freshmen excepted.)

3. Have passed in at least five times as many credits as those in which he has failed, as shown by his previous record. Failures remain failures on the record. Incomplete grades shall not be counted either as failure or passed, until adjusted. (See Regulation F-2.) "Previous record" means the student's entire record in all collegiate institutions, including extension and correspondence divisions of such institutions.

4. Not be on probation. (See Regulation L-2.)

It is the responsibility of the faculty adviser or coach of each activity to see that the eligibility of all candidates is certified by the Registrar's office before participation.

O. ATTENDANCE

1. GENERAL ATTENDANCE.—Students are responsible for their attendance in the courses in which they are enrolled. Excessive absences are, however, reported through the Registrar's office to the dean of the college in which the student is registered.

2. ABSENCES BEFORE AND AFTER VACATIONS.—Students who absent themselves from class immediately before or after a vacation (exclusive of single holidays) shall have their final grade reduced 10 points in each course in which such absence occurred. Absences before and after a vacation date from the last class the student attended prior to the vacation, to the first class attended after the vacation.

3. CONCERTED ABSENCES.—Students who participate in any unauthorized, concerted action to absent themselves from class shall have their final grade reduced 10 points in each course affected by such absence.

4. ABSENCES DUE TO ACTIVITIES.—No student may be absent from the campus in connection with extra-curricular activities more than 16 instructional days a semester. No one extra-curricular activity may take students away from the campus more than 12 instructional days.

P. CLASS RATING

A student in order to be rated as a freshman must have met the entrance requirements for regular students. (See Entrance Requirements in Part II.) To be rated with any higher class a student may not be more than six credits behind the curriculum requirement for

entering that class in a given semester. Thus, for example, a student in the College of Letters and Science who has at least 26 credits of the normal 32 credits at the beginning of the first semester may be ranked as a sophomore, whereas at the beginning of the second semester he must have at least 42 credits of the normal 48 credits to be so ranked.

Q. MISCELLANEOUS

1. SOCIAL ORGANIZATIONS.—Student organizations, including fraternities, sororities, and clubs, are under the supervision of the faculty committee on student organizations. In order to receive permission to form such an organization or to petition for a charter from a national organization, it is necessary to petition this committee.

2. STUDENT EVENTS.—In order to receive permission for any student event it is necessary to petition the faculty committee on calendar.

3. AUDITING OF ACCOUNTS.—All funds for public purposes within the University (except those of fraternities, sororities, and boarding house organizations) which are contributed to or collected by any student or member of the faculty shall be deposited with the University bursar, subject to withdrawal upon the written approval of the president, or of the bursar in the president's absence; and an accounting of all receipts and expenditures in these funds shall be made by those responsible for their collection immediately after they shall have been disbursed, this accounting to be audited by the bursar.

4. CONDUCT.—Students are held responsible for any breach of the recognized rules of conduct.

5. SMOKING.—Smoking is forbidden in University buildings.

PART III

The University Schools and Colleges With Their Curricula

College of Letters and Science

THOMAS STONER KERR, LL.B.....*Dean of the College*
FLOYD WHITNEY GAIL, Ph.D.....*Chairman of the Curriculum Committee*
JAY GLOVER ELDRIDGE, Ph.D.....*Chairman of the Scholarship Committee*
MARGARET RITCHIE, M.A.....*Director of the Home Economics Curricula*
ARCHIE N. JONES, M.A.....*Director of the Music Curricula*
HAROLD D. CRAMER, M.D.....*Acting Director of Pre-Medical Studies*
JAMES BURBANK REED, Ph.D.....*Secretary of the College Faculty*

GENERAL INFORMATION

THE College of Letters and Science is the oldest division of the University, having been established in 1900. Its aim is to provide opportunities for a liberal education, as well as for specialization in the fields of languages, literature, social studies, natural science, and fine arts.

The departments in this division include: American History, Art and Architecture, Botany, Chemistry, Classical Languages, English, European History and Civilization, Home Economics, Mathematics, Modern Languages, Music, Philosophy, Physics, Political Science, Sociology, and Zoology.

Majors are also offered in Commercial Art, Interior Architecture and Decoration, Bacteriology, Dramatics and Public Speaking, Economics, Geology, Journalism, Law, and Psychology. Special curricula are offered in Music, Home Economics, Pre-Dental Studies, Pre-Medical Studies, Pre-Nursing Studies, and Social Work.

ADMISSION

For a statement of general admission requirements, see Part II of the catalog. Graduates of a four-year accredited high school ordinarily are eligible for admission to the College of Letters and Science.

GENERAL REQUIREMENTS FOR GRADUATION

The general requirements of the College of Letters and Science for the Bachelor of Arts and Bachelor of Science degrees include the following:

1. ENGLISH.—6 credits, English Composition.
2. NATURAL SCIENCE.—8 credits.
   The natural science group includes Botany, Chemistry, Geology, Physics, Psychology, and Zoology.
3. SOCIAL STUDIES.—6 credits.
   The social studies group includes American History, Economics, European History, Philosophy, Political Science, and Sociology.
4. FOREIGN LANGUAGE.—8 credits.
   The language group includes French, German, Greek, Latin, and Spanish.
5. MILITARY SCIENCE AND PHYSICAL EDUCATION.—
   Men—6 credits Military, and 2 credits P.E.
   Women—6 credits P.E.

DEGREES

Curricula are offered in the College of Letters and Science leading to the degrees of Bachelor of Science, B.S.; Bachelor of Arts, B.A.;

Bachelor of Science in Home Economics, B.S.(H.Ec.); Bachelor of Science in Pre-Medical Studies, B.S.(Pre-Med.); Bachelor of Music, B.M.; and Bachelor of Science in Pre-Nursing Studies, B.S.(Pre-Nurs.).

MAJORS

Each student must select a major subject not later than the beginning of his junior year. The major requirements usually include twenty or more semester credits in courses numbered above 100, and generally about the same number of credits in related fields. The departmental requirements are stated under the respective curricula.

Students in this college intending to enter the teaching profession are required to take fifteen credits in education, including Ed. 55.

A total of 128 semester hours is required for a degree. Thirty-six semester credits must be taken in courses numbered above 100.

AMERICAN HISTORY

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Hist.	21-22	History of the Americas	6
and			
Hist.	1-2	History of Civilization	6
or			
Hist.	13-14	Classical Civilization	6

Twenty credits in hundreds courses which shall include the following:

Hist.	115	Beginnings in American Diplomacy	3
Hist.	116	Growth of American Diplomacy	3
Hist.	123	The Pacific Northwest	2
Hist.	124	Idaho and the Inland Empire	2
Hist.	127	American Frontier	3

Modifications to meet individual needs may be made through conference with the departmental head.

ELECTIVES

American History majors will be permitted a broad range in the selection of elective courses.

ARCHITECTURE

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Art	1-2	Freehand Drawing	4
Phys.	3	General Physics	4
Arch.	11-12	Elementary Architectural Design	4
Arch.	13	Shades and Shadows	1
Arch.	14	Architectural Perspective	1
Math.	1-2	Freshman Mathematics	8
Math.	51-52	Calculus	8
Art	101-102	Water Color Painting	4
Arch.	53-54	Intermediate Architectural Design	6
Arch.	55-56	Building Construction	6
Arch.	57-58	Architectural History	6
Arch.	115-116	Architectural Design	8
Arch.	136	Mechanical Plants of Buildings	3
C.E.	66	Mechanics (Statics)	2
C.E.	103	Mechanics of Materials	3
C.E.	104	Structural Analysis (Pre. 103)	3
C.E.	106	Re-enforced Concrete Theory	2

SUGGESTED ELECTIVES

Eng.	155	Technical Writing	3
C.E.	135	Estimates and Costs	2
M.E.	144	Heating, Ventilation and Air Conditioning	3
C.E.	154	Contracts and Specifications	2
Bus.	165-166	Business Law	6

GENERAL ART

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Art	1-2	Freehand Drawing	4
or			
Art	5-6	Life Drawing	4
and			
Art	3-4	Principles of Design	4
Art	51-52	Art Appreciation	4
Art	101-102	Water Color Painting	4-6
Art	105-106	Intermediate Freehand Drawing	6
Art	123	Composition and Illustration	3
Art	129-130	History of Painting	4

Select two from the following four:

Art	103-104	Applied Design	4
Art	107-108	Oil Painting	6
Art	127-128	Advanced Freehand Drawing	6
Art	141-142	Advanced Oil Painting	6

COMMERCIAL ART

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Art	1-2	Freehand Drawing	4
		or	
Art	5-6	Life Drawing	4
		and	
Art	3-4	Principles of Design	4
Arch.	11-12	Elementary Architectural Design	4
Art	51-52	Art Appreciation	4
Art	101-102	Water Color	4
Art	103-104	Applied Design	4
Art	105-106	Intermediate Freehand Drawing	4
Art	107-108	Oil Painting	6
Art	121	Alphabets	2
Art	122	Advertising Layout	2
Art	123-124	Composition and Illustration	6
Art	147-148	Commercial Design	6-8

INTERIOR ARCHITECTURE AND DECORATION

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Art	1-2	Freehand Drawing	4
		or	
Art	5-6	Life Drawing	4
		and	
Art	3-4	Principles of Design	4
Arch.	11-12	Elementary Architectural Design	4
Art	51-52	Art Appreciation	4
Art	101-102	Water Color	4-6
Art	103-104	Applied Design	4
Art	105-106	Intermediate Freehand Drawing	4-6
Art	107-108	Oil Painting	6
Art	129-130	History of Painting	4
H.Ec.	144	Advanced Interior Decoration	2
Art	145-146	Interior Architectural Design	8

SUGGESTED ELECTIVES

Course			Credits
H.Ec.	23	Textiles	2

BACTERIOLOGY

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Chem.	1-2	General Chemistry	8
Bact.	51	General Bacteriology	4
Bact.	104	Pathogenic Bacteriology	4
Bact.	106	Dairy Bacteriology	3
Bact.	108	Bacteriological Technique	3
Bact.	109	Immunology	3
Bact.	110	Serology	3
Chem.	51	Qualitative Analysis	4
Chem.	52	Quantitative Analysis	4
Chem.	171-172	Organic Chemistry	8
Physics	3-4	General Physics	8

*SUGGESTED ELECTIVES

Course			Credits
Bact.	54	Public Health and Hygiene	3
Bact.	107	Food Bacteriology	4
Bact.	111-112	Pro-Seminar	1–4
Bact.	113	Public Health Methods	2–4
Bact.	115-116	Special Problems	1–2
Bact.	125	Soil Microbiology	4
Zool.	1	General Zoology	4
Zool.	109	Vertebrate Histology	4
Zool.	110	Histological Technique	2
Bot.	111	Mycology	4
P.P.	101	General Plant Pathology	3
Chem.	181-185 and 186	Biochemistry	6

Recommended preparation: Zoology 54, Comparative Anatomy, 4 credits; Zool. 6, Physiology, 3 credits; Bot. 3, Principles of Botany, 4 credits; Math. 1-2, Freshman Mathematics, 8 credits; Math. 51-52, Calculus, 8 credits.

BOTANY

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Bot.	1-2	General Botany	8
Bot.	53-54	Systematic Botany	6
Chem.	1-2	General Chemistry	8
Bot.	101-102	Plant Physiology	8
Bot.	103	Plant Anatomy	4
Bot.	108	Plant Ecology	3
Bot.	121	Morphology of Thallophytes and Bryophytes	4
Bot.	122	Morphology of Pteridophytes and Spermatophytes	4
Zool.	1	General Zoology	4
Bot.	125-126	Pro-seminar	2

ELECTIVES

A wide choice of electives may be exercised in consultation with the head of the department.

* For Civil Service employment an additional 10 hours in bacteriology is required.

CHEMISTRY

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Chem.	1-2	General Chemistry	8
Chem.	51-52	Qualitative and Quantitative Analysis	8
Math.	1-2	Freshman Mathematics	8
Math.	51-52	Calculus	8
Phys.	51-52	Engineering Physics	10
		or	
Phys.	3-4	General Physics	8
Chem.	105-106	Physical Chemistry	8
Chem.	109	Pro-seminar	1
Chem.	171-172	Organic Chemistry	8
Chem.	175	Qualitative Organic	2

ELECTIVES

The choice of electives must receive the approval of the head of the department.

DRAMATICS AND PUBLIC SPEAKING

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Eng.	17-18	Intro. to Literature	6
With major work in Speech			
Eng.	31-32	Fundamentals of Speech	4
Choice of one			
a. Eng.	35	Extemporaneous Speaking	2
b. Eng.	36	Parliamentary Law and Procedure	2
c. Eng.	37	Intercollegiate Debate	1
Eng.	159	Voice Production	2
Eng.	163-164	Advanced Speaking	4
Eng.	165-166	Argumentation and Debate	4
Eng.	167-168	Advanced Interpretation	4-8

With major work in Dramatics

Course			Credits
Eng.	33-34	Reading and Interpretation	4
Eng.	71-72	Fundamentals of Play Production	6
Eng.	141-142	Shakespeare	6
Eng.	123-124	Contemporary Drama	4
Eng.	159	Voice Production	2
Eng.	171-172	Advanced Play Production	6
Eng.	61-62	Elementary Literary Composition	4
		or	
Eng.	167-168	Advanced Interpretation	4
		or	
A period course in Literature			4

ELECTIVES

A wide choice of electives may be exercised in consultation with the head of the department.

ECONOMICS

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Econ.	51n-52	Principles of Economics	6
Econ.	105-106	Money and Banking	6
Econ.	109	Public Finance	3
Econ.	152	Intermediate Econ. Theory	3
Bus.	81-82	Principles of Accounting	6
Bus.	113	Statistics	3

Choice of 9 credits from:

Course			Credits
Econ.	112	Labor Problems	3
Bus.	167	Government Regulation of Business	3
Econ.	174	International Economic Policies	3
Bus.	193-194	Business Conditions	6

Fifteen credits as follows:

Fifteen credits from courses numbered above 100 in the following subjects to be chosen with the approval of the adviser, 9 credits to be in one field: History, Philosophy, Political Science, Sociology, English, Mathematics, and Natural Sciences.

Recommended preparation: Geol. 12, Economic Geography, 3 credits.

ENGLISH

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Eng.	17-18	Intro. to Literature	6
Courses in Public Speaking (Eng. 31-32, 33-34, 35, 36); Dramatics (Eng. 71-72); or Journalism (Eng. 81-82)			4-6
Eng.	132	Chaucer and Middle English	3
Eng.	141-142	Shakespeare	6
Eng.	115-116	Romantic Prose and Poetry	4
		or	
Eng.	113-114	The Restoration and Queen Anne Ages	4
		or	
Eng.	117-118	Victorian Prose and Poetry	4
		and	
Eng.	119-120	American Literature	6

ELECTIVES

A wide choice of electives may be exercised in consultation with the head of the department.

EUROPEAN HISTORY

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Twelve credits from the following:

Course			Credits
Hist.	1-2	History of Civilization	6
Hist.	13-14	Classical Civilization	6
Hist.	21-22	History of the Americas	6

and

Advanced work consisting of 24 hours in this department and 6 in other Social Studies, chosen with the advice and consent of the head of the department.

SUGGESTED ELECTIVES

Course	Credits
History	8
Education	6
Philosophy	6
Geography	6
French or German	6–8

FOREIGN SERVICE

The passage of the Rogers Act consolidating the diplomatic and consular service, and adjusting the salary schedule to enable persons without private incomes to hold posts, provides that appointments be made strictly upon the basis of merit. Persons passing the Foreign Service examination are also fitted for positions as commercial attaches, consular trade assistants, and employment by firms engaged in the export and import business. Courses in Modern Languages, Political Science, Business and Economics, History, Sociology, and Geography all figure in the provisional program offered to those intending to try an examination for the Foreign Service. In the framing of individual schedules to this end students will consult with Dr. F. C. Church, professor of European History.

FRENCH

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Fr.	13-14	Intermediate French	8

A reading knowledge of another foreign language.

Hist.	141-142	French Civilization	4
Eng.	175-176	Readings in European Literature	4

and 20 credits to be chosen from the following courses, of which a minimum of 16 must be in courses above 100:

Fr.	81-82	Grammar Review and Composition	6
Fr.	121-122	Survey of French Literature	6
Fr.	131-132	The Nineteenth Century, to 1857	4
Fr.	133-134	The Nineteenth Century, after 1857	4
Fr.	141-142	The Seventeenth Century	6
Fr.	145-146	Contemporary Literature	6
Fr.	161-162	Directed Reading	4-6
Fr.	181-182	Free Composition and Conversation	4
Fr.	191-192	Teachers' Course	4

Recommended preparation: German, Greek, Latin, or Spanish should be elected in the sophomore year, if possible.

GEOLOGY

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Math.	1-2	Freshman Mathematics	8
Chem.	1-2	General Chemistry	8
Phys.	3-4	General Physics	8
Geol.	1	Introductory Geology	4
Geol.	2	Historical Geology	4
Zool.	1	General Zoology	4
Bot.	3	Principles of Botany	4
Geol.	53-54	General Mineralogy	6
Geol.	101	Geomorphology	3
Geol.	102	Stratigraphy	3 or 4
Geol.	112	Paleontology	4
Geol.	121	Mining Geology	2
Geol.	122	Structural Geology	2
Geol.	106	Rock Minerals and Rocks	2

Choice of:

Geol.	115	Geol. and Geog. of Idaho and Pacific Northwest	3

or

Geol.	11	General Geography	4

GERMAN

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Ger.	1n-2	Elementary German	8
Ger.	13-14	Intermediate German	8

A reading knowledge of another foreign language.

Hist.	151-152	German Civilization	4
Eng.	175-176	Readings in European Literature	4
Ger.	111-112	Advanced Composition and Conversation	4
Ger.	121-122	Survey of German Literature	6

Choice of two:

Ger.	135-136	The Nineteenth Century	6
Ger.	141-142	Schiller	6
Ger.	143-144	Goethe	6

Recommended preparation: French, Greek, Latin, or Spanish should be elected in the sophomore year, if possible.

GREEK

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Greek	1n-2	Elementary Greek	8
Greek	3-4	Intermediate Greek	8
Hist.	13-14	Classical Civilization	6
Greek	101	Plato	3
Greek	102	Greek Tragedy	3
Greek	103	Herodotus	3
Greek	104	Theocritus	3
Greek	105	Greek Lyrical Poetry	3
Greek	107	History of Greek Literature	2
Greek	108	Archeology	2
Greek	109	New Testament Greek	3
C.L.	60	Classical Art	2

Recommended preparation: One, or, if possible, two years of Latin, French or German.

HOME ECONOMICS*

(General)

FRESHMAN YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	1-2	General Chemistry	4	4
Eng.	1-2	English Composition	3	3
H.Ec.	11n-12	Art Structure and Design	2	2
H.Ec.	23	Textiles	2	
H.Ec.	24	Elementary Clothing	3	
		or		
†H.Ec.	4	Introduction to Foods	3	
P.E.		(Elective)	1	1
Social Studies			3	3
Elective			1	
			16	16

SOPHOMORE YEAR

Course			Credits First Sem.	Credits Sec. Sem.
*Chem.	75	Carbon Compounds	3	
H.Ec.	4	Introduction to Foods		3
		or		
H.Ec.	24	Elementary Clothing		3
H.Ec.	35	Home Nursing	2	
H.Ec.	65	Costume Design	2	
H.Ec.	82	House Construction		2
P.E.		(Elective)	1	1
Zool.	1	General Zoology	4	
Zool.	6	Physiology		3
Electives			4	7
			16	16

JUNIOR YEAR

Course			Credits First Sem.	Credits Sec. Sem.
H.Ec.	71	Selection and Preparation of Foods	3	
H.Ec.	72	Marketing and Serving		3
H.Ec.	124	Advanced Clothing		2
H.Ec.	135	Child Development	2	
H.Ec.	141	Interior Decoration	2	
*H.Ec.	152	Methods in Teaching Home Making		2
Electives			9	9
			16	16

SENIOR YEAR

Course			Credits First Sem.	Credits Sec. Sem.
*H.Ec.	103	Nutrition	3	
H.Ec.	127	Clothing Construction, Problems and Consumer Buying	3	
H.Ec.	133	Home Management House	3 or (3)	
H.Ec.	136	Economic Problems of the Family		2
*H.Ec.	153	Problems in Teaching Home Making	3	
*H.Ec.	157	Observation and Practice Teaching in Home Making	(4) or 4	
Soc.	121	The Family	3	
Electives			1–4, 7–11	
			16	16

Candidates for the degree of B.S. (H.Ec.) are required to complete 60 credits in academic and non-professional courses.

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* Students interested in non-professional Home Economics may omit starred courses; a wide range of electives may be exercised in consultation with the head of the department.

† Upon approval of head of department.

HOME ECONOMICS

(Food and Nutrition)

FRESHMAN YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	1-2	General Chemistry	4	4
Eng.	1-2	English Composition	3	3
H.Ec.	11n-12	Art Structure and Design	2	2
H.Ec.	23	Textiles	2	
H.Ec.	4	Introduction to Foods		3
		or		
H.Ec.	24	Elementary Clothing		3
P.E.		(Elective)	1	1
Social Studies			3	3
Elective			1	
			16	16

SOPHOMORE YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	71-72	Elementary Organic Chemistry	3	3
*H.Ec.	24	Elementary Clothing		3
H.Ec.	35	Home Nursing	2	
H.Ec.	71	Selection and Preparation of Foods	3	
H.Ec.	72	Marketing and Serving		3
P.E.		(Elective)	1	1
Soc.	51	Introduction to Sociology		3
Zool.	1	General Zoology	4	
Zool.	6	Physiology		3
Electives			3	
			16	16

JUNIOR YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Bact.	51	General Bacteriology	4	
Bus.	81	Principles of Accounting	3	
Chem.	181-186	Biochemistry	2	2
Chem.	183	Biochemistry Lab.	2	
Econ.	53	Principles of Economics		4
Education				3
H.Ec.	107	Investigation of Foods	2	
H.Ec.	135	Child Development	2	
Psych.	1	General Psychology		4
Electives			1	3
			16	16

SENIOR YEAR

Course			Credits First Sem.	Credits Sec. Sem.
A.H.	105	Principles of Nutrition	3	
H.Ec.	104	Dietetics		3
H.Ec.	133	Home Management House	3	or (3)
H.Ec.	136	Economic Problems of the Family		2
H.Ec.	137	Institutional Administration	3	
H.Ec.	138	Quantity Cookery		3
Electives			7-10	5-8
			16	16

Candidates for the degree of B.S. (H.Ec.) are required to complete 60 credits in academic and non-professional courses.

JOURNALISM

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Ability to use the typewriter.

Course			Credits
Eng.	81-82	Elements of Journalism	4
Eng.	181-182	Reporting	8
Eng.	183	Editorial Writing	3
Eng.	184	News Editing	3
Eng.	185	History of Journalism	2
Eng.	186	Special Feature Articles	3
Eng.	188	Newspaper Promotion and Advertising	2
Eng.	191	Law of the Press	2
Eng.	192	Ethics in Journalism	2
Eng.	197	Problems in Newspaper Publishing	2

SUGGESTED ELECTIVES

Course			Credits
Eng.	83-84	College Journalism	1-4
Eng.	198	High School Journalism	2
Eng.	61-62	Elementary Literary Composition	2-4
Bus.	165-166	Business Law	3-6
Bus.	175	Principles of Advertising	3
Bus.	176	Retail Advertising	2
Econ.	51n-52	Principles of Economics	6
Hist.	62	America, A World Power	3
Pol.Sci.	75	State Government	3
Pol.Sci.	76	City and County Government	3
Pol.Sci.	131	Political Parties	2
Soc.	51	Introduction to Sociology	3
Soc.	132	Criminology	3
Soc.	165	Public Opinion	3

Advanced courses in Literature or advanced courses in a chosen field.

Recommended preparation: Psych. 1, General Psychology, 4 credits.

* If not taken in the Freshman year.

LATIN

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Students who have had not more than one year of high school Latin will take Sequence I. Those who have had two years will take Sequence II.			
		Sequence I	
Lat.	1n-2	Elementary Latin	8
Lat.	13-14	Intermediate Latin	8
Lat.	53-54	Advanced Latin	6
		Sequence II	
Lat.	13-14	Intermediate Latin	8
Lat.	53-54	Advanced Latin	6

Course			Credits
Lat.	101-102	Horace and Livy	6
Lat.	111-112	Prose Composition	4
Lat.	121-122	Directed Reading	6
Lat.	123	History of Latin Literature	4
Lat.	124	Teachers' Course	2
Hist.	13-14	Classical Civilization	6
		Choice of:	
Greek	1n-2	Elementary Greek	8
		or	
C.L.	53-54	Scientific Terminology	4
Eng.	175-176	Readings in European Literature	4

LAW

(A combined six-year curriculum for the degrees of B.A. and LL.B. For the general requirements of the Degree of Bachelor of Arts, see page 39. For the first year of Law see College of Law section [Part III].)

A student may secure the degrees of Bachelor of Arts and Bachelor of Laws in six years under the following regulation of the College of Letters and Science. Any candidate for the Bachelor of Arts degree, who at the end of the junior year has completed 98 semester hours and who has satisfied all other requirements of the College of Letters and Science for this degree, may in his senior year take the full first year of the law course, and upon completion of the same be entitled to receive the degree of Bachelor of Arts. Upon satisfactory completion thereafter of two years of advanced law study, the degree of Bachelor of Laws will be conferred.

SENIOR YEAR

Course	Credits
Law (first year)	28

MATHEMATICS

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Math.	1-2 or 11-12	Freshman Mathematics	8-10
Phys.	3-4	General Physics	8
		or	
Phys.	51-52	Engineering Physics	10
Math.	51-52	Calculus	8
Math.	111	Higher Algebra	3
Math.	112	Higher Geometry	3
Math.	121	Advanced Calculus	3

Course			Credits
Math.	124	Differential Equations	3
Mechanics (Analytical or Technical)			4-6
Math. 102 or 142 may be substituted for part of required mechanics.			

SUGGESTED ELECTIVES

Phil.	103	Logic	3

Advanced work in Natural Science, Engineering, or Social Studies where Mathematics may be applied.

Education.

MUSIC (B.A.)

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Mus.	1-2	Theory of Music	4
Mus.	3	Orientation in Music	1
Mus.	4	Elementary Harmony	2
Mus.	5-6	Second Year Harmony	6
Mus.	7	Listening to Music	1
Mus.	13-14	Keyboard Harmony	2
Applied Music (Lower division)			16

Proficiency test for admission to junior courses in applied music.

Advanced courses in Literature, Foreign Language, Art, or Education			8-12
Mus.	101-102	History and Literature of Music	4
Mus.	103	Form and Analysis	3
Mus.	104	Modern Music	2

Course			Credits
Applied Music (Upper division)			16
Ensemble (Mus. 35-36, 45-46, or 67-68)			4

SUGGESTED ELECTIVES

Phys.	54	Music and Sound	4
Mus.	59-60	Musical Diction	4
Mus.	105-106	Counterpoint	4
Mus.	109-110	Elementary Composition	4
Mus.	111	Instrumentation and Orchestration	3
Mus.	179	Choral Conducting	2
Mus.	180	Orchestral Conducting	2

Four credits in natural science will satisfy the science requirements for this degree.

MUSIC (B.M.)

Freshman Year

Course			Credits First Sem.	Credits Sec. Sem.
Eng.	1-2	English Composition	3	3
French or German			4	4
Mus.	1-2	Theory of Music	2	2
Mus.	3	Orientation in Music	1	
Mus.	4	Elementary Harmony		2
Applied Music			4	4
P. E. (Women)			1	1
or				
Mil. and P.E. (Men)			2	2
			16	17

Sophomore Year

Course			Credits First Sem.	Credits Sec. Sem.
Mus.	5-6	Second Year Harmony	3	3
Mus.	7	Listening to Music	1	
Mus.	13-14	Keyboard Harmony	1	1
Applied Music			6	6
P.E. (Women)			1	1
or				
Mil. and P.E. (Men)			2	2
Electives			3–4	4–5
			16	16

Junior and Senior Years

Required

Proficiency test for admission to junior courses in applied music.

Course			Credits
Mus.	101-102	History and Literature of Music	4
Mus.	103	Form and Analysis	3
Mus.	104	Modern Music	2
Mus.	105-106	Counterpoint	4
Mus.	109-110	Elementary Composition	4
Mus.	111	Instrumentation and Orchestration	3
Advanced courses in Literature, Foreign Language, Art, or Education			8

A. For those studying piano:

Course			Credits
Mus.	67-68	Ensemble (instrumental)	2
Mus.	121	Piano (applied music)	16

B. For those studying voice:

Course			Credits
Mus.	67-68	Ensemble (vocal)	2
Mus.	131	Voice (applied music)	16
Mus.	35-36	Organized Music	4

C. For those studying other instruments:

Course			Credits
Mus.	67-68	Ensemble (instrumental)	2
Applied Music (one instrument)			16
Mus.	45-46	Orchestra	4

Suggested Electives

Course			Credits
Phys.	54	Music and Sound	4
Mus.	59-60	Musical Diction	4
Mus.	179	Choral Conducting	2
Mus.	180	Orchestral Conducting	2

PHILOSOPHY

(For the general requirements of the degree of Bachelor of Arts see page 39.)

Required

Course			Credits
Phil.	51	History of Ancient Philosophy	3
Phil.	52	History of Modern Philosophy	3

Sixteen credits in Philosophy in courses numbered above 100.

Electives

A wide choice of electives may be exercised by the student in consultation with the department advisers.

PHYSICS

(For the general requirements of the degree of Bachelor of Science see page 39.)

Required

Course			Credits
Phys.	51-52	Engineering Physics	10
		or	
Phys.	3-4	General Physics	8
		and	
Chem.	1-2	General Chemistry	8

Course			Credits
Math.	1-2	Freshman Mathematics	8
		or	
Math.	11-12	Freshman Mathematics	10
Math.	51-52	Calculus	8

Sixteen credits in Physics numbered above 100, in consultation with the head of the department.

POLITICAL SCIENCE

(For the general requirements of the degree of Bachelor of Arts see page 39.)

Required

Twelve credits from the following:

Course			Credits
Pol.Sci.	1-2	American Government	6
Pol.Sci.	75	State Government	3
Pol.Sci.	76	City and County Government	3
Pol.Sci.	85	Comparative Government I	3
Pol.Sci.	86	Comparative Government II	3

Twenty credits in Political Science in courses numbered above 100.

Twenty credits in related fields in courses numbered above 100.

The choice of specific courses in the above groups must receive the approval of the head of the department.

PRE-DENTAL STUDIES

Freshman Year

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	1-2	General Chemistry	4	4
Eng.	1-2	English Composition	3	3
Social Studies			3	3
Bot.	3	Principles of Botany	4	
Zool.	1	General Zoology		4
Mil. and P.E. (Men)			2	2
P.E. (Women)			(1)	(1)
			15-16	15-16

Sophomore Year

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	71-72	Elementary Organic Chemistry	3	3
Psych.	1	General Psychology	4	
Psych.	4	Applied Psychology		4
*Phys.	3-4	General Physics	4	4
Mil. and P.E. (Men)			2	2
or				
P.E. (Women)			(1)	(1)
Electives			2–3	2–3
			16	16

Junior Year

Course			Credits First Sem.	Credits Sec. Sem.
Phil.	1-2	Contemporary Civilization	3	3
Latin or Modern Language			4	4
Soc.	121	The Family	3	
Soc.	122	Community Organization		3
Zool.	103-104	Human Anatomy	2	2
P.E.	50	General Hygiene		3
Elective			2–3	1–2
			14-15	16-17

Senior Year

Students who wish to remain four years and receive the B.S. degree may do so by selecting a major, and completing a total of 128 credits, 36 of which must be in courses numbered above 100.

* Students who have one unit of high school Physics with laboratory, after consultation with adviser, may be excused from taking college Physics.

PRE-MEDICAL STUDIES

Freshman Year

Course			Credits First Sem.	Credits Sec. Sem.
Eng.	1-2	English Composition	3	3
Chem.	1-2	General Chemistry	4	4
Zool.	1-2	General Zoology	4	4
Social Studies			3	3
Mil. and P.E. (Men)			2	2
P.E. (Women)			(1)	(1)
			15-16	15-16

Sophomore Year

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	51	Qualitative and Gravimetric Analysis	4	
Chem.	52	Quantitative Analysis		4
Foreign Language			4	4
Math.	1	Freshman Mathematics	4	
Zool.	54	Comparative Anatomy		4
Mil. and P.E. (Men)			2	2
P.E. (Women)			(1)	(1)
Electives			2–3	2–3
			16	16

Junior Year

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	171-172	Organic Chemistry	4	4
Foreign Language			3–4	3–4
Phys.	3-4	General Physics	4	4
Zool.	113	Embryology	4	
*Electives			0–1	4–5
			16	16

Senior Year

Course			Credits First Sem.	Credits Sec. Sem.
Psych.	1	General Psychology	4	
Psych.	4	Applied Psychology		4
Zool.	110	Histological Technique		2
*Electives			12	10
			16	16

* These electives must be chosen with the approval of the director of pre-medical curriculum from courses numbered above 100 in English, Foreign Language, Social Studies, Bacteriology, Chemistry, Physics, Psychology, and Zoology, and at least one-half of these electives must be in the humanities.

PRE-NURSING STUDIES*
(General)

FRESHMAN YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Eng.	1-2	English Composition	3	3
Chem.	1-2	General Chemistry	4	4
Social Studies			3	3
Zool.	1	General Zoology		4
H.Ec.	1	Cooking and Serving	2	
P.E. (Elective)			1	1
Electives			3	1
			16	16

SOPHOMORE YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Bact.	51	General Bacteriology	4	
Bact.	54	Public Health and Hygiene		3
Psych.	1	General Psychology		4
P.E. (Elective)			1	1
Soc.	51	Introduction to Sociology	3	
Electives			8	8
			16	16

JUNIOR YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Bot.	54	Systematic Botany		3
Soc.	121	The Family	3	
Soc.	156	Social Case Work		3
Zool.	105-106	Human Physiology	3	3
Electives			10	7
			16	16

SENIOR YEAR

To receive the degree B.S. (Pre-Nurs.), the student may choose from the following options:

1. Graduation from an approved school of nursing.
2. Completion of a total of 128 credits, 36 of which must be in courses numbered above 100.

PRE-NURSING STUDIES*
(Special)

FRESHMAN YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Chem.	1-2	General Chemistry	4	4
Eng.	1-2	English Composition	3	3
Social Studies			3	3
Zool.	1	General Zoology		4
P.E. (Elective)			1	1
Electives			5	1
			16	16

SOPHOMORE YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Bact.	51	General Bacteriology	4	
Bact.	54	Public Health and Hygiene		3
Chem.	71-72	Elementary Organic Chemistry	3	3
H.Ec.	4	Introduction to Foods		3
P.E. (Elective)			1	1
Psych.	1	General Psychology		4
Soc.	51	Introduction to Sociology	3	
Electives			5	2
			16	16

JUNIOR YEAR

Course			Credits First Sem.	Credits Sec. Sem.
H.Ec.	101	Selection and Preparation of Foods	3	
H.Ec.	102	Marketing and Serving		3
H.Ec.	103	Nutrition	3	
Zool.	105-106	Human Physiology	3	3
Electives			7	10
			16	16

SENIOR YEAR

To receive the degree B.S. (Pre-Nurs.), the student may choose from the following options:

1. Graduation from an approved school of nursing.
2. Completion of a total of 128 credits, 36 of which must be in courses numbered above 100.

* Approval of courses in Pre-Nursing Studies will be given by Miss Margaret Ritchie, head of the Home Economics Department.

PSYCHOLOGY

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Phys.	3-4	General Physics	8
Chem.	1-2	General Chemistry	8
Zool.	1-2	General Zoology	8
Zool.	54	Comparative Anatomy of Vertebrates	4
Psych.	1	General Psychology	4
Psych.	2 or 4	Educational or Applied Psychology	3-4
Psych.	117	Psychological Methods	3
Psych.	121-122	Advanced Psychology	8
Additional credits selected from courses in Psychology open to undergraduates and numbered above 100			12
Zool.	105-106	Human Physiology	6
Zool.	113	Embryology or	4
Zool.	109	Histology	4

SOCIAL WORK

FRESHMAN YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Eng.	1-2	English Composition	3	3
Foreign Language			4	4
Science			4	4
Social Science			3	3
P.E. (Women)			2	2
Mil. and P.E. (Men)			2	2
			16	16

SOPHOMORE YEAR

Course			Credits First Sem.	Credits Sec. Sem.
Soc.	51	Introduction to Sociology	3	
Soc.	72	Social Anthropology		3
Eng.	31	Fundamentals of Speech	2	
Psych.	57	Exceptional Child	3	
Bact.	54	Public Health and Hygiene		3
P.E.	50	General Hygiene	3	
P.E. (Women)			1	1
Mil. and P.E. (Men)			2	2
Electives			6–7	5–6
			16	16

JUNIOR AND SENIOR YEARS

REQUIRED

Course			Credits
Econ.	53	Prin. of Econ.	4
Zool.	58	Heredity and Eugenics	3
Econ.	112	Labor Problems	3
Soc.	121	The Family	3
Soc.	122	Community Organization	3
*Soc.	132	Criminology	3
Soc.	156	Social Case Work	3
†H.Ec.	135	Child Development	2
H.Ec.	136	Economic Problems of the Family	2
Eng.	155	Technical Writing	3

In addition to the above the student will be expected to elect:

Sociology	8
Psychology	6
Electives	22
	64

Recommended electives: It is recommended that the major portion of the elective work be chosen from the fields of agricultural economics, business administration, economics, education, English, history (American and European), home economics, philosophy, political science, psychology, or sociology.

SOCIOLOGY

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Soc.	51	Introduction to Sociology	3
Soc.	72	Social Anthropology	3

The work of the major is based upon the completion of twenty credits in Sociology in courses numbered above 100, and twenty credits in related fields in courses numbered above 100.

The choice of specific courses in the above groups must receive the approval of the head of the Department of Sociology.

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* Psych. 109 may be substituted.

† Psych. 106 may be substituted.

SPANISH

(For the general requirements of the degree of Bachelor of Arts see page 39.)

REQUIRED

Course			Credits
Span.	13-14	Intermediate Spanish	8
A reading knowledge of another foreign language.			
Hist.	161-162	Spanish Civilization	4
Eng.	175-176	Readings in European Literature	4

and 20 credits to be chosen from the following courses, of which a minimum of 16 must be in courses above 100:

Course			Credits
Span.	81-82	Composition and Conversation	4
Span.	121-122	Survey of Spanish Literature	6
Span.	135-136	Nineteenth Century	6
Span.	141-142	The Golden Age	6
Span.	147-148	Contemporary Literature	6
Span.	161-162	Directed Reading	4-6
Span.	191-192	Teachers' Course	4

Recommended preparation: French, German, Greek, or Latin should be elected in the sophomore year, if possible.

ZOOLOGY

(For the general requirements of the degree of Bachelor of Science see page 39.)

REQUIRED

Course			Credits
Zool.	1-2	General Zoology	8
		or	
Zool.	1	General Zoology	(4)
		and	
Zool.	53	Invertebrate Zoology	(4)
Zool.	54	Comparative Anatomy of Vertebrates	4
Chem.	1-2	General Chemistry	8

ELECTIVES

Of the electives, twenty hours are to be chosen from courses numbered 100 or above in the department of Zoology and all electives must have the approval of the head of the department.

The College of Agriculture

EDWARD JOHN IDDINGS, M.S.....*Dean of the College*
HERBERT ELMER LATTIG, B.S.(AGR.), M.S.(ED.), *Assistant Dean, and Chairman of the Committee on Scholarship and Curriculum*
ROSEMARY COWEN.....*Secretary of the College Faculty*

THE equipment of the College of Agriculture and Agricultural Experiment Station at Moscow consists of 740 acres of deeded land and 12 permanent buildings. In addition the University owns or leases for purposes of agricultural experiments 800 acres located at five other points in the State.

The equipment for agricultural instruction consists of Morrill Hall, used as a central office, classroom, and laboratory building; dairy building; horticultural by-products building; Science Hall; greenhouses; entomology building; dairy-cattle, horse, sheep, swine, and beef-cattle barns; judging pavilion; poultry-service building, and laying houses; carefully selected herds of purebred livestock; 75 acres devoted to experimental work in plant breeding, variety tests, and crop rotation; 55 acres of orchard and garden; 300 acres of pasture and green forage for horses, beef cattle, dairy cattle, sheep, and swine; 100 acres of corn, peas, and oats and other silage crops; and 210 acres of meadow.

LABORATORIES

AGRICULTURAL CHEMISTRY.—This laboratory is fully equipped with all the necessary apparatus for complete courses in all the branches of agricultural, dairy, and soil chemistry, and special research. Reference books, technical bulletins, and journals are on file in the department library.

AGRICULTURAL ECONOMICS.—Facilities for instruction and research are provided in the office in Morrill Hall. An office library is maintained which contains the chief sources of agricultural statistics, both historical and current, together with bulletins, textbooks, and periodicals. Electric calculating machines and other devices are at hand as an aid to research.

AGRICULTURAL ENGINEERING.—The laboratories contain levels, transits, and other equipment for surveying, a large number of gasoline engines, automobiles, and tractors; an acetylene welding outfit and a fully equipped shop and tool room; up-to-date farm machines commonly found on the average farm in Idaho; a test brake for determining the belt horse-power and a tractor dynamometer for determining the draw-bar horse-power of tractors. Pumps, tanks, weirs, and current meters are available for practice in irrigation measurements.

AGRONOMY.—A large, well-equipped laboratory is used for instructional work in grain and forage-crop identification, market grading and judging. A special laboratory is provided for seed testing and advanced research in crops. The department operates a 75-acre tract of land for experimental and demonstration work, which is used to supplement the laboratory courses. The soil laboratories are well equipped with modern apparatus for soil physics.

ANIMAL HUSBANDRY.—Facilities for training in the various phases of the livestock industry are available in the herds and flocks maintained on the University farm and in laboratories equipped to meet the needs of detailed study. Twenty-five Percheron horses; 75 Hereford and Shorthorn cattle; 175 sheep representing the Rambouillet, Hampshire, Suffolk, Southdown, and Lincoln breeds; and 100 Duroc

Jersey and Poland China swine comprise the herds and flocks. Equipment is available for studies of wool. An animal clinic with modern equipment offers laboratory facilities for study of the anatomy, physiology, and diseases of farm animals.

BACTERIOLOGY.—The department of bacteriology occupies five large rooms on the first floor of Science Hall. The laboratories are well equipped for teaching and research work. The student laboratory is adjacent to research laboratories where studies are being made on human and animal diseases and also on agricultural and industrial problems, thus offering the student an excellent opportunity for observation in research methods. Leading national and foreign publications in bacteriology are on file in the library.

BOTANY.—In the College of Letters and Science.

DAIRY HUSBANDRY.—Facilities for instruction in dairying include the creamery laboratory, provided with the usual equipment found in commercial creameries and milk plants, and complete apparatus for the manufacture of butter, cheese, and ice cream. In addition, there is a well-equipped laboratory for research work. For practice in judging and for research work, the University maintains a herd of 100 head of dairy cattle, representing the Jersey and Holstein breeds. On these complete breeding and production records are kept.

ENTOMOLOGY.—The department of entomology occupies the entire Entomology Building. The laboratories are equipped with apparatus necessary for teaching and research work. A well-arranged insect collection is available for study and comparison. The University is in an area rich in its varied, unique insect fauna due to the differences in altitude, soil types, and degrees of cultivation within short distances of the campus.

HORTICULTURE.—Courses in horticulture include instruction in three divisions, fruit growing, vegetable growing, and ornamental horticulture. Orchards, vineyards, berry plantations, and garden space are available for practical instruction outdoors, and greenhouses, storage and small grading and packing house for indoor work. Junior and senior students have access to a well-equipped laboratory in Morrill Hall for advanced study and research.

PLANT PATHOLOGY.—Facilities for instruction in plant pathology include offices, two well-equipped laboratories, a reading room containing suitable reference material, and a greenhouse with modern equipment for both elementary and advanced study and research.

POULTRY.—The poultry plant is provided with facilities for the training of students in practical poultry management and in various phases of special problem work. A central service building houses facilities for judging, incubation, brooding, study of feeds, and the preparation of poultry products for market. Laying houses offer opportunity for instruction in housing and flock management. Experimental feeding trials provide means for special study in poultry nutrition. Instruction in poultry diseases is included in courses in veterinary science. A library maintained in the office in Morrill Hall contains the latest books, bulletins, and magazines as reference material.

ZOOLOGY.—In the College of Letters and Science.

ADMISSION

Admission requirements* are presented in Part II of this catalog.

* Admission to short courses in motor mechanics, carpentry, and dairying is secured from the eighth grade. A special description of the short courses may be had upon application.

Curricula and Degrees

Curricula of study are offered toward the degree, Bachelor of Science in Agriculture. Requirements for the degree, Master of Science in Agriculture, will be found in the section of the catalog devoted to the Graduate School.

Instruction is given in Agricultural Chemistry, Agricultural Economics, Agricultural Education, Agricultural Engineering†, Agronomy, Animal Husbandry, Bacteriology, Dairy Husbandry, Entomology, Horticulture, Plant Pathology, Poultry Husbandry, Soils, and Veterinary Science.

All students pursue the same curriculum throughout the freshman and sophomore years, with some provision for substitution of courses where it is deemed necessary. Detailed instructions for making such substitutions are found under *Majors* on page 55. On or before the beginning of the junior year a major agricultural subject is chosen. Majors may be chosen in any department of the College of Agriculture or in General Agriculture.

The teacher-training curriculum in Vocational Agriculture is the course approved by the State Board of Vocational Education for the preparation of Smith-Hughes high school agriculture teachers. Graduates who have completed at least 13 credits in Agricultural Education and 2 credits in Ed. 55, Idaho Law Manual and Civics are eligible for a state high school certificate valid for five years.

Those who desire a more general course in agriculture, such as will especially fit for county agent and other extension work, should major in General Agriculture, or will find it desirable to choose electives in one of the other departments in the College of Agriculture to prepare for work in these fields.

CURRICULUM IN AGRICULTURE

Freshman Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Eng.	1	English Composition	3	Chem.	2	General Chemistry	4
Chem.	1	General Chemistry	4	Zool.	1	General Zoology	4
Bot.	11	General Ag. Botany	5	Hort.	2	Intro. to Horticulture	3
Agron.	1	General Crop Prod.	4	A.E.	4	Gen. Agric. Engin.	3
Mil.	1	Freshman Military	1½	Mil.	2	Freshman Military	1½
P.E.	31	Freshman Sports	½	P.E.	31	Freshman Sports	½
				Elective			2
Total			18	Total			18

Sophomore Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Chem.	73	Org. and Anal. Chem.	4	Ag.Chem.	2	Ag. Chemistry	4
*Social Science			3	Econ.	53	Principles of Econ.	4
Agron.	51	General Soils	4	Bact.	51	Gen. Bacteriology	4
A.H.	1	Livestock Industry	5	D.H.	2	Elements of Dairying	4
Mil.	3	Sophomore Military	1½	Mil.	4	Sophomore Military	1½
P.E.	33	Sophomore Sports	½	P.E.	33	Sophomore Sports	½
Total			18	Total			18

† The Curriculum in Agricultural Engineering is offered jointly by the College of Agriculture and the College of Engineering and will be found outlined in the Section of the catalog devoted to the College of Engineering. For the degree B.S. (A.E.) see College of Engineering.

* The student may select from courses in Economics, History, Philosophy, Political Science, or Sociology.

JUNIOR YEAR

FIRST SEMESTER			Credits
Course			
Ag.Econ.	103	Ag. Economics	3
P.P.	101	Gen. Plant Path.	3
Ent.	101	Gen. Entomology	3
*Phys.	1	Elementary Physics	4
Major Requirements			4-8
Total			17

SECOND SEMESTER			Credits
Course			
Eng.	155	Technical Writing	3
Major Requirements			15
Total			18

SENIOR YEAR

FIRST SEMESTER	Credits
Course	
Minimum Major Requirements	7
Selected Courses	11
Total	18

SECOND SEMESTER	Credits
Course	
Minimum Major Requirements	4
Selected Courses	13
Total	17

Summary

Required Basic Courses	82 credits or	86 credits†
Major Requirements and Related Courses	32	32
Elective	28	24
Total Required for Graduation	142	142

Students who have taken equivalent courses in the Southern Branch will be able to adjust their schedules to the agricultural curriculum outlined above.

To obtain the recommendation of the faculty for the degree of Bachelor of Science in Agriculture, B.S.(Agr.), the student must in addition to completing the regular courses of study prescribed by the department in which his major lies, present evidence of having spent at least one summer after his first year in residence at the University in practical farm work on an approved farm; those enrolled in the teacher-training course in agricultural education also must present evidence of having had a total of two years of practical farm experience subsequent to becoming 14 years of age.

MAJORS

Before the close of the freshman year each student will be asked to fill out a form indicating the type of work he expects or hopes to follow. Before the end of the sophomore year he will file a written statement in the dean's office indicating the department in which he expects to major. Any student in the College of Agriculture desiring more definitely to prepare himself for any specific lines of work may, with the approval of the dean of the College of Agriculture and the head of the department in which he expects to major, substitute the courses specified in the regular agricultural curriculum as follows:

FIRST: Chem. 51 (Qualitative and Gravimetric Analysis) for Chem. 73 (Organic Chemistry); Chem. 52 (Qualitative Analysis) for Ag. Chem. 2 (Agricultural Chemistry); Bot. 1 (General Botany) for Bot. 11 (General Agricultural Botany).

SECOND: Other substitutions, not to exceed a total of 12 semester credits, selected from the following courses: Agron. 1 (General Crop Production); Hort. 2 (Introduction to Horticulture); A.E. 4 (General Agricultural Engineering); A.H. 1 (Livestock Industry); D.H. 2 (Elements of Dairying); Ag.Chem. 2 (Agricultural Chemistry); Ent. 101 (General Entomology); P.P. 101 (General Plant Pathology); Agron. 51 (General Soils); Ag.Econ. 103 (Agricultural Economics). Majors in Agricultural Economics may substitute Math. 1 for Chem. 73 without change in the rule permitting substitution of twelve credits.

* Students who present one year of high school physics for entrance are not required to take Phys. 1, and will be allowed 8 elective credits in the first semester of the Junior year.

† Those who enter without high school physics.

Majors may be chosen in any department of the College of Agriculture or in General Agriculture. The head of the department is the student's major professor in each case except in General Agriculture. Those choosing the major in General Agriculture will register with the dean of the college.

Twenty credits in courses numbered above 100 are required for a major, the courses to be selected by the major department. The student will take 12 credits in other departments, the courses to be selected with a definite objective and approved by the major department. Twenty-four to twenty-eight credits are elective.

ADULT SPECIAL STUDENTS

Students who are 21 years of age or older may enter as special students and take courses selected to suit their special needs. (See Admission Requirements, pages 23 to 28.) Such students by omitting some of the requirements for the degree, may take agricultural courses of direct and practical value in meeting farm production and agricultural marketing problems. See page 26 for regulations governing such admission.

Short Courses

Commercial Dairying

October 14, 1940 to March 14, 1941

The five-months' course in Commercial Dairying is planned to give a practical working knowledge of modern dairy manufacturing methods. The primary objective of the course is, however, to train men who will be able successfully to fill responsible positions in dairy manufacturing plants. Efforts are made to place worthy men in desirable positions.

A three-story brick building devoted entirely to the work in dairying provides space for classrooms and laboratories. The equipment includes the necessary machinery and complete equipment for the manufacture of butter, cheese, and ice cream, and the processing of market milk by modern commercial methods. Refrigeration is furnished by a five-ton mechanical refrigerating plant. The testing laboratory includes a Mojonnier tester, the most modern machine for testing milk and milk products.

Tuition is free, but each student pays a health fee of $2 each term, and a students' association fee of $4.25 each term, admitting him to the athletic contests on the campus, covering subscription to the college paper, and entitling him to other privileges. A deposit of $5 is required of each student as a breakage fee. All or part of this is refunded at end of the term, depending on the amount of equipment broken. In addition, a few laboratory fees are charged, amounting to about $5 a year. There is also an extra-curricular fee of $4.50. All fees are subject to slight change.

Students who are 17 years of age or over and who have completed the eighth-grade work will be admitted without examinations. Others will be admitted upon submitting evidence of sufficient previous training to undertake the work. The work of the course covers two terms of approximately 10 weeks each.

COMMERCIAL DAIRYING CURRICULUM

FIRST TERM

Course	Credit Hours
Cheesemaking	4
Market Milk	3
Farm Dairying	3
Dairy Bacteriology	2
Dairy Mechanics	2
Dairy Calculations	2
Market Poultry and Eggs	2
Factory Tests	1
Total	19

SECOND TERM

Course	Credit Hours
Buttermaking	4
Milk Production	4
Ice Cream Making	4
Refrigeration	2
Milk Technology	2
Dairy Bacteriology	2
Scoring Milk, Butter, Cheese, and Ice Cream	1
Total	19

Trades Training

COURSES IN MOTOR MECHANICS, DIESEL ENGINES, AND CARPENTRY

September 16, 1940 to June 8, 1941

The trades training courses in Motor Mechanics and Carpentry are cooperative between the Department of Agricultural Engineering, University of Idaho, and the Trades Training Division of the State Department of Vocational Education. These courses are scheduled on a nine months' basis following the program for the regular University work, and are of non-college credit. Under the vocational training requirements students must attend lecture and laboratory classes five days per week for a period of six hours each day. The cost of these courses includes the regular University registration fee of approximately $32.50 for each full semester. Additional costs are for books and instruction material, which averages about $20.00 to $30.00 per year, and for board and room, which may be obtained at reasonable rates from the University or from private homes. Enrollment in these courses is open to anyone who can show that he will profit from the work offered, but those with an eighth grade education and who are at least 16 years of age are best fitted to take advantage of the work.

MOTOR MECHANICS

FIRST TERM

Course	Hours Lect.	Hours Lab.
Ignition	2	4
Garage Management	1	0
Oxyacetylene Welding	0	4
Motors	2	4
Shop Practice	2	2
Chassis	2	4
Top-Body-Fenders	1	2
Total	10	20

SECOND TERM

Course	Hours Lect.	Hours Lab.
Ignition	2	4
Tractors and Trucks	2	0
Oxyacetylene Welding	0	4
Motors	2	4
Batteries	1	2
Chassis	2	4
Top-Body-Fenders	1	2
Total	10	20

CARPENTRY

FIRST TERM

Course	Hours Lect.	Hours Lab.
Tool Conditioning	1	4
Fundamental Woodwork	2	4
Specifications and Plans	2	4
Building Materials	2	2
Costs and Estimates	2	2
Concrete Construction	1	4
Total	10	20

SECOND TERM

Course	Hours Lect.	Hours Lab.
Power Tool Use	1	4
Advanced Woodwork	2	4
Specifications and Plans	2	4
Painting and Finishing	2	4
Builders' Hardware	2	2
Masonry Construction	1	2
Total	10	20

Diesel Engine Short Course

(*Two Weeks*)

Diesel engine operation and repair, including truck, tractor, and stationary power application. This course is open to students with mechanical experience such as tractor operation, garage mechanics, and combine operators. Registration fee is $2.00 for the two weeks' course.

The College of Engineering

J. E. BUCHANAN, C.E.....*Dean of the College*
ROBERT H. HULL, E.E.....*Secretary of the College Faculty*

THE College of Engineering offers curricula in civil engineering, electrical engineering, mechanical engineering, chemical engineering, and (in cooperation with the College of Agriculture) agricultural engineering.

EQUIPMENT

AGRICULTURAL ENGINEERING.—The laboratories of all engineering departments are used by the students in this curriculum. The agricultural engineering department possesses well-equipped shops and laboratories for its special fields of work.

CHEMICAL ENGINEERING.—The chemical engineering laboratories are in the department of chemistry and chemical engineering.

CIVIL ENGINEERING.—In civil engineering there is a full equipment of field instruments, unusually well-appointed drawing rooms, laboratories, including sanitary, surveying, and a materials testing laboratory containing 200,000-pound, 75,000-pound, and 50,000-pound testing machines. The materials testing laboratory is available for the instruction of students and for the service of highway officials throughout the State.

ELECTRICAL ENGINEERING.—The electrical laboratories are well supplied with machinery to demonstrate the action of various types of generators, motors, converters, transformers, and other electrical apparatus, by using commercial machines of convenient size. In addition photometric, high voltage, radio, electrical standardization and vacuum tube testing laboratories are maintained.

MECHANICAL ENGINEERING.—The mechanical engineering laboratory is equipped for experimental work on steam, gas, and oil engines; on gas producers, air compressors, feed pumps and heaters, and injectors; on airplane engines; on automobile motors, carburetors, ignition, and starting apparatus. Facilities are provided for fuel analysis and testing. The University heating and cold storage plants are also available for laboratory work.

ADMISSION AND DEGREES

ADMISSION.—For a statement of admission requirements see Part II.

Students who contemplate entering the College of Engineering with advanced standing from junior colleges or other institutions should include as many freshman and sophomore requirements listed in the curricula as possible. Freshman mathematics should include college algebra, trigonometry, and analytic geometry. Calculus and physics are prerequisites to many advanced courses and their omission will delay graduation.

DEGREES.—Curricula are offered in the College of Engineering leading to the degrees of Bachelor of Science in Civil Engineering, B.S.(C.E.); Bachelor of Science in Electrical Engineering, B.S.(E.E.); Bachelor of Science in Mechanical Engineering, B.S.(M.E.); Bachelor of Science in Chemical Engineering, B.S.(Chem.E.); Bachelor of Science in Agricultural Engineering, B.S.(A.E.).

For the requirements of the advanced degrees of Master of Science in the respective branches of engineering, M.S.(C.E.), etc., and the professional engineering degrees, see the description of the Graduate School.

The degree, Bachelor of Science in Agricultural Engineering, B.S.(A.E.), may be granted to students who have completed a four-year course in civil, mechanical, or electrical engineering followed by one year of prescribed work approved by the faculties concerned.

The degree, B.S.(E.E.) or B.S.(M.E.), may be granted to students who have completed the respective courses in mechanical or electrical engineering followed by one year of prescribed work approved by the faculty.

The courses in the four-year engineering curricula listed following may be distributed advantageously over five undergraduate years. This may be especially desirable for students entering with deficiencies in mathematics and natural science. A five-year program also permits more time for the choice of electives from other departments and for participation in worthwhile student activities, especially in student chapters of the various national engineering societies. Electives should be broadly chosen and the student should give careful attention to their sequence and coherence.

REQUIREMENTS FOR GRADUATION

Students of all four-year curricula in the College of Engineering take the same work in the freshman year, as follows:

COMMON FRESHMAN YEAR

FIRST SEMESTER

Course			Credits
Chem.	1	Gen. Chemistry	4
C.E.	A	Engr. Lectures	0
C.E.	1	Engr. Drawing	4
Eng.	1	English Comp.	3
Math.	11	Fresh. Math.	5
Mil.	1	Fresh. Military	1½
P.E.	31	Fresh. Sports	½
Total			18

SECOND SEMESTER

Course			Credits
Chem.	2	Gen. Chemistry	4
C.E.	2	Engr. Drawing	3
C.E.	10	Engr. Problems	1
Eng.	2	English Comp.	3
Math.	12	Fresh. Math.	5
Mil.	2	Fresh. Military	1½
P.E.	31	Fresh. Sports	½
Total			18

To obtain the recommendation of the faculty for the degree of Bachelor of Science in civil, electrical, mechanical, chemical, or agricultural engineering, the candidate must have completed, in addition to the common freshman year above, the curriculum corresponding to the degree as outlined below.

CURRICULUM IN AGRICULTURAL ENGINEERING

Administered jointly by the Colleges of Engineering and Agriculture

SOPHOMORE YEAR

FIRST SEMESTER

Course			Credits
Agron.	1	Gen. Crop Production	4
C.E.	53	Plane Surveying	4
Math.	51	Calculus	4
Mil.	3	Soph. Military	1½
P.E.	33	Soph. Sports	½
Phys.	51	Engr. Physics	5
Total			19

SECOND SEMESTER

Course			Credits
E.E.	22	Elementary E.E.	3
C.E.	54	Topog. Surveying	3
C.E.	66	Mechanics (Statics)	2
Math.	52	Calculus	4
Mil.	4	Soph. Military	1½
P.E.	33	Soph. Sports	½
Phys.	52	Engr. Physics	5
Total			19

JUNIOR YEAR

FIRST SEMESTER

Course			Credits
C.E.	101	Mechanics (Dynamics)	2
C.E.	103a	Mech. of Materials	4
Geol.	1	Introd. Geology	4
Eng.	151	Engineering Reports	3
M.E.	13	Mechanism	3
A.E.	139	Rural Electrification	3
Total			19

SECOND SEMESTER

Course			Credits
A.E.	132	Farm Machinery	2
M.E.	120	Thermodynamics	3
C.E.	102	Fluid Mech. (Hyd.)	3
C.E.	104	Structural Analysis	3
C.E.	106	Reinforced Concrete	2
Econ.	56	Economics for Engrs.	3
Ag.Econ.	108	Farm Management	3
Total			19

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
A.E.	105	Pro-Seminar	1
A.E.	157	Field Trips	0
A.E.	161	Irrigation Practice	2
A.E.	163	Reclamation and Conservation	2
Agron.	51	General Soils	4
E.E.	133	D. C. Machinery	3
E.E.	137	E. E. Laboratory	2
*Elective			3
Total			17

SECOND SEMESTER			
Course			Credits
A.E.	133	Tractors and Trucks	2
A.E.	106	Pro-Seminar	1
A.E.	108	Farm Buildings	3
A.E.	158	Field Trips	0
C.E.	132	San. and Mun. Engr.	2
C.E.	154	Contracts and Spec.	2
E.E.	134	A. C. Machinery	3
E.E.	138	E. E. Laboratory	2
*Elective			2
Total			17

Total credits required, 146.

* Electives must be approved by the dean of the college in charge.

CURRICULUM IN CHEMICAL ENGINEERING

SOPHOMORE YEAR

FIRST SEMESTER			
Course			Credits
Chem.	51	Qualitative Analysis	4
Math.	51	Calculus	4
M.E.	13	Mechanism	3
Mil.	3	Soph. Military	1½
P.E.	33	Soph. Sports	½
Phys.	51	Engr. Physics	5
Total			18

SECOND SEMESTER			
Course			Credits
Chem.	52	Quantitative Analysis	4
C.E.	51a	Surveying	2
C.E.	66	Mechanics (Statics)	2
Math.	52	Calculus	4
Mil.	4	Soph. Military	1½
P.E.	33	Soph. Sports	½
Phys.	52	Engr. Physics	5
Total			19

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Chem.	105	Physical Chem.	4
Chem.	121	Chemical Engineering Calculations	2
Chem.	171	Organic Chemistry	4
Ger.	1n	Elementary German	4
M.E.	121	Thermodynamics I	3
M.E.	128	M. E. Laboratory	2
Total			19

SECOND SEMESTER			
Course			Credits
Chem.	106	Physical Chem.	4
Chem.	154	Adv. Quantitative Anal.	3
Chem.	172	Organic Chemistry	4
Eng.	151	Engineering Reports	3
Ger.	2	Elementary German	4
Total			18

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Chem.	131	Unit Operations	3
Chem.	133	Inorganic Technology	2
Chem.	137	Field Trips	0
Chem.	109	Pro-Seminar	1
C.E.	101	Mechanics (Dynamics)	2
C.E.	103	Mech. of Materials	5
E.E.	131	Direct Current Mach.	3
*Elective			2
Total			18

SECOND SEMESTER			
Course			Credits
Chem.	132	Unit Operations	4
Chem.	134	Unit Processes and Organic Technology	2
Chem.	136	Chemical Plant Design	3
Chem.	138	Field Trips	0
C.E.	154	Contracts and Specif.	2
E.E.	132	A. C. Mach. and Lab.	2
M.E.	124	Machine Design	2
*Elective			2
Total			17

Total credits required, 145.

* Electives must be approved by the dean of the College of Engineering.

CURRICULUM IN CIVIL ENGINEERING

SOPHOMORE YEAR

FIRST SEMESTER			
Course			Credits
C.E.	53	Plane Surveying	4
Geol.	1	Introd. Geology	4
Math.	51	Calculus	4
Phys.	51	Engr. Physics	5
Mil.	3	Soph. Military	1½
P.E.	33	Soph. Sports	½
Total			19

SECOND SEMESTER			
Course			Credits
C.E.	54	Topog. Surveying	3
C.E.	66	Mechanics (Statics)	2
C.E.	58	Curves and Earthwork	2
Math.	52	Calculus	4
Phys.	52	Engr. Physics	5
Mil.	4	Soph. Military	1½
P.E.	33	Soph. Sports	½
Total			18

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
C.E.	101	Mechanics (Dynamics)	2
C.E.	103	Mech. of Materials	5
C.E.	111	Hwy. and Rwy. Engr.	4
Eng.	151	Engr. Reports	3
E.E.	131	D. C. Machinery	3
*Electives			2
Total			19

SECOND SEMESTER			
Course			Credits
C.E.	102	Fluid Mech. (Hyd.)	3
C.E.	104	Structural Analysis	3
C.E.	106	Reinforced Concrete	2
C.E.	108	Engr. Materials	2
M.E.	120	Thermodynamics	3
E.E.	132	A. C. Machinery	2
Econ.	56	Economics for Engrs.	3
Total			18

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
C.E.	121	Structural Engr.	6
C.E.	131	Sanitary and Municipal Engineering	4
C.E.	141	Hydraulic Engr.	3
C.E.	153	Estimates and Costs	2
C.E.	157	Field Trips	0
*Electives			2
Total			17

SECOND SEMESTER			
Course			Credits
C.E.	122	Structural Engr.	4
C.E.	132	Sanitary and Municipal Engineering	3
C.E.	142	Hydraulic Engr.	3
C.E.	152	Pro-Seminar	1
C.E.	154	Cont. and Specif.	2
C.E.	156	Val. and Appraisals	2
C.E.	158	Field Trips	0
†*Electives			3
Total			18

Total credits required, 145.

CURRICULUM IN ELECTRICAL ENGINEERING

SOPHOMORE YEAR

FIRST SEMESTER			
Course			Credits
Math.	51	Calculus	4
M.E.	3	Machine Tool Lab. I	2
M.E.	5	Machine Drawing	2
M.E.	13	Mechanism	3
Mil.	3	Soph. Military	1½
P.E.	33	Soph. Sports	½
Phys.	51	Engr. Physics	5
Total			18

SECOND SEMESTER			
Course			Credits
C.E.	51a	Surveying	2
C.E.	66	Mechanics (Statics)	2
E.E.	22	Elem. Elec. Engr.	3
Math.	52	Calculus	4
Mil.	4	Soph. Military	1½
P.E.	33	Soph. Sports	½
Phys.	52	Engr. Physics	5
Total			18

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
C.E.	103a	Mech. of Materials	4
E.E.	133	D. C. Machinery	3
E.E.	135	E. E. Laboratory	2
Math.	101	Engr. Math.	3
M.E.	121	Thermodynamics I	3
Phys.	131	Elec. and Magnetism	4
Total			19

SECOND SEMESTER			
Course			Credits
C.E.	101	Mechanics (Dynamics)	2
C.E.	102	Fluid Mech. (Hyd.)	3
E.E.	134	A. C. Machinery	3
E.E.	136	E. E. Laboratory	2
Eng.	151	Engr. Reports	3
M.E.	122	Thermodynamics II	3
M.E.	124	Machine Design	2
Total			18

* Electives must be approved by the dean of the College of Engineering.
† Recommended electives are C.E. 112, C.E. 124, C.E. 134, C.E. 144.

SENIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
E.E.	141	Elec. Engr.	5	C.E.	154	Contracts and Specif.	2
E.E.	143	E. E. Laboratory	2	E.E.	142	Elec. Engr.	5
E.E.	145	Pro-Seminar	1	E.E.	144	E. E. Laboratory	2
E.E.	147	Electrical Design	3	E.E.	146	Pro-Seminar	1
E.E.	163	Field Trips	0	E.E.	162	Radio Engr.	3
M.E.	128	M. E. Laboratory	2	E.E.	164	Field Trips	0
*Elective			5	*Elective			5
Total			18	Total			18

Total credits required, 145.

CURRICULUM IN MECHANICAL ENGINEERING

SOPHOMORE YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Math.	51	Calculus	4	C.E.	66	Mechanics (Statics)	2
M.E.	3	Machine Tool Lab. I	2	E.E.	22	Elem. Elec. Engr.	3
M.E.	5	Machine Drawing	2	Math.	52	Calculus	4
M.E.	13	Mechanism	3	M.E.	4	Machine Tool Lab. II	3
Mil.	3	Soph. Military	1½	Mil.	4	Soph. Military	1½
P.E.	33	Soph. Sports	½	P.E.	33	Soph. Sports	½
Phys.	51	Engr. Physics	5	Phys.	52	Engr. Physics	5
Total			18	Total			19

JUNIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
C.E.	101	Mechanics (Dynamics)	2	C.E.	102	Fluid Mech. (Hyd.)	3
C.E.	103	Mech. of Materials	5	E.E.	134	A. C. Machinery	3
E.E.	133	D. C. Machinery	3	E.E.	138	E. E. Laboratory	2
E.E.	137	E. E. Laboratory	2	Eng.	151	Engineering Reports	3
M.E.	121	Thermodynamics I	3	M.E.	122	Thermodynamics II	3
M.E.	123	Aerodynamics I	3	M.E.	124	Machine Design	2
				M.E.	128	M. E. Laboratory	2
Total			18	Total			18

SENIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
C.E.	51	Surveying	3	C.E.	154	Contracts and Specif.	2
M.E.	125	Machine Design	2	M.E.	140	Pro-Seminar	1
M.E.	127	M.E. Laboratory (Gas)	2	M.E.	142	Airplane Engines	2
M.E.	129	Aero. Engr.	3	M.E.	144	Heat, Vent. & Air Cond.	3
M.E.	141	Heat Power Engr.	3	M.E.	126	M. E. Project	3
M.E.	163	Field Trips	0	M.E.	164	Field Trips	0
*Elective			5	Econ.	56	Economics for Engrs.	3
				*Elective			4
Total			18	Total			18

Total credits required, 145.

AERONAUTICAL ENGINEERING

For students primarily interested in the aeronautical phase of Mechanical Engineering, attention is called to the following suggested electives in addition to M.E. 123, Aerodynamics I; M.E. 129, Aeronautical Engineering; and M.E. 142, Airplane Engines, which are required courses in the Mechanical Engineering curriculum:

C.E.	104	Structural Analysis	3
C.E.	121	Structural Engineering	6
M.E.	156	Airplane Stress Analysis	2
Phys.	106	Meteorology	3
E.E.	20	Elements of Radio-Telegraphy	2
E.E.	162	Radio Engineering	3
Math.	101	Engineering Mathematics	3

* Electives must be approved by the dean of the College of Engineering.

The College of Law

PENDLETON HOWARD, A.M., LL.B., PH.D.....*Dean of the College*

PURPOSES AND METHODS OF INSTRUCTION

THE College of Law was established in 1909. Its primary purpose is to afford a thorough and scientific legal education for students who are fitted by intellectual maturity and previous academic training to pursue professional study under university methods of instruction.

The curriculum covers a minimum period of three academic years and is designed to prepare students for the general practice of law in any American state. Special attention is paid, however, to problems of local law in the western states, to irrigation law and procedure, to mining law, to Idaho pleading and practice, and to the Idaho law of community property.

The College of Law is conducted upon the theory that the teaching of law is a task requiring all the working time of well-trained legal scholars who have made special preparation for teaching. The members of the teaching staff do not practice law but give their entire time to instruction and research. Their practice of the law, which gives them an appreciation of the law in operation, has preceded their teaching.

The case system of instruction in used, supplemented by collateral reading, the examination of statutes and other source materials, the solution of problems, and the rendition of reports upon legal questions. The mere accumulation of information is subordinated to the more important ends of developing the faculties of the student and of training him in scientific habits of thought, at the same time imparting a thorough knowledge of the law as it actually functions.

APPROVAL BY THE AMERICAN BAR ASSOCIATION

In 1921 the American Bar Association adopted a resolution reading in part as follows:

(1) The American Bar Association is of the opinion that every candidate for admission to the bar should give evidence of graduation from a law school complying with the following standards:

(a) It shall require as a condition of admission at least two years of study in a college.

(b) It shall require its students to pursue a course of three years' duration if they devote substantially all of their working time to their studies, and a longer course, equivalent in the number of working hours, if they devote only part of their working time to their studies.

(c) It shall provide an adequate library available for the use of the students.

(d) It shall have among its teachers a sufficient number giving their entire time to the school to insure actual personal acquaintance and influence with the whole student body.

The College of Law has complied with these requirements and is classified by the Section of Legal Education and Admissions to the Bar of the American Bar Association as an "approved law school."

MEMBER OF THE ASSOCIATION OF AMERICAN LAW SCHOOLS

The College of Law is a member of the Association of American Law Schools, an organization comprising nearly one hundred of the leading law schools of the United States. The Association was formed in 1900 with the object of improving legal education in America. Member schools are required to maintain certain high standards relating to entrance requirements, faculty, library and curriculum. It is generally recognized that the Association of American Law Schools and the Section of Legal Education and Admissions to the Bar of the American Bar Association have been the primary forces during the past 35 years in the improvement of legal education in this country. They are the only accrediting agencies of law schools.

PREPARATION FOR THE STUDY OF LAW

The experience of law teachers is that the standing and progress of law students may, in general, be measured by the extent and quality of their pre-legal education. Those with sound and thorough preliminary education have an immense advantage in the study of law over those who lack such preparation.

Since the law touches every human interest, the College of Law does not consider it desirable to prescribe a rigid pre-legal course of study. In this it follows the judgment of the Association of American Law Schools. Among the many values to be derived from a college education, maturity of thought, judgment and expression is of peculiar importance to the study of law. Such maturity comes from rigorous intellectual discipline derived from the mastery of any study undertaken by the student, coupled with a sufficient knowledge of the history and development of English and American institutions and of modern civilization to appreciate the social, economic and political forces back of our legal system.

REQUIREMENTS FOR ADMISSION

Admission requirements are stated in Part II.

PRE-LEGAL COURSE

All students taking courses in the University preparatory to their entrance into the College of Law are requested to consult the faculty adviser on pre-legal studies before making their final choice of courses to be pursued during such preparatory work.

COMBINED ARTS AND LAW COURSE

A student may secure the degrees of Bachelor of Arts and Bachelor of Laws in six years under the following regulation of the College of Letters and Science. Any candidate for the Bachelor of Arts degree, who at the end of the junior year has completed 98 semester hours and who has satisfied all other requirements of the College of Letters and Science for this degree as specified on page 46, may in his senior year take the full first year of the law course, and upon completion of the same be entitled to receive the degree of Bachelor of Arts. Upon satisfactory completion thereafter of two years of advanced law study, the degree of Bachelor of Laws will be conferred. The same scholarship requirements are in effect for this combined course as for regular admission to the College of Law. (See page 27.) No work included in the above 98 credits and counted toward the Bachelor of Arts degree may be counted again toward the LL.B. degree.

COMBINED BUSINESS AND LAW COURSE

The College of Law and the School of Business Administration offer a combined six-year curriculum leading to the degree of Bachelor of Science in Business at the end of four years and to the degree of Bachelor of Laws at the end of six years. Details with respect to this combination curriculum may be found on page 88. The same scholarship requirements are in effect for this combined course as for regular admission to the College of Law. (See page 27.)

ADMISSION TO ADVANCED STANDING

Students who have completed one or more years of study in approved law schools may apply for admission to advanced standing.

No credit will be given for work completed elsewhere than in standard law schools *while in residence at such schools;* therefore, no credit can be given for work done in a law office or by correspondence.

SPECIAL STUDENTS

In rare instances persons who cannot qualify as candidates for the degree of Bachelor of Laws may be admitted as special students on petition to the Committee on Admissions approved by the faculty of the College of Law.

The applicant must show that he is unable to pursue such studies as will qualify him for admission as a regular student, and that he possesses such educational training and practical experience as will enable him to pursue the study of law satisfactorily. Application for permission to enter as a special student should be made in advance of the regular registration period.

It must be distinctly understood that such special students are not candidates for a degree in Law.

STUDENTS IN OTHER COLLEGES

Courses in Law are open to junior and senior students in the College of Letters and Science and in the other colleges, in which they will be credited according to their respective regulations. Before registering, students should consult the dean of the College of Law.

TRIAL PRACTICE

The student organization of the College of Law, known as the *Bench and Bar,* holds regular meetings, when it is addressed by outstanding lawyers and other professional men. This organization engages in the trial of at least one case each school year. The law faculty assists in drawing up legal papers and mapping out the general plan of procedure. The student is thus not only well grounded in the theory of the law, but has an opportunity to practice it in the trial of cases.

SPECIAL LECTURES

It is the policy of the College of Law to bring to the school each year expert practicing lawyers and jurists of the state for series of lectures in specialized subjects. Special lectures are given on professional ethics, on workmen's compensation legislation, on mining law, on special phases of Idaho practice, and on office practice.

EQUIPMENT AND LIBRARY

ROOMS.—The College of Law occupies rooms set apart for its use in the Administration building. These rooms include recitation rooms, offices for the members of the law faculty, the law library, and study rooms.

LIBRARY.—The law library consists of some thirteen thousand volumes, constantly being added to by gift and purchase. Included are an unusually complete collection of treatises and periodicals, as well as all standard digests and encyclopedias; the statutes of the United States and of the majority of the American states; the National Reporter System and the reports of the Supreme Court of the United States and of most of the states prior thereto; English reports from the earliest date; and all the various annotated case series. Included also are works on the general nature and history of law, legal philosophy, public international law, and on closely related fields of political science and business practice.

REQUIREMENTS FOR GRADUATION AND DEGREE

The degree of Bachelor of Laws (LL.B.) from this University will be awarded to students who have complied with all the entrance requirements and who have completed three years of full-time law study and who present 80 or more credits, of which number 80 shall be with an average grade of at least 2.00 (C). The completion of all prescribed first year courses is required for graduation. In addition to these general requirements, students admitted to advanced standing must complete at least the last full year in residence and maintain an average of at least 2.00 (C) in all work successfully completed in this school. (See also University Regulations, Sec. J, on page 32.)

FEES AND EXPENSES

There is no special tuition fee in the College of Law. General expenses are outlined in Part I.

Curriculum

The course of study covers three academic years. The prescribed first-year work is required of all students. Students in the second and third years normally take 13 hours each semester and may not, during any semester, receive credit for more than 15 hours.

In courses 101n-102, 105n-106, and 111n-112, no credits will be given for the work of the first semester until the work of the second semester is completed and an examination upon the entire course is passed.

CURRICULUM IN LAW

FIRST YEAR

FIRST SEMESTER			SECOND SEMESTER		
Course		Credits	Course		Credits
Law 101n	Contracts	3	Law 102	Contracts	3
Law 105n	Criminal Law and Procedure	3	Law 106	Criminal Law and Procedure	2
Law 109	Courts and Civil Procedure	5	Law 112	Property	3
Law 111n	Property	3	Law 116	Torts	5
			Law 120	Legal Bibliography	1

SECOND AND THIRD YEARS

FIRST SEMESTER			SECOND SEMESTER		
Course		Credits	Course		Credits
Law 201	Equity I	3	Law 202	Equity II	3
Law 203	Persons and Community Property	3	Law 208	Evidence	4
Law 217	Bills and Notes	3	Law 212	Wills	2
Law 231	Code Pleading	3	Law 214	Landlord and Tenant	3
Law 235	Security	3	Law 216	Titles	2
Law 251	Constitutional Law I	4	Law 222	Sales	3
Law 255	Conflict of Laws	3	Law 232	Trial and Appellate Practice	3
Law 265	Business Associations I	4	Law 236	Creditors' Rights	3
Law 281	Research		Law 246	Irrigation	3
			Law 252	Constitutional Law II	2
			Law 258	Trusts	4
			Law 268	Business Associations II	4
			Law 274	Taxation	3
			Law 282	Research	

The School of Mines

ARTHUR WILLIAM FAHRENWALD, B.S., E.M., MET.E.....*Dean*

THE University of Idaho, situated in one of the foremost mining regions of the world, appropriately maintains courses in the technology of the mineral industries.

To enable this work to be carried on effectively, in August, 1917, a School of Mines was created as an administrative unit of the University, and its scope was indicated in the following language:

> Within this school will be included the work in mining proper, in metallurgy, and in geology; and it shall include the exploitation of the non-metalliferous minerals (except road-making materials) as well as that of the precious and useful metals.

In accordance with these instructions, the School of Mines offers curricula leading to the degrees of Bachelor of Science in Mining Engineering, Metallurgical Engineering, Geological Engineering, and Geology. For requirements for the degrees of Master of Science in these branches and the professional degrees, E.M., Met.E., and Geol.E., see the description of the Graduate School.

ADVANTAGES OF LOCATION

The region within a radius of 300 miles from the School of Mines has produced, within the last 40 years, minerals and metals worth more than $1,500,000,000. In this circle are located many famous mining camps, such as the Coeur d'Alene district, Silver City and DeLamar in Idaho; Baker City, Oregon; Butte, Philipsburg, Virginia City, Marysville, in Montana; Trail, Granby, Sheep Creek, and other districts in British Columbia. Also within this radius is the great Coulee Dam project and the magnesite deposits in Washington, and just outside this circle are the great phosphate beds in southeastern Idaho. In the active mining centers the precious metals and the industrial metals are produced on a large scale by the most modern equipment, and scientific research is carried on continuously. Such notable operations afford invaluable opportunities to supplement instruction at the school by observation of the best technical practice.

Students in the geological curricula also can supplement classroom work by field study of famous mineral deposits. The State cannot be surpassed as a field for general geologic investigations. The section of sedimentary rocks ranges from Algonkian to Pleistocene. The igneous rocks are of unusual variety in age and character, pre-Cambrian intrusives, the great Idaho batholith with its numerous differentiates, the middle Tertiary and more recent lava flows that cover thousands of square miles of territory, and volcanic craters recently active. Nowhere else in the world can the relationship of ore deposition to structure and igneous activities be studied to better advantage.

EQUIPMENT AND FACILITIES

The School of Mines equipment is conveniently described under the three heads of geology, mining and metallurgy. In addition to the facilities here mentioned the student has the use of the well-equipped laboratories of the departments of mechanical, electrical, and civil engineering, and of chemistry and physics, as well as opportunity for studies in the College of Letters and Science, and enjoys many cultural benefits not obtainable in isolated mining schools that are not connected with universities.

MINING ENGINEERING.—The equipment in mining includes models of mine workings and mine timbering, rock drills, mine surveying instruments, draughting tables and equipment, together with illustrative material for classroom study.

METALLURGICAL ENGINEERING.—The metallurgical ore dressing and assay laboratories are among the most complete in the West and equipment includes apparatus for ore treatment by wet and dry processes; twelve double-muffle, oil-fired furnaces; a chemical laboratory; parting room and balance room; laboratory crushers; gyratory and jaw crushers; rolls and ball mills; disc pulverizers; screening equipment; several types of concentrating tables; flotation machines of various kinds; apparatus for leaching and agitation tests for gold and silver extraction; pyrometers; calorimeters; and other equipment.

GEOLOGY AND GEOLOGICAL ENGINEERING.—The geological laboratories, museum, and classrooms are in the geology building. Two laboratories are maintained for work in mineralogy, one for general mineralogy and blowpipe analysis, and another for optical mineralogy and petrography. Working equipment includes representative minerals, both massive and crystalline, for comparative study; oriented thin sections of important rock-forming minerals; crystal models, thin sections, and hand specimens of rocks; natural crystals and artificial crystal models; more than 3,000 mineral specimens; over 2,000 rock specimens; 1,000 specimens illustrating ore deposits; a representative collection of fossils and casts; and equipment such as microscopes, thin-sectioning apparatus, projecting lanterns, and topographic and geologic maps.

FIELD TRIPS.—Appropriate field trips are arranged and conducted under close instructional supervision. The availability of areas of unusual geologic structure and of mining and metallurgical plants provides convenient opportunity for studies in the field to supplement class and laboratory work.

SCHOOL OF MINES LIBRARY.—Mr. Joseph J. Taylor of Montpelier, one of the pioneer mining engineers of the West, gave the School of Mines a number of years ago a small but select library of technical books and reports of great value, and upon this nucleus, through gifts and loans from other friends and members of the faculty, and exchanges of the Idaho Bureau of Mines and Geology, an excellent departmental reference and research library has been built up to supplement the University Library for purposes of instruction.

GENERAL INFORMATION

FEES AND EXPENSES.—For a statement of fees and expenses, see Part I.

FIELD GEOLOGY AND PRACTICAL MINING.—The dean and faculty of the school aid students in securing employment in mining or geological field work during summer vacations. Required courses giving practice and instruction in the field are Geol. 130-131 and Min. 106-107.

GRADUATE FELLOWSHIPS.—Four graduate fellowships are offered, carrying an income of $500 a year each, two in geology and two in metallurgy, the latter supported by the Idaho Bureau of Mines and Geology. Under the direction of the dean and members of the Idaho Bureau of Mines and Geology staff, the metallurgy fellows carry on research work upon some of the urgent ore-treatment problems of Idaho or those of a general nature confronting the industry. The geology fellows, under the staff of the geology department, are assigned

geologic research in field and laboratory, usually upon a problem connected with the mineral industry of the state.

SCHOLARSHIPS.—For details on the Jerome J. Day and A. E. Larson scholarships in the School of Mines see "Scholarships and Prizes" in Part I of this catalog.

ADMISSION

For a statement of admission requirements see Part II.

Curricula

The courses offered rank with those of the leading mining schools of the country. By all taking the same work in the freshman year, and the majority in the sophomore year also, students have ample opportunity to make a deliberate and thoughtful choice of option as their ambitions become defined and their aptitudes tested.

The electives in the curricula must be approved by the dean of the school at time of registration.

COMMON TO ALL OPTIONS

FRESHMAN YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Chem.	1	General Chemistry	4	Chem.	2	General Chemistry	4
Eng.	1	English Composition	3	Eng.	2	English Composition	3
Geol.	1	Introductory Geology	4	Geol.	2	Historical Geology	4
Math.	1	Freshman Math.	4	Math.	2	Freshman Math.	4
Mil.	1	Freshman Military	1½	Mil.	2	Freshman Military	1½
P.E.	31	Freshman Sports	½	P.E.	31	Freshman Sports	½
Total			17	Total			17

COMMON TO ALL EXCEPT GEOLOGY OPTION

SOPHOMORE YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
C.E.	1a	Engineering Drawing	3	C.E.	2	Engineering Drawing	3
Geol.	53	General Mineralogy	4	C.E.	66	Mechanics (Statics)	2
Math.	51	Calculus	4	Geol.	54	General Mineralogy	4
Mil.	3	Sophomore Military	1½	Math.	52	Calculus	4
Phys.	51	Engineering Physics	5	Mil.	4	Sophomore Military	1½
P.E.	33	Sophomore Sports	½	Phys.	52	Engineering Physics	5
Total			18	P.E.	33	Sophomore Sports	½
				Total			20

CURRICULUM IN GEOLOGICAL ENGINEERING

JUNIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Chem.	51	Qualitative Analysis	4	Chem.	52	Quantitative Analysis	4
C.E.	53a	Plane Surveying	3	C.E.	54	Topographic Surveying	3
Geol.	121	Mining Geology	2	Geol.	122	Structural Geology	2
Geol.	163	Optical Mineralogy and Petrography	3	Geol.	130	Geological Field Methods	1
Min.	101	Elements of Mining	3	Geol.	164	Petrography and Petrology	3
Met.	101	Principles of Metallurgy	3	Min.	106	Mine Surveying	2
				Min.	108	Mine Surveying (Field Trip)	1
				Elective			4
Total			18	Total			20

SENIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Geol.	131	Geological Field Methods	3	Geol.	158	Geology of Non Metalliferous Deposits	3
Geol.	155	Mineragraphy	2	Geol.	198	Senior Seminar	1
Geol.	157	Geology of Ore Deposits	3	Eng.	151	Engineering Reports	3
Geol.	197	Senior Seminar	1	Electives			11
Met.	105	Fire Assaying	2				
Met.	111	Ore Dressing	2				
Min.	107	Mine Surveying	1				
Min.	115	Mine Rescue and First Aid	1				
Electives			4				
Total			19	Total			18

Total required for graduation, 147.

CURRICULUM IN GEOLOGY

SOPHOMORE YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Bot.	3	Principles of Botany	4	Bot.	54	Systematic Botany	3
		or				or	
Zool.	1	General Zoology	(4)	Zool.	2	General Zoology	(4)
		or				or	
Chem.	51	Qualitative Analysis	(4)	Chem.	52	Quantitative Analysis	(4)
C.E.	1a	Engineering Drawing	3	C.E.	2	Engineering Drawing	3
Geol.	53	General Mineralogy	4	Geol.	54	General Mineralogy	4
Mil.	3	Sophomore Military	1½	Mil.	4	Sophomore Military	1½
P.E.	33	Sophomore Sports	½	P.E.	33	Sophomore Sports	½
Elective			6	Elective			6–7
Total			19	Total			19

JUNIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
C.E.	53a	Plane Surveying	3	C.E.	54	Topographic Surveying	3
Geol.	121	Mining Geology	2	Geol.	102	Stratigraphy	3–4
Geol.	163	Optical Mineralogy and Petrography	3			or	
Phys.	3	General Physics	4	Geol.	112	Paleontology	(4)
Elective			7	Geol.	122	Structural Geology	2
				Geol.	130	Geological Field Methods	1
				Geol.	164	Petrography and Petrology	3
				Phys.	4	General Physics	4
				Elective			3
Total			19	Total			19–20

SENIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Eng.	155	Technical Writing	3	Geol.	102	Stratigraphy	3–4
Geol.	101	Geomorphology	3			or	
Geol.	131	Geological Field Methods	3	Geol.	112	Paleontology	(4)
Geol.	155	Mineragraphy	2	Geol.	158	Geology of Non Metalliferous Deposits	3
Geol.	157	Geology of Ore Deposits	3	Geol.	198	Senior Seminar	1
Geol.	197	Senior Seminar	1	Elective			11
Elective			4				
Total			19	Total			18–19

Total required for graduation, 147.

CURRICULUM IN METALLURGICAL ENGINEERING

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Chem.	51	Qualitative Analysis	4
C.E.	53a	Plane Surveying	3
E.E.	131	D. C. Machinery	3
Met.	101	Principles of Metallurgy	3
Met.	105	Fire Assaying	2
Min.	101	Elements of Mining	3
Total			18

SECOND SEMESTER			
Course			Credits
Chem.	52	Quantitative Analysis	4
C.E.	54	Topographic Surveying	3
E.E.	132	A. C. Machinery	2
C.E.	103	Mechanics of Materials	3
Geol.	106	Rock Minerals and Rocks	2
Met.	106	Metallurgy of Iron and Steel	1
Min.	106	Mine Surveying	2
Min.	108	Mine Surveying (Field Trip)	1
Total			18

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Eng.	151	Engineering Reports	3
Geol.	155	Mineragraphy	2
Chem.	105	Physical Chemistry (Lectures)	3
Met.	109	Metallurgical Calculations	1
Met.	111	Ore Dressing	2
Met.	115	Non-Ferrous Metallurgy	2
Min.	107	Mine Surveying (Lab.)	1
Min.	115	Mine Rescue and First Aid	1
Geol.	157	Geology of Ore Deposits	3
Electives			2
Total			20

SECOND SEMESTER			
Course			Credits
Chem.	106	Physical Chemistry (Lectures)	3
Met.	110	Metallurgical Calculations	1
Met.	112	Ore Dressing (Lab.)	2
Met.	116	Non-Ferrous Metallurgy	2
Met.	118	Metallurgical Plant Design	2
Met.	196	Senior Seminar	3
Min.	110	Mining Economics	2
Electives			4
Total			19

Total required for graduation, 147.

CURRICULUM IN MINING ENGINEERING

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Chem.	51	Qualitative Analysis	4
C.E.	53a	Plane Surveying	3
E.E.	131	D. C. Machinery	3
Geol.	121	Mining Geology	2
Met.	101	Principles of Metallurgy	3
Met.	105	Fire Assaying	2
Min.	101	Elements of Mining	3
Total			20

SECOND SEMESTER			
Course			Credits
Chem.	52	Quantitative Analysis	4
C.E.	54	Topographic Surveying	3
C.E.	103	Mechanics of Materials	3
Met.	106	Metallurgy of Iron and Steel	1
Geol.	106	Rock Minerals and Rocks	2
Geol.	130	Geological Field Methods	1
Min.	106	Mine Surveying	2
Min.	108	Mine Surveying (Field Trip)	1
E.E.	132	A. C. Machinery	2
Total			19

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Eng.	151	Engineering Reports	3
Geol.	131	Geological Field Methods	3
Geol.	157	Geology of Ore Deposits	3
Met.	109	Metallurgical Calculations	1
Met.	111	Ore Dressing	2
Met.	115	Non-Ferrous Metallurgy	2
Min.	103	Mine Plant Design	2
Min.	107	Mine Surveying (Lab.)	1
Min.	113	Mine Ventilation	2
Min.	115	Mine Rescue and First Aid	1
Total			20

SECOND SEMESTER			
Course			Credits
Met.	112	Ore Dressing (Lab.)	2
Met.	116	Non-Ferrous Metallurgy	2
Met.	110	Metallurgical Calculations	1
Min.	110	Mining Economics	2
Min.	112	Mining Methods	2
Min.	104	Mine Plant Design	2
Min.	120	Advanced Mining	2
Min.	198	Senior Seminar	2
Elective			1
Total			16

Total required for graduation, 147.

The School of Forestry

D. S. JEFFERS, PH.D. ..... *Dean of the School*
E. R. MARTELL, PH.D. ..... *Assistant Dean of the School*
JOHN EHRLICH, PH.D. ..... *Secretary of the School Faculty*

THE School of Forestry of the University of Idaho was established in 1909 and was administered as a department until August, 1917, when it was organized as an independent school, thus placing it on a par with the other independent divisions of the University.

The School of Forestry has exceptional advantages for developing technical foresters and lumbermen. It is within a short distance of dense forests and some of the largest sawmills and logging camps in the United States, which show every phase of the lumber industry. Excursions are made to sawmills, logging camps, virgin and cut-over forests in order that actual field work may be had.

A large arboretum, comprising more than 150 species of trees, is maintained adjoining the University campus for studies in dendrology and silvics. A 20-acre forest nursery is managed by the school for the production of planting stock, which is sold to the people of the State at one-half cost of production for windbreak and farm woodlot plantings. A tract of 6,900 acres of forest land located about 25 miles from the campus is used as an experimental and demonstration forest. Modern and well-equipped laboratories are provided by the school or by the affiliated colleges. The School of Forestry is especially well fitted for laboratory work in forest pathology, wood technology, and wood chemistry. Greenhouse space is available for germinative tests and investigations in seedling growth. There are also two laboratories and a greenhouse for the study of white pine blister rust and other pathological problems. Auto trucks are available for field trips.

FEES AND EXPENSES

For a statement of fees and expenses, see Part I.

ADMISSION REQUIREMENTS

For a statement of admission requirements, see Part II.

Junior college and other transfer students planning to complete their university work in the School of Forestry should follow as closely as possible the prescribed curriculum for the freshman and sophomore years set forth in the University catalog. Special attention should be given to the differences, if any, in material covered in comparable courses and particularly to the courses in Mathematics, Chemistry, Physics and Botany when they vary in semester credits. Mathematics should include college algebra, trigonometry and analytical geometry.

Students presenting advanced credits at the time of their matriculation in the School of Forestry are required to show a grade point average of "C" or better. Those transfer students within one year of graduating at the University of Idaho may be required to demonstrate satisfactory preparation in pre-senior professional subjects.

All students expecting to enter the School of Forestry at the beginning of the Summer Camp session should file application with the Registrar not later than May 1 of the current year. It is essential at that time that all prerequisites be fully satisfied for the courses to be followed in Summer Camp.

Transfer students should observe that *two full years are required after summer camp*, and that summer camp courses are *prerequisite for scheduled forestry courses in the Junior Year.*

Curricula

Three curricula are offered in the School of Forestry leading to the degree of Bachelor of Science in Forestry. (For requirements for the degrees of Master of Science in Forestry and Master of Forestry see the announcement of the Graduate School in Part III.) Each curriculum is designed to prepare men for work within one broad field of forestry.

FOREST PRODUCTION.—The majority of the students elect the curriculum in "Forest Production" which is designed to give a thorough fundamental training in forestry and in the basic sciences utilized by forestry. Some choice in electives permits the student to pursue further studies in any field of forestry in which he may be interested, such as forest pathology, silviculture, management, or further emphasis in general forest production. Although specialization is not possible in the four-year curriculum, the electives permit the laying of a foundation for future specialization. Recommended electives in some of the various fields of forestry are listed following the outline of the "Forest Production" curriculum. This curriculum prepares students for work in various departments of the federal government, with state governments, and in private forestry.

WOOD UTILIZATION TECHNOLOGY.—The curriculum in "Wood Utilization Technology" is designed to prepare men for service in lumber manufacturing and other wood-using industries as technicians, investigators, or, ultimately, as administrators. A thorough basic training is given in the physical sciences and engineering, in wood technology and utilization phases of forestry, together with a general knowledge of forest production and economics. Opportunity is available, through electives, to develop either the technical phases of lumber production and wood utilization or the business aspect of the industry. Recommended groups of "electives" following the outline of the curriculum enable the student to make that selection best suited to his individual requirements. Employment for one summer in a wood-using industry, followed by a general report on plant and processes is required of all students electing this curriculum.

RANGE MANAGEMENT.—The curriculum in "Range Management" is designed to include basic subjects relating to management of the extensive grazing lands of the West. Graduates are admitted to the Civil Service examination for "Junior Range Examiner", from the eligible list of which, appointments are made to positions in the U. S. Forest Service, U. S. Soil Conservation Service, and the U. S. Grazing Division (Administration of the Taylor Act). Interest is also increasing in training for management of private range and ranch lands. Major subjects included are basic sciences, taxonomy, physiology and ecology of plants, livestock and wildlife management, forestry, and range management.

OPTIONAL FIVE-YEAR CURRICULA.—Because of the increasingly rigid requirements for the practice of professional work in the several technical fields of forestry, because of the increasing need for fundamental training in the social sciences, and also because of the increasing body of information in the technical and professional fields of forestry, students planning on entering the School of Forestry should give serious consideration to the election of a five-year curriculum. The keen competition of the present day can be more successfully met by a broader and more adequate professional training. Those interested in the five-year optional curricula should address an inquiry to the Dean of the School of Forestry.

GENERAL REQUIREMENTS

Except upon approval of the dean of the School of Forestry, credits obtained in non-resident courses will not be accepted as meeting the requirements for graduation in the School of Forestry, effective at the beginning of the academic year 1938-39.

All courses listed in the curricular outlines, except electives, must be taken by the student for graduation. The choice of electives is not restricted to those listed but so far as possible should be made from the recommended lists. The choice of electives must meet the approval of the dean and the major professor in each case. The number of elective credits listed in any semester is the minimum number required; additional credits may be elected by students who have attained high standards of scholarship. Except by special permission, however, no student may enroll in one semester for more than 20 credits nor for fewer credits than the regular schedule. No course numbered above 100 may be taken by freshmen or sophomores. Students in all four-year curricula in the School of Forestry take the same work in the freshman year and in the summer camp between the sophomore and junior years.

The enrollment in Summer Camp may be limited to the capacity of the camp facilities and equipment available. The University may exercise its option to refuse surplus applications.

In order to be eligible for registration as a junior in the School of Forestry, a student must have a scholastic average of 2.00 or better.

COMMON FRESHMAN YEAR

FIRST SEMESTER			
Course			Credits
Bot.	15	General Forestry Botany	5
Chem.	1	General Chemistry	4
Eng.	1	English Composition	3
For.	A	Forestry Lectures	0
Math.	1	Freshman Math.	4
Mil.	1	Freshman Military	1½
P.E.	31	Sports	½
			18

SECOND SEMESTER			
Course			Credits
Chem.	2	General Chemistry	4
Eng.	2	English Composition	3
For.	2	Introduction to Forestry	1
Math.	2	Freshman Math.	4
Zool.	1	General Zoology	4
Mil.	2	Freshman Military	1½
P.E.	31	Sports	½
			18

COMMON SUMMER CAMP

(Between sophomore and junior years)

C.E.	S55	Plane and Topographic Surveying	5 credits
For.	S113	Forest Communities	1 credit
For.	S143	Mensuration	4 credits

CURRICULUM FOR FOREST PRODUCTION

Sophomore Year

FIRST SEMESTER			
Course			Credits
Bot.	65	Elements of Plant Physiology	4
C.E.	1a	Engineering Drawing	3
Econ.	51n	Principles of Economics	3
For.	11	Dendrology	2
Mil.	3	Sophomore Military	1½
P.E.	33	Sports	½
*Elective			2–3
			16–17

SECOND SEMESTER			
Course			Credits
Agron.	52	General Soils	4
Bot.	54	Systematic Botany	3
Chem.	73	Elements of Organic and Analytical Chemistry	4
Econ.	52	Principles of Economics	3
For.	12	Dendrology	2
Mil.	4	Sophomore Military	1½
P.E.	33	Sports	½
			18

* Students who earned less than a grade of B in English 2 are required to take English 3, Expository Writing, 2 credits. Others must elect some course in the humanities approved by the School of Forestry Registering Officer. (Common to Range Management Curriculum.)

Summer Camp

Required of all Forestry students, 10 credits.

JUNIOR YEAR

Course			Credits
Ent.	109	Forest Entomology	2
For.	121	Silvics	2
For.	131	Wood Technology	4
For.	145	Forest Measurements	2
Phys.	3	General Physics	4
For.	151	Range Management	3
			17

Course			Credits
For.	122	Forest Planting	2
For.	124	Silviculture	3
For.	144	Mensuration	3
For.	164	Forest Pathology	3
For.	168	Fire Prevention and Control	3
Phys.	4	General Physics	4
			18

SENIOR YEAR

For.	101	Field Trip	1
For.	125	Regional Silviculture	2
For.	133	Logging	1
For.	157n	Game Management	3
For.	175	Forest Management	3
For.	183	Forest Economics	3
Electives			5
			18

Eng.	155	Technical Writing	3
For.	136	Wood Industries	2
For.	158	Game Management	1
For.	176	Forest Management	3
For.	186	Policy and Administration	3
Electives			6
			18

Total Credits 151
Required Forestry Credits 54

Recommended Electives

FOREST PRODUCTION

Geol.	1	Intro. Geology	4
Bot.	107	Plant Ecology (Autecology)	3
For.	153	Advanced Range	3
For.	192	Forestry Studies	2–4

Bot.	102	Plant Physiology	4
Bot.	108	Plant Ecology (Synecology)	3
For.	152	Range Plants	3
For.	190	Research Methods	2
For.	192	Forestry Studies	2–4

BUSINESS ASPECTS OF FORESTRY

Bus.	81	Principles of Accounting	3
Bus.	165	Business Law	3
Bus.	193	Business Conditions	3
Econ.	105	Money and Banking	3

Bus.	82	Principles of Accounting	3
Bus.	124	Financial Administration	3
Bus.	166	Business Law	3
Bus.	194	Business Conditions	3

SOIL CONSERVATION

Agron.	157	Soil Physics	3
Bot.	53	Systematic Botany	3
Geol.	101	Geomorphology	3

Agron.	154	Origin and Classification of Soils	3
For.	156	Erosion	3
Geol.	2	Historical and Physical Geology	4
Phys.	106	Meteorology	3

GAME MANAGEMENT

Bact.	51	General Bacteriology	4
Bot.	107	Plant Ecology (Autecology)	3
Zool.	53	Invertebrate Zoology	3

Bact.	104	Pathogenic Bacteria	4
Zool.	54	Comparative Anatomy	4
Zool.	68	Ornithology	3
Zool.	118	Parasitology	3

GENERAL ELECTIVES

Chem.	51	Qualitative and Gravimetric Analysis	4
For.	137	Utilization Technology I	3
Geol.	1	Introductory Geology	4
German or French			3–4
P.P.	101	General Plant Pathology	3
Zool.	151	Photographic Technique	2
Bot.	103	Plant Anatomy	4
Chem.	52	Quantitative Analysis	4

For.	138	Utilization Technology II	3
For.	166	Wood Products Pathology	3
Geol.	1	Introductory Geology	4
German or French			3–4
P.P.	102	Methods in Plant Pathology	2
Zool.	54	Comparative Anatomy of Vertebrates	4
Zool.	152	Photographic Technique	2

CURRICULUM FOR WOOD UTILIZATION TECHNOLOGY

SOPHOMORE YEAR

FIRST SEMESTER			
Course			Credits
C.E.	1a	Engineering Drawing	3
Econ.	51n	Principles of Economics	3
For.	11	Dendrology	2
Math.	51	Calculus	4
Mil.	3	Sophomore Military	1½
P.E.	33	Sports	½
Phys.	51	Engineering Physics	5
			19

SECOND SEMESTER			
Course			Credits
C.E.	2	Engineering Drawing	3
Econ.	52	Principles of Economics	3
For.	12	Dendrology	2
Math.	52	Calculus	4
Mil.	4	Sophomore Military	1½
P.E.	33	Sports	½
Phys.	52	Engineering Physics	5
			19

Summer Camp

Required of all Forestry students, 10 credits.

JUNIOR YEAR

Bus.	81	Principles of Accounting	3
Bus.	113	*Statistics	3
		or	
Chem.	51	*Qualitative and Gravimetric Analysis	4
E.E.	131	Direct Current Machinery and Distribution	3
For.	131	Wood Technology	4
For.	133	Logging	1
For.	183	Forest Economics	3
			17–18

Bus.	82	Principles of Accounting	3
Bus.	124	*Financial Administration	3
		or	
Chem.	52	*Quantitative Analysis	4
C.E.	66	Mechanics (Statics)	2
E.E.	132	Alternating Current Machinery and Laboratory	2
For.	136	Wood Industries	2
M.E.	120	Thermodynamics	3
Electives			2
			17–18

Summer Employment

Employment for not less than ten weeks in the industry; report.

SENIOR YEAR

Chem.	171	*Organic Chemistry	4
		or	
*Business or Economics Elec.			3
C.E.	101	Mechanics (Dynamics)	2
C.E.	103	Mechanics of Materials	5
For.	101	Field Trip	1
For.	137	Utilization Technology I	3
Electives			2–5
			16–20

Chem.	172	*Organic Chemistry	4
		or	
*Business or Economics Elec.			3
For.	138	Utilization Technology II	3
For.	166	Wood Products Pathology	3
For.	186	Policy and Administration	3
Electives			3–6
			15–19

Total Credits 151
Required Forestry Credits 33

Recommended Electives

TECHNOLOGY

Chem.	105	Physical Chemistry	4
For.	194	Utilization Studies	2–4
M.E.	3	Machine Tool Lab. I	2
M.E.	5	Machine Drawing	2
M.E.	13	Mechanism	3

Chem.	106	Physical Chemistry	4
C.E.	102	Fluid Mechanics (Hydraulics)	3
C.E.	104	Structural Analysis	3
M.E.	122	Thermodynamics II	3
M.E.	124	Machine Design	2
Phys.	152	Advanced Heat	3–4

* Students interested in commercial lumbering will elect business and economics courses, and students interested in chemical utilization or research will elect chemistry courses. Consent of the major professor and the dean is required in either case.

BUSINESS AND ECONOMICS

Course			Credits
Bus.	107	Transportation	3
Bus.	165	Business Law	3
Bus.	169	Marketing	3
Bus.	193	Business Conditions	3
Econ.	105	Money and Banking	3
Bus.	134	Industrial Management	3
Bus.	166	Business Law	3
Bus.	194	Business Conditions	3
Econ.	106	Money and Banking	3
Econ.	112	Labor Problems	3
Econ.	152	Inter. Econ. Theory	3

GENERAL ELECTIVES

Bot.	65	Elements of Plant Pathology	4
Eng.	3	Expository Writing	2
Eng.	155	Technical Writing	3
For.	145	Forest Measurements (Biometry)	2
German			3–4
Phil.	51	History of Ancient Philosophy	3
Zool.	151	Photographic Technique	2
For.	176	Forest Management	3
For.	190	Research Methods	2
For.	194	Utilization Studies	2–4
German			3–4
Phil.	52	History of Modern Philosophy	3
Phil.	103	Logic	3
Zool.	152	Photographic Technique	2

CURRICULUM FOR RANGE MANAGEMENT

SOPHOMORE YEAR

FIRST SEMESTER

Course			Credits
C.E.	1a	Engineering Drawing	3
Econ.	51n	Principles of Economics	3
For.	11	Dendrology	2
Geol.	1	Introductory Geology	4
Mil.	3	Sophomore Military	1½
P.E.	33	Sports	½
Elective†			2–3
			16–17

SECOND SEMESTER

Course			Credits
Agron.	52	General Soils	4
A.H.	70	Sanitary Science	1
Bot.	54	Systematic Botany	3
Chem.	73	Elements of Organic and Analytical Chemistry	4
Econ.	52	Principles of Economics	3
For.	12	Dendrology	2
Mil.	4	Sophomore Military	1½
P.E.	33	Sports	½
			19

Summer Camp

Required of all Forestry students, 10 credits.

JUNIOR YEAR

Bot.	53	Systematic Botany	3
Bot.	101	Plant Physiology	4
For.	151	Range Management	3
For.	145	Forest Measurements (Biometry)	2
Phys.	3	General Physics	4
Elective			2
			18
A.H.	50	Range Livestock	2
Bot.	102	Plant Physiology	4
For.	100	Field Trip	1
For.	122	Forest Planting	2
For.	152	Range Plants	3
For.	168	Fire Prevention and Control	3
Phys.	4	General Physics	4
			19

SENIOR YEAR

Bot.	107	Plant Ecology (Autecology)	3
For.	121	Silvics	2
For.	153	Advanced Range	3
For.	157n	Game Management	3
For.	183	Forest Economics	3
Electives			2–3
			16–17
A.H.	142	Range Livestock Management	2
For.	156	Erosion	3
For.	158	Game Management	1
For.	186	Policy and Administration	3
Electives			8–9
			17–18

Total Credits 151
Required Forestry Credits 40
Required Botany Credits 22

† See note under Forest Production Curriculum.

Recommended Electives

SOIL CONSERVATION

Course			Credits
Agron.	157	Soil Physics	3
Geol.	101	Geomorphology	3
Agron.	154	Origin and Classification of Soils	3
Geol.	2	Historical and Physical Geology	4
Geol.	115	Geology and Geography of Idaho and Pacific Northwest	3
Phys.	106	Meteorology	3

GENERAL ELECTIVES

Ag.Ec.	103	**Agricultural Economics**	**3**
Agron.	1	General Crop Production	4
Agron.	101	Genetics	4
Bus.	81	Principles of Accounting	3
Bus.	113	Statistics	3
Ent.	101	General Entomology	3
For.	125	Regional Silviculture	2
For.	175	Forest Management	3
For.	196	Range Studies	2–4
P.P.	101	General Plant Pathology	3
S.S.	E-F	Typewriting	0
Zool.	151	Photographic Technique	2
Ag.Ec.	150	Land Economics	3
Agron.	108	Forage Crops	3
A.H.	106	Livestock Feeding	3
Bus.	82	Principles of Accounting	3
Eng.	155	Technical Writing	3
For.	124	Silviculture	3
For.	164	Forest Pathology	3
For.	176	Forest Management	3
For.	190	Research Methods	2
For.	196	Range Studies	2–4
Zool.	152	Photographic Technique	2

The School of Education

JAMES FRANKLIN MESSENGER, PH.D. ..... *Dean of the School*
BERNICE MCCOY, M.S.(ED.) ..... *Secretary of the School Faculty*

THE organization of the School of Education as an independent unit of the University of Idaho was authorized by the Board of Regents in June, 1920.

The work of the school consists in training high school teachers, principals, superintendents, and supervisors. The services of the school are at the disposal of teachers who wish to improve themselves while in service, of school trustees who wish assistance in securing teachers, and of teachers who wish to secure positions in the high schools of the State.

EXPENSES.—For a statement of fees and expenses, see Part I.

PRACTICE TEACHING.—The public high school of the city of Moscow is used for practice teaching. Actual schoolroom conditions are thus provided for observation and for practice.

ADMISSION.—For statement of admission requirements, see Part II.

DEGREE.—Upon completion of all requirements the degree of Bachelor of Science in Education will be given. For the curriculum in Public School Music, the degree of Bachelor of Science in Music Education will be given. For the curriculum in Commercial Education the degree of Bachelor of Science in Commercial Education will be given. Requirements for the degree, Master of Science in Education, Master of Science in Music Education and Master of Science in Commercial Education, are stated in the description of work of the Graduate School.

CERTIFICATES.—Graduates of the School of Education receive a State high school teacher's certificate, issued by the State Board of Education upon recommendation of the dean. It is common also for other states to accept this recommendation and issue certificates. The number of credits in Education required for a certificate in the different states varies from 15 to 25. All students must complete the course in Idaho Law, Manual, and Civics.

POSITIONS.—The University maintains a placement bureau for securing positions for teachers. No charge is made for this service. The first thought is for the home State, but many calls come from other states, and when students wish to go elsewhere assistance is cheerfully given to them. Graduates are urged to keep in touch with the school in order to be in line for deserved promotions.

SCHOOL OF EDUCATION

(Required of all candidates for the B.S.(Ed.) degree.)

Course			Credits
Eng.	1-2	Composition	6
Psych.	1	General Psychology	4
Psych.	2	Educational Psychology	3
Mathematics or some other science			4
History, Political Science, Social Science, or Philosophy			6
P.E. or Military			6-8
Ed.	1	Introduction to Education	2
Ed.	11	Student Problems	1
Ed.	107	History of Education	3
Ed.	108	Educational Sociology	3
Ed.	113	Secondary Education	3
Ed.	114	High School Methods	3
Ed.	131	Practice Teaching*	3 or 4
Ed.	55	Idaho Law, Manual and Civics	2

* Those who have had satisfactory experience in teaching may substitute an elective in Education for Practice Teaching.
Students in Public School Music take Ed. 131a, 4 credits.
Students in Commercial Education take Ed. 131b, 4 credits.

ELEMENTARY CERTIFICATE.—For the benefit of those students who cannot remain in college for the four years consecutively, a student who completes two years of required work in the School of Education, including six credits in practice teaching, may receive a state elementary certificate upon recommendation of the dean.

GENERAL CURRICULUM IN EDUCATION

In addition to the courses required of all students, each student must choose two teaching subjects from the following fields: Art, Botany, Chemistry, Commerce, Economics, English, Dramatics and Public Speaking, French, German, General Science, History, Journalism, Latin, Mathematics, Manual Training, Music, Physical Education, Political Science and Sociology, Philosophy, Physics, Psychology, Spanish, Zoology, and electives sufficient to total 128 semester hours.

The minimum requirements in teaching subjects will be as follows: In English and foreign languages, 18 hours beyond the elementary course. By "elementary course" in foreign language is meant two years in high school or one year in college. In Music 18 hours in addition to six hours in Applied Music are required. In all other subjects the minimum is 18 hours of college work. If history is elected it should include both American and European. If Physical Education for women is elected it should include P.E. 125-126 and P.E. 127-128.

Thirty-six semester credits are required in courses numbered above 100.

CURRICULUM IN COMMERCIAL EDUCATION

(Leading to the B.S.(Com.Ed.) degree.)

In addition to the courses required of all students in the School of Education as outlined above the following courses constitute the curriculum in Commercial Education:

Course			Credits
Econ.	51n-52	Principles of Economics	6
S.S.	15n-16	Gregg Shorthand	8
S.S.	71-72	Intermed. Dictation	8
S.S.	122	Office Training and Standards	2
Bus.	81-82	Principles of Accounting	6
Bus.	165-166	Business Law	6
S.S.	191	Meth. in Commercial Teaching	4
Eng.	153	Business Writing	3

Course			Credits
Geol.	12	Economic Geography	3
Electives in Economics or Business			9

Each student should elect courses which will prepare him to teach at least one other high school subject.

As a part of general preparation the following electives are recommended:

Ed.	115	Educational Guidance
Eng.	31-32	Fundamentals of Speech
Eng.	13-14	Modern Literature
Psych.	117	Psychological Methods

CURRICULUM IN PHYSICAL EDUCATION FOR WOMEN

In addition to the courses required of all students in the School of Education as outlined above the following courses constitute the curriculum in Physical Education for Women:

Course			Credits
Zool.	1	General Zoology	4
Zool.	6	Physiology	3
Zool.	55-56	The Human Body	4
P.E.	1-2	Personal Hygiene	2
P.E.	9-10	Beginning Dancing	2
P.E.	11	Danish Gymnastics	1
P.E.	12	Apparatus and Tumbling	1
P.E.	15-16	Folk Dancing	2
P.E.	17-18	Leisure Sports	2
P.E.	19-20	Women's Athletics	2
P.E.	21-22	Tap Dancing	2
P.E.	47	History of P.E.	2

Course			Credits
P.E.	52	Playground Supervision	2
P.E.	69-70	Advanced Dancing	2
P.E.	121	*Teaching Corrective Gymnastics	2
P.E.	122	*Teaching of Hygiene	2
P.E.	125-126	*Management of Women's Athletics	4
P.E.	127-128	*Methods in Physical Education	4
P.E.	188	First Aid	2
Second Teaching Subject			18

* Offered only in alternate years; therefore, special attention must be paid to taking these courses in the junior year.

CURRICULUM IN PHYSICAL EDUCATION FOR MEN

In addition to the courses required of all students in the School of Education as outlined above the following courses constitute the curriculum in Physical Education for Men:

Course			Credits
Bact.	54	Public Health and Hygiene	3
P.E.	41-42	Freshman Activities	4
P.E.	43-44	Sophomore Activities	4
P.E.	47	History of Physical Education	2
P.E.	21-22	Tap Dancing	2
P.E.	50	General Hygiene	3
P.E.	99	Methods of Coaching Track	2
Zool.	1	General Zoology	4
Zool.	6	Physiology	3
Zool.	55-56	The Human Body	4
P.E.	61	Recreational Plastics	2
P.E.	64	Recreational Community Music	2
P.E.	103	Playground and Community Recreation	2
P.E.	132	Methods of Teaching Health and Physical Education	2
P.E.	141	Methods of Coaching Basketball	2
P.E.	142	Methods of Coaching Baseball	2
P.E.	144	Methods of Coaching Football	2
P.E.	171	Principles of Physical Education	2
P.E.	181	Physical Education Tests and Measurements	2
P.E.	185	Physiology of Exercise	2
P.E.	187	Intramural Athletics	2
P.E.	188	First Aid	2
P.E.	196	Organization and Administration	3
Second Teaching Subject			18

CURRICULUM IN PUBLIC SCHOOL MUSIC

(Required of all candidates for the B.S. (Mus.Ed.) degree.)

Course			Credits
Eng.	1-2	Composition	6
Psych.	1	General Psychology	4
Psych.	2	Educational Psychology	3
One other science			4
History, Political Science, Social Science, or Philosophy			6
P.E. or Military			6-8
Ed.	1	Introduction to Education	2
Ed.	11	Student Problems	1
Ed.	107	History of Education	3
Ed.	113	Secondary Education	3
Ed.	55	Idaho Law, Manual, and Civics	2
Ed.	131a	Practice Teaching in Music	4
Mus.	1-2	Theory of Music	4
Mus.	3	Orientation in Music	1
Mus.	4	Elementary Harmony	2
Applied Music—Major Field			20
Ensembles (35-36 or 45-46)			4
Mus.	5-6	Second Year Harmony	6
Mus.	7	Listening to Music	1
Mus.	13-14	Keyboard Harmony	2
Mus.	23	Class Piano Lessons	2
Mus.	33	Class Voice Lessons	2
Mus.	43	Class Violin Lessons	2
Mus.	101-102	History of Music	4
Mus.	103	Form and Analysis	3
Mus.	112	Instrumentation	3
Mus.	171	Elementary School Music Methods	3
Mus.	173	Class String Instrument Methods	1
Mus.	175	Class Band Instrument Methods	3
Mus.	178	Jr. and Sr. H. S. Music Methods	3
Mus.	179	Choral Conducting	2
Mus.	180	Orchestra Conducting	2

Each student should elect courses which will prepare him to teach at least one other high school subject.

CURRICULUM IN ART EDUCATION

Course			Credits
Eng.	1-2	English Composition	6
Psych.	1	General Psychology	4
Psych.	2	Educational Psychology	3
One other Science			4
Social Science			6
P.E. or Military			6-8
Ed.	1	Introduction to Education	2
Ed.	55	Idaho Law, Manual, and Civics	2
Ed.	107	History of Education	3
Ed.	108	Educational Sociology	3
Ed.	113	Principles of Secondary Education	3
Ed.	114	High School Methods	3
Ed.	131	Observation and Teaching in High School	3
H.Ec.	11n-12	Art Structure and Design	4
Arch.	11-12	Elementary Architectural Design	4
Arch.	13	Shades and Shadows	1
Arch.	14	Architectural Perspective	1
Art	78	J.H.S. Art Education	2
Art	1-2	Freshman Drawing or	4
Art	5-6	Life Drawing	4
Art	51-52	Art Appreciation	4
Art	105-106	Intermediate Freehand Drawing	6
Art	107-108	Oil Painting	6
Art	129-130	History of Painting	4
Phil.	114	Aesthetics	3
Art or Specified Home Ec. Electives			6
Electives			27

Each student should elect courses which will prepare him to teach at least one other high school subject.

Required for Graduation 128

AGRICULTURAL EDUCATION

Graduates of the College of Agriculture may secure state certificates by completing 15 credits in Education under the direction of the professor of Agricultural Education. For Smith-Hughes work the following courses in Education are required:

Course			Credits
Ag.Ed.	151	Principles of Vocational Education	2
Ag.Ed.	152	Beginning Methods	2
Ag.Ed.	153	Advanced Methods	3
Ag.Ed.	154	Methods in Teaching Farm Shop and Farm Mechanics	2
Ag.Ed.	155	Observation and Practice Teaching	3–5
Ag.Ed.	158	Auxiliary Problems	2
Ed.	55	Idaho Law, Manual and Civics	2

HOME ECONOMICS

Graduates of the Home Economics curricula may secure state certificates by completing the following courses in Education:

Course			Credits
Ed.	55	Idaho Law, Manual, and Civics	2
Ed.	59	Principles of Teaching	3
Ed.	113	Secondary Education	3
H.Ec.	152	Methods in Teaching Homemaking	2
H.Ec.	153	Problems in Teaching Homemaking	3
H.Ec.	157	Observation and Practice Teaching in Homemaking	4

The School of Business Administration

RALPH HUNTER FARMER, A.B. ..... *Dean of the School*
ELLEN REIERSON, M.S. (ED.) ..... *Secretary*

THE School of Business Administration was established as a separate college of the University in 1925. For many years prior to that, however, courses in business, economics, and related subjects had been given in the College of Letters and Science. The School offers a general business curriculum, as well as special curricula in accounting, commerce, extractive industries, and secretarial work. In addition, it cooperates with the College of Law to offer a combined curriculum in business and law.

PURPOSE OF THE SCHOOL

The School of Business Administration offers a well-rounded training for young men and women who plan to make business their career. The breadth and complexity of present-day economic life make it increasingly difficult to gain a proper understanding of the basic principles of modern business by starting in as a junior employee of a business firm and learning on the job. The School aims to instruct its students in these fundamentals before they commence their active business careers. Actual experience will then enrich and make more complete their understanding of the principles of business. As a part of a state-supported university, founded to train better citizens, the School also aims to give its students a knowledge of the social importance and responsibilities of the business man.

In addition to instruction in the fundamental principles of business, the School of Business Administration also offers specific training in the technique of business where this is possible; as, for example, in accounting and in secretarial work. In common with other collegiate schools of business, however, the School avoids extreme specialized instruction in business practices. Such practices vary so greatly between different business firms and change so rapidly that in most cases they may best be learned on the job.

FEES AND EXPENSES

For a statement of fees and expenses, see Part I.

ADMISSION REQUIREMENTS

For a statement of admission requirements, see Part II.

THE FIVE MAJORS

Instruction in the School of Business Administration is divided into six principle divisions. These are the five majors in general business, accounting, commerce, extractive industries, and secretarial studies; and the combination curriculum in business and law. Not later than the beginning of his junior year, and usually earlier, each student selects one of these divisions as his field of specialization.

GENERAL BUSINESS.—This major is intended for those students who prefer all-around training in business to specialization in one field. Because of its importance in all phases of business activity special emphasis is placed on finance in this major.

ACCOUNTING.—This field, in common with many others requiring specialized training, offers many opportunities for the college man and

woman. The course includes three years' instruction beyond the freshman year, with emphasis on cost accounting, corporation accounting, auditing, and public accounting.

COMMERCE.—The major in commerce is planned primarily for those students contemplating a career in the merchandising field.

Certain modifications of this major will be arranged for those wishing to prepare for advertising or for foreign trade.

THE EXTRACTIVE INDUSTRIES.—The fact that the University is the only state-supported, degree-granting institution in the State makes it possible to offer a series of business majors in combination with the basic applied sciences—agriculture, engineering, forestry, mining, and the like. It is true that most students interested in the above fields find it advantageous to pursue an intensive scientific course in the respective college or school offering such work. On the other hand there are always some whose major interest is in business, but who foresee an opportunity to apply their training in some one of the extractive industries. In this last group of majors, the School of Business Administration offers opportunities for such combined study.

SECRETARIAL STUDIES.—There are many opportunities for young men and women with a thorough secretarial training. The amount of responsibility and detailed work that devolves on the modern executive makes it necessary for him to have trained secretaries to whose hands he can entrust much of the routine. This field also affords teaching opportunities.

COMBINATION CURRICULUM IN BUSINESS AND LAW

For students who want training in both business and law, a combination curriculum is available. Students in this curriculum register in the School of Business Administration for their first three years, and in the College of Law for the last three. The degree of Bachelor of Science in Business is conferred upon the completion of the required courses of the first four years, and the degree of Bachelor of Laws at the end of the full six years. The requirements of the first four years are outlined below. The fifth and sixth years, which are the same as the second and third years of the College of Law curriculum, may be found on page 66.

DEGREE

The degree, Bachelor of Science in Business, B.S.(Bus.), is conferred on all students satisfactorily completing any one of the five majors in the School of Business Administration or the first four years of the combined Business and Law Curriculum.

Before students are recommended for the degree, B.S.(Bus.), they must demonstrate their ability to operate the typewriter and other machines commonly used in business offices.

Curricula

Below are stated the requirements in each of the five major fields of study and in the combined business and law curriculum.

COMMON FIRST TWO YEARS

(All majors except Secretarial and Business and Law)

FRESHMAN YEAR

FIRST SEMESTER			
Course			Credits
Bus.	27	Business Organization	3
Eng.	1	English Composition	3
*History or Political Science			3
Botany, Chemistry, Geology, Physics, Zoology, or Mathematics			4
Military and Physical Education			2
Elective			1
Total			16

SECOND SEMESTER			
Course			Credits
Geol.	12	Economic Geography	3
Eng.	2	English Composition	3
*History or Political Science			3
Botany, Chemistry, Geology, Physics, Zoology, or Mathematics			3–4
Military and Physical Education			2
Elective			0–1
Total			16

SOPHOMORE YEAR

FIRST SEMESTER			
Course			Credits
Bus.	81	Principles of Accounting	3
Econ.	51n	Principles of Economics	3
Eng.	13	Modern Literature	3
		or	
Eng.	17	Intro. to Literature	3
Social Science or Psychology			3–4
Military and Physical Education			2
Electives			1–2
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	82	Principles of Accounting	3
Econ.	52	Principles of Economics	3
Eng.	14	Modern Literature	3
		or	
Eng.	18	Intro. to Literature	3
Social Science or Psychology			3–4
Military and Physical Education			2
Electives			1–2
Total			16

GENERAL BUSINESS

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	113	Statistics	3
Bus.	169	Marketing	4
Bus.	181	Intermediate Accounting	3
Econ.	105	Money and Banking	3
Bus., Econ., or S.S. Elective			3
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	124	Financial Administration	3
Bus.	182	Intermediate Accounting	3
Econ.	106	Money and Banking	3
Bus., Econ., or S.S. Elective			3
Elective			4
Total			16

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	165	Business Law	3
Bus.	193	Business Conditions	3
Eng.	153	Business Writing	3
Bus., Econ., or S.S. Elective			3
Elective			4
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	136	Investments	3
Bus.	166	Business Law	3
Bus.	194	Business Conditions	3
Econ.	152	Intermediate Economic Theory	3
Elective			4
Total			16

ACCOUNTING

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	113	Statistics	3
Bus.	181	Intermediate Accounting	3
Bus.	185n	Cost Accounting	2
Econ.	105	Money and Banking	3
Bus.	165	Business Law	3
		or	
Law	101n	Contracts	3
Electives			2
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	124	Financial Administration	3
Bus.	182	Intermediate Accounting	3
Bus.	186	Cost Accounting	2
Econ.	106	Money and Banking	3
Bus.	166	Business Law	3
		or	
Law	102	Contracts	3
Electives			2
Total			16

* Students who do not present two units of one high school foreign language for entrance to the University should take a year of foreign language in their freshman year. This may be taken in place of History or Political Science, which may be postponed to a later year.

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	169	Marketing	4
Bus.	183	Auditing	3
Bus.	187	Advanced Accounting	2
Eng.	153	Business Writing	3
*Electives			4
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	184	Income Tax Accounting	3
Bus.	188	Advanced Accounting	2
Econ.	152	Intermediate Economic Theory	3
Bus., Econ., or S.S. Elective			3
Elective			5
Total			16

COMMERCE

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	113	Statistics	3
Bus.	169	Marketing	4
Bus.	181	Intermediate Accounting	3
		or	
Bus.	185n	Cost Accounting	2
Econ.	105	Money and Banking	3
Elective			3–4
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	124	Financial Administration	3
Bus.	132	Sales Management	3
		or	
Bus.	172	Foreign Trade	3
Bus.	182	Intermediate Accounting	3
		or	
Bus.	186	Cost Accounting	2
Econ.	106	Money and Banking	3
Elective			4–5
Total			16

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	129	Retail Merchandising	3
Bus.	165	Business Law	3
Bus.	175	Advertising	3
Bus.	193	Business Conditions	3
Elective			4
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	130	Retail Merchandising	3
Bus.	166	Business Law	3
Econ.	152	Intermediate Economic Theory	3
Eng.	153	Business Writing	3
Elective			4
Total			16

EXTRACTIVE INDUSTRIES

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Bus.	113	Statistics	3
Bus.	169	Marketing	4
Econ.	105	Money and Banking	3
†Technical Electives			5
Elective			1
Total			16

SECOND SEMESTER			
Course			Credits
Bus.	124	Financial Administration	3
Econ.	106	Money and Banking	3
†Technical Electives			5
Elective			5
Total			16

* Law 265, Business Associations, is recommended.

† To be chosen in Agriculture, Engineering, Forestry, or Mining with the approval of the major professor. At least 10 credit hours must be in courses numbered over 100.

Senior Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Bus.	165	Business Law	3	Bus.	166	Business Law	3
Bus.	193	Business Conditions	3	Bus.	194	Business Conditions	3
Eng.	153	Business Writing	3	Econ.	152	Intermediate Economic Theory	3
*Technical Electives			5	*Technical Electives			5
Elective			2	Elective			2
Total			16	Total			16

SECRETARIAL STUDIES

Freshman Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
S.S.	15n	Shorthand and Transcription	4	S.S.	16	Shorthand and Transcription	4
Eng.	1	English Composition	3	Eng.	2	English Composition	3
†History or Political Science			3	†History or Political Science			3
Botany, Chemistry, Geology, Physics, Zoology, or Mathematics			4	Botany, Chemistry, Geology, Physics, Zoology, or Mathematics			3–4
Physical Education (Women)			2	Physical Education (Women)			2
Physical Education and Military (Men)			2	Physical Education and Military (Men)			2
Total			16	Total			16

Sophomore Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
S.S.	71	Intermediate Dictation	4	S.S.	72	Intermediate Dictation	4
Econ.	51n	Principles of Economics	3	Econ.	52	Principles of Economics	3
Eng.	13	Modern Literature or	3	Eng.	14	Modern Literature or	3
Eng.	17	Introduction to Literature	3	Eng.	18	Introduction to Literature	3
Social Science or Psychology			3–4	Social Science or Psychology			3–4
Physical Education (Women)			1	Physical Education (Women)			1
Physical Education and Military (Men)			2	Physical Education and Military (Men)			2
Electives			0–1	Electives			0–1
Total			16	Total			16

Junior Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Bus.	81	Principles of Accounting	3	Bus.	82	Principles of Accounting	3
Bus.	169	Marketing	4	S.S.	122	Office Training and Standards	2
Econ.	105	Money and Banking	3	Econ.	106	Money and Banking	3
Eng.	153	Business Writing	3	Bus., Econ., or S.S. Elective			3
Elective			3	Electives			5
Total			16	Total			16

Senior Year

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Bus.	113	Statistics	3	Bus.	124	Financial Administration	3
Bus.	165	Business Law	3	S.S.	162	Office Management	2
Bus., Econ., or S.S. Elective			6	Bus.	166	Business Law	3
Elective			4	Econ.	152	Intermediate Economic Theory	3
				Elective			5
Total			16	Total			16

* To be chosen in Agriculture, Engineering, Forestry, or Mining with the approval of the major professor. At least 10 credit hours must be in courses numbered over 100.

† Students who do not present two units of one high school foreign language for entrance to the University should take a year of foreign language in their freshman year. This may be taken in place of History or Political Science, which may be postponed to a later year.

BUSINESS AND LAW CURRICULUM

FRESHMAN YEAR

FIRST SEMESTER

Course			Credits
Bus.	27	Business Organization	3
Eng.	1	English Composition	3
*History or Political Science			3
Hist.	57	English Constitutional History	2
Botany, Chemistry, Geology, Physics, Zoology, or Mathematics			4
Military and Physical Education			2
Total			17

SECOND SEMESTER

Course			Credits
Geol.	12	Economic Geography	3
Eng.	2	English Composition	3
*History or Political Science			3
Hist.	58	English Constitutional History	2
Botany, Chemistry, Geology, Physics, Zoology, or Mathematics			3–4
Military and Physical Education			2
Elective			0–1
Total			17

SOPHOMORE YEAR

FIRST SEMESTER

Course			Credits
Bus.	81	Principles of Accounting	3
Econ.	51n	Principles of Economics	3
Eng.	13	Modern Literature	3
		or	
Eng.	17	Introduction to Literature	3
Social Science or Psychology			3–4
Military and Physical Education			2
Elective			2–3
Total			17

SECOND SEMESTER

Course			Credits
Bus.	82	Principles of Accounting	3
Econ.	52	Principles of Economics	3
Eng.	14	Modern Literature	3
		or	
Eng.	18	Introduction to Literature	3
Social Science or Psychology			3–4
Military and Physical Education			2
Elective			2–3
Total			17

JUNIOR YEAR

FIRST SEMESTER

Course			Credits
Bus.	113	Statistics	3
Bus.	169	Marketing	4
Bus.	181	Intermediate Accounting	3
Econ.	105	Money and Banking	3
Law	101n	Contracts	3
Total			16

SECOND SEMESTER

Course			Credits
Bus.	124	Financial Administration	3
Bus.	182	Intermediate Accounting	3
Econ.	106	Money and Banking	3
Business or Economics Elective			3
Law	102	Contracts	3
Elective			1
Total			16

SENIOR YEAR

FIRST SEMESTER

Course			Credits
Bus.	193	Business Conditions	3
Law	105n	Criminal Law and Procedure	3
Law	109	Civil Procedure	5
Law	111n	Property	3
Total			14

SECOND SEMESTER

Course			Credits
Econ.	152	Intermediate Economic Theory	3
Law	106	Criminal Law and Procedure	2
Law	112	Property	3
Law	116	Torts	5
Law	120	Legal Bibliography	1
Total			14

* Students who do not present two units of one high school foreign language for entrance to the University should take a year of foreign language in their freshman year. This may be taken in place of History or Political Science, which may be postponed to a later year.

The Graduate School

GRADUATE COUNCIL

CHARLES WILLIAM HUNGERFORD, PH.D., *Professor of Plant Pathology, Dean*
JAMES FRANKLIN MESSENGER, PH.D. ..... *Dean of the School of Education*
JOHN EHRLICH, PH.D. ..... *Assistant Professor of Forestry*
ERWIN GRAUE, PH.D. ..... *Professor of Economics*
ARTHUR WILLIAM FAHRENWALD, MET.E. ..... *Dean of the School of Mines*
L. C. CADY, PH.D. ..... *Professor of Chemistry*
J. H. CUSHMAN, A.M. ..... *Professor of English*
ELLA LETITIA OLESEN, Registrar ..... *Secretary*

THE aim of the Graduate School is to promote in the student initiative and self-direction of study. To this end the school proposes: (a) to provide for a freer and more intimate association with mature scholars; (b) to afford the student opportunity for the independent use of laboratory and library facilities; (c) to guide him in the integration of knowledge from various fields for new ends; and (d) to introduce the student into the methods of original investigation.

ORGANIZATION

The graduate work is administered by the Graduate Council, which consists of the dean of the Graduate School and six members appointed by the president from the various academic divisions of the University. The scope of the Graduate School covers graduate study throughout the University. More than 35 departments offer majors toward the master's degree. Many of the departments offer several majors and thus the opportunities for specialization are extensive.

FACILITIES

The University in its library and laboratory facilities is equipped for the necessary advanced study and research required for the master's degree. Although it does not at the present offer work leading to the doctor's degree, many students are finding it to their advantage to take work beyond the master's degree. Credits thus secured may be transferred to other graduate schools or used at the University of Idaho at some future date when the doctor's degree is granted.

GRADUATE FELLOWSHIPS AND SCHOLARSHIPS

For the promotion of graduate study and research the University of Idaho awards a number of fellowships, teaching fellowships, and scholarships.

The holders of these fellowships and scholarships pay no fees except the late registration fee, but are required to give limited assistance in the work of the department of their principal study. The fellowships and scholarships are open to graduates of any university or college of recognized standing. Holders of teaching fellowships will not, under normal circumstances, find it possible to complete their requirements for the master's degree in less than two years.

ADVANCED DEGREES

The following advanced degrees are offered: Master of Arts, M.A.; Master of Science, M.S.; Master of Science in Forestry, M.S.(For.); Master of Forestry, M.F.; Master of Science in Agriculture, M.S.(Agr.); Master of Science in the respective branches in Engi-

neering, e.g., M.S.(C.E.), etc.; Master of Science in Metallurgical Engineering, M.S.(Met.E.); Master of Science in Mining Engineering, M.S.(M.E.); Master of Science in Geological Engineering, M.S.(Geol.E.); Master of Science in Geology, M.S.(Geol.); Master of Science in Education, M.S.(Ed.); Master of Science in Home Economics, M.S.(H.Ec.); Master of Science in Business, M.S.(Bus.); Master of Music, M.M.; Master of Science in Music Education, M.S.(Mus.Ed.); and Master of Science in Commercial Education, M.S.(Com.Ed.).

PROFESSIONAL DEGREES IN ENGINEERING

The professional degrees in engineering—Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Ch.E.), Agricultural Engineer (A.E.), Engineer of Mines (E.M.), Metallurgical Engineer (Met.E.), and Geological Engineer (Geol.E.)—may be granted to graduates of the College of Engineering or the School of Mines of the University of Idaho upon the submission of an approved thesis, and after five years of professional experience, one year of which must have been spent in responsible charge of work.

REGULATIONS

ADMINISTRATION.—All graduate students whose cases come under the accepted regulation are dealt with directly by the chairman and secretary of the Graduate Council. Exceptional cases or those from which an appeal is taken are referred to the Council for action.

ADMISSION.—A graduate of the University of Idaho or of another institution which has equivalent requirements for the first degree may be admitted to the Graduate School and become a candidate for the master's degree. Certified credentials covering all previous work should be submitted from each institution at which work was taken well in advance of the student's expected registration. Formal application for admission requires conference with the major professor and can best be completed after arrival on the campus.

PARTIAL ENROLLMENT.—A senior who desires to do graduate work during his last semester in the University is required to make application to the dean of the Graduate School in advance, and may be counted as a graduate student in partial enrollment if he has satisfied the undergraduate residence requirements, and if he needs not more than six credits to complete his requirements for the baccalaureate degree.

FEES.—No deposit or fee, except the late registration fee, is collected from fellows, graduate assistants, or persons connected with the University teaching staff. Others are required to pay the same fees as undergraduate students except that non-resident tuition is not charged to graduate students from outside the State. Failure to complete registration within one week after the final undergraduate registration date in any semester or summer session will involve the payment of the late registration fee of $5.00.

NATURE AND AMOUNT OF WORK.—A minimum of twenty-four semester credits is required for the master's degree; of these at least sixteen credits must be graduate in character (courses numbered above 200) and the remainder may be in courses classified as advanced undergraduate (courses numbered 100-199). However, upon the approval of the major professor and the Graduate Council, candidates for the degree Master of Science in Education, M.S.(Ed.); Master of Science in Music Education, M.S.(Mus.Ed.); Master of Science in

Commercial Education, M.S.(Com.Ed.); and Master of Forestry, M.F., may qualify for the master's degree by thirty semester credits and a professional paper in lieu of the thesis.

Not less than twelve credits shall be in the major subject, and either one or two minors shall be taken in related subjects. Not less than six credits shall constitute a minor.

No student will be granted a master's degree except upon the completion, at the University of Idaho, of at least two-thirds of the required semester hours, except that graduates of the University of Idaho may be permitted to present one-half the required semester hours from some other approved graduate school.

MAJOR SUBJECT.—A candidate for an advanced degree may select his major from those subjects only which are allowed as majors for the corresponding bachelor's degree. He must present preparation equivalent both in the major field and in the general requirement to that required for the first degree.

Any change of major or minor must be approved by the major professors concerned and the dean of the Graduate School. This approval must be filed in the registrar's office.

APPROVAL OF COURSE OF STUDY.—Before the middle of his first semester or at the beginning of his second summer session in the Graduate School, each candidate for a master's degree shall present a tentative statement listing all work he wishes to offer toward the degree. Approval for this course of study must be secured from the major and minor professors, and a copy of this statement shall be filed in the office of the dean of the Graduate School. A provisional title for the thesis or professional paper shall also be included in this statement.

THESIS.—The student should decide upon the subject of his thesis or professional paper during his first semester in residence at the University. A student who expects to qualify for a degree through attendance at summer sessions only should file his thesis or professional paper title, approved by his major professor, with the dean of the Graduate School at the beginning of his second summer session. The thesis or professional paper must be submitted to the Graduate Council not later than May 15 of the year in which the degree is to be conferred.

EXAMINATION.—An oral examination is required of each candidate, except candidates for the degree of master of music who may give a public recital in lieu of an oral examination. The examining committee shall be composed of the professor in charge of the major subject, one professor in charge of a minor subject, and a third member selected by the dean of the Graduate School. This committee examines the candidate on the thesis or professional paper and on his major and minor fields of study. A recommendation of the committee is necessary for graduation.

Any member of the faculty has the privilege of attending the examination and questioning the candidate.

NON-RESIDENT CREDITS NOT ACCEPTED.—Credits from non-resident courses in correspondence or group study shall not be accepted as fulfilling any of the requirements toward a master's degree, and non-resident study shall in no case reduce the residence requirements.

Students who are admitted to the Graduate School with deficiencies may, with the approval of the dean, make up such deficiencies by non-resident study (if the required courses are offered in that way) at such times as they are not enrolled for residence work.

GRADES AND GRADING SYSTEM.—Courses numbered above 200 may be marked P (passed) or F (failed). The grade of P (passed) may be given in place of A or B only. Other courses are graded on the undergraduate basis, but no such course may be counted for a degree unless a grade of C or above is recorded.

RESIDENCE REQUIREMENTS.—One year's residence work is required of every candidate.

Special Provisions:

(1) Graduates of the University of Idaho may be permitted in special cases to spend one semester at some other approved institution.

(2) Upon the recommendation of the department in which the candidate takes his major, attendance at a six-weeks' summer session of the University of Idaho may be counted as a half-semester's residence, provided that one semester is spent in residence in a regular session.

(3) A student may be permitted to fulfill the residence requirements by four summer sessions of not less than six weeks each. If the student chooses to write a professional paper rather than a thesis, he must either attend an additional summer session or carry on individual *in absentia* work during two academic years under the direction of his major professor. Not more than six credits may be earned by such work *in absentia*. Registration for work *in absentia* must be made by the student at the beginning of each of the two years which he wishes to count under this provision.

(4) No full-time instructor, research or demonstration worker in the University shall be granted a master's degree for less than two years of graduate work.

(5) Candidates for the master's degree must complete all requirements for the degree within eight consecutive years.

APPLICATION FOR MASTER'S DEGREE.—Formal application for the master's degree must be filed at the beginning of the last semester or summer session in which the student is in residence. This application must state the exact title of the thesis. No application for a degree at a given commencement will be accepted after March 15. The filing of the application must be preceded by payment of the diploma fee of $5 and a fee of $1.50 for binding two copies of the thesis or professional paper for the library.

The Southern Branch

JOHN R. NICHOLS, PH.D.....*Executive Dean*
ERNEST J. BALDWIN, PH.D., *Director of Division of Letters and Science*
ACHILLES CALLOWAY GOUGH, E.E.....*Director of the Division of Engineering*
EUGENE O. LEONARD, M.S.....*Director of the College of Pharmacy*
CHARLES P. RICHARDSON, M.A.....*Director of the Division of Vocational Education*

THE Southern Branch of the University of Idaho was established as such by the Nineteenth Session of the State Legislature in 1927. Section 1110 of the Idaho Compiled Statutes was amended to read:

> A college which shall be called the "Southern Branch of the University of Idaho," heretofore called the "Idaho Technical Institute," is hereby established in the City of Pocatello, Idaho, the purpose of which shall be the giving of instruction, as nearly as practicable, equivalent to the first two years, as prescribed for the University of Idaho, in such vocational, scientific, literary and technical subjects as will meet the educational needs of the students enrolled: . . . and Provided further, That as to the school of pharmacy in said college, the course shall be such as shall meet the standard of requirements as now, or hereafter, recommended by the American Association of Colleges of Pharmacy.

The predecessor of the Southern Branch of the University of Idaho, the Idaho Technical Institute, was established by the action of the legislature in 1915. The forerunner of the Technical Institute was the Academy of Idaho, established by the State at Pocatello in 1901. In 1930 the School of Pharmacy inaugurated a four-year curriculum as recommended by the American Association of Colleges of Pharmacy, and began to award the degree of Bachelor of Science in Pharmacy.

GRADUATION AND ADMISSION TO JUNIOR STANDING

Graduation from the Southern Branch of the University of Idaho is based upon satisfactory completion of one of the curricula outlined in the Southern Branch catalog. In order to be eligible for graduation a student must make an average grade of "C" in resident credits or must present grades of "C" or above in three-fourths of the credits required in his curriculum and earned in residence. Graduates from the two-year curricula in the divisions of Letters and Science and Engineering receive the certificate of graduation which admits them to junior standing in corresponding curricula in the University of Idaho. Graduates of the two-year curricula in Letters and Science are eligible for admission to the College of Law of the University of Idaho, provided they have sufficient credits in courses acceptable to that division. (See requirements for admission to the College of Law, page 27.)

Students who choose to transfer to another curriculum upon entering the junior year of the University will be required to make up the required subjects of the curriculum to which they transfer.

It is assumed that graduates from any one of the completion courses do not intend to pursue further college studies leading to a degree. They receive the regular diploma of graduation, but if they decide to continue in the work of the University they are not eligible to full junior standing. Credits earned in strictly vocational studies ("V" courses) do not count toward academic standing.

Students of the Southern Branch will avoid confusion by considering their work in terms of the curriculum which they plan to complete at Moscow.

DIVISION OF LETTERS AND SCIENCE

In the Division of Letters and Science are offered the first two years of work leading to the degree of Bachelor of Arts, B.A.; Bachelor of Science, B.S.; Bachelor of Science in Home Economics, B.S.(H.Ec.); Bachelor of Science in Pre-Medical Studies, B.S.(Pre-Med.); Bachelor of Music, B.M.; Bachelor of Science in Pre-Nursing, B.S.(Pre-Nurs.); Bachelor of Science in Agriculture, B.S.(Agr.); Bachelor of Science in Forestry, B.S.(For.); Bachelor of Science in Education, B.S.(Ed.); Bachelor of Science in Music Education, B.S.(Mus.Ed.); Bachelor of Science in Business, B.S.(Bus.). The first two years of courses in Social Work and Pre-Dental Studies, as well as two-year courses in Hospital Training and Business Completion, are also included in this division.

The work of this division is practically identical with the corresponding work in the first two years at Moscow. Students registering at the Southern Branch should consult the Southern Branch catalog.

DIVISION OF ENGINEERING

The Division of Engineering provides the freshman and sophomore years of work of the College of Engineering and the School of Mines of the University. Completion of this work qualifies for junior standing in one of the curricula outlined by those divisions of the University. Students registering at the Southern Branch should consult the Southern Branch catalog.

COLLEGE OF PHARMACY

EUGENE O. LEONARD, M.S., *Professor of Pharmacy and Director of the College of Pharmacy*
B.S., Whitman College; Ph.G., Ph.C., Northwestern University; M.S., Utah State Agricultural College.

EMMONS E. ROSCOE, M.S.....*Associate Professor of Pharmacology*
Ph.G., Ph.C., Idaho Technical Institute; B.S., M.S., University of Denver.

*DOROTHY D. FARIS, M.A.....*Assistant Professor of Bacteriology and Instructor in Pharmacy*
B.A., Wellesley College; M.A., Mount Holyoke College; B.S.(Phar.), Southern Branch, University of Idaho.

EWART A. SWINYARD, B.S.(Phar.).....*Assistant Professor of Pharmacy*
B.S., Utah State Agricultural College; B.S.(Phar.), Southern Branch, University of Idaho.

REX P. CLAYTON, B.S.(Phar.).....*Instructor in Pharmacy*
B.S.(Phar.), Southern Branch, University of Idaho.

The College of Pharmacy offers two four-year curricula leading to the degree of Bachelor of Science in Pharmacy. These curricula comply with the recommendations of the American Association of Colleges of Pharmacy, as provided by action of the Nineteenth Idaho Legislature at the time it created the Southern Branch of the University of Idaho. The College of Pharmacy was established in September, 1920, before the Idaho Technical Institute became the Southern Branch.

THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY.—The College of Pharmacy of the Southern Branch of the University of Idaho holds membership in the American Association of Colleges of Pharmacy. The object of this association is the promotion of pharmaceutical education. All institutions holding membership in this association must maintain certain minimum requirements for entrance and graduation.

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* On leave, 1939-40.

REGISTRATION IN THE STATE OF IDAHO.—Candidates for registration in pharmacy in the State of Idaho must be graduates of a college of pharmacy accredited by the American Association of Colleges of Pharmacy and must have had one year of practical experience in a drug store.

PRE-MEDICAL STUDENTS.—Pre-Medical students, by enrolling in the Scientific Pharmacy curriculum and carefully selecting their electives, may complete the Pre-Medical requirements and at the same time secure a B.S.(Phar.) degree. However, students who plan to stay only two years at the Southern Branch should enroll in the regular Pre-Medical curriculum of the Division of Letters and Science. It should be remembered that more and more of the medical schools are selecting their students from those who have had three and even four years of Pre-Medical preparation. Some medical schools require a bachelor's degree for entrance.

REQUIREMENTS FOR GRADUATION.—A student, in order to be eligible for graduation, must have grades of "C" or above in three-fourths of the credits required in his curriculum and received in residence, or an average grade of at least "C" (2.00) in resident credits. A total of 138 credit hours is required for graduation.

A student, in order to be eligible for the bachelor's degree, must do at least one year's work in residence in the division from which he expects to graduate. If the student's term of residence in the University is but one year, this must be the senior year. A year's work is interpreted as one-fourth of the total number of credits required for graduation. In addition to the above requirements for a B.S.(Phar.) degree, the American Association of Colleges of Pharmacy requires that an applicant for such degree shall have attended an accredited college of pharmacy for at least three years.

Students who expect to receive a degree should, at the beginning of their last semester, file petitions to be admitted as candidates.

PRACTICAL PHARMACY CURRICULUM

This course is to prepare students for positions in retail pharmacy.

FRESHMAN YEAR

FIRST SEMESTER

Course			Credits
Bot.	9	Gen. Pharmaceutical Botany	4
Chem.	1	General Chemistry	4
Eng.	1	English Composition	3
Phar.	3	Introduction to Pharmacy	2
Social Studies			3
Physical Education			1
			17

SECOND SEMESTER

Course			Credits
Chem.	2	General Chemistry	4
Eng.	2	English Composition	3
Phar.	12	Theory of Pharmacy	4
Social Studies			3
Physical Education			1
Electives			2
			17

SOPHOMORE YEAR

FIRST SEMESTER

Course			Credits
Phar.	2	Pharmaceutical Latin	2
Phar.	41	Operative Pharmacy	4
†Phar.	91	Accounting	3
*Ph. Ch.	61	Quant. Pharm. Chemistry	4
Physical Education			1
Electives			3
			17

SECOND SEMESTER

Course			Credits
Phar.	42	Operative Pharmacy	4
†Phar.	92	Accounting	3
Phar.	104	Pharmaceutical Jurisprudence	2
*Ph. Ch.	62	Quant. Pharm. Chemistry	4
Physical Education			1
Electives			3
			17

* Chem. 51-52 may be substituted for Ph. Ch. 61-62.
† Math. 1-2, Freshman Mathematics, may be substituted for Phar. 91-92.

JUNIOR YEAR

FIRST SEMESTER			
Course			Credits
Bact.	51	General Bacteriology	4
*Chem.	71	Pharm. Organic Chemistry	3
Phar.	157	Commercial Pharmacy	3
P'cog.	131	Gen. and Macroscopic P'cog.	3
Electives			4
			17

SECOND SEMESTER			
Course			Credits
*Chem.	72	Pharm. Organic Chemistry	3
Phar.	114	Pharmaceutical Calculations	3
Phar.	156	Preventive Medicine	3
Phar.	158	Commercial Pharmacy	3
P'cog.	132	Gen. and Macroscopic P'cog.	3
Zool.	6	Physiology	3
			18

SENIOR YEAR

FIRST SEMESTER			
Course			Credits
Phar.	151	Dispensing	4
Phar.	153	Adv. Theory of Pharmacy	3
P'col.	161	Pharmacology	3
P'col.	163	Biological Therapeutics	3
Electives			5
			18

SECOND SEMESTER			
Course			Credits
Phar.	152	Dispensing	3
Phar.	154	Adv. Theory of Pharmacy	4
P'col.	162	Pharmacology	3
P'col.	166	New and Non-Official Remedies	2
Electives			5
			17

SCIENTIFIC PHARMACY CURRICULUM

This course prepares students for prescription and hospital pharmacy, manufacturing pharmacy, and pharmaceutical chemistry. With proper selection of elective courses this course will fulfill entrance requirements to colleges of medicine.

FRESHMAN YEAR

FIRST SEMESTER			
Course			Credits
Bot.	9	Gen. Pharmaceutical Botany	4
Chem.	1	General Chemistry	4
Eng.	1	English Composition	3
Math.	1	Freshman Mathematics	4
Social Studies			3
Physical Education			1
			19

SECOND SEMESTER			
Course			Credits
Chem.	2	General Chemistry	4
Eng.	2	English Composition	3
Math.	2	Freshman Mathematics	4
Phar.	12	Theory of Pharmacy	4
Social Studies			3
Physical Education			1
			19

SOPHOMORE YEAR

FIRST SEMESTER			
Course			Credits
Chem.	51	Inorg. and Anal. Chemistry	4
Eng.	13	Modern Literature or Elective	3
Phar.	41	Operative Pharmacy	4
Zool.	1	General Zoology	4
Foreign Language or Elective			4
			19

SECOND SEMESTER			
Course			Credits
Chem.	52	Inorg. and Anal. Chemistry	4
Eng.	14	Modern Literature or Elective	3
Phar.	42	Operative Pharmacy	4
Zool.	2	General Zoology	4
Foreign Language or Elective			4
			19

* Chem. 171-172 may be substituted for Chem. 71-72.

JUNIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Bact.	51	General Bacteriology	4	Bact.	104	Pathogenic Bacteria or	
Chem.	171	Organic Chemistry	5	Phar.	156	Preventive Medicine	3–4
Foreign Language or Elective			3	Chem.	172	Organic Chemistry	3
Phar.	114	Pharmaceutical Calculations	3	Foreign Language or Elective			3
P'cog.	131	Gen. and Macroscopic P'cog.	3	P'cog.	132	Gen. and Macroscopic P'cog.	3
Physical Education			1	Zool.	54	Comp. Anat. of Vertebrates or Elective	4
			19	Physical Education			1
							17–18

SENIOR YEAR

FIRST SEMESTER				SECOND SEMESTER			
Course			Credits	Course			Credits
Phar.	151	Dispensing	4	Chem.	112	Biochemistry	4
P'col.	161	Pharmacology	3	Phar.	152	Dispensing	3
P'col.	163	Biological Therapeutics	3	Phar.	154	Adv. Theory of Pharmacy	4
Phys.	3	General Physics	4–5	P'col.	162	Pharmacology	3
Psychology or Elective			3	Phys.	4	General Physics	4–5
			17–18				18–19

SUGGESTED ELECTIVES: Ph. Ch. 152, Organic Pharmaceutical Preparations; Ph. Ch. 151, Inorganic Pharmaceutical Preparations; Ph. Ch. 154, Toxicology; P'cog. 152, Microscopic Pharmacognosy; Phar. 1, History of Pharmacy.

DIVISION OF VOCATIONAL EDUCATION

High school graduates who cannot, for one reason or another, complete a college course, find in the Division of Vocational Education an opportunity to obtain one or two years training immediately practical in their chosen vocations. This work is intended to be complete in itself and is not offered as leading to a college degree. Courses not marked with a "V" will, however, be credited toward a degree, should the student wish to go on for such work. A two-year course is offered in printing and there are one-year courses in auto-mechanics, auto painting and body repair, aviation mechanics, carpentry, trade dressmaking, secretarial training, cosmetology, and home economics. For outlines and descriptions of these courses, see the Southern Branch catalog.

PART IV

The Experiment Stations
Agricultural Extension
Non-Resident Instruction
The Summer School

Experimentation and Extension

Agricultural Experiment Station

EDWARD JOHN IDDINGS, M.S. ..... *Director*
CHARLES WILLIAM HUNGERFORD, PH.D. ..... *Vice Director*
WILLIAM VERNAL HALVERSON, PH.D. ..... *Chairman of the Project Committee*
DONALD RICHARD THEOPHILUS, PH.D. ..... *Chairman of the Publications Committee*
ROSEMARY COWEN ..... *Secretary of the Staff*

IN COMPLIANCE with an enabling act of Congress approved March 2, 1887, the Idaho Agricultural Experiment Station became an integral part of the State University at the time of its organization. That act, commonly known as the Hatch Act, defines the scope and activities of state experiment stations as follows:

> That it shall be the object and duty of said experiment stations to conduct original researches, or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantage of rotative cropping as pursued in a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of different kinds of foods for domestic animals; the scientific and economic questions in the production of butter and cheese; and such researches or experiments bearing directly on the agricultural industry in the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective states and territories.

The Adams Act, approved March 16, 1906, doubled the original federal funds available for experimentation and research. The Hatch Act made possible the beginning of scientific investigation of problems peculiar to Idaho's agriculture; the Adams Act expressly sanctions and encourages original research along agricultural lines. The Purnell Act, approved February 24, 1925, provides, in the language of the law, "the more complete endowment and maintenance of the agricultural experiment stations." The Bankhead-Jones fund made available July 1, 1935, provides "for research into basic laws and principles relating to agriculture in its broadest aspects and research under this law shall be in addition to research provided for under existing laws." These federal funds are supplemented by state appropriations for the investigation of special problems and for the maintenance of substation farms where some of the work can be most advantageously carried on. During the 1939-1940 biennium the following funds were available for the work of the Agricultural Experiment Station: Federal appropriation, $206,579.72; State appropriations, for Main Station, $15,702.17; for Branch Stations, $25,748.00. Local income from the Main Station, $5,495.37; from the Branch Station, $29,600.00.

ORGANIZATION AND WORK.—The organization of the Agricultural Experiment Station is practically the same as that which prevails in the College of Agriculture. Under the general supervision of a Director, the work of investigation is carried on by departments, of which there are now 13, viz: Agricultural Chemistry, Agricultural Economics, Agricultural Engineering, Agronomy, Animal Husbandry, Bacteriology, Dairy Husbandry, Entomology, Home Economics, Horticul-

ture, Plant Pathology, Poultry Husbandry, and Pure Seed. Each department has a broad conception of its duties and influences and is pushing actively the work it has inaugurated for the ultimate benefit of the agricultural industry it represents.

Some of the most important lines of investigation in progress are: feeding experiments with sheep, hogs, and beef and dairy cattle; study of feeds; breeding and management studies; a study of diseases of animals; experiments for the control of insect pests; breeding of forage crops; variety tests of wheat, oats, barley, peas, and potatoes; a study of chlorosis of plants; an investigation of alkali soils; pea germination studies; a study of vitamin efficiency of Idaho food plants; apple breeding; cherry cracking; fertilization of apple, cherry, and prune orchards; maturity and storage of apples and cherries; cherry pruning experiments; variety tests in vegetable growing; experiments for the control of potato, bean and fruit diseases; experiments in control of legume bugs on beans and alfalfa; spraying experiments on fruit insects; pea weevil, wireworm, and beet leaf hopper investigations, cooperating with United States Department of Agriculture; control of vegetable and truck crop insects; investigations of farm organization, livestock and crop management, and of marketing problems; land use; and feeds for egg production. Approximately 150 separate projects represent the activity of the Experiment Station staff at this time.

The general administration of the pure seed law is intrusted to the director of the Experiment Station. The actual administration of the act, however, is delegated to a pure seed commissioner who has established a laboratory in the Noble building at Boise.

LABORATORY AND OTHER FACILITIES.—The Departments of Bacteriology, Agricultural Chemistry, Agronomy, Animal Husbandry, Horticulture, Plant Pathology, Soil Technology, Veterinary Science, Entomology, Dairy Husbandry, and Dairy Manufacture have well-equipped research laboratories in Science Hall, Morrill Hall, Entomology Building, and the Dairy Building. An entomological and horticultural field laboratory is maintained at Parma. Agricultural Engineering laboratories are located in the engineering shops. Greenhouse facilities are provided for such lines of investigation as require them. The college farm of 740 acres supports splendid herds of beef and dairy cattle, hogs, and sheep, from which individual animals are selected for experimental feeding purposes. This farm also provides experimental fields of ample dimensions for the use of Departments of Agronomy, Agricultural Chemistry, Horticulture, and Plant Pathology, and breeding pens for the Department of Poultry Husbandry.

Farming conditions within the State are so varied that it is necessary to conduct many lines of investigation away from the central station. The substation farms are admirably located for this purpose. On the Sandpoint farm, experiments designed to point the way to the profitable utilization of the cut-over and burned-over lands are in progress. The farm at Aberdeen is used for experiments in crop production under irrigation. The Caldwell Substation supports a small dairy herd and is used for investigations in animal feeding and diversified farming. A feeding plant erected there in 1919 provides for 144 head of cattle and from 500 to 700 head of sheep. The High Altitude Substation at Tetonia conducts experiments in the growing of grains, grasses, and potatoes, and tests of cultural practices which give promise of adaptability to elevations of more than 6000 feet. Additional points of contact with agricultural problems, including an Entomological and Horticultural Field Station at Parma, are maintained by means of field stations where most of the work is

carried on during the summer. The splendid public spirit of citizens in the several localities has made possible the work now in progress on these farms. In the work at Aberdeen the United States Department of Agriculture, through its Bureau of Plant Industry, is cooperating.

PUBLICATIONS.—The practical results of investigations are freely used in the classrooms of the College of Agriculture, and as rapidly as possible are printed in the form of bulletins for general distribution to the farmers of the state and to others who may ask for them. Up to the present time a total of 233 bulletins, 81 circulars, 12 research bulletins, and 185 technical papers have been published. A list of those still available may be had upon request. The publications of the Experiment Station are free. The station staff invites correspondence with farmers of the state upon subjects in which they are interested. General inquiries should be directed to the Experiment Station, special inquiries to such heads of departments as from their official designation are most likely to be able to give the information sought.

Engineering Experiment Station

J. E. BUCHANAN, C.E.....*Director*

ALTHOUGH the Engineering Experiment Station was not formally organized by the Board of Education until June, 1928, investigational work has been carried on in the materials testing and other laboratories since 1904. During that year and the year following, two bulletins were published, each dealing with the road-making properties of the trap rocks of the Palouse region.

OBJECT AND ORGANIZATION.—The station was established to do research work upon engineering problems of importance to industries, municipalities, public utilities, state departments, and engineers of Idaho; to stimulate research activity in the faculty and among the students of the College of Engineering; and to publish the results of investigations and compilations of data of value to the citizens of the State.

The staff of the station is composed of the president of the University, the director and various members of the faculty of the College of Engineering. The laboratories of the departments of civil, mechanical, electrical, chemical, and agricultural engineering are employed in the investigations conducted by the station.

Idaho Bureau of Mines and Geology

ARTHUR WILLIAM FAHRENWALD, E.M., Met.E.....*Director*

THE laws establishing the Idaho Bureau of Mines and Geology specify that its office shall be at the University of Idaho, and that the dean of the School of Mines is ex-officio director. Cooperative relations are maintained with the United States Geological Survey and other governmental bureaus. The State and Federal Bureaus employ metallurgical, mining and geological staffs engaged in the effort to benefit the mining industry of the State. School of Mines faculty members contribute useful field and research work.

Agriculture and Home Economics Extension

EDWARD JOHN IDDINGS, M.S. ..... *Director*
J. W. BARBER ..... *State County Agent Leader and State Club Leader*
MARION MARTHA HEPWORTH ..... *State Home Demonstration Leader*

FOR many years the College of Agriculture and the University has rendered service to the farmers of the State through farmers' institutes, the publishing of bulletins and circulars, judging at fairs, answering letters of inquiry upon topics of interest to the farmer, and through special meetings held in widely separated portions of the State.

Extension work, as it is known today, is an outgrowth of the Smith-Lever Act of Congress, approved May 8, 1914. With the aid of Federal funds supplied by the terms of this Act and special appropriations of the State, the Extension Division within the last few years has contributed in a large measure to the development of an efficient and high quality agriculture.

General administration of extension work in Idaho is in charge of the Director of Extension. The offices of the Director and of the State Leaders of County Agents, Home Demonstration, and Boys' and Girls' Club Work are at Moscow. Offices of field specialists and district agents are at Boise, Pocatello and Moscow. General supervision of the 32 county agents is under a County Agent Leader. Home demonstration agents are supervised by a State Home Demonstration Leader. The State Leader of Boys' and Girls' Clubs directs the club work of the State, which has been very popular in the farming sections, showing an enrollment of approximately 6,000 boys and girls in 1939. Field specialists carry on carefully outlined projects of work, largely through the county agents, in horticulture, entomology, animal husbandry, dairying, agronomy, improvement of soils, poultry husbandry, pure seed production, forestry, agricultural economics, marketing, and soil conservation.

Members of the extension staff are the field representatives of the University of Idaho. They are constantly working in the rural communities, assisting in every possible way in agricultural development and home improvement. Through the Agricultural Extension Service the work of the College of Agriculture of the University of Idaho has become state-wide, and this service is rendered by the institution not only to those near at hand, but also to those sections of the State farthest removed from the campus.

Non-Resident Instruction

BERNICE MCCOY, M.S.(ED.) ..... *Director*

THE University of Idaho offers two kinds of non-resident instruction. First, for individual students, representative courses in most departments are given by correspondence. Second, where a number of persons desire the same subject, the University organizes a study group, which a member of the faculty actively directs and, when it seems practicable, visits from time to time.

The courses offered non-resident students, with few exceptions, carry full university credit and are comparable with the resident courses of the same number. Students taking these courses must have the necessary prerequisites.

All non-resident courses are prefixed with the letter "C" (e.g., Eng. C14).

CORRESPONDENCE STUDY.—In courses offered by correspondence, the University furnishes study outlines and syllabi with a list of the books and other material required. There will be eight assignments per credit-hour; for example: 16 assignments for a two-credit course and 24 assignments for a three-credit course. The assignments call for very definite work on the student's part, consisting of written reports or analyses, the solution of problems, or the investigation of special topics as the nature of the course may demand.

All reports, unless otherwise specified, must be prepared on 8x11 inch paper. Carriage charges must be fully prepaid. The use of reasonably thin paper is recommended to reduce these charges. All lessons are read, graded, corrected, and returned.

ENROLLMENT.—1. Persons not in residence may enroll for non-resident work at any time.

2. *Resident students are not permitted to carry non-resident work. Courses not completed before students register or re-register in the University are automatically dropped one week after such registration.*

3. *Non-resident students failing to complete courses for which they have registered will be dropped at the end of 12 months, but will be permitted to re-enroll with the payment of a $1.00 re-registration fee, the courses to be completed by the close of the ensuing year.*

CREDITS.—4. A total of 32 credits, or one year of undergraduate college work, may be secured by non-resident instruction.

5. As a rule, students are advised to carry not to exceed one course at a time. However, if a student has unlimited leisure, he may safely carry two courses at one time.

EXAMINATIONS.—To receive credit the student must take a written examination on the completion of each course. Other examinations may be required from time to time at the instructor's discretion. In supervising these examinations the University is glad to acknowledge the friendly cooperation of school officials.

REGULATIONS

1. *Students should return each assignment as completed, never sending in more than three at one time. Students violate this regulation at their own risk.* Instructors cannot do justice to students in the field if a large number of assignments are sent in at one time and often failure in the course is a result.

2. *Non-resident students who intend to use credits made in such courses for graduation or certification must have courses completed, including the final examination, three weeks before June 1.*

3. Worthy requests for courses not given in the non-resident bulletin may occasionally be granted.

All communications regarding non-resident instruction should be addressed to the Department of Non-Resident Instruction, University of Idaho, Moscow.

FEES

Fees for correspondence work are $4.00 per credit. For example, a two-credit course will be $8.00 and a three-credit course $12.00. Fees must be paid when enrolling for the course.
Fees will not be refunded.

GRADES

The examination grade in the course comprises fifty per cent of the final grade.

STUDY GROUPS

Members of the University faculty are glad to cooperate in organizing study groups where several persons wish to pursue the same subject. No absolute minimum is set, but it is recommended that the organization of a study group include at least five individuals. Members of these study groups may, on fulfilling the necessary requirements and prerequisites, obtain university credit. Fees for individual members of study groups shall be the same as those charged for individual registration, that is $4.00 per credit. Where the group is large enough and the distance not altogether prohibitive, the member of the faculty in charge of the course will meet the group in person at regular intervals.

NON-RESIDENT COURSES

Courses primarily for undergraduates are numbered between 1 and 99 and courses for advanced undergraduates between 100 and 199. Only those courses numbered above 50 may be taken for credit in the senior college (except that elementary courses in foreign languages and mathematics may under certain conditions be so credited.)

Courses marked with a "n" are those in which credit will not be given for the first semester's work until that of the second semester shall have been completed.

Course		Credits
	AGRICULTURE	
	AGRICULTURAL ECONOMICS	
C103	Agricultural Economics	3
C119	Marketing Farm Products	3
	AGRICULTURAL ENGINEERING	
C161a	Irrigation Practice	2
	AGRONOMY	
C1	General Crop Production	3
	ANIMAL HUSBANDRY	
C106	Livestock Feeding	3
	DAIRY HUSBANDRY	
C3	Milk Production	2
	HORTICULTURE	
C2	Introduction to Horticulture	2
	PLANT PATHOLOGY	
C2	Nature and Control of Plant Diseases	2
C105	Potato Diseases and Their Control	1
	ART	
C1	Freehand Drawing	2
C2	Freehand Drawing	2
C3	Principles of Design	2
C4	Principles of Design	2
C101	Water-Color Painting	2
C102	Water-Color Painting	2
C121	Alphabets	2
C122	Advertising Layout	2
	BACTERIOLOGY	
C54	Public Health and Hygiene	3
	BOTANY	
C1	General Botany	3
	BUSINESS ADMINISTRATION	
C81	Principles of Accounting	3
C82	Principles of Accounting	3
C165	Business Law	3
C166	Business Law	3
C169	Marketing	4
C181	Intermediate Accounting	3
C182	Intermediate Accounting	3
C185n	Cost Accounting	2
C186	Cost Accounting	2
C191	Methods in Commercial Teaching	4
	THE CLASSICS IN ENGLISH	
C53	Scientific Terminology	2
C54	Scientific Terminology	2
	ECONOMICS	
C51n	Principles of Economics	3
C52	Principles of Economics	3
C105	Money and Banking	3
C106	Money and Banking	3
	EDUCATION	
C1	Introduction to Education	2
C2	School-Room Management	2
C55	Idaho Law, Manual and Civics	2
C59	Principles of Teaching	3
C107	History of Education	3
C108	Educational Sociology	3
C111	The Junior High School	3
C113	Secondary Education	3
C114	High School Methods	3
C115	Educational Guidance	3
C123	Educational Tests and Measurements	3
C141	Character Education	3
C150	Modern Trends in Education	3
C151	Vocational Education	2
C165	Curriculum Construction	3
	ENGINEERING	
	CIVIL ENGINEERING	
C1	Engineering Drawing	4
C2	Engineering Drawing	3
C66	Mechanics (Statics)	2
C101	Mechanics (Dynamics)	2
C102	Fluid Mechanics (Hydraulics)	2
C103	Mechanics of Materials	3

Course		Credits
	ELECTRICAL ENGINEERING	
C20	Elements of Radio-Telegraphy	2
C130	D. C. and A. C. Machinery-Theory	4
C133	Direct Current Machinery	3
C134	Alternating Current Machinery	3
	MECHANICAL ENGINEERING	
C5	Machine Drawing	2
C13	Mechanism	3
	ENGLISH	
C17	Introduction to Literature	3
C18	Introduction to Literature	3
C115	Romantic Prose and Poetry	2
C116	Romantic Prose and Poetry	2
C119	American Literature	3
C120	American Literature	3
C153	Business Writing	3
C155	Technical Writing	3
C175	Readings in European Literature	2
	FRENCH	
C1n	Elementary French	4
C2	Elementary French	4
C13	Intermediate French	4
C14	Intermediate French	4
C15	Scientific French	3
C16	Scientific French	3
C81	Grammar Review and Composition	3
C82	Grammar Review and Composition (a continuation of C81)	3
C121	Survey of French Literature	3
C122	Survey of French Literature	3
C131	The Nineteenth Century to 1857	2
C132	The Nineteenth Century to 1857	2
C133	The Nineteenth Century after 1857	2
C134	The Nineteenth Century after 1857	2
C141	The Seventeenth Century	3
C142	The Seventeenth Century	3
C145	Contemporary French Literature	3
C146	Contemporary French Literature	3
C181	Free Composition	2
C182	Free Composition	2
	GEOLOGY	
C1	Introductory Geology	4
C2	Historical Geology	3
C11	General Geography	3
C12	Economic Geography	3
	GERMAN	
C1n	Elementary German	4
C2	Elementary German	4
C13	Intermediate German	4
C14	Intermediate German	4
C15	Scientific German	3
C16	Scientific German	3
C115	Advanced Scientific German	1 or 2
C116	Advanced Scientific German	1 or 2
C141	Schiller	3
C142	Schiller	3
	GREEK	
C1n	Elementary Greek	4
C2	Elementary Greek	4
	HISTORY	
C13	Classical Civilization	3
C14	Classical Civilization	3
C53	Modern Europe	3
C54	Modern Europe	3
C55	Nineteenth Century	3
C56	Nineteenth Century	3
C107	English History	3
C108	English History	3
C109	History of the United States 1492-1763	3
C110	History of the United States 1763-1789	3
C111	History of the United States 1789-1830	3
C112	History of the United States 1830-1865	3
	HOME ECONOMICS	
C135	Child Development	2
C136	Economic Problems of the Family	2
	LATIN	
C1n	Elementary Latin	4
C2	Elementary Latin	4
C13	Intermediate Latin	4
C14	Intermediate Latin	4
C53	Advanced Latin	3
C54	Advanced Latin	3
C101	Horace	3
C107	Teachers' Review of Latin	3
C108	Teachers' Review of Latin	3
C124	Teachers' Course	2
	MATHEMATICS	
C1	Freshman Mathematics	4
C2	Freshman Mathematics	4
C11	Freshman Mathematics	5
C12	Freshman Mathematics	5
C51	Calculus	4
C52	Calculus	4
	MUSIC	
C4	Outline for Elementary Harmony	2
C5	Second Year Harmony	3
C6	Second Year Harmony	3
C70	Rural School Methods	2
	PHILOSOPHY	
C51	History of Ancient Philosophy	3
C52	History of Modern Philosophy	3
C101	Ethics	3
C102	Ethics (Advanced)	3
C110	Philosophy of Science	3
	PHYSICAL EDUCATION	
C47	History of Physical Education	2
	POLITICAL SCIENCE	
C1	American Government	3
C2	American Government	3
C75	State Government in the United States	3
C76	City and County Government	3
C85	Comparative Government I	3
C137	International Relations	3
C150	Current Political and Social Problems	3
	PSYCHOLOGY	
C1	General Psychology	4
C2	Educational Psychology	3
C4	Applied Psychology	4
C54	Psychology of Advertising and Selling	3
C57	Psychology of the Exceptional Child	3
C106	Infant and Child Psychology	3
C116	Psychology of Employment and Handling of Employees	3
C117	Psychological Methods	3
C151	Psychology of High School Subjects	2
C152	Psychology of Elementary School Subjects	2
C153	Psychology of Adolescence	3
	SOCIOLOGY	
C141	Principles of Sociology	3
C142	Principles of Sociology	3
C145	Rural Sociology	3

Course		Credits
	SPANISH	
C1n	Elementary Spanish	4
C2	Elementary Spanish	4
C13	Intermediate Spanish	4
C14	Intermediate Spanish	4
C81	Advanced Composition	2
C82	Advanced Composition	2
C121	Survey of Spanish Literature	3
C122	Survey of Spanish Literature	3
C141	The Golden Age	3
C142	The Golden Age	3
	ZOOLOGY	
C58	Heredity and Eugenics	2
C60	Social Hygiene	2
C107	Organic Evolution	3

The Summer School

Six-Weeks' Term, June 13 to July 21, 1939

J. FRANKLIN MESSENGER, PH.D. ..... *Director*

Visiting Faculty Members

1939 SUMMER SCHOOL

HAROLD BACHMAN ..... *Director of Bands, University of Chicago*

VLADIMIR BAKALEINIKOFF, MUS.D. ..... *Orchestra Conductor*

ROBERT M. BEAR, PH.D. ..... *Professor of Psychology, Dartmouth College*

CARROLL D. CLARK, PH.D., *Head of Department of Sociology, University of Kansas*

VELMA GILDEMEISTER, M.MUS., *Instructor in Music, Fredonia State College*

HOWARD GODING, *Head of Piano Department, New England Conservatory of Music*

WALTER H. HODGSON, PH.D., *Director of Music, Mount Union College*

GEORGE HULTGREN, B.A., *Director of Minneapolis Civic A Cappella Choir*

MAX KRONE, M.A., *Director of Northwestern University A Cappella Choir*

JACOB KWALWASSER, PH.D., *Head of Department of Public School Music, Syracuse University*

DONALD A. LENTZ, M.MUS., *Director of Instrumental Music, University of Nebraska*

PHILIPP H. LOHMAN, PH.D., *Assistant Professor of Economics and Political Science, Miami University*

LINCOLN MAAZEL ..... *Voice Instructor, Los Angeles*

JOHN M. MATZEN, PH.D., *Professor of Education, University of Nebraska*

JULIUS J. OPPENHEIMER, PH.D., *Dean of the College of Liberal Arts, University of Louisville*

BEATRICE PERHAM, M.A. ..... *Director of Music, Glencoe, Illinois*

ELLA M. PROBST, B.S.(ED.), *Principal of the Calhoun School, Minneapolis, Minnesota.*

D. STERLING WHEELWRIGHT, M.MUS., *Organist and Director of Music, Washington Chapel, Washington, D. C.*

ADMISSION.—The Courses of the Summer School are open on the same terms as those of the regular session, as described in Part II of this catalog. Credentials for prospective students should be mailed in advance to the registrar. Entrance examinations are not required.

CREDITS.—Practically all courses offered are for university credit. Students desiring university credit will be required to pass the examinations given during the closing week of the session. A maximum of six semester-credits may be earned during the session.

UNDERGRADUATE WORK.—Undergraduate courses leading to the bachelor's degree are given just as they are during the winter session.

GRADUATE WORK.—The number of graduate students in the Summer Session is increasing rapidly. A large part of the work in summer is planned for teachers who are candidates for the master's degree. It is possible to secure that degree in four summer sessions and outside work during the intervening years.

BULLETIN.—For the special bulletin of the Summer School address, Director, Summer School.

COURSES OFFERED IN 1939 SUMMER SESSION

Course		Credits
	AMERICAN HISTORY (Hist.)	
S127	American Frontier	2
S129	America Since the Changeful Nineties	2
S210	Great Americans	2
	Research	4
	ART	
S77	Elementary Art Education	2
S78	Junior High School Art Education	2
	ATHLETIC COACHING (See Physical Education)	
	BIOLOGY, THE TEACHING OF (See Ed. S118)	
	BOTANY (Bot.)	
S3	Principles of Botany	4
S101	Plant Physiology	2
S119	Field Botany	2
S121	Morphology	2
S207	Advanced Taxonomy	2
S224	Paleobotany	2
	BUSINESS ADMINISTRATION (Bus.)	
S81	Principles of Accounting	2
S180	Survey Course in Accounting	2
	CIVIL ENGINEERING (C.E.)	
S5	Surveying	5
	DAIRY HUSBANDRY (D.H.)	
S121	Factory Management	6
	ECONOMICS (Econ.)	
S52	Principles of Economics	2
S106	Money and Banking	2
S109	Public Finance	2
S170	Nationalism and World Trade	2
S171	The Far East and World Problems	2
	EDUCATION (Ed.)	
S55	Idaho School Law, Manual and Civics	2
S103	Supervision and Teaching of English and Arithmetic	2
S104	Supervision and Teaching of Reading and the Social Studies	2
S107	History of Education	2
S108	Educational Sociology	2
S109	Diagnostic and Remedial Instruction	2
S112b	Curriculum Construction	2
S113	Principles of Secondary Education	2
S114	High School Methods	2
S115	Educational Guidance	2
S118	The Teaching of Biology	2
S120	The Teaching of General Science	2
S127	High School Library Management	2
S204	School Administration	2
S205	School Finance	2
S207	Supervision of Instruction	2
S210	Philosophy of Education	2
S211	Principles of Curriculum Construction	2
S212	Curriculum Construction	2
S212b	Curriculum Construction	2
S241	Character Education	2
S260	Scientific Methods in Education	2
S265	Internal School Organization	2
S267	Seminar in Idaho School Problems	2
	ENGLISH (Eng.)	
S10	Special Writing	2
S17	Introduction to Literature	2
S115	Romantic Prose and Poetry	2
S119	American Literature	2
S142	Shakespeare	2
S180	School Newspaper Practice	2
S198	High School Journalism	2
S208	Problems in Methods of Teaching English	2
S210	Foreign Backgrounds of English Literature	2
S215	Seminar in English Literature	2
S217	English Literary Criticism	2
	ENTOMOLOGY (Ent.)	
S210	Research	3
	EUROPEAN HISTORY (Hist.)	
S106	Recent Times	2
S133	The Meaning of History	2
S201	Seminar—Poland, Old and New	2
	FORESTRY (For.)	
S113	Forest Communities	1
S143	Mensuration	4
	GEOLOGY AND GEOGRAPHY (Geol.)	
S11	General Geography	2
S113	World Resources and Their Utilization	2

Course		Credits
S116	Geography and Geology of Idaho and the Pacific Northwest	2
	GENERAL SCIENCE, THE TEACHING OF (See Ed. S120)	
	HOME ECONOMICS (H.Ec.)	
S103	Nutrition	2
S133	Home Management House	2
S141	Interior Decoration	2
S153	Methods in Teaching Home Economics	2
S156	Methods in Adult Homemaking Curriculum	2
S159	Homemaking Curriculum	2
	JOURNALISM (See Eng. S180 and S198)	
	LIBRARY MANAGEMENT (See Ed. S127)	
	MATHEMATICS (Math.)	
S1	Freshman Mathematics	4
S12	Freshman Mathematics	4
S51	Calculus	4
S52	Calculus	4
S101	Engineering Mathematics	3
S111	Higher Algebra	2
	MUSIC (Mus.)	
S3	Orientation in Music	1
S4	Elementary Harmony	2
S5	Second Year Harmony	2
S7	Listening to Music	1
S25	University Band	1
S35	University Singers	1
S35a	University A Cappella Choir	1
S45	University Symphony Orchestra	1
S67	Ensembles	1
S70	Rural School Music Methods	2
S101	History and Literature of Music	2
S104	Modern Music	2
S109	Elementary Composition	2
S132	Voice Class Methods	2
S167	Advanced Ensembles	1
S171	Music in the Elementary Grades	2
S172	Music in the Intermediate Grades	2
S173	Class String Instrument Methods	1
S174	Class String Instrument Methods	1
S175	Class Woodwind Instrument Methods	1
S176	Class Brass Instrument Methods	1
S177	Junior and Senior High School Music Methods	2
S179	Choral Conducting	2
S180	Orchestral Conducting	2
S207	Creative Music Activities	2
S208	Tests and Measurements in Music	2
S209	Advanced Composition	4
S211	Advanced Orchestration	2
S213a	Choral Literature	2
S214	Literature of Music	2
S216	Orchestral Literature	2
S270	Church Music Techniques	2
S275	Psychology of Music	2
S280	Advanced Orchestra Conducting	2
S283	School Band Techniques	2
	APPLIED MUSIC (Mus.)	
S021	Piano	1
S21	Piano	1
S121	Piano	1
S221	Piano	1
S031	Voice	1
S31	Voice	1
S131	Voice	1
S231	Voice	1
S041	Violin	1
S41	Violin	1
S141	Violin	1
S241	Violin	1
S51	Organ	1
S151	Organ	1
S251	Organ	1
S061	Cello	1
S61	Cello	1
S161	Cello	1
S261	Cello	1
S091	Brass Instruments	1
S91	Brass Instruments	1
S191	Brass Instruments	1
S291	Brass Instruments	1
S095	Woodwind Instruments	1
S95	Woodwind Instruments	1
S195	Woodwind Instruments	1
S295	Woodwind Instruments	1
	PHILOSOPHY (Phil.)	
S51	History of Ancient Philosophy	2
S105	Philosophy of Religion	2
S203	Seminar in Social Philosophies	2
S205	Research	2
	PHYSICAL EDUCATION (P.E.)	
S117	Teaching of Swimming and Life Saving	2
S181	Physical Education Tests and Measurements	2
S187	Intramural Athletics	2
S246b	Coaching Athletic Activities	2
S296	Advanced Organization and Administration of Physical Education	2
	PHYSICS (Phys.)	
S11	Engineering Physics	5
S114	The Physical Basis of Music	2
	POLITICAL SCIENCE (Pol.Sci.)	
S131	Political Parties	2
S152	Government and Business	2
S207	Seminar—The Constitution and Its Interpretations	2
	PSYCHOLOGY (Psych.)	
S153	Psychology of Adolescence	2
S161	Psychology of Personality	2
S201	Advanced Educational Psychology	2
S205	Mental Hygiene	2
S211	Abnormal Psychology	2
	SECRETARIAL STUDIES (S.S.)	
SE	Typewriting	0
S15	Shorthand and Transcription	4
S16	Elementary Shorthand	4
S71	Intermediate Dictation and Transcription	2
S191	Methods in Commercial Teaching	2
S201	Problems in Commercial Education	2
	SOCIOLOGY (Soc.)	
S166	Collective Behavior	2
S200	Contemporary Social Movements	2
S220	Methods of Social Investigation	2
	ZOOLOGY (Zool.)	
S58	Heredity and Eugenics	2
S68	Ornithology	2

PART V

Departments of Instruction

Departments of Instruction

NOTE.—Courses with odd numbers are given in the first semester; those with even numbers, in the second semester; courses numbered 1-2, 3-4, etc., continue through the year. A course which may cover the same subject matter in either semester has an odd number.

It will be observed that courses primarily for undergraduates are numbered between 1 and 99; courses for advanced undergraduates and graduates, between 100 and 199; and courses primarily for graduates, 200 and above.

Courses marked with an *n* are those in which credit will not be given for the first semester's work until that of the second semester shall have been completed.

Agricultural Chemistry

Professor CHRISTENSEN, Associate Professor SNYDER

Courses 1, 2, and 73 in General Chemistry are prerequisites. Students desiring to specialize in professional agriculture are urged to take the more complete courses—1, 2, 51, 52; 171-172 and 181-185 and 186 in General Chemistry. Agr. Chem. 106 should be taken during the second semester of the junior year, while Agr. Chem. 112 is open to seniors.

Primarily for Undergraduates

2 General Agricultural Chemistry 4 credits Second semester

Lectures and laboratory work on chemistry as applied to agriculture, including the following topics: the chemical principles that underlie the growth and nutrition of farm crops, their composition and utilization in animal nutrition; soils, fertilizers, and manures; milk and dairy products; paints and motor fuels and oils. Two lectures and two three-hour laboratory periods a week. (SNYDER, CHRISTENSEN)

For Advanced Undergraduates and Graduates

106 Chemistry of Dairy Products 2 credits Second semester

Analysis of milk, butter, cheese, and other dairy products, designed to meet the needs of advanced students in dairying. Two three-hour laboratory periods a week. Prerequisite: Agr. Chem. 2. Offered in alternate years. (Offered in 1940-41.) (SNYDER)

112 Soil Chemistry 2 or 3 credits Second semester

The chemical nature of different soil types and the relation of the elements to crop production. Analysis of various types of soil by standard methods, to determine the available and total soil constituents. Discussion of methods. Recommendation for the improvement of each soil type by interpreting students' data. One lecture and two laboratory periods a week. Offered in alternate years. (Offered in 1940-41.) (SNYDER)

152 Advanced Agricultural Chemistry
4 or 5 credits Second semester

An advanced course for students majoring in Agricultural Chemistry. Two lectures and two or three laboratory periods a week. Prerequisite: Chem. 172. (SNYDER)

153-154 Pro-Seminar or Thesis 1, 2 or 3 credits Each semester
(CHRISTENSEN, SNYDER)

Insecticides and Fungicides 3 credits Second semester

See Hort. 180. (Available to students in Agricultural Chemistry.)

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
Special problems in soil chemistry, dairy chemistry, and nutrition. (STAFF)

203-204 Seminar 1 or 2 credits Each semester
(STAFF)

Agricultural Economics

Professor EKE, Associate Professor NYBROTEN,
Assistant Professor FENSKE

Primarily for Undergraduates

52 Farm Accounting 2 credits Second semester
Study of some of the accounting procedures particularly applicable to farming; interpretation of statistical data relating to agriculture; graphic presentation of factual material. (FENSKE)

For Advanced Undergraduates and Graduates

103 Agricultural Economics 3 credits First semester
Study of some of the economic forces closely related to agriculture. Special emphasis upon prices, agricultural credit, taxation, and tariffs. Relation of these subjects to Idaho farming. Prerequisite: Econ. 53 or Econ. 52. (NYBROTEN)

108 Farm Management 3 credits Second semester
Types of farming; relation of factors of production to profits in farming; budgeting; outlook material as a source of information for planning the farm business. Prerequisite: Agr. Econ. 103. (EKE)

119 Marketing Farm Products 3 credits First semester
Description of the various services performed in marketing agricultural products; marketing methods; marketing agencies; analysis of the operations of the produce exchanges; future trading; governmental authority in relation to marketing. Prerequisite: Econ. 53 or Econ. 51n-52. (NYBROTEN)

121 Cooperatives 2 credits First semester
History, definition and principles, producer and consumer cooperatives, organization and types, membership problems, management, government, sponsorship, survey of present cooperation, possibilities and limitations. (NYBROTEN)

150 Land Economics 3 credits Second semester
The utilization of agricultural land; land appraisal; political and economic problems of land development; land tenure; relation of population growth to economic utilization of land. Research methods used in land-use studies. Zoning of rural areas. Prerequisite: Agr. Econ. 103 or Econ. 51n-52. (EKE)

152 Agricultural Prices 2 credits Second semester
Study of the price-making process with particular reference to agricultural commodities; price quotations—their significance and validity; interpretation of price quotations; study of more important factors influencing prices of certain Idaho farm products. (Course to alternate with Agricultural Finance; to be offered second semester, 1940-41.) Prerequisite: Econ. 52 or 53. (FENSKE)

154 Agricultural Finance 2 credits Second semester
Study of the credit needs of agriculture; sources and types of agricultural credit; use of credit and relationship to adjustments in agricultural production. (Course to alternate with Agricultural Prices; not offered in 1940-41.) Prerequisite: Econ. 52 or 53. (FENSKE)

171-172 Pro-Seminar in Current Agricultural Economic Problems
1 credit Each semester
Primarily a discussion group participated in by the students under the leadership of members of the staff. Designed to keep the students acquainted with current economic developments. Prerequisite: senior standing. (DEPT. STAFF)

Primarily for Graduates

201-202 Research Credits to be arranged Each semester

203-204 Seminar 1 credit Each semester

Agricultural Education

Professor LATTIG, Associate Professor WINNER,
Mr. MCPROUD, Mr. PETERSEN

Primarily for Advanced Undergraduates

150 Extension Methods in Agriculture 2 credits Second semester
Methods used in the field by county agents, college faculty, extension specialists and teachers of vocational agriculture. Should be of value to all who expect to enter any field of public work in agriculture. (IDDINGS, LATTIG, AND OTHERS)

151 Principles of Vocational Education 2 credits First semester
Vocational education: its history, meaning, aims, administration, and place in the school system. Required in Agricultural Education Curriculum. (Not open to freshmen.) (WINNER)

152 Beginning Methods 2 credits Second semester
For juniors. Required in Agricultural Education Curriculum. (LATTIG)

153 Advanced Methods 3 credits First semester
For seniors. A continuation of Agr.Ed. 152. Required in Agricultural Education Curriculum. (LATTIG)

154 Methods in Teaching Farm Shop and Farm Mechanics
2 credits Second semester
A study of the application of efficient organization and management practice in teaching farm mechanics in vocational education in agriculture. Required in Agricultural Education Curriculum. (WINNER)

155-155 Observation and Practice Teaching
1 to 5 credits Either semester
Required in Agricultural Education Curriculum. Prerequisite: Agr. Ed. 152. (LATTIG, WINNER, MCPROUD)

157 Methods in Teaching Part-time and Evening Classes
2 credits First semester
Methods used by teachers of vocational agriculture in organizing and conducting part-time and evening classes. (WINNER)

158 Auxiliary Problems 2 credits Second semester
Supervision of the Future Farmer Organization, community work and other problems not covered in Agr.Ed. 153. Required in Agricultural Education Curriculum. Prerequisite: Agr.Ed. 153. (WINNER)

Primarily for Graduates

251-252 Seminar Credits to be arranged Each semester
(LATTIG)

253-254 Research Credits to be arranged Each semester
(LATTIG)

257 Problems in Teaching Vocational Agriculture 3 credits
For regularly employed teachers of vocational agriculture in Idaho. Includes attendance at summer conference for teachers of vocational agriculture, problems of methods, and new developments in the field of vocational agriculture. The course may be repeated three years with credit. (LATTIG)

Agricultural Engineering

Professor BERESFORD, Assistant Professor KULP, Mr. RODGERS, Mr. HUMPHREY

Primarily for Undergraduates

Plane Surveying 3 credits First semester
See Civil Engineering 3a.

4 Agricultural Engineering 3 credits Second semester
Elementary problems of the application of engineering to agricultural equipment and production. Two lectures and one three-hour laboratory period a week. (BERESFORD)

5 Concrete 1 credit First semester
Practical problems in the use of concrete on the farm and ranch. Methods of insulation and waterproofing, foundations, floor and wall construction. Reinforced concrete structures and equipment such as fence posts, water troughs, silos, etc. Material estimates, batch proportions for various strengths and curing. One three-hour laboratory period a week. (RODGERS)

For Advanced Uudergraduates and Graduates

101 Graphic Presentation 1 credit First semester
Practice in lettering, graphic presentation of data, preparation of charts and tables for scale reduction, drawing to scale and dimensions. One three-hour laboratory period a week. (RODGERS)

103 Farm Shop Practice Laboratory 2 credits First semester
Special projects in farm shop work with emphasis on Smith-Hughes teaching. Problems of shop instruction, arrangement of equipment, and shop practice. Two three-hour laboratory periods a week. Prerequisite: A.E. 4. (RODGERS)

105-106 Pro-Seminar 1 credit Each semester
(BERESFORD, KULP)

108 Farm Buildings 3 credits Second semester
Problems in the design of buildings in the student's major field. Relation of building arrangement to chore labor. Floor planning, lighting, insulation, and ventilation of farm buildings. Material estimates, methods of construction, and cost computation. Two recitations and one three-hour laboratory period a week. Prerequisite: C.E. 104. (RODGERS)

108a Farm Buildings 3 credits Second semester
For students in College of Agriculture. Prerequisite: A.E. 4. (RODGERS)

111 Farm Water Supply and Sanitation 2 credits First semester
Farm water supply and sanitary equipment. Refrigeration, ventilation, heating, illumination. Protection against lightning and fires. Farm sanitation and sewage disposal. Two lectures a week. Prerequisite: A.E. 4. (KULP)

131 Gas Engines 2 credits First semester
Theory of internal combustion engines, including the latest developments in diesel and semi-diesel applications to agricultural power. Fuels, lubricants, and repair operations required for successful engine maintenance. One recitation and one three-hour laboratory period a week. Prerequisite: A.E. 4. (BERESFORD, HUMPHREY)

132 Farm Machinery 2 credits Second semester
The selection and management of farm machinery and equipment. Students will be grouped in laboratory sections for problems in the operation, care and adjustment of machines used in their major field. One recitation and one three-hour laboratory period a week. Prerequisites: C.E. 101, C.E. 103 or C.E. 103a, M.E. 13. (RODGERS)

132a Farm Machinery 2 credits Second semester
Farm machinery for students in College of Agriculture. Prerequisite: A.E. 4. (RODGERS)

133 Tractors and Trucks 2 or 3 credits Second semester
Operation, construction, and care of tractors and trucks. Additional repair, testing, and operating may be secured by taking the second laboratory period. One lecture and one or two three-hour laboratory periods a week. Prerequisite: A. E. 132. (BERESFORD, HUMPHREY)

133a Tractors and Trucks 2 credits Second semester
For students in College of Agriculture. Prerequisite: A.E. 132a. (BERESFORD, HUMPHREY)

137 Gas Welding 2 or 3 credits First semester
Fundamental training in use of the oxyacetylene torch. One lecture and one or two laboratory periods a week. Prerequisite: junior standing. (HUMPHREY)

138 Farm Equipment Repair 2 credits Second semester
The adjustment and repair of the machines in common use on the farm. Farmstead construction and maintenance of equipment. Two three-hour laboratory periods a week. Prerequisite: A.E. 103. (RODGERS)

139 Rural Electrification 3 credits First semester
The application of electricity to agriculture, including problems of area analysis and distribution, organization and management of rural electrification promotion, and the productive uses of electricity in agriculture. Two lectures and one three-hour laboratory period a week. Prerequisites: E.E. 22 and Phys. 52. (BERESFORD)

141 Dairy and Refrigeration Engineering 3 credits First semester
Engineering in the processing of dairy products and the storage of refrigerated foods. Practical application of the science of thermodynamics to the problems in dairy manufacturing and the refrigeration and storage of meats, fruits and vegetables. Management, generation, and cost of steam, electrical energy, and refrigeration, as applied to this particular study. Two lectures and one three-hour laboratory a week. Prerequisite: junior standing. (BERESFORD)

157-158 Field Trips No credit Each semester
Supervised inspection of engineering works. Approved written reports are required. Prerequisite: senior standing. (STAFF)

161 Irrigation Practice 2 or 3 credits First semester
The place of irrigation in western agriculture; use of irrigation water by crops; the application and conservation of water; time and amount of irrigation; drainage and alkali; irrigation institutions. Laboratory work includes a study of water measurement, irrigation pumps, elementary surveying, the layout of ditches, and the preparation of land for irrigation. Two lectures and one three-hour laboratory period a week. May be taken without the laboratory. Prerequisite: C.E. 102. (KULP)

161a Irrigation Practice 2 credits First semester
For students in College of Agriculture. Prerequisite: junior standing. (KULP)

163 Reclamation and Conservation 2 credits First semester
Agricultural Engineering and the use of agricultural lands, reclamation through irrigation, drainage clearing and settlement, conservation of soil and water. Prerequisite: C.E. 102. (KULP)

164 Irrigation Systems 2 credits Second semester
The operation and maintenance of irrigation systems. The delivery of water and the keeping of records. Factors which contribute to the success of projects. Two lectures a week. Prerequisite: A.E. 161. (KULP)

181-182 Agricultural Engineering Thesis 1 credit Each semester
(BERESFORD, KULP)

Primarily for Graduates

201-202 Seminar 1 credit Each semester
(BERESFORD, KULP)

203-204 Research Credits to be arranged Each semester
Special problems in farm power and machinery, rural structures, and land reclamation. (BERESFORD, KULP)

236 Machine Methods in Agriculture (136)* 3 credits Second semester
The principles of mass production applied to the problems of agriculture. Prerequisites: A.E. 132, A.E. 133. (BERESFORD)

* Old number.

Agronomy

Professor KLAGES, Assistant Professors MICHELS and BAKER, Mr. COLWELL, Mr. PETERSON, Mr. ROYLANCE

Primarily for Undergraduates

1 General Crop Production 4 credits First semester

An introductory course dealing largely with the principal factors underlying crop production. Discussions and recitations, upon the classification, distribution, improvement, cultural practices, harvesting, and marketing of grain and forage crops. Laboratory time is devoted to a study of the botanical characteristics and identification of crop plants and seeds. Freshman year. Three lectures and one three-hour laboratory period a week. (KLAGES, PETERSON)

51 General Soils 4 credits First semester

An elementary course dealing with origin, mechanical analysis, structure, organic matter, moisture and soil air; their relationships; and influences on cultural practices. Three lectures and one two-hour laboratory period a week. Prerequisite: sophomore standing. (BAKER, COLWELL)

52 General Soils (Forestry Majors) 4 credits Second semester

An elementary course dealing with origin, mechanical analysis, structure, organic matter, moisture and soil air; their relationships; and influences on cultural practices. Special emphasis will be given to forest soils. Three lectures and one two-hour laboratory period a week. Prerequisite: sophomore standing. (BAKER, COLWELL)

For Advanced Undergraduates and Graduates

101 Genetics 3 credits First semester

The general principles of genetics, theories of heredity, evolution, variation, and Mendelism, including the application of these principles to crop and animal breeding. Junior year. Three lectures a week. (MICHELS)

102 Crop Improvement 3 credits Second semester

The study of the principles underlying plant breeding, the methods used and the practical application of the principles studied in genetics, with special reference to crop plants. Three lectures a week. (MICHELS)

104 Commercial Grading and Marketing 2 credits Second semester

The commercial grading and marketing of small grains and hay. Laboratory grading of samples by federal grade standards. This course should be taken by students in competitive judging. Junior or senior year. One lecture and one three-hour laboratory period a week. Prerequisite: Agron. 1. (ROYLANCE)

105 Seed Judging and Grading 2 credits First semester

Botanical classification, varietal studies, and the judging of small grains, corn, and legumes, are covered in the laboratory. This course should be taken by students interested in competitive judging. Junior or senior year. Three two-hour periods a week. Prerequisites: Agron. 1 and 104. (KLAGES, PETERSON)

106 Seed Analysis and Identification 3 credits Second semester
Recitations cover weed dissemination, habits of growth, and control measures; legislative measures for sale of seed; weed control; laboratory analysis of seed for purity and germination; identification of weed plants and seeds. Junior standing. Two lectures and one three-hour laboratory period a week. Prerequisite: Agron. 1. (PETERSON)

108 Forage Crops and Sugar Beets 3 credits Second semester
The production and utilization of annual and perennial forage plants and sugar beets; the establishment and care of tame meadows and pastures as well as the conservation, management and improvement of native meadow and pasture lands. Three lectures a week. Prerequisite: Agron. 1. (KLAGES)

110 Grading and Marketing of Peas and Beans
2 credits Second semester
A study of federal grading standards, processing methods, utilization and marketing of peas and beans. Junior or senior year. One lecture and one three-hour laboratory period a week. Prerequisite: Agron. 1. (ROYLANCE)

111 Crop Ecology 3 credits First semester
The study of crop plants in relation to their physiological and social environment and the main underlying factors determining the geographical distribution of field crops. Three lectures a week. Prerequisite: junior standing. (KLAGES)

113-114 Pro-seminar (Crops or Soils) 1 or 2 credits Each semester
A review of experiment station literature; papers by members of the department on investigations in progress; papers by students on special topics. Senior year. One hour a week. (KLAGES, MICHELS, BAKER)

115-116 Special Problems 1 to 3 credits Each semester
Problems in crops or soils. Students preparing for federal or state experiment station work should complete a research problem. Results are to be written up as a technical paper. Amount of credit to be arranged after consultation. (KLAGES, MICHELS, BAKER)

120 Biometry 2 credits Second semester
Statistical analysis of biological data with special reference to field plat technic; the planning and laying out of field experiments and the interpretation and presentation of results. Two lectures a week. Prerequisite: junior standing. (KLAGES)

153 Advanced Soil Fertility 2 credits First semester
A study of the principles underlying absorption, fixation and liberation of plant nutrients in the soil and how they influence the soil solution and crop production. Prerequisite: Agron. 156 or 157. (COLWELL)

154 Origin and classification of Soils 3 credits Second semester
Influence of parent material, climate and vegetation on the development of soils. Classification of soils by the bureau of soils method and in relation to problems of land utilization. Practice in field mapping. Two lectures and one three-hour laboratory a week. Prerequisite: Agron. 51 or 52. (COLWELL)

156 Soil Management 2 credits Second semester
A consideration of the external factors influencing plant nutrition, the fertility of different soils, principles underlying the management of soils and utilization of fertilizers and manures. Two lectures a week. Prerequisite: Agron. 51 or 52, junior standing. (COLWELL)

157 Soil Physics 3 credits First semester
The physical constitution and properties of soils; their relation to structure, moisture, aeration and temperature. Practical applications to cultural practices and erosion problems. Two lectures and one three-hour laboratory period a week. Prerequisite: Agron. 51 or 52. (COLWELL)

Primarily for Graduates

213-214 Research (Crops or Soils) 3 to 5 credits Each semester
Open only to graduates taking advanced work in Agronomy. Problems in plant breeding, crop production or soil physics and management may be selected. A thesis is required. (KLAGES, MICHELS, BAKER)

215-216 Seminar (Crops or Soils) 1 or 2 credits Each semester
Review of experimental work. Papers by members of the department on investigations in progress. Student reports on special topics. One hour a week. (KLAGES, MICHELS, BAKER)

218 Advanced Genetics 3 to 5 credits Second semester
A study of methods of genetic testing and analysis. Particular attention given to formation of hypotheses explaining genetic phenomena. A critical study made of a number of the best examples of genetical analysis to be found in the periodical literature. Laboratory analysis of experimental data on cereals, corn, and "unknown" stock of Drosophila. Prerequisite: Agron. 101, or A.H. 112. (MICHELS)

American History

Professor BROSNAN

Primarily for Undergraduates

21-22 History of the Americas 3 credits Each semester
A general survey course covering history of nations of North America, Central America, and South America. Representative topics: planting of colonies in New World with special emphasis on founding of thirteen British colonies in North America; rise and fall of New France; American Revolution; Latin-American independence; republics of South America, Central America, and the Caribbean; Pan-Americanism; Panama Canal; and international relations of Latin America. (BROSNAN)

61 Growth of the United States, 1789-1865 3 credits First semester
Study of the nation's history from establishment of government under Constitution to Reconstruction. Leading topics: Federalists; Thomas Jefferson; War of 1812-15; Rise of Nationalism; Slavery; Secession; and Civil War. (BROSNAN)

62 America a World Power, 1865-1940 3 credits Second semester
From Civil War to present time. Representative topics: political, social and economic reconstruction; big business; Spanish-American War; Theodore Roosevelt; Woodrow Wilson and World War; war's aftermath; Coolidge post-war boom; gilded age and machine age; great depression; prohibition; unemployment; collapse of individualism; N.R.A.; the "New Deal"; the Roosevelt recovery program; and neutrality and the European War. (BROSNAN)

For Advanced Undergraduates and Graduates

112 Sectionalism and Civil War 3 credits Second semester
Intensive study of period of 1830 to 1865. Jacksonian Democracy; Slavery in territories; growth of anti-slavery sentiment; gradual separation of sections; secession; the Civil War, 1861-65. Prerequisites: Hist. 1-2, or 13-14, or 21-22. (Not given in 1940-41.) (BROSNAN)

115 Beginnings of American Diplomacy 3 credits First semester
Study of history of foreign relations of United States from Independence to Civil War. Diplomacy of the American Revolution; the Confederation; establishment of Department of State under Constitution; diplomacy of Jefferson; War of 1812-15; Monroe Doctrine; Diplomacy of Expansion; and present day war diplomacy. Prerequisite: Six credits in history. (BROSNAN)

116 History of American Diplomacy Since Civil War 3 credits Second semester
Diplomatic problems of Civil War and reconstruction; Pan-Americanism; New Monroe Doctrine; emergence from isolation and Spanish war; path of empire; Panama Canal and the Caribbean; League of Nations; World Court; World Bank; World depression; war debts; quest for peace; today's world problems. Prerequisite: Six credits in history. (BROSNAN)

121 The Reconstruction Period 3 credits First semester
A detailed survey of American history since the Civil War. Reconstruction and adjustment; recuperation and development; Granger and Greenback movements; Cleveland era; populism; free silver; and revolt of the West. Prerequisites: Hist. 1-2, or 13-14, or 21-22. (Not given in 1940-41.) (BROSNAN)

123 The Pacific Northwest 2 credits First semester
International contest for Northwest coast; discovery of the Columbia river; Lewis and Clark; British and American fur trade; missionaries; migration over Oregon Trail; Oregon boundary; placer gold era; from mining camps to towns and cities; emergence of territories and states. Prerequisite: Six credits in history. (BROSNAN)

124 Idaho and the Inland Empire 2 credits Second semester
Idaho fur trade in relation to British and American operations; missionaries; Oregon Trail; earliest surveys; placer gold; territorial organization; Indian wars; coming of railroads; progress in mining; forestry and agriculture; irrigation since World War. Prerequisite: Six credits in history. (BROSNAN)

127 American Frontier 3 credits First semester
History of westward-moving pioneers across continent and their occupation of these seven major frontiers: Atlantic Coast, Falls Line, Appalachian Border, Ohio Valley, Mississippi Valley, Upper

Bend of Missouri, and Pacific Coast Frontiers. Representative topics: Daniel Boone's Wilderness Road; "Down-the-Ohio"; Conquest of Old Northwest; Louisiana; Aaron Burr; Cumberland Road; Oregon and the Santa Fe Trails; Mormons; "Forty-Niners"; Union Pacific Railway and passing of the Last Frontier. Prerequisite: Six credits in history. (BROSNAN)

128 Teachers' Course in American History
2 credits Second semester
Place of American History in secondary school curriculum; subject matter available for secondary school courses; and methods of teaching the subject. Required of American History majors. Prerequisite: Six credits in history. (BROSNAN)

S129 America Since the Changeful Nineties Summer session
Survey of the 40 years since Harrison's administration. Leading movements featured: Agrarian Crusade, Spanish War, Theodore Roosevelt Era, Woodrow Wilson and the World War, Harding's "normalcy" Program, Great Depression, The New Deal. Evaluation of exceptionally numerous changes originating in the decade, 1890-1900.

Primarily for Graduates

S210 Great Americans 2 credits Summer session
Detailed character studies of conspicuous American historical figures. Suggestive of the approach are biographical studies such as Gamaliel Bradford's "Portraits" or "Psychographs", Parrington's "Main Currents in American Thought", and "The American Mind" by Warfel, Gabriel, and Williams.

211-212 Problems in the History of the West
2 credits Each semester
Detailed studies of topics in the History of the West and its influence on national and international affairs at each stage of advance. Emphasis will be on Trans-Mississippi West. Lectures, discussions, and reports. A comprehensive knowledge of American History is assumed. (BROSNAN)

225-226 Research in American History
Credits to be arranged Each semester
Supervised individual investigation of topics selected in conference with the instructor and documented reports embodying the results of research. (BROSNAN)

227-228 Seminar in American History 2 credits Each semester
Intensive studies and discussions of reports presented in American History. The special interests of the students will be considered in the selection of the fields of study. (BROSNAN)

Animal Husbandry

Professor HICKMAN, Associate Professors GILDOW and BEESON, Assistant Professor BRADY

Primarily for Undergraduates

1 The Livestock Industry 5 credits First semester
History and development; principles underlying the production and distribution of livestock and livestock products; relation to

agriculture and other industries; commercial types of horses, cattle, sheep and swine; characteristics and adaption of the various breeds. Lectures, problems, reference reading. Approximately twenty percent of the time will be devoted to the poultry industry. Breeds and varieties; judging for egg production; feeding and management. Three lectures and two three-hour laboratory periods each week. Required of sophomores in agriculture. Livestock: (BEESON, BRADY); Poultry: (LAMPMAN)

50 Range Livestock 2 credits Second semester
History and development of range livestock. Market and breed types. Principles of breeding. For Forestry Students. One lecture and one laboratory period a week. (BRADY)

56 Meat 1 credit Second semester
A study of the factors affecting the quality and palatability of meat; identification and selection of wholesale and retail cuts of meat. One hour period a week. This course is offered for students in Home Economics. (HICKMAN)

70 Sanitary Science 1 credit Second semester
Common diseases and accidents of livestock in national forests, with modes of prevention. Emphasis is placed on diseases transferable to man. For Forestry students. One lecture a week. (GILDOW)

For Advanced Undergraduates and Graduates

103 Breed Types of Livestock 2 credits First semester
Early history, development, and breed characteristics of the various improved breeds of domestic animals. Practice work in judging representatives of the various breeds according to standards set by breed associations and by the show ring. One lecture and one three-hour judging period a week. Required of juniors in Animal Husbandry. Prerequisite: A.H. 1. (BRADY)

104 Livestock Judging 1 credit Second semester
The judging of horses, cattle, sheep and swine in groups with reference to breed and market types. One three-hour judging period a week. Prerequisites: A.H. 1 and 103. (BEESON)

105 Principles of Nutrition 2 or 3 credits First semester
Designed to give fundamental knowledge in the field of nutrition with a discussion of metabolism and energy relations, proteins, fats, carbohydrates, minerals, vitamins, enzymes, physiology of digestion and absorption and hormones. The laboratory will consist of feeding experiments with rats, chickens, and guinea pigs. Required of juniors in Animal Husbandry. Two credits without laboratory and three credits with laboratory. Two lectures and one laboratory period per week. Prerequisite: Chem. 73 or equivalent, or Chem. 111-112. (BEESON)

106 Livestock Feeding 3 credits Second semester
Physiology of nutrition: digestion, absorption, metabolism, protein requirements, energy requirements, and utilization. Feeding stuffs; digestible nutrients, energy values, classification, description and use of feeds. Feeding; maintenance, growth, and production requirements. Required of juniors in Animal Husbandry. Three lectures a week. Prerequisite: Chem. 73 or equivalent. (BEESON)

111 Advanced Livestock Judging 1 credit First semester
Continuation of A.H. 104, primarily for seniors. Excursions are made to livestock farms and shows within reach of the University. One three-hour judging period a week. Prerequisite: A.H. 104. (BEESON)

112 Animal Breeding 3 credits Second semester
Coordination of physiological background; general laws of heredity; methods of investigation; interpreting experimental data; application of principles to livestock improvements; problems and reference reading. Three lectures a week. Required of students in Animal Husbandry. Prerequisite: Agron. 101. (BRADY)

113 Meat 2 credits First semester
Butchering, curing, and care of meats; yield, quality, and values of meat and by-products as influenced by breeding, feeding, and health of meat animals; market classes, grades, and cuts of meat in wholesale and retail markets. Lectures; practice. Prerequisites: A.H. 1 and junior standing in the College of Agriculture. (BRADY)

141 Livestock Production 4 credits First semester
Breeding, feeding, management, and marketing of commercial and purebred beef cattle, hogs, horses and sheep. Four lectures a week. Prerequisites: A.H. 1 and 106. Senior year. (HICKMAN)

142 Range Livestock Management 2 credits Second semester
Feeding and management of cattle and sheep under range and semi-range conditions. Two lectures a week. Prerequisite: A.H. 141. Senior year. (HICKMAN)

157-158 Pro-Seminar 1 or 2 credits Each semester
Investigation in selected lines of Animal Husbandry. Senior year. (STAFF)

159-160 Thesis 1 credit Each semester
Required for graduation in Animal Husbandry. (STAFF)

171 Comparative Anatomy and Physiology 4 credits First semester
A comparison of the structures and functions of the systems of the domestic animal with special attention to the skeletal, digestive, reproductive, and circulatory systems and endocrine glands. Special problems permit students to study specific species. Three class periods, one laboratory weekly. (GILDOW)

174 Animal Diseases (infectious) 3 credits Second semester
A study of the causes, transmission, susceptibility, symptoms, diagnosis, prevention and control of major infectious diseases and parasites of domestic animals. Specific problems permit students to specialize in one or more species. Three class periods weekly. Prerequisites: Bact. 51, junior standing. (GILDOW)

175 Parasites and Parasitosis of Domestic Animals
3 credits First semester
A study of the life cycle, distribution, economic importance and control of insects, ticks, mites, roundworms, flat worms, protozoa and other parasites of domestic animals. The pathology of the host and the importance of parasites as vectors of disease will be considered. Two lectures and one laboratory period weekly. Prerequisite: junior standing. (This course is given alternate years, to be given in 1940-41.) (GILDOW and SHULL*)

* Department of Entomology.

176 Animal Diseases (non-infectious) 2 credits Second semester
A consideration of the general factors related to diseases of and first aid for farm animals; symptoms; diagnosis; the farm medicine chest; wound treatment; dehorning; castrating; docking; unsoundness; physical examination; obstetrics; diseases of the feet, bones, joints, digestive and reproductive organs; nutritional diseases; and plant and mineral poisons. One lecture and one laboratory period weekly. Junior standing. (GILDOW)

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
(STAFF)

203-204 Seminar Credits to be arranged Each semester
(STAFF)

206 Advanced Animal Breeding 2 credits Second semester
Advanced study of animal genetics. Methods of investigation; interpretation of data resulting from animal breeding research; methods of constructive breeders; pedigree studies; application of the newer knowledge of animal breeding in the livestock industry; problems and reading references. Two lectures a week. Prerequisite: A.H. 112. (BRADY)

Art and Architecture

Associate Professor PRICHARD, Mr. MELZIAN, Miss KIRKWOOD, Miss FEATHERSTONE†, Dr. SAVERY‡

ARCHITECTURE

Primarily for Undergraduates

11-12 Elementary Architectural Design 2 credits Either semester
Lectures on the elements of architecture, followed by problems in line and space, using the simpler architectural elements. Shades and shadows and application of washes are introduced. Three hours drawing twice a week. Should be taken in conjunction with Arch. 13-14. (MELZIAN)

13 Shades and Shadows 1 credit First semester
Elementary shades and shadows. (MELZIAN)

14 Architectural Perspective 1 credit Second semester
Discussion of the phenomena of perspective and methods of representing distance, followed by exercises in drawing architectural perspectives. Three hours drawing once a week. Prerequisite: Arch. 13. (MELZIAN)

53-54 Intermediate Architectural Design 3 credits Each semester
A series of problems in architectural composition and planning. Three hours drawing three times a week. Prerequisite: Arch. 11-12. (MELZIAN)

55-56 Building Construction 3 credits Each semester
The nature and properties of materials used in building construction. Methods of construction. Three lectures or recitations a week. Prerequisite: Arch. 11-12. (MELZIAN)

† See also Department of Home Economics.
‡ Department of Philosophy.

57-58 Architectural History 3 credits Each semester
A study of Ancient Architecture; the Romanesque period; the Gothic period; Renaissance and Modern Architecture. Three lectures a week. (MELZIAN)

For Advanced Undergraduates and Graduates

115-116 Architectural Design 4 credits Each semester
A continuation of Arch. 53-54. Three hours drawing four times a week. Prerequisite: Arch. 53-54. (PRICHARD)

117-118 Advanced Architectural Design 5 credits Each semester
A continuation course in architectural design. Elective for students who have completed Arch. 116. Three hours five times a week. (MELZIAN)

135 Materials of Building 3 credits First semester
A study of materials used in the construction of buildings with particular reference to new developments in the field. Prerequisite: Arch. 55-56. (MELZIAN)

136 Mechanical Plants of Buildings 3 credits Second semester
The mechanical plant in its relation to the architectural problem. Insulation, acoustics, plumbing, and electrical installation, their fundamental principles and their application in the details of modern work. Three lectures a week. (MELZIAN)

ART

Primarily for Undergraduates

1-2 Freehand Drawing 2 credits Either semester
The principles of freehand drawing and the elements of composition. Two three-hour laboratory periods a week. No prerequisites. (PRICHARD)

3-4 Principles of Design 2 credits Either semester
Principles of design in line, value, and color, to develop power of appreciation and creation of good design. (KIRKWOOD)

5-6 Life Drawing 2 credits Either semester
Drawing from life and nature. For students who enter with advanced credit, or can show skill. Credit will be allowed for both Art 1-2 and 5-6. (KIRKWOOD)

51-52 Art Appreciation 2 credits Each semester
A consideration of the elements of beauty in the various arts. Slides, lectures and discussion of painting, sculpture, and other arts. The various viewpoints: the philosopher, the artist, the layman. (PRICHARD)

61-62 Painting 2-4 credits Each semester
Painting from life, still-life and nature. Primarily for non-art majors. No prerequisites. (KIRKWOOD)

63-64 Abstract and Applied Design 2-4 credits Each semester
A study of the elements of design and applied decoration. Primarily for non-art majors. No prerequisites. (KIRKWOOD)

65-66 Pottery 2 credits Each semester
Hand-built pottery; use of wheel; glazing and firing. Classes will be limited. Prerequisite: junior standing. (PRICHARD)

77 Elementary Art Education 2 credits First semester
(FEATHERSTONE)

78 Junior High School Art Education 2 credits Second semester
(FEATHERSTONE)

For Advanced Undergraduates and Graduates

101-102 Water Color Painting 2 or 3 credits Each semester
Development of water color technique. Sketching from still life and from nature. Three hours each week per credit. Prerequisite: Art. 1-2 or 5-6. (PRICHARD)

103-104 Applied Design 2 credits Each semester
Advanced design and the crafts. Two three-hour laboratory periods a week. Prerequisite: Art. 3-4. (KIRKWOOD)

105-106 Intermediate Freehand Drawing
2 or 3 credits Each semester
Advanced drawing from life and nature. Three hours each week per credit. Prerequisites: Art 1-2 or 5-6 and 3-4. (KIRKWOOD)

107-108 Oil Painting 2 to 4 credits Each semester
Technique of oil painting; the palette. Painting from life and nature. Prerequisite: Art 1-2 or 5-6. Two to four three-hour periods a week. (KIRKWOOD)

121 Alphabets 2 or 3 credits First semester
Mechanics of lettering and a study of historic style. Prerequisite: junior standing. (PRICHARD)

122 Advertising Layout 2 credits Second semester
The layout of advertising matter for newspaper and magazine work. Relation of type to cut, spacing, balance, methods of reproduction. Pencil layout and the criticism of good and bad examples. Prerequisite: Limited to advertising majors and advanced art students. (PRICHARD)

123-124 Composition and Illustration 3 credits Each semester
A study of the technique of composition and illustration. Three three-hour laboratory periods a week. Prerequisites: Art 1-2; 105-106 or 107-108. (KIRKWOOD)

125-126 Modeling and Casting 2 credits Each semester
Modeling in clay; piece, waste, and elastic moulds. Casting in plaster. Classes limited. Two three-hour laboratory periods a week. Prerequisite: Art 106 or 108. (PRICHARD)

127-128 Advanced Freehand Drawing 3 credits Each semester
Individual problems in various media. Three three-hour laboratory periods a week. Prerequisite: Art 106. (PRICHARD, KIRKWOOD)

129-130 History of Painting 2 credits Each semester
A technical study of the great painters of history. Prerequisite: Art 51-52 or junior standing. (KIRKWOOD)

141-142 Advanced Oil Painting 2 to 4 credits Each semester
Prerequisite: Art 107-108. (KIRKWOOD)

145-146 Interior Architectural Design 3 or 4 credits Each semester
A study of the designing and furnishing of interiors. Drawings and models. Three or four three-hour periods a week. Prerequisites: Arch. 1-2, Art 105-106. (PRICHARD)

147-148 Commercial Design 3 or 4 credits Each semester
Advertising and industrial design. Drawings and models. Three or four three-hour periods a week. Prerequisite: Primarily for senior commercial art majors. (PRICHARD)

161-162 Pro-Seminar Credits to be arranged Each semester
Critical readings in the field of Art. Drawings and reports. (PRICHARD, KIRKWOOD)

Primarily for Graduates

201-202 Problems in Media and Techniques 3 credits Each semester
Research in methods and materials of painting. Prerequisite: graduate standing. Competency in drawing and painting. (KIRKWOOD, PRICHARD)

205-206 Research Credits to be arranged Each semester
(PRICHARD)

215-216 Seminar in Art 3 credits Each semester
Problems in research in aesthetics are carried on in the course and their results presented from time to time for discussion. (SAVERY)

Bacteriology

Professor HALVERSEN, Assistant Professors CHERRINGTON* and HOLM, Mr. HALE*, Dr. ARDREY, Mr. HOGE

Primarily for Undergraduates

51 General Bacteriology 4 credits Either semester
A general survey of the field of Bacteriology, designed for students in the General Science courses and as a foundation for advanced work in the subject. Two lectures and two three-hour laboratory periods a week. Prerequisite: Chem. 1. Organic Chemistry is recommended. (HALVERSEN, HALE)

54 Public Health and Hygiene 3 credits Second semester
Applied hygiene and sanitation from the standpoint of bacteriological and related sciences. The prevention of communicable diseases; environment in relation to health and disease. (HALVERSEN)

For Advanced Undergraduates and Graduates

104 Pathogenic Bacteria 4 credits Second semester
A study of the more important disease-producing organisms. Emphasis is placed on cultural, biochemical and morphological characteristics which serve as a means for their identification. Two lectures and two three-hour laboratory periods a week. Prerequisite: Bact. 51. (CHERRINGTON)

106 Dairy Bacteriology 3 credits First semester
A study of bacteria found in milk, butter, cheese, ice cream, and other dairy products; isolation and study of specific groups; effect of common farm dairy practices on the number of bacteria in milk, etc. One lecture and two three-hour laboratory periods a week. Prerequisite: Bact. 51. (CHERRINGTON)

* On leave of absence during 1939-40.

107 Food Bacteriology 4 credits First semester
Principles underlying the curing, ripening and preservation of food products. A practical working basis for ascertaining the decomposition limits of food suitable for human consumption. Methods of micro-analysis used by state and federal bureaus for food inspection. Two three-hour laboratory periods and two lectures a week. Prerequisite: Bact. 51. (HALVERSEN)

108 Bacteriological Technique 3 credits Second semester
Preparation of special cultural media, special staining methods, and problems involving special technique. One lecture and two three-hour laboratory periods a week. Prerequisite: Bact. 51. (CHERRINGTON)

109 Immunology 3 credits First semester
An intensive study of the theory of immunity, with animal experiments in the production of immune sera, use of vaccines, preparation and testing of vaccines, sera, toxins, and antitoxins. One lecture and two three-hour laboratory periods a week. Prerequisites: Bact. 51 and 104. (HOLM)

110 Serology 3 credits Second semester
A continuation of Bact. 109. Hematology, complement fixation and serum reactions are emphasized. Prerequisites: Bact. 51, 104 and 109. (HOLM)

111-112 Bacteriological Literature (Pro-Seminar)
Credits to be arranged Each semester
(HALVERSEN or CHERRINGTON)

113 Public Health Methods 2, 3, or 4 credits Either semester
Bacteriological methods employed in public health laboratories in the diagnosis of diseases, identification of organisms, and laboratory procedures as an aid of epidemiology. Designed to prepare students for public health laboratory service. Laboratory and lectures to be arranged. Prerequisites: Bact. 51 and 104. (HOLM or HALVERSEN)

115-116 Special Problems 1 or 2 credits Either semester
(HALVERSEN or CHERRINGTON)

121 Clinical Diagnosis Credits to be arranged Either semester
A course covering pathological and bacteriological methods used in hospital and public health laboratories. Laboratory work and lectures to be pursued in approved and designated hospital or public health laboratories containing suitable equipment and instruction to be given by individuals whose preparation would fit them for positions on the university faculty. Prerequisites: Bact. 51 and 104.

125 Soil Microbiology 4 credits First semester
A study of the activities of the microscopic forms of plant and animal life within the soil and the relationship existing between microbial activities, soil fertility, and crop production. The subject matter is covered by text, lectures, and review of current scientific literature. Prerequisite: Agron. 51, Bact. 51. (HALE)

Primarily for Graduates

201-202 Seminar 1 credit Each semester

211-212 Research Credits to be arranged Each semester
(HALVERSEN)

Botany

Professor GAIL; Assistant Professors DAUBENMIRE and GILLETTE; Dr. BRAUN, Dr. ROBERTS, Miss ALLEN, Mr. KEIL

Primarily for Undergraduates

1-2 General Botany 4 credits Each semester
Study of the cell and its functions, followed by a general survey of the entire plant kingdom, beginning with the lower forms. Elementary morphology, physiology, and anatomy of plants. Two lectures, one quiz and two two-hour laboratory periods a week. (GILLETTE, ALLEN)

3 Principles of Botany 4 credits Either semester
A course designed to acquaint the student with the principles of botany which play an important part in biological thought and to bring the student in contact with the plant life about him. Two lectures, one quiz and two two-hour laboratory periods a week. (ROBERTS)

11 General Agricultural Botany 5 credits First semester
The fundamentals of botany with special reference to agricultural subjects; designed to serve as a basis for the work in plant physiology and plant pathology and the technical courses of the College of Agriculture. Three lectures, one quiz and two two-hour laboratory periods a week. (DAUBENMIRE, ROBERTS)

15 General Forestry Botany 5 credits First semester
Fundamentals of physiology; morphology and anatomy of the major groups of the plant kingdom with special emphasis on the seed plants. Three lectures, one quiz and two two-hour laboratory periods a week. (GAIL, ALLEN, ROBERTS)

53-54 Systematic Botany 3 credits Each semester
Begins with a study of the lower seed plants and progresses toward the higher types. The monocotyledonous plants will be studied the first semester with special emphasis on the grasses; dicotyledonous plants are studied the second semester. One lecture and two three-hour laboratory periods a week. Prerequisite: Bot. 1-2, 3, or 11. (GAIL, ALLEN)

65 Elements of Plant Physiology 4 credits First semester
A study of the physics, chemistry, growth and movements of plants. Two lectures and two three-hour laboratory periods per week. Prerequisites: Bot. 11, 3, or 1-2, 15, and Chem. 1-2. (BRAUN)

For Advanced Undergraduates and Graduates

101-102 Plant Physiology 4 credits Each semester
The physics, chemistry, growth, and movement of plants. Two lectures and two three-hour laboratory periods a week. Prerequisites: Bot. 1-2, or 11, 15, and Chem. 1 and 2. (GAIL, BRAUN, ROBERTS)

103 Plant Anatomy 4 credits First semester
Study of tissues of vascular plants from the standpoint of origin, development, and function. Technique of killing, staining, and mounting material for permanent microscopic preparations. Two lectures and two three-hour laboratory periods a week. Prerequisites: Bot. 1-2, or 3, or 11 and Chem. 1-2. (GILLETTE)

107 Plant Ecology (Autecology) 2 or 3 credits First semester
The major factors of plant environment, methods of measurement of these factors, and morphologic adaptations to them. Two lectures and one three-hour laboratory per week. Prerequisite: Bot. 65 or 101. (DAUBENMIRE)

108 Plant Ecology (Synecology) 3 credits Second semester
Structure and dynamic behavior of plant communities, vegetation of the Moscow region, and plant geography with special reference to North America. Two lectures and one three-hour laboratory period per week. Prerequisite: Bot. 53-54. (DAUBENMIRE)

111 Mycology 4 credits First semester
A general morphological survey of the groups of fungi with some emphasis on the economical importance of the groups. Some time is given to the collection and identification of the higher fungi. Two lectures and two three-hour laboratory periods a week. Prerequisites: Bot. 1-2, 3, 11, or 15; junior standing. (ROBERTS)

S119 Field Botany 2 credits Summer session
A course given entirely in the field with the intent of acquainting the student with the names of the vascular plants in our region, and the habitats and life zones in which each occurs. A collection of pressed specimens will be made. (GAIL)

121 Morphology of Thallophytes and Bryophytes
4 credits First semester
A thorough study of the Thallophytes and Bryophytes forms the basis of lectures upon the morphology, life histories and classifications of these groups. Two lectures and two three-hour laboratory periods a week. Prerequisites: Bot. 1-2 and 53-54. (GILLETTE)

122 Morphology of Pteridophytes and Spermatophytes
4 credits Second semester
A continuation of Bot. 121. Two lectures and two three-hour laboratory periods a week. Prerequisites: 1-2, 53-54, and 121. (GILLETTE)

123-124 Thesis 1 or 2 credits Each semester

125-126 Pro-Seminar 1 credit Each semester
Review of current literature; presentation of original work. Required of Botany majors. (STAFF)

128 Plant Cytology 3 credits Second semester
The form and composition of the plant cell in relation to the mechanism of inheritance. Two lectures and one three-hour laboratory period per week. Prerequisites: Bot. 101, 102, and 121, 122, or consent of head of department. (BRAUN)

Primarily for Graduates

204 Plant Nutrition 3 credits Second semester
The inorganic and organic nutrients of plants. Two lectures and one three-hour laboratory period. Prerequisites: Bot. 101-102 and Chem. 171-172 or Ag. Chem. 2. (BRAUN)

206 Advanced Plant Ecology 1-3 credits Second semester
Intensive study of special phases of ecology. Prerequisite: Bot. 107 or 108. (DAUBENMIRE)

207-208 Advanced Taxonomy 2 to 5 credits Each semester
Taxonomy and morphology of special groups of plants. Prerequisites: Bot. 1-2, 53-54, and 121-122. (GAIL)

212 Mycology 3 credits Second semester
A continuation of Botany 111. One lecture and two three-hour laboratory periods a week. Prerequisites: Bot. 111. (ROBERTS)

221-222 Botanical Seminar 1 credit Each semester
Review of current literature, presentation of research work done or in progress. (STAFF)

224 Morphology of Fossil Plants 3 credits Second semester
A study of the plants that formed a part of past vegetations on the earth, with emphasis on the structure of these plants. Two lectures and one three-hour laboratory period each week. Prerequisites: Bot. 1-2, 53-54, and 121-122, or consent of head of the department. (GILLETTE)

231-232 Research 1 to 3 credits Each semester
Students with sufficient preparation may be assigned to research problems in physiology, ecology, morphology, mycology, and taxonomy. (STAFF)

Business Administration

Professors FARMER and GRAUE; Associate Professor WILDE;
Assistant Professors DAVIDSON and FOLZ, Mr. MOORE;
Professor KERR

Primarily for Undergraduates

27 Business Organization 3 credits First semester
Types of enterprise, including cooperative associations and socialization. (FARMER)

81-82 Principles of Accounting 3 credits Each semester
An introduction to the science of accounting. A survey of the fundamentals of bookkeeping which proceeds rapidly into the theory and mechanism of modern accounting, and the account interpretation. Lectures and laboratory. Prerequisite to all other courses in accounting. (WILDE)

For Advanced Undergraduates and Graduates

107 Transportation 3 credits First semester
Freight traffic management, tarriff interpretation, rate construction, claims and transportation law. (DAVISON)

113 Statistics 3 credits First semester
Elementary principles of statistics as applied in the scientific study and interpretation of economic phenomena. (FOLZ)

124 Financial Administration 3 credits Second semester
The financial problems of business enterprises. (FARMER)

126 Analysis of Financial Statements 2 credits Second semester
(Not given 1940-41.)

129-130 Retail Merchandising 3 credits Each semester
Types of retail stores, problems of location, buying, merchandising, and store management. Prerequisite: Bus. 169. (DAVISON)

132 Sales Management 3 credits Second semester
Responsibility of sales management to business and society. Paying, selecting, and training salesmen. Sales planning and sales strategy. Coordination of sales effort with other departments. Prerequisite: Bus. 169. (DAVISON)

134 Industrial Management 3 credits Second semester
The individual business and its conditioning factors of location, buildings and equipment, organization, layout, materials, production control. cost control, and personnel policies. (Not offered, 1940-41.) (MOORE)

136 Investments 3 credits Second semester
The general problem of investments and the merits of the various types of securities. Prerequisite: Bus. 124. (FARMER)

152 Industrial Relations 3 credits Second semester
A study of employment management, wage systems, welfare activities, and other personnel problems of the individual plant. The development of collective bargaining in the United States with an analysis of various labor agreements now in operation. (MOORE)

165-166 Business Law 3 credits Each semester
Legal aspects of common business transactions; contracts, sales, agency, partnership, corporations, guaranty and surety, bailment, and negotiable papers. (KERR)

167 Government Regulation of Business 3 credits First semester
Purpose of control; formal and informal controls; behavior and significance of costs under control; standards and data for guidance and censorship under control. The economic aspects of government legislation will be critically analyzed. (MOORE)

169 Marketing 4 credits First semester
A description and analysis of the marketing processes, with an evaluation of marketing institutions and middlemen according to the functions they perform. Prerequisite: Econ. 51n-52. (DAVISON)

170 Marketing Problems 3 credits Second semester
The development of the capacity of management through the analysis of marketing problems where the significant facts are presented in a business setting. The selection of channels of distribution, distrubution policies, sales promotion, price determination, and price policies. (Not offered, 1939-40.) Prerequisite: Bus. 169. (DAVISON)

172 Foreign Trade 3 credits Second semester
Principles of international trade; tariff, foreign exchange, market development, dumping, foreign policies, trade agreements, merchandising. (DAVISON)

175 Principles of Advertising 3 credits First semester
The proper function of advertising. Elementary problems of space, type, copy, display, and media. Advertising and sales motivations and their use. Prerequisite: junior standing. (DAVISON)

176 Retail Advertising 2 credits Second semester
Emphasis on advertising for the retail store, with written exercises in layout and copy. Store display and sales promotion through advertising media. Prerequisite: Bus. 175. (DAVISON)

177 Insurance 2 credits First semester
Survey of major branches of insurance, principles and practices. (GRAUE)

S180 Survey Course in Accounting 2 credits Summer session
Class discussion of accounting problems peculiar to the partnership, corporation, manufacturing, institutional and federal taxation. Prerequisite: A thorough knowledge of elementary bookkeeping.

181-182 Intermediate Accounting 3 credits Each semester
Analysis of financial statements, actuarial science, partnership and corporation accounting. Prerequisite: Bus. 81-82, or equivalent. (WILDE)

183 Auditing 3 credits First semester
The mechanics of auditing, reports, and auditor qualifications. Prerequisites: Bus. 81-82 and 181-182. (WILDE)

184 Income Tax Accounting 3 credits Second semester
A study of the federal income tax laws as they apply to accounting. (WILDE)

185n-186 Cost Accounting 2 credits Each semester
Covering process and specific order costs. Should be taken in conjunction with Bus. 181-182. Prerequisite: Bus. 81-82. (WILDE)

187-188 Advanced Accounting 2 credits Each semester
Survey course using actual Institute problems as a basis. Individual guidance, without lectures. Examinations at completion of each unit. Prerequisites: Bus. 181-182 and 185-186. (WILDE)

193-194 Business Conditions 3 credits Each semester
A study of prices, price movements and tendencies; current theories of business cycles; guidance of economic activity. (GRAUE)

196 Undergraduate Thesis Credits to be arranged Second semester
The preparation of a rather elaborate business study representing the results of investigation and analysis. Topics are selected with the advice of the member of the staff in charge of the student's major. Conferences, group meetings, discussion. (STAFF)

198 Advanced Statistics 3 credits Second semester
A study of correlation analysis; time correlation and business forecasting, analysis of variance, and statistical analysis of business cycles. (FOLZ)

Primarily for Graduates

205-206 Seminar in Accounting 2-4 credits Each semester
Students will be assigned one American Institute of Accounting examination each week for independent study. One class meeting per week for discussion of the assigned material. (WILDE)

211-212 Seminar in Business 2-4 credits Each semester
The topic for investigation and discussion will be selected from the field in which the student is engaged. (STAFF)

213-214 Research Credits to be arranged Each semester
(STAFF)

Chemistry and Chemical Engineering*

Professor CADY; Assistant Professors CONE, DUSAULT, LASSELLE, OWENS, REED, VANHOOK; Mr. MARTIN, Mr. JOLLEY, Mr. MORRIS, Mr. LARKHAM, Mr. RATAJAK, Mr. SUNDET, Mr. TRAUTMAN, Mr. WILLIS

NOTE.—A laboratory period consists of three consecutive hours.

Primarily for Undergraduates

1 General Chemistry 4 credits First semester
A systematic treatment of chemical principles and their applications. High school chemistry is not required as a prerequisite for this course. Two lectures, one quiz and two three-hour laboratory periods a week. (CADY, DUSAULT, OWENS, JOLLEY, MARTIN, MORRIS, LARKHAM, RATAJAK, SUNDET, TRAUTMAN, WILLIS)

2 General Chemistry 4 credits Second semester
Continuation of Chem. 1. The laboratory work consists of an introduction to qualitative analysis, as a means of studying the chemistry of cations. Prerequisite: Chem. 1. (CADY, DUSAULT, JOLLEY, MARTIN, MORRIS, RATAJAK, SUNDET, TRAUTMAN, WILLIS, LARKHAM)

51 Qualitative and Gravimetric Analysis 4 credits First semester
Theory and practice of analysis. The laboratory practice includes the qualitative separation of cations and anions, with the gravimetric determination of a number of selected cations and anions, accompanied by laboratory quizzes, equation writing and calculations. Two classes and two laboratory periods a week. Prerequisite: Chem. 1 and 2. (CONE)

52 Quantitative Analysis (Volumetric) 4 credits Second semester
Continuation of Chem. 51. The laboratory work consists of volumetric analysis, including calculations. Periods per week the same as for Chem. 51. Prerequisites: Chem. 1, 2, and 51. (CONE, OWENS)

71-72 Elementary Organic Chemistry 3 credits Each semester
Two lectures a week on the fundamental principles of organic chemistry. One laboratory period each week illustrates the technique and typical methods for the preparation and study of simple organic compounds. Prerequisite: Chem. 2. (LASSELLE)

73 Elements of Organic and Analytical Chemistry (53)†
4 credits Each semester
A condensed course of lectures and quizzes covering the fundamental chemistry of the simpler carbon compounds. The laboratory work includes nine weeks of inorganic quantitative analysis and nine weeks of organic preparations. Two class and two laboratory periods a week. Prerequisite: Chem. 2. (REED)

75 Carbon Compounds (54)† 3 credits First semester
An introduction to organic chemistry designed for students in Home Economics. Prerequisite: Chem. 2. (REED)

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* For Chemical Engineering Curiculum, see the College of Engineering section in Part III. For courses in Agricultural Chemistry and Soil Chemistry, see Agricultural Chemistry.

† Old course numbers in parenthesis.

80 Physiological Chemistry 3 credits Second semester
An elementary course in the chemistry of foods and animal processes for those students who desire an introduction to the principles and methods of biochemistry. Three lectures a week. Prerequisites: Chem. 2 and either 71, 73, or 75. (OWENS)

105-106 Physical Chemistry 3 or 4 credits Each semester
An introduction to physical chemistry from the standpoint of kinetic theory, thermodynamics, and the constitution of matter. The three recitations a week are devoted to discussions, problems, and quizzes over the subject matter. The one laboratory period includes determinations of molecular weight, conductance, potential, viscosity, surface tension, solubility, and calorimetry. Prerequisites: Chem. 1, 2, 51, and 52; first-year college physics; and Math. 51, and 52. (CONE, MARTIN)

S107 The Teaching of Chemistry 2 credits Summer session
A course designed for those who expect to teach chemistry in secondary schools. By means of lectures, reports, and discussions the following are considered: aims, methods, principles of selection and emphasis, sources of material, laboratory equipment and instruction, modern textbooks and laboratory manuals. Five periods a week. Prerequisites: Chem. 1, 2, 51, and 52, or their equivalent.

109 Pro-Seminar 1 or 2 credits First semester
A study of current publications in the fields of chemistry and chemical engineering with reports on typical scientific papers. Prerequisites: Chem. 52, 172 and senior standing. (CADY)

121 Chemical Engineering Calculations (115)* 2 credits First semester
Complete quantity calculations will be made on plants producing representative industrial chemicals. Two class periods a week. Prerequisite: Chem. 52. Parallel with Chem. 105. (VANHOOK)

131 Unit Operations (113)* 3 credits First semester
Three class periods a week on the unit operations of chemical engineering. Discussion and problems on fluid flow, heat transfer, evaporation, drying and diffusion. Prerequisites: Chem. 52, 105, 121, and 172, and M.E. 121. (VANHOOK)

132 Unit Operations (114)* 4 credits Second semester
A continuation of Chem. 131, including problems and discussion of filtration, grinding, mixing, extraction, distillation, and gas absorption. The fundamental principles of the unit operations are emphasised in the laboratory. Performance tests are conducted on various types of equipment. Two class periods and two laboratory periods a week. Prerequisite: Chem. 131. (VANHOOK)

133 Inorganic Technology (117)* 2 credits First semester
A study of principles involved in inorganic chemical industries, with a discussion of raw materials, equipment, processes, products, and methods of control. Two class periods a week. Prerequisites: Chem. 1, 2, 51, 52, and 172. (VANHOOK)

134 Unit Processes and Organic Technology (118)* 2 credits Second semester
A continuation of Chemistry 133 in the organic field with emphasis on the application of unit processes to organic technology. Two class periods a week. Prerequisites: Chem. 133 and 172. (VANHOOK)

* Old course numbers in parenthesis.

136 Chemical Plant Design (116)* 3 credits Second semester
Consideration of the planning of plants and design of equipment to give technical and economical efficiency of operation. Three class periods per week. Prerequisites: Chem. 131, 133. Parallel with Chem. 132. (VANHOOK)

137-138 Field Trips No credit Each semester
Supervised inspection of chemical engineering plants. Approved written reports are required. Prerequisite: senior standing. (STAFF)

154 Advanced Quantitative Analysis (104)*
3 credits Second semester
Laboratory work and a discussion of the theory designed for such students as may need to continue quantitative analysis beyond Chem. 52. One class and two laboratory periods a week. Prerequisites: Chem. 1, 2, 51, and 52. (REED)

171 Organic Chemistry (101)* 4 credits First semester
Three lectures a week on the general principles and theories of organic chemistry. One laboratory period a week devoted to the discussion of the fundamental operations employed in organic laboratory practice, the preparation of from five to six types of organic compounds, and written quizzes. Prerequisites: Chem. 1, 2, 51, and 52. (LASSELLE)

172 Organic Chemistry (102)* 4 credits Second semester
Continuation of Chem. 171. Two lectures a week, with two periods of laboratory work including the preparation of 10 to 12 aliphatic and aromatic compounds. (LASSELLE)

175 Qualitative Organic Analysis 2 credits First semester
A study of homologous reactions and the separation and identification of various types of organic compounds. Two laboratory periods a week. Prerequisites: Chem. 52 and 172. (REED)

181 Biochemistry (111)* 2 credits First semester
This course is an introduction to the chemistry of foodstuffs, digestion, and body fluids. There are two lectures per week. Prerequisite: Chem. 72 or 172. (OWENS)

183 Biochemistry Laboratory (111)* 2 credits First semester
A laboratory course designed for nutrition majors. The emphasis is placed on the chemistry of carbohydrates, fats, and proteins, including their isolation. There will be some qualitative tests on urine and blood. Prerequisites: Chem. 72 or 172, 181 or parallel. (OWENS)

185 Biochemistry Laboratory (111)* 2 credits First semester
A laboratory course in biochemistry emphasizing qualitative and quantitative analysis of biological materials. The latter part of the course will be devoted to urine analysis. Prerequisites: Chem. 52, 171, 181 or parallel. (OWENS)

186 Biochemistry (112)* 2 or 3 credits Second semester
The two lectures a week will be used to discuss intermediate metabolism, nutritional requirements, energy relationships and hormones. The laboratory period will offer an opportunity to study blood analysis with an introduction to the microchemical technique involved. Prerequisite: Chem. 181. (OWENS)

* Old course numbers in parenthesis.

191-192 Thesis (109-110)* 1 to 3 credits Each semester
Prerequisites: Chem. 52 and 172. (CADY WITH DEPARTMENTAL STAFF)

Primarily for Graduates

205-206 Seminar 1 credit Each semester
Required of graduate students majoring in chemistry. Prerequisites: Courses approved by the department. (VANHOOK)

207-208 Advanced Physical Chemistry 2 credits Each semester
A survey of the different divisions of the field, given from year to year by the various members of the department. Prerequisites: Chem. 105-106, and 171-172. (In 1939-40 Recent Advances in Physical Chemistry, CONE)

209-210 Chemistry of Colloids 2 credits Each semester
The theoretical discussion will include a study of absorption, electrokinetic phenomena, diffusion and other physical properties as well as chemical properties of colloidal dispersions. The course includes both lecture and laboratory work. Prerequisite: Chem. 105-106. (OWENS)

211 Chemical Thermodynamics 3 credits First semester
A study of the principles of thermodynamics and their applications to chemical systems. Prerequisites: Chem. 105-106, Math. 52. (JOLLEY)

214 Electrochemistry 2 credits Second semester
Fundamental theory and applications of electrochemistry. Prerequisites: Chem. 105-106, Math. 52. (CONE)

221-222 Advanced Chemical Engineering Calculations
2 credits Each semester
A presentation of the mathematical methods of chemical engineering and extensive industrial calculations. Prerequisite: Chem. 131-132. (VANHOOK)

231-232 Advanced Chemical Engineering 2 credits Each semester
Lectures each semester on one of the following unit operations: heat and fluid flows, diffusional processes, distillation, and crystalization. Prerequisite: Chem. 131-132. (STAFF)

261-262 Inorganic Chemistry 2 credits Each semester
A study of the periodic system and the chemistry and applications of the elements and their compounds. Prerequisite: Chem. 105-106. (REED)

271-272 Advanced Organic Chemistry (201-202)*
1 to 3 credits Each semester
The lectures deal with selected phases of organic chemistry. Laboratory work consists of special preparations and quantitative organic analysis. Prerequisites: Chem. 171 and 172. (LASSELLE)

293-294 Research (203-204)* Credits to be arranged Each semester
The working and instructional facilities of the department are placed at the disposal of properly qualified graduate students. (DEPARTMENTAL STAFF)

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* Old course numbers in parenthesis.

Civil Engineering

Professors BUCHANAN, CARTER; Assistant Professors HOWARD, JANSSEN; Mr. DAVIDSON, Mr. METCALFE, Mr. THOMPSON

Primarily for Undergraduates

A Engineering Lectures No credit First semester
A survey of the engineering profession. (BUCHANAN)

1 Engineering Drawing 4 credits Either semester
Freehand lettering; use of drawing equipment; orthographic drawings to include the principal, section, and auxiliary views; dimensioning and working drawings; introduction to point, line, and plane problems; sketching. One lecture, one quiz, and two three-hour drawing periods per week. (CARTER, THOMPSON, BROWN)

1a Engineering Drawing 3 credits Either semester
Primarily for students in forestry. Same subject matter as C.E. 1 with less emphasis on sketching, inking, dimensioning, and working drawings. One lecture and two three-hour drawing periods per week. (CARTER, THOMPSON, BROWN)

2 Engineering Drawing 3 credits Either semester
Continuation of C.E. 1 with emphasis on point, line and plane problems; surfaces, intersections, and developments; machine elements; pictorial drawing; application to practical engineering problems. One recitation and six hours in the drawing room per week. Prerequisite: C.E. 1 or 1a. (CARTER, THOMPSON, BROWN)

10 Engineering Problems 1 credit Second semester
Training in computation and analysis of engineering problems. One laboratory period per week. Prerequisite: Math. 11.

51 Surveying 3 credits First semester
A brief course in the theory and use of the transit, plane table, level, and other instruments for engineering students other than civils. One recitation and six hours of field and office work per week. Prerequisites: Math. 11 and C.E. 1. (HOWARD, METCALFE)

51a Surveying (3b)* 2 credits Second semester
A brief course in the theory and use of the transit, level, and other instruments, for electrical, mechanical, and chemical engineering students. One recitation and three hours of field and office work per week. Prerequisites: Math 11 and C.E. 1 or 1a. (HOWARD, METCALFE)

53 Plane Surveying (3)* 4 credits First semester
Theory and use of transit, level, and minor instruments. One recitation and nine hours of field and office work per week. Prerequisites: Math. 11 and C.E. 1 or 1a. (HOWARD, METCALFE)

53a Plane Surveying (3a)* 3 credits First semester
For students in forestry and mines. One recitation and six hours of field and office work per week. Prerequisites: Math. 1 or Math. 11 and C.E. 1 or 1a. (HOWARD, METCALFE)

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* Old course numbers in parenthesis.

54 Topographic Surveying (4)* 3 credits Second semester
A study of methods employed in making topographic surveys. A topographic survey of a given area is made including calculations and map. One recitation and six hours in the field or drafting room per week. Prerequisite: C.E. 53 or 53a. (HOWARD, METCALFE)

S55 Plane and Topographic Surveying (S5)*
5 credits Summer Camp
For students in forestry. First five weeks of summer camp. An abbreviation of C.E. 53a and 54. Recitation, field work, and drafting. Prerequisites: Math. 1 or Math. 11, and C.E. 1 or 1a.

58 Curves and Earthwork 2 credits Second semester
Simple, compound, spiral, parabolic curves, trackwork, and earthwork, including the mass diagram. A recitation and problem course. Prerequisite: C.E. 54. (HOWARD, METCALFE)

66 Mechanics (Statics) (56)* 2 credits Either semester
Composition and resolution of forces; laws of equilibrium; stresses in frames; centers of gravity; moments and products of inertia; analytic and graphic methods of solution. Prerequisites: Math. 51 and Phys. 51. (JANSSEN, DAVIDSON, THOMPSON, METCALFE, BROWN)

101 Mechanics (Dynamics) 2 credits Either semester
A continuation of C.E. 66. Rectilinear motion; curvilinear motion; translation and rotation; work and energy; momentum and impulse. Prerequisites: Math. 51-52 and C.E. 66. (JANSSEN, SCHROEDER, DAVIDSON, THOMPSON, METCALFE)

102 Fluid Mechanics (Hydraulics) (104)*
3 credits Second semester
The theory of hydrostatics and hydrodynamics, measurement of flow by weirs, orifices, and current meters; friction in pipes; flow in pipes, conduits, and canals; impulse and reaction wheels. Passing grades in both recitation and laboratory are necessary to obtain credit in the course. Two recitations and one laboratory period per week. Prerequisite: C. E. 101 or to be taken with C.E. 101. (JANSSEN, DAVIDSON, THOMPSON, METCALFE, KULP)

103 Mechanics of Materials (103-109)*
5 or 3 credits Either semester
The elasticity of materials; stress and strain; the theory of flexure; column theory; fatigue of metals. Laboratory includes study of physical properties and testing of steel, cast iron, timber, cement, and concrete. Three recitations and six hours in the laboratory per week. Passing grades in both recitation and laboratory are necessary to obtain credit in the course. Prerequisites: Math 51-52 and C.E. 66. (JANSSEN, DAVIDSON, THOMPSON, METCALFE)

103a Mechanics of Materials (103-109a) 4 credits Either semester
Similar to 103 except three hours of laboratory per week. Passing grades in both recitation and laboratory are necessary to obtain credit in the course. Prerequisites: Math 51-52 and C.E. 66. (JANSSEN, DAVIDSON, THOMPSON, METCALFE)

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* Old course numbers in parenthesis.

104 Structural Analysis (102)* 3 credits Second semester
The calculation of stress and deflections in statically determinate framed structures by algebraic and graphic methods. Two recitations and three hours in the drafting room per week. Prerequisite: C.E. 103. (JANSSEN, DAVIDSON, THOMPSON)

105 Advanced Mechanics of Materials (139)*
2 credits First semester
Application of photoelastic methods of stress determinations. Stresses in curved beams, hooks, flat plates, and rings; deformations of structures; impact stresses. Prerequisite: C.E. 103. Elective. (JANSSEN, DAVIDSON, THOMPSON)

106 Reinforced Concrete 2 credits Second semester
Theory of reinforced concrete beams, slabs, columns, etc. Two recitations per week. Prerequisite: C.E. 103 or 103a. (BUCHANAN, JANSSEN, DAVIDSON, THOMPSON)

108 Engineering Materials (112-115)* 2 credits Second semester
Soil mechanics, properties of construction materials, design of mixes, inspection and interpretation of tests. One recitation and three hours in laboratory per week. Prerequisites: Chem. 2, Geol. 1, C.E. 103 or 103a. (JANSSEN)

109 Highway Materials (111)* 1 or 2 credits Either semester
Investigation of road building materials. Prerequisite: C.E. 108. Elective. (JANSSEN)

111 Highway and Railway Engineering (105-113)*
4 credits First semester
Location, design, maintenance, and economics of highways and railways. Two recitations and six hours of field or drafting room work per week. Prerequisites: C.E. 54 and 58. (HOWARD, METCALFE)

112 Highway Engineering 3 credits Second semester
Continuation of C.E. 111 which is prerequisite. Elective. (HOWARD, METCALFE)

115 Field Measurements 2 credits First semester
Advanced field measurements. Prerequisite: C.E. 54. Elective. (HOWARD)

121 Structural Engineering (121-137)* 6 credits First semester
Theory and design of steel and timber structures including statically indeterminate structures. Three recitations and nine hours in the drafting room per week. Prerequisite: C.E. 104. (JANSSEN, DAVIDSON, THOMPSON)

122 Structural Engineering (126)* 4 credits Second semester
Theory and design of plain and reinforced concrete and masonry structures—buildings, bridges, hydraulic structures, retaining walls, foundations, etc. Two recitations and six hours in the drafting room per week. Prerequisite: C.E. 121. (JANSSEN, DAVIDSON, THOMPSON)

124 Structural Engineering 3 credits Second semester
Continuation of C.E. 121 and C.E.122. Prerequisite: C.E. 122. Elective. (JANSSEN, DAVIDSON, THOMPSON)

* Old number.

131 Sanitary and Municipal Engineering (141-143)*
4 credits First semester
A study of the engineering features of: (1) Public health engineering, municipal and rural sanitation, stream pollution, microscopy, and limnology; (2) Principles involved in the design, construction, operation and maintenance of water supply systems; (3) Laboratory analysis of water and sewage covering: chemical, biological, and microscopical control tests for plant operation and stream pollution studies. Three recitations and three hours in laboratory per week. Prerequisites: Chem. 2, C.E. 102. (Bact. 51 is also recommended.) (CARTER, THOMPSON)

132 Sanitary and Municipal Engineering (143-144)*
2 or 3 credits Second semester
Continuation of C.E. 131 with introduction to design construction, operation and maintenance of sewers and sewage systems. Two recitations and three hours in laboratory per week. Prerequisite: C.E. 131. (CARTER, THOMPSON)

134 Sanitary and Municipal Engineering
3 credits Second semester
Advanced undergraduate work in stream pollution, limnology, and microscopy. Two recitations and three hours in laboratory per week. Elective. Prerequisite: C.E. 132. (CARTER, THOMPSON)

141 Hydraulic Engineering (127)* 2 or 3 credits First semester
Hydrology, water power, dams, hydraulic machinery, waterways and flood control. Prerequisite: C.E. 102. (BUCHANAN, DAVIDSON, METCALFE)

142 Hydraulic Engineering (120)* 2 or 3 credits Second semester
Continuation of C.E. 141, with emphasis on irrigation and drainage. Prerequisite: C.E. 141. (BUCHANAN, KULP, DAVIDSON, METCALFE)

144 Hydraulic Engineering 3 credits Second semester
Extension of C.E. 141 and 142. Prerequisite: C.E. 142. Elective. (BUCHANAN, DAVIDSON, METCALFE)

152 Pro-Seminar (128)* 1 or 2 credits Second semester
A study of technical periodicals and selected literature. Papers on engineering topics are prepared, read, and discussed. Prerequisite: senior standing. (BUCHANAN)

153 Estimates and Costs (135)* 2 credits First semester
Economic comparisons, preparation of quantity surveys, cost estimates, cost reports, administration, etc. Prerequisite: senior standing. (BUCHANAN)

154 Contracts and Specifications (124)* 2 credits Second semester
Brief consideration of law of contracts and emphasis on general and technical clauses in engineering specifications. Prerequisite: senior standing. (BUCHANAN)

156 Valuations and Appraisals (138)* 2 credits Second semester
Valuations and appraisals of public utilities and rate structures. Two recitations per week and written reports. Prerequisite: senior standing. (HOWARD)

* Old number.

157-158 Field Trips No credit Each semester
Supervised inspection of engineering works. Approved written reports are required. Prerequisite: senior standing. (STAFF)

160 Thesis (130)* 2 or 3 credits Either semester
A problem in design or investigation. Open only to senior students by permission. Elective. (STAFF)

161 Engineering Administration (133)* 2 credits First semester
Principles of organization and management. Prerequisite: senior standing. Elective. (BUCHANAN)

163 Construction Methods (136)* 2 credits First semester
A study of the ordinary methods of construction and the relation thereto of such elements as time, equipment, cost and organization. Two recitations per week and written reports. Prerequisite: senior standing. Elective. (HOWARD)

Primarily for Graduates

201-202 Mechanics of Materials
Credits to be arranged Each semester
Prerequisite: C.E. 108. (JANSSEN)

211-212 Highway Engineering
Credits to be arranged Each semester
Prerequisite: C.E. 111. (HOWARD)

221-222 Structural Engineering
Credits to be arranged Each semester
Prerequisite: C.E. 122. (JANSSEN)

231-232 Sanitary and Municipal Engineering
Credits to be arranged Each semester
Prerequisite: C.E. 132. (CARTER)

241-242 Hydraulic Engineering
Credits to be arranged Each semester
Prerequisite: C.E. 142. (BUCHANAN)

251-252 Engineering Reports Credits to be arranged Each semester
(STAFF)

261-262 Research Credits to be arranged Each semester
(STAFF)

Classical Languages

Professor AXTELL, Miss RENTFRO

The courses given in this department are intended for three classes of students: (a) those in the Latin language; (b) those in the Greek language; and (c) those who wish, without learning the original languages, to know the literary and other works of the classical peoples inherent in modern civilization.

A. LATIN

The courses listed below are intended for students who wish to fulfill their requirements in a foreign language, to major in the subject, or to secure elective credits. The complete requirements for the Latin curriculum are stated on page 46.

* Old number.

Students who present two years of high school Latin for admission will ordinarily continue in Latin 13-14, the completion of which will fulfill the language requirement for the B.A. degree, but in special cases on written approval of the instructor they may register in Latin 2. Those who have had but one year may register in Latin 1 in special cases.

Students who wish chiefly an acquaintance with Roman history and institutions should elect European History 14, "Classical Civilization." For Latin literature in English see Eng. 175.

NOTE.—Eur. Hist. 13-14, Classical Civilization, are courses giving a rapid survey of the history and main institutions of Greece and Rome. See under European History.

Primarily for Undergraduates

1n-2 Elementary Latin 4 credits Each semester

Besides preparing to read Latin the course deals especially with the Latin-English words and phrases in literature, law, and the sciences. Translation of easy selections from classic myths and stories from Roman history. (AXTELL)

13-14 Intermediate Latin 4 credits Each semester

Translation of narratives dealing with Roman life combined with a review of grammar, and study of idioms, reading of selected orations of Cicero, and study of Roman government constitute the work of the first semester. In the second semester Vergil's *Aeneid* is translated in part and the principles of his poetry are studied. Prerequisite: Lat. 1-2, or equivalent. (RENTFRO)

53-54 Advanced Latin 3 credits Each semester

Study of selections from standard Latin authors, the prose writers the first semester, poets the second semester. Investigation of their lives and criticism of their styles. Prerequisite: Lat. 3-4, or equivalent. (RENTFRO)

For Advanced Undergraduates and Graduates

101 Horace 3 credits First semester

Selected *Odes* and *Satires* which show Horace's career, literary development, and character are read. Study of the principles of Roman lyric poetry. Investigation of the culture of the court of Augustus. Prerequisite: Lat. 53-54, or equivalent. (AXTELL)

102 Livy 3 credits Second semester

Translation of selections from Livy's history of Rome. Study of the principles of Latin narrative. Prerequisite: Lat. 53-54, or equivalent. (AXTELL)

111-112 Prose Composition 2 credits Each semester

Systematic exercises affording a thorough review of Latin grammar. Best studied in connection with either Lat. 53-54 or 101-102. Prerequisite: Lat. 13-14, or equivalent. Required for a recommendation to teach Latin. (AXTELL)

121-122 Directed Reading 2 or 3 credits Each semester

Rapid translation of standard Latin authors not usually read in the first years of college. Selections will be made to suit the needs and desires of the class. Prerequisites: Lat. 53-54, 101 and 102, or equivalent courses. (RENTFRO)

123 History of Latin Literature 2 credits First semester
A study of development of Latin literature to the third century A. D. Textbook, lectures, and outside reading in translation. Pre-6 credits in advanced undergraduate courses in Latin. (AXTELL)

124 Teachers' Course 2 credits Second semester
Comprehensive and advanced work in detail in Latin philology necessary for the efficient teacher. Ideals, means, and methods of teaching Latin in the high school. Prerequisite: Lat. 53-54, or 101-102, or equivalent courses. (AXTELL)

125-126 Pro-Seminar 1 to 3 credits Each semester
A study of antiquities and topography of Rome. Prerequisite: 6 credits in advanced undergraduate courses in Latin. (AXTELL)

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
Special topics in Latin literature or antiquities will be set for investigation. (AXTELL)

203 Latin Epigraphy 3 or 4 credits First semester
A study of Latin inscriptions; materials, forms, classes, and their bearing upon Roman history. Important examples will be investigated intensively. (AXTELL)

204 Roman Life 3 or 4 credits Second semester
A study of Roman customs and manners by use of literary references and illustrations from antiquities. A special topic will be assigned each student for investigation. (AXTELL)

B. GREEK

Students may begin the study of Greek in the first semester of any collegiate year. It may be taken to satisfy the requirements in a foreign language. For the curriculum in Greek see page 44. Students who wish chiefly an acquaintance with Greek history should elect European History 14, "Classical Civilization." Those who wish to know Greek Literature through English translation should elect English 175.

Primarily for Undergraduates

1n-2 Elementary Greek 4 credits Each semester
First lessons comprising the main features of inflection and syntax are learned, simple sentences are written into Greek, and easy selections from Greek authors are translated. Emphasis is placed upon the Greek words in current use in modern English writing. (AXTELL)

3-4 Intermediate Greek 4 credits Each semester
In the first semester selections from Xenophon and Herodotus and other prose writers are translated and practice in writing Greek is continued. In the second semester passages from Homer are translated and various topics such as the influence of Homer upon English literature are investigated. Prerequisite: Greek 1n-2. (AXTELL)

For Advanced Undergraduates and Graduates

101 Plato 3 credits First semester
The *Apology* and selections from the *Phaedo* and *Crito*. Analysis of other Socratic dialogs. Introduction to Greek philosophy. Study of Plato's life and thought. Prerequisite: Greek 3-4, or equivalent courses. (AXTELL)

102 Greek Tragedy 3 credits Second semester
Translation of a representative tragedy, such as the *Antigone, Promethus Bound,* or *Alcestis*. Lectures and papers on the evolution of classical tragedy. Study of lyric choruses. Prerequisite: Greek 3-4, or equivalent courses. (AXTELL)

103 Herodotus 3 credits First semester

104 Theocritus 3 credits Second semester

105 Greek Lyrical Poetry 3 credits First semester

107 History of Greek Literature 2 credits First semester

108 Greek Archeology 2 credits Second semester

109-110 New Testament Greek 3 credits Each semester

C. THE CLASSICS IN ENGLISH

53-54 Scientific Terminology 2 credits Each semester
A study of the fundamental Latin and Greek words used in the humanistic and natural sciences. Particular attention will be given to the terminology of the study in which each student is especially interested. (AXTELL)

60 Classical Art 2 credits Second semester
A study of the development of Greek and Roman sculpture, paintings, and other fine arts. Recognition of famous examples found in modern galleries and museums. (AXTELL)

Dairy Husbandry

Professors THEOPHILUS and FOURT, Mr. HANSEN, Mr. FOUNTAINE

These courses are so arranged that the student may specialize either in dairy production or dairy manufacturing.

Primarily for Undergraduates

2 Elements of Dairying 4 credits Second semester
A general survey of the industry; composition of milk, its food value, various products of milk and their importance, and methods of dairy-herd improvement. Study of the Babcock test, cream separation, and the judging of dairy cattle. Three lectures and one laboratory period a week. (FOUNTAINE)

For Advanced Undergraduates and Graduates

106 Dairy Cattle Judging 2 credits Second semester
A study of types of the various breeds of dairy cattle, with comparative judging. Prerequisite: D.H. 2. (FOURT)

107 Advanced Dairy Cattle Judging 1 credit First semester
Continuation of D.H. 106. (FOURT)

108 History of Breeds and Dairy Cattle Breeding
3 credits Second semester
Study of the history, development, and modern blood lines of the Ayrshire, Guernsey, Holstein, and Jersey breeds of cattle; study of the principles of breeding as practiced today, and the formation of definite breeding policies for a herd. Prerequisite: D.H. 2. (FOURT)

110 Judging Dairy Products 1 credit Second semester
A study of quality and market standards in dairy products including practice of scoring butter, cheese, ice cream, milk, and cream. Prerequisite: D.H. 2. (THEOPHILUS)

111 Advanced Dairy Products Judging 1 credit First semester
Continuation of D.H. 110. (THEOPHILUS)

114 Market Milk 2 credits Second semester
A study of the methods of processing and distributing market milk. Required of majors in Dairy Husbandry. Two lectures a week. Prerequisite: D.H. 2. (FOUNTAINE)

116 Cheese Making 2 credits Second semester
A study of the methods of manufacturing cheddar and other common types of cheese. Required of majors in Dairy Husbandry. Two lectures a week. Prerequisite: D.H. 2. (HANSEN)

117 Butter Making 3 credits First semester
A study of methods of manufacturing creamery butter and its sale and distribution. Required of majors in Dairy Husbandry. Three lectures a week. Prerequisite: D.H. 2. (HANSEN)

119 Ice Cream and Ices 3 credits First semester
A study of the theory and practice of making ice cream and other frozen milk products. Three lectures a week. Prerequisite: D.H. 2. (THEOPHILUS)

120 Dairy Cattle Feeding and Management
4 credits Second semester
A study of the breeding, care and feeding of dairy stock, the planning and arrangement of dairy buildings, the management of purebred herds, fitting for show, feeding for official records, sales and advertising, cattle photography. Required of majors in Dairy Husbandry. Three lectures and one three-hour laboratory period a week. Prerequisite: D.H. 2. (FOURT)

S121 Factory Management 6 credits Summer Session
Practice in the operation and management of market milk, ice cream, butter, and cheese plants. Required of and open only to majors in Dairy Husbandry. Eight hours daily for six weeks. Prerequisite: D.H. 2. (THEOPHILUS, HANSEN)

125 Milk Technology 3 credits First semester
Methods of manufacturing condensed milk, powdered milk, casein, and other milk by-products. Three lectures a week. Prerequisite: D.H. 2. (THEOPHILUS)

129-130 Pro-Seminar 1 credit Each semester
Study of dairy problems and review of literature. Required of majors in Dairy Husbandry. (STAFF)

131-132 Undergraduate Research Credits arranged Each semester
Students with ability to do independent work may be assigned special problems in some phase of dairy production or dairy manufacture. (STAFF)

133-134 Thesis 1 credit Each semester
Required for graduation in Dairy Husbandry. (STAFF)

Dairy Bacteriology 3 credits First semester
See Bacteriology 106.

Chemistry of Dairy Products 2 credits Second semester
See Agricultural Chemistry 106.

Dairy Engineering 3 credits First semester
See Agricultural Engineering 141.

Primarily for Graduates

229-230 Seminar 1 credit Each semester
(STAFF)

231-232 Graduate Research Credits to be arranged Each semester
(STAFF)

Dramatics

(See under *English*)

Economics

Professors FARMER and GRAUE, Assistant Professor FOLZ, Mr. MOORE

Primarily for Undergraduates

51n-52 Principles of Economics 3 credits Each semester
A study of contemporary economic institutions—their foundation, organization, and principles of working order as displayed by scientific inquiry. (GRAUE, FOLZ and MOORE)

53 Principles of Economics 4 credits Each semester
A study of economic theory and its application to present-day economic problems and institutions. This course is not intended for those majoring in business administration or economics. (FOLZ)

56 Economics for Engineers 3 credits Second semester
A brief course in the principles of economics for students in the College of Engineering.

For Advanced Undergraduates and Graduates

105-106 Money and Banking 3 credits Each semester
The theory of money and banking, with some emphasis on banking practice. (FARMER)

S107 Nationalism and World Trade 2 credits Summer session

109 Public Finance 3 credits First semester
Public expenditures and revenues. Federal, state, and local financial problems. Prerequisite: Econ. 51n-52. (FARMER)

112 Labor Problems 3 credits Second semester
An analytical survey of unemployment, wage theories, trade unionism, and government regulation of labor with special emphasis upon the Social Security Act. (MOORE)

152 Intermediate Economic Theory 3 credits Second semester
A study of the analysis of economic organization by Alfred Marshall. Prerequisite: senior standing in Business Administration or Economics. (GRAUE)

S171 The Far East and World Problems
2 credits Summer session

174 International Economic Policies 3 credits Second semester
A study of the development of the theory of international trade; the commercial policies and practices of nations; international finance; and the problems of war debts and reparations. (FOLZ)

Primarily for Graduates

201 Advanced Economic Theory 3 credits First semester
An advanced course in economic theory, representing a study of society from the entrepreneur point of view of price. For registration, consult the instructor. (GRAUE)

202 History of Economic Thought 3 credits Second semester
A historical-analytical survey of economic doctrines with special emphasis upon the theories of value and distribution. (GRAUE)

213-214 Seminar in Economics 2-4 credits Each semester
Material and topics to be selected. (FARMER, GRAUE)

215-216 Research in Economics of the Extractive Industries
Credits to be arranged Each semester
Research in production or marketing problems of the extractive industries. (FOLZ)

217-218 Research Credits to be arranged Each semester
(STAFF)

Education

Professors MESSENGER, RUSSELL, and LATTIG, Associate Professors McCOY and SMITH, Professor LEMON

Primarily for Undergraduates

1 Introduction to Education 2 credits First semester
A general introductory course for those who have made no professional study of education. Seeking to cultivate an attitude favorable to the scientific investigation of educational problems, it touches on a wide variety of topics, gives results of scientific studies and raises vital questions for further study. Open to freshmen and sophomores. (McCOY)

2 School-Room Management 2 credits Second semester
A practical course dealing with the concrete classroom problems of the teacher. (SMITH)

11 Student Problems 1 credit First semester
Required of all freshmen. The purpose of the course is to help the student adjust himself to college and to prepare for the position he expects to fill after graduation. Mutual acquaintance is the most important feature. Only open to freshmen and new students who are sophomores. (MESSENGER)

15 Elementary Education 2 credits First semester
A course for those students who expect to teach in the elementary schools after the sophomore year. (McCoy)

55 Idaho Law, Manual, and Civics 2 credits Second semester
Idaho school law, the state manual and course of study, and the civil government of Idaho. Required of all who wish to be recommended for a certificate. Includes one credit of General Methods. (McCoy)

57 Observation and Teaching in Elementary School
1 to 6 credits Each semester
To be arranged with the director of practice teaching and the dean of the School of Education. (Smith)

59 Principles of Teaching 3 credits First semester
The course presents in a practical way the fundamental processes of instruction. For non-educational students. (Smith)

For Advanced Undergraduates and Graduates

101 Elementary School Supervision 3 credits Second semester
Intended for those preparing to be critic teachers, supervisors, and principals or superintendents of schools. (McCoy)

S103 Supervision and Teaching of English and Arithmetic
2 credits Summer Session
This course is comparable to Elementary School Supervision but confines itself to English and arithmetic, and includes work for teachers of these subjects who are not supervisors. (Probst)

S104 Supervision and Teaching of Reading and the Social Studies
2 credits Summer Session
This course is comparable to Elementary School Supervision but confines itself to reading and the Social Studies, and includes work for teachers of these subjects who are not supervisors. (Probst)

107 History of Education 3 credits First semester
A survey of the development of educational ideals and practices from the age of primitive man to the present. The purpose is to consider what has been thought and tried in the past and use the information thus gained in evaluating the theories and practices of today. (Messenger)

108 Educational Sociology 3 credits Second semester
A study of the relation of education to present-day social problems. Prerequisite: Ed. 107. (Messenger)

S109 Diagnostic and Remedial Instruction
2 credits Summer Session
This course is intended to aid teachers in discovering individual defects and in correcting them. (Probst)

111 The Junior High School 3 credits First semester
A study of the fundamental principles of present-day reorganization of high school education, with special emphasis upon junior high school organization, administration, and methods of instruction. (Russell)

S112
This is a course in curriculum study intended to meet the needs of county superintendents.

113 Principles of Secondary Education 3 credits First semester
A study of high school education from three points of view: (a) the high school pupil and his characteristics; (b) the high school as an institution and its relation to society and to other educative institutions; (c) the high school course of study, especially as regards the aims and values of the different subjects. Prerequisite: six credits in Education and Educational Psychology. (RUSSELL)

114 High School Methods 3 credits Second semester
A course in the practical problems of teaching technique. It seeks, however, to establish fundamental principles of procedure rather than specific formulae. Prerequisite: six credits in Education. (RUSSELL)

115 Educational Guidance 3 credits Second semester
A study of the objectives, principles, problems and methods of educational and vocational guidance. (SMITH)

118 The Teaching of Biology 2 credits Second semester
Discussions of the subject matter and how to present it to Biology students. The collection, care, and preservation of biological material. Demonstrations of important biological principles.

S120 The Teaching of General Science 2 credits Summer Session
This course reviews briefly the major goals of science teaching, then deals at length with the following topics: methods and techniques, the method of science, the text book, motivation in science, visual education, field trips and supervised study, testing and quizzes, the science laboratory.

S121 Rural Supervision 2 credits Summer Session
This course is designed for supervisors and administrators of rural schools. It deals with rural school problems particularly but does not isolate them from the broader problems of education in general.

S127 High School Library Management
2 credits Summer Session
School library management, with special emphasis on reference material and problems, and elementary cataloging. This course is planned as a help to the teachers who, without other library training, find it necessary to supervise and care for the school book collection. (PETERSON, HALVERSON)

131 Observation and Teaching in High School
1 to 4 credits Each semester
To be arranged with the director of practice teaching and the dean of the School of Education. (SMITH)

131a Observation and Teaching in Music
4 credits Either semester

131b Observation and Teaching in Commercial Subjects
4 credits Either semester

Observation and Practice Teaching in Home Making
3 credits Either semester
See H.Ec. 157.

150 Modern Trends in Education 3 credits Second semester
The purpose of this course is to set forth the innovating practices in elementary and high schools. Although new type programs will be investigated and presented, their philosophical implications also will be treated.

Observation and Practice Teaching in Agriculture
1 to 5 credits Each semester
See Agr.Ed. 155-156.

Beginning Methods of Teaching Vocational Agriculture
2 credits Second semester
See Agr.Ed. 152.

Advanced Methods of Teaching Vocational Agriculture
3 credits First semester
See Agr.Ed. 153.

Vocational Education 2 credits Second semester
See Agr.Ed. 151.

Auxiliary Problems in Teaching Vocational Agriculture
2 credits Second semester
See Agr.Ed. 158.

Primarily for Graduates

203 Educational Measurements and Testing
3 credits First semester
Recent movements seek not to eliminate opinion but to support it by scientific evidence. This course acquaints the student with the machinery used in such investigations and develops skill in its use. The use of "standardized tests" in actual classrooms to determine school efficiency is included. (RUSSELL)

204 School Administration 3 credits First semester
A presentation of the fundamental principles and problems of organization and administration of city, county, and state school systems. (RUSSELL)

S205 School Finance 2 credits Summer Session
This course deals with major problems of financing schools at the present time. Applications are made to the problems of Idaho.

S206 Business Management of Schools 2 credits Summer Session (MATZEN)

207 Supervision of Instruction 3 credits First semester
In small cities a large and important part of the superintendent's work consists of the supervision of instruction. This course is intended to help those preparing for superintendencies to be able to improve their teachers while in service. (SMITH)

210 Philosophy of Education 3 credits Second semester
The aim of this course is to bring together and unify the facts and principles elaborated in various fields of Education, to think beyond the technique of school practices, to define some educational objectives, and to discover the meaning and place of Education in the social structure of which we are a part. (MESSENGER)

211-212 Curriculum Construction 3 credits Each semester
A study of the curriculum from three points of view: (1) principles that should govern the selection of subject matter; (2) actual scientific studies that have been made regarding the place and value of different subjects; (3) the methodology of research involved in scientific curriculum construction. (RUSSELL)

S220 Current Educational Literature 2 credits Summer Session
This course has to do with the various points of view in education as reflected in current educational literature.

241 Character Education 2 credits First semester
A study of the influences exerted by the school in the building of character. (LEMON)

260 Scientific Methods in Education 3 credits Second semester
This is a course in methods of research, experimentation, and investigation. Useful to those who expect to do research for a thesis and those who wish to apply scientific methods of investigation in their own schools after they begin to teach. The essential principles of experimental and statistical procedure are applied to actual investigation of curriculum construction. (RUSSELL)

261-262 Educational Research
Credits to be arranged Each semester
This is for students working for the master's degree. It is done under the direction of the professor in whose subject the greater part of the work is offered. (STAFF)

265-266 Seminar 2 credits Each semester
During the summer of 1939 the field of study was Internal School Organization.

S267 Seminar in Idaho School Problems
2 credits Summer Session
(SMITH)

281-282 Professional Problems
Credits to be arranged Each semester
This is for students working for the master's degree. It is done under the direction of the professor in whose subject the greater part of the work is offered. (STAFF)

S283 Curriculum Problems 2 credits Summer Session
(RUSSELL)

Seminar in Agricultural Education Each semester
See Agr.Ed. 251-252.

Research in Agricultural Education 1 to 4 credits Each semester
See Agr.Ed. 253-254.

Electrical Engineering

Professor JOHNSON, Associate Professor HULL, Mr. BROWN

Primarily for Undergraduates

20 Elements of Radio-Telegraphy 2 credits Second semester
An elementary course dealing with the fundamentals of direct and alternating currents in their application to radio-telegraphy. Two recitations a week. Open to all students who have completed high school physics. Elective. (BROWN)

22 Elementary Electrical Engineering 3 credits Second semester
Study and problems of the fundamentals of electrical engineering. Prerequisite: Phys. 51. (JOHNSON)

For Advanced Undergraduates and Graduates

131 Direct Current Machinery and Distribution
3 credits First semester
A study of theory, construction, and operation of direct current generators and motors, and the calculation of distribution systems for light and power. A general introductory course for civil, chemical, and mining engineering students. Prerequisite: Phys. 51-52. (HULL, BROWN)

132 Alternating Current Machinery and Laboratory
2 credits Second semester
A general course in continuation of E.E. 131, treating of alternating current machinery and circuits. One recitation and one three-hour laboratory period a week. Prerequisite: E.E. 131. (HULL, BROWN)

133 Direct Current Machinery 3 credits First semester
A course considering the fundamentals of electrical engineering, particularly as applied to direct current machinery. Required of junior electrical, mechanical and senior agricultural engineers. Prerequisites: Phys. 51-52 and E.E. 22. (JOHNSON)

134 Alternating Current Machinery 3 credits Second semester
A continuation of E.E. 133, dealing with alternating current circuits and machinery. Prerequisite: E.E. 133. (JOHNSON)

135 Electrical Engineering Laboratory 2 credits First semester
The use of instruments, the testing and operation of direct current machinery and apparatus. Primarily for electrical students. To accompany E.E. 133. (HULL, BROWN)

136 Electrical Engineering Laboratory 2 credits Second semester
The use of instruments, the testing and operation of direct and alternating current machinery and apparatus. For electrical students. To accompany E.E. 134. (HULL, BROWN)

137 Electrical Engineering Laboratory 2 credits First semester
Similar to E.E. 135, but designed for nonelectrical students. (BROWN)

138 Electrical Engineering Laboratory 2 credits Second semester
Testing and operation of alternating current machinery. Designed for nonelectrical students and to accompany E.E. 134. (BROWN)

141 Electrical Engineering 5 credits First semester
An advanced course in electrical circuit theory and in the theory and characteristics of alternating machinery. Prerequisite: E.E. 134. (JOHNSON)

142 Electrical Engineering 5 credits Second semester
A continuation of E.E. 141, taking up the theory of special alternating current machines and the theory of transmission systems. Prerequisite: E.E. 141. (JOHNSON)

143 Electrical Engineering Laboratory 2 credits First semester
Work in the laboratory on alternators, synchronous and induction motors, transformers, meters, and polyphase systems. To accompany E.E. 141. (HULL)

144 Electrical Engineering Laboratory 2 credits Second semester
A continuation of E.E. 143, with intensive tests upon the equipment studied in E.E. 141 and 142. (HULL)

145-146 Pro-Seminar 1 or 2 credits Each semester
Discussion of typical power and industrial applications with problems and reviews of current articles in the technical press. The preparation and presentation of papers on assigned subjects. Required of seniors in electrical engineering. (JOHNSON)

147 Electrical Design Problems 3 credits First semester
Problems and design of simple electrical machines and projects. Prerequisites: E.E. 133-134 and Math. 101. (HULL)

149-150 Electrical Circuits 3 credits Each semester
A study of transient and steady state conditions in various electrical circuits. Elective. Prerequisites: Math. 101 and E.E. 134. (JOHNSON)

151 Illumination and Photometry 2 credits First semester
A general course treating of the principles of illumination and photometry; the comparison of illuminants; a study of the proper lighting of homes, public buildings, and factories. Elective. Prerequisite: a knowledge of elementary physics. (JOHNSON)

153 Electric Power Systems 3 credits First semester
Theory and practice of electric distribution systems. Elective. Prerequisite: E.E. 134. (JOHNSON)

154 Central Stations 3 credits Second semester
Design and intensive study of central stations, their layout and equipment. Elective. Prerequisites: E.E. 132 or 134, and M.E. 122. (JOHNSON)

156 Electrical Engineering Problems 2 or 3 credits Second semester
The complete solution of various engineering projects; designs; choice of materials; comparative costs. Elective. Prerequisite: senior standing. (STAFF)

158 Transmission Lines 3 credits Second semester
A study of the theory and design of high tension transmission lines together with an introduction to the problem of transient phenomena in transmission lines and electrical machines. Elective. Prerequisite: Math. 101. (SCHROEDER, BROWN)

160 Vacuum Tubes 2 credits Second semester
Study and testing of vacuum tubes and vacuum tube circuits. Elective. Prerequisite: senior standing. (BROWN)

161 Elements of Telephony 3 credits First semester
An introductory course dealing with the principles and design of simple telephone systems. Prerequisite: E.E. 134. (HULL)

162 Radio Engineering 3 credits Second semester
A theoretical course in radio-telegraphy involving a mathematical treatment of circuits and apparatus. Open only to students in engineering and physics with senior standing. (HULL)

163-164 Field Trips No credit Each semester
Supervised inspection of engineering works. Approved written reports are required. Prerequisite: senior standing (STAFF)

171-172 Thesis 2 or 3 credits Each semester
An original investigation or dissertation upon some subject in electrical engineering. (STAFF)

Primarily for Graduates

201-202 Advanced Electrical Engineering
Credits to be arranged Each semester
Problems in transient, high-frequency, and high-voltage phenomena. (STAFF)

203-204 Theory of Direct Current Machinery
Credits to be arranged Each semester
Advanced investigation into theory underlying design and operation of direct current machinery. (STAFF)

205 Power Plant Economics Credits to be arranged First semester
Study of design, operation, and organization of power plants as related to public utilities. (STAFF)

241-242 Research Credits to be arranged Each semester
(STAFF)

English

Professor CUSHMAN; Assistant Professors COOPE, BETH, SCHULDT*, and BANKS; Mr. BECKWITH, Mr. WHITEHEAD†, Mr. PACKENHAM, Mr. SHERMAN, Miss COLLETTE, Dr. WILSON, Mr. HOAG, Dr. ATKINSON, Mr. SOLLERS, Mr. KECK, Dr. ALBRECHT, Dr. TRUEBLOOD, Mr. HUNNER, Mr. HATLEN, Mr. LILLYWHITE‡.
Professors ELDRIDGE and AXTELL.

A. DEFICIENCIES IN PREPARATION.—Freshmen notably deficient in spelling, punctuation, capitalization, sentence or paragraph structure, or giving other evidences of illiteracy, will be required, in addition to regular Eng. 1, to do work prescribed by the department until such deficiencies shall have been removed. Sophomores, juniors, and seniors are not exempt from this rule. (Reg. J-5, Part II.)

B. REQUIRED COURSES.—The regular courses in the department are divided into two groups, required and elective. The freshman course, Eng. 1-2, is required of all first-year students. Eng. 3, 151, 153, and 155 in composition are required for certain groups of students. Sophomores planning to major in English are required to take the introductory course in literature known as Eng. 17-18. Students who expect to ask the department for recommendations to teach English should take Eng. 107 and at least some work in public speaking, dramatics, or journalism. Students in any college or school who will need recommendation for the teaching of English should consult the head of the department not later than the beginning of the junior year for assistance in making out a proper program of courses. Stu-

* Died December 10, 1939.
† Leave of absence, 1939-40.
‡ Resigned.

dents desiring credit for intercollegiate debate must register for such credit in Eng. 37. Students desiring credit for work on *The Argonaut* must register, if prepared for the course, in Eng. 83-84.

C. PREREQUISITES.—Eng. 1-2 is a prerequisite to all courses in the department except Eng. 31-32 (Fundamentals of Speech), Eng. 33-34 (Reading and Interpretation), and Eng. 37 (Intercollegiate Debating); but students in Eng. 1-2 may take Eng. 35 (Extemporaneous Speaking), or Eng. 36 (Parliamentary Law and Procedure), provided they secure permission from the head of the department. Junior standing is a prerequisite to all 100's courses in literature, language, dramatics and public speaking, or journalism. Eng. 1 alone is required in the College of Agriculture for all first-year students. Eng. 2 is a prerequisite to Eng. 155 (Technical Writing) for students in Agriculture who make "D" in Eng. 1.

D. MAJOR CURRICULA.—Three major curricula are offered by the department—the regular curriculum in English, a curriculum in journalism, and a curriculum in dramatics and public speaking. The outlines of the three curricula are stated in the College of Letters and Science section, Part III of this catalog.

ENGLISH

Primarily for Undergraduates

1-2 English Composition 3 credits Each semester
Required of all first-year students and a prerequisite for all courses in the department except as noted above under "C." (COOPE, BANKS, BECKWITH, PACKENHAM, SHERMAN, COLLETTE, WILSON, HOAG, ATKINSON, KECK, ALBRECHT, TRUEBLOOD, HUNNER)

3 Expository Writing 2 credits Either semester
Theory and practice of nonliterary composition. (HOAG)

S10 Special Writing 2 credits Summer Session
Not given in the regular college year. Designed for students desiring part credit for Eng. 1 and for those who have had Eng. 1-2 and want work equivalent to Eng. 3-4 or Eng. 61-62. Instruction largely individual. (SCHULDT)

13-14 Modern Literature 3 credits Each semester
Cannot be taken as a substitute for Eng. 17-18 by English majors or by students in the School of Education who desire to teach English. It is the chief purpose of the course to bring students into contact with the thought of our times as expressed in modern literature. (COOPE, BANKS, BECKWITH, WILSON, TRUEBLOOD)

17-18 Introduction to Literature 3 credits Each semester
Required of all sophomores in the College of Letters and Science expecting to major in English. The course endeavors to show what literature is and to make clear its function in life. It requires copious and carefully directed illustrative reading, so organized as to show the development of the various literary types of English literature. (ATKINSON, PACKENHAM, SCHULDT)

61-62 Elementary Literary Composition 2 credits Each semester
The principles of successful composition in the short story, the literary essay, verse writing, and the one-act play. The course is designed as a prerequisite to Eng. 105-106. Open to sophomores who have distinguished themselves in Eng. 1-2, and, with the consent of the head of the department, to a limited number of upperclassmen. (SCHULDT)

63-64 Great Books 2 credits Each semester
For students in any department of the University and for mature persons not regularly registered in the University. Great books of the world from the Bible and Homer to recent times. An elective course which cannot be substituted for required advanced courses. (CUSHMAN, SHERMAN)

For Advanced Undergraduates and Graduates

SPECIAL NOTE.—All hundreds courses require Eng. 1-2 and junior standing as prerequisites.

105-106 Advanced Literary Composition 2 credits Each semester
A study of the principles underlying successful composition in the short story, the literary essay, verse writing, and the drama, and considerable practice under criticism. With special permission from the head of the department, the course may be taken in successive years. Open only to those who have shown some aptitude in literary composition by doing good work in Eng. 61-62 or by writing for publication. (SCHULDT)

107 The Teaching of English 3 credits First semester
The course will consider such problems of the high school teacher as the selection of textbooks; the use of professional journals; correlation and experience projects; methods of teaching the basic skills of reading, writing, and speaking, and the appreciation of literature; testing and grading; and classroom procedures. Some consideration will be given to high school instruction in journalism, dramatics, and public speaking. (HOAG)

110 The Modern English Language 3 credits Second semester
A study of usage in pronunciation, spelling, grammatical practice, and word coining in the light of the more recent history of the language. (WILSON)

112 Elizabethan Literature 2 credits Second semester
The nondramatic literature of the Elizabethan Age. The lyric, narrative poetry, and the beginning of the essay; Spencer, Bacon, and Milton and their contemporaries. (Not given in 1940-41.) (WILSON)

113-114 The Restoration and Queen Anne Ages
2 credits Each semester
Dryden, Defoe, Swift, Steele, Addison, Pope, and the dramatists. The rise of the essay, pseudo-classicism, the heroic drama, the prose drama of manners, and the beginnings of the novel. (Not given in 1940-41) (BANKS)

115-116 Romantic Prose and Poetry 2 credits Each semester
The transition to romanticism. The romantic writers from the middle of the eighteenth century to the death of Scott. (Not given in 1940-41) (COOPE)

117-118 The Victorian Period 2 credits Each semester
A study of the greatest writers of the Victorian era, their interpretation of the life and ideals of their time, their relation to one another, and their influence upon their contemporaries and successors. (SHERMAN)

119-120 American Literature 3 credits Each semester
The study of American literature both as an expression of the American spirit and as a part of the development of English literature. The development of American literature is traced from colonial times to the present. The first semester traces the development to 1870; the second semester from 1870 to the present. (COOPE)

121-122 The Modern Novel 3 credits Each semester
Beginning with Defoe, the chief emphasis is placed on the important novelists of the Eighteenth, Nineteenth, and early Twentieth Centuries, but the course is concluded with some analysis of present-day tendencies in both English and American fiction. (SCHULDT)

123 Contemporary English and American Drama
2 credits First semester
A study of the leading contemporary dramatists in England and in America with emphasis on Barrie, Shaw, Galsworthy, and Eugene O'Neil. (CUSHMAN)

124 Contemporary European Drama 2 credits Second semester
A study of the leading contemporary dramatists in Europe with emphasis on the influence of Ibsen. (CUSHMAN)

131 Old English Language and Literature
3 credits First semester
Aim both linguistic and literary. The development of the language. Grammar and the reading of selected texts. The history of Old English literature, with wide reading in modern translations. Primarily for upperclassmen and graduates. Prerequisite: Eng. 17-18. (Not given in 1940-41) (COOPE)

132 Chaucer and Middle English 3 credits Second semester
The development of the language and the literature to the end of the Middle English Period. The study of Chaucer as a poet and story teller. Primarily for upperclassmen and graduates. Prerequisite: Eng. 17-18. (Not given in 1940-41.) (CUSHMAN)

141 Dramatic Influences Upon Shakespeare 3 credits First semester
A study of the development of the drama to 1594. Folk dramatic material, miracle plays, moralities, interludes, and early regular drama. Special emphasis upon the work of Shakespeare's immediate predecessors and earlier contemporaries, and a comparison of this work with Shakespeare's earlier plays. Theatrical and social conditions affecting the Elizabethan drama. (CUSHMAN)

142 Shakespeare 3 credits Second semester
Shakespeare's development and characteristics as dramatic artist, poet and thinker. (CUSHMAN)

151 Engineering Reports 3 credits Either semester
Required for graduation from the College of Engineering and the School of Mines. Problems in semitechnical articles and in formal technical reports, and a short study of the business letter. Irregular students must have special permission from the instructor. (SCHULDT)

153 Business Writing 3 credits Either semester
For upper-division students in the School of Business Administration. Emphasis is placed on business correspondence and business reports, though other types of manuscripts are prepared. Irregular students must have special permission. (SHERMAN)

155 Technical Writing 3 credits Either semester
For students in the College of Agriculture, the School of Forestry, majors in Geology, Pre-medical and Pre-nursing studies. The writing of various semitechnical papers, a formal technical report,

and the more usual types of business letters. Prerequisite: If the divisional requirement is only one semester of freshman English, a grade of "C" or above. Irregular students must have special permission from the instructor. (SCHULDT, SHERMAN, KECK, HUNNER)

175-176 Readings in European Literature 2 credits Each semester
Selections from the writings of European authors as an introduction to the comparative study of their literary personalities and tendencies and of their influence on English literature. Not counted toward a major or a minor in English. (AXTELL, ELDRIDGE)

Primarily for Graduates

201 Folk Literature 3 credits First semester
The origins of literature. Choric song and dance, the ballad, children's singing games, cowboy songs, and other folk literary forms, and their relation to the development of individual artistic literature. Primarily for seniors and graduates.

203-204 Special Problems in the Development of (a) Poetry, (b) Drama, (c) Prose Fiction, (d) The Essay, or (e) Biblical Literature
3 credits Each semester
Only one or two of these literary types will be considered in any one year. Primarily for seniors and graduates. (ATKINSON)

S205 Thesis Writing 2 credits Summer Session
A study of the literature of the subject and practice in the elements of thesis writing.

207-208 Special Problems in Methods of Teaching English
Credits to be arranged Each semester
A course in special research intended primarily for experienced teachers doing graduate work in the department. Open to properly qualified graduate students.

209-210 The Foreign Backgrounds of English Literature
3 credits Each semester
A study of the influence of foreign literatures on the chief writers of English, with special emphasis on establishing the Medieval, and the Renaissance points of view. Primarily for seniors and graduates. (CUSHMAN)

211-212 Research Credits to be arranged Each semester
Research in preparation for graduate thesis and conferences on results. In addition, each candidate for a graduate degree will meet with other graduates for special investigation of some one topic. Open to properly qualified graduate students. (CUSHMAN)

214 Studies in Biography 3 credits Second semester
A brief study of world masterpieces in biography (in English translation), with concentration on contemporary English and American biography. Primarily for seniors and graduates. (CUSHMAN)

S215 Seminar in English Literature 2 credits Summer Session
A course designed to offer each mature student an opportunity to study some special field in English literature with individual conferences with the instructor and frequent round-table discussions with other students.

217-218 English Literary Criticism 3 credits Each semester
The development of literary theory from Ascham to Pater. The relation of criticism to the development of literature. Present tendencies in criticism. Primarily for seniors and graduates. (ALBRECHT)

DRAMATICS AND PUBLIC SPEAKING

SPECIAL NOTE.—Eng. 1-2 is prerequisite to all courses in dramatics and public speaking except Eng. 31-32, 33-34, and 37; exceptional cases—students with semiprofessional training and experience—will be handled by the head of the department.

31-32 Fundamentals of Speech 2 credits Each semester
An introduction to the thought, voice, and action of public speaking. Beginning course. Sections limited to fifteen students each. No prerequisite. (LILLYWHITE, COLLETTE, SOLLERS)

33-34 Reading and Interpretation 2 credits Each semester
Analysis and presentation of monologues, stories, poems, plays, etc. No prerequisite. (SOLLERS)

35 Extemporaneous Speaking 2 credits First semester
The application of the extempore method to public speaking. One section. Open to those who have had Eng. 31-32 or equivalent. Open to freshmen by special permission. (LILLYWHITE)

36 Parliamentary Law and Procedure 2 credits Second semester
A study of parliamentary law and procedure through organization of the class as a parliamentary body and practice of speech under parliamentary conditions. Open to freshmen by special permission. (LILLYWHITE)

37 Intercollegiate Debating 1 credit Either semester
The questions for debate are studied and briefed, and frequent debate practice is held. Students are selected on a competitive basis and organized into a regular class. University debaters are chosen primarily from this group. May be taken two semesters for credit. Open to freshmen by special permission. (LILLYWHITE)

71-72 Fundamentals of Play Production 3 credits Each semester
A study of the principles of acting and staging of plays, together with practical application of these principles in laboratory production of one-act plays. No public appearance is guaranteed members of the class. If registration is too large, trials will be given to determine those best fitted for the work. (SOLLERS)

For Advanced Undergraduates and Graduates

123-124 Contemporary Drama 2 credits Each semester
For description of these courses see the statement of Eng. 123 and 124.

141-142 Shakespeare and Dramatic Influences on Shakespeare
3 credits Each semester
For description of these courses see the statement of Eng. 141 and 142.

159 Voice Production 2 credits First semester
The physical factor of voice production will be considered in detail, with emphasis on the proper use of resonating chambers; there will be a study of tongue placement for all the phonetic sounds; an effort will be made to improve tone quality; class practice will be part of the course. Prerequisite: Eng. 33-34 or 35-36 or 37. (LILLYWHITE)

162 Speech Correction 2 credits Second semester
A study of the general functional cases, including delayed speech, halting speech, monotonous speech, nasality, lisping, voice

defects. Especial attention will be given to stuttering, the diagnosis of the case and the therapy. The English sounds will be studied as to their formation by the organs of articulation. Especially intended for teachers. Prerequisite: Eng. 31-32 or 33-34 or equivalents. (LILLYWHITE)

163-164 Advanced Speaking 2 credits Each semester
Origin of speech: development of speech in race and individual; personality in speech; psychology of persuasion. Prerequisite: Eng. 33-34 or 35-36 or 37. (LILLYWHITE)

165-166 Argumentation and Debate 2 credits Each semester
Practical logic, argumentation, analysis, briefing, and presentation of debate. Open to those with Eng. 35, 36, or equivalent. (LILLYWHITE)

167-168 Advanced Interpretation 2 credits Each semester
The first semester stresses diction in poetry and Shakespearian drama; the second semester stresses interpretation of contemporary literature. Open to those with Eng. 33-34, or equivalent. With the recommendation of the instructor this course may be taken two years in succession. (COLLETTE)

171-172 Advanced Play Production 3 credits Each semester
A continuation of the staging and acting of plays, with special emphasis on the direction of full length plays. Open to properly qualified students from Eng. 71-72 or to those with equivalent training. With the recommendation of the instructor this course may be taken two years in succession. (COLLETTE)

JOURNALISM

SPECIAL NOTE.—Eng. 1-2 is a prerequisite to all journalism courses; exceptional cases will be handled by the head of the department—students with considerable practical experience or with advanced standing.

Primarily for Undergraduates

81-82 Elements of Journalism 2 credits Each semester
An introduction to the principles of news writing. Study of newspaper organization and methods. Comparative study of metropolitan newspapers. All written work is done on the typewriter. (BETH)

83-84 College Journalism 1 credit Each semester
One credit each semester will be given for *Argonaut* work done under the following conditions: the student must be the editor or managing editor of *The Argonaut* or an upperclassman majoring in journalism; he must register for the credit. Maximum of four credits permitted. (BETH)

For Advanced Undergraduates and Graduates

S180 School Newspaper Practice 2 credits Summer Session
Study and practice in the reporting, writing, and editing of news. Students will assist in publishing the summer session newspaper. Emphasis placed on treatment of school and university news. Of special value to those preparing to coach high school newspapers. Mimeograph methods. (BETH)

181-182 Reporting 4 credits Each semester
Practical training in reporting and newswriting. General assignment and "run" work for city daily newspaper. Study of courts, public offices, and public affairs as a source of news. Two recitation and two three-hour laboratory periods weekly. Prerequisite: Eng. 81-82 or equivalent. (BETH)

183 Editorial Writing 3 credits First semester
Discussion of current events. The process of logical thinking. Instruction and practice in the writing of editorials, news reviews and columns. Prerequisite: Eng. 81-82. (Not given in 1940-41) (BETH)

184 News Editing 3 credits Second semester
Practice in copyreading and headline writing; problems of newspaper desk work; proof-reading; practical print shop instruction in makeup and typography. Two two-hour copy reading laboratory periods weekly, with some outside preparation, and one three-hour print shop laboratory period weekly. Prerequisite: Eng. 181. May be taken with Eng. 182. (BETH)

185 History of Journalism 2 credits First semester
History of the principles and the persons contributing to the development of American journalism. Present tendencies. Outstanding western newspapers and editors. Prerequisite: Eng. 81-82. (Not given in 1940-41) (BETH)

186 Special Feature Articles 3 credits Second semester
The writing of nonfiction, special feature articles for newspapers and magazines. Practical and specific study of markets for manuscripts. Individual instruction is given during private conferences. Prerequisite: Eng. 181-182, or to be taken with Eng. 182, or special permission of instructor and of head of department. (Not given in 1940-41) (BETH)

188 Newspaper Promotion and Advertising
2 credits Second semester
Instruction and practice in the preparation of newspaper promotion campaigns. Analysis of newspaper practices to discover promotion ideas. Instruction and practice in soliciting newspaper advertising. Study of copy-mat services. Practice in layout and writing of advertisements for newspapers. Newspaper advertising typography. Prerequisites: Eng. 181, Bus. 175. (BETH)

191 Law of the Press 2 credits First semester
Chiefly a study of the law of libel. Consideration is given also to such topics as the right of privacy, contempt of court, freedom of the press, copyright, statutory limitations, postal regulations, and the right to reprint public affairs. Prerequisite: Eng. 81-82. (BETH)

192 Ethics of Journalism 2 credits Second semester
A study of professional standards in journalism, with the influences affecting them. The social responsibility of the newspaper. Prerequisite: Eng. 81-82. (Not given in 1940-41) (BETH)

197 Problems in Newspaper Publishing 2 credits First semester
Editorial, business, and print shop problems of the weekly and small daily newspaper. Common problems in circulation, advertising, promotion, competition, and administration. Newspaper correspondence. The newspaper analysis and community survey. Prerequisite: Eng. 81-82. (BETH)

S198 High School Journalism 2 credits Summer session
Problems in directing high school newspapers and yearbooks. Prerequisite: Eng. 81-82 or consent of the head of the department. (BETH)

Entomology

Professor SHULL, Assistant Professor FISHER

For Advanced Undergraduates and Graduates

101 General Entomology 3 credits First semester
Study of structure, development, classification, life history and ecology of insects. Twe lectures and one two-hour laboratory period a week. Prerequisite: Zool. 1. (SHULL)

103 External Insect Anatomy 2 credits First semester
Study of insect characters used in classification. Two three-hour laboratory periods a week. Prerequisite: Ent. 101. (FISHER)

104 Economic Entomology 3 credits Second semester
A detailed study of the habits and effects of insects and the principles of insect control. Two lectures and one two-hour laboratory period a week. Given in alternate years. (Not given in 1940-41). Prerequisite: Ent. 101. (SHULL)

105-106 Systematic Entomology 2 credits Each semester
Study of the classification of insects. Two laboratory periods a week. Prerequisite: Ent. 101. (FISHER)

107-108 Special Problems 2 or 3 credits Each semester
Prerequisites: senior standing and permission of instructor before registration, and Ent. 104 or 106. (SHULL, FISHER)

109 Forest Entomology 2 credits First semester
Study of the life-history, habits and control of insects affecting forests and forest products. One lecture and two demonstration periods per week. Open to Forestry students only. Prerequisite: Zool. 1. (SHULL)

111-112 Pro-Seminar 1 credit Each semester
Prerequisite: Ent. 101. (SHULL, FISHER)

Parasites and Parasitosis of Domestic Animals 3 credits First semester
See A.H. 175. (Available to students in Entomology.)

Insecticides and Fungicides 3 credits Second semester
See Hort. 180. (Available to students in Entomology.)

Primarily for Graduates

209-210 Research Credits to be arranged Each semester
Prerequisite: Ent. 104 or 106. (SHULL, FISHER)

211-212 Seminar 1 credit Each semester
Prerequisite: Ent. 104 or 106. (SHULL, FISHER)

213 Advanced Entomology 2 credits First semester
Advanced study of structure, development, classification, life history, ecology, control of insects; review of important literature and history of entomology. Two lectures per week. (Not given 1940-41). Prerequisite: Ent. 103 or 104. (SHULL)

214 Insect Physiology and Toxicology
3 credits Second semester
Study of life processes of insects; history of preparation and application of insecticides and methods for study of insect physiology and toxicology. Two lectures and one two-hour laboratory. Prerequisites: Ent. 103 and 104 and Ag. Chem. 2 or Chem. 52. (Not given 1940-41). (FISHER)

European History and Civilization

Professor CHURCH, Mr. BRAGDON. Professor AXTELL, Associate Professor HOWE

The following courses are open to all upper-division students: (a) the courses primarily for undergraduates, numbered from 50 to 99; and (b) such courses among those for advanced undergraduates as have no prerequisites other than junior or senior standing.

Primarily for Undergraduates

1-2 History of Civilization 3 credits Each semester
A survey course in the history of the life and thought of the past, together with its expression in art and letters. It aims to show their relationship with each other and with politics. (CHURCH)

13-14 Classical Civilization 3 credits Each semester
The course deals with the Grecian and Roman governments, customs, art, literature, and institutions, and their contribution to the modern world. It is carried on through lectures by instructors, and reports, papers, and written exercises by members of the class. Open to all students. (AXTELL)

51-52 The Middle Ages 3 credits Each semester
European history from the German invasions to the downfall of the feudal system. Contributions of the classical, the Christian, and the Saracen civilizations. (Not given in 1940-41) (BRAGDON)

53-54 Modern Europe 3 credits Each semester
The evolution of the modern state system and of international relations through the break-up of the Concert of Powers. (BRAGDON)

55-56 The Nineteenth Century and After 3 credits Each semester
This course is designed for students who want to attempt recent history without previous college work in history, and to acquire practice in the historical method. Its beginning is the downfall of Napoleon and its scope is measured by the ability of the class. (CHURCH)

57-58 English Constitutional History 2 credits Each semester
English history with special reference to the parliamentary system of government from Magna Carta to the modern cabinet, and with special attention to the needs of law students. These courses must be taken in the order named. (BRAGDON)

For Advanced Undergraduates and Graduates

105-106 Recent Times 3 credits Each semester
A study of the European nations from about 1870, with special reference to the Near and Far Eastern questions, and to colonial

expansion in Asia and Africa. With these are discussed European problems that also contributed to the Great War. Prerequisite: 12 hours in History and Economics or Political Science. (CHURCH)

107-108 English History 3 credits Each semester
Evolution of the Anglo-Saxon element in civilization. The political, economic, and cultural factors are correlated with special attention to the needs of English majors. (BRAGDON)

131-132 Current Historical Materials and Problems 2 credits Each semester
Current happenings are here presented as the material out of which history is made. The emphasis is on the sources of information and their critical evaluation. (BRAGDON)

133 The Meaning of History 2 credits First semester
Topical studies covering a survey course in world history. The method is that of a pro-seminar. (CHURCH)

134 Teaching of History 2 credits Second semester
Designed for students expecting to teach history in the intermediate and secondary schools. Methods of approach and the critical examination of textbooks. (CHURCH)

135-136 Economic History 3 credits Each semester
A methodical study of the evolution in modern times of the economic factors in history, carefully correlated with political events. The emphasis is distributed among Europe, England, and America. (BRAGDON)

141-142 French Civilization 2 credits Each semester
French history in outline, with particular emphasis upon the cultural elements in art, literature, science, and philosophy, and their influence upon modern civilization. (HOWE)

151-152 German Civilization 2 credits Each semester
German history, with emphasis upon the relation of German culture to that of Europe in general, particularly through the Reformation. (Not given in 1940-41) (CHURCH)

161-162 Spanish Civilization 2 credits Each semester
A brief study of the various civilizations which went into the building-up of Spanish culture; their fusion in Spain; and their spread throughout the world, particularly America. (Not given in 1940-41) (HOWE)

171-172 Italian Civilization 2 credits Each semester
Italian history, with emphasis on the singular contributions of Italy to political and intellectual progress, particularly through the Renaissance. (CHURCH)

173-174 The Expansion of Europe 3 credits Each semester
The transference of European ideas and institutions overseas. Attention will be given to the colonial efforts of the Portuguese and Dutch in the East, to the achievements of Spain in Latin America, and to the fortunes of the British Empire. Prerequisites: 6 hours each of History and Political Science. (BRAGDON)

Primarily for Graduates

201-202 Seminar 3 credits Each semester
Subject for 1940-41 is "The Danube." (CHURCH)

203-204 Research Credits to be arranged Each semester
Investigation of topics leading to the preparation of a thesis. Weekly conferences with the instructor in charge, in which the student is directed in reading, use of materials, and writing of reports. (CHURCH, BRAGDON)

207-208 Seminar in English History 3 credits Each semester
Subject for 1940-41 is "British Social Reform in the Nineteenth and Twentieth Centuries." (BRAGDON)

231-232 Renaissance and Reformation 3 credits Each semester
The development of literature and art, the revival of science, the age of discovery, the undermining of the church by the new critical spirit, and the revolution of religious and political thought which accompanied the attack on the church in the sixteenth century. (CHURCH)

Forestry

Professors JEFFERS, MARTELL, and YOUNG; Associate Professor WHITE; Assistant Professors EHRLICH, WOHLETZ, STARK, PIERSON

Primarily for Undergraduates

A Forestry Lectures No credit First semester
A brief survey of a few other fields to which forestry is related. Required of all first-year forestry students and transfer students entering with fewer than 54 credits.

2 Introduction to Forestry 1 credit Second semester
A general course designed to acquaint the beginning student with the principles of forestry, its history and importance to the people of the United States. One lecture a week. (Open to forestry students only.)

3 Farm Forestry 2 credits First semester
Handling the farm woodlot; growing wood products needed on the farm; seasoning, preservation, use, and marketing of farm products; windbreak and shelterbelt planting; forestry in the economics of agriculture. Two lectures per week. (Open to nonforestry students only.)

11-12 Dendrology 2 credits Each semester
Characters, classification, identification, geographic range, economic importance of commercial tree species of the United States. Reference to local and exotic species. First semester, hardwoods; second semester, conifers. One lecture and one laboratory period a week; field trips. Prerequisite: Bot. 15.

16 Tree Identification 2 credits Second semester
A course for nonforestry students. Identification and economic uses of trees, with special reference to the trees of Idaho and to local plantings. Two lectures a week. (Open to nonforestry students only.)

53 Recreational Uses of the Forest 3 credits Either semester
Planning and management of recreational forest areas; economic and social uses of forest for recreation. Two lectures and one laboratory period a week. Prerequisites: For. 2, For. 11.

Primarily for Advanced Undergraduates and Graduates

100 Field Trip 1 credit Second semester
Two weeks of field study in June following junior year. A prerequisite to graduation for Range Management majors.

101 Field Trip 1 credit First semester
Two weeks of field and industry study in September of the senior year. A prerequisite to graduation for Forest Production majors and Wood Utilization Technology majors.

103 General Forestry 2 credits First semester
History of forestry, world forestry conditions, relative importance of forestry in the economic pattern of the United States, the land problems of forestry, legislation, and present trends. Two lectures per week. (Open to nonforestry students only.)

S113 Forest Communities 1 credit Summer Camp
An ecological study of the influences present and operative in the life of the forest. One week during second five weeks of summer camp.

121 Silvics 2 credits First semester
A study of the factors of site and their influence on the tree and stand. Two lectures a week. Prerequisites: Summer Camp, For. 12, Chem. 2, Bot. 65, Agron. 52.

122 Forest Planting 2 credits Second semester
Methods of seed collection, extraction, and storage; germinative tests; nursery practice; field planting. One lecture and one laboratory period a week. For. 121 desirable as prerequisite.

124 Silviculture 3 credits Second semester
A study of the silvicultural cutting systems, cultural operations, and the silvicultural characteristics of the more important commercial species. Three lectures a week and occasional all-day field trips. Prerequisite: For. 121.

125 Regional Silviculture 2 credits First semester
A study of the forest regions of the United States and the practical methods for successful handling of the important forest types within the regions. Two lectures a week. Prerequisite: For. 124.

131 Wood Technology 4 credits First semester
Anatomy of wood and structure and organization of tree stems; identification of wood by gross and minute characteristics; physical properties and uses of important North American woods. Two lectures and two laboratory periods a week. Prerequisites: Summer camp, For. 12, Phys. 3 concurrently or Phys. 51.

133 Logging 1 credit First semester
Methods of logging and transportation systems used in the various timber types of the United States, with special reference to economic conditions and trends in the industry. One lecture or discussion a week; reports. Senior standing.

136 Wood Industries 2 credits Second semester
Principles, methods, and problems of the manufacture of forest products, including lumber milling, lumber grades and products, seasoning, preservation, wooden products other than lumber, chemical forest industries, and certain economic aspects of wood industries. Two lectures a week, directed reading and several industrial trips. Prerequisites: Chem. 2, For. 131, For. 183.

137 Utilization Technology I 3 credits First semester
Technology of the manufacture and utilization of lumber, timbers, and other wooden products, including mechanical properties, application of strength data, lumber grades and sizes, structural timbers, timber fastenings, timber construction, glued wood, moisture content control, preservation, painting and finishing, comprehensive study of manufacturing processes and trends. Two lectures and one laboratory period a week. Prerequisite: C.E. 103, For. 136.

138 Utilization Technology II 3 credits Second semester
Introduction to the chemistry of wood, chemical and technological processes for the conversion of wood into commodities properties and uses of these products, chemical utilization of other products of forest trees, industrial trends. Two lectures and one laboratory period a week. Prerequisite: For. 136. Chemistry majors by special arrangement.

S143 Mensuration 4 credits Summer Camp
Log rules and their use; log scaling theory and practice; measurements of tree volume; sampling; topographic mapping; growth measurements. Five entire-day sessions a week, last four weeks of Summer Camp. Prerequisites: C.E. S55, For. 11-12, Math. 2.

144 Mensuration 3 credits Second semester
Theory of log, tree and stand measurements; construction and use of volume tables; construction and application of yield tables; growth studies. Two lectures or discussions and one laboratory period a week. Prerequisites: For. S143 and For. 145.

145 Forest Measurements (Biometry) 2 credits First semester
Measures of central tendency; measures of dispersion and the normal curve of error; measures of reliability; sampling; graphic methods; correlation; importance and application of statistics to forest measurements. One laboratory period. Prerequisite: For. S143.

151 Range Management 3 credits First semester
Development of the range industry; grazing regions; production and utilization of range forage; range improvement; range reconnaissance and management plans. Three lectures a week; reports; field trips. Prerequisites: Summer camp, Bot. 15.

152 Range Plants 3 credits Second semester
Range forage plants and poisonous plants; taxonomy, associations, geographic range, economic value, production and management problems. Two lectures and one laboratory period a week; reports; field trips. Prerequisites: Bot. 53-54, For. 151.

153 Advanced Range 3 credits First semester
Detail of reconnaissance and compilation; technical problems in field and research methods. Three lectures a week; reports; field trips. Prerequisite: For. 151.

156 Erosion 3 credits Second semester
Analysis of status and causes of erosion on wild lands; control methods; prevention methods, revegetation, land management. Three lectures a week; reports; field trips. Prerequisites: Geol. 1, Agron. 52, For. 151.

157 Game Management 3 credits First semester
Included is an introduction to vertebrate morphology and classification. Life histories and environments of game populations to obtain the maximum productivity that economics, land usage, and the particular environment will allow. Two lectures and one laboratory a week; lectures during the first nine weeks by Zoology Department. Prerequisite: For. 151. Zoology students by special arrangement.

158 Game Management 1 credit Second semester
Continuation of For. 157n with emphasis on game surveys and the application of management technique. One laboratory each week. Prerequisite: For. 157n. Zoology students by special arrangement.

164 Forest Pathology 3 credits Second semester
Lectures on principles, including health and disease and decay, symptomatology, etiology (including pathological cycles, pathogenicity, and classification of pathogens), environment and epiphytology, and control as related to silviculture, management, and utilization. Field and laboratory study of representative and important noninfectious and infectious tree diseases, wood rots, and stains, with readings in original papers and preparation of reports. One lecture and two laboratory and discussion periods a week. Prerequisites: Bot. 65, For. 131.

166 Wood Products Pathology 3 credits Second semester
The decay, stains, molds, and insect damage in wood and wood products; including symptoms, causal organisms and their growth requirements, and control. Two lectures and one laboratory period a week. Prerequisites: For. 131 and senior standing.

168 Fire Prevention and Control 3 credits Second semester
A study of fire danger, i. e., risk, forest fuels and inflammability; their reduction or elimination; fire damage and loss; the fire organization, detection, communication and transportation planning; and fire plans. Three lectures a week. Prerequisites: Chem. 2, C.E. S55.

175 Forest Management 3 credits First semester
The regulation of American forests for continuous timber production. Three lectures a week. Prerequisites: For. 124, For. 144.

176 Forest Management 3 credits Second semester
The financial aspects of the management of American forests; taxation, insurance, and forest working plans. Three lectures a week. Prerequisite: For. 175.

183 Forest Economics 3 credits First semester
Orientation and scope of forest economics; important economic concepts; land use and land-use planning; land and forest resources; production, distribution and consumption of forest products; industrial and social problems. Three lectures or discussion periods a week. Prerequisite: Econ. 52.

186 Policy and Administration 3 credits Second semester
Historic, economic, and social background of legislation and policies developed in the acquisition and administraton of national, state, and private forests. Three discussion periods a week. Prerequisites: For. 183 and senior standing.

190 Research Methods 2 credits Second semester
An introduction to the objectives and technique of research. Logical thinking and the planning of investigations; assembly, interpretation, and presentation of data; use of literature, and preparation of working plans and manuscripts. Two discussion hours a week. Prerequisite: permission of the instructor.

192 Forestry Studies 2-4 credits Either semester
Individual conference course in advanced studies. Open to seniors and graduates.

194 Utilization Studies 2-4 credits Either semester
Individual conference course in advanced studies. Open to seniors and graduates.

196 Range Studies 2-4 credits Each semester
Individual conference course in advanced studies. Assigned problems and reports. Open to seniors and graduates.

Primarily for Graduates

Each year a few qualified students are accepted as candidates for the Master's Degree.

235-236 Wood Chemistry 2-3 credits Each semester
Chemistry of cellulose and other polysaccharides; chemistry of lignin; chemistry of wood; laboratory work in the analysis and chemistry of wood. Prerequisites: Chem. 171-172, For. 131. Chemistry majors by special arrangement. (WHITE)

253-254 Range Maintenance 2-3 credits Each semester
Advanced work in research methods, revegetation, growth requirements, management. Lectures, assigned topics, reports. Prerequisite: For. 152, 153, or equivalent. (YOUNG)

263-264 Advanced Forest Pathology 2-4 credits Each semester
Advanced work in field methods, laboratory technique, and use of original literature in preparation for intensive studies of tree diseases and rots, deterioration of wood products, and the organisms which cause them. Seminar on selected problems in forest pathology and their relation to forest practices. Prerequisite: For. 164 or 166. It is recommended that Bot. 111 and 212 be taken concurrently. (EHRLICH)

271-272 Advanced Studies 2-4 credits Each semester
A directed problem and individual conference course in a selected field of study, involving library and/or laboratory or field work. (MARTELL, EHRLICH,WOHLETZ, STARK)

273-274 Advanced Utilization Studies 2-4 credits Each semester
A directed problem and individual conference course in a selected field of study, involving library and/or laboratory work. (WHITE)

275-276 Advanced Range Studies 2-4 credits Each semester
A directed problem and individual conference course in a selected field of study, involving library and/or laboratory or field work. (YOUNG)

291-292 Research Credits to be arranged Each semester
Facilities and instruction are offered for graduate research in professional or scientific work along specified lines of Forest production, Wood Utilization Technology, and Range Management. Individual research under the guidance of the major professor concerned and a thesis are required. (STAFF)

French

(See under *Modern Languages*)

Geology and Geography

Professor FORRESTER; Assistant Professor SCHEID; Mr. UPSON

Primarily for Undergraduates

1 Introductory Geology 4 credits Either semester
An introduction to earth science for both technical and non-technical students. The study primarily comprises a consideration of the earth, its materials, its structure, and of the natural agencies and processes that are at work upon and within its crust. Three lectures and one laboratory a week. (FORRESTER)

2 Historical Geology 4 credits Second semester
A consideration of the origin of the earth and of its geologic history. The earth's physical and geographic development is studied simultaneously with the history and evolution of animal and plant life. Three lectures and one laboratory period a week. Prerequisite: Geol. 1. (UPSON)

11 General Geography 4 credits First semester
The characteristics and distribution of the geographic elements: climate, topography, plants and animals, soils, and other natural resources, and a consideration of the effect of these elements on human occupations. Three lectures or recitations and one laboratory period a week. (UPSON)

12 Economic Geography 3 credits Second semester
The relationship between geographical environment, climate, etc., and human activity, industry, and commerce. The geographical distribution of the natural resources of the world and the effect of this distribution upon national growth and trade activities. (SCHEID)

53-54 General Mineralogy 4 credits Each semester
The mineralogically more important crystal systems are studied by the use of wooden models and natural crystals. Two or three months are used to study and identify minerals by their physical properties; especially those properties most useful in field recognition. A like amount of time is devoted to the chemical study of minerals and blowpipe analysis. Geologic occurrence, association, alteration, and uses of minerals are included with the aim of giving a comprehensive understanding of the mineral kingdom. Field trips cost the student from two to three dollars. Two lectures and two laboratory periods a week. Prerequisite: Chem. 2. (UPSON)

For Advanced Undergraduates and Graduates

101 Geomorphology 3 credits First semester
Study of the origin of land forms and of some important geomorphologic problems. The use of land forms in the interpretation of geologic history is emphasized. Three lectures or recitations a week. Prerequisites: Geol. 2 and 121. (UPSON)

102 Stratigraphy 3 or 4 credits Second semester
The course includes a survey of the principles of sedimentation, introduction to correlation and other stratigraphic problems and the major groups of stratified rocks of the United States. Three lectures a week, three credits. Laboratory work to accompany the course is optional with the student; one credit. Prerequisite: Geol. 2. Given in alternate years. (Given in 1940-41.) (UPSON)

106 Rock Minerals and Rocks 2 credits Second semester

Studies of the mineral composition, structure, origin, mode of occurrence, weathering, and uses of the important rocks. Gives the ability to recognize and identify the common rocks of the countryside. Field trips cost the student from two to three dollars. One lecture and one laboratory period a week. Prerequisite: Geol. 1 or Geol. 54. (SCHEID)

112 Paleontology 4 credits Second semester

A study of the evolution and classification of animal and plant fossils, including the distribution of the different groups throughout geologic time together with the use of any evidence of past life as index fossils. Three lectures and one laboratory period a week. Given in alternate years. (Given in 1939-40.) Prerequisite: Geol. 2. (UPSON)

115 Geology and Geography of Idaho and the Pacific Northwest 3 credits First semester

Lectures, readings, and topical investigations concerning the geologic history, development of the scenery, rocks, mineral deposits, water resources, and economic geography of the region. Prerequisite: Geol. 2. Given in alternate years. (Given in 1941-42.) (SCHEID)

121 Mining Geology 2 credits First semester

A study of the methods of working out and interpreting geologic structures, together with the use and application of maps, especially as pertaining to mineral deposits (metals and nonmetals, including coal, oil, and underground water). Two lectures a week. Prerequisite: Geol. 2. (FORRESTER)

122 Structural Geology 2 credits Second semester

An advanced consideration of primary and secondary rock structures, their origin, and the mechanical principles involved, together with a study of diastrophism. Two lectures a week. Prerequisite: Geol. 121. (FORRESTER)

130 Geological Field Methods 1 credit Second semester

Lectures and assigned readings on methods of geological field-work, note-taking, and making of geological maps and reports, in preparation for the practical application of these principles in actual field-work. Prerequisites: Geol. 54 and 121, and C.E. 53a. (FORRESTER)

131 Geological Field Methods 3 credits First semester

Two weeks' work in the field, before the opening of school, on the preparation of a geologic map. One laboratory period through the remainder of the semester on office work and writing of reports. Prerequisite: Geol. 130. (FORRESTER)

153 Petroleum Geology 3 credits First semester

A study of the origin and accumulation of petroleum and natural gas, the stratigraphy and structure of typical and outstanding oil fields, and the geologic methods of locating oil. Oil shales and the native bitumens are also considered. Prerequisite: Geol. 2. Given in alternate years. (Given in 1940-41.) (SCHEID)

155 Mineragraphy 2 credits First semester

Preparation of polished sections of the opaque minerals, their identification and the interpretation of their structures under the reflecting microscopes. One lecture and two 2-hour laboratory periods a week. Prerequisites: Geol. 54 and Chem. 51. (SCHEID)

157 Geology of Ore Deposits 3 credits First semester
The origin, occurrence, distribution, classification, uses and economics of metalliferous deposits. Three lectures a week. Prerequisites: Geol. 54, and Geol. 121. (FORRESTER)

158 Geology of Nonmetalliferous Deposits 3 credits Second semester
The origin, occurrence, distribution, nature, and uses of the principal nonmetallic mineral products, including fertilizers, fuels, building materials, etc. Three lectures a week. Prerequisite: Geol. 54, and Geol. 121. (FORRESTER)

159 Advanced Metallic Mineral Deposits 2 credits First semester
A technical study designed to evaluate criteria of mineral paragenesis, mineral succession, and wall-rock alteration in ore deposits, together with an advanced geologic study of the principal mining districts of the world with special emphasis on those of North America. Recommended for geology majors and geological engineers. One lecture and one laboratory period a week. Prerequisite: Geol. 157. (May be taken concurrently with Geol. 157.) (FORRESTER)

160 Advanced Nonmetallic Mineral Deposits
2 credits Second semester
An advanced consideration of the origin, mode of occurrence, distribution, classification and economics of nonmetallic mineral deposits. Recommended for geology majors and geological engineers. One lecture and one laboratory period a week. Prerequisite: Geol. 158. (May be taken concurrently with Geol. 158.) (FORRESTER)

163 Optical Mineralogy and Petrography 3 credits First semester
A study of optics as applied to the determination of rock minerals by the polarizing microscope and the identification of minerals in thin sections and in fragments. Optical mineralogy then serves as an introduction to the study of rocks with the petrographic microscope. Lectures on rock classification and on the microscopic and megascopic characters of igneous rocks. Two lectures and two 2-hour laboratory periods a week. Prerequisite: Geol. 54. (SCHEID)

164 Petrography and Petrology 3 credits Second semester
Continuation of the work started the first semester with further study of the petrographic features of the igneous, sedimentary, and metamorphic rocks. The second half of the semester is devoted to discussions of the origin of igneous and metamorphic rocks and problems of magmatic differentiation. Two lectures and two 2-hour laboratory periods a week. Prerequisite: Geol. 163. (SCHEID)

197-198 Senior Seminar 1 credit Each semester
Study of important geologic problems. Reports and discussions. Required of seniors majoring in the Geological Curricula. One hour a week. Prerequisite: senior standing. (DEPARTMENTAL STAFF)

Primarily for Graduates

201-202 Advanced Studies in Geology and Geography
2 to 4 credits Each semester
(a) Geomorphology, (b) structural geology, (c) paleontology, (d) stratigraphy, (e) mineralogy, (f) petrology, (g) sedimentation, (h) metamorphism, (i) soils, (j) mineral deposits, (k) economics of the mineral industry, (l) geography, (m) hydrology. These courses are open to students qualified to carry on profitably advanced studies in the fields specified. They consist of guided and closely supervised readings, laboratory or field work, and regular conferences with the professor concerned. May be elected more than once to pursue different studies. (DEPARTMENTAL STAFF)

203-204 Graduate Seminar 1 credit Each semester
Study of important geologic problems and required of graduate students majoring in geology. One hour a week for presentation of problems and discussion. (DEPARTMENTAL STAFF)

205 Advanced Petrology 3 credits First semester
Study of crystallization-differentiation and the role of crystal fractionation and the reaction series in petrogenesis. Considers also the post-consolidation modifications of rock by igneous emanations. Two lectures and one 3-hour laboratory period a week. Prerequisite: Geol. 164. (SCHEID)

207 Advanced Ore Deposits 2 credits First semester
A technical study designed to evaluate criteria of mineral paragenesis, mineral succession, and wall-rock alteration in ore deposits, together with an advanced study of the principal mining districts of the world with special emphasis on those of North America. One lecture and one laboratory period a week. Prerequisite: Geol. 157. (FORRESTER)

210 Advanced Nonmetalliferous Deposits
2 credits Second semester
An advanced consideration of the origin, mode of occurrence, distribution, classification and economics of nonmetallic mineral deposits. One lecture and one laboratory period a week. Prerequisite: Geol. 158. (FORRESTER)

225-226 Geologic and Geographic Research in Specific Fields
Credits to be arranged Each semester
(a) Geomorphology, (b) structural geology, (c) paleontology, (d) stratigraphy, (e) mineralogy, (f) petrology, (g) sedimentation, (h) metamorphism, (i) soils, (j) mineral deposits, (k) economics of the mineral industry, (l) geography, (m) hydrology. The working and instructional facilities of the department are placed at the disposal of properly qualified students. Courses may be elected more than once to carry on different researches. (DEPARTMENTAL STAFF)

German

(See under *Modern Languages*)

Greek

(See under *Classical Languages*)

History

(See under *American History* and *European History*)

Home Economics

Professor RITCHIE, Associate Professor LEWIS, Assistant Professor SEGNER, Miss FEATHERSTONE, Miss STEDMAN, Miss HERRON, Miss SMITH, Associate Professor PRICHARD

FOODS

Primarily for Undergraduates

4 Introduction to Foods 3 credits Second semester
Foods, their classification, composition and value in diet. Chemistry of cookery. Kitchens and their equipment. One lecture and two three-hour laboratory periods a week. Prerequisite: Chem. 1, may parallel Chem. 2. (LEWIS)

For Advanced Undergraduates and Graduates

71 Selection and Preparation of Foods
3 credits First semester
Food preservation. Home projects. Seasonal problems. Nutritive values. One lecture and two three-hour laboratory periods a week. Prerequisites: Chem. 1-2 and H.Ec. 4. (LEWIS)

72 Marketing and Serving 3 credits Second semester
Problems in marketing and meal service. Nutritive values. Entertaining. Invalid cookery. School lunches. One lecture and two three-hour laboratory periods a week. Prerequisite: H.Ec. 101. (LEWIS)

107 Investigation of Foods 2 credits First semester
Advanced course for investigation of problems in cookery. One lecture and one three-hour laboratory period a week. Prerequisite: H.Ec. 102. (LEWIS)

Meat
See A.H. 56.

NUTRITION

103 Nutrition 3 credits First semester
Adequate diet and nutrition problems of adults and children. Three lectures a week. Prerequisite: senior standing. (RITCHIE)

104 Dietetics 3 credits Second semester
Diet therapy. Adaptation of the normal diet to meet needs of adults and children in disease and convalescence. Two lectures and one three-hour laboratory a week. Prerequisite: A.H. 105. (RITCHIE)

Principles of Nutrition
See A.H. 105.

TEXTILES AND CLOTHING

Primarily for Undergraduates

23 Textiles 2 credits First semester
A study of the factors involved in the intelligent selection and purchase of textile materials including indentification of fibers and fabrics, fundamental weaves, yarns, color and finishes, standardization and trade conditions affecting the consumer. One lecture and one two-hour laboratory period a week. (STEDMAN)

24 Elementary Clothing 3 credits Second semester
Fundamental problems of clothing selection, construction and care as related to the individual. Use and alteration of commercial patterns. One lecture and two three-hour laboratory periods a week. Prerequisite: H.Ec. 23. (STEDMAN)

65 Costume Design 2 credits First semester
A study of the application of art principles to the practical demands of the costume for various types of people, figures, and occasions. Two two-hour periods a week with outside work. Prerequisite: H.Ec. 12. (FEATHERSTONE)

For Advanced Undergraduates and Graduates

124 Advanced Clothing 2 credits Second semester
Advanced problems in garment construction. Selection, design and construction of suitable clothing for both children and adults. Two three-hour periods a week. Prerequisites: H.Ec. 24 and 65. (STEDMAN)

127 Clothing Construction Problems and Consumer Buying 3 credits First semester
Advanced course in clothing construction; special problems adapted to the individual; study of consumer problems. One lecture and two three-hour laboratory periods. Prerequisite: H.Ec. 124. (STEDMAN)

166 Historic Costume 2 credits Second semester
A comprehensive study of historic and national costumes to develop knowledge and appreciation essential for designing of clothing and costuming for pageants and plays. Two three-hour periods a week. Prerequisite: junior standing. (FEATHERSTONE)

168 Advanced Costume Design 2 credits Second semester
Designing of various types of dress; opportunity is afforded to do individual advanced work. Two two-hour laboratory periods a week. Prerequisite: H.Ec. 65. (FEATHERSTONE)

ART PRINCIPLES AND ART IN THE HOME

Primarily for Undergraduates

11n-12 Art Structure and Design 2 credits Each semester
Study of principles of line, dark and light and color. Applied design. Two three-hour periods a week. Credit for H.Ec. 11 will not be given until after completion of H.Ec. 12. (FEATHERSTONE)

82 House Construction 2 credits Second semester
Problems involved in designing a house; the plan; the interior and exterior design; building materials; and methods of construction. Two one-hour periods a week. Prerequisite: H.Ec. 11n-12. (PRICHARD)

For Advanced Undergraduates and Graduates

141 Interior Decoration 2 credits First semester
The principles of art applied to interior decoration; a study of period furniture. Emphasis on the planning and decoration of the modern American house. Two two-hour periods a week with outside work. Prerequisite: H.Ec. 12. (FEATHERSTONE)

144 Advanced Interior Decoration 2 credits Second semester
A concentrated study of the colonial and modern American house. Actual problems in decorating a house or room. Two three-hour periods a week. Prerequisite: H.Ec. 141. (FEATHERSTONE)

ADMINISTRATION AND MANAGEMENT OF HOME AND FAMILY

Primarily for Undergraduates

35 Home Nursing 2 credits First semester
Personal hygiene; the general care of the sick; emergencies and first aid to the injured. One lecture and one two-hour laboratory period a week.

For Advanced Undergraduates and Graduates

133 Home Management House 3 credits Either semester
Managing the house, planning and cooking all the meals, buying and paying bills. Time and money management emphasized. Six weeks residence and one lecture a week throughout semester. Prerequisite: senior standing. (RITCHIE)

135 Child Development 2 credits First semester
Problems of infancy, physical care for normal growth and development, recreation, prevention of defects, behavior difficulties, and remedial procedures. Two lectures a week and observation in nursery school. Prerequisite: junior standing. (RITCHIE)

136 Economic Problems of the Family
2 credits Second semester
A course dealing with problems of household production; earning and spending the family income. Two lectures a week. Prerequisite: junior standing. (RITCHIE)

137 Institution Administration 3 credits First semester
Includes principles of organization and scientific management applied to institutional administration. Observation and experience in food service and housing departments of University. Three lectures a week. Prerequisite: senior standing. (RITCHIE, MILLER)

138 Quantity Cookery 3 credits Second semester
Preparation of food in large quantities; menu planning for institutions; experiences in food service. One lecture and two three-hour laboratory periods a week. Prerequisite: senior standing. (RITCHIE, MILLER)

S159 Homemaking Curriculum 2 credits Summer Session
A course including work in revising the Teachers' Guide in Homemaking Education for Idaho's secondary schools. To be offered intensively (two periods daily) during the first three weeks only. (SEGNER)

METHODS

For Advanced Undergraduates and Graduates

152 Methods in Teaching Homemaking 2 credits Second semester
Analysis and organization of problems related to homemaking in the secondary school. Three periods a week. Prerequisite: junior standing. (SEGNER)

153 Problems in Teaching Homemaking 3 credits First semester
Development and application of a scientific method to various problems encountered in teaching homemaking in secondary schools. Three periods a week. Prerequisite: H.Ec. 152. (SEGNER)

155 Methods for Extension Workers 2 credits First semester
Survey of extension and business fields of home economics. Preparation and presentation of lectures and demonstrations on problems of the home. Two lectures a week. Prerequisite: senior standing. (RITCHIE)

156 Methods in Adult Homemaking Education
2 credits Second semester
Participation in developing and evaluating an adult education program. Prerequisite: senior standing. (SEGNER, STEDMAN, SMITH)

157 Observation and Practice Teaching in Homemaking Classes
4 credits Either semester
Observation and teaching experiences under supervision in the homemaking classes of Moscow and other high schools. Twenty-five teaching experiences. Prerequisite: H.Ec. 152. (SEGNER, SMITH)

HOME ECONOMICS FOR NON-HOME ECONOMICS STUDENTS

Primarily for Undergraduates

1 Cooking and Serving 2 credits First semester
For students not registered in home economics. This will include the preparation of food and serving of meals. Two three-hour laboratory periods a week. (LEWIS)

21 Clothing 2 credits First semester
For students not registered in home economics. Problems involved in the planning and selection of a wardrobe suited to the individual. Fundamentals in the designing and construction of clothing. Two three-hour laboratory periods a week. (STEDMAN)

32 The House 2 credits Second semester
For students not registered in home economics. To develop an appreciation of problems in connection with the planning, building and decoration of a house and the developing of good taste and appreciation in the selection and arrangement of furniture, drapes, rugs, and accessories. Two lectures a week. (FEATHERSTONE)

HOME ECONOMICS RESEARCH

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
(RITCHIE)

Horticulture

Professor VERNER, Associate Professor WOODBURY

Primarily for Undergraduates

2 Introduction to Horticulture 3 credits Second semester
General principles of plant propagation, fruit growing, vegetable gardening, landscape gardening and floriculture. Freshman year. Two lectures and one two-hour laboratory period a week. (VERNER, WOODBURY)

56 Home Floriculture 2 credits Second semester
Practical methods of propagation and culture of flowers and ornamental plants in and about the home. One recitation and one three-hour laboratory period a week. (WOODBURY)

For Advanced Undergraduates and Graduates

109 Floriculture 3 credits First semester
Principles and practices of greenhouse and retail store management. Fundamentals of production of greenhouse and conservatory plants. Two lectures and one laboratory per week. Prerequisite: Hort. 2 or Hort. 56. Given in alternate years. Will be given in 1941-42. (WOODBURY)

120 Landscape Gardening 3 credits Second semester
Elementary principles underlying the use of plants for beautifying private and public grounds. Two lectures and one three-hour laboratory period a week. (WOODBURY)

140 Vegetable Gardening 3 credits Second semester
Fundamental principles and practices in the production and handling of vegetable crops. Two lectures and one three-hour laboratory period a week. Prerequisite: Hort. 2. Given in alternate years. Will be given in 1941-42. (WOODBURY)

147 Potato Culture 1 credit First semester
A course dealing with the history, acreage and distribution, varieties, planting, and general culture and handling of the potato. Designed especially for those desiring to grow potatoes on a commercial scale. One lecture a week. Given in alternate years. Will be given in 1941-42. (WOODBURY)

161 Tree-Fruit Production 3 credits First semester
Fundamental principles and practices in the production and handling of tree-fruit crops. Two lectures and one recitation period a week. Prerequisite: Hort. 2. Given in alternate years. Will be given in 1941-42. (VERNER)

168 Small-Fruit Production 2 credits Second semester
Fundamental principles and practices in the production and handling of small-fruit crops. Two lectures a week. Prerequisite: Hort. 2. Given in alternate years. Will be given in 1940-41. (VERNER)

180 Insecticides and Fungicides 3 credits Second semester
Application, effects and chemistry of insecticides and fungicides. Given cooperatively by the departments of Horticulture, Agricultural Chemistry, Agricultural Engineering, Entomology and Plant Pathology. Two lectures and one three-hour laboratory period a week. Prerequisites: junior standing and consent of the head of the department in which the student is majoring. Given in alternate years. Will be given in 1941-42. (VERNER, AND OTHERS)

183 Systematic Horticulture 1 credit First semester
Classification, nomenclature and description of horticultural plants, with consideration of varietal characteristics. One lecture a week. Given in alternate years. Will be given in 1941-42. (VERNER AND WOODBURY)

185 Improvement of Horticultural plants
2 credits First semester
Study of the characteristics desired, methods used, results obtained, and the importance of breeding and selection, in the improvement of woody and herbaceous horticultural plants. Prerequisites: Hort. 2, Hort. 183, Agron. 101. Given in alternate years. Will be given in 1940-41. (WOODBURY)

193-194 Special Problems 2 credits Each semester
A course affording an opportunity for advanced majors to secure additional, specialized training in one of the three main subdivisions of the field: namely, fruit production, vegetable production or ornamental horticulture. Assigned reading or laboratory work as arranged. Prerequisite: Consent of the head of the department. (VERNER, WOODBURY)

195-196 Pro-Seminar 1 credit Each semester
Review of current literature in Horticulture. Papers by members of the department and students. For advanced majors only. (VERNER, WOODBURY)

198 Thesis 1 credit — Second semester

Primarily for Graduates

201-202 Advanced Horticulture 3 credits — Each semester
(VERNER, WOODBURY)

203-204 Research Credits to be arranged — Each semester
(VERNER, WOODBURY)

Italian

(See under *Modern Languages*)

Journalism

(See under *English*)

Latin

(See under *Classical Languages*)

Law

Professors HOWARD and HARDING; Associate Professor HOPKINS;
Assistant Professor MILLION

FIRST YEAR

(Required)

101n-102 Contracts 3 credits — Each semester

Formation and performance of promissory undertakings in formal and informal business transactions, including breach and remedies therefor. Williston's *Cases on Contracts* (4th ed.) (HARDING)

105n-106 Criminal Law and Procedure
3 credits — First semester
2 credits — Second semester

The problem of criminal justice; the sources of and purposes of the criminal law; the meaning of criminal responsibility; the characteristics of particular crimes; organization and procedure in criminal courts; problems of prosecution; agencies for punishment, probation, pardon, and parole. Harno's *Cases and Materials on Criminal Law and Procedure* (2nd ed.); Idaho Penal Code and Code of Criminal Procedure. (HOWARD)

109 Courts and Civil Procedure 5 credits — First semester

Development of the English and American court systems; the organization of a court and related problems of jurisdiction; the forms of actions and principles of pleading at common law; the fusion of law and equity; extraordinary remedies; jurisdiction and venue. Magill and Chadbourn's *Cases on Civil Procedure* (3rd. ed.); McCormick's *Cases and Materials on Court Organization* (mimeographed). (HOPKINS)

111n-112 Property 3 credits — Each semester

The nature of property; bailments; liens; pledges; gifts; introduction to real property; adverse possession; prescription; modes of conveyancing; execution of deeds. Bigelow's *Cases on Personal Property* (2nd ed.); Bigelow's *Introduction to Real Property* (pamphlet ed.); Aigler's *Cases on Titles to Real Property* (2nd ed.) (MILLION)

116 Torts 5 credits Second semester
The protection, legal and equitable, given the interests of personality and property by the judicial process against physical harms and harms of appropriation; the protection given interests in relations with other persons. Green's *The Judicial Process in Torts Cases* (2nd ed.). (HOPKINS)

120 Legal Bibliography 1 credit Second semester
Use and analysis of legal digests, encyclopedias, and other source books; analysis and organization of legal material. Eldean's *How to Find the Law* (2nd ed.); selected materials. (HARDING)

SECOND AND THIRD YEARS

201 Equity I 3 credits First semester
Introduction to equity; general principles of equity procedure; specific performance of contractual undertakings. Walsh's *Cases on Equity.* (MILLION)

***202 Equity II** 3 credits Second semester
Injunctions against tort and crime; bills of peace, bills *quia temet* and related cases; relationship of vendor and purchaser; fraud and mistake. Walsh's *Cases on Equity.* (MILLION)

***203 Persons and Community Property** 3 credits First semester
Marriage, separation, divorce and alimony; property rights of married women; contractual and tortious liabilities of one spouse to the other and to third persons; Idaho law of community property. Jacob's *Cases on Domestic Relations* (2nd ed.); Idaho statutes and cases. (MILLION)

208 Evidence 4 credits Second semester
Functions of judge and jury; burden of proof and presumptions; witnesses; the hearsay rule and its exceptions; opinions and conclusions from lay and expert witnesses; circumstantial evidence; preferred evidence. Tracy's *Cases and Materials on Evidence.* (HOWARD)

212 Wills 2 credits Second semester
Testamentary capacity; execution of wills; fraud and undue influence; revocation; revival and republication of wills; administration of estates. Mechem and Atkinson's *Cases on Wills and Administration* (2nd ed.). (HOPKINS)

214 Landlord and Tenant 3 credits Second semester
Nature and creation of leases; extent of lessor's rights; rent; security devices for lessor; covenants to repair and pay taxes; termination by expiration, surrender, redemption, holding over. Jacob's *Cases on Landlord and Tenant.* (MILLION)

216 Titles 2 credits Second semester
Accretion; exceptions and reservations; estates; covenants for title; priorities. Aigler's *Cases on Titles to Real Property.* (2nd ed.). (MILLION)

217 Bills and Notes 3 credits First semester
A consideration of the law of bills of exchange, checks, and promissory notes at common law and under the Uniform Negotiable Instruments Law. Smith and Moore's *Cases on Bills and Notes* (3rd ed.). (MILLION)

* Not given in 1940-41.

***222 Sales** 3 credits Second semester
A study of the rights and liabilities of parties with respect to executed and executory contracts of sale of chattels. Woodward's *Cases on Sales* (3rd ed.). (MILLION)

231 Code Pleading 3 credits First Semester
The code cause of action; parties; splitting and joining actions; the complaint; the answer, including counterclaims; motions and bills of particulars; amendment and aider. Special attention is given to the Idaho Code of Civil Procedure. Cathcart and Howell's *Cases on Code Pleading.* (HOPKINS)

232 Trial and Appellate Practice 3 credits Second semester
Jurisdiction, venue; service and return of process; trial of issues with special reference to the Idaho civil practice; judgment; Idaho appellate practice. Hinton's *Cases on Trial Practice* (2nd ed.). (HOPKINS)

***235 Security** 3 credits First semester
Pledges; trust receipts; letters of credit; suretyship; mortgages. Sturges' *Cases on Credit Transactions* (2nd ed.). (HOPKINS)

***236 Creditors' Rights** 3 credits Second semester
The administration of the estates of insolvent debtors; fraudulent conveyances; general assignments; receivership; bankruptcy. Hanna and McLaughlin's *Cases and Materials on Creditors' Rights* (3rd. ed.). (HOPKINS)

246 Irrigation 3 credits Second semester
Irrigation law and procedure in the western states, with special emphasis upon Idaho statutes and decisions. Appropriation for agricultural, industrial and municipal purposes; streams and subterranean waters; storage; irrigation districts; water and ditch companies. *Long on Irrigation* (2nd ed.); Bingham's *Cases on Water Rights.* (HARDING)

251 Constitutional Law I 4 credits First semester
The function of judicial review; the national state and its governmental organization; independence and interrelation of departments; citizenship, national and state; due process of law; equal protection of the laws; eminent domain; retrospective laws. McGovney's *Cases on Constitutional Law* (2nd ed.). (HOWARD)

252 Constitutional Law II 2 credits Second semester
Regulation and control of interstate commerce; delegation of powers and administrative legislation; administrative adjudication and enforcement; judicial control of administrative action. McGovney's *Cases on Constitutional Law* (2nd ed.). (HOWARD)

255 Conflict of Laws 3 credits First semester
Enforcement of rights created and obligations assumed in states other than the state of the forum; interstate and private international law. Lorenzen's *Cases on Conflict of Laws* (4th ed.). (HARDING)

***258 Trusts** 4 credits Second semester
The nature, creation and essential elements of express trusts, both private and charitable; resulting and constructive trusts; administration of trusts. Scott's *Cases on Trusts* (2nd ed.). (MILLION)

* Not given in 1940-41.

265 Business Associations I 4 credits First semester
Unincorporated business ventures; vicarious liability in tort and contract; partnership property and accounting, including administration of insolvent estates. *Casebook to be announced.* (HARDING)

***268 Business Associations II** 4 credits Second semester
Incorporated business ventures; management and control; corporate powers and liabilities; organization and reorganization of financial structures. Prerequisite: *Business Associations I.* Frey's *Cases and Statutes on Business Associations.* (HARDING)

***274 Taxation** 3 credits Second semester
Legitimate purposes of taxation; general property tax and tax administration; excise taxes; estate and inheritance taxes; income taxes. Maguire and Magill's *Cases on Taxation.* (HARDING)

281-282 Research Credits to be arranged Each semester
Individual studies. Open to qualified seniors only by special permission of the law faculty.

Mathematics

Professor TAYLOR, Associate Professor BENDER, Mr. BUNCH, Mr. DIMSDALE, Mr. LOWNEY

Primarily for Undergraduates

1-2 Freshman Mathematics 4 credits Each semester
College algebra, trigonometry, and analytic geometry. Required of all freshmen in the School of Mines and the School of Forestry. Math. 1 is required of students in the pre-medical curriculum. (BENDER, BUNCH, DIMSDALE, LOWNEY, TAYLOR)

11-12 Freshman Mathematics 5 credits Each semester
Subject matter same as Math. 1-2 with additional emphasis upon computation and upon construction and interpretation of graphs. Required of freshmen in the College of Engineering. (BENDER, BUNCH, DIMSDALE, LOWNEY, TAYLOR)

14 Mathematics of Finance 3 credits Second semester
The mathematical principles involved in the problems of compound interest, annuities, bonds, and insurance. Prerequisite: Math. 1. (BENDER, BUNCH)

51-52 Calculus† 4 credits Each semester
Fundamental processes and applications of differential and integral calculus. Prerequisite: Math. 1-2 or 11-12. (TAYLOR, BENDER, BUNCH, DIMSDALE, LOWNEY)

For Advanced Graduates and Graduates

101 Engineering Mathematics 3 credits First semester
Advanced graphical methods, standard types of differential equations, complex and hyperbolic functions, harmonic analysis. Prerequisite: Math. 51-52. (TAYLOR)

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* Not given in 1940-41.
† For students in the College of Letters and Science and in the School of Education this course will count as an advanced subject.

102 Mathematics of Statistics 3 credits Second semester
The mathematical principles underlying the modern theory of statistics. Prerequisite: Math. 51. (BENDER)

104 General Astronomy 3 credits Second semester
An introduction to descriptive and mathematical astronomy. Prerequisite: Math. 51.

111 Higher Algebra 3 credits First semester
Determinants, theory of equations, polynomials, and infinite series. Prerequisite: Math. 51-52. (LOWNEY)

112 Higher Geometry 3 credits Second semester
Modern analytic geometry, higher plane curves, and solid analytic geometry. Prerequisite: Math. 51-52. (TAYLOR)

121 Advanced Calculus 3 credits First semester
Partial differentiations, definite integrals, vector analysis, line and surface integrals. Prerequisite: Math. 51-52. (TAYLOR)

124 Differential Equations 3 credits Second semester
Methods of solution, fundamental theory, and applications of ordinary and partial differential equations. Prerequisite: Math. 51-52. (TAYLOR)

142 Teachers' Course 3 credits Second semester
Selected topics in algebra and geometry. Aims and methods in teaching mathematics. Designed especially for those who expect to teach mathematics in the high school. Prerequisite: Math. 51. (BUNCH)

Primarily for Graduates

201-202 Seminar 3 credits Each semester
Selected topics will be assigned for individual study. Written reports will be required. Regular conferences will be held for criticism and discussion. Prerequisite: Math. 121. (TAYLOR)

221 Theory of Functions 3 credits First semester
An introductory course in the theory of functions of a complex variable. Prerequisite: Math. 121. (TAYLOR)

223-224 Research Credits to be arranged Each semester
(TAYLOR)

226 Modern Analysis 3 credits Second semester
Selected topics in the theory of functions of a real variable. Prerequisite: Math. 121 or Math. 124. (TAYLOR)

Mechanical Engineering

Professor GAUSS, Assistant Professor SCHROEDER, Mr. HALL

Primarily for Undergraduates

1 Wood Shop 1 credit First semester
Exercises in wood working, both bench and lathe work, including the use of wood-working machines. Three hours in shop. (HALL)

2 Forge Shop 1 credit Second semester
Exercises in forging iron and steel, in heat treatment and tempering. Instruction in oxyacetylene welding and in the use of forging machinery. Three hours in shop. (HALL)

3 Machine Tool Laboratory I 2 credits First semester
Designed to acquaint the student with machine tools and methods used in the shaping of metals. Exercises include pattern work, lathe turning, welding, drilling, shaping and cutting. One hour lecture and three hours laboratory per week. Prerequisite: To be taken with M.E. 5. (HALL)

4 Machine Tool Laboratory II 3 credits Second semester
An advanced study of machine tools, processes, and materials which are used in the manufacturing industries. The metallurgy of iron and steel, cold forming, hot forming, plastics, factory machines and methods including jigs and fixtures. One hour lecture and six hours laboratory per week. Prerequisites: M.E. 3 and 5. (HALL)

5 Machine Drawing 2 credits First semester
The making of shop drawings, both details and assemblies. One recitation and three hours in drafting room. Prerequisite: C.E. 1-2. (SCHROEDER)

13 Mechanism 3 credits First semester
Engineering kinematics: The principles underlying the action of the elementary combinations of which all machines are composed; the communication of motion by gear wheels, belts, cams, screws, and link work; and the various means of producing changes of velocity. Two recitations and three hours in drafting room. Prerequisites: C.E. 1 and 2. (HALL, SCHROEDER)

51 Civilian Pilot Training 2 credits First semester
Civil air regulations, navigation, and meteorology, which comprise the "ground school" phase of the civilian pilot training program of the Civil Aeronautics Authority. Work in this course is coordinated with actual flight training given by a Civil Aeronautics Authority approved operator at a nearby airport. Registration must conform with regulations of the Authority. Not open to freshmen. (GAUSS, SCHROEDER, HAMMAR, REARDEN)

For Advanced Undergraduates and Graduates

120 Thermodynamics 3 credits Second semester
Principles of thermodynamics: energy transformations; thermal capacities; available energy; entropy; equations; vapors; steam and air; steam engines, turbines and other machinery. Some laboratory work included. Primarily for civil engineers. Prerequisites: Chem. 1-2, Phys. 51-52 and Math. 51-52. (GAUSS, SCHROEDER)

121 Thermodynamics I 3 or 4 credits First semester
Definitions, units, energy transformations; thermal capacities; properties of gases; laws of thermodynamics; available energy; entrophy; equations; vapors; steam; flow of fluids. Prerequisites: Chem. 1-2, Phys. 51-52 and Math. 51-52. (GAUSS, SCHROEDER)

122 Thermodynamics II 3 credits Second semester
A continuation of M.E. 121. Steam engines and turbines; refrigeration; gaseous mixtures; internal combustion engines; compressed air. Prerequisite: M.E. 121. (GAUSS)

123 Aerodynamics I 3 credits First semester
Introductory course. Airplane construction, instruments, controls, and accessories. Airways, aviation, commercial application. Prerequisite: junior standing. (SCHROEDER)

124 Machine Design 2 credits Second semester
Fundamental principles involved in the design and operation of machinery. Studies of fastenings, belting and pulleys, transmission of power, gearings, couplings, clutches, brakes, shaftings and bearings. Prerequisites: C.E. 101, C.E. 103, M.E. 5 and 13. (GAUSS)

125 M.E. Design 2 credits First semester
The student selects and designs an approved machine. Complete computations are made and detail and assembly drawings prepared. Prerequisite: M.E. 124. (GAUSS)

126 Mechanical Engineering Project 3 credits Second semester
The design, detailing, fabrication and operation of a suitable machine or machine part. Correlation of information presented in prerequisite courses bearing on the general design problem. Prerequisite: senior standing. (GAUSS)

127 Mechanical Engineering Laboratory (Gas)
2 credits First semester
A course designed to demonstrate the theories and principles used in practice. Fuel consumption and efficiencies, carburetion, ignition, valve mechanisms, governing, the effect of compression and lubricating oils. Six hours in laboratory. Prerequisites: M.E. 121 and 128. (GAUSS)

128 Mechanical Engineering Laboratory (Steam)
2 credits Either semester
The generally approved methods of testing engines, turbines, pumps, and auxiliary apparatus found in power plants. The calibration and proper use of testing apparatus. Report writing. Six hours in laboratory. Prerequisite: M.E. 121. (HALL)

129 Aeronautical Engineering 3 credits First semester
Airplane design, aviation, aerial photography; landing fields; transportation and terminals; transportation economics; communication; instruments. Prerequisite: senior standing. (SCHROEDER)

140 Pro-Seminar 1 credit Second semester
Training in the systematic accumulation of data available in current literature. Emphasis is laid on clear and correct expression in written and oral reports. Prerequisite: senior standing. (SCHROEDER)

141 Heat Power Engineering 3 credits First semester
The variable load problem; power plant economics; power plant buildings; Diesel engine power; hydro-electric power; steam power; vapor cycles; steam boilers; feed-water; heat balance piping systems, meters. Prerequisite: M.E. 122. (GAUSS)

142 Airplane Engines 2 credits Second semester
The design and operation of airplane engines. A study of the various types and their application to airplanes, together with power requirements, fuel consumption, and velocity of propulsion. Prerequisites: M.E. 123 and 129. (SCHROEDER)

144 Heating, Ventilation and Air Conditioning
3 credits Second semester
Principles and practice of heating, ventilation, and air conditioning; measurement of heat, temperature and humidity; appliances; heat losses; types of heating and air conditioning; temperature and humidity control; refrigeration; tests. Prerequisite: M.E. 128. (GAUSS)

150 Thesis 2 or 3 credits Either semester
Prerequisite: senior standing. (GAUSS)

152 Hydraulic Machinery 3 credits Second semester
The construction and arrangement of centrifugal pumps, turbines, and hydraulic machinery; principles of operation and characteristics; theory and design of turbine blading; pump impellers. Prerequisites: C.E. 101 and 102; M.E. 124. (GAUSS)

154 Mechanical Engineering Problems
2 or 3 credits Either semester
Practical problems suitable for undergraduate work. Prerequisite: senior standing. (GAUSS)

156 Airplane Stress Analysis 2 credits Second semester
The fundamental principles of stress analysis with particular reference to the airplane. Brief consideration of materials comcomly used in airplane construction. Analysis and design of wings, chassis, fuselage, and other parts. Prerequisites: C.E. 101 and 103. (SCHROEDER)

158 Arc Welding 2 credits Either semester
One recitation and three hours in laboratory. Prerequisite: senior standing. (HALL)

163-164 Field Trips No credit Each semester
Supervised inspection of engineering works. Approved written reports are required. Prerequisite: senior standing. (STAFF)

Primarily for Graduates

201-202 Seminar Credits to be arranged Each semester
(GAUSS)

223-224 Thermodynamics Credits to be arranged Each semester
The working and instructional facilities of the department will be placed at the disposal of qualified students selected for this work. (GAUSS)

239-240 Research Credits to be arranged Each semester
Subjects for investigation and group discussion will be selected in some field of special activity. (STAFF)

Metallurgy

Professor FAHRENWALD; Assistant Professors NEWTON and STALEY; Mr. LUNDQUIST

For Advanced Undergraduates and Graduates

101 Principles of Metallurgy (Lectures)
3 credits First semester
Properties of metals and alloys; metallic compounds; ores and their values; fuels; refractory materials; pyrometallurgical processes and apparatus; electrometallurgical processes and appara-

tus; mechanical treatment of alloys; handling of gases; metallurgical products. Prerequisites: Phys. 3-4 or 51-52 and Chem. 1-2. (NEWTON)

105 Fire Assaying 2 credits First semester
Determination of gold, silver, and lead, in ores and metallurgical products according to the most approved methods in use in the mills and smelters of the West. One six-hour laboratory period. Prerequisites: Chem. 51 and Met. 101. (LUNDQUIST)

106 Metallurgy of Iron and Steel 1 credit Second semester
Manufacture of iron and steel; blast furnaces; puddling; cementation; crucible process; bessemer process; open-hearth process; iron and steel founding; heat treatment; malleable cast iron; constitution of iron and steel, and relation to physical properties; alloy steels. Prerequisites: Chem. 1-2 and Phys. 3-4 or 51-52. (NEWTON)

109-110 Metallurgical Calculations 1 credit Each semester
A three-hour problem laboratory in which the student will work problems illustrating the work covered in Met. 111 and Met. 115 for the first semester, and Met. 112 and 116 for the second semester. A separate textbook will be used, and a slide rule will be required.
Students taking Met. 111 and Met. 115 must register for one credit in Met. 109; those taking only one of these courses will register for one-half credit in Met. 109. Similarly, the students taking Met. 112 and Met. 116 will register for one credit in Met. 110, and those taking only one will register for one-half credit in Met. 110. (NEWTON)

111 Ore Dressing 2 credits First semester
Fundamentals of ore dressing processes; plant flow sheets; theory, operation and performance of machines; grinding and flotation pulp circuits; metallic and nonmetallic mineral flotation; economics. Prerequisites: Met. 101 and Min. 101. (FAHRENWALD)

112 Ore Dressing (Laboratory) 2 credits Second semester
Experments to demonstrate scientific fundamentals of various ore dressing processes; grinding, classification, sedimentation and flotation experiments; laboratory methods of ore testing and metallurgical calculations. Prerequisite: Met. 111. (FAHRENWALD, NEWTON)

115-116 Nonferrous Metallurgy 2 credits Each semester
Chemistry and practice of pyrometallurgical, hydrometallurgical, and electrometallurgical methods of recovering the nonferrous metals from their ores; fire and electrolytic refining of metallic products; metallurgy of gold and silver. Prerequisites: Met. 101. (FAHRENWALD)

118 Metallurgical Plant Design 2 credits Second semester
Preparation of process flow sheets of ore dressing, smelting or hydrometallurgical plants; selecting machines and apparatus; designing the plant, foundation plans and set-up details. Prerequisites: C.E. 66 and 103. (FAHRENWALD)

196 Senior Seminar 3 credits Second semester
A study of recent metallurgical problems and literature. (FAHRENWALD, NEWTON)

Primarily for Graduates

201-202 Metallurgical Investigations
Credits to be arranged Each semester
Laboratory work on problems in the metallurgical treatment of gold, silver, copper, lead, or zinc ores. (FAHRENWALD, NEWTON, STALEY)

216 Advanced Metallurgy 2 credits Second semester
Review and critical discussion of current literature, lectures, and reports. Prerequisites: All metallurgy courses offered in the School of Mines. (FAHRENWALD, NEWTON)

Military Science and Tactics

Lieutenant Colonel CHARLES W. JONES, Major ALBERT D. FOSTER, Major EARL F. PAYNTER, Major EDWIN U. O. WATERS, Major LEWIS S. NORMAN, Band Leader BERNARD FITZGERALD, Staff Sergeant ALFRED C. JOHNSON, Sergeant ROBERT L. MEADOR, Sergeant ALEXANDER M. SCHMALL, Sergeant DURED E. TOWNSEND, Sergeant JEFFERSON D. MORGAN

RESERVE OFFICERS' TRAINING CORPS.—An infantry unit of the senior division of the R.O.T.C. is established at the University under the provisions of War Department Bulletin No. 1, January 8, 1917, and the National Defense Act of June 3, 1916, as amended by the Act of June 4, 1920.

The training is conducted in accordance with U. S. Army regulations, and has for its primary object education of the student to become an officer of the army in time of war or other grave emergency; in time of peace to affiliate with the national guard or organized reserves and thus assist in their development and efficiency. Upon graduation the students may elect to be commissioned in the Officers' Reserve Corps of the army.

ORGANIZATION.—For purposes of administration and training, the students are organized as an infantry regiment with field staff and band under a type of discipline suited to their experience. The United States government provides the necessary technical equipment and supplies, including uniforms, used in the work of the department.

ANNUAL ENCAMPMENT.—Reserve Officers' Training Corps Camps for the Ninth Corps Area are established by the government each year, extending from about June 15 to July 27. Attendance is free from expense on the part of the student. It is required for advanced course students, normally at the completion of the junior year.

RIFLE TEAMS.—The department of military science and tactics trains rifle teams of men and women students, the former competing telegraphically with similar teams of other institutions.

MILITARY BAND.—A band of 80 pieces is maintained as part of the R.O.T.C. course. Membership is composed of basic course students. Membership in band is of selected students and is determined by personal examination of candidates previous to enrollment thereof. Examination of all band candidates is by the band leader.

BASIC COURSE

REQUIRED.—Three hours a week of all able bodied citizen male students in the freshman and sophomore classes, and of those who are special students.

1-2 First Year Basic 1½ credits Each semester
Theoretical, 31 hours; practical, 65 hours. Military courtesy, obligations of American citizenship; leadership; physical training; infantry drill regulations; national defense act; map reading; rifle marksmanship; military history and policies; military organization.

1k-2k First Year Military Band 1½ credits Each semester
Theoretical, 10 hours; practical, 90 hours. Leadership; band music; concert music.

3-4 Second Year Basic 1½ credits Each semester
Theoretical, 35 hours; practical, 61 hours. Same subjects as in Mil. 1-2 (continued). Musketry, scouting and patrolling; automatic rifle, combat principles.

3k-4k Second Year Military Band 1½ credits Each semester
Continuation of 1k-2k.

ADVANCED COURSE

ELECTIVE.—Five hours a week for students who have completed the basic course creditably. A student pursuing the advanced course will be commissioned in the regiment as a cadet officer during his second year in the advanced course and will be appointed a noncommissioned officer during the first year thereof. Advanced course students will receive government allowances for the two years and from this allowance will be furnished a complete officer's uniform for use when commissioned as a reserve officer. A deposit of $20.00 is required of all students entering upon the first year of the advanced course. This deposit is refunded when government allowances are received.

ADVANCED MILITARY FIRST YEAR

105-106 Military Science 3 credits Each semester
Theoretical, 94 hours; practical, 66 hours. Leadership; aerial photograph reading; machine guns; howitzer weapons; pistol; field fortification; combat training; chemical warfare defense; company administration; care and operation of motor vehicles.

ADVANCED MILITARY SECOND YEAR

107-108 Military Science 3 credits Each semester
Theoretical, 127 hours; practical, 34 hours. Leadership; military history and policy; military law; property; Officers' Reserve Corps regulations; tanks; antitank defense; mechanization; antiaircraft defense; combat intelligence; infantry signal communications; combat principles.

Mining

Professor FAHRENWALD; Assistant Professors STALEY and NEWTON

For Advanced Undergraduates and Graduates

101 Elements of Mining 3 credits First semester
Prospecting, boring, drilling, explosives and blasting, rock-breaking, support of excavations, underground transport, mine

drainage, ventilation, quarrying, open-pit and alluvial mining. Prerequisites: Math. 1-2, and Phys. 3 or 51. (STALEY)

103-104 Mine Plant Design 2 credits Each semester
Design of headframes and mine structures; selection of hoisting equipment; mine haulage; handling of water; compressed air; and power plants are discussed. Prerequisites: C.E. 56, 103. (STALEY)

106 Mine Surveying 2 credits Second semester
Lectures on standard method of surveying practice in the large mining districts of this country, including instruments and equipment; carrying the meridian underground, underground traverses, notebooks and office records, maps, stope surveying, and calculations of tonnages extracted. Calculations and reductions of notes from the mine survey and plotting by coordinates. Claim surveying. Two recitations a week. Prerequisite: C.E. 53a-54. (STALEY)

107 Mine Surveying 1 credit First semester
Office work computing field notes from Min. 108, plotting map and solving problems. One three-hour period a week. Prerequisite: Min. 106. (STALEY)

108 Mine Surveying (Field Trip)
1 credit Following commencement
Ten-day underground surveying trip at Burke, Idaho, or equally suitable district, immediately following commencement. Open only to students enrolled in the School of Mines. Prerequisite: Min. 106. (STALEY)

110 Mining Economics 2 credits Second semester
Mine sampling and valuation; calculation of value of ore from widths and assays; probable and prospective ore; capitalization; amortization; costs of production; cost-keeping; the more important aspects of mining law; essential features of reports by mining engineers. Prerequisite: Geol. 54. (STALEY)

112 Mining Methods 2 credits Second semester
Various methods of underground mining are taken up. Choice of level interval, open stopes, supported stopes, and caving methods are discussed along with the choice of method and the combination of these various methods. Two lectures. Prerequisite: Min. 101. (STALEY)

113 Mine Ventilation 2 credits First semester
Theory, principles, and practice of mine ventilation; investigation of mine ventilation flow-sheets; air-conditioning as practiced by deep mines. Two recitations. Prerequisite: Min. 101. (STALEY)

115 Mine Rescue and First Aid 1 credit First semester
This course is given in cooperation with the U. S. Bureau of Mines, the mine rescue car visiting Moscow for this purpose. (STALEY)

120 Advanced Mining 2 credits Second semester
Mine development and organization; problems confronting the mineral industry. Two recitations. Prerequisites: Min. 101 and 103. Concurrently with Min. 112. (STALEY)

161 Geophysical Prospecting 2 credits First semester
A study of geophysical devices for locating mineral deposits; magnetic, electrical, seismic, torsion balance, and geothermal methods, also those dependent upon radio-activity of matter. Prerequisites: Geol. 53-54, Phys. 3-4, or Phys. 51-52. (STALEY)

198 Senior Seminar 2 credits Second semester
A study of recent mining problems and literature. (STALEY, FAHRENWALD)

Primarily for Graduates

201-202 Mining Research Problems
Credits to be arranged Each semester
Special problems and investigations in mining methods, mining machinery, equipment and design. (FAHRENWALD, STALEY)

Modern Languages

Professor ELDRIDGE, Associate Professors TROMANHAUSER and HOWE, Assistant Professors ASHBY, RENTFRO, and BEATTIE, Dr. WIENS, Professor CHURCH

FRENCH

Students who present two years of high school French for admission will continue in Fr. 13-14. Those who have had one year of high school French may take Fr. 2, but in many cases it will be advisable to register for Fr. 1, with the written permission of the instructor. Elementary French and Elementary Spanish may not be taken the same year. No credit is given for Fr. 1 until Fr. 2 is completed.

Primarily for Undergraduates

1n-2 Elementary French 4 credits Each semester
(RENTFRO, BEATTIE)

13-14 Intermediate French 4 credits Each semester
The aim of this course is to give the student an accurate and fluent reading knowledge of French prose. Idioms, irregular verbs, syntax, composition and conversation based on the text. Prerequisite: Fr. 2, or the equivalent. (BEATTIE)

21-22 Sophomore French 2 credits Each semester
Open to sophomores only. Prerequisite: Fr. 13-14. (RENTFRO)

81-82 Grammar Review and Composition 3 credits Each semester
A review of French grammar, with constant practice in writing and speaking French. Prerequisite: Fr. 13-14. (BEATTIE)

For Advanced Undergraduates and Graduates

115-116 Advanced Scientific French 1 to 2 credits Each semester
Directed reading in scientific French, open to those who have a good reading knowledge of French and who receive special permission. Forty-five hours of reading per credit and weekly reports to the instructor. (ASHBY)

121-122 Survey of French Literature 3 credits Each semester
A rapid view of the main currents of French literature, from the middle ages to the end of the nineteenth century, illustrated

by the reading of representative masterpieces. Works of the Old French period will be read in modern French translations. Prerequisite: Fr. 13-14. (Offered 1940-41 and alternate years.) (BEATTIE)

131-132 The Nineteenth Century, to 1857 2 credits Each semester
The origins of the Romantic movement in French literature, its triumph and decline, and the beginnings of Realism. Prerequisite: Fr. 13-14. (Offered 1941-42 and alternate years.) (BEATTIE)

133-134 The Nineteenth Century, after 1857 2 credits Each semester
The literature of the second half of the century, beginning with Baudelaire and Flaubert. Prerequisite: Fr. 13-14. (Offered 1940-41 and alternate years.) (BEATTIE)

141-142 The Seventeenth Century 3 credits Each semester
After a preliminary study of the period, a considerable number of the masterpieces of Corneille, Moliere, and Racine are read. Prerequisite: Fr. 13-14. (ELDRIDGE)

145-146 Contemporary Literature 3 credits Each semester
French literature of the twentieth century. For students able and willing to read widely in unedited texts. Prerequisites: advanced standing in French; instructor's consent. (Offered in 1941-42 and alternate years.) (BEATTIE)

161-162 Directed Reading 1 to 3 credits Each semester
Prerequisite: Completion of two or more advanced class-courses in French. Not intended as a substitute for such courses, but as a supplement to them. Written permission of the head of the department required. (DEPARTMENTAL STAFF)

181-182 Free Composition and Conversation
2 credits Each semester
The course seeks to develop in the student the ability to express himself freely in French, both in conversation and in written work. A thorough knowledge of French grammar is essential. Limited to ten students. Prerequisite: Fr. 13-14. Recommended preparation: Fr. 81-82. (Offered in 1940-41 and alternate years.) (BEATTIE)

191-192 Teachers' Course 2 credits Each semester
Consideration in outline of the essentials of the French language and French culture. Pronunciation and diction. Planning the high school course; teaching methods; tests and examinations. Open to majors in French, and to others only by special permission. (BEATTIE)

Readings in European Literature 2 credits Each semester
See English 175-176.

History of French Civilization 2 credits Each semester
See European History 141-142.

Primarily for Graduates

201-202 Old French 3 credits Each semester
Readings and interpretation of Old French texts selected from Constans: *Chrestomathie de l'Ancien Francais,* with some study of Old French phonology and morphology. Some knowledge of Latin is required. (ELDRIDGE)

221-222 The Literature of the Renaissance 3 credits Each semester
A study of the literature of the French renaissance and the beginning of classicism. Individual study and reports; lectures; class study of selected texts. (HOWE)

261-262 French Seminar 2 to 4 credits Each semester
(ELDRIDGE)

271-272 Research Credits to be arranged Each semester
(DEPARTMENTAL STAFF)

GERMAN

Students who present two years of high school German for admission will continue in Ger. 13-14. Those who have had one year of high school German may take Ger. 2, but in many cases it will be advisable to register for Ger. 1 with the written permission of the instructor. No credit is given for Ger. 1 until Ger. 2 is completed. Advanced and graduate courses are given according to the needs of students.

Primarily for Undergraduates

1n-2 Elementary German 4 credits Each semester
(ELDRIDGE, ASHBY, WIENS)

13-14 Intermediate German 4 credits Each semester
The primary aim of this course is to give the student an accurate and fluent reading knowledge of modern German, but grammar review, composition, and conversation are included so far as time permits. Prerequisite: Ger. 2, or the equivalent. (WIENS)

15-16 Scientific German 3 credits Each semester
A special course in scientific German, open to those who have completed Ger. 13-14 and to others by special permission. A science reader, followed by reading in scientific journals and short monographs. Separate sections for Chemistry and Pre-Medical students. (TROMANHAUSER, ASHBY)

For Advanced Undergraduates and Graduates

111-112 Advanced Composition and Conversation 2 credits Each semester
Prerequisite: Ger. 13-14. (WIENS)

115-116 Advanced Scientific German 1 to 2 credits Each semester
Directed reading in scientific German, open to those who have had Ger. 15-16 and to others by special permission. Forty-five hours of reading per credit and weekly reports to the instructor. (ASHBY)

121-122 Survey of German Literature 3 credits Each semester
Selected readings, reports, and lectures. Robertson's *History of German Literature,* Thomas' *Anthology.* Prerequisite: Ger. 13-14. (WIENS)

135-136 The Nineteenth Century 3 credits Each semester
(ASHBY)

141-142 Schiller 3 credits Each semester
Schiller's life. Selected lyrics and ballads. *Die Jungfrau von Orleans* or *Don Carlos, Wilhelm Tell, Die Braut von Messina,* and the *Wallenstein* complete. Prerequisite: Ger. 13-14. (ELDRIDGE)

143-144 Goethe 3 credits Each semester
Study of Goethe's life and development, in connection with his lyric poems.. *Goetz von Berlichingen, Egmont, Tasso, Faust, Iphigenie.* Prerequisite: One advanced year-course in German. (ASHBY)

161-162 Directed Reading 1 to 3 credits Each semester
Prerequisite: Completion of two or more advanced class-courses in German. Not intended as a substitute for such courses but as a supplement to them. Written permission of the head of the department required. (DEPARTMENTAL STAFF)

Readings in European Literature 2 credits Each semester
See Eng. 175-176.

History of German Civilization 2 credits Each semester
See European History 151-152.

Primarily for Graduates

201-202 Middle High German 3 credits Each semester
Grammar, Michels: *Mittelhochdeutsches Elementarbuch.* Reading of Hartman's *Der arme Heinrich;* the *Nibelungenlied;* selected poems of Walter von der Vogelweide; and selections from Wolfram von Eschenbach's *Parzival.* (ELDRIDGE)

231 Gothic 3 credits First semester
Introduction to the study of Germanic philology. After a brief treatment of the phonology and morphology of Gothic, reading in *Ulfilas.* Prerequisite: Old English or two years of German. (ELDRIDGE)

271-272 Research Credits to be arranged Each semester
(DEPARTMENTAL STAFF)

ITALIAN

Primarily for Undergraduates

1-2 Elementary Italian 3 credits Each semester
The essentials of Italian grammar, with constant practice in pronunciation, simple translations from English into Italian, and the reading of easy Italian. (CHURCH)

OLD NORSE

101-102 Old Norse (Icelandic) 3 credits Each semester
Prerequisite: Old English or two years of German. (ELDRIDGE)

RUSSIAN

1n-2 Elementary Russian 3 credits Each semester
The aim of this course is to give the student a grasp of the language sufficient to allow him to read easy literary and scientific writings. Careful attention is given to pronunciation. (Offered in 1940-41 and alternate years.) (WIENS)

SPANISH

Students who present two years of high school Spanish for admission will continue in Span. 13-14. Those having one year of high school Spanish may take Span. 2, but often it will be better to take Span. 1 with the written permission of the instructor. No student may elect Fr. 1 and Span. 1 the same year. No credit is given for Span. 1 until Span. 2 is completed.

Primarily for Undergraduates

1n-2 Elementary Spanish 4 credits Each semester
(TROMANHAUSER, HOWE)

13-14 Intermediate Spanish 4 credits Each semester
Reading of modern authors, composition and conversation, review of grammar, and a study of idioms. The aim of this course is to give the student a reading knowledge of modern Spanish. Prerequisite: Span. 2, or the equivalent. (HOWE)

21-22 Sophomore Spanish 2 credits Each semester
Prerequisite: Span. 13-14. Open to sophomores only. (TROMANHAUSER)

81-82 Composition and Conversation 2 credits Each semester
A thorough study of advanced grammar and composition. Constant drill in conversation. Prerequisite: Span. 13-14. (TROMANHAUSER)

For Advanced Undergraduates and Graduates

121-122 Survey of Spanish Literature 3 credits Each semester
Lectures, reading of selected texts, reports. Conducted so far as possible in Spanish. Prerequisite: Span. 13-14. (Given in alternate years. Not given in 1940-41). (HOWE)

135-136 The Nineteenth Century 3 credits Each semester
(TROMANHAUSER)

141-142 The Golden Age 3 credits Each semester
A study of the development of the Spanish drama until the death of Calderon; the great types of the Spanish novel; the mystics; the rise and decadence of poetic taste in the sixteenth and seventeenth centuries. Prerequisite: Span. 13-14. (Given in alternate years. Not given in 1941-42). (HOWE)

147-148 Contemporary Literature 3 credits Each semester
Readings and discussions of contemporary writers, including those of Spanish America. Prerequisite: Span. 13-14. (HOWE)

161-162 Directed Reading 1 to 3 credits Each semester
Prerequisite: Completion of two or more advanced class-courses in Spanish. Not intended as a substitute for such courses, but as a supplement to them. Written permission of the head of the department required. (DEPARTMENTAL STAFF)

191-192 Teachers' Course 2 credits Each semester
Thorough drill in pronunciation, grammar, and composition. Consideration of methods of teaching, examination of texts, and courses of study. Open to majors in Spanish and to others by special permission. (ASHBY)

Readings in European Literature 2 credits Each semester
See Eng. 175-176.

History of Spanish Civilization 2 credits Each semester
See European History 161-162.

Primarily for Graduates

201-202 Old Spanish 2 credits Each semester
The elements of historical Spanish grammar, with an intensive study of selected texts. Students electing this course should have a fluent reading knowledge of Spanish, French, and Latin; a knowledge of German is highly desirable. (HOWE)

271-272 Research Credits to be arranged Each semester
(DEPARTMENTAL STAFF)

Music

Professor JONES, Associate Professor CLAUS, Assistant Professors MACKLIN, LEONARD, STUMP*, FITZGERALD, Miss LITTLE, Mr. LAWRENSON, Miss CASS, Miss RIES, Professor STAUFFER

DEGREES

The Department of Music offers specialized curricula leading to the following degrees: (a) Bachelor of Music; (b) Bachelor of Arts, with music as a major study; (c) Bachelor of Science in Music Education; (d) Bachelor of Science in Education, with public school music as a teaching subject; (e) Master of Music; (f) Master of Arts; and (g) Master of Science in Music Education.

ORGANIZED MUSIC

Membership in organized music groups is open to all students in the University, after consultation with directors. One credit per semester is offered in each group, and may be counted toward graduation irrespective of course numbers.

The following organized music courses are offered: University Singers (Mixed Chorus), Vandaleers (A Cappella Choir), Treble Clef Club (Women), University Symphony Orchestra, and the University Concert and Military Bands.

A maximum of eight credits is allowed toward graduation in organized music courses. These may be earned in one course, or in a number of different courses. Students may register in any organized music course after receiving the maximum number of credits, but will receive no credit.

ENSEMBLE

Membership in ensemble groups is open to all students in the University after consultation with the departmental office. One credit per semester is offered in each group, and may be counted toward graduation in the senior college irrespective of course numbers.

The following courses are offered: Mixed Quartet, Male Quartet, Double Male Quartet, Girl's Sextet, String Quartet, String Trio, Piano Trio, Piano Quintet, Trumpet Trio, Trumpet Sextet, Clarinet Quartet, Woodwind Quintet, and Two Piano Ensemble.

* Died, November 13, 1939.

APPLIED MUSIC

Applied music is defined as private lessons for which two credits are offered for one lesson per week, or four credits for two lessons per week, for a semester. Applied music credit is offered in voice, violin, piano, organ, violoncello, viola, double bass, clarinet, trumpet, trombone, tuba, flute, oboe, and French horn. Although students may register for applied music at any time for as many lessons as desired, no credit will be given unless the registration is for at least one lesson per week for a full semester or two lessons per week for a summer session.

Applied music may be taken as an elective course by any student in the University and credit may be counted toward graduation irrespective of course numbers. Students not of university rank may register for the courses in applied music but will not be given credit.

Thirty-two credits in a major instrument and four in a minor instrument are required for graduation for a Bachelor of Music degree, twenty-eight credits in a major instrument and four in a minor instrument are required for graduation for a Bachelor of Arts degree and twenty credits in a major instrument are required for graduation for a Bachelor of Science degree in Music Education.

At the beginning of the junior year a candidate for a degree in Music will be given an examination in applied music to determine his eligibility for upper division work. Completion of the following work or its equivalent is prerequisite to the examination in each field:

Piano: Bach two and three part inventions, scales and arpeggios, Czerny opus 740 or equivalent, Haydn, Mozart, and Beethoven sonatas, or studies of equal difficulty.

Voice: A mastery of the fundamentals of singing, breath control, intonation, diction, and the ability to sing moderately difficult songs in English, French, German or Italian.

Violin: Studies by Kreutzer, Sevcik, Carorti, and Rode; scales and arpeggios in two and three octaves; Sonatas by Handel and Tartini; and concertos by Viotti, Vivaldi, Mozart, and Mendelssohn, or studies of equal difficulty.

Cello: Scales and arpeggios in two and three octaves; etudes by Werner, Schroeder, Lee, Dotzauer, Grutzmacher, easy concertos by Klengel, Romberg, and Goltermann, or studies of equal difficulty.

Organ: Pedal studies, trios (two manuals and pedal), organ literature by Bach, Mendelssohn, Guilmant, Rheinberger, and Cesar Franck, or studies of equal difficulty.

At the end of the senior year, an applied music examination will be given candidates for degrees in music to determine their proficiency. Graduation depends on proficiency attained and not necessarily on the number of credits earned. Graduation recitals are required of candidates for the B.A. and B.M. degrees.

ADVANCED CREDIT

A student who has studied applied music of college grade with private teachers after high school graduation, or at an unaccredited institution, may apply for an examination for advanced credit with

the approval of a teacher in that branch of applied music, and the head of the Department of Music.

SCHOLARSHIPS

Seven scholarships are offered to students majoring in music. These scholarships consist of a waiver of the fee for applied music and are continuous for the year or semester in which they are awarded. Scholarship awards are made on a competitive basis at the beginning of each school year, and are allotted on the basis of ability and scholarship.

FEES

Tuition is payable in advance for the semester or unexpired portion thereof. Students entering after the opening of the semester are charged pro-rata, except that no allowance will be made for absence from the first week in any semester.

No deduction will be made for lessons missed by the student, nor will such lessons be made up. In case of serious illness, make-up lessons will be arranged in the departmental office. Lessons missed because of University holidays or during examination weeks will not be made up.

On withdrawal from the University, refunds for private instruction will be made in accordance with the requirements under "refunds of fees" in Part I of this catalog.

All students will be required to do their practicing in the practice rooms provided for this purpose in the Music Hall, Music Hall Annex, Bartley Cottage, and Center Cottage, unless special permission to practice elsewhere is granted.

Following is a table of fees per semester for lessons in applied music, payable at the Bursar's office:

Applied Music Lessons

One lesson per week, one-half hour (two credits)	$30.00
Two lessons per week, one-half hour each (four credits)	$60.00

Practice Room Rental (With Piano)

One hour per day for the semester	$ 4.00
Two hours per day for the semester	$ 7.00
Three hours per day for the semester	$ 9.00

Practice Room Rental (Without Piano)

One hour per day for the semester	$ 2.00
Two hours per day for the semester	$ 3.00
Three hours per day for the semester	$ 4.00

Practice Room Rental (Organ)

One hour per day for the semester	$ 6.00
Two hours per day for the semester	$ 9.00
Three hours per day for the semester	$11.00

(Organ practice is allowed one hour per week on the auditorium organ, the other hours being scheduled on the practice organ in the Music Hall.)

GENERAL MUSIC COURSES

Primarily for Undergraduates

1-2 Theory of Music 2 credits Each semester

A course designed to acquaint the student with the fundamental elements and skills of music, including the singing and writing of

scales, intervals, and chords in major and minor modes. Practice in sight-reading four part song material and practice in writing one and two part melodic and rhythmic dictation and three and four part chords and progressions. (MACKLIN)

1a Theory of Music (Education majors only)
2 credits First semester
A course especially designed for the classroom teacher containing a brief background of music fundamentals and skills. (CASS)

3 Orientation in Music 1 credit Either semester
This course is suggested as an elective to all students in the University interested in a general elementary cultural course in the appreciation of music. An elementary survey of musical elements in which the chief aim is music appreciation, including a brief study of the rudiments of music, theory, harmony, history, and form. (JONES, CASS)

4 Elementary Harmony 2 credits Second semester
An introductory study of the structure of chords, and practice in the chord progressions in major and minor modes, up to and including the dominant seventh chord. Prerequisite: Mus. 1 or 1a. (LITTLE)

5-6 Second Year Harmony 3 credits Each semester
A course in chord and melody writing, modulations, ornamental tones, dominant ninth chords and altered chords. (Keyboard facility is required, or students may take Music 13-14 concurrently.) Prerequisite: Mus. 4. (LITTLE)

7-8 Listening to Music 1 credit Each semester
A course suggested to all students in the University interested in hearing a great deal of recorded music. A record library of about three thousand recordings is available for this work. Annotated comments are given by the instructor for each composition. (CASS)

13-14 Keyboard Harmony 1 credit Each semester
Application of chord progressions to the piano keyboard. Practice in harmonization of melodies and transposition. Prerequisite: Mus. 4. (LAWRENSON)

23 Class Piano Lessons 2 credits First semester
(Music Education majors only.) (STAFF)

33 Class Voice Lessons 2 credits First semester
(Music Education majors only.) (STAFF)

43 Class Violin Lessons 2 credits Second semester
(Music Education majors only.) (CLAUS)

57-58 Accompanying and Sight Reading
1 credit Each semester
A practical course in rapid sight reading with practical experience in accompanying singers and instrumentalists. Prerequisite: Ability to play the piano. (MACKLIN)

59-60 Musical Diction 2 credits Each semester
A study of the science of phonetics with especial emphasis upon the sounds and enunciation of foreign languages required in singing. (STUMP)

67-68 Ensemble 1 credit Each semester
A practical study of the literature of chamber music, and includes membership in mixed quartet, male quartet, double male quartet, girls' sextet, string quartet, string trio, piano trio, piano quintet, trumpet trio, trumpet sextet, clarinet quartet, woodwind quintet, and two piano ensemble. (STAFF)

70 Rural School Methods 2 credits Second semester
A course for classroom teachers not specializing in music. Materials, methods, and problems relating to classroom music and activities, and their integration with other activities in the curriculum. Idaho Chorus plan presented. (CASS)

Recreational Community Music (see P.E. 64. Available to students in Physical Education.)

For Undergraduates and Graduates

101-102 History and Literature of Music 2 credits Each semester
A detailed study of the periods in the history of music with emphasis on the effect of historical periods and schools on the literature of music. Literature is presented through radio, phonograph records, and faculty and student performances. Prerequisites: Mus. 3, 7. (FITZGERALD)

103 Form and Analysis 3 credits First semester
Analysis of the form and harmony as employed in the smaller and larger standard musical compositions. Prerequisites: Mus. 6 and 14. (LAWRENSON)

104 Modern Music 2 credits Second semester
A survey of trends in musical composition from the composers of the late Romantic period through the Impressionists, and including contemporary writers. Emphasis on the harmonic structure of the Modernists. Prerequisite: Mus. 103. (LAWRENSON)

105-106 Counterpoint 2 credits Each semester
A study of strict counterpoint in two, three, and four parts, with practice in writing in the five species. Prerequisites: Mus. 6 and 14. (LITTLE)

108 Piano Class Methods 2 credits Second semester
A comparative survey of materials and methods of class piano instruction, with emphasis on the various published methods of study. Prerequisite: eight credits in piano or consent of instructor. (CASS)

109-110 Elementary Composition 2 credits Each semester
A practice course in original music writing, accompaniments for voice and solo instruments, and application of prose and poetry to musical forms. Prerequisites: Mus. 104 and 106. (MACKLIN)

112 Instrumentation and Orchestration 3 credits Second semester
A practical course in arranging for band and orchestral instruments, including a study of range, tone color, relationships, and transpositions. Prerequisite: Mus. 6. (FITZGERALD)

S132 Voice Class Methods 2 credits Summer Session
The physiological and acoustical basis of voice culture. Methods of individual and class instruction. (STUMP)

167-168 Advanced Ensemble 1 credit Each semester
A practical study of advanced literature of chamber music, and includes membership in one of the Music Department chamber ensembles. (STAFF)

171 Elementary School Music Methods
3 credits First semester
Practical methods of teaching music in the kindergarten and grades one to six inclusive, with particular attention to the care and development of the child voice. Prerequisite: junior standing. (CASS)

173 Class String Instrument Methods 1 credit First semester
Practical course in the playing and teaching of viola, violoncello and double bass in class. Primarily for public school teachers. (CLAUS, LITTLE)

175 Class Band Instrument Methods 3 credits Both semesters
A practical course in the playing and teaching of band instruments primarily for public school teachers.

Section A Woodwind instruments First semester
Section B Brass instruments Second semester
Section C Percussion instruments Second semester
(FITZGERALD)

178 Junior and Senior High School Methods
3 credits Second semester
Organization and administration of high school music courses. Includes materials and methods for glee clubs, choruses, appreciation, orchestra, band, and theory and harmony classes. (JONES)

179 Choral Conducting 2 credits First semester
An introductory course in the technique of conducting with emphasis on materials for an interpretation of music for choruses, choirs, and glee clubs. Prerequisite: junior standing. (JONES)

180 Orchestral Conducting 2 credits Second semester
A study of the materials for orchestra, interpretation, score reading, and practical experience in conducting. Prerequisite: Mus. 179. (CLAUS)

Practice Teaching (Ed. 131 and 131a) 4 credits Each semester
To be arranged with the Director of Practice Teaching and the vocal or instrumental supervisor. Prerequisite: Mus. 171. (CASS, FITZGERALD)

Primarily for Graduates

202 Music Supervision 2 credits Second semester
Advanced course in administration and supervision of public school music, including organization, curriculum construction and supervisory techniques. Prerequisite: 8 credits in music methods. (CASS)

203 Problems in Music Education 2 credits First semester
Lectures and discussion of the problems of music education from the elementary through the college level. Particular reference to newer innovations and trends. Primarily for teachers in service. Prerequisite: 8 credits in music methods. (JONES)

204 Advanced Music Methods 2 credits Second semester
Advanced course in techniques in music education. Particular reference to objectives, curriculum, accrediting, grading, ability grouping, and project and unit techniques. Prerequisite: 8 credits in music methods. (CASS)

205-206 Canon and Fugue 2 credits Each semester
An advanced course in contrapuntal writing including double counterpoint, imitation, sequences, canon, and fugues in three or more parts. Prerequisite: Mus. 106. (LITTLE)

S207 Creative Music Activities 2 credits Summer Session
A methods course in classroom activities in the field of creative music. Includes materials, procedures, and instruments and their use. (PERHAM)

208 Tests and Measurements in Music 2 credits Second semester
Evaluation and application of the various ability and achievement tests in music, with methods of use, analysis, and prognosis. Survey and evaluation of studies in the field of music testing. Prerequisites: Psych. 2, and 8 credits in music methods. (JONES)

209-210 Advanced Composition 2 credits Each semester
Practice in original writing in the larger musical forms including writing for the orchestra. (MACKLIN)

211-212 Advanced Orchestration 2 credits Each semester
Advanced course in arranging and scoring for the orchestra, with emphasis on modern trends. Prerequisite: Mus. 112. (FITZGERALD)

213 Literature of Music 2 credits First semester
Advanced practical course in the literature and interpretation of music for voice, violin, piano, or cello. Survey of concert and program literature and program building. Prerequisite: 16 credits in applied music. (MACKLIN, CLAUS, LITTLE, JONES)

214 Literature of Music 2 credits Second semester
A practical course in the interpretation and music of Bach, Beethoven, Brahms, Wagner, and contemporary composers. (STAFF)

215 Seminar in Music Education 2 credits
(JONES)

S216 Orchestral Literature 2 credits Summer Session
An analytical survey of the standard symphony orchestra literature with especial emphasis on backgrounds and interpretation. (BAKALEINIKOFF)

222 Research Credits to be arranged Either semester
(JONES)

S230 Philosophy and Psychology of Music Education
2 credits Summer Session
A course designed to deal with the problems of philosophy and psychology in relation to present practices in the field of Music Education. Particular attention to objectives, attitudes, and appreciations and techniques subjected to analytical study.

S231 Music Education Materials Clinic
2 credits Summer Session
A practical analytical survey of published materials available for all phases of Music Education. (Materials furnished through cooperation of the publishers.) Outside work is done by committees chosen according to the field of major interest, with reports of the committee work analyzed in class.

S270 Church Music Techniques 2 credits Summer Session
A practical course for church organists and choir directors. Includes materials and methods of organizing church choirs. Survey of church music literature and activities of the church music department. (WHEELWRIGHT)

S275 Psychology of Music 2 credits Summer Session
A study of perceptual and appreciational concepts and abilities in the field of music, including the psychology of listening, performance and composition. (KWALWASSER and HODGSON)

S278 Choral Problems 2 credits Summer Session
An advanced course designed to investigate and discuss the problems incident to the organization, administration, and direction of the various types of choral activities in secondary schools and colleges. (KRONE)

279 Advanced Choral Conducting 2 credits First semester
Advanced practical course in baton technique and choral interpretation. Practice in conducting required. Prerequisite: Mus. 179 or equivalent. (JONES)

280 Advanced Orchestra Conducting 2 credits Second semester
Advanced practical course in techniques of orchestra conducting and orchestral interpretation, and study of symphonic scores by Haydn, Mozart, Beethoven and others. Practice in conducting required. Prerequisite: Mus. 180 or equivalent. (CLAUS)

281 Band Organization and Conducting 2 credits First semester
Laboratory course in band organization, literature, instrumentation, interpretation, program building, band formations, and conducting. Particular reference to the drum major and marching band. Prerequisite: Mus. 175 or equivalent. (FITZGERALD)

S282 School Band and Orchestra Problems
2 credits Summer Session
An advanced course in the investigation and discussion of problems incident to the organization, administration, and direction of various types of instrumental activities in secondary schools and colleges. (BACHMAN)

S283 School Band Techniques 2 credits Summer Session
A practical course in the organization, methods and materials for school bands. Primarily for public school music teachers. (BACHMAN)

291-292 Professional Problems
Credits to be arranged Each semester
A course designed for students working for the master's degree. Work is arranged by the major professor. (JONES)

APPLIED MUSIC COURSES

021 Piano (Sub-Freshman) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON, CASS)

21 Piano (Lower Division) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON, CASS)

121 Piano (Upper Division) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON, CASS)

221 Piano (Graduate) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON, CASS)

031 Voice (Sub-Freshman) 2 or 4 credits Each semester
(JONES, STUMP, LEONARD)

31 Voice (Lower Division) 2 or 4 credits Each semester
(JONES, STUMP, LEONARD)

131 Voice (Upper Division) 2 or 4 credits Each semester
(JONES, STUMP, LEONARD)

231 Voice (Graduate) 2 or 4 credits Each semester
(JONES, STUMP, LEONARD)

041 Violin (Sub-Freshman) 2 or 4 credits Each semester
(CLAUS)

41 Violin (Lower Division) 2 or 4 credits Each semester
(CLAUS)

141 Violin (Upper Division) 2 or 4 credits Each semester
(CLAUS)

241 Violin (Graduate) 2 or 4 credits Each semester
(CLAUS)

081 Viola (Sub-Freshman) 2 or 4 credits Each semester
(CLAUS)

81 Viola (Lower Division) 2 or 4 credits Each semester
(CLAUS)

181 Viola (Upper Division) 2 or 4 credits Each semester
(CLAUS)

061 Cello (Sub-Freshman) 2 or 4 credits Each semester
(LITTLE)

61 Cello (Lower Division) 2 or 4 credits Each semester
(LITTLE)

161 Cello (Upper Division) 2 or 4 credits Each semester
(LITTLE)

261 Cello (Graduate) 2 or 4 credits Each semester
(LITTLE)

085 Double Bass (Sub-Freshman) 2 or 4 credits Each semester
(LITTLE)

85 Double Bass (Lower Division) 2 or 4 credits Each semester
(LITTLE)

185 Double Bass (Upper Division) 2 or 4 credits Each semester
(LITTLE)

51 Organ (Lower Division) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON)

151 Organ (Upper Division) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON)

251 Organ (Graduate) 2 or 4 credits Each semester
(MACKLIN, LAWRENSON)

ORCHESTRAL AND BAND INSTRUMENTS

Students may register for private instruction in any of the instruments used in the standard symphony orchestra or standard military or concert band. Two credits will be given for one lesson per week and four credits for two lessons per week.

091-91-191 Brass Instruments 2 or 4 credits Each semester

095-95-195 Woodwind Instruments 2 or 4 credits Each semester

097-97-197 Percussion Instruments 2 or 4 credits Each semester
(FITZGERALD)

ORGANIZED MUSIC

(Prerequisite: consent of instructor)

NOTE.—Students desiring credit for mixed quartet, male quartet, string quartet, clarinet quartet, woodwind quintet, string trio, piano trio, piano quintet, trumpet trio, and trumpet sextet, should register in Mus. 67-68, Ensemble.

25-26 University Concert Band 1 credit Each semester
Membership open to all students in the University after consultation with the director. Emphasis on the study of standard and advanced band literature. Not open to students registered in Mil. 1k, 2k, 3k, or 4k. (FITZGERALD)

35-36 University Singers 1 credit Each semester
Membership in the mixed chorus is open to all students in the University without tryout. Oratorio work constitutes the large part of the material for this chorus. The activities include the presentation of an oratorio during the spring season. (JONES)

35a-36a Vandaleers 1 credit Each semester
Membership in the Vandaleers is open to all students in the University subject to tryout and election by the club. Activities include concerts, short programs, appearances in school assemblies, and an annual tour. Material consists of standard and classic mixed chorus arrangements. (JONES)

35b-36b Treble Clef Club (Women) 1 credit Each semester
Membership in the Treble Clef Club is open to all girls in the University after consultation with the director. The material includes standard and classic music arranged for women's voices and cantatas and excerpts from opera and oratorios. Activities include concerts and assembly programs. (CASS)

45-46 University Orchestra 1 credit Each semester
Membership in the University Orchestra is open to all students in the University who can qualify, after consultation with the conductor. Students who take this work have unusual opportunity for sight-reading, and a thorough study of orchestral literature, and routine. This course is required of students majoring in the orchestral instruments. (CLAUS)

THE UNIVERSITY BANDS

The University maintains two bands, the University Concert Band and the First Regimental Band. Members are chosen on the

basis of superior musicianship and ability. These organizations emphasize the study of standard and advanced band literature, give several concerts during the school year, and furnish music for parades, inspections, and other military functions. Membership in the military band may be submitted for required military drill. (FITZGERALD)

Norse

(See under *Modern Languages*)

Philosophy

Professor CHENOWETH, Dr. SAVERY

Primarily for Undergraduates

1-2 Contemporary Civilization 3 credits Each semester
An orientation course designed to give to beginning students an introduction to the economic, social, and political principles operative in modern social organization, together with the philosophy underlying them. Open to freshmen and sophomores. (CHENOWETH)

51 History of Ancient Philosophy 3 credits First semester
A general study of the development of thought from Thales to Descartes, with special reference to the origin of the concepts which are commonly used in the expression of modern thought. Open to sophomores, juniors and seniors. (CHENOWETH)

52 History of Modern Philosophy 3 credits Second semester
A study of the development of thought from Descartes to the present time. Emphasis is placed on the relation of the various movements in philosophy to the formation of modern systems. (CHENOWETH)

For Advanced Undergraduates and Graduates

101 Ethics 3 credits First semester
A study of the various phases in the development of ethical thought, with the object of deriving a standard for the government of moral conduct. (SAVERY)

102 Ethics (Advanced) 3 credits Second semester
A comparative study of ethical theories and the application of the moral criterion to present-day problems. Prerequisite: Phil. 101. (SAVERY)

103 Logic 3 credits First semester
The laws of thought, studied with a view to their use in the organization of the results of everyday experience and scientific investigation. Special attention is given to the function of logic in the methods of science. (SAVERY)

104 Contemporary Philosophy 3 credits Second semester
A study of recent and contemporary philosophies, especially the thought of Karl Marx, William James, Bergson, Dewey, and Whitehead. The course will emphasize value theory and social philosophy. (SAVERY)

105 Philosophy of Religion 3 credits First semester
An examination of the fundamentals of the different world religions, with the object of determining the place of the religious consciousness in life. (CHENOWETH)

106 The State and the Individual 3 credits Second semester
A study of the principles applicable to the various activities of the individual in connection with the state. (CHENOWETH)

107 Philosophy in Literature 3 credits First semester
The development of philosophy is studied in connection with its expression in literature. (CHENOWETH)

108 Social Ethics 3 credits Second semester
An examination of the way in which ethical principles enter into the solving of current problems of social morality. (SAVERY)

109 Pro-Seminar in Philosophy 3 credits First semester
This course is designed to meet the need of qualified students who wish to pursue special studies with the cooperation of the instructor. Classroom procedure will be adapted to the needs of the students. Prerequisites: instructor's permission and junior standing. (SAVERY)

110 Philosophy of Science 3 credits Second semester
A study of the various philosophic bases which are presupposed in science. (SAVERY)

113 Aesthetics 3 credits First semester
An analysis of the experience of the beautiful. A nontechnical investigation of the various types of art and a consideration of the relation of art to science, morality, and religion. Prerequisite: junior standing. (SAVERY)

122 Philosophical Ideas in Recent Literature
3 credits Second semester
An interpretation of current ethical, social, political, and religious trends through the medium of the work of such writers as Tolstoi, Nietzsche, Ibsen, H. G. Wells, Anatole France, O'Neill, and others. (SAVERY)

125 American Thought 3 credits First semester
A study of the basic ideas which have shaped American civilization. Prerequisite: junior standing. (CHENOWETH)

140 Philosophy of Power 3 credits Second semester
An examination of the moral consequences arising from attempts to solve human problems by the use of force. (SAVERY)

151 Metaphysics 3 credits First semester
An examination of the basic ideas in the different types of philosophy with special reference to idealism, materialism, realism, and pragmatism. Prerequisite: junior standing. (SAVERY)

153 The Ways of Knowing 3 credits First semester
A study of the different ways in which man seeks knowledge: the common man, the artist, the religious prophet, the scientist, and the philosopher. Prerequisite: junior standing. (SAVERY)

Primarily for Graduates

201-202 Advanced Philosophy 2 to 4 credits Each semester
An investigation of a general problem in philosophy, selected at the beginning of each semester by the instructor in consultation with the members of the class. Each student is required to present to the class, one or two reports covering the results of a considerable amount of research in connection with a particular phase of the general problem. (CHENOWETH)

203-204 Seminar in Philosophy 1 or 2 credits Each semester
Problems in research are carried on in the course and their results presented from time to time for discussion. (CHENOWETH, SAVERY)

205-206 Research Credits to be arranged Each semester
(CHENOWETH, SAVERY)

208 Plato 3 credits Second semester
The *Republic* and *Laws* are read in translation with special reference to Plato's theory of government. (CHENOWETH, SAVERY)

S209 Seminar 1, 2 or 3 credits Summer Session
Problems in Contemporary Political Philosophy.

211-212 Seminar in Aesthetics 2 or 3 credits Each semester
Problems in research are carried on in the course and their results presented from time to time for discussion. (SAVERY)

Physical Education for Men

Professor BANK; Associate Professors RYAN, JACOBY; *Assistant* Professors TWOGOOD, TESSIER; Mr. PRICE, Mr. AUGUST
Professors PRICHARD and JONES
Dr. CRAMER, Miss MYLNE, Mrs. MANCA

The University maintains a carefully planned and coordinated program for the health of the students. A physician and an infirmary offer diagnostic service and advice. The department of physical education seeks to develop a health-building and recreational program, and to establish regular habits of physical activity. To this end it endeavors to develop skill in and enthusiasm for sports which may be enjoyed in college and afterward. It offers participation with instruction in numerous games and facilities at the level of skill (intramural or intercollegiate) most profitable, socially and physically, to each participant. Physical and medical examinations are required of all new students on matriculation. All freshmen and sophomores, unless excused by the medical department or the divisional dean, are required to take P.E. 31-33.

A major or minor course of study for prospective teachers of physical education, hygiene and recreation, leading to a B.S. (Ed.) degree, is offered in cooperation with the School of Education.

A major in physical education, leading to a M.S.(Ed.) degree, is offered for students of graduate standing.

REQUIRED COURSES

Primarily for Undergraduates

***31 Freshman Sports** ½ credit—1 hour per week Each semester
Required of all freshmen. Instruction in fundamental skills and participation in touch football, volleyball, basketball, tumbling, and softball. (STAFF)

***33 Sophomore Sports** ½ credit—1 hour per week Each semester
Required of all sophomores. Instruction in fundamental skills and participation in:

Swimming	Life Saving	Golf	Handball
Boxing	Table Tennis	Archery	
Wrestling	Tumbling and Stunts	Fencing	
Tennis	Badminton	Basketball	

(STAFF)

†35-36 Restricted Physical Education
½ credit—1 hour per week Each semester
Required when physical and medical examinations necessitate prescribing specific activities to meet the individual's need. (STAFF)

ELECTIVE COURSES

Primarily for Undergraduates

21-22 Tap Dancing 1 credit Each semester
See *Physical Education for Women.* (WIRT)

41 Freshman Activities 2 credits First semester
Required of freshman majors. One lecture and three laboratory periods per week. Calisthenics, tumbling and stunts, apparatus. (JACOBY)

42 Freshman Activities 2 credits Second semester
Required of freshman majors. One lecture and three laboratory periods per week. Boxing, wrestling. (TESSIER)

43 Sophomore Activities 2 credits First semester
Required of sophomore majors. One lecture and three laboratory periods per week. High and low organized games. (PRICE)

44 Sophomore Activities 2 credits Second semester
Required of sophomore majors. One lecture and three laboratory periods per week. Swimming, life saving, water polo. (TESSIER)

47 History of Physical Education 2 credits First semester
See *Physical Education for Women.*

50 General Hygiene 3 credits Each semester
Three-hour lecture course covering the important factors in maintaining health. Individual health practices and the measures of public health are included. (CRAMER)

61 Recreational Plastics 2 credits First semester
A study of art techniques and forms suitable for playground projects. (PRICHARD)

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* Not more than ½ credit can be secured in any one semester. A total of two credits earned during four semesters is required. Sophomores must select a different activity each semester.

† Not more than ½ credit can be secured in any one semester. A total of two credits earned during four semesters is required.

64 Community Recreational Music 2 credits Second semester

A course in the techniques and materials for a musical program in recreational and community centers. Song leading, program building, and techniques or teaching music appreciation, as well as lessons in listening to music. (JONES)

99 Technique and Methods of Coaching Track

2 credits First semester

Two-hour lecture course in the methods of coaching track teams. Details of teaching individual fundamentals, strategy, and conditioning of athletes. In addition, all students will receive practical instruction on the field in track from the coach's viewpoint. (RYAN)

For Advanced Undergraduates and Graduates

103 Playground and Community Recreation

2 credits First semester

A study of the promotion and organization of recreational activities, stages of growth and adaptation of activities on junior and senior high school level; adult recreational work in the community; construction and equipment of playgrounds. Two periods a week. (PRICE)

132 Methods of Teaching Health and Physical Education

2 credits Second semester

This course deals with the various problems in the organization of the physical education activities program to secure educational objectives. Prerequisites: P.E. 41-42-43-44. (PRICE)

141 Technique and Methods of Coaching Basketball

2 credits First semester

Two-hour lecture course in the methods of coaching basketball teams. Details of teaching individual fundamentals, offensive and defensive team play, strategy, and conditioning of athletes. In addition, all students will receive practical instruction on the field in basketball from the coach's viewpoint. Prerequisite: junior standing. (TWOGOOD)

142 Technique and Methods of Coaching Baseball

2 credits Second semester

Two-hour lecture course in the methods of coaching baseball teams. Details of teaching individual fundamentals, offensive and defensive team play, strategy, and conditioning of athletes. In addition, all students will receive practical instruction on the field in baseball from the coach's viewpoint. Prerequisite: junior standing. (TWOGOOD)

144 Technique and Methods of Coaching Football

2 credits Second semester

Two-hour lecture course in the methods of coaching football teams. Details of teaching individual fundamentals, offensive and defensive team play, strategy, and conditioning of athletes. In addition, all students will receive practical instruction on the field in football from the coach's viewpoint. Prerequisite: junior standing. (BANK)

171 Principles of Physical Education 2 credits First semester

Interpretation of the aims and objectives of physical education, the principles and procedures upon which the physical education program should be based, and its relation and contribution to general education. (JACOBY)

181 Physical Education Tests and Measurements
2 credits First semester
A study of the general historical background and the need for and use of tests in physical education. Elementary statistical methods, scoring methods, how to build tests, administration of tests, and their use in classification and placement. Prerequisites: Psych. 1, and junior standing. (JACOBY)

185 Physiology of Exercise 2 credits First semester
A course in which the effects of exercise upon the different organs, muscles, structure, and functions of the body are studied so that the ideals and aims of exercise can be taught and carried out in a wholesome manner. Prerequisites: Zool. 6, and junior standing. (STAFF)

187 Intramural Athletics 2 credits First semester
The organization and administration of the intramural program in elementary and secondary schools, and the ability to officiate at the various activities required. Prerequisite: junior standing. (JACOBY)

188 First Aid 2 credits Second semester
A course in first aid and emergencies, with special emphasis on athletic injuries and their care. Students qualify for a Red Cross certificate. Prerequisite: junior standing. (RYAN)

196 Organization and Administration 3 credits Second semester
The organization of a staff, of programs, constructing the gymnasium, arrangement and care of equipment, care and administration of courts, tanks, and fields, and general problems of supervision of a physical education department. Prerequisite: P.E. 131. (JACOBY)

Primarily for Graduates

246 Coaching Athletic Activities for Men
2 credits Summer School
This course deals with the coaching theory of major sports, stressing the correlation of offense and the setting up of particular defenses to meet the various attacks. The individual's special problems will be given special attention.

261-262 Research in Physical Education
Credits to be arranged Each semester
This course is primarily designed for students working toward the master's degree. It is done under the direction of the professor in whose field the greater portion of the work is offered. It should be taken by those students satisfying their thesis requirements. (STAFF)

281-282 Professional Problems in Physical Education
Credits to be arranged Each semester
This course is primarily designed for students working toward the master's degree. It is done under the direction of the professor in whose field the greater portion of the work is offered. It should be taken by those students satisfying their professional problems requirements. (STAFF)

296 Advanced Organization and Administration
2 credits Second semester
Deals with the policies in the organization of the program, and the methods of administration to secure results in the public schools, high school, and elementary schools. Topics stressed: classification of children; the time schedule; teaching staff; training; load; office organization and administration; state laws and programs of physical administration; the plant; and finances. (JACOBY)

298 Seminar in Physical Education
Credits to be arranged Second semester
(JACOBY)

Physical Education for Women

Associate Professor WIRT, Miss MYLNE, Mrs. MANCA, Associate Professor RYAN, Assistant Professor JACOBY, Dr. CRAMER, Mr. PRICE

Work in this department is required of freshmen and sophomores. Juniors and seniors are encouraged to continue by electing additional courses which will give credit toward graduation. A major course in physical education for women leading to the degree of bachelor of science in education is outlined in the curriculum of the School of Education in Part III of this catalog. Those registering in this course should consult the director of physical education for women. A minor in physical education with a major in the College of Letters and Science, leading to a bachelor of arts degree, also may be outlined in conference with the head of the department in which the student majors and with the director of physical education for women. P.E. 125-126 and P.E. 127-128 *are absolutely essential to minor curriculum.*

All freshman and sophomore women, unless exempted because of physical disability as determined in the university physical examinations, are required to elect activities among the following courses: P.E. 9-10, 11-12, 13-14, 15-16, 17-18, 19-20, 21-22, 55-56, 66, 67-68, 69-70. If the physical examinations given all entering women students, or later indications disclose defects in posture, feet, etc., which could be remedied by individual corrective exercises, prescription for the same will be given and individual help outlined in addition to the course for which registered. While freshmen may, if they desire, register for an elective in physical education activities additional to the required hour each semester, they are not permitted to apply such credit earned in the first year to fulfillment of requirement in the sophomore year.

P.E. 1-2, Personal Hygiene, is required of all first-year women except those registered in the home economics or pre-nursing curriculum.

Primarily for Undergraduates

1-2 Personal Hygiene 1 credit Each semester
Informal discussion of and project approach to consideration of personal hygiene problems of the college woman. (WIRT)

9 Beginning Dancing 1 credit First semester
Fundamental modern dance techniques. (WIRT)

10 Beginning Dancing 1 credit Second semester
Continuation of first semester. Prerequisite: P.E. 9. Two hours a week. (WIRT)

11 Danish Gymnastics 1 credit First semester
Free swinging exercises demanding alternation of strenuous and relaxed movements, aimed at development of coordination, increased mobility, and flexibility. Informal in approach. Two hours a week. (MANCA)

12 Apparatus and Tumbling 1 credit Second semester
Practice in individual, partner, and group stunts, pyramid building and tumbling. Two hours a week. (MANCA)

13-14 Beginning Swimming 1 credit Each semester
For those who cannot swim, or who have not been instructed in correct form. Two hours a week. (MYLNE)

15-16 Folk Dancing 1 credit Each semester
Dances of various nations, with recreational rather than art approach in rhythmic expression. Of value to those planning to teach in elementary schools. Two hours a week. (WIRT)

17 Leisure Sports 1 credit First semester
Practice in activities which can most easily be continued in after-school life. Includes tennis, deck tennis and table tennis. Equipment for tennis must be provided by the registrants. Two hours a week. (MYLNE, MANCA)

18 Leisure Sports 1 credit Second semester
Includes badminton, shuffleboard and golf. Equipment for golf must be provided by the registrants. Two hours a week. (MYLNE)

19-20 Women's Athletics 1 credit Each semester
Participation in soccer, speedball, volley ball, basketball, and baseball. Two hours a week. (MANCA)

21-22 Tap Dancing 1 credit Each semester
Emphasis upon complete bodily coordination in tap routines. (WIRT, MANCA)

47 History of Physical Education 2 credits First semester
A study of the backgrounds and the development of the physical education movement, the comparison of distinctive trends in different countries with special emphasis upon the modern trend in the United States. Two hours a week. (MYLNE)

50 General Hygiene 3 credits Each semester
Three-hour lecture course covering the important factors in maintaining health. Individual health practices and the measures of public health are included. (CRAMER)

52 Playground Supervision 2 credits Second semester
The nature and function of play; stages of growth and adaptation of activities; practice in teaching recreational activities suitable for elementary school children. Especially recommended for those preparing to teach in lower grades. Two hours a week. (MANCA)

55-56 Intermediate Swimming 1 credit Each semester
Two hours a week. Prerequisite: P.E. 13-14, or equivalent. (MYLNE)

67-68 Advanced Swimming and Life Saving
1 credit Each semester
Two hours a week. Prerequisite: P.E. 55-56 or equivalent. (MYLNE)

69-70 Advanced Dancing 1 credit Each semester
Two hours a week. Prerequisite: P.E. 9-10 or equivalent. (WIRT)

For Advanced Undergraduates and Graduates

103 Playground and Community Recreation
2 credits First semester
Recommended as an upper-class elective for women majoring or minoring in the department. See *Physical Education for Men.* (PRICE)

117-118 The Teaching of Swimming 1 credit Each semester
Methods and practice in teaching swimming. Prerequisite: P.E. 55 or 68. (MYLNE)

121 Teaching of Corrective Gymnastics 2 credits First semester
A study of body mechanics in relation to physical examinations and teaching methods. (MANCA)

122 The Teaching of Hygiene 2 credits Second semester
A study of the project and informal discussion methods of making the rules of hygiene of significance to high school girls. Two hours a week. Prerequisites: P.E. 1 and 2, and junior standing. (WIRT)

125-126 Management of Women's Athletics
2 credits Each semester
Theory and practice in coaching activities and team games for use in playgrounds, public schools, high schools, and camps. Two lecture periods and two hours' practice teaching. Prerequisite: P.E. 19-20. (MANCA)

127-128 Methods in Physical Education
2 credits Each semester
Organization of programs in physical education for elementary children and high school girls, consideration of problems of administration, of aims and objectives, principles, and methods of teaching. Two class periods a week, plus occasional laboratory assignments. Prerequisite: fulfillment of underclass departmental requirements. (Not given in 1940-41.) (WIRT)

181 Physical Education Tests and Measurements
2 credits First semester
May be taken as an upper-class elective by women majoring in physical education.
See *Physical Education for Men.* (JACOBY)

188 First Aid 2 credits Second semester
First aid in emergencies, with special emphasis on athletic injuries and their care, qualifying for the Red Cross certificate in first aid. Two hours a week. Prerequisite: junior standing. (RYAN)

196 Organization and Administration 3 credits Second semester
May be taken as an upper-class elective by women majoring in physical education.
See *Physical Education for Men.* (JACOBY)

Physics

Professor HAMMAR, Assistant Professor LUKE and STAUFFER

Primarily for Undergraduates

1 Elementary Physics 4 credits First semester
An introductory survey of the field of physics with emphasis on everyday applications. Three lectures, one three-hour laboratory period, and one recitation period a week.

3-4 General Physics 4 credits Each semester
Three lectures, one three-hour laboratory period, and one recitation period a week. (LUKE, STAUFFER)

51-52 Engineering Physics 5 credits Each semester
This course is intended for students in the physical sciences and in engineering and must be preceded or accompanied by the calculus. Three lectures and two three-hour laboratory periods a week. Prerequisite: high school physics. (HAMMAR, STAUFFER)

54 Music and Sound 4 credits Second semester
A nontechnical treatment of the elements of acoustics with applications to musical instruments, scales and harmony and auditorium acoustics. Three lectures and one three-hour laboratory period a week. (STAUFFER)

For Advanced Undergraduates and Graduates

101-102 Intermediate Physics 4 credits Each semester
The topics studied in this course are mechanics, heat, sound, electricity, magnetism, light and atomic structure. Three lectures and one three-hour laboratory period a week. Prerequisite: Physics 3-4 or 51-52.

106 Meteorology 3 credits Second semester
A broad survey of the physics of the atmosphere. Prerequisite: Phys. 3-4, or 51-52. (HAMMAR)

110 Teaching of Physics 3 credits Second semester
The equipment and management of laboratories; the content and organization of subject matter. A set of class demonstrations is worked out and performed by each student. Prerequisite: Phys. 3-4, or 51-52.

S113-114 The Physical Basis of Music 2 credits Summer Session
A nontechnical treatment of the acoustical principles of musical instruments, scales, and hearing; with demonstrations. Prerequisite: junior standing. (STAUFFER)

121-122 Analytical Mechanics 3 credits Each semester
Statics, kinematics, and dynamics. Prerequisites: Phys. 3-4, or 51-52; Math. 51. (LUKE)

131-132 Electricity and Magnetism 3 or 4 credits Each semester
Prerequisites: Phys. 3-4, or 51-52; Math. 51-52. (STAUFFER)

141 Advanced Light 4 credits First semester
Prerequisites: Phys. 3-4, or 51-52, and Math. 51. (STAUFFER)

152 Advanced Heat 3 or 4 credits Second semester
Prerequisites: Phys. 3-4, or 51-52, and Math. 51-52. (HAMMAR)

161-162 Pro-Seminar 1 credit Each semester
A study of important topics in advanced physics. Prerequisites: Phys. 121-122 and 131.

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
Investigation of experimental or theoretical nature under supervision of an instructor. (HAMMAR)

211-212 Modern Physics 4 credits Each semester
A review of the fundamentals of physics, and an introduction to modern theories of atomic structure and radiant energy. Prerequisites: Phys. 3-4, or 51-52, and Math. 51-52. (HAMMAR)

221-222 Advanced Mechanics 4 credits Each semester
A mathematical treatment of the dynamics of rigid bodies, hydrodynamics, and elasticity. Prerequisite: Phys. 121-122. (HAMMAR)

251-252 Introduction to Theoretical Physics
3 credits Each semester
Prerequisite: Phys. 121-122. (HAMMAR)

261-262 Seminar 1 credit Each semester
A study of topics from recent research.

Plant Pathology

Associate Professor RAEDER, Assistant Professors BLODGETT and VIRGIN

For Advanced Undergraduates and Graduates

101 General Plant Pathology 3 credits First semester
A study of plant diseases due to bacteria, fungi, and non-parasitic causes. Includes a study of causes, symptoms, effects, means of dissemination, and principles of control. Prerequisite: Bot. 1-2, or Bot. 11. One lecture and two laboratory periods weekly. (RAEDER, BLODGETT)

102 Methods in Plant Pathology 2 credits Second semester
Greenhouse and laboratory studies of bacterial and fungus diseases of plants, including cultural methods, isolation, inoculation, spore germination, etc. Two laboratory periods weekly. Given in alternate years. Will be given in 1940-41. Prerequisites: P.P. 101 and Bact. 51. (VIRGIN)

103 Diseases of Field Crops 2 credits First semester
A study of the various diseases of field crops with special emphasis upon those of economic importance in Idaho. Among the principal field crops covered are: small grains, corn, sugar beets, alfalfa, clover, etc. One lecture and one laboratory period weekly. Prerequisite: P.P. 101. (RAEDER)

104 Fruit Diseases 2 credits Second semester
Various diseases of both tree and small fruits, special emphasis being placed upon non-parasitic diseases of both these groups. Lectures, reference readings, and reports upon assigned topics. Two lectures weekly. Given in alternate years. Will be given in 1940-41. Prerequisite: P.P. 101. (BLODGETT)

106 Diseases of Truck Crops 2 credits Second semester
A study of some of the diseases of the more important truck crops grown in Idaho. Two lectures weekly. Given in alternate years. Will not be given in 1940-41. Prerequisite: P.P. 101. (VIRGIN)

107-108 Pro-Seminar 1 credit Each semester
(STAFF)

110 Thesis 1 credit Second semester
(STAFF)

Insecticides and Fungicides 3 credits Second semester
See Hort. 180 (Available to students in Plant Pathology.)

Primarily for Graduates

201-202 Seminar 1 credit Each semester
(STAFF)

203-204 Research Credits to be arranged Each semester
(STAFF)

Political Science

Professor KERR, Assistant Professor CHAMBERLAIN,
Mr. BERGERSON

Primarily for Undergraduates

1-2 American Government 3 credits Each semester
A survey of the national, state, and local governments. Special consideration of the organization, functions, and present-day problems of the American federal government. (KERR, CHAMBERLAIN, BERGERSON)

75 State Government 3 credits First semester
An analysis of American state government. Emphasis upon executive budget, administrative consolidation, relations of the states and the federal government. (CHAMBERLAIN)

76 City and County Government 3 credits Second semester
A study of the organization, functions and special problems of the local units of government in the United States. (CHAMBERLAIN)

85 Comparative Government I 3 credits First semester
A comparative study of European parliamentary governments. Attention will be given to the responsible ministry, relation between the executive and the legislature, and recent political developments. (BERGERSON)

86 Comparative Government II 3 credits Second semester
A comparative study of the new governments of Europe, including Italy, Germany, Spain, Russia. (BERGERSON)

For Advanced Undergraduates and Graduates

Ordinarily six credits in lower division courses in political science are required for registration in the following courses. Exceptions may be made in special cases with the consent of the instructor concerned.

127 Political Theory 3 credits First semester
A study of the leading political theories from the earlier stages of civilization to the present. Emphasis on the modern theories of the state. (BERGERSON)

128 American Political Theory 3 credits Second semester
American contributions to political thought. Writings of Paine, Hamilton, Jefferson, Calhoun, and others. Consideration will also be given to more recent developments in American political theory. (BERGERSON)

131 Political Parties 2 credits First semester
Public opinion and the political process. Party machines, the spoils system, nominating methods, conduct of elections. (CHAMBERLAIN)

132 Legislation and Legislative Bodies 2 credits Second semester
Practical workings of legislative bodies. Special attention will be given to such problems as representation, committee activity, the lobby, and the influence of the executive. (BERGERSON)

137 International Relations 3 credits First semester
The nature and importance of international relations. An examination of nationalism, imperialism, militarism, internationalism, and the problems which result therefrom. (KERR)

138 International Political Organization 3 credits Second semester
A survey of the chief agencies for international cooperation, past and present. Present status of the League and the World Court will also be studied. (BERGERSON)

141 World Politics 3 credits First semester
Developments in international politics since the World War. The chief elements conditioning the foreign policies of the major world powers. (BERGERSON)

142 Conduct of American Foreign Policy 3 credits Second semester
Analysis of the chief factors which tend to determine our foreign policy. Especial consideration will be given to Dollar Diplomacy, the Open Door, Isolation, etc. (BERGERSON)

151 Public Administration 3 credits First semester
The development of public administration and its relation to the other branches of government. The regulation and control of administrative agencies. (CHAMBERLAIN)

152 Government and Business 3 credits Second semester
Growth of governmental control, 1890 to the present. Sherman Act, Clayton Act, Esch-Cummins Act. Analysis of the New Deal and its implications for the future. (KERR)

165 National Government and Administration
3 credits First semester
A study of the responsibilities forced upon the national government by modern technology. Recent attempts to improve the quality of governmental administration will receive consideration. (CHAMBERLAIN)

166 The American Constitution 3 credits Second semester
A study of the leading constitutional principles in their historical setting. Consideration will be given to federal and state relations, the power of Congress, due process, and civil liberties. (KERR)

Business Law 3 credits Each semester
See Bus. 165-166. (KERR)

Primarily for Graduates

205 Principles of International Law 3 credits First semester
Origin and development of International Law and its present status. Case method will be used. Special study of recent developments. (BERGERSON)

206 Problems in Local Government 3 credits Second semester
Emphasis on new problems growing out of increasing complexity of our economic and social structure. Special consideration to county problems. (CHAMBERLAIN)

207-208 Seminar 2 credits Each semester
Each semester a problem in some field of Political Science will be chosen for study. Course will be conducted through papers and reports. (KERR, CHAMBERLAIN)

211-212 Research in Political Science
Credits to be arranged Each semester
(KERR)

Poultry Husbandry

Professor LAMPMAN, Mr. WILLIAMS

Primarily for Undergraduates

Introductory Survey 1 credit First semester
This course is given in conjunction with Animal Husbandry 1. (LAMPMAN, WILLIAMS)

For Advanced Undergraduates and Graduates

101 Market Grades and Marketing Agencies
2 credits First semester
Factors influencing quality of poultry products; candling and grading eggs; classification and inspection of grades of market poultry; marketing agencies. One lecture and one laboratory weekly. (LAMPMAN)

102 Advanced Poultry Production 3 credits Second semester
An advanced study of problems concerned with flock management and modern practices. Application of experimental data. Particularly adapted for major students of Animal Husbandry and Agricultural Education. Two lectures and one laboratory weekly. Prerequisite: A.H. 1. (LAMPMAN)

105 Advanced Breeding and Judging 3 credits First semester
Exhibition and utility phases of breeding and judging. Breed and variety characteristics; practice in judging exhibition and utility poultry, and a study of the inheritance of standard-bred and utility qualities. Two lectures and one laboratory weekly. Given in alternate years. (Will be given in 1941-42.) Prerequisite: A.H. 1. (WILLIAMS)

108 Incubation and Brooding 3 credits Second semester
Principles involved in modern artificial methods. The embryonic development of the chick during incubation and the nutritional requirements of growing chicks receive special emphasis. One lecture and one recitation weekly. Laboratory to be arranged. Given in alternate years. (Will be given in 1940-41.) Prerequisite: A.H. 1. (LAMPMAN)

121-122 Special Problems Credits to be arranged Each semester
(LAMPMAN, WILLIAMS)

123-124 Thesis 1 credit Each semester

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
(LAMPMAN, WILLIAMS)

Psychology

Professors BARTON and LEMON, Dr. BOYER

The courses of this department are arranged in three different orders of sequence: for those who contemplate a business career; for those who hope to become teachers; and for those who care to specialize in Psychology. Notice that some courses are offered alternate years.

Primarily for Undergraduates

1 General Psychology 4 credits Either semester
Prerequisite to all other courses in Psychology. The student will attempt to understand the underlying principles of human nature. The object of such study will be that of knowing how best to control what people think, feel, and do. Three lectures and one laboratory period a week. (BARTON)

2 Educational Psychology 3 credits Either semester
Application of results of experimental psychology to teaching; including problems of inherited nature, learning, individual differences; measurements of mental traits. Prerequisite: Psych. 1. (LEMON)

4 Applied Psychology 4 credits Second semester
The general nature of the human organism and the effects of environmental influences; business practices; evidences; testimony; helps in medical practice. Three lectures and one laboratory period a week. Prerequisite: Psych. 1. (BARTON)

54 Psychology of Advertising and Selling 3 credits Second semester
A consideration of the psychological factors involved in advertising and selling, and their relation to individual differences. Prerequisites: Psych. 1 and 4. (BOYER)

57 Psychology of the Exceptional Child
3 credits First semester
A study of deviating children with a discussion of their needs and treatment. Prerequisites: Psych. 1 and 4. (BARTON)

For Advanced Undergraduates and Graduates

105 Comparative Psychology 3 credits First semester
A general survey of what has been done in an experimental way to determine the capacities, reactions, and general nature of lower animals in situations of controlled stimulation. Three lectures a week. Prerequisites: Psych. 1 and 4, or equivalent. (BOYER)

106 Infant and Child Psychology 3 credits Second semester
Behavior problems and the psychological care of the young child. Prerequisites: Psych. 1 and 2, or equivalent. (LEMON)

109 Psychology of Criminality 3 credits First semester
The nature, determination, causes and treatment of criminals with a view to their best interests and the safety of society. Prerequisites: Psych. 1 and 4, or equivalent. (BARTON)

111 Elementary Abnormal Psychology 3 credits First semester
The nature, causes, prevention, and treatment of functional and organic mental deficiency, and derangement. Prerequisites: Psych. 1 and 4, or equivalent. (BARTON)

116 Psychology of Employment and Handling of Employees
3 credits Second semester
Analysis of the psychological factors involved in the interrelated activities of the worker and the management. Methods for developing and training workers; measures of active ability and proficiency; selection and placement. Prerequisites: Psych. 1 and 4, or equivalent. (BOYER)

117 Psychological Methods 3 credits First semester
A practical course in statistical methods as applied to psychology. The course includes measures of central tendency and dispersion, graphic methods; probability curve; correlations; reliability of statistical measures. Prerequisites: Psych. 1 and 4, or equivalent. (BOYER)

121-122 Advanced Psychology 4 credits Each semester
A survey of the leading problems, conceptions, methods, and results of modern psychology. Critical examination of present tendencies in textbooks. Three lectures and one laboratory period a week. Prerequisites: Psych. 1 and 4, or equivalent. (BOYER)

151 Psychology of High School Subjects
3 credits First semester
Specific application of educational psychology to the teaching of the subjects of the high school curriculum. Prerequisites: Psych. 1 and 2. (LEMON)

152 Psychology of Elementary School Subjects
3 credits Second semester
A course designed for superintendents, supervisors, and teachers in the elementary school. The application of educational psychology to the subjects of the course of study of the elementary school. Prerequisites: Psych. 1 and 2. (LEMON)

153 Psychology of Adolescence 3 credits First semester
A complete psychological study of the development, urges, interests, personality, and mental hygiene of the junior and senior high school student. Prerequisites: Psych. 1 and 2, or equivalent. (LEMON)

161 Psychology of Personality 3 credits First semester
A consideration of the nature and development of personality. Lectures, discussions and reports on the various literature in the field. Prerequisites: Psych. 1 and 4, or equivalent. (BARTON)

Primarily for Graduates

201 Advanced Educational Psychology
3 credits First semester
An advanced course covering the field of educational psychology. Lectures, discussions, and reports on the experimental literature in the field. Prerequisites: Psych. 1 and 2, or equivalent. (LEMON)

205 Mental Hygiene 3 credits First semester
An examination of the literature and experimental findings of the causes and means of prevention of crime, neuroses, and psychoses. Other milder maladaptations will be given consideration. Prerequisites: Psych. 1, 4 and 111. (BARTON)

206 Psychology of Learning 3 credits Second semester
A more intense consideration of the factors conditioning the learning process; a searching study of the roles of repetition, recency, primacy, feeling, fitness of material to past activity and to future needs. Prerequisites: Psych. 1 and 2, or equivalent. (BOYER)

211 Advanced Abnormal Psychology 2 credits Second semester
An advanced course in the study of mental deficiency and derangement. Prerequisites: Psych. 1, 4 and 111. (BARTON)

212 Advanced Psychological Methods 2 credits Second semester
An advanced course to supplement Psych. 117. (Psychological Methods) which includes special correlation techniques; partial and multiple correlation, factor analysis, and experimental techniques adapted to psychological materials. Prerequisite: Psych. 117. (BOYER)

213-214 Seminar in Psychology 1 credit Each semester
Reading and reports on the current literature of subjects chosen. Opportunity is also afforded for research students to present their problems for discussion and criticism. One meeting each week. (BARTON, LEMON)

215-216 Psychological Research 1 to 8 credits Each semester
Opportunity is given for students to do original work in some field of psychological investigation. Before registering, the student should consult the instructor. (BARTON, LEMON, BOYER)

217 Psychology in Ethics 3 credits Second semester
An attempt to ascertain the part played by human nature in determining moral conduct. Relation of these considerations to the various ethical theories. Prerequisites: Psych. 1 and 4, or equivalent. (BARTON)

220 Social Psychology 3 credits Second semester
Innate tendencies influenced by the behavior of one's fellows, and their organization into group attitudes of opposition and cooperation; the receptive roles of habit, custom, language, suggestion, imitation, and emotion and their relation to social progress. Prerequisites: Psych. 1 and 4, or equivalent. (BARTON)

Public Speaking

(See under *English*)

Religious Education

(For the plan of work see *Religious Education* in Part I. For the courses offered, see the separate announcements issued by the Religious Institutes.)

Secretarial Studies

Assistant Professor REIERSON, Mrs. ALDRICH, Miss MCINTOSH

Primarily for Undergraduates

E-F Typewriting No credit Each semester
Devoted to the development of typewriting technique, care of the machine, letter set-up, personal typewriting, and stencil cutting. No previous training is necessary. (ALDRICH)

G-H Advanced Typewriting No credit Each semester
Emphasis is placed upon personal typewriting, upon further development of a rapid and accurate writing rate, and upon the organization of typed material. (MCINTOSH)

***15n-16 Shorthand and Transcription** 4 credits Each semester
An introductory course in Gregg shorthand. The techniques in shorthand writing and transcription are fully developed. (REIERSON, ALDRICH, MCINTOSH)

***71-72 Intermediate Dictation and Transcription**
4 credits Each semester
Major emphasis is placed upon the development of a broad shorthand vocabulary, upon taking dictation at a high rate, and upon transcription techniques. Prerequisites: S.S. 15n-16 or two years of high school shorthand. (REIERSON, ALDRICH, MCINTOSH)

73-74 Expert Dictation 2 credits Each semester
Advanced dictation and court reporting. Prerequisite: a speed of 140 words a minute. (REIERSON)

For Advanced Undergraduates and Graduates

122 Office Training and Standards 2 credits Second semester
In this course students will receive training in the operation of the commonly used office machines such as the duplicating, dictating and transcribing, addressing, and calculating machines; in filing, telephoning, and dictating; and in the responsibilities of a secretary. Prerequisite: For secretarial majors—S.S. 15n-16; for nonsecretarial majors—S.S. E-F and Eng. 153. (REIERSON)

162 Office Management 2 credits Second semester
An analysis of the factors which contribute to efficiency in office management, in supervision, and in executive control. (REIERSON)

191 Methods in Commercial Teaching 4 credits First semester
A thorough investigation into the current methods of teaching typewriting, shorthand, transcription, bookkeeping, junior business training, office practice, and other allied business subjects. Prerequisites: S.S. 15n-16; Bus. 81-82, or their equivalent. (REIERSON)

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* Students who enter the University with two years of high school shorthand will register for Bus. 71-72. Those who have had one year of shorthand will normally take Bus. 16, but in some cases will be advised to register for Bus. 15n.

Sociology

Professor KERR, Mr. FOSKETT

Primarily for Undergraduates

51 Introduction to Sociology 3 credits Each semester
The student is introduced to such fundamental sociological concepts as group, community, culture, institution, interaction, contact, isolation, conflict, accommodation and control. Attention will be given to the fundamental problems and fields of inquiry in sociology. Not open to freshmen. (FOSKETT)

72 Social Anthropology 3 credits Second semester
A study of the customs, practices, beliefs, institutions and social organization of primitive peoples; the phenomena of culture diffusion and independent invention; the importance of primitive culture for Western civilization; the influence of Western ideas and inventions on backward peoples. (FOSKETT)

Primarily for Advanced Undergraduates

121 The Family 3 credits First semester
The historical and economic backgrounds of the modern family; the family as a social institution, its nature and functions; the family today; conditions affecting the family in America. Prerequisite: Soc. 51. (FOSKETT)

122 Community Organization 3 credits Second semester
The roles and functions of the various community institutions viewed in their dynamic aspects. Present-day tendencies in community organization. Prerequisite: Soc. 51. (FOSKETT)

131 Social Control 3 credits First semester
The nature and function of social control; the means of social control; the problems of social control in modern society. Special attention will be given to the influence of the group on the individual. Prerequisite: Soc. 51. (FOSKETT)

132 Criminology 3 credits Second semester
The problem of crime and criminals; the making of the criminal; the history of punishment; modern penal institutions and methods; present tendencies in crime prevention. Prerequisite: Soc. 51. (FOSKETT)

151 Social Change 3 credits First semester
The problem of social change; interpretation of social change; the relations of social institutions to social change. Particular attention will be given to the idea of progress and the doctrine of social evolution. Prerequisite: Soc. 51. (FOSKETT)

152 Social Problems 3 credits Second semester
Rapid social change resulting from natural catastrophe, mobility, inventions, or scientific discovery in relation to the breakdown of control in existing economic, social, and political institutions; current concepts of social problems. Prerequisite: Soc. 51. (FOSKETT)

156 Social Case Work 3 credits Second semester
Principles and theories of various sciences in relation to the study of maladjusted persons and dependent families. Methods of treatment with the view to their rehabilitation discussed. Prerequisite: Soc. 51. (FOSKETT)

158 Race and Nationality Problems 3 credits Second semester
The social consequences of the migration of races and nationalities; theories of racial differences; programs of assimilation in Europe and in America. Prerequisite: Soc. 51. (FOSKETT)

165 Public Opinion 3 credits First semester
Propaganda and other agencies supplying the public with information; the part played by the individual; the formation of public opinion; the role and function of public opinion in America. Prerequisite: Soc. 51 or senior standing. (FOSKETT)

S166 Collective Behavior Summer Session
A study of the problem of social interactions in which the individual develops his personality and in which he manifests that personality.

171 Advanced Sociology 3 credits First semester
The history of sociology; a critical examination of the methods employed in sociological inquiry; current sociological theories; an evaluation of the contributions of sociology to modern thought. Prerequisite: Soc. 51. (FOSKETT)

Primarily for Graduates

S200 Contemporary Social Movements 2 credits Summer Session
A comparative study of the leading social philosophies and the movements based on them. An attempt is made to analyze these movements in terms of the conditions out of which they arose and the place they occupy in the present.

211-212 Research in Sociology Credits to be arranged Each semester
(KERR, FOSKETT)

S220 Seminar in Social Investigation 2 credits Summer Session
A survey of the methods and techniques used in social investigations. A careful analysis will be made of a number of outstanding studies in an attempt to evaluate the contributions and possibilities of research.

S221 Seminar in Sociological Theory 2 credits Summer Session
An historical survey of sociological thought from preliterate peoples to the present. Attention is given to the social conditions underlying social theory as well as to the principal concepts developed.

Spanish

(See under *Modern Languages*)

Zoology

Professor STOUGH, Assistant Professors GLASS and STEFFENS;
Dr. PRATT, Mr. MCDONALD, Mr. ARVEY

Primarily for Undergraduates

1-2 General Zoology 4 credits Each semester
The general problems of animal classification, structure, physiology, activities and adaptations, sex, development, heredity, evolution, and life histories of representative and economic forms. Two lectures, one quiz, and two two-hour laboratory periods a week. (STOUGH, PRATT, MACDONALD, ARVEY)

6 Physiology 3 credits Second semester
Designed to give a general knowledge of the more important physiological problems, and of the structure and functions of the human body. Two recitations and one three-hour laboratory period a week. Prerequisite: Zool. 1. (GLASS)

53 Invertebrate Zoology 4 credits First semester
A systematic study of invertebrates with special attention to life histories, taxonomy, and distribution of fresh-water and terrestrial forms occurring in this region. Recommended especially for prospective teachers of zoology and biology. Two lectures and two three-hour periods of laboratory or field work a week. Prerequisite: Zool. 1, or junior standing. (PRATT)

54 Comparative Anatomy of Vertebrates
4 credits Second semester
Dissection and study of types of vertebrates, together with lectures and discussions on general vertebrate anatomy with special reference to the evolution of the various organ systems. Two lectures and two three-hour laboratory periods a week. Prerequisites: Zool. 1-2 or 1 and 53. (STOUGH, STEFFENS)

55-56 Anatomy of the Human Body 2 credits Each semester
An elementary study of the structure of the human body. Specially designed for majors in physical education. Prerequisites: Zool. 1 and 6. (GLASS)

58 Heredity and Eugenics 2 or 3 credits Second semester
A scientific study of the main facts and theories of heredity and its mechanism, with emphasis on phases pertaining to human welfare. Two lectures a week. Prerequisites: Zool. 1 and 2, 6, or 53, or senior college standing. (GLASS)

(This course may be taken for three credits if desired by adding one three-hour laboratory per week to the above. Living organisms will be used to illustrate the principles of heredity.)

60 Social Hygiene (Women) 2 credits Second semester
Prerequisite: Zool. 1.

64 Field Zoology 3 credits Second semester
Designed to give a working knowledge of the more common animals in the Idaho fauna; field trips for observing and collecting; identification of species in laboratory; lectures on taxonomy, adaptations and ecological relationships. One lecture and two three-hour laboratory periods a week. Prerequisite: Zool. 1 or junior standing. (PRATT)

66 Protozoology 3 credits Second semester
An introduction to the study of protozoans. Lectures deal with their classification, morphology, life histories, physiology, and ecology with special reference to forms pathogenic in man. Laboratory work involves the collection, cultivation, taxonomy, and morphology of free-living and parasitic species. Two lectures and one three-hour laboratory period a week. Prerequisite: Zool. 1. (PRATT)

68 Ornithology 3 credits Second semester
A study of the origin, evolution, structure, habits, adaptations, distribution, classification, and economic value of birds. Two lectures and one three-hour laboratory period each week. Prerequisite: Zool. 1. (STOUGH, ARVEY)

70 Social Hygiene (Men) 2 credits First semester
Prerequisite: Zool. 1.

For Advanced Undergraduates and Graduates

103-104 Human Anatomy 2 credits Each semester
A study of the general structure of the human body through mammalian dissection, charts, models, dissectible mannikin and human skeletons. Should be taken along with Zool. 105-106. One lecture and one three-hour laboratory period a week. Prerequisites: Zool. 1, 2, 6, or 53, 54, and 113. (GLASS)

105-106 Human Physiology 3 credits Each semester
A study of the various physiological functions of the human body. Required of pre-nursing students and seniors in pre-medicine. Recommended to others, particularly to those majoring in home economics, physical education, psychology, and education who desire a more thorough course than Zool. 6. Should be preceded by, or be taken along with, Zool. 103-104. One lecture and two three-hour laboratory periods a week. Prerequisites: Zool. 1 and 2, 6 or 53, and Chem. 1-2. (GLASS)

107 Organic Evolution 3 credits First semester
A critical discussion of the facts and theories of organic evolution and the general development of evolutionary speculation. Three lectures a week. Prerequisites: Zool. 1-2 and 54 or 58. (Zool. 113 is recommended.) (GLASS)

109 Vertebrate Histology and Organology
4 credits First semester
A study of the various tissues, followed by the study of the minute structure of the chief mammalian organs. Two lectures and two three-hour laboratory periods a week. Prerequisites: Zool. 1-2 and 54. (STEFFENS)

110 Histological Technique 2 credits Second semester
A laboratory course in the various techniques employed in animal histology, including methods of fixing, sectioning, staining, mounting, etc. Prerequisites: Zool. 1-2 and 54. (STEFFENS)

111 General Neurology 4 credits First semester
Not offered in 1940-41.

113 Embryology 4 credits First semester
Lectures on general problems. The laboratory work deals with studies on maturation, fertilization, segmentation, and with serial sections and entire embryos of the chick, pig, and human being with reference to the origin of the various types of tissue and the development of the different organs. Two lectures and two three-hour laboratory periods a week. Prerequisites: Zool. 1-2, or 1-53, and 54. (STOUGH, STEFFENS)

115 Cytology 4 credits First semester
A study of the animal cell with special emphasis on its relation to sex, genetics, and evolution. Laboratory work in special technique and study of principal cytological phenomena. Two lectures and two three-hour laboratory periods a week. Prerequisites: Zool. 1-2 or 1-53, 54, 113, and Chem. 1-2. (STOUGH, STEFFENS)

118 Parasitology 3 credits Second semester
A study of animal parasites with special emphasis on those of man. Laboratory includes the securing of living parasites in all stages of their life histories and the treatment of this material for morphological and other studies. Recommended for pre-medical and pre-nursing students as well as for zoology majors. Two lectures and one three-hour laboratory period a week. Prerequisite: Zool. 2 or 53. (PRATT)

119-120 Thesis 1 to 3 credits Each semester
(STOUGH, GLASS, STEFFENS, PRATT)

151-152 Photographic Technique 2 credits Each semester
Photography as a scientific implement and aid in scientific and medical research. Enlarging, coloring, outdoor and nature photography, orthochromatic photography, x-ray photography, photomicrography, and color photography. One lecture and one three-hour laboratory or field-work period a week. Prerequisites: Zool. 1; and Chem. 1-2, or by special permission by head of department. (STOUGH, STEFFENS, PRATT)

161-162 Pro-Seminar 2 credits Each semester
An introduction to the methods of zoological research. Limited to seniors majoring in zoology. (STOUGH)

Primarily for Graduates

201-202 Research Credits to be arranged Each semester
Problems will be assigned, and students prepared for independent investigation in any phase of zoology will be given all the opportunities available for carrying on their work. (STOUGH, GLASS)

213-214 Advanced Morphology 2 credits Each semester
Not offered 1940-41.

216 Advanced Cytology 4 credits Second semester
Continuation of Zool. 115 for graduate students. One lecture and three three-hour laboratory periods a week. (STOUGH)

261-262 Seminar 2 credits Each semester
Reports on advanced literature in the various phases of zoology. (STOUGH)

PART VI

Administrative Officers and Faculty of the University

Administration

Board of Regents

MR. ARTHUR L. SWIM, *President* ..... Twin Falls
Term expires April, 1942

MRS. A. A. STEEL, *Vice President* ..... Parma
Term expires April, 1941

MR. W. C. GEDDES, *Secretary* ..... Winchester
Term expires April, 1944

MR. CLENCY ST. CLAIR ..... Idaho Falls
Term expires April, 1940

MR. W. F. MCNAUGHTON ..... Coeur d'Alene
Term expires April, 1943

Executive Committee for the University

W. C. GEDDES, *Chairman*
CLENCY ST. CLAIR — ARTHUR L. SWIM
J. W. CONDIE — W. F. MCNAUGHTON
PRESIDENT H. C. DALE, *Secretary*

Administrative Officers

HARRISON CLIFFORD DALE, A.M. ..... *President of the University*
THOMAS STONER KERR, LL.B. ..... *Dean of the College of Letters and Science*
EDWARD JOHN IDDINGS, M.S., *Dean of the College of Agriculture, Director of Agricultural Experiment Station, and Director of Extension Division*
JESSE E. BUCHANAN, C.E., *Dean of the College of Engineering and Director of the Engineering Experiment Station*
PENDLETON HOWARD, PH.D. ..... *Dean of the College of Law*
ARTHUR WILLIAM FAHRENWALD, E.M., MET.E. ..... *Dean of the School of Mines*
DWIGHT SMITHSON JEFFERS, PH.D. ..... *Dean of the School of Forestry*
JAMES FRANKLIN MESSENGER, PH.D. ..... *Dean of the School of Education*
RALPH HUNTER FARMER, A.B. ..... *Dean of the School of Business Administration*
CHARLES WILLIAM HUNGERFORD, PH.D., *Dean of the Graduate School, and Vice-Director of the Agricultural Experiment Station*
JAY GLOVER ELDRIDGE, PH.D. ..... *Dean of the University Faculty*
JOHN RALPH NICHOLS, PH.D. ..... *Executive Dean of the Southern Branch* (Pocatello)
PERMEAL J. FRENCH, M.A. ..... *Dean of Women Emerita*
BEATRICE OLSON, M.A. ..... *Dean of Women*
HERBERT J. WUNDERLICH, M.A. ..... *Dean of Men and Administrative Secretary*
HAROLD D. CRAMER, M.D., *University Physician and Director, University Health, and Acting Director of Pre-Medical Studies*
ARCHIE N. JONES, M.A. ..... *Director of Music Curricula*
MARGARET RITCHIE, M.A. ..... *Director of Home Economics Curricula*
FRANK STANTON, LL.B. ..... *Bursar*
ELLA LETITIA OLESEN ..... *Registrar*
MARY BELLE SWEET, B.L.S. ..... *Librarian*
OREN ARAM FITZGERALD, M.A. ..... *University Editor*
RAYMOND W. LIND, B.S. (C.E.) ..... *Superintendent of Buildings and Grounds*
*FLOYD LYMAN PACKER, B.S. (BUS.) ..... *Purchasing Agent and Assistant Bursar*
GALE L. MIX, LL.B. ..... *Graduate Manager of Student Activities*
ROBERT FULTON GREENE, M.S. (ED.) ..... *Director of Dormitories*
PHILIP HENDRICK SOULEN, M.A. ..... *High School Inspector*
FULTON GILBERTH GALE, M.S. (ED.) ..... *Supervisor of Practice Teaching*

* Resigned December 31, 1939.

Faculty*

PROFESSORS, ASSOCIATE PROFESSORS, AND ASSISTANT PROFESSORS

The figure following the name and degree of each officer indicates the date of his first appointment to the staff.

HARRISON CLIFFORD DALE, A.M., *President of the University*
A.B., A.M., Harvard. (1920.) 1937.

CLAUDE WILLIAM ASHBY, M.A., *Assistant Professor of Modern Languages*
B.A., M.A., University of Idaho. 1925.

HAROLD LUCIUS AXTELL, PH.D., *Professor of Classical Languages, and Head of the Department of Classical Languages*
A.B., Kalamazoo College; A.B., A.M., Ph.D., University of Chicago. 1902.

G. ORIEN BAKER, M.S. (AGR.), *Assistant Professor of Agronomy; and Soil Technologist, Agricultural Experiment Station*
B.S. (Agr.), M.S. (Agr.), Washington State College. 1935.

THEODORE PAUL BANK, M.A., *Professor of Physical Education, Head Football Coach, and Head of the Department of Physical Education for Men*
A.B., University of Michigan; M.A., Tulane University. 1935.

WILLIAM CARR BANKS, M.A., *Assistant Professor of English*
A.B., M.A., University of Washington. 1927.

JOSEPH WESLEY BARTON, PH.D., *Professor of Psychology, and Head of the Department of Psychology*
B.S., University of Utah; Ph.D., Peabody Teachers College. 1920.

ARTHUR HENRY BEATTIE, M.A., *Assistant Professor of Modern Languages*
B.A., M.A., University of British Columbia. 1931.

WILLIAM MALCOLM BEESON, PH.D., *Associate Professor of Animal Husbandry, and Associate Animal Husbandman of the Agricultural Experiment Station*
B.S. (Agr.), Oklahoma A.&M. Col.; M.S. (Agr.), Ph.D., U. of Wisconsin. 1936.

JACOB ROY BENDER, M.S., *Associate Professor of Mathematics*
A.B., Ohio University; M.S., University of Washington. 1921.

HOBART BERESFORD, B.S. (AGR.ENGR.), *Professor of Agricultural Engineering; and Agricultural Engineer, Agricultural Experiment Station*
B.S. (Agr.Engr.), Iowa State College. 1924.

ELMER FREDERICK BETH, M.A., *Assistant Professor of Journalism*
B.A., M.A., University of Wisconsin. 1930.

EARLE BLODGETT, PH.D., *Assistant Professor of Plant Pathology; and Associate Plant Pathologist, Agricultural Experiment Station*
B.S. (Agr.), M.S. (Agr.), University of Idaho; Ph.D., U. of Wisconsin. 1927-30; 1935.

D. E. BRADY, PH.D., *Assistant Professor of Animal Husbandry*
B.S. (Agr.), Ph.D., University of Minnesota. 1938.

CORNELIUS JAMES BROSNAN, PH.D., *Professor of American History, and Head of the Department of American History*
A.B., U. of Michigan; M.A., Harvard U.; Ph.D., U. of California. 1921.

JESSE E. BUCHANAN, C.E., *Professor of Civil Engineering, Dean of the College of Engineering and Director of the Engineering Experiment Station*
B.S. (C.E.), M.S. (C.E.), C.E., University of Idaho. (1927.) 1938.

LOUIS CLYDE CADY, PH.D., *Professor of Chemistry, and Head of the Department of Chemistry and Chemical Engineering*
B.S. (Chem.E.), M.S., University of Idaho; Ph.D., U. of Wisconsin. 1922.

ISAAC NEWTON CARTER, C.E., *Professor of Civil Engineering*
B.S. (C.E.), M.S. (C.E.), C.E., University of Idaho. 1923.

LAWRENCE HENRY CHAMBERLAIN, M.A., *Assistant Professor of Political Science*
B.S. (Ed.), M.A., University of Idaho. 1931.

CURTIS WORTH CHENOWETH, M.A., *Professor of Philosophy, and Head of the Department of Philosophy*
B.A., Wesleyan College of West Virginia; M.A., Harvard University. 1919.

†VIRGIL ARTHUR CHERRINGTON, M.S., *Assistant Professor of Bacteriology; and Assistant Bacteriologist, Agricultural Experiment Station*
B.S., Iowa State College; M.S., University of Idaho. 1928.

LEO M. CHRISTENSEN, PH.D., *Professor of Agricultural Chemistry; and Agricultural Chemist, Agricultural Experiment Station*
B.S. (Chem.Eng.), Ph.D., Iowa State College. 1939.

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* Compiled as of December 31, 1939.
† On leave of absence 1939-40.

FREDERIC CORSE CHURCH, PH.D., *Professor of European History and Civilization, and Head of the Department of European History and Civilization*
A.B., Ph.D., Cornell University. 1921.

CARL CLAUS, *Associate Professor of Music*
Graduate, Belgian Conservatory of Music. 1922.

WILLIAM HOMER CONE, PH.D., *Assistant Professor of Chemistry*
B.S., M.S., University of Idaho; Ph.D., University of Washington. 1924.

GEOFFREY GAINSBOROUGH COOPE, M.A., *Assistant Professor of English*
B.A., University of British Columbia; M.A., University of California; M.A., University of Birmingham, England. 1927.

JOHN HOUSTON CUSHMAN, A.M., *Professor of English, and Head of the Department of English*
A.B., Brown University; A.M., Harvard University. 1919.

REXFORD F. DAUBENMIRE, PH.D., *Assistant Professor of Botany*
B.S., Butler University; M.S., University of Colorado; Ph.D., University of Minnesota. 1936.

ELMER EDGAR DAVISON, M.B.A., *Assistant Professor of Business Administration*
B.B.A., M.B.A., University of Washington. 1930.

DONALD DUDLEY DUSAULT, M.S., *Assistant Professor of Chemistry*
B.S., M.S., University of Idaho. 1923.

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B.S., Cornell University; A.M., Duke University; S.M., Ph.D., Harvard University. 1935.

JAY GLOVER ELDRIDGE, PH.D., *Professor of Modern Languages, Head of the Department of Modern Languages, and Dean of the University Faculty*
B.A., M.A., Ph.D., Yale University. 1901.

ARTHUR WILLIAM FAHRENWALD, E.M., MET.E., *Professor of Mining and Metallurgy, and Dean of the School of Mines*
B.S.(Met.E.)., Met.E., South Dakota School of Mines; E.M., New Mexico School of Mines. 1919.

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A.B., Oberlin College. 1927.

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B.S.(Agr.), M.S.(Agr.Econ.), University of Minnesota. 1939.

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B.Mus., Oberlin College; M.Mus., Arthur Jordan Conservatory. 1938.

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B.S.(Agr.), M.S.(Agr.), University of Idaho. 1922.

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B.A., M.A., University of Nebraska; Ph.D., University of Washington. 1913.

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B.S.(M.E.), M.E., Washington University. 1925.

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ERWIN GRAUE, PH.D., *Professor of Economics*
B.S., Ph.D., Cornell University. 1928.

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B.S., Utah Agricultural College; M.S., Ph.D., Iowa State College. 1929.

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ROBERT HARSH HULL, E.E., *Associate Professor of Electrical Engineering*
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CHARLES WILLIAM HUNGERFORD, PH.D., *Professor of Plant Pathology; Plant Pathologist, Agricultural Experiment Station; Vice-Director of the Agricultural Experiment Station; and Dean of the Graduate School*
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GLENN J. JACOBY, M.S.(ED.), *Associate Professor of Physical Education and Intramural Director*
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B.S.(Arch.), B.S.(C.E.), M.S.(C.E.), University of Idaho. 1931.

DWIGHT SMITHSON JEFFERS, PH.D., *Professor of Forestry, and Dean of the School of Forestry*
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ARCHIE N. JONES, M.A., *Professor of Music, and Head of the Department of Music*
Diploma, University of Nebraska School of Music; B.S., M.A., University of Minnesota. 1935.

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B.S.F., M.S.F., Ph.D., University of Michigan. 1935.

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Colby College. 1935.

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B.S.(For.), Purdue University; M.S., New York State College of Forestry. 1938.

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B.S., Utah State Agricultural College; Ph.D., University of California. 1930.

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B.S.(Pre.Med.), M.S., University of Idaho. 1929.

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A.B., M.A., DePauw University. 1920.

ROBERT ANDREW TESSIER, B.E.(Phy.Ed.), *Assistant Professor of Physical Education for Men, and Assistant Football Coach*
B.E.(Phy.Ed.), Tulane University. 1935.

DONALD RICHARD THEOPHILUS, PH.D., *Professor of Dairy Husbandry; and Dairy Husbandman, Agricultural Experiment Station*
B.S.(An.Hus.), B.S.(Dairy Mfg.), M.S.(Dairy Bact.), Ph.D., Iowa State College. 1927.

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B.A., University of Chicago; Ph.D., University of Heidelberg. 1920.

FORREST F. TWOGOOD, B.A., *Assistant Professor of Physical Education for Men, Assistant Football Coach, and Head Basketball and Baseball Coach*
B.A., University of Iowa. 1936.

ANDREW VANHOOK, PH.D., *Assistant Professor of Chemical Engineering*
B.S.(Chem.E.), Brooklyn Polytechnic Institute; Ph.D., New York University-Heights. 1938.

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B.S., M.S., Pennsylvania State College; Ph.D., Johns Hopkins University. 1927.

EDWIN U. O. WATERS, Major, Infantry, U. S. Army, *Assistant Professor of Military Science and Tactics*
Graduate, Infantry School. 1937.

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B.A. Sc., University of Toronto; M. Sc., Ph.D., McGill University. 1938.

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B.S., University of Utah; M.S., University of California. 1924.

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B.S., Montana State; M.S., Iowa State. 1939.

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B.A., University of Nebraska; M.A., Columbia University. 1923.

ERNEST WOHLETZ, B.S., *Assistant Professor of Forestry*
B.S., University of California. 1937.

GEORGE WALLIS WOODBURY, M.S., *Associate Professor of Horticulture; and Assistant Horticulturist, Agricultural Experiment Station*
B.S., M.S., Michigan State College. 1935.

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INSTRUCTORS AND ASSISTANTS IN INSTRUCTION

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CLARA E. ALDRICH, B.A.(BUS.), *Instructor in Secretarial Studies*
B.A.(Bus.), Albany College. 1938.

RHESA MCCOY ALLEN, JR., B.S.(MIN. GEOL.), *Teaching Fellow in Geology*
B.S.(Min.Geol.), Virginia Polytechnic Institute. 1938.

VADA HAZEL ALLEN, M.S., *Instructor in Botany*
B.S., M.S., University of Idaho. 1931.

WILLIAM BOYLE ARDREY, PH.D., *Instructor in Bacteriology; and Assistant Bacteriologist, Agricultural Experiment Station*
B.S., Monmouth College; M.S., Ph.D., Michigan State. 1939.

MARTIN DALE ARVEY, A.B., *Fellow in Zoology*
A.B., U. of California. 1938.

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B.S.(Ed.), University of Idaho. 1939.

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A.B., Vassar College; M.A., Ph.D., University of Washington. 1936.

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B.S.(Bus.), University of Idaho. 1933.

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B.A., Gooding College; M.A., University of Idaho. 1928.

HARALD BERGERSON, M.A., *Instructor in Political Science*
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B.S., M.S., University of Idaho; Ph.D., Peabody College. 1930.

CHANDLER BRAGDON, M.A., *Instructor in European History and Civilization*
B.A., M.A., Cambridge University. 1939.

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BURTON ROBERT BROWN, B.A., *Fellow in Philosophy*
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CARL WILLIAM BROWN, B.S.(E.E.), *Instructor in Electrical Engineering*
B.S.(E.E.), Kansas State College. 1939.

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B.A., Walla Walla College; B.A., Pacific University; M.A., University of Oregon. 1927.

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WALTER R. DAVIDSON, *Instructor in Vocational Carpentry.* 1939.

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B.Ch., M.A., University of Minnesota. 1938.

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BARNABY CHARLES FLUKE, B.S., *Fellow in Entomology*
B.S., University of Wisconsin. 1939.

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A.B., M.A., University of California. 1936.

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B.S.(An.Hus.), University of Wisconsin; M.S.(DairyHus.), University of Minnesota. 1939.

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B.S.(M.E.), M.S.(M.E.), University of Idaho. 1935.

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B.S.(Agr.), M.S.(Agr.), University of Idaho; Ph.D., Iowa State College. 1925.

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B.Mus., M.Mus., University of Kansas. 1938.

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B.S.(Met.Eng.), Montana School of Mines. 1939.

IVAN PRATT, PH.D., *Instructor in Zoology*
A.B., College of Emporia; M.S., Kansas State College; Ph.D., University of Wisconsin. 1938.

WALTER J. PRICE, B.S.(ED.), *Instructor in Physical Education for Men, and Assistant Football and Basketball Coach*
B.S.(Ed.), University of Idaho. 1938.

EDWIN JAMES RATAJAK, B.S., *Assistant in Chemistry*
B.S., University of Idaho. 1939.

ARDITH RIES, B.MUS., *Assistant in Music*
B.Mus., Grinnell College. 1938.

JOHN RODERICK ROBERTS, PH.D., *Instructor in Botany*
B.S., M.S., Ph.D., University of Washington. 1939.

JEFFERSON BELTON RODGERS, A.E., *Instructor in Agricultural Engineering and Assistant Agricultural Engineer, Agricultural Experiment Station*
B.S.(M.E.), M.S.(Agr.Engr.), A.E., University of Idaho. 1933.

BARNETT SAVERY, PH.D., *Instructor in Philosophy*
A.B., University of Washington; A.M., Ph.D., Harvard University. 1938.

ALEXANDER M. SCHMALL, Sergeant, U. S. Army, *Assistant Instructor and Chief Clerk in Military Science and Tactics.* 1937.

THEODORE ALLISON SHERMAN, M.A., *Instructor in English*
A.B., Stanford University; M.A., University of Idaho. 1931.

M. ISABEL SMITH, M.S., *Critic Teacher in Home Economics*
B.S., West Virginia University; M.S., University of Minnesota. 1939.

JOHN F. SOLLERS, M.A., *Instructor in Dramatics and Speech*
A.B., M.A., Carnegie Institute of Technology. 1936.

JUNE SPELLERBERG, B.S.(ED.), *Fellow in Education*
B.S.(Ed.), University of Idaho. 1939.

LOUISE ADELIA STEDMAN, M.A., *Instructor in Home Economics*
B.A., M.A., University of Iowa. 1937.

SHERMAN ARCHIE SUNDET, B.A., *Assistant in Chemistry*
B.A., Concordia College. 1939.

HENRY LOREN THOMPSON, B.S.(C.E.), *Instructor in Civil Engineering*
B.S.(C.E.), Rose Polytechnic Institute. 1938.

HOWARD W. THUNE, B.S.(GEOL.), *Teaching Fellow in Geology*
B.S.(Geol.), College of Puget Sound. 1939.

DURED E. TOWNSEND, Sergeant, U. S. Army, *Assistant Instructor in Military Science and Tactics.* 1937.

MARVIN TRAUTMAN, B.A., *Assistant in Chemistry*
B.A., Huron College. 1939.

PAUL GRAHAM TRUEBLOOD, PH.D., *Instructor in English*
A.B., Williamette University; M.A., Ph.D., Duke University. 1937.

JOSEPH E. UPSON, PH.D., *Instructor in Geology*
B.S. (Geol.), Princeton University; Ph.D., Harvard University. 1938.

HENRY A. WHITE, B.S. (CHEM.), *Potlatch Fellow in Forestry*
B.S. (Chem.E.), Oregon State College. 1939.

*ALBERT EDWARD WHITEHEAD, PH.M., *Instructor in Public Speaking*
B.A., University of Colorado; M.A., Ph.M., University of Wisconsin. 1930.

A. GERHARD WIENS, PH.D., *Instructor in Modern Languages*
A.B., Bluffton College; M.A., Ph.D., Ohio State University. 1935.

†DAVID BURTON WILLIS, B.S., *Assistant in Chemistry.* 1939.
B.S., University of Idaho. 1939.

HENRY LOVEJOY WILSON, PH.D., *Instructor in English*
B.A., Ph.D., University of Iowa; M.A., University of Colorado. 1935.

JOHN WILLIAM WOLFE, B.S., *Graduate Assistant in Agricultural Engineering*
B.S. (Agr.Eng.), So. Dakota State College. 1939.

Administration, Maintenance, and Service

ASSOCIATED STUDENTS

GALE L. MIX, LL.B., *Graduate Manager of Student Activities*
LL.B., University of Idaho. 1939.

PERRY CULP, JR., *A.S.U.I. New Director and Assistant Graduate Manager*
University of Idaho. 1937.

WINSTON GOSS, B.S. (ZOO.), *Manager, Student Union Book Store*
B.S. (Zoo.), University of Idaho. 1939.

JAMES MARSH, *Manager Food Service, Student Union Building*
Macalaster College, Kinman Business College. 1938.

MARIA RAPHAEL, B.S. (BUS.), *Secretary to the Graduate Manager*
B.S. (Bus.), University of Idaho. 1939.

BURSAR'S OFFICE

FRANK STANTON, LL.B., *Bursar*
LL.B., Drake University. 1911.

‡FLOYD LYMAN PACKER, B.S. (BUS.), *Purchasing Agent and Assistant Bursar*
B.S. (Bus.), University of Idaho. 1927.

§KENNETH ANDREW DICK, M.S. (BUS.), C.P.A., *Chief Accountant*
B.S. (Bus.), M.S. (Bus.), University of Idaho. 1931.

AMALIE BARING, *Cashier.* 1924.

NELLIE BUE, *Assistant Accountant.* 1929.

KENNETH GORDON LUNDBURG, B.S. (BUS.), *Assistant Accountant*
B.S. (Bus.), University of Idaho. 1936.

JACK ARTHUR WUNDERLICH, B.S. (BUS.), *Acting Chief Accountant*
B.S. (Bus.), University of Idaho. 1937.

DIVISIONAL SECRETARIES

JEAN CHANDLER, *Secretary to the Dean of School of Forestry*
University of Idaho. 1937.

‖JEAN COLLINS, *Secretary to Dean of Graduate School*
University of Idaho Southern Branch. 1934.

ROSEMARY COWEN, *Secretary to Dean of College of Agriculture*
University of Idaho Southern Branch. 1936.

BESS CUDDY, B.S. (ED.), *Secretary to Dean of School of Education*
B.S. (Ed.), University of Idaho. 1938.

VIOLET HAGEN, *Secretary to Dean of College of Engineering*
University of Idaho. (1930) 1939.

RUTH C. JOHNSON, B.S. (ED.), *Secretary to the President*
B.S. (Ed.), Miami University. 1937.

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* On leave of absence, 1939-40.
† Appointed October 1, 1939.
‡ Resigned December 31, 1939.
§ On leave of absence 1939-40.
‖ Resigned December 16, 1939.

ELLEN E. KERL, B.A., *Secretary to Dean of Women*
B.A., Wellesley College. 1939.

DOROTHY JEAN MOTT, B.S.(BUS.), *Secretary to Dean of College of Letters and Science*
B.S.(Bus.), University of Idaho. 1938.

INEZ TRACY ROULSTON, *Secretary to Dean of School of Mines.* 1926.

VERNETTA C. STOKESBERRY, B.S.(BUS.), *Secretary to Dean of Men and Administrative Secretary*
B.S.(Bus.), University of Idaho. 1937.

INFIRMARY

HAROLD D. CRAMER, M.D., *University Physician and Director, University Health and Acting Director of Pre-Medical Studies*
A.B., M.D., Stanford University. 1938.

EDNA PETERSON, R.N., *Head Nurse*
R.N., St. Joseph's Hospital, Vancouver, Washington. 1926.

MELVA B. OGG, R.N., *Assistant Head Nurse*
R.N., Deaconess Hospital, Spokane, Washington. 1927.

AUDREY PARKE, B.S., *Technician*
B.S.(Bact. & Zool.), University of Idaho. 1939.

KATHRYN WHALEN, B.S.(BUS.), *Secretary to the University Physician*
B.S.(Bus.), University of Idaho. 1938.

LIBRARY STAFF

MARY BELLE SWEET, B.L.S., *Librarian*
B.L.S., University of Illinois. 1905.

AGNES CHRISTINA PETERSON, A.B., *Assistant Librarian and Library Instructor*
A.B., University of Washington. 1922.

MILDRED HANSEN KERR, B.A., *Loan Assistant*
B.A., University of Oregon. 1929.

NEDRA LUCILLE LEBLOND, B.S.(L.S.), *Periodical Assistant*
A.B., B.S.(L.S.), University of Washington. 1930.

PAULINE CALENDINE, B.S.(L.S.), *Reference Assistant*
A.B., Ball State Teachers College; B.S.(L.S.), University of Illinois. 1936.

WILDA THOMPSON, B.S.(L.S.), *Catalog Assistant*
B.A., B.S.(L.S.), University of Washington. 1938.

PHYLLIS SHEIDLER, B.S.(L.S.), *Desk Assistant*
B.A., B.S.(L.S.), University of Washington. 1939.

PRISCILLA JUST FERGUSON, A.B., *Cataloger*
A.B., Certificate of Librarianship, University of California. 1939.

BERNICE NADINE HAND, B.S.(L.S.), *Reserve Assistant*
B.A., Mills College; B.S.(L.S.), University of Washington. 1939.

MAINTENANCE

GENERAL

RAYMOND W. LIND, B.S.(C.E.), *Superintendent of Buildings and Grounds*
B.S.(C.E.), University of Colorado. 1929.

ALYCE HOBBS, *Secretary to Superintendent of Buildings and Grounds.* 1937.

AUGUST GOTTFRED SKOG, *Head Janitor.* 1909.

NELSON BROWN, *Heating Plant Foreman.* 1930.

MATT DIETHELM, *Paint Shop Foreman.* 1930.

GEORGE CLEMENT HALLAM, *Carpenter Shop Foreman.* 1908.

ROY A. KAYLER, *Machine Shop Foreman.* 1936.

RALPH KENNEDY, *Electrical Shop Foreman*
University of Idaho. 1920.

O. L. MERZ, *Plumbing and Heating Foreman.* 1937.

LEONARD NORRIUS RUDD, *Carpenter Foreman.* 1930.

OTTO TURINSKY, SR., *Campus Foreman.* 1929.

UNIVERSITY FARM

STANLEY S. BROWN, *Shepherd.* 1923.

WILLIAM J. FLORENCE, *Beef Cattle Herdsman.* 1928.

AUGUST FREDRICKSON, *Foreman, Department of Agronomy.* 1936.

CHARLES EDGAR GABBY, *Dairy Cattle Herdsman*
University of Idaho. 1921.

OSCAR H. NORDBY, *Foreman.* 1939.

EARL SAWYER, *Herdsman.* 1927.

GEORGE VAN, *Foreman, Poultry Farm.* 1921.

WADE WELLS, B.S. (AGR.), *Swine Herdsman*
B.S. (Agr.), University of Idaho. 1934.

PUBLICATIONS

OREN ARAM FITZGERALD, M.A., *University Editor*
B.A., M.A., University of Idaho. 1927.

CECIL HAGEN, B.A., *Assistant in Department of Publications*
B.A., University of Idaho. 1930.

RHODA HOBSON, *Head of Stenographic Bureau.* 1911.

REGISTRAR'S OFFICE

ELLA LETITIA OLESEN, *Registrar*
University of Idaho. 1915.

MYRTLE IRENE RACH, B.S. (ED.), *Secretary and Assistant to the Registrar*
B.S. (Ed.), University of Idaho. 1930.

STUDENT WELFARE

MEN

HERBERT J. WUNDERLICH, M.A., *Dean of Men and Administrative Secretary*
B.S., University of Idaho; M.A., Harvard University. 1938.

ROBERT FULTON GREENE, M.S. (ED.), *Director of Dormitories*
B.S. (Ed.), M.S. (Ed.), University of Idaho. 1931.

JOHN L. BRATTEN, *Assistant Director of Dormitories*
University of Idaho. 1939.

HARALD BERGERSON, M.A., *Proctor of Campus Club*
B.A., College of Puget Sound; M.A., University of Washington. 1936.

MRS. HARALD BERGERSON, *Hostess of Campus Club*
University of Idaho. 1939.

LAWRENCE HENRY CHAMBERLAIN, M.A., *Proctor of Willis Sweet Hall*
B.S. (Ed.), M.A., University of Idaho. 1931.

MRS. LAWRENCE HENRY CHAMBERLAIN, M.S. (ED.), *Hostess of Willis Sweet Hall*
B.S. (Bus.), M.S. (Ed.), University of Idaho. 1938.

ARTHUR DALLEY, B.S., *Proctor of Senior Hall*
B.S., University of Idaho. 1939.

JOHN EHRLICH, PH.D., *Proctor of Idaho Club*
B.S., Cornell University; A.M., Duke University; S.M., Ph.D., Harvard University. 1935.

MRS. JOHN EHRLICH, BACH. MUS., *Hostess of Idaho Club*
Bach. Mus., New England Conservatory of Music. 1939.

J. IRVING JOLLEY, B.S., *Proctor of Chrisman Hall*
B.S., University of Washington. 1937.

MRS. J. IRVING JOLLEY, B.S., *Hostess of Chrisman Hall*
B.S., University of Washington. 1939.

WALLACE PEFLEY, *Proctor of Lindley Hall Annex*
Boise Junior College, University of Idaho. 1938.

JEFFERSON BELTON RODGERS, A.E., *Proctor of Lindley Hall*
B.S. (M.E.), M.S. (AGR.ENGR.), A.E., University of Idaho. 1933.

MRS. JEFFERSON BELTON RODGERS, M.S. (ED.), *Hostess of Lindley Hall*
B.S. (Bus.), M.S. (Ed.), University of Idaho. 1936.

WOMEN

M. BEATRICE OLSON, M.A., *Dean of Women*
B.A., University of North Dakota; M.A., Chicago University. 1938.

MRS. MABLE WHITEHURST, M.A., *Hostess of Hays Hall, and Director of Social Activities at the Student Union*
A.B., Denison University; M.A., Columbia University. 1938.

MRS. GLADYS BABCOCK, B.A., *Hostess of Forney Hall*
B.A., Washington State College. 1939.

MRS. MARY MCCALLUM REED, A.B., *Hostess of Ridenbaugh Hall*
A.B., University of Idaho. 1938.

DENA GREENWALT, *Assistant Hostess of Hays Hall.* 1939.

BERYL MCARTHUR, *Assistant Hostess of Forney Hall.* 1938.

Research and Extension

AGRICULTURAL EXPERIMENT STATION

EDWARD JOHN IDDINGS, M.S., *Dean of the College of Agriculture, Director of the Agricultural Experiment Station, and Director of Extension*
B.S.(Agr.), M.S., Colorado Agricultural College. 1910.

CHARLES WILLIAM HUNGERFORD, *Professor of Plant Pathology; Plant Pathologist, Agricultural Experiment Station; Vice-Director of the Agricultural Experiment Station; and Dean of the Graduate School.* 1919.

ROSEMARY COWEN, *Secretary to the Director.* 1936.

Note: Since most members of the Agricultural Experiment Station Staff also teach in the College of Agriculture and are listed in the General Faculty their names are not repeated here. The following additional individuals are engaged wholly in research.

DONALD WILLIAM BOLIN, M.S.(AGR.), *Assistant Agricultural Chemist, Agricultural Experiment Station*
B.S.(Agr.), M.S.(Agr.), University of Wisconsin. 1929.

CARL F. DIETZ, B.S.(AGR.), *Assistant Horticulturist, Agricultural Experiment Station* (Parma)
B.S.(Agr.), Ohio State University. 1939.

PAUL AXEL CLARENCE EKE, PH.D., *Agricultural Economist, Agricultural Experiment Station*
B.S.(Agr.), M.S.(Agr.Econ.), Ph.D., University of Wisconsin. 1929.

LEONARD E. ENSMINGER, B.S.(AGR.), *Assistant Agricultural Chemist, Agricultural Experiment Station*
B.S.(Agr.), University of Missouri. 1939.

ROBERT LYLE GRIFFITH, D.V.M., *Graduate Research Assistant in Animal Husbandry*
B.S., D.V.M., Washington State College. 1939.

ROWLAND WELLS HAEGELE, M.S., *Assistant Entomologist, Agricultural Experiment Station* (Parma)
A.B., Stanford University; M.S., University of Idaho. 1925.

*JOHN M. HALE, M.S.(AGR.), *Assistant Bacteriologist, Agricultural Experiment Station*
B.S., Utah State Agricultural College; M.S.(Agr.), University of Idaho. 1936.

REUBEN F. JOHNSON, B.S.(AGR.), *Assistant Animal Husbandman, Agricultural Experiment Station, and Superintendent, Caldwell Substation*
B.S.(Agr.), University of Idaho. 1925.

EDWIN FRANKLIN RINEHART, M.S.(AGR.), *Associate Animal Husbandman, Agricultural Experiment Station, and Extension Animal Husbandman* (Boise)
B.S.(Agr.), Ohio State University; M.S.(Agr.), University of Idaho. 1918.

†LOWELL RAY TUCKER, M.S.(HORT.), *Assistant Horticulturist, Agricultural Experiment Station* (Parma)
B.S.(Agr.), University of Illinois; M.S.(Hort.), University of New Hampshire. 1930.

WALTER VIRGIN, B.S.(AGR.), *Associate Plant Pathologist, Agricultural Experiment Station*
B.S.(Agr.), University of Idaho. 1938.

JAMES KENNETH WILLIAMS, B.S.(AGR.), *Assistant Poultry Husbandman, Agricultural Experiment Station*
B.S.(Agr.), Texas A.&M. College. 1931.

‡ELLA WOODS, PH.D., *Home Economist, Agricultural Experiment Station*
B.S., B.S.(H.Ec.), University of Idaho; A.M., Ph.D., Columbia University. 1927.

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* On leave of absence 1939-40.
† Resigned November 30, 1939.
‡ On sabbatical leave of absence second semester 1939-40.

COOPERATIVE RESEARCH IN AGRICULTURE

‡WAYNE MELVILLE BEVER, M.S.(AGR.), *Junior Plant Pathologist, U.S.D.A., Agricultural Experiment Station*
B.S.(Agr.), M.S.(Agr.), University of Idaho. 1929.

J. P. BONNER, B.S.(C.E.), *Assoc. Hydr. Engineer, Soil Conservation Service, Agricultural Experiment Station*
B.S.(C.E.), Catholic University. 1938.

‡TOM J. BRINDLEY, PH.D., *Associate Entomologist, U.S.D.A., Agricultural Experiment Station*
B.S., M.S., Ph.D., Iowa State College. 1931.

‡F. G. HINMAN, M.S., *Junior Entomologist, U.S.D.A., Agricultural Experiment Station*
B.S., Montana State College; M.S., Washington State College. 1935.

MAX C. JENSEN, B.S., *Graduate Assistant in Agricultural Engineering, Soil Conservation Service*
B.S.(Agr.Eng.), University of Idaho. 1939.

HUGH MCKAY, B.S.(AGR.), *Junior Agronomist, Soil Conservation Service*
B.S.(Agr.), University of Idaho. 1938.

DONALD C. MURPHY, M.S., *Dept. of Plant Pathology, Agricultural Experiment Station, State of Idaho*
B.S., M.S., University of Idaho. 1936.

‡W. E. PEAY, M.S., *Junior Entomologist, U.S.D.A., Agricultural Experiment Station*
B.S., University of Utah; M.S., Utah State College. 1939.

HOWARD ROYLANCE, B.S.(AGR.), *Federal Pea Inspector*
B.S.(Agr.), University of Idaho. 1938.

‡C. I. SEELY, M.S., *Agent in Investigation of Noxious Weeds, U.S.D.A., Agricultural Experiment Station*
B.S., M.S., Washington State College. 1936.

SUPERINTENDENTS OF EXPERIMENT SUBSTATIONS

JOHN LEONARD TOEVS, B.S.(AGR.) — Aberdeen
B.S.(Agr.), University of Idaho. 1931.

REUBEN FREDERIC JOHNSON, B.S.(AGR.) — Caldwell
B.S.(Agr.), University of Idaho. 1929.

RALPH E. KNIGHT, B.S.(AGR.) — Sandpoint
B.S.(Agr.), University of Idaho. 1935.

WILLIAM ALFRED MOSS, B.S.(AGR.) — Tetonia
B.S.(Agr.), Kansas State College. 1918.

IDAHO BUREAU OF MINES AND GEOLOGY

ARTHUR WILLIAM FAHRENWALD, E.M., MET.E., *Director and Secretary, Board of Control*
B.S.(Met.E.), Met.E., South Dakota School of Mines; E.M., New Mexico School of Mines. 1919.

INEZ TRACY ROULSTON, *Secretary to the Director.* 1926.

JAMES DONALD FORRESTER, PH.D., *Geologist*
B.S.(Geol.Eng.), University of Utah; M.S.(Geol.), Ph.D., Cornell University. 1939.

WILLIAM WESLEY STALEY, M.S.(MET.), *Mining Engineer*
B S.(Min.E.), E.M., New Mexico School of Mines; M.S.(Met.), University of Idaho. 1928.

JOSEPH NEWTON, M.S.(MET.), *Assistant Metallurgist*
B.S.(Met.E.), Montana School of Mines; M.S.(Met.), University of Idaho. 1930.

VERNON EDWARD SCHEID, A.B.(GEOL.), *Field Assistant in Geology*
A.B.(Geol.), Johns Hopkins University. 1934.

JOSEPH E. UPSON, PH.D., *Field Assistant in Geology*
B.S.(Geol.), Princeton University; Ph.D., Harvard University. 1938.

RAYNARD VICTOR LUNDQUIST, M.S., *Chemist*
B.S.(Chem.E.), M.S., University of Idaho. 1928.

RHESA MCCOY ALLEN, JR., B.S.(MIN.GEOL.), *Field and Laboratory Assistant in Geology*
B.S.(Min.Geol.), Virginia Polytechnic Institute. 1938.

HOWARD W. THUNE, B.S.(GEOL.), *Field and Laboratory Assistant in Geology*
B.S.(Geol.), College of Puget Sound. 1939.

JAMES WILSON PENNINGTON, B.S.(MIN.ENG.), *Research Fellow in Metallurgy*
B.S.(Min.Eng.), University of Idaho. 1939.

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‡ In cooperation with U.S.D.A.

OFFICERS OF EXTENSION DIVISION
(Agriculture and Home Economics)

EDWARD JOHN IDDINGS, M.S., *Dean of the College of Agriculture, and Director of Extension Division*

ROSEMARY COWEN, *Secretary to the Director*

FIELD STAFF

JESSIE CAMERON AYERS, A.B., *State Seed Analyst* — Noble Bldg., Boise
A.B., University of Washington. 1919.

EDMUND ROSWELL BENNETT, M.H., *Extension Horticulturist* — State House, Boise
B.S., M.H., Michigan State College. 1916.

T. C. BLACKBURN, *Field Inspector, Grain Certification.* 1931. — Blackfoot

ROBERT A. FISHER, PH.D., *Assistant Extension Entomologist* — Moscow
B.S., M.S., University of Idaho; Ph.D., Iowa State College. 1939.

MARION MARTHA HEPWORTH, B.S.(H.EC.), *State Home Demonstration Leader, and Nutrition Specialist* — Moscow
B.S.(H.Ec.), Kansas State College. 1924.

*KARL VICTOR HOBSON, B.S.(AGR.), *Assistant Agricultural Economist*
B.S.(Agr.), University of Idaho. 1935. — State House, Boise

L. A. JONES, *Field Inspector, Grain Certification.* 1935.

HAROLD WILLIAM E. LARSON, PH.D., *Extension Specialist in Soils*
B.S., University of Idaho; M.S., Oregon State College; Ph.D., University of Wisconsin. 1935.

IVAN H. LOUGHARY, M.S.(AGR.), *Extension Dairyman* — State House, Boise
B.S., M.S.(Agr.), Oregon State College. 1935.

†VIVIAN MINYARD, B.S.(H.EC.), *Clothing Specialist* — State House, Boise
B.S.(H.Ec.), Washington State College. 1936.

PREN MOORE, *Poultry Specialist* — State House, Boise
University of Idaho. 1919.

ROYALE KING PIERSON, M.S.(FOR.), *Extension Forester* — Moscow
B.A., University of Montana; M.S.(For.), University of Idaho. 1936.

‡JOHN HENRY REARDEN, B.S., *State County Agent Leader and State Club Leader*
B.S., Oregon State College. 1920.

EDWIN FRANKLIN RINEHART, M.S.(AGR.), *Extension Animal Husbandman*
B.S.(Agr.), Ohio State University; M.S.(Agr.), University of Idaho. 1918.
State House, Boise

WESLEY EARL SHULL, PH.D., *Extension Entomologist* — Moscow
B.S., Ph.D., Iowa State College; M.S., University of Idaho. 1926.

HARRY LOWE SPENCE, JR., M.S.(AGR.), *Extension Agronomist, and State Seed Commissioner*
B.S., M.S.(Agr.), University of Idaho. 1929.

SHIRLEY TREADWELL, *Chief Clerk,* Extension Office, State House, Boise. 1917.

J. ROBERT WALKER, B.S.(AGR.), *Assistant in Extension*
B.S.(Agr.), University of Idaho. 1936.

CAROL OSCAR YOUNGSTROM, M.S., *Extension Economist* — State House, Boise
B.S., Oregon State College; M.S., Kansas State College. 1929.

COUNTY AGENTS

LUCIE THROCKMORTON, *Secretary to County Agent Leader*
University of Idaho. 1918.

REUBEN BAUER, B.S.(AGR.), *County Extension Agent,* Benewah County — St. Maries
B.S.(Agr.), University of Idaho. 1929.

ELBA BOYD BAXTER, B.S.(AGR.), *County Extension Agent,* Bear Lake County — Paris
B.S.(Agr.), University of Idaho. 1938.

DELBERT T. BOLINGBROKE, B.S.(AGR.), *County Extension Agent,* Twin Falls County
B.S.(Agr.), Utah Agricultural College. 1926. — Twin Falls

WILLIAM DEAN BOYLE, B.S.(AGR.), *County Extension Agent,* Teton County — Driggs
B.S.(Agr.), Utah State Agricultural College. 1930.

THOMAS JAMES CHESTER, B.S.(AGR.), *County Extension Agent,* Caribou County
B.S.(Agr.), University of Idaho. 1939. — Soda Springs

GEORGE WILLIAM CLEVELAND, B.S.(AGR.), *County Extension Agent,* Madison County
B.S.(Agr.), Utah Agricultural College. 1934. — Rexburg

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* On leave of absence October 9, 1939-June 30, 1940.
† Resigned November 1, 1939.
‡ Resigned December 31, 1939.

CHARLES WARREN DAIGH, B.S.(AGR.), *County Extension Agent*, Minidoka County
B.S.(Agr.), Oregon State College. 1930. Rupert

ALMA EARL DUKE, B.S.(AGR.), *County Extension Agent*, Bannock County Pocatello
B.S.(Agr.), University of Idaho. 1931.

GEORGE JOSEPH FUNKE, B.S.(AGR.), *County Extension Agent*, Boundary County
B.S.(Agr.), University of Idaho. 1939. Bonners Ferry

HARRY STEWART GAULT, B.S.(AGR.), *County Extension Agent*, Lincoln County
B.S.(Agr.), University of Idaho. 1935. Shoshone

HERMAN G. HILFIKER, B.S.(AGR.), *County Extension Agent*, Bingham County
B.S.(Agr.), University of Idaho. 1936. Blackfoot

PETER MARTIN JESNESS, B.S.(AGR.), *County Extension Agent*, Elmore County
B.S.(Agr.), University of Minnesota. 1918. Mountain Home

GEORGE W. JOHNSON, B.S.(AGR.), *County Extension Agent*, Clearwater County
B.S.(Agr.), University of Idaho. 1930. Orofino

CHASE KEARL, B.S.(AGR.), *County Extension Agent*, Franklin County Preston
B.S.(Agr.), Utah State Agricultural College. 1921.

BUFORD E. KUHNS, B.S.(AGR.), *County Extension Agent*, Canyon County Caldwell
B.S.(Agr.), University of Idaho. 1927.

GUY THEODORE MCALEXANDER, B.S.(AGR.), *County Extension Agent*, Latah County
B.S.(Agr.), Colorado Agricultural College. 1930. Moscow

CHESTER L. MINK, B.S.(AGR.), *County Extension Agent*, Gooding County Gooding
B.S.(Agr.), University of Idaho. 1935.

ERNEST R. PALMER, B.S.(AGR.), *County Extension Agent*, Power County
B.S.(Agr.), University of Idaho. 1938. American Falls

WILLIAM WENDELL PALMER, B.S.(AGR.), *County Extension Agent*, Cassia County
B.S.(Agr.), University of Idaho. 1927. Burley

RAY O. PETERSEN, B.S.(AGR.), *County Extension Agent*, Gem County Emmett
B.S.(Agr.), University of Idaho. 1937.

JAY THOMAS PIERSON, B.S.(AGR.), *County Extension Agent*, Washington County
B.S.(Agr.), University of Nebraska. 1939. Weiser

CHASE WASHINGTON RANEY, B.S.(AGR.), *County Extension Agent*, Lewis County
B.S.(Agr.), University of Idaho. 1934. Nezperce

WILLIAM EBER RAWLINGS, B.S.(AGR.), *County Extension Agent*, Idaho County
B.S.(Agr.), Purdue University. 1931. Grangeville

JOHN ROLAND ROBERTSON, B.S.(AGR.), *County Extension Agent*, Bonneville County
B.S.(Agr.), University of Idaho. 1930. Idaho Falls

VIRGIL ARTHUR SIPLE, B.S.(AGR.), *County Extension Agent*, Oneida County Malad
B.S.(Agr.), University of Idaho. 1939.

IRVIN W. SLATER, B.S.(AGR.), *County Extension Agent*, Fremont County St. Anthony
B.S.(Agr.), University of Idaho. 1934.

WALTER FRANCIS THOMAS, B.S.(AGR.), *County Extension Agent*, Bonner County
B.S.(Agr.), University of Idaho. 1921. Sandpoint

JOSEPH WILLIAM THOMETZ, *County Extension Agent*, Nez Perce County Lewiston
University of Idaho. 1921.

MERLE L. TILLERY, B.S.(AGR.), *County Extension Agent*, Kootenai County
B.S.(Agr.), Colorado Agricultural College. 1925. Coeur d'Alene

DANIEL EMERSON WARREN, B.S.(AGR.), *County Extension Agent*, Payette County
B.S.(Agr.), University of Idaho. 1929. Payette

*J. W. WEBSTER, B.S.(AGR.), *County Extension Agent*, Oneida County Malad
B.S.(Agr.), University of Idaho. 1936.

EUGENE WINFIELD WHITMAN, M.S.(AGR.), *County Extension Agent*, Jerome County
B.S.(Agr.), M.S.(Agr.), University of Idaho. 1929. Jerome

LEWIS M. WILLIAMS, B.S.(AGR.), *County Extension Agent*, Jefferson County Rigby
B.S.(Agr.), University of Idaho. 1934.

HOME DEMONSTRATION AGENTS

BETTY HATFIELD, B.S.(BUS.), *Secretary to Home Demonstration Leader*
B.S.(Bus.), University of Idaho. 1936.

HATTIE JULIA ABBOTT, B.S.(H.EC.), *District Home Demonstration Agent*, North Central District Moscow
B.S.(H.Ec.), Kansas State College. 1929.

LEATHA CHRISTENSEN, B.S.(H.EC.), *District Home Demonstration Agent*, Northeastern District Idaho Falls
B.S.(H.Ec.), Utah Agricultural College. 1929.

LEONA V. CURTIS, B.S., *District Home Demonstration Agent*, Northern District
B.S., South Dakota State College. 1936.

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* Resigned October 1, 1939.

HILDA FREDERICK, M.A.(H.Ec.), *District Home Demonstration Agent*, Southeastern District Pocatello
B.S.(H.Ec.), Utah State College; M.A.(H.Ec.), University of California. 1935.

FRANCES GALLATIN, B.S.(H.Ec.), *District Home Demonstration Agent*, Southwestern District Boise
B.S.(H.Ec.), Oregon State College. 1935.

MARGARET L. HILL, B.S.(H.Ec.), *District Home Demonstration Agent*, South Central District Twin Falls
B.S.(H.Ec.), University of Idaho. 1936.

DOROTHY NEAL STEPHENS, M.S., *District Home Demonstration Agent*, Central District Boise
B.S.(H.Ec.), University of Idaho; M.S.(Retailing), New York University. 1939.

DISTRICT EXTENSION AND CLUB AGENTS

GEORGE CLARENCE ANDERSON, M.S.(AGR.), *District Extension Agent* Boise
B.S.(Agr.), Kansas State College; M.S.(Agr.), University of Idaho. 1922.

JAMES WARREN BARBER, M.S.(AGR.), *District Extension Agent* Pocatello
B.S.(Agr.), M.S.(Agr.), University of Idaho. 1921.

WALTER E. SCHOENFELD, *County Club Agent* Bannock County
University of Idaho. 1938.

WILLIAM LOUIS STEPHENS, B.S.(AGR.), *District Extension Agent* Moscow
B.S.(Agr.), University of Idaho. 1926.

DEVERE TOVEY, B.S.(AGR.), *Assistant District Club Agent* Pocatello
B.S.(Agr.), University of Idaho. 1938.

PLACEMENT BUREAU AND NON-RESIDENT INSTRUCTION

BERNICE MCCOY, M.S.(ED.), *Associate Professor of Education, and Director of Non-Resident Instruction and Placement Service*
B.S.(Ed.), M.S.(Ed.), University of Idaho. 1922.

JANE FRANCES WHEELAN, *Chief Clerk in Placement Service and Non-Resident Instruction*
University of Wisconsin. 1937.

Standing Committees of the Faculty

ACADEMIC COUNCIL:
President Dale, chairman; Dean Eldridge, vice-chairman; Deans Buchanan, Fahrenwald, Farmer, Howard, Hungerford, Iddings, Jeffers, Kerr, Messenger, Olson and Wunderlich; Lt. Col. Jones; Professors Jones, McCoy, Ritchie and Woodbury; Dr. Cramer; Miss Featherstone; Miss Olesen.

ADMISSIONS AND ADVANCED CREDITS:
Professor Axtell, chairman; Professors Barton, Gail, Taylor; Miss Olesen.

AFFILIATION WITH STATE TEACHERS' ASSOCIATION:
Professor Smith, chairman; Professors Lattig, Johnson, Snyder; Mr. Sherman.

A. S. U. I. BOARD REPRESENTATIVE:
Dean Jeffers.

ATHLETICS:
Dean Kerr, chairman and conference representative; Deans Fahrenwald and Wunderlich; Professors Bank and Rearden; Dr. Cramer.

CODIFICATION:
Professor DuSault, chairman; Dean Eldridge; Professors Harding and Scheid; Miss Olesen.

DISCIPLINE:
Men—Professor Raeder, chairman; Professors Harding, Carter, and Wilde; Keith Greaves and Roy Ramey.
Women—Miss Reierson, chairman; Misses Mylne and Rentfro; Mrs. Reed; Ann Maguire and Maxine Miller.

EMPLOYMENT OF GRADUATE STUDENTS:
Dean Hungerford, chairman; Dean Messenger; Professor Cady.

GRADUATE COUNCIL (PROMOTION OF SCHOLARSHIP):
Dean Hungerford, chairman; Deans Fahrenwald and Messenger; Professors Cady, Cushman, Ehrlich, Graue; Miss Olesen.

HEALTH AND HOUSING (RESIDENCE):
Dr. Cramer, chairman; Dean Wunderlich, vice-chairman; Dean Olson; Professors Bank and Lemon; Major Foster; Mr. Greene; Miss Johnson.

LIBRARY:
Miss Sweet, chairman; Deans Farmer and Wunderlich; Professors Beeson, Church, Young and Schuldt.

LOAN FUNDS (FACULTY LOAN FUND, 1932):
Mr. Stanton, chairman; Professors Hickman, Taylor, DuSault.

N. Y. A. ASSIGNMENTS:
Men—Dean Wunderlich, chairman; Dean Jeffers; Professors Cone and Hull.
Women—Dean Olson, chairman; Professor Ritchie; Miss Sweet.

NON-RESIDENT STATUS OF STUDENTS:
Dean Howard, chairman; Dean Kerr; Professor Million.

PUBLIC EVENTS:
Dean Kerr, chairman; Deans Hungerford, Messenger and Wunderlich; Professors Cushman and Jones.

REGISTRATION AND SCHEDULE:
Miss Olesen, chairman; Deans Buchanan, Farmer, Howard, Kerr and Messenger; Professors DuSault, Halverson, Staley; Mr. Stanton.

STUDENT-FACULTY COUNCIL (CALENDAR):
Dean Wunderlich, chairman; Professor Church, vice-chairman (calendar); Deans Jeffers and Olson; Mr. Mix; Mrs. Whitehurst; Walter Olson; Rachel Braxtan; Sabey Driggs; Fred Zamboni; Cecil Smith; Bob Davis; Maxine Miller; Ed Dakin; Doris Lacey.

STUDENT ORGANIZATIONS:
Professor Barton, chairman; Deans Olson and Wunderlich; Major Paynter.

UNIVERSITY PLANT:
President Dale, chairman; Deans Buchanan, Olson and Wunderlich; Dr. Cramer; Mr. Lind and Mr. Stanton.

PART VII

Degrees Conferred in 1939

Commissions and Certificates

Honor List

Forty-fourth Commencement

June 3-5, 1939

Degrees Conferred

(COMMENCEMENT ADDRESS, "Semi-Centennial" by Dr. Talbot L. Jennings, '24, Hollywood, California.)

BACCALAUREATE DEGREES
College of Letters and Science

BACHELOR OF ARTS

Helen Marie Abbott
Loeta Akers
Ferris Andrus Albers
Jean St. Clair Alison
Leonard James Arrington
Jean Hitchcock Baer
Ruth McFarland Bennett
Blanche Susanna Black
Betty Ann Blake
Burton Robert Brown
Belva Adele Budge
Eleanor Butler
Ellen Lenore Byrnes
Margaret Carothers
George William Charlesworth, Jr.
Jeanette Dean Clifford
Joseph Vaughn Clothier, Jr.
LaVerne Charles Cobbett
Connie Conrad Connealy
David Carson Consalus
Faith Beamer Cooke
Miriam Leyrer Drury
Lawrence H. Duffin
Millicent Judge Eldridge
Jessie Dorothy Elliott
Grace Norine Eubanks
Doris Elvina Franson
Raymond David Givens
Elizabeth Roberta Hanrahan
Margit Hansen
Mary Edna Harmer
Margaret Mae Rita Harris
Roderic Willson Hearn
Helen Margaret Hill
Wilma Elizabeth Hjort
Ada Marcia Hoebel
Jean Illingsworth
Roxy Elizabeth Jensen
Edward Harry Johnson
Margaret Anne Johnson
Virginia Lee Johnson
Robert Herrick Jones
Miriam Leslie Kennard
Marjorie Lois Lester
Mildred Margaret Lewis
Ruth Elizabeth Lukens
Virginia Gertrude McDonald
Jack Whitwell McKinney
Robert Earl Mason
James Gifford Moerder
Boyd Allen Moore
Julia Winifred Moore
Iris Alberta Morgan
Donald Otto Nelson
George H. Oram, Jr.
Edward John Price
G. Naomi Randall
Elsie Wahl Ratajak
Samuel Jones Rich
Herman Edward Slotnick
Spokane Smith
Moreau Edward Stoddard
Virginia Lea Stoner
Margaret Jane Swayne
Beatrice Wayne Warner
Hans Wetter
Helen Lenore Williams
Lorraine Aolah Williams
Malcolm Edward Woodbury
Ruth Elinor Woodward
Carolyn Belle Wysong

BACHELOR OF SCIENCE

Burt Francis Callahan
Josh Harlan Carey
Arthur Frederick Dalley
David Vernon Fix
Dean Milton Fluharty
Rex Gilbert Fluharty
Dorothy May Hale
Richard Wilton Hassinger
Owen Paul Hatley
Robert DeOrville Jenkins
Julian Rockwell Johnson
Leonard Burr Kellogg
John Rankin Kinney
David Hughes Lewis, Jr.
Clea Gay Lindsay
Harold Carter Lukens
Jenkin Leland Palmer
James William Pence
Lee Hans Petersen
Edwin James Ratajak
LaRele Joseph Stephens
Floyd Albert Trueblood
Glen Martin Albin Whitesel, Jr.
David Burton Willis

BACHELOR OF SCIENCE IN PRE-MEDICAL STUDIES

Theodore Edwin Alm
William Hicks Boyd
Mary Elizabeth Kostalek
Jack Tullus Murphy
Henry Joseph Rosevear
Donald Jack Soltman

Bachelor of Science in Home Economics

Ruth Kringel Bell
Doris Madeline Bennett
Margaret Ann Colburn
Zelda Lois Condie
Leah Ruth Dinnison
Gretchen Louise Farber
Charlotte Ann Fisher
Ruth Caroline Harnett
Helen Rebekah Havenor
Margaret Elizabeth Hesby
Alberta Dee Hill
Neva Genevieve Homan
Marion Jenny Isenburg
Bertha Elaine Johnson
Margaret Anna McPherson
Sara M. Mitchell
Barbara Peterson
Margaret Jane Quinn
Eleanore Rhoda Redfield
Ruth DeMoisy Ryan
Lillie Spencer
Jean Elizabeth Spooner
Helen Sonya Turinsky

Bachelor of Music

Mary Elizabeth Hoover

College of Agriculture

Bachelor of Science in Agriculture

Donald Paul Albin
Harold Frank Atkins
Donald Dwight Benedict
Aaron Ellsworth Blewett
Glenn LeRoy Bodily
Philip Bynon Borup
Dean A. Broadhead
Richard Wayne Brown
Neal Stanley Bue
Dowe Henry Byington
John Matthew Corless
Jay Orville English
Earl Orvid Evans
Robert Wilson Every
Gordon Hoopes Goodsell
Robert Hogge
Melvin Warren Hollinger
Edward George Iddings
Claude Gustaf Johnson
Earl Cecil Kent
Earnest Cornelius Kole
Kenneth Frederick Langland
Lincoln Tolman Lee
Hubert John Link
Joseph Edward Mills, Jr.
Lewis Drexel Morgan
Anders John Passey
Arnold E. Poulson
Rulon A. Ricks
Elmer William Rieman, Jr.
John Daniel Roberts
John Edward Roice
Sheldon Clyde Sanders
Walter Ernest Schoenfeld
Henry Rayfield Seidel
Carl Frederick Sierk
Vance Thomas Smith
Vearl Robert Smith
Jesse Tremelling
Stanley Irving Trenhaile
William Linn Watt
Frank Elmer Wells
Wade Glen Wells
Elden Denning Westergard
Reo Smith Westover

College of Engineering

Bachelor of Science in Civil Engineering

Emile Patrick Bachand
John Ramsey Baldwin
Paul Cap Bent
George Hight Cummings
George Wendell Decker
Robert Woodall Ferebauer
William Fischer
Charles Eric Harris
Joseph Hoyle Latimore
Eugene Lippa
Paul Gilbert Morken
James Lawrence Nixon
Paul Frederick Parrish
William Martin Pierce
Norman Bruce Platt
Paul Francis Taylor
Fred Marion Tileston
Boyd Howard Walter

Bachelor of Science in Electrical Engineering

Robert Orin Chambers
George Albert Davis
John Burnside Dingler
John Harry Hemperly
John Paul Hughes
Joseph Leon Lambert
George Raymond Larsen, Jr.
Carl Stanley Lewis
Walter Bruce Mitchell
Michael Hopland Nelson
Robert Lyle Orr
Harvey Loren Price
Robert Ramsey Ries
Wendell Julian Satre
Harold Oliver Torgerson

Bachelor of Science in Mechanical Engineering

Kenneth B. Arnett
James Palmer Atwood
Robert Hugh Baldwin
Simeon George Coonrod
Leverett William Giffin
Voitto Arnold Luukkonen
James Munson Moore
Harold Lundin Walpole

Bachelor of Science in Chemical Engineering

Bruce Barr Gralow
Charles Homer Hughes
Vern William Irvine
Charles Wilbur Larkam
Lysle Christian Schwendiman
Edgar Glenn Stockton

Bachelor of Science in Agricultural Engineering

Ben King Humphrey
Max C. Jensen
Charles Douglas King
Robert Crites Linkhart

College of Law

Bachelor of Laws

Grant Lewis Ambrose
Laurence Edwin Baird
Walter Lyttleton Budge
Robert Benjamin Dunlap
John Hancock
Arthur Estel Johnson
Embert Victor Larson, Jr.
George Robert McFadden
Theron William Ward

School of Mines

Bachelor of Science in Mining Engineering

Donald Edward Anderson
Arthur Frank Betchart
Samuel Loren Bida
James Clenny Hicks
Charles Freeman Jensen
Edgar Olaf McAlister
Don Harry Metke
Bruce Walter Stoddard
Stephen Dan Stover
Robert G. Vervaeke
Robert Theodore Williams

Bachelor of Science in Metallurgical Engineering

Robert Dickerson Carpenter
George Kenneth Coates
James Wilson Pennington

Bachelor of Science in Geological Engineering

Frederick William Cater, Jr.
George Eldon Neff

School of Forestry

Bachelor of Science in Forestry

Allan Thordur Arnason
Kenneth Clarence Baldwin
Clifford Melvern Ball
Vernon C. Ball
Otto Baltuth
Willis Austin Bohman
Morton Roy Brigham
John Ernest Brock
George Ross Callaway
Duncan Campbell
Richard Lorne Campbell
James Watts Caples
Robert Ellis Clements, Jr.
Kenneth Jacob Cross
Neil John Day
Gilbert Bushnell Doll
Irwin Deforest Ellis
Joe Thomas Fallini
Edwin Fargo
Robert Hall Forbes
John Leonard Fritz
Wilbur Vernon Garten
Rudolph Goldblum
Morris Cameron Greer
Wilson Charles Gutzman
John Henry Hoye
Dwight Nelson Jeffers
Howard Elmore Johnson
Charles John Kiljanczyk
Dale H. Kinnaman
Herman Michael Koppes
Rodney Boyd Leonard
William Joseph Lucas
Warren Stanley MacGregor
Gerald Hurley Martin
Jack Marshall Martin
Ronald Giles Martin
Richard James Mastin
Loren Ellsworth Miller
John Melvin Molberg
William John Morrow
Harold Alfred Oldson
Arthur John Petersen
John Henry Pinnock
Frank C. Piper
Franklin Harry Pitkin
Charles Edgar Poulton
Earl Ritzheimer
Dale Foster Robertson
William Daniel Shelley
James Andrew Singley
Rolf Gunnar Skar
Carleton Henry Spinney
Don Edward Springer
Edgar Williams Stanton, III
Golden Stephenson
Charles Carmichael Strawn
Carl Clifford Wilson
Louis Richard Wilson
John Clifton Windl

School of Education

Bachelor of Science in Education

Anna Mary Andersen
Grace Elizabeth Anderson
Rudolph Christopher Aschenbrener
Henry Woodrow Ash
Stephen Maxmillian Belko
Walter Bert Betts
Vera Lee Biggart
Alice Charlotte Bjorklund
Floris Catherine Block
Elizabeth Jane Bothwell
Howard Morton Breithaupt
Barbara Jean Brodrecht
Margaret Josephine Brown
Loren Henry Bruns
Nellie Elaine Buckles
Helen Elizabeth Clough
Lela Mable Coffin
Marjorie McCrea Colquhoun
Margaret Josephine Davis
Marjorie Jean Dempsey
Katherine Adrianna DeWinter
Walter Leon Dinnison
Charlotte Maxine Driscoll
Kathryn Louise Emery
Martha Lorissa Evans
Wilbert Davis Fawcett
Agnes Dorothy Fitzpatrick
Mary Loretto Flynn
Eleanor Ford
Karl Edgar Frye
Hester Gentry
Burton McGee Gifford
Lona Jessie Goodell
Eleanora Angeline Graham
George V. Grey
Roy Isaiah Griffin
Blondell Eugene Groseclose
Dan George Hager
Norman Sylvester Heikkila
Angeline Louise Helmholz
Billie Louise Hilliard
Lucia Elizabeth Hughes
Carl Henry Huntington
Donald LeRoy Johnson
Homer Eldon Johnson
James Ellsworth Johnston
Elma Florence Jones
Ray John Kaczmarek
Eva Kathryn Katzenmeyer
Martin Lowell Keith
Anthony Joseph Knap
Lillian Pauline Larson
Wesley Waldo Lathen
Frances Lillian Lewis
James Vaughn Lewis
Phyllis Maxine Lewis
Lois Irene Lipps
Iver John Longeteig, Jr.
Isabell Ann Louis
Bernard Phlander Luvaas
Helen Charlotte McCannon
Gladys Mae McCauley
Betty Lou McConnell
June Emelia McIntyre
Daniel Williams Martin
Robert Leon Middleton
Fred Louis Milette
Jacob Hubert Miller
Robert Pierce Muffett
Walter Joseph Musial
Pierce Billings Nelson
Marguerite Fern Ogle
Marcelo Andres Ordonez
Alyce Minnie Parker
Velma Ruth Patton
Raymond William Peters
Robert Bryson Pitts
Mary Frances Randall
Soini Edwin Ranta
Robert Cole Ratliff
Ruth Janet Rhodes
Lois Dorothy Richards
Harold Sigward Roise
Alice Frances Rondeau
Carolyn Frieda Roos
Mabel Sant
Elizabeth Alida Waldrop Schroeder
Victoria Cassels Scott
Maximo Paulino Sebastian
Ruth E. Munro Shira
Elena Sliepcevich
Ida M. Compton Smith
Lyle Smith
Mary Dillon Smith
Marian Glendora Smith
George Russell Sommer
Delma H. Sorensen
June Frances Spellerberg
Royce Darwin Stauffer
Vivian Thomas Stephenson
Laurel Jean Stewart
Alexander Stim, Jr.
Billy Briggs Studebaker
Helen Ford Sullivan
Vernon David Taggart
Mary Elizabeth Tilford
Richard Alois Trzuskowski
Thaddeus Vesser
June Viel
Emily Gascoigne Ward
Ida Martin Warner
Raymond Weitz
John Robert Welch
Harold Wennstrom
Evelyne White
Jenny Wren Wilder
Otis Clyde Williams
Hugh Edward Wilson
Mary Lorita York

Bachelor of Science in Music Education

Calypso Hawley
Esther Evelyn Hughes
William Gilmor MacPhail
John Alan O'Connor
Richard Harland Paris
Betty Torgesen
Ailene Drucillia Trunnell
Karl J. Wilson

School of Business Administration

Bachelor of Science in Business

Robert LaVerne Alexanderson
Raymond Leo Beeler
Walter Charles Bithell
Morris Peter Bohman
Matha Irene Boles
Norman Tedder Bond
George Allison Bremer, Jr.
Willard Russell Burns
Ross Erin Butler
Barbara Louise Carnefix
Harold Starr Carringer
Charles Dawson Crowther, Jr.
Jack William Cushman
Edward Lee Dailey
Homer Evan Davies
Jean Margaret Driscoll
Verla Burwell Durant
Frances Miller Foster
John Leonard Gaskill
Richard Rayome Greiner
Leo Louis Hammond
John Alfred Henggeler
Eugene Burton Herron
Beth Hess
Audrey Oberg Hunter
Russell Ray Johnson
Ellen Alberta Johnston
Max Ronald Kenworthy
Ethel Aurelia Latimore
Jarvis Estel Lowe
Theodore Wallace McGill
Clarence Edward McPherson
William Dillion Marshall
Arnold Sands Miller
Mary Eleanor Moore
Max Noel
William A. Olson
John Wesley Peret
George Gordon Radford
Anna Maria Raphael
Ardis Marie Simpson
Helen Ann Sutton
Kingsley Charles Torgesen
Charles Wayne Tucker
Jerome Bernard Wesler
Edgar Frederick Wilson
Norma Mae Woodhouse
Clifford William Woodward
Wayne Kenneth Yenni
John Rayner Young

ADVANCED DEGREES

Master of Arts

Name	Present Degree	Major Department
Richard Elvin Berg, B.A.,	University of Idaho, 1937	*English*
William Spencer Bronson, B.A.,	University of Idaho, 1930	*Philosophy*
Walter Lee Brown, B.A.,	University of Idaho, 1938	*English*
Horace Charles Carlson, B.S.,	Utah State Agricultural College, 1935	*European History*
Doris Squibb Coughlan, B.A.,	University of Idaho, 1927	*Spanish*
Bernice Evelyn Exleton, B.A.,	University of Idaho, 1938	*French*
Carolyn Katherine Atkins Folz, B.S. in L.S.,	University of Illinois, 1933	*English*
Mother Mary Callista Murray, A.B.,	Incarnate Word College, 1923	*English*
Francis John Newton, B.A.,	University of Idaho, 1936	*Art*
Reuben Emanuel Norling A.B.,	Augustana College, 1926; B.D., Augustana Theological Seminary, 1930	*English*
Mary Alice Pierce, B.A.,	College of Idaho, 1928	*English*
Hazel Mary Roe, B.A.,	University of Idaho, 1926	*European History*
Michael Gerald Ryan, A.B.,	Colby College, 1937	*American History*
Herbert Kurt Steiniger, B.A.,	University of Idaho, 1936	*Art*
Alma Edwin Teuscher, A.B.,	University of California at Los Angeles, 1934	*American History*
James Port Wells, B.A.,	University of Idaho, 1936	*English*
Arnold Sexton Westerlund, B.A.,	University of Idaho, 1938	*Art*
Elinor May Yaggy, B.A.,	University of Idaho, 1929	*English*

Master of Science

Oren William Bigham, B.S.,	University of Idaho, 1938	*Botany*
John Roy Bower, Jr., B.S. in Ch.E.,	Montana State College, 1937	*Wood Chemistry*
Jean Boomer Daubenmire, B.S.,	University of Idaho, 1936	*Botany*
Ralph Lowell Hossfeld, B.S. (Chem.E.),	University of Idaho, 1937	*Wood Chemistry*
Sherman Newell Kelly, B.S. (Chem.E.),	University of Idaho, 1937	*Chemistry*
Gordon Morehouse Martin, B.S.,	Purdue University, 1938	*Physics*
Robert Clayton Rogers, B.S.,	University of Idaho, 1938	*Psychology*
Karsten Sigurd Skaar, B.S. (Chem.E.),	University of Idaho, 1937	*Chemistry*
George Finley Sprague, Jr., B.S. in Chem.,	University of Virginia, 1932	*Chemistry*
Samuel Branch Walker, B.S. (Chem.E.),	University of Idaho, 1935	*Chemistry*
John William Zukel, B.S.,	Massachusetts State College, 1937	*Entomology*

Master of Science in Agriculture

Glenn LeRoy Bodily, B.S. (Agr.),	University of Idaho, 1939	*Plant Pathology*
James Floyd Claypool, B.S. (Agr.),	University of Idaho, 1936	*Agricultural Chemistry*
William Earle Colwell, B.Sc.,	University of Nebraska, 1936	*Agronomy (Soils)*
Beckford Fedderson Coon, B.S. (Agr.),	University of Idaho, 1938	*Entomology*
William Richard Craner, B.S. (Agr.),	University of Idaho, 1930	*Agricultural Education*

Master of Science in Agricultural Engineering

Herschel Vincent Klaas, B.S.(A.E.), University of Idaho, 1938 — *Rural Electrification*
Bernardo Secolles Salvador, B.S.(A.E.), University of Idaho, 1938 — *Agricultural Engineering*
William Benjamin Watson, B.S.(A.E.), University of Idaho, 1938 — *Hydrology*

Master of Science in Metallurgical Engineering

B. LaVerl Bryant, B.S.(Chem.E.), University of Kansas, 1938 — *Metallurgy*
James Philip Cooke, B.S., Oregon State College, 1934 — *Metallurgy*
Kenneth Kenwood Kirkpatrick, B.S.(Chem.E.), University of Idaho, 1938 — *Metallurgy*
Joseph Edwin Pimentel, B.S.(Chem.E.), University of Idaho, 1936 — *Metallurgy*
Lyman Huntley Shaffer, B.S., U.S. Military Academy, 1930 — *Metallurgy*
Robert E. Shaffer, B.A., State University of Iowa, 1936; B.S. Min.E., New Mexico School of Mines, 1938 — *Metallurgy*

Master of Science in Geology

Warren Richard T. Wagner, B.A.(Geol.), Berea College, 1936 — *Ore Deposits*

Master of Science in Forestry

Francis Gordon Ellis, B.S.(For.), University of Idaho, 1928 — *Range Management*
Willard Leslie Robinette, B.S., New York State College of Forestry, 1937 — *Range Management*
Albert Wiswell Slipp, B.S. in For., University of New Brunswick, 1930 — *Forest Pathology*

Master of Science in Education

Margaret Joy Bell, A.B., Asbury College, 1924 — *Education*
Georgia Mae Bennett, B.S.(Ed.), University of Idaho, 1932 — *Education*
Franklyn Wesley Bovey, B.S.(Ed.), University of Idaho, 1933 — *Education*
Emory Lee Bruns, B.S., South Dakota State College, 1925 — *Education*
Gayland Everett Burgeson, B.A. in Ed., State Teachers College, Valley City, N. D., 1929 — *Education*
Kenneth Joseph Carberry, B.S.(Ed.), University of Idaho, 1938 — *Physical Education*
William Henry Carder, B.S.(Ed.), University of Idaho, 1921 — *Education*
George A. Catmull, B.A., University of Utah, 1931 — *Education*
Orby David Cole, B.S.(Ed.), University of Idaho, 1931 — *Education*
Sister M. Alfreda Elsensohn, B.S., Gonzaga University, 1927 — *Education*
Edward Harold Foster, B.A., Walla Walla College, 1929 — *Education*
Seth Temple Freer, B.S., University of Idaho, 1914 — *Education*
Karl Edgar Frye, B.S.(Ed.), University of Idaho, 1939 — *Education*
Cyril Lawrence Geraghty, B.S.(Bus.), University of Idaho, 1935 — *Education*
A. Hollis Grange, B.S., Utah State Agricultural College, 1934 — *Education*
Olen Dean Green, B.S.(Ed.), University of Idaho, 1938 — *Physical Education*
Helene Katharine Haller, B.S.(Ed.), University of Idaho, 1938 — *Education*
Flora Southworth Jones, B.S., University of Oregon, 1933 — *Education*
Clara Amanda Kelley, B.S.(Ed.), University of Idaho, 1938 — *Education*
James Marshall Laing, B.S.(Ed.), University of Idaho, 1937 — *Education*
Kenneth Austin Lauritzen, B.S.(Mus.Ed.), University of Idaho, 1938 — *Education*
Charles McConnell, B.A., University of Idaho, 1932 — *Education*
Marvin Whitney McLaughlin, B.A., College of Idaho, 1919 — *Education*
Lowell Wesley Mason, B.S.(Ed.), University of Idaho, 1930 — *Education*
Wilbur Whittaker Merchant, B.S.(Ed.), University of Idaho, 1935 — *Education*
James Homer Nelson, B.S.(Ed.), University of Idaho, 1937 — *Educational Psychology*
Paul Marion Parks, B.S.(Ed.), University of Idaho, 1930 — *Education*
Ralph Nicholas Peterson, B.A., University of Idaho, 1930 — *Education*
Ronald Martin Smith, B.S.(Pre-Med.), University of Idaho, 1931 — *Education*
Harvey Everett Steiger, B.S.(Ed.), University of Idaho, 1938 — *Education*
Derrick A. Stephenson, LL.B., University of Montana, 1917; B.A., University of Montana, 1925 — *Education*
Alexander Stim, Jr., B.S.(Ed.), University of Idaho, 1939 — *Education*
Joseph Murphy Stover, Jr., B.S.(Ed.), University of Idaho, 1929 — *Education*
Ruth Margaret Underkofler, B.A., College of Idaho, 1919 — *Education*
Roberta Fisher Whittemore, B.A., University of Idaho, 1925 — *Education*
David Louis Wiks, B.S.(Ed.), University of Idaho, 1930 — *Education*
George D. Williams, B.A. in Ed., Iowa State Teachers College, 1927 — *Education*
George William Willott, B.S.(Ed.), University of Idaho, 1938 — *Physical Education*

Master of Science in Music Education

Alice Esther Peterson, B.S., Teachers College, Columbia University, 1930 — *Music Education*

Master of Science in Business

Evelyn Marie Albrecht, B.A., Antioch College, 1928 — *Business Administration*

AGRICULTURAL ENGINEER

Jefferson Belton Rodgers, B.S.(M.E.), University of Idaho, 1929; M.S.(A.E.), University of Idaho, 1935

HONORARY DEGREES

BACHELOR OF ARTS

John Warren Brigham, Genesee, Idaho

DOCTOR OF LETTERS

Talbot Lanham Jennings, Hollywood, California

COMMISSIONS

COMMISSIONED AS SECOND LIEUTENANTS IN THE OFFICERS' RESERVE CORPS, ARMY OF THE UNITED STATES

Robert J. Abbey
Leon C. Addy
Robert L. Alexanderson
Walter B. Betts
Aaron E. Blewett
Honor Graduate
W. Melvin Butterfield
Charles D. Crowther
Honor Graduate
Richard J. Darnell
Walter L. Dinnison
John M. Elder
Robert B. Galbreaith
Earl S. Gregory
Charles F. Gripton
John M. Hammerlund
Eugene B. Herron
John H. Hoye
Honor Graduate
Martin V. Huff
James R. Hutchison
James E. Johnston
Max R. Kenworthy
Charles D. King
Honor Graduate
Kenneth F. Langland
Dale C. Lawrence
Robert C. Linkhart
Carroll B. McElroy
John W. McVey
John J. Minnis
James G. Moerder
James L. Nixon
John W. Peret
Charlie F. Petersen
Emmet Porter
Donald E. Ratliff
Robert C. Ratliff
Harold S. Roise
Honor Graduate
Harold G. Senften
George R. Sommer
Ovid N. Stromberg
Paul F. Taylor
Honor Graduate
Merrill S. Thornber
Robert G. Vervaeke
Reo S. Westover

TO BE COMMISSIONED SECOND LIEUTENANTS IN THE OFFICERS' RESERVE CORPS, ARMY OF THE UNITED STATES, UPON REACHING THE AGE OF 21 YEARS

George G. Radford
Sam J. Rich
Wayne K. Yenni

TO BE COMMISSIONED SECOND LIEUTENANT IN THE OFFICERS' RESERVE CORPS, ARMY OF THE UNITED STATES, UPON COMPLETION OF CAMP TRAINING AND REACHING THE AGE OF 21 YEARS

George H. Cummings

Final Honor List, Class of 1939

For conditions upon which honors are awarded see paragraph on "Honors" in Part II of this catalog. In this list the names are arranged in alphabetical order, not according to scholastic rating.

HIGHEST HONORS

Helen Marie Abbott, B.A.
Jean Hitchcock Baer, B.A.
Margit Hansen, B.A.
Angeline Louise Helmholz, B.S.(Ed.)
James Clenny Hicks, B.S.(Min.E.)
Mary Elizabeth Kostalek, B.S.(Pre-Med.)
Marjorie Lois Lester, B.A.
Mildred Margaret Lewis, B.A.
Jack Whitwell McKinney, B.A.
John Melvin Molberg, B.S.(For.)
Robert Pierce Muffett, B.S.(Ed.)
Marcelo Andres Ordonez, B.S.(Ed.)
Margaret Jane Swayne, B.A.
Paul Francis Taylor, B.S.(C.E.)

High Honors

Leonard James Arrington, B.A.
John Ramsey Baldwin, B.S. (C.E.)
Blanche Susanna Black, B.A.
Ellen Lenore Byrnes, B.A.
Fred William Cater, B.S. (Geol.E.)
Robert Orin Chambers, B.S. (E.E.)
Arthur Frederick Dalley, B.S.
Verla Burwell Durant, B.S. (Bus.)
Earl Orvid Evans, B.S. (Agr.)
Edwin Fargo, B.S. (For.)
Bruce Barr Gralow, B.S. (Chem.E.)
Elizabeth Roberta Hanrahan, B.A.
Mary Edna Harmer, B.A.
Eugene Burton Herron, B.S. (Bus.)
Billie Louise Hilliard, B.S. (Ed.)
Ada Marcia Hoebel, B.A.
Esther Evelyn Hughes, B.S. (Mus.Ed.)
Audrey Oberg Hunter, B.S. (Bus.)
Charles Douglas King, B.S. (A.E.)
Charles Wilbur Larkam, B.S. (Chem.E.)
Francis Lillian Lewis, B.S. (Ed.)
Voitto Arnold Luukkonen, B.S. (M.E.)
Edgar Olaf McAlister, B.S. (Min.E.)
Helen Charlotte McCannon, B.S. (Ed.)
Arnold Sands Miller, B.S. (Bus.)
Julia Winifred Moore, B.A.
Velma Ruth Patton, B.S. (Ed.)
James Wilson Pennington, B.S. (Met.E.)
Charles Edgar Poulton, B.S. (For.)
Anna Maria Raphael, B.S. (Bus.)
Elsie Wahl Ratajak, B.A.
Edwin James Ratajak, B.S.
Carolyn Frieda Roos, B.S. (Ed.)
Lysle Christian Schwendiman, B.S. (Chem.E.)
Herman Edward Slotnick, B.A.
Vance Thomas Smith, B.S. (Agr.)
Donald Jack Soltman, B.S. (Pre-Med.)
Helen Ford Sullivan, B.S. (Ed.)
Hans Wetter, B.A.
Robert Theodore Williams, B.S. (Min.E.)
Norma Mae Woodhouse, B.S. (Bus.)

PART VIII

Enrollment Statistics

Index

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

SUMMARY

	College	Non-Resident	Special Courses	Summer School	Students in Absentia
Idaho	2263	340	38	599	45
States other than Idaho	531	100	8	290	26
Territories and Foreign Countries	29	5	—	5	—
TOTAL	2823	445	46	894	71

COUNTIES IN IDAHO

	College	Non-Resident	Special Courses	Summer School	Students in Absentia
Ada	185	27	1	40	4
Adams	3	—	—	4	—
Bannock	51	15	—	22	—
Bear Lake	17	2	—	9	—
Benewah	47	4	—	5	1
Bingham	47	7	—	15	3
Blaine	16	2	—	7	2
Boise	5	—	—	—	—
Bonner	81	10	2	7	1
Bonneville	38	15	—	13	1
Boundary	40	5	—	9	—
Butte	7	3	—	1	—
Camas	5	2	1	1	—
Canyon	94	17	—	21	3
Caribou	5	—	—	—	—
Cassia	41	7	—	16	4
Clark	4	—	—	2	—
Clearwater	44	3	—	10	1
Custer	15	4	—	6	1
Elmore	19	6	—	5	1
Franklin	19	3	—	14	2
Fremont	21	7	1	6	—
Gem	30	3	—	9	1
Gooding	36	4	2	10	1
Idaho	56	10	—	14	3
Jefferson	13	3	—	3	—
Jerome	30	4	—	5	—
Kootenai	124	20	3	29	2
Latah	521	72	21	143	3
Lemhi	20	3	—	4	—
Lewis	45	7	1	4	—
Lincoln	12	3	—	5	—
Madison	28	3	—	6	1
Minidoka	58	4	—	15	1
Nez Perce	117	10	4	40	1
Oneida	24	6	—	12	2
Owyhee	10	3	—	5	1
Payette	34	3	—	4	—
Power	9	3	—	7	—
Shoshone	129	16	—	14	1
Teton	7	1	1	9	—
Twin Falls	102	18	1	31	3
Valley	23	5	—	4	—
Washington	31	—	—	13	1
TOTAL	2263	340	38	599	45

STATES OTHER THAN IDAHO

	College	Non-Resident	Special Courses	Summer School	Students in Absentia
Alabama	—	—	—	1	—
Arizona	3	—	—	2	1
Arkansas	1	—	—	—	—
California	67	12	—	29	4
Colorado	2	1	—	3	—
Connecticut	2	3	—	—	—
Delaware	1	—	—	—	—
Florida	1	—	—	1	—
Illinois	21	4	—	3	—
Indiana	9	—	—	—	—
Iowa	7	1	—	10	—
Kansas	3	—	—	6	2
Louisiana	2	—	—	1	—
Maine	9	1	—	—	—
Maryland	1	—	—	—	—
Massachusetts	7	3	—	—	—
Michigan	3	—	—	1	—
Minnesota	13	2	—	32	2
Missouri	8	—	—	5	—
Montana	25	16	3	12	1
Nebraska	3	1	—	4	1
Nevada	2	—	—	2	—
New Jersey	21	1	—	2	—
New York	33	1	—	6	—
North Carolina	—	—	—	1	—
North Dakota	8	1	—	20	—
Ohio	13	—	—	1	—
Oklahoma	2	—	—	1	—
Oregon	25	4	1	34	6
Pennsylvania	8	1	—	—	—
Rhode Island	4	1	—	—	—
South Dakota	11	1	—	13	2
Texas	2	2	—	2	—
Utah	9	8	—	41	3
Vermont	1	—	—	—	—
Virginia	3	—	—	—	—
Washington	160	30	4	38	3
Washington, D. C.	1	—	—	3	1
West Virginia	1	—	—	—	—
Wisconsin	30	—	—	7	—
Wyoming	9	6	—	9	—
TOTAL	531	100	8	290	26

TERRITORIES AND FOREIGN COUNTRIES

	College	Non-Resident	Special Courses	Summer School	Students in Absentia
Alaska	1	1	—	1	—
Canada	22	3	—	4	—
Czechoslovakia	1	—	—	—	—
Hawaii	1	—	—	—	—
Mexico	1	—	—	—	—
Panama Canal Zone	—	1	—	—	—
Philippine Islands	3	—	—	—	—
TOTAL	29	5	—	5	—

ENROLLMENT TABLE, FIRST SEMESTER 1939-40 TO DECEMBER 9, 1939

COLLEGE, COURSE, or CURRICULUM	Graduate Students			Seniors			Juniors			Sophomores			Freshmen			Specials			Total by Curricula			Total by Colleges		
COLLEGE	* M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T
College of Letters and Science	35	22	57	55	82	137	81	88	169	84	99	183	104	136	240	2	—	2				361	427	788
Arts	11	17	28	25	38	63	34	43	77	43	44	87	50	49	99	2	—	2	165	191	356			
Science	24	3	27	24	3	27	34	2	36	28	7	35	26	8	34	—	—	—	136	23	159			
Pre Medical Studies	—	—	—	6	—	6	12	3	15	12	3	15	28	3	31	—	—	—	58	9	67			
Home Economics	—	—	—	—	40	40	—	40	40	—	42	42	—	61	61	—	—	—	—	183	183			
Pre-Nursing Studies	—	—	—	—	—	—	—	—	—	—	3	3	—	15	15	—	—	—	—	18	18			
Music	—	2	2	—	1	1	1	—	1	1	—	1	—	—	—	—	—	—	2	3	5			
College of Agriculture	14	—	14	55	—	55	56	—	56	79	—	79	104	—	104	3	—	3				311	—	311
College of Engineering	3	—	3	46	—	46	58	1	59	73	—	73	132	—	132	—	—	—				312	1	313
Civil Engineering	2	—	2	14	—	14	14	—	14	17	—	17	37	—	37	—	—	—	84	—	84			
Electrical Engineering	—	—	—	12	—	12	19	—	19	22	—	22	32	—	32	—	—	—	85	—	85			
Mechanical Engineering	1•	—	1	13	—	13	14	1	15	20	—	20	45	—	45	—	—	—	93	1	94			
Chemical Engineering	—	—	—	7	—	7	11	—	11	14	—	14	18	—	18	—	—	—	50	—	50			
Colleges of Agr. and Engr.	2	—	2	2	—	2	2	—	2	5	—	5	4	—	4	1	—	1				16	—	16
Agricultural Engineering	2	—	2	2	—	2	2	—	2	5	—	5	4	—	4	1	—	1	16	—	16			
College of Law	—	—	—	6	1	7	21	1	22	21	2	23	—	—	—	4	—	4				52	4	56
School of Mines	5	—	5	22	—	22	22	—	22	28	—	28	29	—	29	1	—	1				107	—	107
Mining Engineering	—	—	—	6	—	6	7	—	7	12	—	12	11	—	11	1	—	1	37	—	37			
Geology	3	—	3	8	—	8	5	—	5	7	—	7	13	—	13	—	—	—	36	—	36			
Geological Engineering	—	—	—	—	—	—	3	—	3	3	—	3	2	—	2	—	—	—	8	—	8			
Metallurgical Engineering	2	—	2	8	—	8	7	—	7	6	—	6	3	—	3	—	—	—	26	—	26			
School of Forestry	7	—	7	82	—	82	44	—	44	46	—	46	63	—	63	—	—	—				242	—	242
School of Education	14	15	29	67	57	124	67	50	117	50	71	121	89	62	151	—	1	1				287	256	543
Education	14	15	29	62	52	114	63	47	110	43	64	107	84	55	139	—	1	1	266	234	500			
Music Education	—	—	—	5	5	10	4	3	7	7	7	14	5	7	12	—	—	—	21	22	43			
School of Business Administration	2	—	2	59	11	70	78	17	95	91	26	117	107	55	162	—	1	1				337	110	447
Total in Regular Curricula	82	37	119	394	151	545	429	157	586	477	198	675	632	253	885	11	2	13				2025	798	2823
Special Courses																						34	12	46
Music																			9	12	21			
Motor Mechanics																			11	—	11			
Carpentry																			5	—	5			
Commercial Dairying																			9	—	9			
Non-Resident (College Credit)																						266	179	445
Summer School	269	194	463	men 170, women 228, total 398; Special courses 9 24 33;																		448	446	894
Students in Absentia	57	14	71																			57	14	71
Grand Total																						2830	1449	4279
Deduct for names entered more than once																						290	179	469
Net Total																						2540	1270	3810

* M—Men, W—Women, T—Total.

ENROLLMENT TABLE—SOUTHERN BRANCH, UNIVERSITY OF IDAHO—FIRST SEMESTER, 1939-40 TO DECEMBER 9, 1939

DIVISIONS, COURSES or CURRICULA	Senior			Junior			Sophomore			Freshman			Unclassified			Total by Curricula			Total by Divisions		
DIVISION	*M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T	M	W	T
LETTERS AND SCIENCE DIVISION	—	—	—	—	—	—	124	107	231	214	189	403	1	4	5				339	300	639
Art	—	—	—	—	—	—	20	14	34	37	26	63	—	3	3	57	43	100			
Science	—	—	—	—	—	—	17	1	18	17	2	19	1	1	2	35	4	39			
Business	—	—	—	—	—	—	30	17	47	55	53	108	—	—	—	85	70	155			
Business Completion	—	—	—	—	—	—	1	2	3	5	2	7	—	—	—	6	4	10			
Business Law	—	—	—	—	—	—	6	—	6	9	—	9	—	—	—	15	—	15			
Home Economics	—	—	—	—	—	—	—	18	18	—	20	20	—	—	—	—	38	38			
Pre-Medical Studies	—	—	—	—	—	—	3	—	3	10	2	12	—	—	—	13	2	15			
Pre-Nursing Studies	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	2	2			
Hospital Training	—	—	—	—	—	—	—	4	4	—	10	10	—	—	—	—	14	14			
Pre-Dental Studies	—	—	—	—	—	—	2	—	2	2	—	2	—	—	—	4	—	4			
Music	—	—	—	—	—	—	—	—	—	2	2	4	—	—	—	2	2	4			
Agriculture	—	—	—	—	—	—	—	—	—	12	—	12	—	—	—	12	—	12			
Forestry	—	—	—	—	—	—	18	—	18	33	—	33	—	—	—	51	—	51			
Education	—	—	—	—	—	—	23	50	73	29	69	98	—	—	—	52	119	171			
Music Education	—	—	—	—	—	—	4	1	5	3	1	4	—	—	—	7	2	9			
ENGINEERING DIVISION	—	—	—	—	—	—	34	—	34	83	—	83	—	—	—	—	—	—	117	—	117
Civil Engineering	—	—	—	—	—	—	6	—	6	22	—	22	—	—	—	28	—	28			
Electrical Engineering	—	—	—	—	—	—	7	—	7	17	—	17	—	—	—	24	—	24			
Mechanical Engineering	—	—	—	—	—	—	13	—	13	28	—	28	—	—	—	41	—	41			
Chemical Engineering	—	—	—	—	—	—	6	—	6	9	—	9	—	—	—	15	—	15			
Agricultural Engineering	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	1	—	1			
Mining Engineering	—	—	—	—	—	—	1	—	1	1	—	1	—	—	—	2	—	2			
Geology	—	—	—	—	—	—	1	—	1	5	—	5	—	—	—	6	—	6			
COLLEGE OF PHARMACY	28	1	29	30	4	34	37	2	39	58	4	62	4	—	4	—	—	—	157	11	168
TOTAL IN REGULAR CURRICULA	28	1	29	30	4	34	195	109	304	355	193	548	5	4	9	—	—	—	613	311	924
VOCATIONAL EDUCATION DIVISION																			95	60	155
Auto Mechanics																29	—	29			
Auto Painting																13	—	13			
Aviation Mechanics																14	—	14			
Carpentry																11	—	11			
Dressmaking																—	4	4			
Secretarial Training																10	6	16			
Cosmetology																—	13	13			
Printing																12	1	13			
Home Economics																—	36	36			
Commercial Foods																6	—	6			
SPECIAL MUSIC OR ART STUDENTS																34	19	53	34	19	53
GRAND TOTAL																			742	390	1132

* M—Men, W—Women, T—Total.

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