

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

APRIL, 1919

NO. 127—SECTION 1

ENTRANCE INFORMATION

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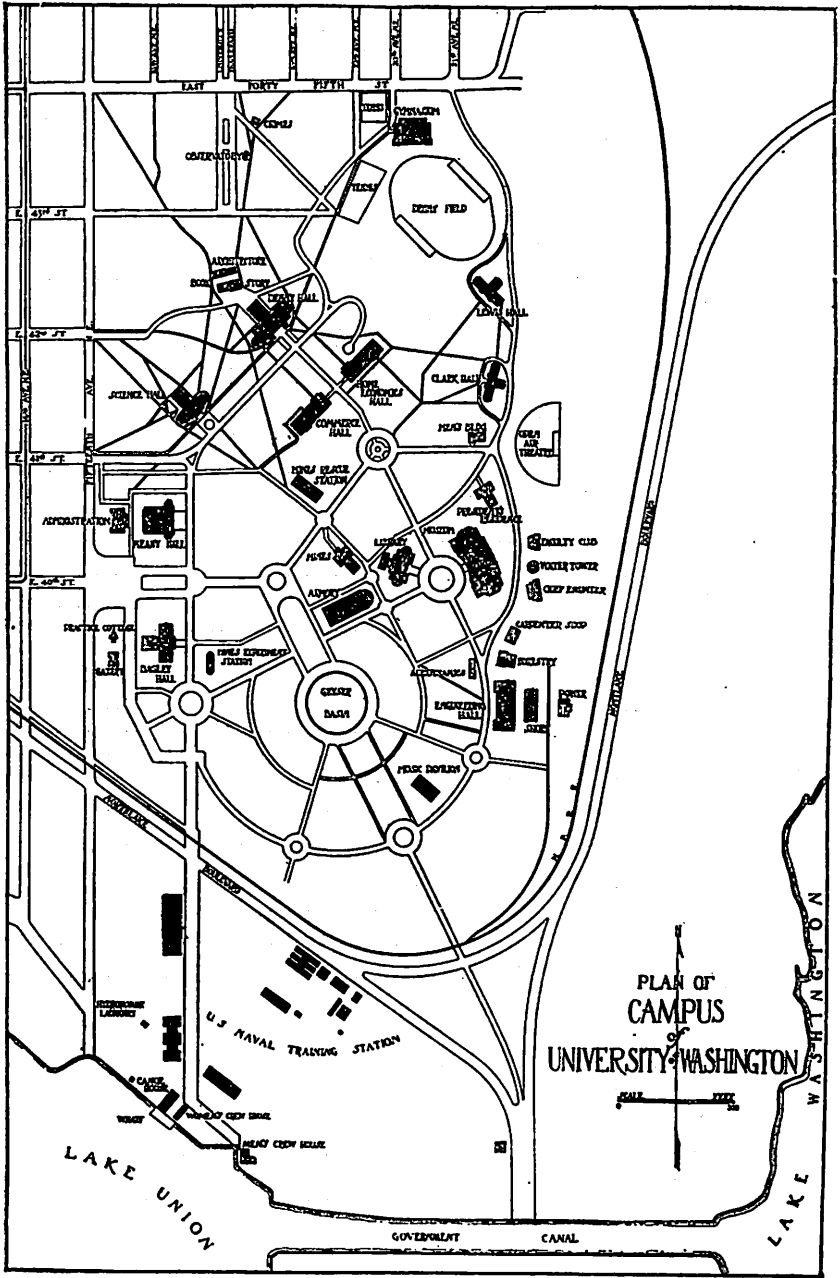
SEATTLE, WASHINGTON

PUBLISHED QUARTERLY BY THE UNIVERSITY

1919

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PLAN OF CAMPUS
UNIVERSITY OF WASHINGTON

SCALE 1:1000

LAKE UNION

WASHINGTON
LAKE

GOVERNMENT CANAL

U.S. NAVAL TRAINING STATION

THE ENTRANCE INFORMATION BULLETIN

This bulletin contains such parts of the General Catalogue and Announcement of the University as are needed for the information in regard to general facilities and requirements of admission of those intending to become students. Specific information concerning the work of the different colleges, schools, and departments, will be found in the complete General Catalogue or in the separate bulletins listed on the last page.

LOCATION OF THE UNIVERSITY

The University of Washington campus, comprising 355 acres, lies between Fifteenth Avenue Northeast on the western boundary and Lake Washington on the eastern and Forty-fifth Street on the northern and Lake Union on the southern. The campus is best reached from the railway stations and docks by Ravenna or Cowen Park cars. Administration Hall is reached by leaving the street car at Fortieth Street and Fourteenth Avenue Northeast and walking one block east. It faces on Fifteenth Avenue at the left of the Fortieth Street entrance to the campus.

UNIVERSITY CALENDAR

1918-1919

AUTUMN QUARTER

Examination for admission and for exemption from College English, Thursday, Friday and Saturday, September 26, 27 and 28, at 9 a. m. and 2 p. m.
 Registration of new first year students.....Friday and Saturday, September 27 and 28
 Registration of all other students.....Monday and Tuesday, September 30 and October 1
 Instruction begins.....Wednesday, October 2
 President's annual address.....Friday, October 4, 10 a. m.
 Women's assembly.....Friday, October 11, 11 a. m.
 Thanksgiving recess.....Wednesday, November 27, 6 p. m., to Monday, December 2, 8 a. m.
 Quarter examinations.....Tuesday, Wednesday, Thursday and Friday, December 17, 18, 19 and 20

WINTER QUARTER

Registration days.....Thursday and Friday, January 2 and 3
 Instruction begins.....Monday, January 6
 Washington's birthday (holiday).....Saturday, February 22
 Quarter examinations.....Friday, Saturday, Monday and Tuesday, March 21, 22, 24 and 25

SPRING QUARTER

Registration days.....Monday and Tuesday, March 31 and April 1
 Instruction begins.....Wednesday, April 2
 Campus Day.....Friday, April 25
 Junior Day.....Saturday, May 24
 Memorial Day (holiday).....Friday, May 30
 Quarter examinations.....Tuesday, Wednesday, Thursday and Friday, June 10, 11, 12 and 13
 Class Day and President's reception.....Saturday, June 14
 Baccalaureate Sunday.....June 15
 Commencement and Alumni Day.....Monday, June 16

SUMMER QUARTER

Registration.....Tuesday, June 17
 Instruction begins.....Wednesday, June 18
 Quarter examinations.....Saturday, August 30

THE BOARD OF REGENTS

WINLOCK W. MILLER, President.....	Seattle
Term ends March, 1920	
WILLIAM T. PERKINS.....	Seattle
Term ends March, 1920	
ELDRIDGE WHEELER.....	Montesano
Term ends March, 1921	
OSCAR A. FECHTER.....	Yakima
Term ends March, 1922	
JOHN A. REA.....	Tacoma
Term ends March, 1922	
WILLIAM A. SHANNON.....	Seattle
Term ends March, 1923	
RUTH KARR MCKEE.....	Olympia
Term ends March, 1923	

WILLIAM MARKHAM, Secretary to the Board

OFFICERS OF ADMINISTRATION
THE UNIVERSITY

- HENRY SUZZALLO, Ph. D., LL. D.....President of the University
Administration Hall
- JOHN THOMAS CONDON, LL. M.....Dean of Faculties
Administration Hall
- HERBERT THOMAS CONDON, LL. B.....Comptroller
Administration Hall
- EDWARD NOBLE STONE, A. M.....Registrar
Administration Hall
- EDWIN BICKNELL STEVENS, A. M.....Executive Secretary
Administration Hall
- ¹ARTHUR RAGAN PRIEST, A. M.....Dean of Men
Administration Hall
- MACY MILLMORE SKINNER, Ph. D.....Assistant Dean of Men
Administration Hall
- ETHEL HUNLEY COLDWELL, A. M.....Dean of Women
Administration Hall
- WILLIAM ELMER HENRY, A. M.....Librarian
Library
- FRANK STEVENS HALL.....Museum
Museum

THE COLLEGES AND SCHOOLS

- DAVID THOMSON, B. A.....Dean of the College of Liberal Arts
Denny Hall
- HENRY LANDES, A. M.....Dean of the College of Science
Science Hall
- STEPHEN IVAN MILLER, LL. B., A. B.....
.....Director of the College of Business Administration
Commerce Hall
- FREDERICK ELMER BOLTON, Ph. D....Dean of the College of Education
Home Economics Hall
- CARL EDWARD MAGNUSSON, Ph. D.....
.....Acting Dean of the College of Engineering
Engineering Hall
- IRVING MACKEY GLEN, A. M.....Dean of the College of Fine Arts
Meany Hall
- JOHN NATHAN COBB.....Director of the College of Fisheries
Commerce Hall
- HUGO WINKENWERDER, M. F.....Dean of the College of Forestry
Forestry Hall
- ²COLIN VICTOR DYMENT, B. A.....Director of the School of Journalism
Commerce Hall
- JOHN THOMAS CONDON, LL. M.....Dean of the Law School
Commerce Hall
- WILLIAM ELMER HENRY, A. M.....Director of Library School
Library
- MILNOR ROBERTS, A. B.....Dean of the College of Mines
Mines Hall
- CHARLES WILLIS JOHNSON, Ph. C., Ph. D.....
.....Dean of the College of Pharmacy
Bagley Hall
- FREDERICK MORGAN PADEFORD, Ph. D.....
.....Acting Dean of the Graduate School
Denny Hall
- ³J. ALLEN SMITH, Ph. D.....Dean of the Graduate School
Denny Hall

THE EXTENSION SERVICE

- ²EDWIN AUGUSTUS START, A. M.....Director
- EVERETT FRANCIS DAHM, A. B.....Assistant Director
Administration Hall

¹Absent on leave.

²Absent on leave 1918-19; resigned 1919.

³Detached on special service 1917-19.

THE UNIVERSITY ORGANIZATION

The University of Washington is one of the five institutions of higher education which complete the system of public education of the state of Washington. Each of these institutions, the others being the State College and the three normal schools, has its field delimited by the legislature of the state. To the University is given exclusive authority to instruct in the following major lines: Aeronautical engineering, architecture, commerce, fisheries, forestry, journalism, law, library economy, marine engineering, and medicine.

The University has concurrent authority with the State College to instruct in the following major lines: Chemical engineering, civil engineering, electrical engineering, home economics, liberal arts, mechanical engineering, mining, pharmacy, professional training of high school teachers, school supervisors, and school superintendents, and pure science.

Schools and Colleges and Their Fields.—To carry out its share of this educational responsibility, the University is organized in several schools and colleges, the organization, opportunities, and requirements of which are set forth in this annual announcement. These schools and colleges are:

- (A) The Colleges of Liberal Arts and Science, which provide a liberal education in the fields of arts and of pure science, leading in a course, normally requiring twelve quarters of residence, to the degrees of bachelor of arts and bachelor of science.
- (B) The professional and technical schools and colleges, including:
 - (1) The College of Business Administration, covering in a course of twelve quarters the fundamentals of scientific training for industry and commerce. The degree given is bachelor of business administration.
 - (2) The College of Education, in a course of twelve quarters, prepares students for careers in the field of education as high school teachers and school administrators. The degree is bachelor of education. Students in the College of Liberal Arts may major in the department of education and take the degree of bachelor of arts.
 - (3) The College of Engineering has four departments, chemical, civil, electrical, and mechanical engineering (including aeronautical and marine), their curricula leading in twelve quarters to the degree of bachelor of science in the special field chosen by the student, of science in the special field chosen by the student. The degree of master of science in each field is open to graduate students. The college opens a wide range of training for technical activities.

- (4) The College of Fine Arts offers curricula of twelve quarters in architecture, vocal, instrumental, or public school music, or musical theory, painting and design, public school drawing, and music and drawing, leading to the degrees of bachelor of architecture, or bachelor of fine arts, with a major in one of the subjects named.
- (5) The College of Fisheries, just established, lays a scientific foundation for work connected with the great industry of the fisheries, one of the chief resources of the Pacific Coast. The degree is bachelor of science in fisheries.
- (6) The College of Forestry offers a curriculum of twelve quarters preparing for work as a scientific forester or in the great industry of lumbering. The degree is bachelor of science. The full professional course is fifteen quarters, with a liberal allowance of electives, giving opportunity for specialization in forest service and state work, logging engineering, forest products, or the lumber business. For this course the degree of master of science may be given.
- (7) The School of Journalism requires for entrance as a major an equivalent of the junior certificate, elsewhere explained, substantially the first two years of college work in arts or science. The curriculum leads to the degree of bachelor of arts and prepares its students for practical newspaper work.
- (8) The School of Law is the standard of approved law schools for admission to the bar of this state. For admission the student must present a junior certificate from the College of Liberal Arts or the College of Science, or its equivalent. The curriculum of the school requires three school years or nine quarters, and leads to the degree of bachelor of laws. The degree of master of laws is also given. Students may carry on work in liberal arts or science and law concurrently, taking both bachelors' degree in six years, or eighteen quarters.
- (9) The Library School likewise has a three year or nine quarter curriculum, which must be preceded by the work required for a junior certificate in the College of Liberal Arts or the College of Science. It prepares for professional library work and gives the degree of bachelor of library economy.
- (10) The College of Mines offers four year or twelve quarter curricula, leading to the degree of bachelor of science in mining engineering, geology and mining, metallurgical engineering, or coal mining engineering.

The fields open to graduates of this college are indicated by these divisions. The college also offers a curriculum in ceramics (clay, glass and cement products.) The graduation degree of master of science may also be obtained.

- (11) The College of Pharmacy offers two, three, four, and five years courses, the first preparing for practical pharmacy, the second for commercial pharmacy, the third providing a well rounded scientific training in this field, and the fourth an opportunity for graduate and research work. The two year course offers the degree of graduate in pharmacy, the three year course that of pharmaceutical chemist, the four year that of bachelor of science in pharmacy, and the five year that of master of science in pharmacy.
- (C) The Graduate School. In this school the master's degree in arts or science is given after one year of resident work of high grade and special character. The degree of doctor of philosophy is given in four departments, botany, chemistry, English, and mathematics.

It will thus be seen that the university offers wide opportunities either for a liberal education in the arts and sciences or for specialized professional and technical training. Since the university life is enjoyed in common, students of the former class are in daily contact with the practical applications of learning, and those of the latter class work in close association with the spirit and traditions of liberal culture. Through its extension service the university makes much of its teaching and influence effective among those who cannot become resident students.

Definitions and Explanations.—In all statements relating to the university the word *course* refers to a single study pursued for a definite period, for which credit may be given toward university requirements for graduation in accordance with the number of hours taken; a *curriculum* is a group of courses arranged to be taken consecutively or concurrently; a *department* is the unit of instructional organization in a particular science or art, as the department of geology; a *college* gives full curricula, beginning with the work of the freshman year and covering twelve quarters; while the work of a *school* is based upon two or more years of college work.

The four year programs of the colleges of arts and science are further divided into the *lower division* (freshman and sophomore) and *upper division* (junior and senior). The *junior certificate* is given for the completion of the requirements of the lower division. The more advanced work of the upper division leads to graduation with the bachelor's degree. The specialized work of the schools is upper

division or graduate work and requires the junior certificate as a minimum to enter upon it.

Special Curricula Within the Schools.—There are also given certain semi-professional curricula for which no special school or college is provided. Such is the curriculum in nursing and public health, given in the College of Science.

The university does not give a medical course but it offers a pre-medical curriculum especially planned as a foundation for study in a medical school. This may be two years in length for schools not requiring college graduation, or four years for schools requiring that amount of preparation.

Under the provisions of the National Defense Act, students in the university may attain commissions as reserve officers in the United States Army by meeting the requirements for advanced work in military science. This is done without interference with the students' regular academic work.

The Four Quarter System.—The university is now operated on the four quarter system, each quarter having approximately twelve working weeks. These quarters or terms begin in October, January, April and the latter part of June. The university is closed only through the month of September. A careful reading of the calendar will show the working of this plan in detail. Students may enter at the beginning of any quarter. This permits them to do a full quarter of university work in the summer, to complete a university course in three years, if health and resources permit, or to otherwise adjust their university residence to meet personal conditions. This flexible plan is of especial advantage in the University of Washington because the absence of extremes in climatic conditions is favorable to mental work at all times of the year.

ADMISSION TO THE UNIVERSITY

GENERAL STATEMENT

Students are admitted to the residence work of the University by certificate or by examination, only graduates of accredited four year secondary schools being admitted on certificate. They are classified as graduates and undergraduates. Undergraduates are classified as regular students (freshmen, sophomores, juniors, and seniors), unclassified students, and special students.

All correspondence regarding the admission of students to the residence courses of the University as well as the requirements for graduation should be addressed to the Registrar. Every applicant for admission at the beginning of the autumn quarter, is requested to forward his credentials as early in the summer as possible, at the same time indicating the college or school of the University that he intends to enter. *Credentials for students expecting to enter the*

autumn quarter should be received in the Registrar's office before August 15.

Admission by Certificate.—A graduate of an accredited secondary school, whose course has covered the requirements for entrance as either a regular or an unclassified student (see page 10) will be admitted upon recommendation of his principal and the presentation of a satisfactory certificate. Since the school diplomas do not give the necessary information, they cannot be accepted for this purpose. The principals of all accredited high schools in the state are furnished with the official blanks, which may also be obtained from the Registrar's office.

Applicants for advanced standing are required to furnish a complete certified statement of both preparatory and college credits, together with a letter of honorable dismissal from the institution last attended.

The list of accredited schools is as follows:

I. PUBLIC HIGH SCHOOLS

Aberdeen	Ellensburg	Montesano	Sequim
Almira	Elma	Mossy Rock	Shelton
Anacortes	Endicott	Mount Vernon	Snohomish
Arlington	Enumclaw	Newport	South Bend
Asotin	Ephrata	Nooksack	Spangle
Auturn	Everett	North Bend	Spokane—
Battle Ground	Fairfield	Onkesdale	Lewis and Clark
Bellingham	Fall City	Oakville	North Central
Whatcom	Farmington	Odessa	Sprague
Fairhaven	Ferndale	Okanogan	Stanwood
State Normal High	Foster	Olympia	Stevenson
School	Friday Harbor	Omak	St. John
Blickleton	Garfield	Oroville	Sultan (U. H.)
Black Diamond	Goldendale	Orting	Sumas
Blaine	Grandview	Outlook	Sumner
Bothell	Granger	Falouse	Sunnyside
Bremerton (U. H.)	Granite Falls	Pasco	Tacoma—
Brewster	Harmony	Pe Ell	Stadium
Buckley	Harrington	Pomeroy	Lincoln Park
Burlington	Hartline	Port Angeles	Tekoa
Burton (U. H.)	Hillyard	Port Townsend	Tenino
Camas	Hoquiam	Prescott	Tolt
Cashmere	Iiwaco	Prosser	Tonasket
Castle Rock	Issaquah	Pullman	Toppenish
Centralia	Kalama	Puyallup	Touchet
Chehalis	Kelso	Raymond	Twisp
Chelan	Kennewick	Beardan	Vancouver
Cheney	Kent	Redmond	Vashon
Chewelah	Kettle Falls	Renton	Vera
Clarkston	Kirkland	Republic	Waitsburg
Cle Elum	Kittitas	Richland	Walla Walla
Colfax	La Conner	Ridgefield	Wapato
Colville	La Crosse	Ritzville	Washougal
Conconully	Latah	Rochester	Washtucna
Coulee City	Laurel	Rockford	Waterville
Coupeville	Leavenworth	Rosalia	Wenatchee
Creston	Lemah	Roslyn	White Salmon
Davenport	Lind	Roy	Wilbur
Dayton	Lynden	Seattle—	Wilson Creek
Deer Park	Mabton	Ballard	Winslow
Doty	Malden	Broadway	Winlock
Dryad	Marysville	Franklin	Woodland
Duvall	Mead	Lincoln	Yacolt
Eatonville	Medical Lake	Queen Anne	Yakima
Edison	Meridian (U. H.)	West Seattle	Zillah
Edmonds	Millwood	Sedro Woolley	Douglas, Alaska
Edwall	Monroe	Selah	Juneau, Alaska

II. OTHER SECONDARY SCHOOLS

Adelphia College, Seattle (academic department)	Spokane College, Spokane (preparatory department)
Annie Wright Seminary, Tacoma	St. Helen's Hall, Portland, Oregon
Brunot Hall, Spokane	St. Martin's College, Lacey (high school department)
Forest Ridge Convent, Seattle	St. Nicholas School, Seattle
Holy Angels Academy, Seattle	St. Paul's Academy, Walla Walla
Holy Names Academy, Seattle	College of Puget Sound, Tacoma (preparatory department)
Holy Names Academy, Spokane	Walla Walla College Academy, Walla Walla
Pacific Lutheran Academy, Parkland	Y. M. C. A., Seattle
Pless School, Seattle	
Seattle Pacific College, Seattle (academy)	

III. SCHOOLS OUTSIDE OF WASHINGTON

Graduates of secondary schools outside of Washington will be admitted on the same terms as graduates of accredited schools of Washington, provided the school in question is fully accredited, (1) by the North Central Association of Schools and Colleges, (2) by the New England College Entrance Certificate Board, or (3) by a leading university whose standards of admission are practically the same as those of the University of Washington.

Admission by Examination.—Applicants for admission by examination are required to pass an examination based on a four year course amounting in the aggregate to fifteen units and covering the requirements of the college that the student wishes to enter.

Entrance examinations are held at the University on Thursday, Friday and Saturday preceding the opening of each quarter.

The schedule of hours for examination may be obtained from the Registrar.

Certificates of successful examinations before the College Entrance Examination Board will be accepted in lieu of matriculation examinations conducted by the University of Washington.

Examinations for Exemptions in English.—The department of English will give an entrance examination in English composition for those students who wish to attempt it, with the view to being excused from all or a part of the required course in college composition. It is hoped that a large number of entering students will present themselves for this examination, which will be held on the same dates as the regular entrance examinations.

REGISTRATION

All new first year students will be registered on Friday and Saturday, September 26 and 27, 1919.

Only old students and new students entering with advanced standing will be registered on Monday and Tuesday, September 29 and 30, 1919.

Registration of all students for the winter quarter will take place on Friday and Saturday, January 2 and 3, 1920; for the spring quarter, Friday and Saturday, April 2 and 3, 1920; and for the summer quarter, Tuesday and Wednesday, June 22 and 23, 1920.

Late Registration.—In order to enforce promptness in the matter of taking up university work at the opening of the quarter a penalty of \$1 is imposed for registration after the regular registration days.

The same penalty is imposed for changes in election after the beginning of the regular class work, except where such changes are made upon the initiative of the student's instructor or class officer.

No student will be allowed to register after the first week of the quarter without qualifying by the aid of an approved tutor. (This rule does not apply to graduate students.)

Except in the cases of students who have been granted a leave of absence, or withdrawn in good standing, during the preceding quarter of residence, no students may register in the University after the third week of a quarter without special permission from the Board of Deans.

REQUIREMENTS FOR ADMISSION

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of an accredited secondary school who presents fifteen units* of credit, distributed as follows:

- 2 units of mathematics (1 unit algebra, 1 plane geometry).
- 8 units selected from one of the following groups (or 2 units, if 8 units of mathematics are presented).
 - (a) Latin and Greek (not less than 2 units of Latin, or 1 of Greek will be counted.
 - (b) Modern foreign language (at least 2 units in one language; not less than one unit will be counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physical geography, geology, physiology. (Not less than one unit will be counted in physics, chemistry, or general biology. No science will be counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units in subjects represented in the above groups (a) - (d).
- 5 units selected from any subjects accepted by an approved high school for its diploma; not more than 4 units in vocational subjects. (For admission to the College of Business Administration only, a maximum of 8 units in commercial subjects will be accepted. Only 4 of these will be counted, if the student is transferred later to any other college of the University).

A candidate who fulfills these requirements will be admitted to freshman standing in any of the colleges of the University. However, if he has not taken in high school certain of the subjects recommended for admission to the college that he may decide to enter, he will take them in the University. These subjects may apply toward a degree, as far as elective courses make this practicable. In certain curricula, however, these subjects must be taken in addition to the prescribed subjects.

Entrance with condition, to freshman standing, is not permitted. Excess admission credit does not establish any presumptive claim for advanced standing, unless the student has taken a graduate course in the high school of at least one semester.

Additional Subjects Recommended for Admission to the Several Colleges

COLLEGES OF LIBERAL ARTS AND SCIENCE (GENERAL COURSES)

- 3 units of English.
- 1 unit of algebra.
- 1 unit of plane geometry.

* To count as a "unit" a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks.

UNIVERSITY OF WASHINGTON

A student entering the College of Liberal Arts or the College of Science must take the following subjects in the University as part of his requirements for graduation, if he has not taken them in high school:

- 2 units (20 credits) of a modern foreign language.*
(For the College of Science, French or German is the required language.)
- 1 unit (10 credits) of United States history and civics.
- 1 unit (10 credits) of another history.
- 1 unit (10 credits) of either physics or chemistry.
(Both physics and chemistry are required in the College of Science.)
- 1 unit (10 credits) of either botany or zoology.
- 1 unit (10 credits) of additional mathematics or science.

CURRICULUM PREPARATORY TO MEDICINE (COLLEGE OF SCIENCES)

- 1 unit of United States history and civics.
- 1 unit of medieval and modern history.
- 1 unit of physics.
- 2 units of either French or German.

CURRICULUM FOR NURSES (COLLEGE OF SCIENCE)

- 1 unit of United States history and civics.
- 1 unit of medieval and modern history.
- 2 units of either French or German.

CURRICULA IN HOME ECONOMICS (COLLEGE OF SCIENCE)

For admission to any of these curricula, a student may satisfy the entrance requirements of either the College of Science or the College of Liberal Arts.

COLLEGE OF EDUCATION

- 2 units in one foreign language.
- 1 unit in one of the following: physics, chemistry, botany, zoology.
- 1 unit in a history.
or ½ unit U. S. history, and ½ unit civics.

COLLEGE OF BUSINESS ADMINISTRATION

- 2 units of history (American and modern history preferred).

COLLEGES OF ENGINEERING AND MINES

- ½ unit of advanced algebra.
- ½ unit of solid geometry.
- 1 unit of physics.

COLLEGE OF FINE ARTS (MUSIC, ARCHITECTURE, DRAWING)

General recommended subjects are the same as for the College of Education.*

Music students must also present the equivalent of four years' work in music.

Architecture students should present one unit each in physics and chemistry, and one-half unit each in trigonometry and free-hand drawing.

As all curricula in Fine Arts require at least four years for foreign language, it is desirable that as much of this work as possible be taken in high school.

COLLEGE OF FORESTRY

- 3 units of English.
- 2 units in one foreign language.

* Beginning with 1921, two years of one foreign language will be required for admission to the College of Liberal Arts, the College of Science, or the College of Fine Arts. For the College of Science this language must be French or German; for the College of Fine Arts any modern foreign language; for the College of Liberal Arts any foreign language. If the requirement has not been met in high school, it must be made up in college without credit.

- 1½ units of algebra.
- 1 unit of plane geometry.
- 1 unit of physics.
- 1 or ½ unit of botany.

COLLEGE OF PHARMACY

For the three-year course:

- 3 units of English.
- 1 unit of algebra.
- 1 unit of plane geometry.

For the four-year course:

- 3 units of English.
- 1 unit of algebra.
- 1 unit of plane geometry.
- 2 units in one foreign language. — *may be Latin*
- 1 unit in one of the following: physics, chemistry, botany, zoology, physiology, general biology. (Must include satisfactory amount of laboratory work).

COLLEGE OF FISHERIES

- 2 units of one modern foreign language.

SCHOOL OF LAW, LIBRARY SCHOOL AND SCHOOL OF JOURNALISM
(See following page.)

Unclassified Standing.—A graduate of an accredited secondary school who presents fifteen units in subjects accepted by his school for graduation, but who does not meet the requirements for admission to freshman standing may, upon recommendation of his principal, be admitted as an unclassified student. Such a student will be allowed to enroll for those courses only for which he has had adequate preparation. By virtue of his classification, he is not a candidate for a degree, but he may ultimately become a candidate for a degree by fulfilling as part of his college prescriptions all the requirements for entrance to and graduation from the college in which he is registered.

Special Students.—All courses offered by the University are organized for regular students, that is, students who have had the equivalent of a good high school education fully covering college entrance requirements. Under certain regulations, however, a student who cannot be admitted to freshman standing or as an unclassified student, may be admitted, classified as a special student, and allowed to register for those courses only for which he shows special preparation.

The number of such students admitted is necessarily limited by the facilities of the University. The regulations governing the admission of special students are as follows:


1. For admission to any college or school of the University, a special student must be at least twenty-one years of age.
2. In general, a student from an accredited high school will not be admitted to this classification if he has been in attendance in the high school during the previous year.
3. All available certified credits for previous school work must be

submitted to the Registrar and an application blank for admission as a special student filled out, giving, in addition to other information, the kind of work desired, the reasons for desiring such work, and, when no credits can be presented a detailed statement of any previous educational work and practical experience. When it seems necessary to assure the applicant's preparation for the particular courses desired, an examination will be required.

4. Registration as a special student is for one quarter only. Re-registration will be refused if the student has not shown satisfactory earnestness and definiteness of purpose, or if his work has not been good.

5. By virtue of his classification, a special student is not eligible for any degree. He may ultimately become a candidate for a degree, however, by completing the admission requirements of the college in which he is registered.

6. Persons desiring to be admitted as special students will apply to the Registrar for the necessary application and credential blanks.

 *In order that applicants for admission as special students may receive full consideration, it is desirable that their applications be filed with the Registrar several weeks, at least, before the date of registration.*

Advanced Undergraduate Standing.—Students from classes above the first year in other colleges of recognized rank, who present letters of honorable dismissal, may be admitted to the advanced standing for which their training seems to fit them. No advanced credit will be given for work done in institutions whose standing is unknown, except upon examination. Definite advanced standing will not be given until the student has been in residence for at least one quarter.

Admission to the School of Law, Library School and School of Journalism.—Clear entrance to the College of Liberal Arts or the College of Science, and 102 hours (2 years) of advanced credit in prescribed freshman and sophomore courses, covering all prescriptions for the junior certificate, are required for admission to the School of Law.

Admission of Normal School Graduates to Advanced Standing.—Graduates of the normal schools of this state and of institutions of like standing elsewhere, who have completed two full years of normal school work after graduating from a four-year accredited high school, will be admitted to junior standing in the Colleges of Liberal Arts, Science, or Education. For graduation with the degree of bachelor of arts, bachelor of science or bachelor of education, these students are required to earn a minimum of 90 credits in the University, including the satisfaction of such of the requirements for graduation from the respective colleges as have not been fairly covered by previous work.

Admission to Graduate Standing.—A bachelor's degree from a

college or university of good standing is required for admission to the Graduate School.

Auditors.—With the consent of the instructors concerned, any mature person, not registered as a student in the University, may be enrolled at the Registrar's office as an auditor in not more than two courses, without payment of any fee. This provision does not apply to laboratory courses, or to any courses offered in the summer session.

No such person may regularly attend any course in which he has not been registered, or enrolled as an auditor.

EXPENSES

Tuition.—By authority of a special act of the legislature of the State of Washington passed in 1919, vesting the Board of Regents with full power to modify existing fees and to establish new ones, the following fees are announced to become effective at the opening of the summer quarter of 1919.

The matriculation fee of \$10 formerly collected from all new students is abolished.

University Tuition.—A general tuition fee of \$10 per quarter will be collected from each student at the beginning of each quarter, excepting as noted below under "exemptions."

Law Tuition.—In addition to the general university tuition fee of \$10 paid by each student, a special tuition fee of \$10 a quarter will be collected from all students registering in the School of Law. Students taking work in the School of Law and also in other schools and colleges of the University will pay at the rate of \$1 for each credit hour of law work elected.

Short Courses.—The tuition for registration in all short courses, such as mining, forestry, and marine biological station is the same as for any quarter, viz. \$10.

Exemptions.—Any honorably discharged soldier, sailor, marine, or nurse, who served during the war with Germany, is entitled to register and attend courses without the payment of any fees except special or individual instruction fees and except student laboratory deposit fees and disciplinary fees.

The university authorities may, in their discretion, also grant exemption from the payment of tuition for a given quarter to a limited number of students who after one quarter of residence at the university have shown themselves worthy from the standpoint of scholarship and financial need.

Application for the war, as well as the scholarship, exemption must be made in person to the Dean of Men or the Dean of Women.

In the case of war exemptions, proper evidence of an honorable discharge must be offered.

Refunding of Fees.—Tuition fees are not returnable in whole or in part, except that one-half of such tuition may be returned in case the student is compelled to withdraw within sixty days of the date of his registration by reason of sickness or other causes entirely beyond his control. Students withdrawing under discipline forfeit all rights to the return of any portion of the fees.

No part of the tuition may be refunded under any circumstances after sixty days from the date of the student's registration.

Associated Students Fees.—The regular Associated Students fee of five dollars is paid for the autumn, winter and spring quarters, three dollars for the winter and spring quarters only, two dollars for the spring quarter only, and one dollar for the summer quarter only. Payment of this fee is optional with graduate students, teachers attending classes on Saturdays and at irregular hours, regularly enrolled extension students, any student registered for not more than six hours of work, and Seattle teachers who have served or are serving the University by training cadet teachers, provided their cases have been reported to the registrar by the department of education.

LABORATORY DEPOSITS

The actual amount of material that a student may use during a laboratory course cannot always be stated in advance. The student's deposit therefore, as announced in the catalogue, and made at the Comptroller's office, is an amount which is expected to cover the value of the material that will be consumed; this includes the expense involved in the actual repair—not replacement—of the scientific apparatus used by the student. In case these charges overrun this amount it becomes necessary for the student to make a further deposit. At the end of the quarter the student receives a rebate order from the department concerned, which informs the comptroller as to the amount consumed and a refund is paid accordingly. This rebate order must, however, be presented for payment on or before September 15 next following the date of the receipt. The books are closed after this date and no orders will be honored thereafter.

The following are the laboratory deposits for each quarter in force in the various laboratory courses, arranged by departments:

Anatomy.—105, 106, 107—\$3; 104—\$5; 101, 102, 103—\$10.

Astronomy and Navigation.—1, 2—\$1; 121, 122, 123—\$2; 201—\$5.

Bacteriology and Pathology.—5, 101, 102, 104, 105, 106, 110, 111, 112, 201, 202, 208, 209—\$3.

Botany.—8, 9, 10, —\$1; 13, 14—\$1.50; 1, 2, 3, 11, 12, 26, 53, 105, 106, 107, 111, 119, 130, 140, 141, 142, 143, 144, 145, 200, 233, 250, 251, 252, 253, 254, 261, 262, 263, 271, 279, 280—\$2.

Chemistry.—All courses except 221, 222, 223—\$5; breakage ticket, \$5; desk key, \$.50.

Civil Engineering.—1—\$1; 21, 22, 23, 24, 27, 30, 38, 55, 56, 142, 167—\$3.

Economics and Business Administration, Typewriting.—\$1.50 for 5 hours or less; \$3 above 5 hours, maximum 10 hours.

Education.—171—\$1.

Electrical Engineering.—132, 141, 197—\$2; 100, 122, 181, 182—\$3; 15, 20, 104, 162, 164—\$4.

Fisheries.—3, 4, 5, 101, 102, 103, 104, 105, 106, 112, 113, 114—\$2.

Forestry and Lumbering.—1, 5, 53, 58, 104—\$1; 101, 102, 105, 187—\$2; 51, 188, 218, 214—\$3.

Geology.—1, 2, 5, 11, 12, 31, 32, 112, S. C. 1—\$1; 120, 121, 122, 123, 124, S. C. 2—\$2; 21—\$3.

Home Economics.—8, 109, 200—\$1; 143—\$1.50; 25, 61, 62, 108—\$2; 1, 2, 3, 106, 107, 180, 181—\$3; 4, 103, 121, 135—\$4; 133—\$5; 5, 6—\$6.

Journalism.—101, 102, 103, 104, 105, 106, 107, 108, 109, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 178, 174—\$2; 182—\$2.50. (Maximum fees for any one student first three quarters, \$4).

Library Economy.—Undergraduates—\$1; graduates, \$2; collected first two quarters.

Lockers.—\$.50 per year at Mines, Chemistry and Engineering buildings.

Mechanical Engineering.—1, 2, 3, 4, 53, 54, 55, 83, 105, 106, 107, 108, 109, 151, 152, 153—\$2.

Mines and Mining.—50—\$1; 151, S. C. 2, S. C. 3—\$3; 101, 152, 176—\$5; 155—\$5 or \$10; 106—\$20 to \$40; *metallurgy*, 103, 106, 163, 164, S. C. 2—\$5; 102—\$10; 153, 160, S. C. 3—\$12; 101, S. C. 1—\$20; *ceramics*, 102, 152, 182—\$3; 151—\$7; 161, 162, 168—\$5 or \$10.

Music.—18 (A, B, C)—\$12 to \$27 the quarter for one lesson hour, according to instructor; practice rooms, 1 hour—\$3; 2 hours—\$5.

Painting, Sculpture and Design.—9, 10, 11—\$1; 72, 103, 104, 157—\$2; 56, 57, 58, 107, 108, 109—\$3.

Pharmacy.—15—\$1; 7, 10—\$2.50; 1, 2, 5, 6, 11, 104, 105, 106, 107, 113, 114, 115—\$5; 109, 110, 111, 121, 122, 123, 201, 202—\$2.50 to \$5; breakage ticket—\$5.

Physical Education and Hygiene.—\$1 per year locker and apparatus; paid by all taking one or more courses. Women's suits, style and cost to be arranged.

Physics.—1, 2, 3, 48, 49, 50, 51, 89, 90, 97, 98, 99, 101, 103, 104, 114, 203, 209—\$2.50.

Psychology.—101, 106—\$1; 1—\$2.

Zoology.—1, 2, 3, 4, 5, 7, 51, 56, 101, 103, 106, 108, 154—\$2; 54, 55—\$3; 151, 152, 153—\$4.

Special Examinations.—A fee of \$1 will be charged for all examinations given outside of the regular schedule.

Late Registration.—A penalty of \$1 is imposed for registration after the regular registration days. The same penalty is imposed for changes in election or withdrawals from individual courses, made after regular registration days.

Graduation Fee.—The fee charged to graduates is five dollars for each one receiving a baccalaureate or higher degree, or a diploma in pharmacy, and three dollars for each one receiving a teacher's diploma. This teacher's diploma fee does not include the legal registration fee of \$1 paid to that county school superintendent who first registers a teacher's diploma.

Student Help.—A considerable number of students who have found it necessary to support themselves, in part or wholly, while at the University, have been enabled to do so by securing occupation of various sorts. There is an employment bureau conducted by the Y. M. C. A. to secure work for men who have to make their own expenses. There is also a faculty committee which lends its assistance in securing aid for such students. The Y. M. C. A. in co-operation with the dean of women, renders a similar service for women.

Students who expect to earn a portion of their support are advised not to register for a full schedule of studies.

Every effort is made on the part of the officials of the University to aid students in their efforts to secure employment, but it is not

deemed advisable for any one to register unless he has in hand or in immediate prospect sufficient funds to maintain him for the first few months.

ACADEMIC AND VOCATIONAL GUIDANCE

Dean of Men.—When entering the University, young men who have not fully decided on a vocation for life are urged to consult the Dean of Men. Through his office the University is attempting to direct men into vocations for which they are naturally adapted and to point out lines of work in which there is an insufficient supply of well trained men. The dean is always ready, also, to aid students in any of their individual or group problems.

Dean of Women.—The Dean of Women is always ready to help or advise any woman student who may need assistance. She will supply lists of approved boarding and lodging places, correspond with parents or guardians who desire to make inquiry concerning their daughters or wards, and take an interest in all the organizations for women.

Vocational Secretary.—The office of vocational secretary has been newly created to assume the responsibility of all placement work. It is desirable that every student have a conference with the vocational secretary sometime before graduation. The office is also available to undergraduates for the purpose of advisement. The vocational secretary is also the executive secretary of the alumni association of the University. A great mutual service may be rendered by reporting to this office any positions open that would be of interest to university graduates. Offices 310-312 Administration Hall.

STUDENT GOVERNMENT

As a result of action taken by the A. S. U. W. and ratified by the faculty, the plan has been adopted of having the student members of the Board of Control act as a discipline committee to deal with cases of misconduct among students. The success of this plan makes it probable that before long student government will be still further advanced.

DEGREES

It is not the policy of the University at the present time to grant honorary degrees.

Degrees With Honors.—A degree with honors may be conferred upon a student who, upon recommendation of the honors committee and upon vote of the faculty is declared worthy of unusual distinction. Early in May each head of a department brings to the attention of the committee on honors such seniors majoring in his department as

he thinks may be eligible for honors. A student is not allowed to take honors in more than one subject.

The University Normal Diplomas.—The University is authorized by law to issue teachers' diplomas, valid in all public schools of the state. Candidates for these diplomas should register in the department of education as early as possible after the beginning of the sophomore year, and should consult with the department from time to time as to their work for the diploma and their preparation for teaching. Fuller information may be found in the bulletin of the College of Education.

FELLOWSHIPS, SCHOLARSHIPS AND AID

Graduate Fellowships.—By the will of Sarah Loretta Denny the sum of \$25,000 was bequeathed to this University for the establishment of university fellowships. The income from this fund is at present \$1,250, and affords three graduate fellowships of equal amount, which will be awarded by May 1st of each year by the graduate faculty.

The university honor fellowships are awarded annually, under the same scholarship qualifications as those obtaining for the Loretta Denny fellowships.

The Mars Fellowship.—A research fellowship in astronomy, given by the late Dr. Percival Lowell, of the Lowell Observatory, Flagstaff, Arizona, carrying a stipend of six hundred dollars, may be awarded annually.

University Teaching Fellowships.—The University each year provides a number of teaching fellowships in various departments. The graduate student receiving such a fellowship divides his time equally between his studies and assistance in the teaching work of the department in which he is enrolled.

Columbia University Fellowship.—Columbia University offers each year a fellowship of two hundred and fifty dollars, open to students in mining, engineering, and chemistry.

Isabella Austin Scholarship.—The Isabella Austin scholarship for entering freshmen women was established in 1916 from the income of a fund given in memory of Isabella Austin, Dean of Women, University of Washington, 1909-1915. The award is made annually to a young woman of promise on the basis of scholarship and financial need.

Chemistry Scholarship.—An anonymous donor offers a scholarship of one hundred dollars annually to the student doing the best work in chemistry.

Senior Scholars.—In June preceding their senior year, juniors who have 182 or more credits with high grade may be elected senior scholars. A senior scholar may be relieved from attendance at regular lectures or recitations, and may be granted other special privileges in order that he may devote himself to more intensive and more correlated study than the classroom system permits. His work must be in not less than two or more than four allied subjects and it must be correlated so that it will bear upon some common field.

The Rosenberg Scholarship.—Mrs. Ella S. Rosenberg of Seattle has established a scholarship in French to be known as the "Samuel Rosenberg Scholarship, endowed in loving memory by his wife, Ella S. Rosenberg." This scholarship produces two hundred dollars a year, and is to be awarded annually to the student who, in the opinion of the department, is the most worthy of it. In making this award, account will be taken of the scholarship, personality and needs of the candidates.

PRIZES

For Excellence in Public Speaking and Debate.—Judge Alfred Battle offers an annual cash prize of seventy-five dollars to the Washington debating team chosen to meet representative debaters from the University of Oregon.

Each alternate year, beginning with the spring of 1908, the Seattle Bar Association gives the sum of fifty dollars to defray the expenses of a debate between the representatives of the law schools of Oregon and Washington.

For Essays.—The Philo Sherman Bennett prize of twenty-four dollars annually is "for the best essay discussing the principles of free government."

Mr. Vivian W. Carkeek, of the law class of 1901, offers an annual cash prize of twenty-five dollars for the best thesis on Washington law.

In memory of the Hon. Edwin A. Jaggard, late justice of the supreme court of Minnesota, Miss Anna Wright Jaggard offers an annual cash prize of fifty dollars for the best essay on a topic connected with courses in history of law or jurisprudence.

The University State Bank offers an annual cash prize of twenty-five dollars for the best essay on banking, submitted by a student in the College of Business Administration.

Alpha Chapter of the Chi Omega Fraternity offers a social betterment prize of fifteen dollars, to be given annually, for the best paper on any phase of social service presented by a student of the University of Washington.

For Scholarship in Italian.—Mr. N. Paoella, of Seattle, offers a gold medal each year, beginning with 1913, for a period of ten years, to the student doing the best work in Italian.

Men's Freshman Latin Prize.—Through the kindness of a friend of the University, a prize of fifty dollars in gold will be awarded to the man in the freshman class who passes the best examination in the Latin work of the year.

Sophomore Latin Prize.—A cash prize of twenty-five dollars, from an anonymous donor, will be awarded to that member of the sophomore class who has done the best work in Latin during the year.

For Scholarship in French.—Judge Thomas Burke offers two cash prizes, one of fifteen dollars and one of twenty-five dollars, for general excellence in French.

STUDENT LOAN FUNDS

Mr. Samuel H. Hedges, of Seattle, has endowed a student loan fund, known as The David Jackson Hedges Memorial Fund, in memory of the donor's son, which affords assistance by way of emergency loans to young men of the University upon application duly approved by the trustees of the fund.

Several minor loan funds have been established which help considerably in the efforts of the university authorities to assist students, both men and women, through financial emergencies. These are placed at a low rate of interest in small amounts for short periods. Young women interested in securing this assistance should consult the Dean of Women.

ASSOCIATIONS AND CLUBS

Alumni Association.—The permanent executive secretary of the Alumni Association is J. G. Fletcher, who is also vocational secretary of the University, with offices in Administration Hall.

The Associated Students.—The Associated Students of the University of Washington (incorporated) is an organization of the entire student body. The powers of government are vested by its constitution in an annually elected board of control, upon which three members of the faculty and three alumni also have seats. The board appoints a general manager, who has the financial control of all branches of athletics, musical organizations, and of contests in debate and oratory. The associated student fee of \$5 a year entitles the student to a subscription to the University of Washington Daily—the official student paper—free admission to all athletic, debating and oratorical contests given under the auspices of the A. S. U. W., the annual musical concert, the discounts in the co-operative bookstore, and to all the voting and other privileges of the association.

Christian Associations.—The Young Men's and Young Women's Christian Associations each maintain an organization among the students. They are active in making the new students feel at home and in assisting them in many ways. Prospective men students are invited to address the secretary of the University of Washington Y. M. C. A., Seattle, Washington, regarding rooming needs or employment. The student handbook will be ready for distribution at registration time.

Department Clubs.—The following clubs are connected with the work of different University departments: Chemical Club, Classical Club, Deutscher Verein, English Club, Forest Club, French Club, Home Economics Club, Mathematics Club, Pharmacy Club, Political Science Club, Scandinavian Club, Spanish Club.

Debating.—There are four debating and literary societies in the University, Stevens, Badger, Athena and Sacajawea. The first two are for men, the last two for women. Membership in the clubs is limited in order that frequent practice may be afforded.

The Pacific Coast Triangular Debating League, consisting of the Universities of Washington, Oregon, and British Columbia, holds an annual triangular debate. Each institution has two teams, representing the affirmative and negative of the question under discussion.

The men of the University also have dual debate leagues with Reed College and Whitman College.

The women of the University have similar dual leagues with the University of Oregon and Whitman College.

Musical Organizations.—The musical organizations consist of the University Choral Society, Men's Glee Club, Women's Glee Club, Orchestra and Band.

Philological Association.—The Philological Association was organized to encourage scientific investigation in language and literature. Membership is open to all members of the University who are interested in philology.

Honor Societies.—The following honor societies have been established at the University: Phi Beta Kappa, Sigma Xi, Phi Delta Phi, Phi Delta Chi, Phi Delta Kappa, Phi Lambda Upsilon, Tau Kappa Alpha, Theta Sigma Phi, Sigma Delta Chi, Mim Kaph Mim, Tau Beta Pi.

Washington University State Historical Society.—The Washington University State Historical Society has for its purpose the preserving of the historical documents and records of the Northwest and of the state of Washington, and to preserve or publish the results of all investigations.

GENERAL SCHOLASTIC REGULATIONS

STUDIES

At the beginning of each quarter, the student arranges his schedule of studies with the advice and assistance of his class officer. A regular course consists of fifteen or sixteen hours of recitations per week.

All women students are required to take three hours of **gymnasium** work per week throughout the first and second years, twelve credits in physical culture being required of women for a degree.

A course of two years in military training is required. All able-bodied male students except those from foreign countries, not intending to become naturalized, must take the course which by regulation of the University is required during the first and second year. Furthermore, every male undergraduate student is required to take physical exercise or athletics during each week of his attendance at the University, unless excused by his dean and the physical director.

Neither the requirement of physical education for women, nor that of military science for men applies to any student entering as a junior or senior, providing the student has fulfilled the requirements in these subjects laid down by the institution from which he comes. The deans, together with the physical director, or commandant, as the case may be, have authority to allow a student to substitute the proper corresponding amount of scholastic work for gymnasium or military science when it seems advisable. Substitutions to be valid must be signed by the dean concerned and the physical director or commandant, and must be filed in the office of the Registrar.

PHYSICAL EXAMINATIONS

All students on entering the University for the first time are required to present themselves for physical examination at the call of the Department of Physical Education. Failure to be examined constitutes a delinquency on the records.

REGULATIONS FOR WITHDRAWAL

Withdrawal is the voluntary severance by a student of his connection with a course or with the University and is indicated on the registrar's books by a "W." During the first four weeks of a quarter, a student may withdraw from a course and be given a "W" with the written consent of his adviser and his instructor. If he desires to withdraw at a later period, he may do so, as above, but if his work has not been satisfactory he shall be given an "E" instead of a "W"; provided, however, that, if in either case, a withdrawal will reduce the student's hours below 12, it must be approved by his dean. A

student who drops a course without withdrawing shall be given an "E" in the course.

SCHOLARSHIP STANDING

Any student who is reported at any time during a quarter as doing unsatisfactory work in two or more of his subjects, aggregating more than one-third of his registered hours, shall be placed on probation for the remainder of said quarter. If at the end of the quarter he fail in two or more subjects, aggregating more than one-third of his registered hours, he shall not be allowed to re-register except under conditions prescribed by his dean, who shall be his registering officer.

Appeal from the decision of the dean may be taken to the board of deans.

Any student who fails in two or more subjects, aggregating more than one-third of his quarter's work shall be placed on probation for the following quarter. If in said following quarter said student fail in more than one-half of his registered hours, he shall not be allowed to register except on recommendation of the board of deans.

Any student who fails in more than one-half of his registered hours, after the first quarter of residence, will not be allowed to re-register, except by permission of the board of deans.

EXAMINATIONS

The regular quarterly examinations are held during the last four days of each quarter.

In certain courses running through two or more quarters the examination on the work of the first quarter is merely qualifying, final credit not being given until the examination for the entire course has been passed.

SYSTEM OF GRADES

I. The following is the system of grades:*

A	Honor
B	} Intermediate
C	
D	
E	Failed
I	Incomplete

(An incomplete is given only in case the student has been in attendance and done satisfactory work to a time within two weeks of the close of the quarter.)

2. Candidates for the bachelor's degrees in the colleges of Liberal Arts, Science, Education, Business Administration, Fine Arts, Forestry, and the Library School and the School of Journalism, must receive grades of A, B, or C in three-fourths of the credits required

for their respective degrees. This rule became operative in June, 1918, and does not apply to grades given before the year 1910-11.

FRATERNITY PLEDGING

No fraternity or sorority shall pledge any person for membership whose registration in the University is not complete.

Registration is complete when the election blank has been signed by the student and all required registering officers, when all required fees have been paid, and when all blanks have been left in the Registrar's office or other place designated by him.

No student having less than Junior standing shall be initiated into a fraternity or sorority until he or she has earned eighteen credits or provisional credits in two quarters, or fifteen in one quarter, at this University. Credits or provisional credits for work taken to remove entrance conditions may not be counted.

Candidates for initiation into either fraternities or sororities shall secure from the Registrar's office a certificate of eligibility.

* These grades correspond approximately to the old marking scheme as follows: A, 100-96; B, 95-86; C, 85-78; D, 75-70; E, 70-0.

THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS

ENTRANCE INFORMATION
THE CATALOGUE
Bulletins of
COLLEGE OF LIBERAL ARTS
COLLEGE OF SCIENCE
COLLEGE OF EDUCATION
LIBRARY SCHOOL
COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF JOURNALISM
COLLEGE OF ENGINEERING
COLLEGE OF FINE ARTS
COLLEGE OF FISHERIES
COLLEGE OF FORESTRY
SCHOOL OF LAW
COLLEGE OF MINES
COLLEGE OF PHARMACY
GRADUATE SCHOOL
EXTENSION SERVICE
SUMMER SESSION
PUGET SOUND BIOLOGICAL STATION
BULLETIN OF VOCATIONAL COURSES
UNIVERSITY DIRECTORY

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to THE REGISTRAR, University of Washington, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

JUNE, 1919

NO. 127 SECTION 2

COLLEGE OF LIBERAL ARTS
COLLEGE OF SCIENCE

1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

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EDWIN AUGUSTUS START, A. M. Director
EVERETT FRANCIS DAHM, A. B. Assistant Director
Administration Hall

¹Absent on leave 1918-1919.

²Absent on leave 1918-19; resigned 1919.

³Detached on special service 1917-19.

⁴In charge of service 1918-1919; resigned July 31, 1919.

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

COLLEGE OF LIBERAL ARTS

THE FACULTY

- HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
 JOHN THOMAS CONDON, LL. M., (Northwestern), DEAN OF FACULTIES
 DAVID THOMSON, B. A., (Toronto), Professor of Latin; DEAN.
 EDMOND STEPHEN MEANT, M. L., (Wisconsin), Professor of History.
 J. ALLEN SMITH, PH. D. (Michigan), Professor of Political Science and Dean of the Graduate School.
- CAROLINE HAVEN OBER, Professor of Spanish.
 FREDERICK MORGAN PADELFORD, PH. D. (Yale), Professor of English and Acting Dean of the Graduate School.
- WILLIAM SAVERY, PH. D., (Harvard), Professor of Philosophy.
 PIERRE JOSEPH FREIN, PH. D., (Johns Hopkins), Professor of Romanic Languages.
 HERBERT HENRY GOWEN, D. D., (Whitman), F. R. G. S., F. R. S. A., Professor of Oriental Languages and Literature.
- OLIVER HUNTINGDON RICHARDSON, PH. D., (Heidelberg), Professor of European History.
 VERNON LOUIS PARRINGTON, A. B., (Harvard), A. M., (Emporia), Professor of English.
 FREDERICK ELMER BOLTON, PH. D., (Clark), Professor of Education and Dean of the College of Education.
- EDWIN JOHN VICKNER, PH. D. (Minnesota), Professor of Scandinavian Languages.
 WILLIAM PIERCE GORSVOE, A. B. (Knox), Professor of Dramatic Art.
 ARTHUR RAGAN PRIEST, A. M., (DePauw), Professor of Debating and Dean of Men.
 ALLEN ROGERS BENHAM, PH. D., (Yale), Professor of English.
 STEPHEN IVAN MILLER, JR., A. B., (Stanford), LL. B., (Michigan), Professor of Transportation, Head of the Department of Economics and Director of the College of Business Administration.
- RICHARD FREDERICK SCHOLZ, PH. D., (Wisconsin), Professor of Ancient History.
 LEONARD VINCENT KOOS, PH. D., (Chicago), Professor of Education.
 FRED CARLETON AYER, PH. D., (Chicago), Professor of Education.
 ANTON DE HAAZ, PH. D., (Stanford), Professor of Business Administration.
 LAURA E. LOOKWOOD, PH. D., (Yale), Acting Professor of English.
 JAMES D. BARNETT, PH. D., (Wisconsin), Acting Professor of Political Science.
 LOREN DOUGLAS MILLIMAN, A. B., (Michigan), Associate Professor of English.
 THOMAS KAY SIDBY, PH. D., (Chicago), Associate Professor of Latin and Greek.
 EDWARD McMAHON, A. M., (Wisconsin), Associate Professor of American History.
 JACOB NEIBERT BOWMAN, PH. D., (Heidelberg), Associate Professor of European History.
 GEORGE WALLACE UMPHREY, PH. D., (Harvard), Associate Professor of Romanic Languages.
 OTTO PATZER, PH. D., (Wisconsin), Associate Professor of French.
 VANDERVEER CUSTIS, PH. D., (Harvard), Associate Professor of Economics.
 THOMAS TALBOT WATERMAN, PH. D., (Columbia), Associate Professor of Anthropology.
 EDWARD GODFREY COX, PH. D., (Cornell), Associate Professor of English.
 J. F. THOMAS, A. B., (Beloit), Associate Professor of Sociology.
 OTTILIE GERTRUDE BOETZKE, A. M., (Washington), Assistant Professor of German.
 ROBERT MAX GARRETT, PH. D., (Munich), Assistant Professor of English.
 CHARLES MUNRO STRONG, PH. D., (Missouri), Assistant Professor of Spanish.
 WILLIAM THEODORE DARBY, A. M., (Columbia), Assistant Professor of English.
 HARVEY BRUCE DENSMORE, PH. D., (Grenoble), Assistant Professor of Romanic Languages.
 JOEL MARCUS JOHANSON, A. B., (Washington), Assistant Professor of English.
 BENNET OTTO ECKELMAN, PH. D., (Heidelberg), Assistant Professor of German and Chairman of German Faculty.
- CHARLES LOUIS HELMLINGE, A. M. (Washington), Assistant Professor of Romanic Languages.
 THERESA SCHMID McMAHON, PH. D., (Wisconsin), Assistant Professor of Economics.
 SERENO BURTON CLARK, PH. D., (Harvard), Assistant Professor of Latin and Greek.
 CLIFFORD WOODY, PH. D., (Columbia), Assistant Professor of Education.
 MACY M. SKINNER, PH. D., (Harvard), Assistant Professor of Chinese, Acting Dean of Men.
 RALPH HASWELL LUTZ, PH. D. (Heidelberg), Assistant Professor of History.
 CURT JOHN DUCASSE, PH. D., (Harvard), Assistant Professor of Philosophy.
 LUIS SANTANDER, A. B., LL. B., (Santiago), Assistant Professor of Spanish.
 LEWIS LILLY, A. B. (Wisconsin), Assistant Professor of Accounting and Finance.

- 'BRUCE D. MUGGETT, PH. D. (Pennsylvania), Assistant Professor of Insurance.
- 'REXFORD G. TUGWELL, A. M. (Pennsylvania), Assistant Professor of Marketing.
- VICTOR L. O. CHITTICK, A. M., (Harvard), Assistant Professor of English.
- *WALTER E. ROLOFF, PH. D., (Wisconsin), Assistant Professor of German.
- *FREDERIC A. RUSSELL, PH. D., (Illinois), Assistant Professor of Economics and Acting Director of the School of Journalism.
- EMILIO GOGGIO, PH. D., (Harvard), Assistant Professor of Romanic Languages.
- GEORGE E. FREELAND, A. M., (Clark), Assistant Professor of Education.
- GEORGE HENRY JENSEN, B. S., (Valparaiso), Assistant Professor of Vocational Education and Supervisor of Teacher Training in the Trades and Industries.
- EDWIN RAY GUTHRIE, PH. D., (Pennsylvania), Assistant Professor of Philosophy.
- WALTER BRILL WHITTLESLEY, A. M., (Washington), Instructor in French.
- RUDOLPH HERBERT ERNST, A. M., (Harvard), Instructor in English.
- JOSEPH BARLOW HARRISON, A. B., (Oxford), Instructor in English.
- CLEMENT AKERMAN, A. M., (Harvard), Instructor in Economics.
- VICTOR JOHN FARRAR, A. M., (Wisconsin), Research Assistant in History.
- FRANK LAURE, A. M., (Washington), Instructor in Economics.
- ALLENITA M. GILLETTE, A. M., (Washington), Instructor in English in the Extension Service.
- CHARLES ALEXANDER GUERRARD, B. L., (University of France), Instructor in French in Extension Service.
- MAX P. PHILLBRICK, A. B., (Colby), Instructor in Romanic Languages.
- KATE GREGG, PH. D., (Washington), Instructor in English.
- ELVINE SIMON, (University of Geneva), Instructor in Russian Language and Literature.
- E. R. THOMA, Acting Instructor in Business Administration.
- MARGARET PROSSER, A. B., (Vassar), Associate in English.
- WINIFRED S. HAGOETT, A. M., (Michigan), Associate in English.
- VERA KELSEY, A. M., (Brown), Associate in English.
- LETTIE LEE ROCHSTER, A. B., (Washington), Associate in English.
- EDWARD H. CRUSSELL, Associate in Vocational Education and Assistant Supervisor of Teacher Training in the Trades and Industries.
- WILLIAM F. E. DURANT, Associate in French.
- ORVILLE P. COCKERELL, LL. B., (Ohio), Lecturer in charge of Debating.
- F. W. COBB, B. S., (Alma), Lecturer in Business Administration for Extension Service.
- PAUL A. UMOFF, Lecturer in Russian for Extension Service.
- J. H. PEPER, Extension Lecturer in Special Education.
- MELVIN W. CASSMORE, Extension Lecturer on Business Administration.
- N. KOBAYASHI, Extension Lecturer on the Japanese Language.
- TREVOR KINCAID, A. M., (Washington), Professor of Zoology.
- FREDERICK ARTHUR OSBORN, PH. D., (Michigan), Professor of Physics, and Director of the Physics Laboratories.
- DAVID CONNOLLY HALL, M. D., (Chicago), University Health Officer, and Director of Physical Education for Men.
- IRVING MACKAY GLEN, A. M., (Oregon), Professor of Music and Dean of the College of Fine Arts.
- EFFIE ISABEL RAITT, B. S., (Columbia), Professor and Director of the Department of Home Economics.
- STEVENSON SMITH, PH. D., (Pennsylvania), Professor of Psychology.
- SAMUEL LATIMER BOOTHROYD, M. S., (Colorado Agricultural College), Associate Professor of Astronomy.
- ALLEN FULLER CARPENTER, PH. D., (Chicago), Associate Professor of Mathematics.
- EDWIN JAMES SAUNDERS, A. M., (Harvard), Assistant Professor of Geology.
- GEORGE BURTON RIGG, PH. D., (Chicago), Assistant Professor of Botany.
- FRED HARVEY HEATH, PH. D., (Yale), Assistant Professor of Chemistry.
- JAMES GEORGE ARBUTHNOT, B. S., (Kansas State), Assistant Professor of Physical Education.
- 'JESSIE B. MERRICK, B. S., (Columbia), Instructor in Physical Education.

'Withdrawn.

*Absent on leave 1919-1920.

COLLEGE OF LIBERAL ARTS

The College of Liberal Arts provides instruction in the languages, education, economics and business administration, history, philosophy, political science, and sociology. Together with the College of Science, it affords the student an opportunity to acquire a general education which shall serve as a sure foundation for real success in whatever profession he may choose. In both these colleges the junior certificate plan is in operation, through which the work of the high school is closely articulated with that of the college. In order to obtain the degree of Bachelor of Arts, it is necessary for the student first to obtain his junior certificate. This represents the satisfactory completion of the work of the first two years in college, and leads, after two more years of work, to the degree. The details of the plan are set forth below.

It is highly desirable that students entering the College of Liberal Arts from another institution should obtain from the Registrar, as soon as possible, a statement of what they must do in order to be granted the junior certificate and later, their bachelor's degree. Otherwise, by failing to fulfill the requirements, they will find their graduation postponed for a quarter or more, despite the fact that they may have earned credits sufficient in *number* to entitle them to the degree.

*REQUIREMENTS FOR ADMISSION

Admission to Freshman Standing.—A student must offer for admission to freshman standing in the University, fifteen units† by examination or by certificate from an accredited school from which he has graduated. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (1 unit algebra, 1 plane geometry).
- 3 units selected from one of the following groups (or 2 units, if 3 units of mathematics are presented).
 - (a) Latin and Greek (not less than 2 units of Latin, or 1 of Greek will be counted).
 - (b) Modern foreign language (at least 2 units in *one* language; not less than one unit will be counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physical geography, geology, physiology. (Not less than one unit will be counted in physics, chemistry, or general biology. No science will be counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units in subjects represented in the above groups (a) - (d).
- 5 units selected from any subjects accepted by an approved high school for its diploma;

Grouping of Subjects in Preparation for Admission.—In addition to the three units of English and two units of mathematics required of all students for admission to the University, the student expecting to enter the College of Liberal Arts is advised to take as many as possible

*More detailed information concerning admission is furnished in a separate section of the University Bulletin, known as Entrance Information.

†To count as a "unit" a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks.

of the subjects specified on a succeeding page among "Requirements of the Lower Division," under group 2, "Subjects Required Either in High School or College." He should also note paragraph 4 on the same page entitled, "Subjects Conditionally Required in College." A careful observance of these paragraphs will furnish a more complete preparation for college work, and will give the student correspondingly greater freedom of election in college.

Admission from Normal Schools.—Graduates of the normal schools of this state and of institutions of like standing elsewhere who are likewise graduates of accredited four year high schools, are admitted to full standing in the upper division of the College of Liberal Arts. Their courses of study are determined by the major department which they choose, subject to the approval of the dean. The presumption is that they take all of the required subjects in the lower division for which they have not had a fair equivalent elsewhere. However, this procedure may be modified in any particular case, if, in the opinion of the major department and of the dean, it is for the best interests of the student to do so.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

To secure the degree of bachelor of arts (A. B.) the student must complete not less than a total of 192 credits and must observe the restrictions in regard to major and group requirements, scholarship requirements, and the requirements of the lower division and upper division.

I. MAJOR AND GROUP REQUIREMENTS

(a) From 36 to 60 credits must be in a single department known as the major department (except that with a major in English, 10 credits in English 1-2 may be counted in addition to 60 credits in other English courses).

(b) The number of credits taken in the major and any other single department combined must not exceed a total of 96 (except that when English is combined with the major department for the purpose of this total, credits in English 1-2 may be disregarded).

(c) Not less than 72 credits must be in the group in which the major department falls. For this purpose the departments are grouped as follows:

Group 1. Language and Literature.—Classical languages and literature, English, German, Oriental literature, Romanic languages and literature, Russian, Scandinavian.

Group 2. Philosophical.—Economics and business administration, education, history, philosophy, political science, sociology.

The group requirement of 72 credits does not apply to majors in home economics.

II. SCHOLARSHIP REQUIREMENTS

Not less than three-fourths of the credits required for graduation must be earned with grades of A, B, or C.

III. REQUIREMENTS OF THE LOWER DIVISION

The work of the lower division comprises the studies of the freshman and sophomore years of the undergraduate curriculum and leads to the junior certificate. This work consists primarily of the elementary or introductory courses of the various departments.* Its aim is to supplement the work of the high school, to contribute to a broad general training in preparation for the advanced work of the upper division.

To receive the junior certificate the student must have earned not less than 90 college credits (together with required credits in military science or physical education), and must have completed, in high school and college together, the amount of work specified in the subjects mentioned below. In addition thereto, he must have satisfied the qualitative test prescribed in English composition. The object of these requirements is to secure for the student a knowledge of a wide range of subjects, to distribute his knowledge over the fundamental fields. To this end the high school and college are viewed as essentially a unit.

The required subjects are grouped as follows:

1. *Subjects Required in High School.*

- (a) English, 3 years (8 units).

In addition to the completion of this amount of work in English, the student must show by a test examination *proficiency in English composition*, or he must take English composition in the University, as provided under requirement (c) below.

- (b) Elementary algebra, 1 year (1 unit).

- (c) Plane geometry, 1 year (1 unit).

Subjects (a), (b), and (c) are those required of all students for admission to the University.

2. *Subjects Required Either in High School or College.*

- (d) A modern foreign language, 2 years (2 units or 20 credits).

- (e) U. S. history and civics, 2 quarters (1 unit or 10 credits). See note 1.

- (f) History, 2 quarters (1 unit or 10 credits). See Note 2.

- (g) Physics or chemistry, 2 quarters (1 unit or 10 credits).

- (h) Botany or zoology, 2 quarters (1 unit or 10 credits).

- (i) Mathematics or science, 2 quarters (1 unit or 10 credits). See note 3.

3. *Subjects Required in College.*

- (j) Philosophy, psychology, 2 quarters, (10 credits).

* NOTE.—The following (or their equivalents) constitute the courses of the Lower Division:

1. Modern Foreign Language: The first two years.
2. Ancient Language: Intermediate Latin; the first two years of college work; courses in civilization and literature.
3. English: Composition; freshman and sophomore literature.
4. Mathematics and the Natural Sciences: The elementary courses (1 and 2) or equivalents.
5. History: The introductory courses in each line, e. g., medieval and modern (1 and 2), American (7 and 8), English (5 and 6), ancient (17 and 18).
6. Philosophy and Psychology: Elementary or introductory course in each line, e. g., general psychology, introduction to philosophy, ethics, logic.
7. Political and Social Science: Introducing courses in economics, government, sociology.
8. Education: Introductory course, viz., Principles of Education.
9. Public Speaking: 1 and 2.

- (k) Economics, political science, sociology, 2 quarters (10 credits).
 (l) Physical education or military science, 2 years (12 credits). See note 4.
4. *Subjects Conditionally Required in College.*
 (m) Ancient life and literature, 2 quarters, (10 credits). See note 5.
 (n) Modern foreign language, 2 or more quarters, (10 or more credits). See note 6.
 (o) English composition, 2 quarters, (10 credits). See note 7.

NOTES

1. Students who do not take United States history and civics in the high school must take History 7 and 8 in the University.
2. One year of history is required in addition to requirement (e). It may be satisfied in *any year* (1 unit or 10 credits) of history.
3. The requirement in mathematics or science is in addition to (b), (c), (g), and (h). It may be satisfied by any of the following combinations, viz., two quarters of a science, a quarter of each of two sciences, two quarters of mathematics, or a quarter of mathematics and a quarter of science.
4. In addition to the 12 credits in military science or physical education required of students in the lower division, six quarters in physical education are required of male students in the junior and senior years.
5. Two quarters' work in ancient life and literature is required of all students who have not taken, or do not plan to take, 3 or more years of ancient language. For such students courses are offered in the University on the civilization of the ancients and on the literature in translation.
6. Beginning with 1921, two years of one foreign language will be required for admission to the College of Liberal Arts or the College of Science. If the requirement has not been met in high school, it must be made up in college without credit.
7. English composition is required for the junior certificate except in the case of those persons who show by examination proficiency in that subject. (See University calendar for dates of examination).

Schedule Limitations of the Lower Division.—As a rule students in the lower division must confine their elections to courses designed for such students, viz., courses numbered 1 to 99 in the catalogue. A student, however, who has had the proper prerequisite or who may be deemed in intellectual maturity sufficiently qualified, may, with the consent of the dean and the instructor concerned, register for an upper division course. (In a foreign language a student who has had the proper prerequisite may be enrolled in an upper division course merely with the consent of the class adviser.) Students who are granted this privilege should be careful not to allow it to interfere with the completion of all lower division requirements by the end of the sophomore year; otherwise, an extra quarter of residence in that division may be necessary in order to secure the junior certificate and graduation may be correspondingly postponed.

No student in the lower division shall be registered for more than 16 credit hours per quarter (exclusive of military science and physical education) or for less than 12 credit hours per quarter, except with the consent of the dean.

IV. REQUIREMENTS OF THE UPPER DIVISION

The upper division comprises the studies of the junior and senior years. It consists principally of the advanced work of the undergraduate curriculum, and is therefore differentiated, both in content and method, from that of the lower division.

To be enrolled in the upper division, the student must have completed all requirements for the junior certificate. The minimum amount of work to be done in the upper division will vary from 96 to 84 hours of credit (exclusive of the four credits in physical education

required of junior and senior men), according to the number of credits offered for the junior certificate. *The student must earn not less than 84 hours of credit (exclusive of physical education) while enrolled in the upper division.* At least 60 of the credit hours taken in the upper division must be in upper division courses (Nos. 100 to 199). Of these 60 hours a minimum of 18 must be taken in the major subject.

Schedule Limitations of the Upper Division.—No student in the upper division shall be registered for more than 16 or less than 12 credit hours per quarter, except with the consent of the dean. A maximum of 19 hours per quarter may be granted to students who have made an exceptional record in scholarship in the lower division and who maintain that record in the upper division.

SCHEME OF ELECTIVES

For the purpose of election, outside the major department, the College of Liberal Arts, the College of Science, the College of Education, the College of Business Administration and the School of Journalism are treated as one.

The following courses given outside the College of Liberal Arts may be counted toward a bachelor of arts degree. Not more than 24 such credits altogether shall be counted toward this degree except that from the College of Fine Arts 36 credits may be so counted.

College of Pharmacy.—Materia medica, therapeutics, toxicology. Total amount allowed, 12 credits.

College of Engineering.—Mechanical drawing, descriptive geometry, surveying, direct currents, alternating currents. Total amount allowed, 18 credits.

College of Mines.—General metallurgy.

College of Fine Arts.—A total number of 36 credits in the College of Fine Arts may be counted toward the bachelor of arts degree.

College of Forestry.—General forestry, characteristics of trees, forest economics, silviculture. The maximum number of hours elective from these subjects is 18.

School of Law.—Agency, constitutional law, contracts, general business law, equity, persons, property. From these subjects a total of 18 credits may be counted toward the bachelor of arts degree by a student majoring in the philosophical group; a total of six credits may be so counted by a student majoring in any other group.

SIX-YEAR ARTS AND LAW CURRICULUM

This combined course allows the student with a good record to obtain an A. B. and an LL. B. in six years. It is open only to those students who have maintained a uniformly good record for scholar-

ship during the first three years of collegiate work. At the end of three years, after the student has earned 147 credits, including 12 credits in military science or physical education and including all of the required work, together with a major, he may for the fourth year register in the School of Law for the first year's work in law. He must, however, earn in the College of Liberal Arts additional credits sufficient to make the total credits amount to 156. Thirty-six credits in the first year law work may apply toward the A. B. degree, thus making 192 credits required for this degree.

The last two years of this combined course are devoted to completing the rest of the required work in the School of Law.

Students are strongly advised to complete their full 147 credits in the College of Liberal Arts by the end of the third year so that they can enter the law work clear in the fourth year.

Students from other institutions entering this University with advanced standing may take advantage of this combined course, provided they are registered in the College of Liberal Arts for at least one full year of work, and earn at least 45 credits in this University before entering the School of Law.

This privilege will not be extended to normal graduates attempting to graduate in two years, nor to undergraduates of other colleges who enter this University with the rank of senior.

DEPARTMENTS OF INSTRUCTION

All courses of study offered in the University are listed and briefly described in a section of the General Catalogue known as Departments of Instruction. This is also published as a separate bulletin. To it the student is referred for all information in regard to courses.

GENERAL NOTE.—Each student is to be held either for the admission and graduation requirements of the catalogue under which he enters, or for those of the catalogue under which he graduates.

COLLEGE OF SCIENCE

COLLEGE OF SCIENCE

FAULTY

- HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES
HENRY LANDES, A. M. (Harvard), Professor of Geology; DEAN.
THEODORE CHRISTIAN FRYE, PH. D. (Chicago), Professor of Botany.
HORACE G. BYERS, PH. D. (Johns Hopkins), Professor of Chemistry.
TREVOR KINCAID, A. M. (Washington), Professor of Zoology.
FREDERICK ARTHUR OSBORN, PH. (Michigan), Professor of Physics and Director of the Physics Laboratories.
ROBERT EDOUARD MORITZ, PH. D. (Nebraska), PH. N. D. (Strassburg), Professor of Mathematics.
DAVID CONNOLLY HALL, SC. M., M. D. (Chicago), Director of Physical Education for Men.
HENRY KREITZER BENSON, PH. D. (Columbia), Professor of Industrial Chemistry.
JOHN WEINZIEL, PH. D. (Wisconsin), Professor of Bacteriology.
EFFIE ISABEL RAITT, B. S. (Columbia), Professor of Home Economics and Director of the Department of Home Economics.
STEVENSON SMITH, PH. D. (Pennsylvania), Professor of Psychology.
SAMUEL LATIMER BOOTHROYD, M. S. (Colorado Agricultural College), Associate Professor of Astronomy.
WILLIAM MAURICE DEHN, PH. D. (Illinois), Associate Professor of Chemistry.
*CHARLES EDWIN WEAVER, PH. D. (California), Associate Professor of Geology.
ALLEN FULLER CARPENTER, PH. D. (Chicago), Associate Professor of Mathematics.
EDWIN JAMES SAUNDERS, A. M. (Harvard), Assistant Professor of Geology.
GEORGE IRVING GAVETT, B. S. (O. E.) (Michigan), Assistant Professor of Mathematics.
ELI VICTOR SMITH, PH. D. (Northwestern), Assistant Professor of Zoology.
HENRY LOUIS BRAKEL, PH. D. (Cornell), Assistant Professor of Physics.
GEORGE BURTON RIGG, PH. D. (Chicago), Assistant Professor of Botany.
GRACE GOLDENA DENNY, A. B. (Nebraska), Assistant Professor of Home Economics.
JOHN WILLIAM HOTSON, PH. D. (Harvard), Assistant Professor of Botany.
LEWIS IRVING NEIKERK, PH. D. (Pennsylvania), Assistant Professor of Mathematics.
HAROLD EUGENE CULVER, PH. M. (Wisconsin), Assistant Professor of Geology.
*SAMUEL HERBERT ANDERSON, PH. D. (Illinois), Assistant Professor of Physics.
JAMES GEORGE ARBUTHNOT, B. S. (Kansas State College), Assistant Professor of Physical Education.
ROY MARTIN WINGER, PH. D. (Johns Hopkins), Assistant Professor of Mathematics.
BARBARA HAECKER BARTLETT, B. S. (Columbia), Assistant Professor of Nursing and Public Health.
GRACE RUSSELL CONNELLY, B. S. (Columbia), Acting Assistant Professor of Home Economics.
ARTHUR WILLIS BARTON, PH. D. (Northwestern), Acting Assistant Professor of Chemistry.
HERMAN VANCE TARTAN, B. S. (Oregon Agricultural College), Acting Assistant Professor of Chemistry.
NELLIE FITZGERALD, B. S. (Columbia), Acting Assistant Professor of Home Economics.
ERIC TEMPLE BELL, PH. D. (Columbia), Assistant Professor of Mathematics.
FRED H. HEATH, PH. D. (Yale), Assistant Professor of Chemistry.
JOHN L. WOROBSTER, M. D. (Med. School, University of Alabama), Assistant Professor of Anatomy.
*HALMAR LAURITS OSTERUD, A. M. (Washington), Instructor in Zoology.
LLOYD LEROY SMAL, PH. D. (Columbia), Instructor in Mathematics.
NATHAN FASTEN, PH. D. (Wisconsin), Instructor in Zoology.
*HORACE HARDY LESTER, PH. D. (Princeton), Instructor in Physics.
MARY IRENE PRAY, B. S. (Columbia), Instructor in Physical Education.
HELEN HARRINGTON, (Wellesley), Instructor in Physical Education.
CHLOE SHERMAN CLARKE, B. S. (Teachers College, Columbia), Instructor in Home Economics.
MILDRED WEST LOHNG, PH. D. (Johns Hopkins), Instructor in Psychology.
BUTLER T. WILFRANK, PH. D. (Chicago), Instructor in Psychology.
MARTHA DESSLER, M. S. (Columbia), Instructor in Home Economics.
THOMAS GORDON THOMPSON, PH. D. Acting Instructor in Chemistry.

ASSOCIATES

- CLAUDE J. HUNT, Associate in Physical Education for Men.
OSMAN CADY, B. S. (Washington), Associate in Chemistry.
OSCAR W. BAIRD, A. B. (Wisconsin), Associate in Physics.
LILLIAN BLOOM, Associate in Physical Education.

*Withdrawn.

*Absent on leave.

THE COLLEGE OF SCIENCE

The student entering the College of Science may take up one of several curricula, general or specialized, with the emphasis upon pure or applied science. These curricula, set forth in detail in succeeding pages, are:

- I. Elective curricula with a major in some one department.
- II. Pre-medical curricula.
 - A. Two-year curriculum preparatory to medicine.
 - B. Four-year curriculum preparatory to medicine.
 - C. Three-year curriculum for nurses.
- III. Curriculum for prospective science teachers.
- IV. Prescribed curricula in Home Economics.
- V. Six-year curriculum in Science and Law.
- VI. Five-year curriculum in Science and Library Economy.

LABORATORIES

The University of Washington has the following laboratories equipped for work in the various science departments:

Anatomy.—The laboratory for human anatomy has been arranged to secure a maximum of light and cleanliness. Besides laboratory tables, study tables have been installed. All necessary equipment in the way of skeletal, chart and model materials are available.

Astronomy.—The Observatory is housed in a substantial sandstone structure containing dome for equatorial, room for transit and clocks, office, room for lectures and laboratory work and dark-room. Part of the roof is flat, making an admirable place for evening study of the heavens. The instruments include a six-inch refracting telescope and accessories; a Bamberg transit, Riefler clock, Bond chronometer, Gaetner chronograph, Astro-Petzal objective with accessories, a barometer, sextants, etc. The clock is enclosed in a constant temperature chamber. The minor equipment consists of a good assortment of transparencies and lantern slides, globes, planetarium, and other equipment for experiments in laboratory and lecture work in astronomy.

Botany.—The botanical laboratories are on the third floor and in the basement of Science Hall. They occupy about 4,000 feet of floor space divided as follows: Two large laboratories of about 1,000 square feet each; three small laboratories, one for physiology, two for research. The laboratories are fitted with the apparatus and conveniences usual for the work.

Chemistry.—The chemical laboratories are housed in a thoroughly modern fireproof building, designed after most approved models, combining the good features of the best chemistry buildings in the coun-

try. There are fully equipped separate laboratories devoted to general chemistry, analytical chemistry, food inspection and analysis, organic chemistry, physiological chemistry, industrial chemistry, and pharmaceutical chemistry. All laboratories are equipped with hoods with forced drafts, water, gas, distilled water and air under pressure. The industrial and chemical engineering laboratories are equipped with the fundamental types of apparatus used in manufacturing processes, such as filter press, hydraulic press, stills, grinding apparatus, heating furnaces, and vacuo drying oven.

Geology.—The geology laboratories, four in number, are in Science Hall. Two are on the first floor, and consist of large rooms, arranged for general geology, physiography, meteorology, mineralogy, petrography and paleontology. Two laboratories are in the basement, in well-lighted rooms at the southwest end of the building. One of the laboratories is fitted with lathes, diamond saw, and grinding plates run by electric motor for the preparation of rock slides for petrographic study. The other basement laboratory is equipped with large tanks for experimental work in erosion, and with ample facilities for map modeling and the construction of relief maps.

For work in mineralogy and petrography extensive collections of minerals and rocks are supplied; and for paleontological study collections of fossils and casts represent the principal geological formations. In the study of meteorology practical work is done by the use of a complete set of weather bureau instruments. For the study of earthquake phenomena a Bosch-Omori seismograph has been installed for some years. For general laboratory and lecture work the latest model Bausch & Lomb Balopticon with reflectroscope and polariscope attachments is provided.

Physics.—The laboratories set apart for the use of the department consist of: (1) A general laboratory for students in arts and sciences, (2) a general laboratory for students in applied science, (3) an electrical laboratory, (4) a heat laboratory, (5) a sound and light laboratory, (6), a photometry room, (7) a battery room.

The laboratories are supplied with apparatus from the best American and European makers.

The Bureau of Testing is equipping itself as rapidly as possible to meet the demand for a bureau where scientific instruments may be accurately calibrated and tested. The standards of the bureau will be calibrated by our National Bureau of Standards at Washington, D. C.

The bureau is prepared to calibrate direct and alternating current instruments, to determine candle power of lamps, to measure temperature, both high and low, and to a limited extent standardize weights. Those desiring to have work done should address the director, Frederick A. Osborn.

Psychology.—The psychology laboratory occupies seven rooms on the fourth floor of Science Hall. These include an acoustics room,

an optics rooms, a shop, a dark-room, a room for time measurements, and a general laboratory for elementary psychology courses. Apparatus is annually added for undergraduate, graduate and research work.

Zoology.—The laboratory work of the department of zoology is conducted in six rooms located on the second floor of Science Hall. Here are adequate facilities for pursuing the following lines of investigation: General zoology, histology, anatomy, physiology, entomology and research.

*ADMISSION TO FRESHMAN STANDING

A student must offer for admission to freshman standing in the University, fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a unit a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented):
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units selected from the above groups.
- 5 units selected from any subjects accepted by an approved high school for its diploma; not more than four, however, to be in vocational subjects.

CURRICULA

I. ELECTIVE CURRICULA WITH A MAJOR IN ONE DEPARTMENT

In this division of the college, in order to secure the degree of bachelor of science, a student must complete a total of at least 192 credits, and must observe the restrictions in regard to a major subject, necessary scholarship, elections in other colleges and the requirements of the lower division and the upper division.

A. REQUIREMENTS IN A MAJOR SUBJECT

A student must earn from 36 to 60 credits in a single department, known as his major department. Not more than 96 credits may be counted in the major and one other department.

B. SCHOLARSHIP REQUIREMENTS

Not less than three-fourths of the credits required for graduation must be earned with grades A, B, or C.

*More detailed information concerning admission is furnished in a separate section of the University Bulletin, known as Entrance Information.

C. ELECTIONS IN OTHER COLLEGES

In engineering, fine arts, forestry, law, mines, and pharmacy, electives will be allowed to the extent of 18 credits from any one college, and not to exceed 24 from all.

D. REQUIREMENTS OF THE LOWER DIVISION

The work of the lower division comprises in general the studies of the freshman and sophomore years of the undergraduate curriculum and leads to the junior certificate. It consists primarily of the elementary and introductory courses of the various departments.* Its aim is to give a broad general training in preparation for the advanced work in the upper division.

To receive the junior certificate the student must have earned not less than 90 university credits, together with required credits in physical education or military science, and must have completed in secondary school and university together the amount of work specified in the subjects mentioned below except (1) that subject (o) may be taken in the upper division by students who begin a modern language after entering the university; and (2) subject (l) or (m) may, in certain cases, be taken in the upper division with the consent of the dean.

1. *Subjects Required in a Secondary School.*

- (a) English, 3 years (3 units).

In addition to the completion of this amount of work in English, the student must show by a test examination, *proficiency in English composition*, or he must take English composition in the University, as provided under requirement (p) below.

- (b) Elementary algebra, 1 year (1 unit).
-
- (c) Plane geometry, 1 year (1 unit).

2. *Subjects Required Either in a Secondary School or in the University.*

- (d) A modern foreign language, which must be either German or French, 2 years (2 units or 20 credits).
-
- (e) United States History and civics, 1 year (1 unit or 10 credits). See Note 2.5
-
- (f) History—ancient, medieval and modern, or English, 1 year (1 unit or 10 credits).
-
- (g) Mathematics, 1 year (1 unit or 10 credits). See Note 2.4
-
- (h) Physics, 1 year (1 unit or 10 credits).
-
- (i) Chemistry, 1 year (1 unit or 10 credits).
-
- (j) Botany or zoology, 1 year (1 unit or 10 credits).
-
- (k) Geology, physiography, or astronomy, 1 year; or astronomy and geology, ½ year each (1 unit or 10 credits).

3. *Subjects Required in the University.*

- (l) Philosophy, psychology, 1 year (10 credits). See Note 3.6
-
- (m) Economics, political science, sociology, 1 year (10 credits). See Note 4.7
-
- (n) Physical education or military science, 2 years (12 credits). See Note 6.

4. *Subjects Conditionally Required in the University.*

- (o) Either French or German, 1 or more years (10 or more credits). See Note 6.
-
- (p) English composition, 2 to 8 credits. See Note 2.3

*NOTE.—The following (or their equivalents) constitute the courses of the Lower Division:

1. Modern Foreign Language: The first two years.
2. Ancient Language: Intermediate Latin; the first two years of college work; courses in civilization and literature.
3. English: Freshman composition; freshman and sophomore literature.
4. Mathematics and the Natural Sciences: The elementary courses (1 and 2) or equivalents.
5. History: The introductory courses in each line, e. g., medieval and modern (1 and 2), American (7 and 8), English (5 and 6), ancient (17 and 18).
6. Philosophy and Psychology: Elementary or introductory course in each line, e. g., general psychology, introduction to philosophy, ethics, logic.
7. Political and Social Science: Introductory courses in economics, government, sociology.
8. Education: Introductory course, viz., Principles of Education.
9. Public Speaking: 1 and 2.

- (q) Ancient language and literature, or English literature, 1 year (10 credits). See Note 6. ✓

NOTES

1. The students who do not take United States history or civics in a secondary school must take History 7 and 8 in the University.
 2. One quarter of advanced algebra is required.
 3. Not more than 5 credits in psychology may be counted toward the requirement in philosophy or psychology.
 4. Not more than 5 hours each of economics, political science, or sociology may be counted toward satisfying the requirements in these subjects. With the approval of the Dean, the requirements listed under (m) may be waived for the junior certificate, but not for graduation.
 5. In addition to the 12 credits in military science or physical education required of students in the lower division, 6 quarters physical education are required in the junior and senior years.
 6. Beginning with 1921, two years of one foreign language will be required for admission to the College of Liberal Arts or the College of Science. If the requirement has not been met in high school, it must be made up in college without credit. (For the College of Science, this language must be French or German.)
 7. English composition is required of all freshmen who cannot show by examination a proficiency in the subject. (See University calendar for dates of examination.)
 8. Greek or Roman civilization or literature, the literature of India or of Persia, or English literature, may be taken to satisfy the requirement in literature. This subject is required of all students who have not taken, or do not plan to take, 3 or more years of ancient language. As a rule students in the lower division must confine their elections to the courses numbered 1 to 99, in the catalogue. A student who has had the proper prerequisite, or who has attained sufficient intellectual maturity, may register for an upper division course, with the consent of the instructor concerned and of the dean.
- No student in the lower division shall be registered for more than 18 credit hours per quarter (exclusive of military science and physical education), or for less than 12 hours per quarter, except with the consent of the dean.

E. REQUIREMENTS OF THE UPPER DIVISION

The upper division comprises the studies of the junior and senior years. It consists principally of the advanced work of the undergraduate curriculum, and is therefore differentiated, both in content and method, from that of the lower division.

To be enrolled in the upper division, a student must have completed all the requirements for the junior certificate. The minimum amount of work to be done in the upper division will vary from 96 to 84 hours of credit, according to the number of credits offered for the junior certificate. *The student must earn not less than 84 hours of credit while enrolled in the upper division.* At least 60 of the credit hours taken in the upper division must be in upper division courses (100-199). Of these 60 hours a minimum of 18 must be in the major subject.

No student of the upper division shall be registered for more than 16 or less than 12 hours per quarter, except with the consent of the dean. A maximum of 19 hours per quarter may be granted to students who have made an exceptional record in scholarship in the lower division and who maintain that record in the upper division.

II. PRE-MEDICAL CURRICULA

A AND B. TWO AND FOUR-YEAR CURRICULA PREPARATORY TO MEDICINE

The University offers two curricula preparatory to the study of medicine. One of these is for two years, and will meet the requirements of those medical schools which require no more than two years of col-

lege work for admission to their professional study. The second is for four years, and prepares students for those medical schools that require for admission the completion of a full four years college course. The curricula will not reduce the amount of work to be done by the student in the medical school but they are designed to increase its efficiency.

These courses are also well adapted for pre-dental students, as the best dental schools require the same foundation work as the medical schools.

Students entering the pre-medical courses should present the following among the 15 units required for entrance to the University (see Admission to Freshman Standing):

- 3 units of English
- 1 unit of Algebra.
- 1 unit of Plane Geometry.
- 1 unit of United States History and Civics.
- 1 unit of Medieval and Modern History.
- 1 unit of Physics.
- 2 units of either French or German.

Below is the outline of the four-year curriculum. The first and second years constitute the two-year curriculum:

FIRST YEAR					
<i>First quarter</i>	<i>Credits</i>	<i>Second quarter</i>	<i>Credits</i>	<i>Third quarter</i>	<i>Credits</i>
Chem. (21 General).....	5	Chem. (22 General).....	5	Chem. (23 General).....	5
Zool. (3 Pre-medical).....	5	Zool. (4 Vertebrate).....	5	Zool. (5 Embryology).....	5
English (51 Composition)...	5	English (52 Composition)...	5	Sci. French or German....	5
Mil. Sci. or Phys. Ed.....	2	Mil. Sci. or Phys. Ed.....	2	Mil. Sci. or Phys. Ed.....	2
SECOND YEAR					
Physics (92 General).....	5	Physics (98 General).....	5	Physics (8 Gen. Elec.).....	5
Chem. (81 Organic).....	5	Chem. (82 Organic).....	5	Sociology (1 Intro.).....	5
Psychology (1 General).....	5	Econ. 1 or Pol. Sci.....	5	Psychol. or Philosophy....	5
Mil. Sci. or Phys. Ed.....	2	Mil. Sci. or Phys. Ed.....	2	Mil. Sci. or Phys. Ed.....	2
THIRD YEAR					
Anatomy (109 Physiology) ..	6	Anatomy (102 General)....	6	Anatomy (103 General)....	6
Anat. (105 Histology and Embryology)	5	Anat. (108 Histology and Embryology)	5	Anat. (107 Neurology)	5
Bacteriology (103 Gen.)... 4		Bacteriology (109 Med.)... 4		Pathology	4
Zool. (109 Physiology)....	5	Zool. (110 Physiology)....	5	Bacteriology (1 Hygiene)... 4	
FOURTH YEAR					
Chem. (141 Physiology)....	5	Zool. (111 Physiology)....	5	Zool. (111 Physiology)....	5
Pathology	3	Chem. (144 Physiology)....	5	Phar. (111 Tox. & M. Med.)	5
Anat. (104 Topographical)..	4	Pathology	8	Pathology	4
		Phar. (110 Tox. & M. Med)	5	H. E. (107 Dietetics).....	4

C. THREE-YEAR CURRICULUM FOR NURSES

Believing that a broader scientific education is desired by young women entering the nursing profession, the University offers a three-year pre-hospital course which when followed by the two-year hospital course in such hospitals as may be selected by the University, leads to a degree of bachelor of science in nursing and a certificate of nursing.

For admission to this curriculum a student must present 15 units by examination or certificate from an accredited school from which she has graduated. (See Requirements for Admission to Freshman Standing). These 15 units should include the following:

- 3 units of English
- 1 unit of Algebra.
- 1 unit of Plane Geometry.

- 1 unit of United States History and Civics.
 1 unit of Medieval and Modern History.
 1 unit of Physics.
 2 units of either French or German.

The curriculum:

FIRST YEAR					
<i>First quarter</i>	<i>Credits</i>	<i>Second quarter</i>	<i>Credits</i>	<i>Third quarter</i>	<i>Credits</i>
English (1 Composition)...	5	English (2 Composition)....	5	H. E. (145 Housewifery)...	3
Chem. (5 General)	5	Chem. (8 General).....	5	H. E. (4 Food Prep.).....	3
Phys. (89 Home).....	5	Phys. (90 Home).....	5	Sociology (1 Introductory)...	5
Phys. Ed.....	2	Phys. Ed.....	2	Zoology (3 Pre-medical)....	5
				Phys. Ed.....	2
	17		17		18
SECOND YEAR					
Psychology (1 General)...	5	Econ. 1 or Pol. Sci.....	5	H. E. (5-6 Food Preparation	
Bacteriology (108 Gen.)...	4	Bacteriology (109 Med.)...	4	and Selection).....	5
Anatomy (105 Histology)...	5	Anatomy (101 General)....	4	Bacteriology (4 Hygiene)...	3
English (51 Composition)..	3	English (52 Composition)..	3	Anatomy (103 General)....	5
Phys. Ed.....	2	Phys. Ed.....	2	English (53 Composition)...	3
				Phys. Ed.....	2
	19		18		18
THIRD YEAR					
Zool. (109 Physiology).....	5	Zool. (110 Physiology).....	5	Pathology	5
Chem. (85 Organic).....	5	Phar. (110 Toxicology)....	5	Phar. (4 Mat. Medica)....	5
H. E. (107 Dietetics).....	5	Diet for Sick.....	3	Psychology (126 Abnormal)	
		Hist. and Ethics of Nursing.	3	or Philosophy 1.....	5
	15		16		15

CURRICULUM TO BE FOLLOWED IN A SELECTED HOSPITAL

	<i>Credits</i>
Demonstration of Nursing.....	5
Anesthesia	10
Clinical Analysis	10
Medical Nursing	20
Surgical Nursing	20
Obstetrical and Gynecological Nursing.....	20
Eye, Ear, Nose and Throat Nursing.....	5
Neurological Nursing	5
Children's Nursing	5
Infectious and Contagious Disease Nursing.....	5
Administration	5

III. CURRICULUM FOR PROSPECTIVE SCIENCE TEACHERS

Most of those science students who expect to teach must begin in a small high school. In such schools one teacher usually teaches several or all the sciences. It is therefore desirable that such students get a wide range of scientific knowledge, rather than the intensive training secured by three years' work for a major in some one department. The following course permits the student to prepare in more sciences by not requiring three years of any one science.

FRESHMAN		SOPHOMORE	
	<i>Credits</i>		<i>Credits</i>
Science (botany, geology, or zoology).....	10	History	10
Science (physics or chemistry).....	10	Political Science	10
Mathematics	5	Science	20
English	0 to 10	Elective	5
German or French.....	10		
JUNIOR		SENIOR	
Ancient Language or Literature.....	10	Education	18
Philosophy and Psychology.....	10	Science	10
Science	20	Elective	17
Elective	5		

(12 credits in Military Science or Physical Education are also required.)

REGULATIONS GOVERNING THIS CURRICULUM

- (a) A student may select any three of the following sciences and must do the amount of work in any particular science, as indicated.
 Botany (exclusive of bacteriology), 20 credits.
 Chemistry, 20 credits.
 Geology, 20 credits.
 Mathematics (exclusive of astronomy), 20 credits.
 Physics, 20 credits.
 Zoology, 20 credits.
- (b) Included in or in addition to the work in (a) every student must take 5 credits in mathematics, 10 credits in physics, 10 credits in chemistry, 10 credits in botany or zoology.
- (c) In (a) chemistry and zoology may *not* be selected in a group together.
- (d) If 20 credits of chemistry are taken, only 15 of geology are required.
- (e) When mathematics is selected as one of the three sciences, physics must be selected also.
- (f) The modern foreign language required shall be either French or German and a continuation of the language taken in high school.
- (g) The work in freshman composition shall be 0 to 10 credits.
- (h) Until 1919 students may fulfill the requirements for the normal diploma by electing 18 credits from the following subjects: Principles of education, educational sociology, secondary education, principles of teaching, and practice teaching. However, under Rule 64 (e), until 1919-1920 students who find it difficult to adjust their schedules to include practice work will be allowed to fulfill the previous requirements. By including history of education, instead of educational sociology, all the specific requirements can be met. It is recommended that the additional credits be made up by including childhood and adolescence as a substitute for the practice work. The department of education has authority to make any reasonable adjustments.

IV. PRESCRIBED CURRICULA IN HOME ECONOMICS

Many fields of activity other than teaching are being offered to women trained in the work given in the department of home economics. In each line of vocational work offered there is opportunity to put into practice the technical work of the laboratory. In food preparation the students work in the University Commons, in commercial establishments and in hospitals to gain practical experience. In clothing, students learn first to sew for themselves and then for customers. For those who wish to enter commercial work there is provided, through the cooperation of business houses, opportunity to work in stores.

Seniors are required to live in the practice cottage located on the campus, where they take full responsibility for the management and care of the house for a family of four during a period of one month.

Accordingly, the following grouping is arranged as a guide in selecting the work that will best satisfy the requirements of each individual.

Group I is planned for students who want a liberal college training with emphasis upon the subjects that pertain to the home and home life. Those who are interested in social betterment and who wish to enter definite welfare work may combine home economics, and sociology in this curriculum.

Group II, Food and Nutrition, is offered for those students who wish to specialize for the purpose of teaching this phase of the work in institutions of higher education, for laboratory or research workers, and for dietitians in hospitals, sanatoria or private work. Those

who intend to become sanitary and food inspectors are also advised to take the course.

Group III, Teachers' Curriculum. There is always a demand for the well-trained home economics teacher. This group combines some liberal arts subjects in other departments, chemistry, physics, bacteriology, fine arts, physiology and economics. The courses are especially arranged to meet in the most efficient manner the particular needs of home economics students. Practice teaching extending through one quarter in the Seattle schools is required. Graduates of this course qualify under the Smith-Hughes regulations.

Group IV, Institutional Management. In this course there are combined the fundamental sciences, technical and business courses, with practice work. Young women with initiative and ability find positions that offer increasingly attractive returns when trained in this line of work. Institutions operating for groups of people are seeking trained women to manage the commissary and housekeeping departments.

Group V, Textiles, Clothing and Fine Arts. This curriculum requires a minimum of science but gives ample opportunity for combining work in design with clothing and textiles for the purpose of general culture or for use in a commercial field.

A teaching major in home economics consists of: H. E. 4, 5, 6, 8, 25, 61, 62, 107, 108, 143, 144, 145, 146 and 147.

Any one of the five lines may lead to the degree of bachelor of science. Students who fulfill all entrance requirements of the College of Liberal Arts may use home economics as a major for the degree of bachelor of arts.

Students eligible to freshman standing in any college of the university are eligible to enter any one of the above five curricula in home economics; 180 + 12 credits are required for graduation from any of these curricula.

GROUP I—GENERAL CURRICULUM

To provide a liberal college training, also for those students who wish to fit themselves for the following vocations:

1. Homemaking.
2. Social Service. (Elect economics and sociology.)

FOURTH YEAR					
<i>First quarter</i>	<i>Credits</i>	<i>Second quarter</i>	<i>Credits</i>	<i>Third quarter</i>	<i>Credits</i>
English 1.....	3	English 2.....	3	English 3.....	3
Chemistry 5.....	5	Chemistry 6.....	6	Language.....	5
Physical Ed.....	2	Zoology 1-2 or Botany 1-2..	5	Zoology 1-2 or Botany 1-2..	5
		Physical Ed.....	2	Physical Ed.....	2
Electives—H. E. 25, 4, 8; Fine Arts III, 3.					
SOPHOMORE					
Language.....	5	Language.....	5	Language.....	5
History.....	5	History.....	5	Psychology I.....	5
Physical Ed.....	2	Physical Ed.....	2	Economics.....	5
				Physical Ed.....	2
Electives—H. E. 5, 6.					
JUNIOR					
Philosophy 3.....	5	Sociology 1.....	5		
Electives—H. E. 106, 61-62; Fine Arts II, 1-2; Physics 89-90.					

SENIOR

Electives—H. E. 144-145, 101, 146, 147; Bacteriology 101-102; Nursing, 5; Psychology 131.

GROUP II—FOOD AND NUTRITION

FRESHMAN

First quarter	Credits	Second quarter	Credits	Third quarter	Credits
English 1.....	3	English 2.....	3	English 3.....	3
Chem. 5.....	5	Chem. 6.....	5	Physiology 7.....	5
Physical Ed.....	2	Physical Ed.....	2	Lang., Lit. or Hist.....	5
				Physical Ed.....	2

Electives—H. E. 25, 4, 8; Fine Arts III, 3.

SOPHOMORE

Lang., Lit. or Hist.....	5	Lang., Lit. or Hist.....	5	Lang., Lit. or Hist.....	5
Chem. 85.....	5	Chem. 86.....	5	Chem. 44.....	5
Physical Ed.....	2	Physical Ed.....	2	Psychology 1.....	5
				Physical Ed.....	2

Electives—H. E. 5-6.

JUNIOR

Chemistry 104.....	4	Economics.....	5	Sociology.....	5
Bacteriology 101.....	4	Bacteriology 102.....	4		

Electives—H. E. 107; Nursing 5; Physics 89-90.

SENIOR

Electives—H. E. 108, 108, 110 and related sciences.

120 + 12

GROUP III—SMITH-HUGHES TEACHER TRAINING

It is important for those who expect to teach in high school to take this course.

FRESHMAN

First Quarter	Credits	Second Quarter	Credits	Third Quarter	Credits
English 1.....	3	English 2.....	3	English 3.....	3
Chem. 5.....	5	Chem. 6.....	5	Physiology 7.....	5
Physical Ed.....	2	Physical Ed.....	2	Lang., Lit. or Hist.....	5
				Physical Ed.....	2

Electives—H. E. 25, 4, 8; Fine Arts III—3.

SOPHOMORE

Lang., Lit. or Hist.....	5	Lang., Lit. or Hist.....	5	Lang., Lit. or Hist.....	5
Chem. 85.....	5	Chem. 86.....	5	Chem. 144.....	5
Physical Ed.....	2	Physical Ed.....	2	Psychology 1.....	5
				Physical Ed.....	2

Electives—H. E. 5-6.

JUNIOR

Ed. 99.....	5	Ed. 100.....	3		
Electives—H. E. 107; Physics 89-90; F. A. II, 1-2; H. E. 143; Bacteriology 101-102; H. E. 61-62.					

SENIOR

H. E. 146.....	3	H. E. 147.....	3		
Soc. 1.....	5	Ed. 109.....	3		
Eco. 1.....	5				
Electives—Nursing 5; H. E. 144-145; Ed. 145; Ed. 140; Psych. 131.					

180 + 10

GROUP IV—INSTITUTIONAL MANAGEMENT

To be taken by those students who wish to fit themselves for the following vocations:

1. Dietitians.
2. House directors.
3. Managers of tearooms, lunchrooms, cafeterias.
4. Food service in state, municipal, or charitable institutions.

FRESHMAN

First Quarter	Credits	Second quarter	Credits	Third quarter	Credits
Eng. 1.....	3	Eng. 2.....	3	Eng. 3.....	3
Chemistry 5.....	5	Chemistry 6.....	5	Physiology 7.....	5
Physical Ed.....	2	Physical Ed.....	2	Lang., Lit. or Hist.....	5
				Physical Ed.....	2

Electives—H. E. 25, 4; Fine Arts III, 3; Law 55.

SOPHOMORE

Lang., Lit. or Hist..... 5	Lang., Lit. or Hist..... 5	Lang., Lit. or Hist..... 5
Chem. 85..... 5	Chem. 86..... 5	Chem. 144..... 5
Physical Ed..... 2	Physical Ed..... 2	Psychology 1..... 5
		Physical Ed..... 2

Electives—H. E. 5-6.

JUNIOR

Economics 1..... 5	Sociology 1..... 5
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Electives—H. E. 107, 121, 122, 123; B. A.; Chem. 104; F. A. II, 11.

SENIOR

Electives—H. E. 143, 125, 144, 145, 124; Bacteriology 101, 102; B. A.

GROUP V—TEXTILES, CLOTHING AND FINE ARTS

SUMMARY

College requirements..... 64
Fine Arts..... 31
Home Economics..... 56
Free Elective..... 29
Physical Education..... 12

College requirements	Credits	Fine Arts	Credits	Home Economics	Credits
English..... 9		Fine Arts III—3-10-11..... 12		H. E. 25 Textiles..... 5	
Lang., Lit. or Hist..... 20		Fine Arts III—16-17-18..... 3		H. E. 8 Ele. Clothing..... 3	
Laboratory Science..... 10		Fine Arts III—169-170..... 4		H. E. 11-12 Needlework..... 4	
Physiology..... 5		Fine Arts II—1-2 Arch..... 4		H. E. 27 Non-textiles..... 3	
Economics..... 5		Fine Arts III—111-112..... 6		H. E. 61-62 (clothing)..... 10	
Sociology..... 5				H. E. 130-134 Trade dress-making..... 12	6
Psychology..... 5				H. E. 133-134 Costume design..... 10	
Philosophy..... 5				H. E. 135 Millinery..... 3	
				H. E. 143 Home Furnishings..... 3	
				H. E. 144 House management..... 3	
Total 64					
Free Electives..... 29					
Physical Ed..... 12					
		Total 81		Total 56	

V. SIX-YEAR COURSE IN SCIENCE AND LAW

This is a combination course whereby a student may obtain the degrees of bachelor of science and bachelor of laws in six years. At the end of his third year, after he has earned 135 credits, together with the required 12 credits in military service or physical education, including all of the required work, together with a major in some department, he may register in the School of Law for the first year's work in law. He will be granted the bachelor of science degree at the end of the fourth year, or whenever he completes the required work above specified, together with 9 additional credits in the College of Science and 24 credits in the School of Law; making a total of 180 plus 12 credits for graduation. The fifth and sixth years of the combined course are devoted to completing the remainder of the required work for graduation from the School of Law.

VI. FIVE-YEAR COURSE IN SCIENCE AND LIBRARY ECONOMY

This course is for students who are preparing to become professional librarians and who desire to receive degrees of bachelor of science and bachelor of library economy. Under this arrangement a student should first complete, all the required work of the course for Science Teachers (outlined above), substituting courses in Library

economy for 12 credits in education, as stipulated for the senior year. A portion of the fourth year and all of the fifth year are devoted to the required subjects in library economy. If this plan is carefully followed, a student should earn the degree of bachelor of science at the end of the fourth year, and the degree of bachelor of library economy at the end of the fifth year. (See bulletin of the Library School.)

DEPARTMENTS OF INSTRUCTIONS

All courses of study offered in the University are listed and briefly described in a section of the General Catalogue known as Departments of Instruction. This is also published as a separate bulletin. To it the student is referred for all information in regard to courses.

GENERAL NOTE.—Each student is to be held either for the admission and graduation requirements of the catalogue under which he enters, or for those of the catalogue under which he graduates.

**THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS**

ENTRANCE INFORMATION
THE CATALOGUE
Bulletins of
COLLEGE OF LIBERAL ARTS
COLLEGE OF SCIENCE
COLLEGE OF EDUCATION
LIBRARY SCHOOL
COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF JOURNALISM
COLLEGE OF ENGINEERING
COLLEGE OF FINE ARTS
COLLEGE OF FISHERIES
COLLEGE OF FORESTRY
SCHOOL OF LAW
COLLEGE OF MINES
COLLEGE OF PHARMACY
GRADUATE SCHOOL
EXTENSION SERVICE
SUMMER SESSION
PUGET SOUND BIOLOGICAL STATION
BULLETIN OF VOCATIONAL COURSES
UNIVERSITY DIRECTORY

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to **THE REGISTRAR**, University of Washington, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

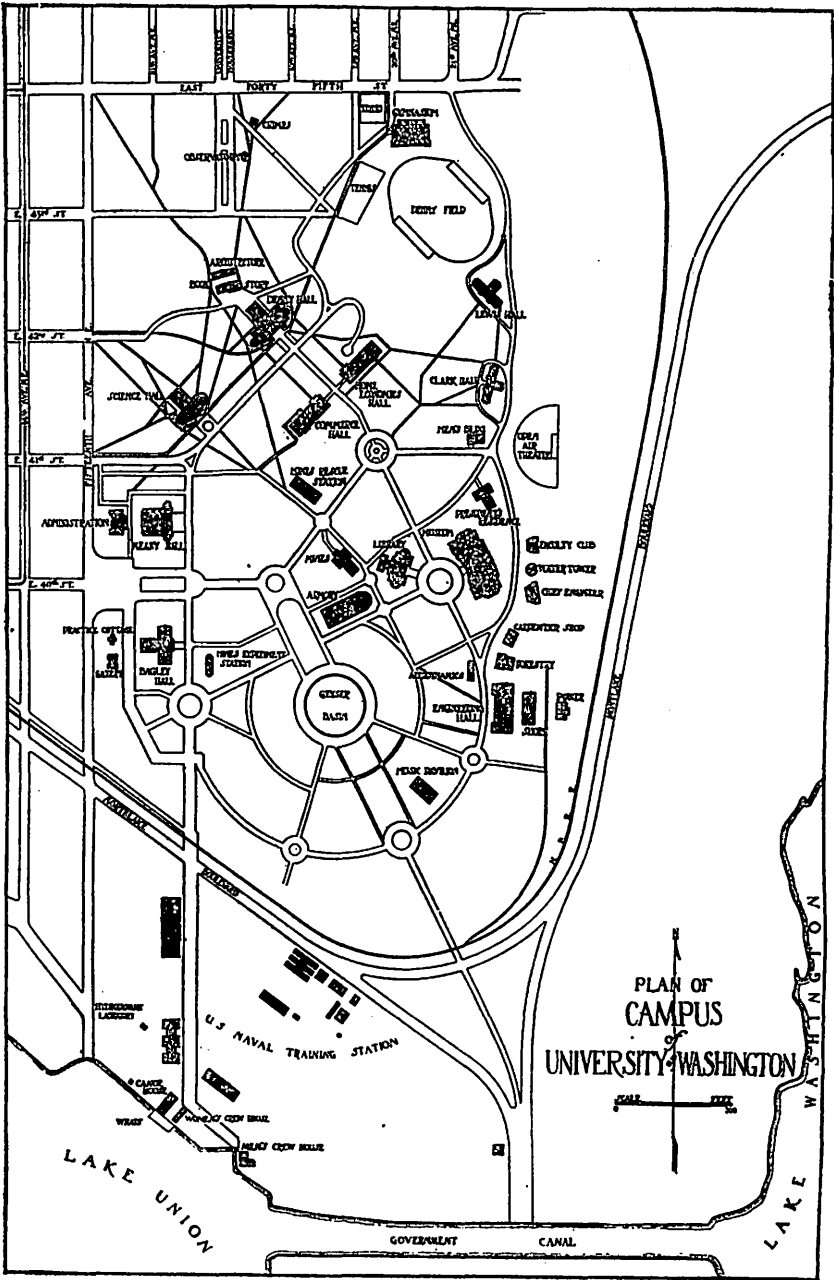
JUNE, 1919

NO. 127 SECTION 3

COLLEGE OF EDUCATION
1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919



PLAN OF
 CAMPUS
 UNIVERSITY OF WASHINGTON



LAKE UNION

GOVERNMENT CANAL

LAKE WASHINGTON

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess.....
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations.....
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations.....
.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus Day.....Friday, April 23
Junior Day.....Saturday, May 29
Quarter examinations.....
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's reception.....Saturday, June 19
Baccalaureate Sunday.....June 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration days.....Tuesday and Wednesday, June 22 and 23
Instruction begins.....Thursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

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Term ends March, 1920	
WILLIAM T. PERKINS	Seattle
Term ends March, 1920	
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THE EXTENSION SERVICE

*EDWIN AUGUSTUS START, A. M.....	Director
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

†In charge of service 1918-1919; resigned July 31, 1919.

COLLEGE OF EDUCATION

THE FACULTY

HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
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WILLIAM PIERCE GOBSUCH, A. B. (Knox), Professor of Public Speaking and Debate.
STEVENSON SMITH, PH. D. (Pennsylvania), Professor of Psychology.
WILLIAM FIELDING OGBURN, PH. D. (Columbia), Professor of Sociology.
STEPHEN IVAN MILLER, JR., A. B. (Stanford), LL. B. (Michigan), Professor of Transportation; Director of the College of Business Administration and head of the Department of Economics and Business Administration.
EDWARD McMAHON, A. M. (Wisconsin), Associate Professor of American History.
GEORGE WALLACE UMPHREY, PH. D. (Harvard), Associate Professor of Spanish.
EDWIN JAMES SAUNDERS, A. M. (Harvard), Assistant Professor of Geology.
ROBERT EVSTAFISSEFF ROSE, PH. D. (Munich), Assistant Professor of Chemistry.
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HARVEY BRUCE DENSMORE, A. B. (Oxford), Assistant Professor of Greek.
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ERNEST OTTO ECKELMAN, PH. D. (Heidelberg), Assistant Professor of German.
FRANCES DICKEY, A. M. (Columbia), Assistant Professor of Music.
JESSIE E. MERRICK, B. S. (Columbia), Director of Physical Education for Women.
HELEN BALOH CULVER, Bachelor's Diploma (Pratt), Instructor in Design.
RUTLEDGE T. WILTBANK, PH. D. (Chicago), Instructor in Psychology.

¹Resigned.

COLLEGE OF EDUCATION

Scope and Aims.—The curriculum of the College of Education assumes that teachers should have a broad and liberal education, supplemented by professional training which gives a knowledge of the pupils to be taught, the problems to be met, and new meaning to the subjects of instruction, as well as fundamental principles of teaching; and that they should be masters of some special subject which they expect to teach.

The college is especially fitted to provide teachers of the following types: (1) High school teachers; (2) high school principals; (3) superintendents of public schools; (4) grammar school principals; (5) supervisors of primary schools; (6) supervisors and teachers of music, drawing, manual and industrial arts, home economics, physical training and other special subjects; (7) normal school and college instructors in education; (8) experts in educational research; (9) specialists in the education of defectives; (10) playground directors; (11) Y. M. C. A. and Y. W. C. A. workers; (12) juvenile court workers.

General Academic Work.—Because of the variety of work which every teacher is likely to be required to do upon beginning to teach, and because of the requirements for state certificates, elementary college courses should be taken in not less than four subjects which are taught in the high schools.

Specialised Academic Work.—Each teacher should have thorough, extended preparation in one subject and reasonable preparation in at least two additional subjects. Experience has shown that the following combinations are most frequently demanded: Latin, French; Latin, Greek; English, French; English, history, civics; English, Latin, history; Spanish, French; mathematics, physics, chemistry; botany, zoology, physiology, physiography; home economics alone or in connection with one or two other subjects; manual and industrial arts alone or in connection with one or two other subjects; commercial subjects alone or with other subjects; athletics, music, or drawing in combination with other work. One teacher is frequently required to teach all of the sciences. Public speaking is desirable as a part of the preparation for teaching English.

Professional Work.—The requirements for the academic major and minors secure a proper distribution of the academic subjects. The professional work consists (a) of the courses given in the department of education, (b) the teachers' courses given in the various academic departments, and (c) the courses in zoology, psychology, and sociology, fundamental to those in education.

Special Teachers' Courses.—Many of the academic departments have teachers' courses for the purpose of studying the problems of

teaching their subjects in the high schools. Work in special methods relating to particular subjects is given by those dealing most directly with the subject matter. Foundation principles of general method as based upon the laws of learning and teaching are developed in the department of education.

Observation and Supervised Teaching.—By an arrangement between the University and the schools of Seattle students in the department of education may observe the regular work in certain schools (at present twelve are used) and do supervised teaching under direction of the regular teachers of the school and the university professor in charge of that work. In this way students have an opportunity to observe and gain valuable experience under exceptionally favorable conditions.

Material Equipment of Department of Education.—The department of education occupies seven rooms on the second floor of Home Economics Hall, comprising four offices, two lecture rooms and a seminar room. (In addition, the offices of the Smith-Hughes work under the joint direction of the State Board of Vocational Education and the College of Education are in rooms 109-110, Commerce Hall.) The department is equipped with the standard educational works, besides many special books and monographs in English, German, and French. All the American educational journals of importance, and many English, German, and French periodicals are on file. In all, nearly sixty journals are received. The equipment is especially good for work in educational psychology, educational sociology, educational tests and measurements, philosophy of education, child study, educational organization and administration, school surveys and current school problems.

The Bailey and Babette Gatzert Foundation for child welfare is not a part of the College of Education but its work is open to the observation of students in education.

Industrial Arts.—While no separate department of industrial arts is maintained during the regular year, special attention has been devoted to this work during the summer session. A good curriculum may be secured during the regular academic year by selecting from the courses in engineering, fine arts, and education. The following courses are suggested: Carpentry and wood-turning, pattern making and cabinet work, forge and foundry, engineering drawing, public school drawing, freehand drawing, principles of design and the theory and organization of industrial arts. Because of the excellent industrial arts work in the Seattle public schools, students have unusual facilities for observing the best organization and equipment. A large number of industrial centers and pre-vocational classes are maintained in various parts of the city.

Under the terms of the Smith-Hughes act "the training of teachers for trades and industries in resident work and extension work

shall be conducted through the University of Washington, under the supervision of the State Board of Vocational Education, with the approval of the Federal Board." In conformity with these regulations special courses will be organized to train teachers for the secondary, industrial and trade schools. One instructor in the department of education devotes his entire time to schools and to giving courses relating to the Smith-Hughes work.

Athletics and Playground Activities.—There is at the present time, a strong demand for teachers, both men and women, who can direct the various forms of athletics and playground activities in the high school and the grammar grades.

Public School Music.—Not only is there a demand for specially trained supervisors of music in the schools, but every school needs teachers who can give some assistance in the general musical activities of the school and the community. Every teacher who has any musical ability ought to secure some training in music and participate in some of the musical organizations of the University.

Debating, Dramatics, Public Speaking.—Every teacher will be called upon to assist in the incidental work of the school. The small towns can not afford special teachers of public speaking and debate and consequently the teacher who can assist in these lines increases his usefulness. Every student should participate in some of these lines all through the college course and definite courses in them should be taken.

Journalism in High Schools.—Newspaper writing is being introduced in some of the best high schools as a part of the English course. It seems to afford a valuable incentive to many pupils in their English work. The teacher who undertakes this work needs to be especially well trained professionally as well as in English and journalism. For a proper combination of courses the student should consult the departments of education, English, and journalism.

Commercial Subjects.—At present the demand upon the University for teachers of commercial subjects far exceeds the supply. To prepare for this line of work the student should include courses in bookkeeping, stenography, commercial law, commercial policies, commercial geography, besides courses in economics, and the professional training in education.

Teaching of Technical Subjects in College.—Many students of engineering, forestry, law and other technical subjects ultimately plan to teach those subjects in colleges or technical schools. An increasing number of such students desire professional training in educational theory and methods as a part of their preparation.

The Study of Education and Citizenship.—Courses in education are valuable, not only for those who expect to teach, but also for those

who expect to be citizens of any community. Many of the courses in education, therefore, are rightly coming to be pursued by students not expecting to become teachers.

Extension Service.—The department of education is glad to render service to the cause of education in many ways besides through the regular courses of instruction. Members frequently give addresses at teachers' institutes, parent-teachers' associations, educational associations, community centers, school dedications, school commencements, etc. They are also glad to conduct educational surveys as far as time will permit.

Saturday and Evening Classes.—To accommodate the teachers of Seattle and vicinity several classes in education are scheduled on Saturday and during the late afternoon and evening. For the courses thus arranged for the year 1919-1920, see the statement of courses in education.

Vocational Secretary.—The University maintains a vocational secretary for the purpose of assisting students to secure desirable positions. The services of this officer are entirely free to students and graduates of the University and to employers.

ORGANIZATION AND REQUIREMENTS

Lines of Work.—Three lines of work are provided in the College of Education: (a) The course leading to the degree of bachelor of education; (b) the courses leading to the degrees of master of arts in education and master of science in education; (c) work leading to the degree of master of arts or master of science with education as a major subject; (d) work leading to the normal diploma and life diploma in connection with a degree from the College of Liberal Arts, the College of Science or the College of Education.

The College of Education is so organized that the student shall begin to think of the profession of teaching immediately upon entering the University. While the main work in education does not come until the junior and senior years, the student receives guidance and counsel from the outset in selecting his courses and is helped to get in touch with the professional atmosphere that should surround a teachers' college. The foundation work in zoology and psychology will be given as far as possible with the teaching profession in mind. It is planned to give some work of a general nature in education during the first two years that will serve as vocational guidance and will assist the student to arrange his work most advantageously and to accomplish it most economically. By the more prolonged individual acquaintance between students and the faculty of the College of Education it is hoped that the student will receive greater professional help and the faculty will be better able to judge of the teaching qualities of the students.

Under the new plan the student does not take so many required courses as formerly. The specific requirements in foreign language, physical science, mathematics, history and a half year of philosophy have been omitted. The student may elect these if he chooses. By this means the curriculum will be much more flexible and the student will be given the important educational privilege of choosing largely his own courses. This is in harmony with the idea of the greater vocationalizing of education.

The work of education and allied courses has been so extended that adequate professional preparation can now be secured. The courses in zoology, psychology, and sociology are all directly contributory to knowledge and interpretation of the courses in education.

A degree may be obtained at the end of the fourth year, but the standard which the University encourages and hopes to establish for high school teaching is the five-year course, consisting of thorough professional work combined with advanced academic work. Students expecting to teach are encouraged on entering to plan their courses for the master's degree in education. While the extended combined course is preferred it is possible for students with adequate preparation to secure the master's degree in a year of graduate work. The master's degrees in education are specifically intended as teachers' degrees representing mastery of an extensive field of scholarship plus professional training, rather than intensive research in a limited field of investigation.

*ADMISSION TO FRESHMAN STANDING

A student must offer for admission to freshman standing in the University, fifteen units† by examination or by certificate from an accredited school from which he has graduated. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented):
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units selected from the above groups.
- 5 units selected from any subjects accepted by an approved high school for its diploma; not more than four, however, to be in vocational subjects.

*More detailed information concerning admission is furnished in a separate section of the University Bulletin, known as Entrance Information. (See pages 7-11.)

†To count as a "unit" a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University, it is recommended that a student expecting to enter the College of Education should elect his work from the groups (a) to (d), so as to offer the following subjects:

A foreign language.....	at least 2 units
A history (American preferred) or U. S. history and civics.....	1 unit
A science (physics, chemistry, botany, or zoology).....	1 unit

If he shall not have included these subjects in his high school elections, it will be necessary for him to include them among his elections in college.

REQUIREMENTS FOR GRADUATION WITH THE DEGREE OF BACHELOR OF EDUCATION

To secure the degree of bachelor of education the candidate must fulfill the following conditions:

1. Comply with the admission regulations as stated above.
2. Complete the requirements in college subjects as follows:

	<i>Credits</i>
*Zoology	10
Psychology	5
Sociology	5
Physical education	12
†English	10
Education	36
Teaching subjects:	
(a) Two academic majors or	
(b) One academic major and two academic minors.	
‡Free electives, depending upon the foregoing selections.....	
Total for graduation	192

* Students who have had one year in zoology in the high school may be excused from the laboratory work in zoology in the University, but shall be required to take the courses in ethnology and evolution. The distribution of the required work in zoology shall be determined by the head of the department of zoology.

† All freshmen are required to take an examination in English on entrance to the College of Education. Those whose standings are especially high in the examination may be excused from a part of the required ten credits.

‡ The student's free electives will vary from 15 to 50 credits, according to the exemption in English and the number of credits secured in the major and minor subjects.

1. An academic major consists of from 35 to 40 credits in some subject other than education. At the option of the major professor this may include the teachers' course.

2. An academic minor consists of from 20 to 30 credits in some subject other than education.

3. The distribution of the work in the academic majors and minors is under the advice of the dean of the College of Education and the head of the department in which the academic major is selected. The distribution of the majors and minors is considered in the light of the actual calls for teachers year by year.

4. The teachers' course in the academic major is required, if offered.

5. The teaching subjects may be selected from any subjects now recognized in the Colleges of Liberal Arts, Science, Fine Arts, or Economics and Business Administration.

6. The 36 credits in education required for the degree of bachelor of education should include as foundation work the 18 credits required for the normal diploma. The work should also include a course in the history of education and one in childhood or adolescence. The remainder of the work should be selected so as to emphasize the line of special interest, as, for example, administration, secondary education, educational psychology, etc.

7. The required English must be completed during the first year. The required zoology or some other year of science must be taken during the first two years. If history or foreign languages are elected one course in the ones selected must be completed during the first two years. If mathematics is elected, five credits in it must be completed during the first two years. If the foregoing courses are not completed as specified, only half credit will be allowed.

8. Candidates for the bachelor's degree in the College of Education must receive grades of A, B, or C in at least three-fourths of the credits required for the degree. This rule does not apply to grades given before the year 1910-1911.

9. Students are allowed to combine, in preparation for teaching, courses from the departments of political science, sociology and business administration, for the academic majors or the academic minors. Such combinations must be approved by the dean and the head of the department in which the academic major is selected.

10. Courses in manual and industrial arts, or in those combined with drawing, will be accepted as a minor toward the degree of bachelor of education.

11. Students in the College of Liberal Arts have the right to major in the department of education. Students majoring in education must take at least 36 credits. Students in the Colleges of Science, Engineering, Forestry, Mines, Law, Pharmacy, Fine Arts, and Business Administration may elect courses in education according to conditions fixed by these colleges.

FRESHMAN YEAR

During the freshman year the student should aim to take approximately the following work:

	<i>Credits</i>
English	10
Zoology	10
Physical education	6
Psychology	5
Sociology	5
Introduction to education.....	2
Probable academic major.....	15

ELECTIVES OPEN TO FRESHMEN

Languages: English, French, German, Greek, Italian, Latin, Public Speaking, Scandinavian, Spanish.

Sciences: Botany, chemistry, geology, home economics, mathematics, physics, zoology.

Social Sciences: History, journalism, political science, economics, sociology, commerce.

Manual and Industrial Arts: Drawing, woodwork, forgework.

SOPHOMORE YEAR

During the sophomore year the student should continue physical education. If psychology and sociology have not been taken in the freshman year they should be taken during the first quarter of the sophomore year. Principles of Education should be taken during the sophomore year, the academic major should be continued, and at least one academic minor begun. The range of electives open to sophomores is very wide. For limitations see the departmental statements.

Psychology 1 is prerequisite to all courses in Education except Education 1. In exceptional cases Psychology 1 may be taken concurrently, but only on the approval of the dean of the College of Education.

The dean of the College of Education may accept as the equivalent of such a fundamental course in psychology the incidental psychological training which may have been received by experienced teachers, with the understanding that they are eventually to take psychology as part of the professional work.

JUNIOR AND SENIOR YEARS

During the junior and senior years about five hours of work in education will be necessary each quarter. The academic major and minors should also be completed. The remainder of the work is elective.

"ADMISSION OF NORMAL SCHOOL GRADUATES TO ADVANCED STANDING

Graduates of the normal schools of this state and of institutions of like standing elsewhere, who are likewise graduates of accredited four year high schools, are admitted to full junior standing in the College of Education. Their courses of study are determined by the dean of the College of Education subject to the approval of the head of the department in which the academic major is selected. The distribution of the majors and minors is considered in the light of actual calls for teachers year by year. The presumption is that they will take all the required subjects in the College of Education for which they have not had a fair equivalent elsewhere. Requests for modification of this procedure will be considered by the committee on graduation only when recommended by the dean of the college.

Graduates from approved normal schools who major in education in the College of Liberal Arts may be exempted from such portions of the work in education as they have completed satisfactorily in the normal school, such exemption to be granted only upon the recommendation of the head of the department of education. ,)

REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION
OR MASTER OF SCIENCE IN EDUCATION

1. Registration in the College of Education at least one year before graduation. (The student may register in the College of Education as early as the beginning of the freshman year and is urged to do so if he plans to prepare for teaching.)
2. A bachelor's degree from this University or from some other institution of recognized standing.
3. Education, 36 credits.
4. A major academic subject, 36 to 48 credits, at the option of the major professor.
5. Two academic minors of at least 24 credits each.
6. A teachers' course in the academic major, maximum 9 credits.
7. At least 5 credits in psychology.
8. Total 237 credits, including the undergraduate credits.
9. Upon completion of the course for the degree of master of arts in education or master of science in education the candidate shall be examined in the academic major, the two academic minors and in education under regulations which apply to the examination of candidates for masters' degrees in the graduate school.

NOTE 1. Such of the above requirements as have been included in the work taken for the bachelor's degree need not, of course, be taken a second time.

NOTE 2. Upon approval of the professor in charge of the academic major a part of the work for the major may be taken in allied lines.

REQUIREMENTS FOR NORMAL DIPLOMAS AND LIFE DIPLOMAS

The University is authorized by law to issue teachers' diplomas, valid as teachers' licenses in all public schools of the state, as described below. Candidates for these diplomas should consult with the dean of the College of Education as early as possible regarding their work for the diploma and their preparation for teaching.

1. *The University Five-Year Normal Diploma*, valid for a period of five years from date of issue, is granted on the following conditions:

1. (a) Graduation from this University from the Colleges of Liberal Arts, Science, Education, Fine Arts, or Business Administration. (b) Completion of at least 18 credits (quarter hours) in the department of education. (c) Completion of a teachers' course in the major academic subject, if offered: maximum, 9 credits. (d) General psychology, 5 credits. (e) Evidence of such general scholarship

and personal qualities as give promise of success and credit in the profession of teaching. Legible handwriting, good spelling and correct English are indispensable. Active interest in the prospective work as a teacher will be considered.

The courses in education include the following:

(a) *Old Plan*

Principles of Education.

History of Education or Social Foundations of Education.

Childhood and Adolescence or Secondary Education.

Observation and Teaching or Methods of Teaching.

(b) *New Plan*

(Effective for students entering as freshmen September, 1916, or later.)

	<i>Credits</i>
Principles of Education	5
Educational Sociology	3
Secondary Education	3
Methods of teaching	3
Practice of teaching	5

Students who entered before September, 1916, may have the privilege of following either plan.

The department reserves the right to adjust these requirements in education subjects to individual cases. Variations will sometimes need to be made in the case of normal school students, persons who have taken education courses in summer sessions, and teachers with considerable experience. No deviations will be permitted except on approval of the dean of the College of Education.

2. Persons who have received the master's or doctor's degree from this University are eligible to the University five-year normal diploma, provided they have fulfilled the specific requirements exacted of those with the bachelor's degree.

3. Graduates of other accredited colleges or universities than the University of Washington who desire the University five-year normal diploma are required to be in residence in this University at least one quarter subsequent to graduation and to earn not less than 15 credits in approved subjects. Of these 15 credits, 5 credits must be in courses in education approved by the dean of the College of Education, and 10 credits in teaching subjects, in courses approved by the major professor. They must have earned here or elsewhere at least 5 credits in psychology, a total of 18 credits in education, and have completed a teachers' course in an academic subject.

4. Graduates of the advanced courses of state normal schools who subsequently graduate from this University and who become candidates for the University five-year diploma must earn at least 12 credits in education in this University.

II. *The University Life Diploma* is granted to candidates who fulfill the requirements for the University five-year diploma and also give satisfactory evidence of having taught successfully for at least twenty-four months.

COURSES OF STUDY

EDUCATION

Sociology and zoology as well as psychology are very desirable as a foundation for the study of education. The courses in principles of education and social foundations of education are fundamental to all other courses in education. Students should take psychology during the freshman or the sophomore year, and principles of education in either the last half of the sophomore year or the first half of the junior year. This should be followed by social foundations of education, secondary education, or childhood and adolescence and methods of teaching; practice teaching should be taken in the senior year. Students who major in the department should take all of the fundamental courses required for the normal diplomas and then select enough to total 36 credits in the department. Major students in education must take course 171, Experimental Education.

Principles of education, see courses 1, 99, 221-222-223.

Educational sociology, see courses 109, 151, 161, 162, 176-177, 211-212-213, 271-272-273.

Educational psychology, see courses 140, 141, 155, 160, 171, 173, 181-182-183, 185, 186-187, 231-232-233.

Educational administration, see courses 191, 192-193, 252-253.

Secondary education 119, 153, 154, 275, 276.

Practice teaching, see courses 145, 146, 167.

Research, see courses 190, 298, 299, 300.

Teachers' training courses in trades and industries (under Smith-Hughes Act), see courses 3, 4, 5, 6.

COURSES FOR UNDERGRADUATES

1. How to Study.—Following a consideration of how to study effectively, an attempt is made to help students to apply this knowledge in their work. Required of all freshmen in the College of Education. Open as an elective to students of other colleges. Counted toward a major in education but not toward the normal diploma. Two credits; autumn, winter, or spring. Freeland

99. Principles of Education.—An attempt to interpret the meaning of education, to understand human nature and to comprehend how environment may be utilized to promote the development of the individual and of society. Prerequisite, Psychology 1. Five credits; autumn, winter, or spring. Bolton

109. Educational Sociology I: Social Foundations.—Introductory course treating social factors in the development of the individual and in school administration, and educational functions of typical social groups. Prerequisite, Psychology 1. Three credits; autumn, winter, or spring. Ayer

119. High School Curriculum.—Secondary school curricula and

closely related problems. Prerequisite, courses 99, 109. Three credits; autumn, winter, or spring. Koos

140. *Methods of Teaching I.*—The application of psychology to high school instruction. Three credits; autumn, winter, or spring. Woody

*141. *Methods of Teaching II.*

*162-163. *History of Education.*

145. *Practice Teaching.*—One lecture each week, conferences with the instructor, assigned readings, and one period each day during the quarter devoted to observation and practice teaching under supervision in the Seattle city schools. As far as possible the details of the course are arranged to meet individual needs. Five credits; autumn, winter, or spring. Freeland

146. *Practice Teaching.*—A second quarter of practice teaching may be elected. Freeland

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

To be admitted to the following group of courses students must have had at least 18 credits in education:

151. *Educational Sociology II: Cooperative Agencies.*—Evolution of the school curriculum with reference to social organization; the social and school survey; relation of the school to other educational agencies. Prerequisite, course 109. Three credits; spring. Ayer

153. *Problems in High School Administration.*—Problems in secondary education largely non-curricular in character. Prerequisite, course 119. Two credits; spring. Koos

154. *The Junior High School.*—History of the movement for reorganization and functions and relations of this new organization. Prerequisite, course 119. Two credits, winter; or three credits, spring. Koos

135
155. *Childhood and Adolescence.*—A study of the characteristics of the child to reveal how education is conditioned upon successive stages of development; physical, mental and moral. Prerequisite, Psychology 1. Three credits; autumn, winter, or spring. Bolton

160. *Play in Education.*—The psychological and biological meaning of play; values and applications. Two credits; autumn, winter, or spring. Freeland

161. *History of Education; Ancient and Medieval.*—Social interpretation of the historic beginnings of education, the contributions of the Greeks and Romans, the development of Christianity, medievalism, and the beginning of modern education. Three credits; autumn. Ayer

162. History of Education; Modern.—Development of educational practices since the Renaissance. The growth of democracy in and through education will be traced. European countries will be treated chiefly from the point of view of influence upon educational progress in the United States. Three credits; winter. Ayer

167. Improvement of Teaching.—This course is offered as a substitute for practice teaching for experienced teachers. (Also offered as a five-hour course in the summer.) Supervised teaching and self-supervision will be emphasized. Credits to be arranged; autumn, winter, or spring. Freeland

171. Experimental Education.—Designed to show the possibility and value of experimental work in education, to give first hand knowledge in the technique of properly conducting experiments in connection with school work. Three double periods per week. Required of all majors in College of Education. Laboratory fee, \$1. Three credits; autumn or winter. Woody

173. Literature of Experimental Education.—Survey of experimental studies which furnish the basis for current methods in reading, spelling, arithmetic, penmanship, foreign languages, etc., and their bearing. Prerequisite, course 171. Three credits; spring. Woody

176-177. Vocational Guidance.—A study of the vocational guidance movement in the public schools. Two credits per quarter; winter, spring. Ayer

181-182-183. Educational Problems of Adolescence.—A critical consideration of the physical, intellectual, emotional, moral and social characteristics of adolescence, and the educative activities suited to the period of secondary school education. Two credits per quarter; autumn, winter, and spring. Bolton

184. Elementary Educational Measurements.—Marks and grading; standardization and standardized tests. Course designed for teachers with little or no experience. Others admitted on consent of the instructor. Laboratory deposit, \$1. Three credits; spring.

185. Educational Statistics.—Statistics needed by the graduate student in conducting research or the teacher, principal, or superintendent in the every day problems of the school room. An introduction to the course in educational measurements and other courses in which statistics are needed. Two credits; autumn. Woody

186-187. Educational Measurements.—Lectures, discussions, reading, class experiments, and projects. Primarily for experienced teachers, principals or those preparing for such positions. Prerequisite, course 241. Two credits per quarter; winter and spring.

190. Special Problems.—A course for advanced undergraduates, especially majors in education, who wish preliminary training in in-

dividual research methods. Supervised by the instructor representing the special field selected. Credits to be arranged.

191. Educational Administration: State and County.—The principles of administration of school systems in states and counties, including a comparison of school laws and school systems in several states with special attention to Washington and neighboring states. Three credits; autumn. Koos

192-193. Educational Administration: City Schools.—For those preparing for superintendencies, principalships, and other supervisory positions, as well as those desiring an acquaintance with the larger problems of city school administration. Three credits per quarter; winter, spring. Koos

COURSES FOR GRADUATES ONLY

**211-212-213. Comparative Education.*

**221-222-223. Philosophy of Education.*

231-232-233. Advanced Educational Psychology.—A survey of the latest contributions to educational psychology, with especial emphasis upon the contributions of Thorndike. Two credits per quarter; autumn, winter, spring. Woody

**252-253. Financial Aspects of School Administration.*

271-272-273. Seminar in Educational Surveys.—This course will include a consideration of the purpose and method of the school survey and a study of the principles of educational practice exhibited in the reports of typical school surveys. Two credits per quarter; autumn, winter, and spring. Ayer

275-276. Seminar in Secondary Education.—A research course in the problems of high-school administration. Two credits per quarter; autumn, winter. Koos

298-299-300. Individual Research or Thesis Work.—Intensive study and original investigation of special problems. Results are usually reported in one of the seminars and when especially meritorious may be published. The special problems are directed by the members of the department representing the fields of work chosen by the students. Credits to be arranged.

SMITH-HUGHES COURSES IN TRADES AND INDUSTRIES

The following courses conforming to the methods of teaching trades and industries will be credited toward the bachelor's degree

* Not offered during 1919-1920.

in education if all other requirements for admission and graduation are fulfilled:

3. *Industrial Education*.—The purpose, history, organization, and the promotion of industrial education and its articulation with the traditional school system, with industry and with the Smith-Hughes Law. Brief space will be devoted to the continuation school, prevocational school and vocational guidance. Three credits; autumn.
Jensen

4. *Methods of Teaching Trades and Class Management*.—This course will include some of the general principles of education that apply particularly to trade education and general methods in teaching trade subjects. It will include the development of lesson plans as an outgrowth of the study of methods of trade teaching. Daily preparation, including both oral and lesson sheets, will be emphasized throughout. (Thirty-six hours in class room.) Three credits; winter.
Jensen

5. *Trade Analysis and Teaching Program*.—Each member of the class will develop a teaching program or detailed course of study following the analysis of the trade that he expects to teach. (Thirty-six hours in class room.) Three credits; spring.
Jensen

6. *Practice Teaching in Trades and Industries*.—Work in practice teaching will be carried on under conditions as nearly like the conditions that the individual teachers meet in their respective trades after certification, as possible, and will be closely supervised at all times. (Thirty-six hours in class room.) This course is not a substitute for the regular required practice teaching, Education 145. Three credits; autumn, winter, or spring.
Jensen

COURSES IN OTHER DEPARTMENTS

For courses in other departments which may form a part of the curricula in education the student is referred to the section of the General Catalogue entitled Departments of Instruction, published also as a separate bulletin. In this all courses of study given in the University are listed and briefly described.

**THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS**

ENTRANCE INFORMATION
THE CATALOGUE
Bulletins of
COLLEGE OF LIBERAL ARTS
COLLEGE OF SCIENCE
COLLEGE OF EDUCATION
LIBRARY SCHOOL
COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF JOURNALISM
COLLEGE OF ENGINEERING
COLLEGE OF FINE ARTS
COLLEGE OF FISHERIES
COLLEGE OF FORESTRY
SCHOOL OF LAW
COLLEGE OF MINES
COLLEGE OF PHARMACY
GRADUATE SCHOOL
EXTENSION SERVICE
SUMMER SESSION
PUGET SOUND BIOLOGICAL STATION
BULLETIN OF VOCATIONAL COURSES
UNIVERSITY DIRECTORY

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to **THE REGISTRAR**, University of Washington, Seattle, Washington.

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BULLETIN

UNIVERSITY OF WASHINGTON

GENERAL SERIES

JUNE, 1919

NO. 127 SECTION 4

COLLEGE OF
BUSINESS ADMINISTRATION

1919-1920



SEATTLE, WASHINGTON

PUBLISHED QUARTERLY BY THE UNIVERSITY

1919

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

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Term ends March, 1920	
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*EDWIN AUGUSTUS START, A. M.....	Director
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

COLLEGE OF BUSINESS ADMINISTRATION

THE FACULTY

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ROBERT EDOUARD MORITZ, PH. D. (Nebraska), PH. N. D. (Strassburg), Professor of Mathematics.
HENRY KREITZER BENSON, PH. D. (Columbia), Professor of Industrial Chemistry.
FREDERICK ELMER BOLTON, PH. D. (Clark), Professor of Education and Dean of the College of Education.
EFFIE ISABEL RAITT, B. S. (Columbia), Professor of Home Economics; Director of the Department of Home Economics.
STEVENSON SMITH, PH. D. (Pennsylvania), Professor of Psychology.
LESLIE JAMES AYER, B. S., J. D. (Chicago), Professor of Law.
ERNST OTTO ECKELMAN, PH. D. (Heidelberg), Assistant Professor of German.

¹Absent on leave, 1919-1920.

²Withdrawn.

THE COLLEGE OF BUSINESS ADMINISTRATION

Modern business has reached that stage where internal and external economies must be realized. The industrial management of today seeks to reduce waste in materials and labor, and to promote the most effective organization of the factors of production. Such a task requires not only special knowledge, but also vision of the highest order. Accounting, statistics, labor efficiency, resources, credit, insurance, business law and organization are necessary parts of the industrial structure; psychology, sociology, government, ethics and history constitute the background of industrial stability.

The establishment of a well-ordered plant is the basis of a strong position in production; there remains the problem of successfully moving the product to the consumer. Markets are no longer local, but national and even international. Every business man has occasion to study salesmanship, advertising, transportation routes and rates, banking, exchange, tariffs and government regulation. The more extended state control of industry is especially necessitating unusual ability to cooperate.

The College of Business Administration aims to train students to meet the specific and general problems of modern industry.

ADMISSION

For admission to the College of Business Administration a student must offer fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a unit a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following:

- 8 units of English.
- 1 unit of algebra.
- 1 unit of plane geometry.
- 2 units of history (American or modern history preferred).
- 8 units selected from subjects accepted by an approved high school for its diploma. (For admission to the College of Business Administration only, a maximum of 8 units in commercial subjects will be accepted. Only 4 of these will be counted if the student is transferred later to any other college of the University.)

Additional Requirements.—The faculty of the College of Business Administration reserves the right to ask for additional work from students who present such irregular or specialized credit as to constitute an insufficient basis for high standard in their college subjects.

Special Students.—Special students will be admitted to the College of Business Administration, subject to the general requirements of the University, and will be admitted to such classes as may be approved by the Director of the College of Business Administration. (See Entrance Information, page 17.)

GRADUATION

Degrees.—The College of Business Administration is a professional college, and its graduates receive the degree of bachelor of

business administration. The degree of bachelor of business administration will be conferred upon any student who has fulfilled the entrance requirements and who presents 192 credits in subjects required or approved by the faculty of the College of Business Administration.

The degree of master of business administration will be conferred upon students who continue their work for an additional year, having completed the requirements for the degree of bachelor of business administration. Students will not be advised to do graduate work unless unusual ability has been shown in their previous courses. All graduate work must be selected after a consultation with the instructor in charge of the special department in which the student is interested, and after the approval of the director of the College of Business Administration.

Students entering from other colleges and universities must satisfy not only the general requirements of the University, but also the requirements of the College of Business Administration.

Not less than three-fourths of the credits required for graduation must be earned with grades of A, B, or C.

Curricula.—All students in the College of Business Administration must have their selection of courses approved each quarter by a member of the college faculty. The college requires that the following courses shall be completed during the first and second years, and suggests the following distribution:

FRESHMAN YEAR			
Autumn	Credits	Winter	Credits
Accounting (B. A. 11).....	3	Accounting (B. A. 12).....	3
Economics 1 (Gen. Econ.)..	5	English.....	5
English.....	5	Mathematics 11 (Inv.).....	5
Mil. Sci. or Phys. Ed.....	2	Electives.....	2
		Mil. Sci. or Phys. Ed.....	2
		Mathematics 12 (Inv.).....	5
SOPHOMORE YEAR			
Risk and Insurance.....	3	Econ. & Soc. Stand. of Liv. ..	2
Money and Banking.....	5	Business Law.....	3
Theo. & Eco. of Markets.....	3	Philosophy.....	3
Business Law.....	3	Electives.....	2
Mil. Sci. or Phys. Ed.....	2	Marketing of Mfd. Prod.....	2
		Mil. Sci. or Phys. Ed.....	2
		Sociology.....	5
		Transportation.....	3
		Business Law.....	3
		Political Science.....	3
		Mil. Sci. or Phys. Ec.....	2
JUNIOR YEAR			
		Philosophy (Ethics).....	5
		History.....	10
SENIOR YEAR			
		Economic research and seminar, at least 4 credits. (Selection of courses subject to approval.)	

The requirements of the first two years are made sufficiently broad to establish a foundation for the profession of business, regardless of the particular field in which the student may later be interested. Such a plan permits him to delay the choice of his special field until the junior year.

The program outlined above also aims to keep the student in direct touch with his college, at least one course in economics being

assigned to each quarter. It should be further observed that this program leaves a considerable freedom of selection to the student.

No student is allowed to enter the junior-senior courses of the College of Business Administration unless he has (a) reached at least junior standing and (b) satisfied the prerequisites to these courses.

The prerequisites to the junior-senior courses have been established after the most careful consideration of (a) the standard of efficiency and performance aimed at in the course, and (b) the educational value which the course might deliver to the student. It has been decided that to admit students who have not completed the carefully arranged prerequisites would imperil not only the quality of the work of the instructor, but also would make it impossible for the students to gain the full benefit of the course. But the college realizes that certain just claims to exceptions from the above rules could be presented, and has decided that exceptions can be granted to those students whose maturity and extended experience in economic affairs of a suitable nature make it just and reasonable. Proof of these experiences and qualifications will be passed upon by the director of the College of Business Administration.

The junior and senior years are, in large part, open to the student's selected field of business interest. This does not mean that the student will be free to elect courses regardless of their relation to his field of work. The especial interest of each student or group of students will be under the control of the instructor designated to that department of work, subject to the approval of the director of the College of Business Administration.

Fields of Training—The following fields of business training are suggested:

1. Accounting.
2. Money and Banking.
3. Teaching of Commercial Subjects.
4. Teaching of Economics.
5. Business Organization, Finance and Policies.
6. Real Estate.
7. Bond and Brokerage.
8. Industrial Management.
9. Foreign Trade.
10. Transportation.
11. Insurance.
12. Secretarial Work.
13. Marketing and Selling.
14. Employment Management.
15. Retail Store Service.
16. Merchant Marine.

Modern Language.—Any student selecting the field of foreign trade or foreign banking will be required to present a satisfactory reading knowledge of at least one modern language.

Law.—Students selecting their specialty in accounting, business organization, foreign trade, or transportation may be required to take:

- Law of Public Utilities.
- International Law.
- Law of Bankruptcy.
- Law of Contracts.

Education.—Students desiring to teach commercial subjects must fulfill the requirements of the College of Education relative to the teaching certificate.

Geology.—The department of geology offers several courses in geography which are of direct interest to students interested in foreign and domestic trade. Such students may be required to elect one or more of the following courses:

Physical Geography.
Geography of South America.
Economic Geography of Washington.

GENERAL INFORMATION

Textbooks—Syllabus Fees.—Many courses in the College of Business Administration require a textbook, and in a few instances more than one. It is the aim of the faculty to keep the textbook expense as low as is consistent with a high standard of class work.

In courses where a syllabus is used the College of Business Administration may ask from each student a fee sufficient to cover the expense of material, printing or mimeographing. Under no circumstances will this fee be more than \$1 per student for each course.

Library Facilities.—The college is placing in the library a large number of supplementary books. For many years government reports, containing a vast amount of material for the student of business, have been filed in the library. Most of the domestic journals in economics and commerce, as well as many foreign ones, are received by the college. Each student is expected to make use of the material and to report from time to time on current topics of interest.

Student Organizations.—Two professional societies with national affiliations have been established at the College of Business Administration. Beta Gamma Sigma is a professional fraternity for men which at present counts chapters in many eastern institutions. Membership is based upon high scholarship. Its aim is to further serious study of business problems. Phi Sigma Chi is a similar organization among the women majoring in business administration. Its purpose is not social, but professional, and membership is restricted to candidates for the B. B. A. degree. A number of prominent business women in Seattle and eastern cities are counted among its honorary members.

Required Military Science and Physical Education.—The University requirements in military science, physical education and hygiene are satisfied as follows:

Men students—Freshmen and sophomores, five hours of military science per week; juniors and seniors, two hours of physical education per week.

Women students—Physical education, three times per week for two years.

Correspondence.—Inquiries in regard to the College of Business Administration may be addressed to the director of the college. All correspondence regarding admission should be sent to the registrar of the University.

Contact with Actual Business.—The business men of the state and especially of the city of Seattle are cooperating in a most genuine way with the College of Business Administration. Students are encouraged to avail themselves of the many opportunities to do part-time work in local concerns along their chosen lines, thereby combining practical experience with scientific training. The result of the investigation into the cost of living in Seattle has formed the basis of wage payment in many of the local industries, including a number of public utilities. In cooperation with the Chamber of Commerce, the students have made an exhaustive investigation of some sixty industries to determine the possibility of locating them in the Puget Sound region. The data collected have led to concrete results. The students are thus brought face to face with the problems of actual business.

Advisory Boards.—In order that the courses offered may contribute more effectively toward greater efficiency in business, advisory boards are now being formed for each study group. These boards consist of prominent business men, and offer an opportunity to the members of the faculty to secure practical advice in regard to the training best adapted to certain specific business pursuits.

International Relations.—Plans are now being completed to establish exchange scholarships with China and with some of the South American republics. The opportunities which are thus offered for American students to study abroad and for foreign students to gain a better understanding of American life and thought will be of great educational value.

One of the members of the faculty of the College of Business Administration has been granted leave of absence to enable him to fill a position at the University of Rotterdam (Holland).

Outside Lecturers.—It is the policy of the College of Business Administration to supplement as far as possible the work given with practical lectures and discussions by business men. Many of the leading business men of Seattle and the state have already expressed their willingness to deliver lectures and participate in discussions with the classes of the school.

COURSES OF STUDY

The courses of study offered in all departments of the University are listed and briefly described in a section of the General Catalogue entitled Departments of Instruction, also printed as a separate bulletin. The courses in the department of economics and business administration are listed by title below:

1. *General Economics*.—Five credits; autumn, winter, or spring.
4. *Economics of Consumption*.—Two credits; autumn.
7. *Economic Resources of the World*.—Three credits; autumn or spring.
8. *Economic Resources of the Northwest*.—Three credits; winter.
9. *History of Commerce and Commercial Policies*.—Two credits; winter.
10. *Business Principles*.—Three credits; winter.
- 11-12-13. *Elementary Accounting*.—Three credits per quarter; autumn, winter, spring.
- 14-15-16. *Second Year Accounting*.—Three credits per quarter; autumn, winter, spring.
21. *Money and Banking*.—Five credits; autumn or spring.
24. *Banking Practice*.—Two credits; winter.
41. *Risk and Insurance*.—Three credits; autumn or spring.
42. *Elements of Statistics*.—Three credits; winter.
51. *Economics of Transportation*.—Three credits; autumn or spring.
53. *Water Transportation*.—Three credits; winter.
61. *Social and Economic Standards of Living*.—Two credits; winter.
62. *Social and Economic Standards of Living*.—Prerequisite, course 61.
63. *Immigration and Labor*.—Two credits; spring.
71. *Evolution of the Market*.—Three credits; autumn.
72. *Marketing of Manufactured Products*.—Three credits; winter.
73. *Sales Management*.—Three credits; spring.
- 76-77-78. *Advertising*.
- 81-82-83. *Typewriting*.—One credit per quarter; autumn, winter, spring.
- 84-85-86. *Shorthand*.—Two credits per quarter; autumn, winter, spring.
87. *Secretarial Accounts*.—Two credits; autumn.
88. *Office Management*.—Two credits; winter.
89. *Secretarial Training*.—Three credits; spring.
90. *Business Correspondence*.
101. *The Teaching of Economics*.—Three credits; spring.
103. *Advanced Economics*.—Three credits; autumn.
105. *Trusts and Combinations*.—Three credits; autumn.

106. *Fair and Unfair Competition*.—Three credits; winter.
107. *The Regulation of Industry*.—Three credits; winter.
109. *Research Course in Combinations and Trusts*.—Two credits per quarter; autumn, winter, spring.
110. *Research Course in Economic Theory*.—Two credits per quarter; autumn, winter, spring.
111. *Auditing*.—Three credits; autumn.
114. *C. P. A. Problems*.—Three credits; spring.
- *116. *Municipal Accounting*.—Two credits; winter.
117. *Cost Accounting*. Three credits; winter.
118. *Practice Work in Accounting*.—Credits 3-6; autumn, winter, spring.
121. *Corporation Finance*.—Three credits; winter.
122. *Investments*.—Three credits; spring.
- *123. *Stock Exchange Operations*.—Two credits; spring.
126. *Real Estate Problems*.—Two credits; spring.
128. *Foreign Exchange and Foreign Banking*.—Two credits; winter.
141. *Property Insurance*.—Three credits; autumn.
142. *Life Insurance*.—Three credits; winter.
145. *Business Statistics*.—Two credits; spring.
147. *Social Insurance*.—Three credits; spring.
149. *Marine Insurance*.—Three credits; winter.
150. *Research Course in Insurance and Statistics*.—Two credits per quarter; autumn, winter.
151. *Rail and Marine Rates*.—Three credits; spring.
153. *Railroad Administration*.—Three credits; autumn.
- *154. *State Railroad Commissions*.—Three credits; winter.
157. *Railroad Finance*.—Three credits; winter.
159. *Research Course in Transportation*.—Two credits per quarter; autumn, winter, spring.
161. *History of the American Labor Movement*.—Three credits; autumn.
162. *Modern Labor Problems*.—Three credits; winter.
- *163. *European Labor Problems*.
- *165. *Labor Legislation*.
166. *Women in Industry*.—Three credits; autumn.
167. *Employment Management*.—Three credits; spring.
- 168-169-170. *Seminar in Labor*.—Three credits per quarter; autumn, winter, spring.
171. *Organization of Foreign Trade*.—Three credits; autumn.
172. *Technique of Foreign Trade*.—Three credits; winter.
173. *Ports and Terminals*.—Three credits; spring.
174. *The Trade of the Pacific*.—Three credits; spring.
175. *The Trade of Latin America*.—Three credits; winter.
176. *The Trade of Europe*.—Three credits; autumn.
177. *Oriental Institutions—China*.—Two credits; autumn.

178. *Oriental Institutions—Japan.*—Two credits; winter.
179. *Oriental Institutions—Russia.*—Two credits; spring.
180. *Research Course in Foreign Trade.*—Two credits per quarter; autumn, winter, spring.
- 182-183-184. *Teachers' Course in Commerce.*—Two credits per quarter; autumn, winter, spring.
- 185-186-187. *Department Store Training.*—Autumn, winter, spring.
- 188-189-190. *Practice Selling.*—Autumn, winter, spring.
191. *Business Management.*—Three credits; autumn or spring.
195. *Industrial Management.*—Three credits; autumn.
196. *Research Course in Management.*—Two credits per quarter; autumn, winter, spring.
201. *Seminar in Economics and Business Administration.*

**THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS**

**ENTRANCE INFORMATION
THE CATALOGUE
Bulletins of
COLLEGE OF LIBERAL ARTS
COLLEGE OF SCIENCE
COLLEGE OF EDUCATION
LIBRARY SCHOOL
COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF JOURNALISM
COLLEGE OF ENGINEERING
COLLEGE OF FINE ARTS
COLLEGE OF FISHERIES
COLLEGE OF FORESTRY
SCHOOL OF LAW
COLLEGE OF MINES
COLLEGE OF PHARMACY
GRADUATE SCHOOL
EXTENSION SERVICE
SUMMER SESSION
PUGET SOUND BIOLOGICAL STATION
BULLETIN OF VOCATIONAL COURSES
UNIVERSITY DIRECTORY**

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to **THE REGISTRAR**, University of Washington, Seattle, Washington.

Edgington

Best Copy

Departmental

BULLETIN

UNIVERSITY OF WASHINGTON

GENERAL SERIES

JULY, 1919

NO. 127 SECTION 9

SCHOOL OF JOURNALISM

1919-1920



SEATTLE, WASHINGTON

PUBLISHED QUARTERLY BY THE UNIVERSITY

1919

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

WINLOCK W. MILLER, President	Seattle
	Term ends March, 1920
WILLIAM T. PERKINS	Seattle
	Term ends March, 1920
ELDRIDGE WHEELER	Montesano
	Term ends March, 1921
OSCAR A. FECHTER	Yakima
	Term ends March, 1922
JOHN A. REA	Tacoma
	Term ends March, 1922
WILLIAM A. SHANNON	Seattle
	Term ends March, 1923
RUTH KARR MCKEE	Olympia
	Term ends March, 1923

OFFICERS OF ADMINISTRATION

THE UNIVERSITY

HENRY SUZZALLO, Ph. D., LL. D.....	President of the University Administration Hall
JOHN THOMAS CONDON, LL. M.....	Dean of Faculties Administration Hall
HERBERT THOMAS CONDON, LL. B.....	Comptroller Administration Hall
EDWARD NOBLE STONE, A. M.....	Registrar Administration Hall
EDWIN BICKNELL STEVENS, A. M.....	Executive Secretary Administration Hall
ARTHUR RAGAN PRIEST, A. M.....	Dean of Men Administration Hall
ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
WILLIAM ELMER HENRY, A. M.....	Librarian Library
FRANK STEVENS HALL.....	Director of Museum Museum
JAMES GARFIELD FLETCHER, A. B.....	Vocational Secretary Administration Hall

¹Absent on leave 1918-1919.

SCHOOL OF JOURNALISM

THE FACULTY

HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.

JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.

—————, DIRECTOR.

—————, Assistant Professor of Journalism.

FRED WASHINGTON KENNEDY, Assistant Professor of Journalism and Director of Journalism Laboratories.

GRACE HARTLEY EDGINGTON, A. B. (Oregon), Associate in Journalism.

LESLIE JAMES AYER, B. S., J. D. (Chicago), Lecturer on Newspaper Jurisprudence.

HORACE HARDY LESTER, PH. D. (Princeton), Instructor in Newspaper Photography.

THE SCHOOL AND ITS EQUIPMENT

The first courses in journalism in the University of Washington were given in 1907. A department of journalism was established in 1909. In March, 1918, the department was formally made a school. The professional courses during junior and senior years, in combination with many prescribed courses in other departments of the Colleges of Liberal Arts and Science, are intended to equip the student for practical journalism:

1. By giving him training on (a) the editorial side of publishing, with its several occupations; on (b) the business and administrative side; in (c) the mechanics of publishing; in (d) short story.
2. By developing the broader scholarship that is almost indispensable in modern journalism in addition to mere technical knowledge.
3. By building up character for journalism.

Journalism graduates have always been in demand among the newspapers of the state. The demand to date has exceeded the supply to such an extent that it has been a practice to send out students before they had completed their course. Ultimately it is hoped the school may meet the demand with graduates only.

Equipment.—Journalism and printing take up the entire lower floor of Commerce Hall, 208 x 70 feet, which was first occupied in September, 1917. Classrooms, exchange room, journalism library, faculty offices, University of Washington Daily quarters, newswriting room, Tyee quarters, all the mechanical equipment for teaching practical journalism, and the printing stockroom, are on this floor. The department of printing does nearly all the university work.

Frederick A. Churchill Junior Memorial Library.—In March, 1918, a separate journalism library was opened, to be known as the Frederick A. Churchill Junior Memorial Library, in memory of a brilliant student of the school, who died in 1916 while doing newspaper work in New York. The memorial library contains works relating to all phases of the editorial side of the newspaper, to advertising, to printing, to short story, and to current events.

University of Washington Daily.—The editorial and business offices of the University of Washington Daily are in Commerce Hall adjoining the university printing department. Ownership of the University of Washington Daily is vested in the student body. It is not supervised by the School of Journalism, but most of the staff, however, are majors in journalism. An editor is elected by the Associated Students twice each year, and he selects his own staff; a business manager is appointed by the student board of control and selects his staff.

ADMISSION AND GRADUATION

Admission.—For entrance to the School of Journalism as majors, students must present a minimum of 102 quarter credits from the University of Washington, or an equivalent amount from some other institution of accredited standing, covering the requirements of the junior certificate. In a few cases, persons of maturity and with practical experience, who do not have this foundation, may be admitted as special students on complying with the regulations for the admission of special students. (See Entrance Information, page 17.)

Graduation.—The curriculum of the School of Journalism leads to the degree of bachelor of arts (A. B.), for which degree 180 credits must be obtained, plus 12 hours in physical training or military science. Sixty of these hours must be in journalism, and a minimum of 90 plus 12 hours must have been earned before the student is enrolled in the School of Journalism, and a minimum of 84 after the student has been given junior standing.

CURRICULUM 1919-20

The requirements for the degree of bachelor of arts from journalism majors are (inclusive of the work required for admission to the School of Journalism) as follows:

The required subjects of the College of Liberal Arts, which total 102 hours, but which are in most cases covered in part in high school, the estimated average remaining for the University being.....	65
A minimum of nine hours of advanced work in English or Oriental literature (in excess of the requirement in freshman composition).....	9
A minimum of 12 hours of advanced work (i.e., in excess of the junior certificate requirements) in each of three of the following: accounting, economics, history, philosophy, political science, psychology, sociology.....	36
(Provided, however, that four courses in addition to the junior certificate requirements in either a modern foreign language, an ancient language, both in the original, or a science, will be accepted in lieu of the 12 hours in any of the seven subjects described in the preceding paragraph.)	
A minimum of three hours in business law.....	3
Journalism.....	60
Unprescribed electives.....	19
Physical training and military science.....	12
Total	204

NOTE.—Business law counts one credit toward the required 60 in journalism because it includes the law of the newspaper. Freehand drawing counts three credits toward the 60 in the cases of students who are preparing for illustrating or cartooning.

B. 2 - 1 on Journalism - other 2 - Elect
FEES

In certain journalism courses a laboratory fee of \$2 or less is charged. This fee goes toward the purchase of the community journalism typewriters, of which the school now has twelve; toward newspaper and periodical subscriptions, of which the school annually takes about fifty, in addition to the large number of weeklies that come to the desk on exchange; toward the purchase of textbooks; and toward the purchase of student materials. The number of courses carrying these fees varies from year to year. In 1917-1918 the maximum laboratory fees to all or any student were \$4, regardless of the number of courses taken. In addition, the regular university fees are charged.

COURSES OF STUDY

The courses of study offered in all departments of the University are listed and briefly described in a section of the General Catalogue entitled Departments of Instruction, also printed as a separate bulletin. The courses in the School of Journalism are described below. They are subject to change.

THIRD YEAR COURSES

101-102-103. *Elements of Journalism*.—A general introduction to the newspaper business, and a course in practical reporting. The year course is required of all majors. Non-majors of junior or senior standing, particularly home economics students, may take two quarters. The emphasis is on actual reporting. Three credits per quarter; autumn, winter, spring. Laboratory deposit, \$2.

104-105-106. *Mechanics of Publishing*.—Heads; practice in the journalism laboratory; proofreading; modern appliances; history of printing, with thesis. Required of all majors. One credit per quarter; autumn, winter, spring. One lecture and two laboratory periods per week. Laboratory deposit, \$2. Assistant Professor Kennedy

General Advertising.—See Economics and Business Administration 76-77-78.

110-111-112. *Current Events*.—A general information course in world movements; newspaper, periodical, magazine, and occasionally new book readings. Open to any non-major above freshman rank.

FOURTH YEAR COURSES

151-152-153. *Editing and Advanced Newswriting*.—Copyreading, headwriting, and other desk work, with a study of types of news-writing and practice in getting and writing news stories involving difficulties. Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2.

154-155-156. *Features, Exchanges, Syndicates*.—Study of the writing, illustrating, and arranging of advanced feature stories, with special reference to Sunday sections; study of contemporary newspapers; handling of exchanges; syndicated stories. Writing assignments; research among newspapers; readings. Credits and hours to be arranged. Laboratory deposit.

157-158-159. *History of Journalism, Editorial Writing, Newspaper Policy*.—A course that covers the allied fields of editorial writing (with practice); the history of journalism with especial reference to newspapers that have been made or unmade by their editorial policies; a general study of newspaper policy, with emphasis on the ethics of journalism, and the history of newspaper ethics; newspaper campaigns; a study of current tendencies through the editorial page. Credits and hours to be arranged. Laboratory deposit.

160-161-162. *Short Story*.—A critical appreciation of the composition, human aspects, and tendencies of the short story, and its place in literature. Short stories must be produced throughout the year at regular intervals, and are graded in proportion to their probable marketability. Open to non-majors above sophomore rank who bring a recommendation from the department of English. (English 101-102.) Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2, which covers prescribed textbooks, short story periodicals, library facilities, and use of typewriters. Miss Edgington

163-164-165. *The Business Office*.—Cost finding; estimating; simplified accounting for newspaper plants; business office management; buying and selling; efficiency; plant hygiene; letter composition. This course is intended primarily for students who aspire to ultimate ownership or management of newspaper or job plants. Open to students in the School of Business Administration who have had prerequisite training. Compulsory for majors on the business side. Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2. Kennedy

166-167-168. *Advanced Advertising and Publicity*.—An intensive study of mediums and markets is made, campaigns are prepared and copy is written. Two credits per quarter; autumn, winter, spring. One lecture and one discussion per week. Laboratory deposit, \$2.

*169-170-171. *Country Journalism and Circulation Management*.—Study of successful country newspapers; methods of handling local advertising, and of securing and handling foreign business; circulation; scientific management as applied to a newspaper plant; office systems and simple front office accounting. Compulsory for majors on the business side. Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2.

† 175. *Senior Conference*.—A course in practical newspaper problems and procedure in all departments. One credit; autumn, winter, or spring. One recitation per week. Required of all senior majors. Journalism faculty

SUBJECTS PRESENTED BY OTHER DEPARTMENTS

† 54-55-56. *Business Law*.—The law of libel, with copyright, postal, advertising, circulation, and state and federal statutes generally as they relate to the publishing industry, will be covered in the first quarter of this course. Majors are advised to take all three quarters, however. Open to journalism majors of sophomore standing. For detailed description see curriculum of the College of Law. Three credits per quarter; autumn, winter, spring. Professor Ayer

179-180-181. *Freehand Drawing*.—A foundation course for newspaper and magazine illustrating and cartooning. For further description, see curriculum of the College of Fine Arts.

*54. *Newspaper Photography*.—The course aims to give a familiarity with the construction and use of cameras, with the technique of picture-taking for still and moving objects, and with methods of developing and printing. Some attention will be given to the making of halftones, three color work, and newspaper reproduction. Class limit, 16. Credits and hours to be arranged. Laboratory deposit.

* Not offered in 1919-1920.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

APRIL, 1919

NO. 127—SECTION 5

COLLEGE OF
ENGINEERING

1919 - 1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

Entered as Second Class Matter, at Seattle, Under the Act of July 16, 1894

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
 Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
 Registration of new first year students.....Friday and Saturday, September 26 and 27
 Registration of all other students.....Monday and Tuesday, September 29 and 30
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 President's annual address.....Friday, October 3, 10 a. m.
 Women's assembly.....Friday, October 10, 11 a. m.
 Thanksgiving recess.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
 Quarter examinations.....Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
 Instruction begins.....Monday, January 5
 Quarter examinations.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
 Instruction begins.....Monday, April 5
 Campus Day.....Friday, April 23
 Junior Day.....Saturday, May 29
 Quarter examinations.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
 Class Day and President's reception.....Saturday, June 19
 Baccalaureate Sunday.....June 20
 Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration days.....Tuesday and Wednesday, June 22 and 23
 Instruction begins.....Thursday, June 24
 Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

WINLOCK W. MILLER, President.....	Seattle
Term ends March, 1920	
WILLIAM T. PERKINS.....	Seattle
Term ends March, 1920	
ELDRIDGE WHEELER	Montesano
Term ends March, 1921	
OSCAR A. FECHTER.....	Yakima
Term ends March, 1922	
JOHN A. REA.....	Tacoma
Term ends March, 1922	
WILLIAM A. SHANNON.....	Seattle
Term ends March, 1923	
RUTH KARR McKEE.....	Olympia
Term ends March, 1923	

WILLIAM MARKHAM, Secretary to the Board

OFFICERS OF ADMINISTRATION THE UNIVERSITY

HENRY SUZZALLO, Ph. D., LL. D.....	President of the University Administration Hall
JOHN THOMAS CONDON, LL. M.....	Dean of Faculties Administration Hall
HERBERT THOMAS CONDON, LL. B.....	Comptroller Administration Hall
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ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
WILLIAM ELMER HENRY, A. M.....	Librarian Library
FRANK STEVENS HALL.....	Director of Museum Museum
JAMES GARFIELD FLETCHER, A. B.....	Vocational Secretary Administration Hall

THE COLLEGES AND SCHOOLS

DAVID THOMSON, B. A.....	Dean of the College of Liberal Arts Denny Hall
HENRY LANDES, A. M.....	Dean of the College of Science Science Hall
STEPHEN IVAN MILLER, LL. B., A. B.....	Director of the College of Business Administration Commerce Hall
FREDERICK ELMER BOLTON, Ph. D.....	Dean of the College of Education Home Economics Hall
CARL EDWARD MAGNUSSON, Ph. D.....	Acting Dean of the College of Engineering Engineering Hall
IRVING MACKEY GLEN, A. M.....	Dean of the College of Fine Arts Meany Hall
JOHN NATHAN COBB.....	Director of the College of Fisheries Commerce Hall
HUGO WINKENWERDER, M. F.....	Dean of the College of Forestry Forestry Hall
*COLIN VICTOR DYMENT, B. A.....	Director of the School of Journalism Commerce Hall
JOHN THOMAS CONDON, LL. M.....	Dean of the Law School Commerce Hall
WILLIAM ELMER HENRY, A. M.....	Director of Library School Library
MILNOR ROBERTS, A. B.....	Dean of the College of Mines Mines Hall
CHARLES WILLIS JOHNSON, Ph. C., Ph. D.....	Dean of the College of Pharmacy Bagley Hall
FREDERICK MORGAN PADELDFORD, Ph. D.....	Acting Dean of the Graduate School Denny Hall
*J. ALLEN SMITH, Ph. D.....	Dean of the Graduate School Denny Hall

THE EXTENSION SERVICE

*EDWIN AUGUSTUS START, A. M.....	Director
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

¹Absent on leave 1918-1919.

²Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

THE FACULTY

- HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT
 JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.
 CARL EDWARD MAGNUSON, PH. D. (Wisconsin), E. E. (Minnesota), Professor of Electrical Engineering; ACTING DEAN.
 EVERETT OWEN EASTWOOD, C. E., M. A. (Virginia), S. B. (Massachusetts Institute of Technology), Professor of Mechanical Engineering.
 CHARLES CHUBB MORE, M. S., C. E. (Lafayette), M. C. E. (Cornell), Professor of Civil Engineering.
 WILLIAM FRANKLIN ALLISON, B. S., C. E. (Purdue), C. E. (Cornell), Professor of Municipal and Highway Engineering.
 GEORGE SAMUEL WILSON, B. S. (Nebraska), Associate Professor of Mechanical Engineering.
 CHARLES WILLIAM HARRIS, C. E. (Cornell), Associate Professor of Civil Engineering.
 EDGAR ALLEN LOEW, B. S. (E. E.) (Wisconsin), Associate Professor of Electrical Engineering.
 HORACE JAMES MACINTYRE, S. B. (Massachusetts Institute of Technology), M. M. E. (Harvard), Assistant Professor of Mechanical Engineering.
 JOHN WILLIAM MILLER, B. S. (C. E.), (Nebraska), Assistant Professor of Aeronautical Engineering.
 FREDERICK KURT KIRSTEN, B. S., E. E. (Washington), Assistant Professor of Electrical Engineering.
 LESLIE FORREST CURTIS, B. S. (Tufts), M. S. (E. E.) (Washington), Assistant Professor of Electrical Engineering.
 WILLIAM ELMHIRST DUCKERING, A. B., C. E. (Washington), Assistant Professor of Civil Engineering.
 FRANK DEMETRIUS HAYDEN, B. S. (Massachusetts Institute of Technology), Assistant Professor of Civil Engineering.
 ARTHUR MELVIN WINSLOW, PH. B. (Brown), B. S. (Massachusetts Institute of Technology), Assistant Professor of Mechanical Engineering.
 SAMUEL THOMAS BEATTIE, Instructor in Woodwork.
 SANDY MORROW KANE, Instructor in Metal Work.
 CLARENCE LESTER WHITE, C. E. (Iowa), Instructor in Civil Engineering.
 GORDON RUSSELL SCHUCK, E. E. (Minnesota), Instructor in Electrical Engineering.
 LEON W. MOORE, C. E. (Cornell College), Acting Instructor in Civil Engineering.
 PAUL NEWCOMB FORD, C. E. (Cornell College), Acting Instructor in Civil Engineering.
 FRED FALCONER WELD, C. E. (Pennsylvania State College), Acting Instructor in Civil Engineering.
 JAMES DOUGLASS MUDGE, M. E. (Cornell University), Acting Instructor in Mechanical Engineering.
-
- HORACE G. BYERS, PH. D. (Johns Hopkins), Professor of Chemistry.
 FREDERICK MORGAN PADELFORD, PH. D., (Yale), Professor of English.
 FREDERICK ARTHUR OSBORN, PH. D. (Michigan), Professor of Physics and Director of the Physics Laboratories.
 ROBERT EDOUARD MORITZ, PH. D. (Nebraska), PH. N.D. (Strassburg), Professor of Mathematics.
 HENRY KREITZER BENSON, PH. D. (Columbia), Professor of Industrial Chemistry.
 JOHN WEINZIRL, PH. D. (Wisconsin), Professor of Bacteriology.
 LESLIE JAMES AYER, B. S. (Upper Iowa), J. D. (Chicago), Professor of Law.
 SAMUEL LATIMER BOOTHROYD, M. S. (Colorado Agricultural College), Associate Professor of Astronomy.
 JOSEPH DANIELS, S. B. (Massachusetts Institute of Technology), M. S. (Lehigh), Associate Professor of Mining Engineering and Metallurgy.
 HENRY LOUIS BRAKEL, PH. D. (Cornell), Assistant Professor of Physics.
 GEORGE IRVING GAVETT, B. S. (C. E.), (Michigan), Assistant Professor of Mathematics.
 LEWIS IRVING NEIKIRK, PH. D. (Pennsylvania), Assistant Professor of Mathematics.
 SAMUEL HERBERT ANDERSON, PH. D. (Illinois), Assistant Professor of Physics.

¹ Absent on leave 1919-1920.

THE COLLEGE OF ENGINEERING

Curricula and Degrees.—The College of Engineering offers two four-year curricula in each of the departments of chemical, civil, electrical and mechanical engineering. One of these leads to the degree of bachelor of science in the respective branches of engineering, as B. S. in civil engineering. The other is offered to meet the need for a broader foundation of general training than is possible in the regular four-year curricula. This curriculum in each department leads to the degree of bachelor of science (B. S.), and is followed by a year of graduate work which, under the university regulations for advanced degrees, leads to the degree of master of science (M. S.) in the respective lines.

In arranging the curricula the aim has been: To keep the work fundamental in character; to introduce the student into an engineering atmosphere as soon as possible; to direct the methods of work and study and to provide for a certain amount of flexibility in the selection of subjects.

A distinctive feature is the engineering problems (C. E. 11, 12, 13) given by engineering instructors in two three-hour periods a week and consisting chiefly of problems taken from engineering work, analyzed from an engineering standpoint and solved by using mathematics as a means rather than an end.

The freshman work in the departments of chemical, civil, electrical and mechanical engineering, is identical, thus making it possible for a student to delay the definite choice until the beginning of the sophomore year.

All freshman and much sophomore work is repeated each quarter. Additional courses will be repeated whenever practicable, provided the demand is sufficient to warrant full sections, but not for less than six students. Thus freshmen may enter at the opening of any quarter with the assurance of continuity of work for at least two years. The plan provides a possibility for taking desirable elective courses, or for engaging in practical work for one or more quarters before completing the curriculum.

Degree with Honors.—A degree with honors in engineering may be conferred upon any student of the College of Engineering who, upon recommendation of the engineering faculty of the honors committee and upon vote of the university faculty, may be declared worthy of unusual distinction.

Advanced Degrees.—The degrees of master of science in civil engineering (M. S. in C. E.), master of science in electrical engineering (M. S. in E. E.), master of science in mechanical engineering (M. S. in M. E.), and master of science in chemical engineering (M. S. in Ch. E.), respectively, will be conferred upon graduates of this college, or other engineering colleges of recognized standing, who

complete a year (45 credit hours) of graduate work, including a satisfactory thesis, with the grade of A, B or C. The candidate must also pass a formal examination open to all members of the faculty. The selection of work for this degree must, in each case, be approved by the head of the department in which the student majors.

The professional degrees, chemical engineer (Ch. E.), civil engineer (C. E.), electrical engineer (E. E.), and mechanical engineer (M. E.), will be conferred in two years on graduates of this college holding the degree (M. S.) and in three years on those with (B. S.) in their respective lines, who give evidence of having been engaged continuously in acceptable engineering work and who present satisfactory theses.

Thesis.—The graduating thesis will consist of research or design in some branch of engineering, or the review of some existing construction. The subject must be approved by the professor in charge of the department under which it is classified.

THE ENGINEERING LABORATORIES

Civil Engineering.—The hydraulic laboratory is being transferred to its new location on the shore of Lake Union, where facilities are available for both medium and high head experiments. For medium head, a free water surface, one acre in extent, is provided at an elevation of 100 feet above the laboratory floor. For high heads, connection is made with an 8" pipe leading from an elevated tank 300 feet above the floor.

The materials testing laboratory contains five universal testing machines with capacities from 30,000 to 300,000 pounds, two impact machines with various hammers ranging in weight from 550 to 1500 pounds, with the necessary auxiliary apparatus for general work.

The equipment for testing hydraulic cement is complete for all the ordinary tests as specified by the American Society of Civil Engineers.

The road laboratory is equipped for testing materials used in the construction of roads. The machines for the abrasion and toughness tests are of the standard designs adopted by the American Society for Testing Materials; other machines are similar to those used by the United States Office of Public Roads.

The surveying equipment consists of an ample supply of all the necessary instruments for plane and topographic surveying.

Electrical Engineering.—The dynamo laboratory contains seventeen alternating and thirty-two direct current generators and motors. The machines are of modern design and have a combined capacity of 300 kilowatts in direct current machines and 225 kilowatts in alternating current machines. Most of the machines are of five- or ten-kilowatt capacity. Power from a storage battery of 130 cells is avail-

able at a separate switchboard in the dynamo laboratory. The university power house, containing two steam-driven units of 200 and 100 kilowatts, serves as a commercial laboratory for operating and testing purposes.

Nine smaller rooms are devoted to the following: (a) Instrument making and repairing, (b) grinding room and shop, (c) instrument and stock room, (d) telephone laboratory, (e) electrolysis and special thesis problems, (f) storage battery rooms, (g) three dark rooms for photometry work. The instrument room contains a large collection of standard indicating and recording ammeters, voltmeters and wattmeters, a three-element G. E. oscillograph, and a Tinsley A. C. potentiometer.

Mechanical Engineering.—The steam and experimental laboratory is fully equipped with steam apparatus, including engines aggregating 900 H.P., of simple and compound, high speed and Corliss types; steam turbine; jet and surface condensers; injector; centrifugal pump; steam calorimeters; indicators; calibrating appliances; oil testing machine; gas engine of stationary and automobile types; gas producer plant; refrigerating apparatus; compressed air machinery for two stage compression and Westinghouse full train equipment; fuel testing facilities, including Mahler Bomb, Junkers and other calorimeters, with accessories for determining heating value and analysis of solid, liquid and gaseous fuels.

There is a thoroughly modern woodworking shop, machine shop, foundry and forge shop. The wood shop is equipped with benches, lathes, band saws, circular saws, planer, and trimmer. The forge and foundry are equipped with down-draft forges, power hammer, punch and shears, cupola, moulding machines, shakers, rattler, riddles, brass furnace, core ovens, and traveling crane. Machine shop is equipped with small and large lathes, drill press, milling machine, planer, sharper, metal saw, grinding machine and complete equipment for bench and vise work.

ADMISSION TO FRESHMAN STANDING

A student must offer for admission to freshman standing in the university fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a "unit" a subject must be taught the equivalent of five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented):
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit counted in any language).

- (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units selected from the above groups.
 5 units selected from any subjects accepted by an approved high school for its diploma, not more than four, however, to be in vocational subjects.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the university, all students expecting to enter the College of Engineering should elect their work from the groups (a) to (d), so as to offer the following subjects:

Advanced algebra.....	½ unit
Solid geometry.....	½ unit
Physics	1 unit

If the student shall not have included these subjects in his high school elections, it will be necessary for him to take them in the University in addition to the prescribed curriculum.

Students entering the College of Engineering must have a *working knowledge* of the fundamentals of arithmetic, algebra and geometry. It is therefore desirable for the student to review his preparatory mathematics *just before entering college*. By such a step much time will be saved and the work of the college will be rendered more valuable to him.

Detailed information concerning entrance to the University is contained in a special section of the General Catalogue, also published as a separate bulletin.

CURRICULA OF THE COLLEGE OF ENGINEERING

FOR THE FRESHMAN YEAR IN ALL DEPARTMENTS

FRESHMAN					
First Quarter	Credits	Second Quarter	Credits	Third Quarter	Credits
Alg. Math. 51.....	3	Trig. Math. 52.....	3	Anal. Geom. Math. 53.....	3
Engr. Prob. C. E. 11.....	3	Engr. Prob. C. E. 12.....	3	Engr. Prob. C. E. 13.....	3
Gen. Chem. 1 or 21.....	5	Gen. Chem. 2 or 22.....	5	Gen. Chem. 3 or 23.....	5
Drawing, C. E. 1.....	3	Drawing, C. E. 2.....	3	Surveying, C. E. 21.....	3
Woodwork, M. E. 1.....	1	Woodwork, M. E. 2.....	1	Woodwork, M. E. 3.....	1
Mil. Sci. 1.....	2	Mil. Sci. 2.....	2	Mil. Sci. 3.....	2
	17		17		17

IN CHEMICAL ENGINEERING

Leading to the degree of Bachelor of Science in Chemical Engineering

FRESHMAN					
The same for all curricula. See above.					
SOPHOMORE					
First Quarter	Credits	Second Quarter	Credits	Third Quarter	Credits
Dif. Cal. Math. 61.....	3	Int. Cal. Math. 62.....	3	Dir. Cur. E. E. 99.....	4
Physics 97.....	5	Physics 98.....	5	D. C. Lab. E. E. 100.....	2
Qual. Chem. 48.....	5	Quant. Chem. 101.....	5	Physics 99.....	5
Metalwork, M. E. 53.....	1	St. Engr. M. E. 82.....	4	Quant. Chem. 102.....	4
Mil. Sci. 4.....	2	Metalwork, M. E. 54.....	1	Metalwork, M. E. 55.....	1
	16	Mil. Sci. 5.....	2	Mil. Sci. 6.....	2
	16		18		18

JUNIOR

Organic Chem. 81..... 5	Organic Chem. 32..... 5	Organic Chem. 33..... 5
Indust. Chem. 121..... 5	Indust. Chem. 122..... 5	Indust. Chem. 123..... 5
Alt. Cur. E. E. 121..... 4	Mechanics, C. E. 131..... 3	Mach. Des. M. E. 90..... 3
A. C. Lab. E. E. 122..... 2	Mechanism, M. E. 81..... 3	English 3..... 3
16	16	16

SENIOR

Phys. Chem. 201..... 5	Phys. Chem. 202..... 5	Elec. Chem. 204..... 5
Metallurgy, Min. 101..... 5	Mach. Des. M. E. 115..... 3	Thesis..... 3
Steam Lab. M. E. 83..... 3	Thesis..... 2	Elective..... 6
Elective..... 3	Elective..... 6	
16	16	14

Electives must in all cases be approved by the head of the department.

IN CIVIL ENGINEERING

Leading to the degree of Bachelor of Science in Civil Engineering

FRESHMAN

The name for all curricula. See page 10.

SOPHOMORE

First Quarter	Credits	Second Quarter	Credits	Third Quarter	Credits
Cal. Math. 61..... 3		Cal. Math. 62..... 3		Steam Lab. M. E. 83..... 3	
Mach. Des. M. E. 90..... 3		Mach. Des. M. E. 91..... 3		St. Eng. M. E. 82..... 3	
Physics 97..... 5		Physics 98..... 5		Physics 99..... 5	
E. R. Surv. C. E. 22..... 4		Higher Surv. C. E. 23..... 4		Field Eng. C. E. 24..... 4	
Mil. Sci. 4..... 2		Mil. Sci. 5..... 2		Mil. Sci. 6..... 2	
17		17		17	

JUNIOR

Mechanics, C. E. 131..... 3	Mechanics, C. E. 132..... 3	Reinforced Conc. C. E. 133..... 3
Hydraulics, C. E. 142..... 5	Hydr. Eng. C. E. 143..... 3	Direct Cur., E. E. 99..... 4
English 5..... 3	Highways, C. E. 122..... 3	D. C. Lab, E. E. 100..... 2
Geology 5..... 5	English 6..... 3	Str. Mtls., C. E. 167..... 3
	Elective..... 3	History of Eng., C. E. 41..... 3
16	15	15

SENIOR

Frame Struc., C. E. 134..... 3	Elective..... 11	Elective..... 14
Business Law 54..... 3	Business Law 55..... 3	
Thesis..... 5		
Elective..... 5		
16	14	14

Electives must in all cases be approved by the head of the department.

IN ELECTRICAL ENGINEERING

Leading to the degree of Bachelor of Science in Electrical Engineering

FRESHMAN

The name for all curricula. See page 10.

SOPHOMORE

First Quarter	Credits	Second Quarter	Credits	Third Quarter	Credits
Dir. Cal. Math. 61..... 3		Int. Cal. Math. 62..... 3		Dir. Cur., E. E. 99..... 4	
Mechanism, M. E. 81..... 3		St. Engr., M. E. 82..... 3		D. C. Lab. E. E. 100..... 2	
Physics 97..... 5		Physics 98..... 5		Physics 99..... 5	
Mach. Des., M. E. 90..... 3		Mach. Des., M. E. 91..... 3		Cal. Math. 63..... 3	
Metalwork, M. E. 53..... 1		Metalwork, M. E. 54..... 1		Metalwork, M. E. 55..... 1	
Mil. Sci. 4..... 2		Mil. Sci. 5..... 2		Mil. Sci. 6..... 2	
17		17		17	

JUNIOR

Dir. Cur. E. E. 103..... 5	Alt. Cur. E. E. 161..... 5	Alt. Cur. E. E. 163..... 5
D. C. Lab. E. E. 104..... 4	A. C. Lab. E. E. 162..... 4	A. C. Lab. E. E. 164..... 4
Steam Lab. M. E. 83..... 3	English 6..... 3	Physics 114..... 3
Mechanics, C. E. 131..... 3	Mechanics, C. E. 132..... 3	Elective..... 3
15	15	15

SENIOR

Transients, E. E. 196, 197, or Thesis 195.....	5	El. Des. E. E. 151.....	5	Elective	15
Hydraulics, C. E. 142.....	5	Elective	10		
Elective	5				
	<hr/> 15		<hr/> 15		<hr/> 15

Electives must in all cases be approved by the head of the department.

IN MECHANICAL ENGINEERING

Leading to the degree of Bachelor of Science in Mechanical Engineering

FRESHMAN

The name for all curricula. See page 10.

SOPHOMORE

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Cal. Math. 61.....	3	Cal. Math. 62.....	3	Ca. Math. 63.....	3
Mechanism, M. E. 81.....	3	English 5	3	St. Eng. M. E. 82.....	3
Mach. Des. M. E. 80.....	3	Mach. Des. M. E. 91.....	3	Steam Eng. Lab. M. E. 88..	3
Physics 97	5	Physics, 98.....	5	Physics 99	5
Metalwork, M. E. 58.....	1	Metalwork, M. E. 54.....	1	Metalwork, M. E. 55.....	1
Mil. Sci. 4.....	2	Mil. Sci. 5.....	2	Mil. Sci. 6.....	2
	<hr/> 17		<hr/> 17		<hr/> 17

JUNIOR

Dir. Cur. E. E. 99.....	4	Alt. Cur. E. E. 121.....	4	Hydraulics, C. E. 142.....	5
D. O. Lab. E. E. 100.....	2	A. O. Lab. E. E. 122.....	2	Str. Matls. C. E. 167.....	3
Exp. Eng. M. E. 151.....	3	Exp. Eng. M. E. 152.....	3	Exp. Engr. M. E. 153.....	3
Eng. & Boll. M. E. 123.....	3	Eng. & Boll. M. E. 124.....	3	Eng. & Boll. Des. M. E.	
Mechanics, C. E. 181.....	3	Mechanics, C. E. 182.....	3	125	3
Metalwork, M. E. 105.....	1	Metalwork, M. E. 106.....	1	Metalwork, M. E. 107.....	1
	<hr/> 16		<hr/> 16		<hr/> 15

SENIOR

Business-Law 54.....	3	Gas. Eng. M. E. 198.....	3	Power Plants M. E. 184... 3	
Thermo. M. E. 188.....	3	Heat. & Vent. M. E. 182..	3	Refrigeration, M. E. 180... 2	
Mach. Des. M. E. 101.....	2	Mach. Des. M. E. 102.....	2	Mach. Des. M. E. 103 or	
Steam Turb. M. E. 179... 3		Thesis	3	199	3
Elective	4	Elective	4	Thesis	3
	<hr/> 15		<hr/> 15	Elective	4
					<hr/> 15

IN NAVAL ARCHITECTURE AND MARINE ENGINEERING

FRESHMAN

The name for all curricula. See page 10.

SOPHOMORE

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Cal. Math. 61.....	3	Cal. Math. 62.....	3	Cal. Math. 63.....	3
Mechanism, M. E. 81.....	3	English 5	3	St. Eng. M. E. 82.....	3
Mach. Des., M. E. 90.....	3	Mach. Des. M. E. 91.....	3	Steam Eng. Lab. M. E. 88..	3
Physics 97	5	Physics 98.....	5	Physics 99	5
Metalwork, M. E. 58.....	1	Metalwork, M. E. 54.....	1	Metalwork, M. E. 55.....	1
Mil. Sci. 4.....	2	Mil. Sci. 5.....	2	Mil. Sci. 6.....	2
	<hr/> 17		<hr/> 17		<hr/> 17

JUNIOR

Dir. Cur. E. E. 99.....	4	Alt. Cur. E. E. 121.....	4	Exp. Eng. M. E. 153.....	3
D. O. Lab. E. E. 100.....	2	A. O. Lab. E. E. 122.....	2	Hydraulics, C. E. 142.....	5
Exp. Eng. M. E. 151.....	3	Exp. Eng. M. E. 152.....	3	Str. Matls. C. E. 167.....	3
Nav. Arch. M. E. 185.....	3	Nav. Ar. Draw. M. E. 186. 3		Nav. Ar. Draw. M. E. 187. 3	
Mechanics, C. E. 181.....	3	Mechanics, C. E. 182.....	3	Metalwork, M. E. 107.....	1
Metalwork, M. E. 105.....	1	Metalwork, M. E. 106.....	1		
	<hr/> 16		<hr/> 16		<hr/> 15

SENIOR

Thermo. M. E. 188..... 3	Gas Engines, M. E. 198... 3	Mar. Engr. M. E. 190..... 3
Ship Design, M. E. 188.... 2	Ship Design, M. E. 189.... 2	Mar. Engr. & B. Des. M. E. 124..... 3
Steam Turb. M. E. 179.... 3	Heat. & Vent. M. E. 182... 3	Refrigeration, M. E. 180... 2
Business Law 54..... 3	Elective 7	Elective 4
		Thesis 3
15	15	15

Electives must in all cases be approved by the head of the department.

FOR BACHELOR OF SCIENCE DEGREE

The student must register in one of the departments of the College of Engineering.

	Credits
Mathematics 51, 52, 53, 61, 62, 63.....	18
Physics 97, 98, 99.....	15
Chemistry 1, 2, 3, or 21, 22, 23.....	15
Englab 5.....	8
Civil Engineering 1, 2, 11, 12, 13, 21, 131.....	21
Electrical Engineering 99, 100, 121, 122 or 161, 162.....	12
Mechanical Engineering 1, 2, 3, 81, 82, 90, 140.....	15
Military Science or Physical Education 1, 2, 3, 4, 5, 6.....	12
Technical electives in major department, at least.....	21
General electives.....	60

192

Electives must in all cases be approved by the head of the department in which the student majors.

IN AERONAUTICAL ENGINEERING

Students who desire to major in aeronautical engineering should include the following courses in the technical and general electives of the curriculum for the bachelor of science degree. These courses may also be taken as electives in the curricula for the bachelor of science degree in chemical, civil, electrical and mechanical engineering.

- 101. Aerodynamics.
- 111. Aerial Propellers.
- 121. Airplane Design.
- 141. Airships.
- 161. Aerial Transportation.

Electives must in all cases be approved by the dean of the college.

DEPARTMENTS OF INSTRUCTION

AERONAUTICAL ENGINEERING

101. *Aerodynamics*.—Use of the wind tunnel in the determination of the characteristics of aerofoils; selection of aerofoils for a given purpose. Prerequisite, C. E. 11, 12, and Math. 63. Three credits; autumn, winter, spring. Assistant Professor Miller

111. *Aerial Propellers*.—A study of the theory and design of airscrews including a review of the methods of calculating thrust and efficiency. Prerequisite, Math. 63. Three credits; autumn. Miller

121. *Airplane Design*.—Selection of the type and construction of an airplane for a given purpose; computation of performance from aerodynamic data; design of flying boats and seaplanes; the distribution of weights and the proportioning of parts. Prerequisite, A. E. 101. Three credits; winter. Miller

141. Airships.—Aerostatics, including a detailed study of lighter-than-air machines. Prerequisite, 101, 121. Three credits; spring.

Miller

161. Aerial Transportation.—The design and layout of landing fields and aircraft terminals. Aerial transportation as an industrial factor and as an instrument of warfare. Prerequisite, A. E. 101, 111, 121, 141. Will be given provided at least six students apply for course. One credit; spring.

Miller

CHEMICAL ENGINEERING

The fee for each laboratory course is five dollars. This deposit covers the cost of materials furnished by the laboratory and provides the student for a full quarter's work. The student is required to purchase a breakage ticket when he obtains his locker key. The cost of the ticket is five dollars and any portion of it unused will be refunded.

1-2-3. General Chemistry.—The first two quarters are devoted to general chemistry and the chemistry of the non-metals; the third quarter to the chemistry of the metals. The laboratory work of the third quarter is qualitative. Open only to students who have had no high school chemistry. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter, spring.

Assistant Professor Tartar and assistants

21-22-23. General Chemistry.—For students who have had a high school course in chemistry, and especially for students in the Colleges of Science and Engineering. The third quarter is devoted to elementary qualitative analysis. Prerequisite, an accredited high school course in chemistry. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter, spring.

Professor Byers, Dr. Thompson and assistants

31-32-33. Organic Chemistry.—The fundamentals of organic chemistry, especially for major students in chemistry and those preparing for medicine. Prerequisite, Chem. 3 or its equivalent. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter, spring.

Associate Professor Dehn

43. Qualitative Analysis.—For students of chemistry and chemical engineering. The theory of qualitative operatives forms an important part of the class work. Prerequisite, Chem. 23 or its equivalent. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, spring.

Byers

51. Engineering Chemistry.—Chemistry of fuels and construction materials. Elective for engineering students. Prerequisite, Chem. 3 or 23. Two lectures and one laboratory period per week. Three credits; spring.

Professor Benson and associate

101-102-103. Quantitative Analysis.—Elements of quantitative methods. Prerequisite, Chem. 23 or its equivalent. Four laboratory periods per week. Four credits per quarter; autumn, winter, spring.

Assistant Professor Heath

121-122-123. Industrial Chemistry.—Three lectures and two laboratory periods per week. Prerequisite, Chem. 102. Five credits per quarter; autumn, winter, spring.

Benson and associate

201-202. Physical Chemistry.—An elementary course dealing with the fundamental theories of chemistry based upon physical measurements. Prerequisites, Physics 2 and Chem. 86 and 102. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter.

Tartar and assistants

204. Electro Chemistry.—The elements of electro-chemical processes. Prerequisite, Chem. 202. Three lectures and two laboratory periods per week. Five credits; spring.

Byers and Tartar

CIVIL ENGINEERING

1. Engineering Drawing.—The use of instruments, free-hand lettering, fundamental principles of making working drawings, platting of traverse from field notes. Laboratory deposit, \$1. Three credits; autumn, winter, spring.

White

2. Engineering Drawing.—Reading of working drawings, conventional symbols and standards, tracing. Prerequisite, course 1. Three credits; autumn, winter, spring.

White

5. Cartography.—Making of maps and charts, with topographical symbols, U. S. G. S. standards. Three credits; spring.

White

11. Engineering Problems.—The investigation of simple structures as to loadings, weights and stresses in members by algebraic and graphic methods. Three credits; autumn, winter, or spring.

Assistant Professor Duckering

12. Engineering Problems.—Elementary problems dealing with the movement of bodies, work, energy and power. Three credits; autumn, winter, or spring.

Ford

13. Engineering Problems.—The problems of dimensioned objects, graphic solution. Three credits; autumn, winter, or spring.

White

21. Plane Surveying.—Instruments, computations, mapping, and an introduction to the U. S. system for the survey of the public lands. Prerequisite, course 1 and Math. 51. All freshman engineers. Laboratory deposit, \$3. Three credits; autumn, winter, spring.

Assistant Professor Hayden

22. Railroad Surveying.—Elementary railroad engineering. Prerequisite, course 21. Laboratory deposit, \$3. Four credits; autumn.

Hayden

23. Higher Surveying.—Meridian observations; triangulation and base line measurements; computations and adjustment of measurements; plane table surveying. Prerequisite, course 21. Four credits; winter. Hayden

24.—Field Engineering.—Field practice in the survey and construction of highways, railroads, canals, etc. Prerequisite, course 22. Four credits; spring. Hayden

27. Mine Surveying.—Surface and underground practice; observation for meridian; topography; mining claim survey; tunnels and vertical shaft work and connections; mapping. Prerequisite, course 21. Sophomore mining engineers. Laboratory deposit, \$3. Three credits; winter. Hayden

30. Surveying.—(Short session in Forestry). Laboratory deposit, \$3. Five credits. Hayden

33. Surveying.—(Short session in Mining). Laboratory deposit, \$3. Five credits. Hayden

41. History of Civil Engineering.—A general survey of monumental structures from the standpoint of utility, design, construction and maintenance. Three credits; spring. White

56. Forest Surveying.—Chain, compass, transit and level surveying, with reference to work in forestry. Laboratory deposit, \$3. Five credits; spring. Hayden

112. Railway Construction.—Railway construction methods, machinery and tools; details of track, and terminal structures. Prerequisite, course 24. Five credits; winter. Hayden

115. Railway Economics.—The economic theory of railway location, operation, and maintenance. Prerequisite, course 24. Five credits; spring. Hayden

122. Highways.—Location, methods, and types of construction, with local application. Prerequisite, C. E. 22. Three credits; winter. Professor Allison

126. Roads and Pavements.—Surface materials and maintenance, including comparative laboratory study of properties of local materials. Prerequisite, C. E. 122. Five credits; autumn. Allison, Ford

131. Mechanics.—Statics, stresses in structures, beams, columns, flexible cords; theorem of least work; theorem of three moments; combined stresses. Prerequisite, Math. 62. Three credits; autumn, winter, or spring. Professor More

132. Mechanics.—Dynamics; translation and rotation; work, energy and power; friction; torsion; inertia of rigid bodies. Prerequisite, C. E. 131. Three credits; autumn, winter, or spring. Duckering

133. Reinforced Concrete.—The mechanics of reinforced concrete beams, girders, columns and retaining walls and introduction to reinforced arch bridges. Prerequisite, C. E. 131. Three credits; spring. More

134. Framed Structures.—Complete problems presenting structural engineering, cranes, roof trusses, highway bridges and simple railroad spans. Prerequisite, course 131. Three credits; autumn.

Duckering

142. Hydraulics.—Flow of water through pipes, orifices, over weirs and in open channels; energy, impulse and reaction of jets with application to impulse wheels; review of hydrostatics. Prerequisite, C. E. 131. Laboratory deposit, \$8. Five credits; spring.

Associate Professor Harris

143. Hydraulic Engineering.—Complete problems presenting hydraulic engineering. Prerequisite, C. E. 142. Three credits; winter.

Harris

144. Hydraulic Mining.—A course of two lectures per week on theory and practice of hydraulic mining. Two credits; winter.

Allison

145. Hydraulic Machinery.—Development and theory of water wheels and turbine pumps; design of a reaction turbine; reference to hydrostatic machinery and dredging equipment. Prerequisite, C. E. 12. Senior and graduate E. E. and M. E. Three credits; winter.

Harris

147. Hydraulic Power.—Generation of power; penstock and turbines; types of installations. Prerequisite, C. E. 142; senior and graduate C. E. Five credits; autumn.

Harris

153. Water Supply.—The principal engineering operations necessary to secure suitable water supplies for cities and towns; purification of water. Prerequisite, C. E. 143; senior and graduate C. E. Five credits; winter.

Allison

154. Sanitary Engineering.—The design and construction of sewage systems, sewage treatment, and disposal; garbage collection and destruction. Senior and graduate C. E. Prerequisite, C. E. 153. Five credits; spring.

Allison

161. Bridges.—Stresses, design and deflection of simple trusses; detail drawings; estimates. Prerequisite, C. E. 134. Senior and graduate C. E. Five credits; winter.

More

164. Higher Structures.—Primary and secondary stresses and design. Prerequisite, C. E. 161. Senior and graduate C. E. Five credits; spring.

More

167. Strength of Materials.—An experimental study of the physical properties of materials used in engineering. Prerequisite, C. E. 131. Senior and graduate C. E. and M. E. and graduate E. E. Laboratory deposit, \$8. Three credits; spring.

Ford

169. Materials of Construction.—Selection, handling and inspection of builders' materials; critical investigations in laboratory and field. Prerequisite, junior standing. Five credits; winter.

Ford

171. *Engineering Astronomy*.—A course designed to give the student ability to determine time, latitude and azimuth from observations of the sun or stars with the surveyor's transit. Prerequisites, Math. 52, C. E. 21 or its equivalent, and must be preceded or accompanied by Astronomy 1 or its equivalent. Four laboratory hours per week. Laboratory deposit, \$2. Two credits, autumn.

Associate Professor Boothroyd

172. *Geodetic Astronomy*.—Problems for the precise determination of time, latitude and azimuth. Prerequisites, C. E. 171, and Math. 62. Ten hours laboratory work per week. Laboratory deposit, \$5. Five credits; winter quarter, alternating with 173. Boothroyd

173. *Geodesy*.—Figure of the earth, geodetic positions, adjustment of triangulation systems, gravity determination and isostasy, mapping and map projection. Prerequisites, C. E. 171 and Math. 62. Five lecture and recitation periods per week with outside assignments of problems and readings. Five credits; spring. Boothroyd

ELECTRICAL ENGINEERING

99. *Direct Currents*.—Theory of the electric and magnetic circuits; construction, operation and characteristics of direct current generators and motors. Prerequisite, Physics 98. Four credits; autumn, winter, spring.

Associate Professor Loew, Assistant Professors Kirsten and Curtis

100. *Direct Currents Laboratory*.—Laboratory work on direct current machinery. Prerequisite, Physics 98. Laboratory deposit, \$3. Two credits; autumn, winter, spring. Loew, Kirsten, Curtis

103. *Direct Currents*.—Continuation of 99 in direct current machinery. Storage batteries. Regulation and control of direct current systems. To be taken in connection with course 104. Prerequisite, course 99. Five credits; autumn, winter, spring.

Kirsten, Loew

104. *Direct Currents Laboratory*.—Experimental work on direct current dynamo machinery and on storage batteries. Prerequisite, course 99. Five credits; autumn, winter, spring.

Kirsten, Loew

15. *Elementary Direct Currents*.—(Night Class).¹ The laws of the electric and magnetic circuits with application to direct current machinery without the aid of advanced mathematics. For electricians having at least two years of practical experience with electrical machinery. Laboratory deposit, \$4. Four credits per quarter.

20. *Elementary Alternating Currents*.—(Night Class).¹ An introduction to alternating current theory with experimental work on

¹Will be offered, provided six students apply for course.

alternating current machinery. Prerequisite, course 15. Laboratory deposit, \$4. Four credits per quarter.

121. *Alternating Currents*.—A short course in alternating currents for non-electrical students. To be taken in connection with course 122. Prerequisite, course 99. Four credits; autumn, winter. Loew

122. *Alternating Currents Laboratory*.—Experimental work on alternating current machinery. Prerequisite, course 100. Laboratory deposit, \$3. Two credits; autumn, winter. Loew, Kirsten

131. *Telephones*.—Theory, construction and operation of telephone systems. Central telephone station practice. Prerequisite, courses 99, 100. Junior or senior elective. Three credits; autumn, spring. Curtis

132. *Telephones and Telegraphs*.—Details of automatic and manual switchboards; testing and locating faults; multiplex telegraphy; railway signal systems. Junior or senior elective. Prerequisite, course 131. Laboratory deposit, \$2. Three credits.

141. *Electric Lighting*.—Electric lamps; commercial photometry; adaptation of electric lighting to commercial requirements. Junior or senior elective. Prerequisite, courses 99, 100. Laboratory deposit, \$2. Four credits; winter. Kirsten

151. *Electrical Machine Design*.—Complete design of one direct current generator or motor. Prerequisite, courses 103, 104. Five credits; autumn, spring. Kirsten, Loew

*152. *Design of Electrical Apparatus*.—Switchboards, transformers, alternators or alternating current motors. Prerequisite, course 151. Four credits.

161. *Alternating Currents*.—The theory of singlephase and polyphase system; energy storage in magnetic and dielectric fields; vector diagrams and the symbolic method of analysis; power factor and power measurements; hysteresis and eddy currents; theory of the transformer, singlephase and polyphase induction motors and alternators. Prerequisite, course 103. Five credits; autumn, spring.

Professor Magnusson

162. *Alternating Currents Laboratory*.—Experimental work with alternating current machinery. Prerequisite, course 104. To be taken in connection with course 161. Laboratory deposit, \$4. Four credits; autumn, spring. Curtis

163. *Alternating Currents*.—The theory of rotary converters, synchronous and commutator motors and transmission lines; high tension phenomena; corona; commercial wave forms; unbalanced and interlinked systems. Prerequisite, course 161. Five credits; winter.

Magnusson

164. *Alternating Current Laboratory*.—Prerequisite, course 162. Laboratory deposit, \$4. Winter. Curtis

¹170. *Electric Railways*.—Equipment, roadbed, construction and operation. Prerequisite, courses 99, 100. Four credits; autumn.

Curtis

¹174. *Central Stations*.—Location, design and operation of electric central stations. Prerequisite, courses 161, 162. Three credits; winter.

Curtis

¹176. *Power Transmission*.—Theory, design and operation of electric power transmission lines. Prerequisite, courses 163, 164. Four credits; spring.

Kirsten

181, 182. *Radio*.—Radio systems; lineal, open and complex oscillations; coupled circuits; resonance; transmitters; receivers; vacuum tubes in radio work; quenched and undamped oscillations. Prerequisites, calculus, physics, and direct and alternating currents. Laboratory deposit, \$3. Five credits per quarter; winter, spring.

Curtis

195. *Thesis*.—After consultation with the head of the department each student selects a suitable topic for investigation. Reports of progress are made weekly to the instructor in charge of the work selected. A complete report of the work is typewritten and bound and a copy deposited in the University library. Five credits; autumn, winter, spring.

Magnusson, Loew, Kirsten, Curtis

196. *Electric Transients*.—The exponential law of simple transients; single and double energy transients; current oscillations and traveling waves; natural period of transmission lines; short circuit transients; surges; corona; lighting phenomena. Prerequisite, courses 161, 162. Three credits; autumn, spring.

Magnusson

197. *Electric Transients Laboratory*.—To be taken in connection with course 196. Prerequisite, courses 161, 162. Laboratory deposit, \$2. Two credits; winter.

Magnusson

200, 201, 202. *Research*.—Five credits per quarter; autumn, winter, spring.

Magnusson, Loew, Kirsten, Curtis

MECHANICAL ENGINEERING

1, 2, 3. *Woodwork*.—Bench work; cabinet work; pattern making. Laboratory deposit, \$2. One credit per quarter; autumn, winter, spring.

Mr. Beattie

4. *Woodwork*.—Mine timber framing. Prerequisite, Mining 50. Laboratory deposit, \$2. One credit; spring.

Associate Professor Daniels, Mr. Beattie

53, 54, 55. *Metalwork*.—Foundry; forge; machine work. Laboratory deposit, \$2. One credit per quarter; autumn, winter, spring.

Mr. Kane

81. *Mechanism*.—The operation of machines involving the transmission of forces and the production of determinate motions. Prere-

¹Will be offered, provided six students apply for course.

quisite, C. E. 2, Math. 52. Three credits; autumn, winter or spring.
Associate Professor Wilson

82. Steam Engineering.—The various forms of steam apparatus used in modern steam plants; their construction, use, and reason for their installation. Not open to freshmen. Prerequisite, C. E. 2. Three credits; autumn, winter, or spring. Professor Eastwood

83. Steam Engineering Laboratory.—Calibrations of thermometers, gages, indicator springs, etc.; tests of the simple steam engine; one complete engine and boiler test with report. Preceded or accompanied by course 82. Laboratory deposit, \$2. Three credits; autumn, winter, or spring. Wilson

90, 91. Machine Design.—The design of machine details. Preceded or accompanied by course 81. Prerequisite, C. E. 2. Three credits per quarter; autumn, winter or spring. Assistant Professor Macintire

101-102-103. Machine Design.—The design of hoisting and pumping machinery; special machines. Prerequisite, course 90, C. E. 131, 132. Three credits per quarter; autumn, winter, spring. Macintire

105-106-107. Metalwork.—Advanced machine shop practice. Prerequisite, course 55. Laboratory deposit, \$2. One credit per quarter; autumn, winter, spring. Kane

108. Metalwork.—Manual arts for teachers. Prerequisite, course 107. One credit; autumn, winter, or spring. Beattie

109. Woodwork.—Manual arts for teachers. Prerequisite, course 3. One credit; autumn. Beattie

115. Machine Design.—Special problems in the design of chemical machinery. Prerequisite, course 90, C. E. 131. Three credits; autumn. Macintire

123-124-125. Engines and Boilers.—The generation and use of steam in various types of boilers and engines. Three lectures per week first quarter; one lecture and six laboratory periods per week second and third quarter. Prerequisite, courses 82, 91, C. E. 131. Three credits per quarter; autumn, winter, spring. Macintire

151-152-153. Experimental Engineering.—A continuation of M. E. 83, involving more extended and complete investigations. Prerequisite, M. E. 83. Laboratory deposit, \$2. Three credits per quarter, autumn, winter, spring. Wilson

179. Steam Turbines.—The theory, construction and design of steam turbines. Prerequisite, course 82. Three credits; autumn. Eastwood

180. Refrigeration.—The theory and application of mechanical refrigeration. Prerequisite, physics 98. Two credits; spring.

Macintire

182. Heating and Ventilation.—The various systems of heating and ventilating, methods of design and tests. Prerequisite, course 82. Three credits; winter.

Eastwood

183. Thermodynamics.—The fundamental principles underlying the transformation of heat into work, with special application to engineering. Prerequisite, M. E. 82. Three credits; autumn.

Eastwood

184. Power Plants.—The design of steam power plants, involving their location, buildings, prime movers, power transmission, etc. Prerequisite, courses 123, 140. Three credits; spring.

Eastwood

185-186-187. Naval Architecture.—The theory of naval architecture, as pertains to displacement, stability and strength, and the usual calculations involved in construction. Not open to freshmen. Three credits per quarter; autumn, winter, spring.

Eastwood

188, 189. Ship Design.—Application of the principles of naval architecture to the design of a ship for a definite purpose. Prerequisite, M. E. 186. Two credits per quarter; autumn and winter.

Eastwood

190. Marine Engineering.—The power plant equipment of ships, including boilers, engines, auxiliaries and propellers. Prerequisite, courses 82, 185. Three credits; spring.

Eastwood

198. Gas Engineering.—The development of gas engineering, including stationary, marine, automobile and airplane motors, and gas producer plants. Prerequisite, course 82. Three credits; winter.

Wilson

199. Gas Engine Design.—Calculations and plans for the design of a given type of motor. Prerequisite, course 198. Three credits; spring.

Wilson

SUBJECTS PRESENTED BY DEPARTMENTS OF OTHER COLLEGES

Courses which form a part of the engineering curricula, either as required subjects or electives, are given in the departments of

Bacteriology
Economics
English
Geology
History
Law

Mathematics
Mining Engineering
Germanic or Romance Languages
Physics
Zoology

Descriptions of these courses, with all those offered in any school or college of the university, will be found in the section of the catalogue known as Departments of Instruction (also published separately).

Military Science and Tactics.—Military training is required of freshmen and sophomores. All able-bodied male students except those from foreign countries, not intending to become naturalized, must take the course which by regulation of the university is required during the first and second years. Infantry and coast artillery units of the Reserve Officers Training Corps are maintained at the university and students so electing and passing the required examination may continue the work as candidates for commissions in the Officers' Reserve Corps of the United States Army. Furthermore, every male undergraduate student is required to take physical exercise or athletics during each week of his attendance at the university, unless excused by his dean and the physical director.

ENGINEERING EXPERIMENT STATION

THE STAFF

HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.
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HENRY KREITZER BENSON, PH. D. (Columbia), Chemical Engineering and Industrial Chemistry.
CHARLES WILLIAM HARRIS, B. S. (C. E.) (Washington), C. E. (Cornell), Civil Engineering.
EVERETT OWEN EASTWOOD, C. E., A. M. (Virginia), S. B. (Massachusetts Institute of Technology), Mechanical Engineering.
FREDERICK ARTHUR OSBORN, PH. D. (Michigan), Physics Standards and Tests.

The Engineering Experiment Station was formally organized in December, 1917, in order to coordinate the engineering investigations in progress and to facilitate the development of industrial research in the University.

A large number of investigations in the industrial field have been in progress for many years in the University, either by the efforts of individual faculty members and students or through organized groups, such as the Timber Testing Laboratory, the Bureau of Testing, Radio Experiment Station, and especially the Bureau of Industrial Research. As an indication of the research already accomplished, reference is made to the important papers already published.

The Engineering Experiment Station includes all the bureaus and departmental groups previously active in engineering and industrial research, as well as the field occupied by individual investigators.

The scope of the work is twofold:

(a) To investigate and to publish information concerning engineering problems of a more or less general nature that would be helpful in municipal, rural and industrial affairs;

(b) To undertake extended research and to publish reports on engineering and scientific problems.

The purpose of the station is to aid in the industrial development of the state and nation by scientific research and by furnishing infor-

mation for the solution of engineering problems. Every effort will be made to cooperate effectively with professional engineers and the industrial organizations in the state. Investigations of primary interest to the individual or corporation proposing them, as well as those of general interest, will be undertaken through the establishment of fellowships.

The control of the Engineering Experiment Station is vested in an administrative staff consisting of the president of the University, the dean of the College of Engineering, as ex-officio director, and seven members of the faculty. For administrative purposes, the work of the station is organized into seven divisions:

1. FOREST PRODUCTS.

This division covers the field of the College of Forestry, and includes wood distillation, wood preservation and cooperative work with the Seattle Station of the United States Timber Testing Laboratory.

2. MINING AND METALLURGY.

This division represents the field of the College of Mines, and includes cooperative work of the Pacific Northwest Station of the United States Bureau of Mines.

3. CHEMICAL ENGINEERING AND INDUSTRIAL CHEMISTRY.

This division represents the application of chemistry to engineering and industrial problems.

4. CIVIL ENGINEERING.

This division covers the field of the Department of Civil Engineering, with emphasis on hydraulic and sanitary engineering and the testing of road and structural materials.

5. ELECTRICAL ENGINEERING.

This division includes the several branches of electrical engineering: electric railways, telephones, telegraphs, radio, illumination, and electric power.

7. PHYSICS STANDARDS AND TESTS.

This division is equipped with reliable physical standards, and the work is largely calibrating and testing of instruments and other physical apparatus.

6. MECHANICAL ENGINEERING. This division includes mechanical engineering, marine engineering, and aeronautics.

Inquiries in regard to the work of the Engineering Experiment Station should be addressed to the Director.

*Make copy -
do not take away*

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

JULY, 1919

NO. 127 SECTION 6

COLLEGE OF FINE ARTS
1919-1920



SEATTLE, WASHINGTON

PUBLISHED QUARTERLY BY THE UNIVERSITY

1919

THE BOARD OF REGENTS

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Term ends March, 1923	

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess.....
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations.....
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations.....
.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus Day.....Friday, April 23
Junior Day.....Saturday, May 29
Quarter examinations.....
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's reception.....Saturday, June 19
Baccalaureate Sunday.....June 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration days.....Tuesday and Wednesday, June 22 and 23
Instruction begins.....Thursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

OFFICERS OF ADMINISTRATION

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*J. ALLEN SMITH, Ph. D.....	Dean of the Graduate School Denny Hall

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*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

COLLEGE OF FINE ARTS

THE FACULTY

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THOMAS K. SIDNEY, PH. D. (Chicago), Associate Professor of Latin and Greek.
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HARVEY BRUCE DENSMORE, A. B. (Oxford), Assistant Professor of Greek.
GINO ARTURO RATTI, PH. D. (Grenoble), Assistant Professor of French.
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ERNEST OTTO BOKELMAN, PH. D. (Heidelberg), Assistant Professor of German.
SAMUEL HERBERT ANDERSON, PH. D. (Illinois), Assistant Professor of Physics.
MARY EMMA GROSS, A. M. (Teachers' College, Columbia), Assistant Professor of Physical Education.
ERIC TEMPLE BELL, PH. D. (Columbia), Assistant Professor of Mathematics.
CURT JOHN DUCASSE, PH. D. (Harvard), Assistant Professor of Philosophy.

¹ Absent on leave.

COLLEGE OF FINE ARTS

This college comprises the departments of architecture, dramatic art, music, and sculpture, painting and design. In the department of architecture a curriculum of four years is offered leading to the degree of bachelor of architecture; in music there are curricula of four years leading to the degree of bachelor of music, with major in applied music, composition, or public school music, and to the degree of bachelor of arts in music. Curricula of four years are offered leading to the degree of bachelor of fine arts, with a major in painting and design, public school drawing, or music and drawing. Two-year curricula lead to certificates of proficiency for supervisors of art and music. The department of dramatic art offers major courses in the study of the drama and dramatic interpretation.

Normal Diploma.—Graduates in music may receive in addition to their bachelor of music degree a normal diploma, entitling them to teach music in the public schools, by meeting the requirements of the department of education and such departmental requirements as the department of music may see fit to institute. This will necessitate a total of at least 192 credits.

Certificates of Proficiency for Music Supervisors.—These may be issued by the head of this college to students who may not have completed the requirements for the degree, but who have satisfactorily completed certain stipulated courses at the discretion of the department. These courses include history of music, elementary harmony, public school music, ear training and melody writing, school music and music education, vocal music, education and drawing or some other approved elective. Only students of advanced standing can complete this course in less than two years.

REQUIREMENTS FOR ADMISSION

A student must offer for admission to freshman standing in the University fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a unit a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented):
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work.)
- 2 units selected from the above groups.
- 5 units selected from any subjects accepted by an approved high school for its diploma; not more than four, however, to be in vocational subjects.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University, it is recommended that a student expecting to enter the College of Fine Arts should elect his work from the groups (a) to (d), so as to offer the following subjects:

- 2 units in *one* foreign language.
- 1 unit in science (physics, chemistry, botany, or zoölogy).
- 1 unit in a history (or United States history and civics).

If he shall not have included these subjects in his high school elections, it will be necessary for him to include them among his elections in college.

Since all the courses in fine arts leading to a degree require forty hours or eight quarters of foreign language before graduation, it is advisable to elect as much of this work in preparatory years as possible. It is also advisable that students intending to enter the course in architecture present credits for preparatory work in trigonometry and freehand drawing. After 1921, two years of modern foreign language will be included among entrance requirements.

More detailed information concerning admission is furnished in a separate section of the University Bulletin, known as Entrance Information.

Students intending to enter any of the music courses leading to a degree must satisfy the head of the department that they have completed in addition to the usual high school preparation the equivalent of four years' work in piano, showing that they are familiar with the rudiments and can play well scales and chords in all positions, the smaller sonatas of Haydn, Mozart and Beethoven, and easier compositions representative of the best literature for the piano.

CURRICULA

FOR THE BACHELOR OF MUSIC DEGREE WITH A MAJOR IN APPLIED MUSIC (Piano, Violin, Voice)

FRESHMAN					
Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Music 1 (Apprec.)	2	Music 2	2	Music 3	2
4 (History)	2	5	2	5	2
7 (Sight S.)	2	8	2	9	2
14 (Ear Tr.)	2	15	2	16	2
31 (Applied)	3	32	3	33	3
10 (Chorus) elective.	1	10 or elective	1	10 or elective	1
English Comp.	3	English Comp.	3	English Comp.	3
Phys. Ed.	2	Phys. Ed.	2	Phys. Ed.	2
	17		17		17
SOPHOMORE					
Music 10 or elective	1	Music 10 (or elective)	1	Music 10 (or elective)	1
68 (Applied)	3	69 (Applied)	3	70	3
51 (Harmony)	3	52	3	53	3
Pol. Sci.	5	Physics 51	5	Physics 52	5
Mod. Lang.	5	Mod. Lang.	5	Mod. Lang.	5
Phys. Ed.	2	Phys. Ed.	2	Phys. Ed.	2
	10		10		10

UNIVERSITY OF WASHINGTON

JUNIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Music 10 (or elective).....	1	Music 10 or elective.....	1	Music 10 or elective.....	1
118 (Applied).....	3	119.....	3	120.....	3
101 (Adv. Har.).....	3	102.....	3	103.....	3
104 (Adv. His.).....	2	105.....	2	106.....	2
107 (Counterp.).....	2	108.....	2	109.....	2
110 (Instr. Form.).....	2	111.....	2	112.....	2
Mod. Lang.....	5	Elective.....	5	Elective.....	5
	18		18		18

SENIOR

Music 10 or elective.....	1	Music 10 or elective.....	1	Music 10 or elective.....	1
168 (Applied).....	3	169.....	3	170.....	3
157 (Compos.).....	2	158.....	2	159.....	2
151 (Adv. Appr.).....	2	152.....	2	153.....	2
Elective.....	3	Elective.....	3	Philosophy 120 (Aesth.).....	5
	16		16	Senior Program.....	2
					15

FOR THE BACHELOR OF MUSIC DEGREE WITH A MAJOR IN COMPOSITION

FRESHMAN

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Music 1 (Apprec.).....	2	Music 2.....	2	Music 3.....	3
4 (History).....	2	5.....	2	6.....	2
7 (Sight S.).....	2	8.....	2	9.....	2
14 (Bar Tr.).....	2	15.....	2	16.....	2
51 (Beg. Har.).....	3	52.....	3	53.....	3
51 (Applied).....	3	52.....	3	53.....	3
English Comp.....	3	English Comp.....	3	English Comp.....	3
Phys. Ed.....	2	Phys. Ed.....	2	Phys. Ed.....	2
	19		19		19

SOPHOMORE

Music 10 (Chor.) or Elect..	1	Music 10 or Elect.....	1	Music 10 or Elect.....	1
101 (Adv. Har.).....	3	102.....	3	103.....	3
107 (Counterpoint).....	2	108.....	2	109.....	2
Modern Language.....	5	Modern Language.....	5	Modern Language.....	5
Political Science.....	5	Physics 51.....	5	Physics 52.....	5
Phys. Ed.....	2	Phys. Ed.....	2	Phys. Ed.....	2
	18		18		18

JUNIOR

Music 10 (Chor.) or Elect..	1	Music 10 (Chor.) or Elect..	1	Music 10 (Chor.) or Elect..	1
68 (Applied).....	3	69.....	3	70.....	3
110 (Instr. Form.).....	2	111.....	2	112.....	2
157 (Composition).....	2	158.....	2	159.....	2
104 Adv. Hist.).....	2	105.....	2	106.....	2
Modern Language.....	5	Elective.....	5	Elective.....	5
	15		15		15

SENIOR

Music 10 (Chor.) or Elect..	1	Music 10 (Chor.) or Elect..	1	Music 10 (Chor.) or Elect..	1
118 (Applied).....	3	119.....	3	120.....	3
151 (Adv. Appr.).....	2	152.....	2	153.....	2
160 (Polyphonic).....	2	161.....	2	162.....	2
201 (Adv. Comp.).....	2	202.....	2	203.....	2
204 (Orchest.).....	2	205.....	2	206.....	2
Elective.....	5	Elective.....	5	Philosophy 129 (Aesth.)....	5
	17		17		17

COLLEGE OF FINE ARTS

FOR THE BACHELOR OF MUSIC DEGREE WITH A MAJOR IN PUBLIC SCHOOL

MUSIC

FRESHMAN

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Music 1 (Appreciation)	2	Music 2 (Appreciation)	2	Music 3 (Appreciation)	2
4 (History)	2	5 (History)	2	6 (History)	2
7 (Sight Singing)	2	8 (Sight Singing)	2	9 (Sight Singing)	2
10 (Chor.) or Elect.	1	10 (Chor.) or Elect.	1	10 (Chor. or Elect.	1
14 (Ear Training)	2	15 (Ear Training)	2	16 (Ear Training)	2
81 (Applied)	3	82 (Applied)	3	33 (Applied)	3
English Composition	3	English Composition	3	English Composition	3
Physical Education	2	Physical Education	2	Physical Education	2
	<u>17</u>		<u>17</u>		<u>17</u>

SOPHOMORE

Music 51 (Harmony)	3	Music 52 (Harmony)	3	Music 53 (Harmony)	3
54 (School of Music)	2	55 (School of Music)	2	56 (School of Music)	2
10 (Chor.) or Elect.	1	10 (Chor.) or Elect.	1	10 (Chor.) or Elect.	1
Psychology 1	5	Physics 51	5	Physics 52	5
Modern Language	5	Modern Language	5	Modern Language	5
Physical Education	2	Physical Education	2	Physical Education	2
	<u>18</u>		<u>18</u>		<u>18</u>

JUNIOR

Music 68 (Applied)	3	Music 69 (Applied)	3	Music 70 (Applied)	3
101 (Adv. Harmony)	3	102 (Adv. Harmony)	3	103 (Adv. Harmony)	3
113 (Education)	2	114 (Education)	2	115 (Education)	2
Modern Language	5	Education 99 (Princip.)	5	Education 109 (Soc. F.)	5
Political Science	5	Elective or Mod. Language.	5	Elective or Mod. Language.	5
	<u>18</u>		<u>18</u>		<u>18</u>

SENIOR

Music 107 (Counterpoint)	2	Music 108 (Counterpoint)	2	Music 109 (Counterpoint)	2
110 (Instr. Forms)	2	111 (Instr. Forms)	2	112 (Instr. Forms)	2
151 (Adv. Apprec.)	2	152 (Adv. Apprec.)	2	153 (Adv. Apprec.)	2
154 (Ed. & Superv.)	2	155 (Ed. & Superv.)	2	156 (Ed. & Superv.)	2
Elective	2	Elective	2	Elective	2
Phys. Ed. 117 (Folk D.)	2	Education 165 (Pract.)	5	Philosophy 129 (Aesth.)	5
Elective or Mod. Language.	5	Elective or Mod. Language.	5	Elective	3
	<u>17</u>		<u>18</u>		<u>16</u>

FOR THE DEGREE OF BACHELOR OF ARTS IN MUSIC

FRESHMAN

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
*Music, elective	3	Music, elective	3	Music, elective	3
English Composition	3	English Composition	3	English Composition	3
Modern Language	5	Modern Language	5	Modern Language	5
Chem., Botany or Zoology	5	Chem., Botany or Zoology	5	Elective	3
Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2
	<u>18</u>		<u>18</u>		<u>18</u>

SOPHOMORE

*Music, elective	5	Music, elective	5	Music, elective	5
Political Science	5	Physics 51-52	5	Physics 51-52	5
Foreign Lang. or elective	5	Foreign Lang. or elective	5	Foreign Lang. or elective	5
Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2
	<u>17</u>		<u>17</u>		<u>17</u>

UNIVERSITY OF WASHINGTON

JUNIOR					
<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Music, elective	6	Music, elective	6	Music, elective	6
Psychology	5	Liberal Arts, elective	10	Philosophy	5
Liberal Arts, elective	5			Liberal Arts, elective.....	5
	16		16		16
SENIOR					
Music, elective	5	Music, elective	5	Music, elective	5
Liberal Arts, elective	10	Liberal Arts, elective	10	Liberal Arts, elective	10
	15		15		15

* (1) Among the music courses indicated above the following are required: 1-2-3, 4-5-6, 7-8-9, 31-32-33, 101-102-103.

(2) Liberal Arts electives for junior and senior years must be chosen from courses in the senior college, except with the consent of the dean.

A total of forty hours of modern foreign language pursued either in the high school or in the University is required for a degree in the College of Fine Arts. If a student has finished this work in the high school, he shall substitute approved electives in the University. If he presents no foreign language for admission to the University, he must supply the deficiency in addition to the hours demanded by the respective curricula, without credit. If he presents on entrance two years of Latin, he may be excused from ten hours of the modern language requirement at the discretion of the dean.

Students of the public school music course are required to take Education 165 in the senior year. This practice teaching substitutes for the senior thesis.

CURRICULUM IN ARCHITECTURE LEADING TO THE DEGREE OF BACHELOR OF ARCHITECTURE

FRESHMAN					
<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Hist. & Elem. Archt. 1..	2	Hist. & Elem. Archt. 2..	2	Hist. & Elem. Archt. 3..	2
Archt. Design 4	3	Archt. Design 5	3	Archt. Design 6	3
Descr. Geom. 7	3	Shades & Shadows 8	3	Perspective 9	3
Mechanics 47	5	Mechanics 48	5	Modern Language	5
Freehand Draw. 10	1	Freehand Draw. 11	1	Freehand Draw. 12	1
English 8	3	English 4	3	English 5	3
Phys. Ed., Mil. Sci... 2		Phys. Ed., Mil. Sci... 2		Phys. Ed., Mil. Sci... 2	
	17+2		17+2		17+2
SOPHOMORE					
Hist. & Elem. Archt. 51. 2		Hist. & Elem. Archt. 52. 2		Hist. & Elem. Archt. 53. 2	
Archt. Design 54	3	Archt. Design 55	3	Archt. Design 56	3
Bldg. Constr. 60	2	Bldg. Constr. 61	2	Bldg. Constr. 62	2
Modeling 72	1	Freehand Draw. 73	1	Freehand Draw. 74	1
Mathematics 57	3	Mathematics 58	3	Mathematics 59	3
Modern Language 1.....	5	Modern Language 2	5	Modern Language 3	5
Phys. Ed., Mil. Sci... 2		Phys. Ed., Mil. Sci... 2		Phys. Ed., Mil. Sci... 2	
	16+2		16+2		16+2
JUNIOR					
Hist. Archt. 101	2	Hist. Archt. 102	2	Hist. Archt. 103	2
Archt. Design 104	3	Archt. Design 105	3	Archt. Design 106	3
Modeling 112	1	Water Color 113	1	Water Color 114	1
Mechanics (C. E.) 131.....	3	Mechanics (C. E.) 132.....	3	Rnf. Concrete (C. E.) 133..	3
Physics (Gen.) 1	5	Physics (Gen.) 2	5	Forestry 108	2
Sanita. & Plumb. 115.....	1	Sanita. & Plumb. 116.....	1	Elective	5
	15		15		18

COLLEGE OF FINE ARTS

11

SENIOR

(Design Option)

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Hist. Archt. 151	2	Hist. Archt. 152	2	Hist. Archt. 153	2
Archt. Design 154	5	Archt. Design 155	5	Archt. Design 156	5
Freehand Draw. 157	2	Freehand Draw. 158	2	Freehand Draw. 159	2
Art. Apprec. 166	1	Art. Apprec. 167	1	Art. Apprec. 168	1
Steam Eng. (M. E.) 82	3	Heat. & Vent. (M. E.) 182.	3	Pl. Survey (C. E.) 21.....	3
Elective	2	Elective	2	Elective	2
	15		15		15

SENIOR

(Architectural Engineering Option)

Frame Struc. (C. E.) 184..	3	Bridges (C. E.) 161	5	Pl. Survey (C. E.) 21	3
Steam Eng. (M. E.) 82	3	Elect. Course (E. E.) 11.....	5	Thesis	5
Accus. Illum. (P.) 87.....	5	Heat. & Vent. (M. E.) 182.	3	Struc. Mat. (C. E.) 187.....	3
Bus. Law (Law) 54	3	Bus. Law 55	3	Bus. Law 56	3
Elective	1	Elective	1	Elective	1
	15		15		15

not in catalog

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN PAINTING AND DESIGN

FRESHMAN

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
P. D. (Freehand) 5.....	3	P. D. (Freehand) 6.....	3	P. D. (Freehand cast) 7... 3	3
*P. D. (Art Struc.) 9.....	4	*P. D. (Art Struc.) 10.....	4	*P. D. (Art Struc.) 11.....	4
Art Apprec. 16	1	Art Apprec. 17	1	Art Apprec. 18	1
English Composition	3	English Composition	3	English Composition	3
Modern Language	5	Modern Language	5	Modern Language	5
Phys. Ed. or Mil. Sci.....	2	Phys. Ed. or Mil. Sci.....	2	Phys. Ed. or Mil. Sci.....	2
	18		18		18

SOPHOMORE

*P. D. (Art Struc.) 53.....	4	*P. D. (Art Struc.) 54.....	4	*P. D. (Art Struc.) 55.....	4
P. D. (Illustration) 56.....	3	P. D. (Illustration) 57.....	3	P. D. (Illustration) 58	3
Greek Art 19.....	1	Modern Language	5	Modern Language	5
Modern Language	5	Greek Art 19.....	1	Greek Art 21.....	1
Elective	3	Elective	3	Elective	3
Phys. Ed. or Mil. Sci.....	2	Phys. Ed. or Mil. Sci.....	2	Phys. Ed. or Mil. Sci.....	2
	18		18		18

JUNIOR

Arch. 1 (Arch. Dr.).....	2	Arch. 2 (Arch. Dr.).....	2	Arch. 3 (Arch. Dr.)	2
*P. D. (Art Struc.) 103.....	3	*P. D. (Art Struc.) 104	3	P. D. (Portrait) 109	3
P. D. (Portrait) 107.....	3	P. D. (Portrait) 108	3	Roman Art (Lat. 16)	1
Roman Art (Lat. 14).....	1	Roman Art (Lat. 15)	1	Laboratory Science	5
Political Science	5	Laboratory Science	5	Elective	4
	15	Elective	2		15

SENIOR

*P. D. (Art Struc.) 157... 3	3	*P. D. (Art Struc.) 158... 3	3	*P. D. (Art Struc.) 159... 3	3
P. D. (Life 160, or Mural Dec. 163)	3	P. D. (Life 161, or Mural Dec. 164)	3	P. D. (Life 162, or Mural Dec. 165)	3
Elective	9	Elective	9	Elective	9
	15		15		15

* The courses in art structure comprise the following: Freshman, principles of design; sophomore, needle designing, woodblock printing, design; junior, pottery, interior decorating, posters; senior, jewelry, landscape composition, design.

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN PUBLIC
SCHOOL DRAWING

FRESHMAN

Autumn Quarter		Winter Quarter		Spring Quarter	
Credits		Credits		Credits	
P. D. (freehand draw.) 5	3	P. D. (freehand draw.) 6	3	P. D. (freehand draw.) 7	3
P. D. (art struc.) 9	4	P. D. (art struc.) 9	4	P. D. (art struc.) 11	4
Art Appreciation 16	1	Art Appreciation 17	1	Art Appreciation 18	1
English Composition	3	English Composition	3	English Composition	3
Modern Language	5	Modern Language	5	Modern Language	5
Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2
	18		18		18

SOPHOMORE

P. D. (art struc.) 53	4	P. D. (art struc.) 54	4	P. D. (art struc.) 55	4
P. D. (illus.) 56	3	P. D. (illus.) 57	3	P. D. (illus.) 58	3
Political Science	5	Modern Language	3	Psychology	5
Modern Language	3	Phys. Ed. or Mil. Sci.	2	Modern Language	3
Phys. Ed. or Mil. Sci.	2	Elective	5	Phys. Ed. or Mil. Sci.	2
	17		17		17

JUNIOR

P. D. (art struc.) 103	3	P. D. (art struc.) 104	3	P. D. (art struc.) 105	3
P. D. (illus.) 107	3	P. D. (illus.) 108	3	P. D. (illus.) 109	3
Greek Art 8	1	Greek Art 9	1	Greek Art 10	1
Education	5	Education	3	Education	3
Elective	3	Laboratory Science	5	Laboratory Science	5
	15		15		15

SENIOR

P. D. (art struc.) 157	3	P. D. (art struc.) 158	3	P. D. (art struc.) 159	3
*Education	5	Education	3	Philosophy	5
Elective	4	Phys. Ed. 106 (folk dance)	2	Elective	3
	15	Elective	7		16

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN MUSIC
AND DRAWING

FRESHMAN

Autumn Quarter		Winter Quarter		Spring Quarter	
Credits		Credits		Credits	
Music 4 (hist. of music)	2	Music 5 (hist. of music)	2	Music 6 (hist. of music)	2
Music 7 (sight singing)	2	Music 8 (sight singing)	2	Music 9 (sight singing)	2
P. D. 5 (drawing)	4	P. D. 6 (drawing)	4	P. D. 7 (drawing)	4
Modern Language	5	Modern Language	5	Modern Language	5
English Composition	3	English Composition	3	English Composition	3
Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2
	18		18		18

SOPHOMORE

Music 14 (ear. tr. or elec.)	2	Music 15 (ear. tr. or elec.)	2	Music 16 (ear. tr. or elec.)	2
Music 34 (school music)	2	Music 35 (school music)	2	Music 36 (school music)	2
Modern Language	5	Modern Language	5	Psychology	5
Political Science	5	Laboratory Science	5	Laboratory Science	5
P. D. 9 (art struc.)	3	P. D. 10 (art struc.)	3	P. D. 11 (art struc.)	3
Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2	Phys. Ed. or Mil. Sci.	2
	19		19		19

JUNIOR

Music 18 (ap. music)	1	Music 18 (ap. music)	1	Music 18 (ap. music)	1
Music 31 (harmony)	2	Music 32 (harmony)	2	Music 33 (harmony)	2
Music 113 (music ed.)	2	Music 114 (ap. ed.)	2	Music 115 (music ed.)	2
P. D. 53 (art struc.)	3	P. D. 54 (art struc.)	3	P. D. 55 (art struc.)	3
P. D. 16 (art apprec.)	1	P. D. 17 (art apprec.)	1	P. D. 18 (art apprec.)	1
P. D. 103 (pottery)	3	P. D. 104 (pottery)	3	Education	3
Education	5	Education	3	Elective	5
	17	Elective	2		17

SENIOR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Music 18 (ap. music).....	2	Music 18 (ap. music).....	2	Music 18 (ap. music).....	2
Music 119 (music apprec.)..	2	Music 120 (music apprec.)..	2	Music 121 (music ap.).....	2
Music 154 (music super)....	2	Music 158-6 (music super)..	2	Music 154 (music super)....	2
P. D. 153 (pub. school draw- ing methods)	3	P. D. 57 (illus. and life)...	3	P. D. 101 (pub. school draw- ing methods)	3
P. D. 56 (illus. and life)...	3	Education	3	P. D. 58 (illus. and life)....	3
*Education	5	Elective	3	Elective	3
	<hr/>		<hr/>		<hr/>
	15		15		15

*Among the courses in education, Practice Teaching must be included in the senior year.

CURRICULUM IN ART LEADING TO CERTIFICATES OF PROFICIENCY FOR SUPERVISORS OF ART

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
P. D. (art struc.) 9.....	4	P. D. (art struc.) 10.....	4	P. D. (art struc.) 11.....	4
P. D. (freehand) 5.....	3	P. D. (freehand) 6.....	3	P. D. (freehand cast) 7....	3
English Composition	3	English Composition	3	English Composition	3
Modern Language	5	Modern Language	5	Modern Language	5
Art Appreciation 16.....	1	Art Appreciation 17	1	Art Appreciation 18.....	1
	<hr/>		<hr/>		<hr/>
	16		16		16

SECOND YEAR

P. D. (art struc.) 53.....	4	P. D. (art struc.) 54.....	4	P. D. (art struc.) 55	4
P. D. (freehand) 56	3	P. D. (freehand) 57.....	3	P. D. (freehand) 58.....	3
Psychology	5	Education	5	Education	5
Methods of Teaching Art... 3		Elective	3	Public School Draw. 101... 3	
	<hr/>		<hr/>		<hr/>
	15		15		16

DEPARTMENTS OF INSTRUCTION

The University reserves the right to withdraw temporarily any course which is not justified by the demand.

I. Music

1-2-3. *Music Appreciation.*—This course is planned to aid not only music students but also all interested in music to become intelligent and discriminating listeners. Musical masterpieces, both instrumental and vocal, of different periods and forms, will be presented and discussed. Two credits per quarter; autumn, winter, spring.

Mrs. Van Ogle

4-5-6. *History of Music.*—The progress of musical development from the primitive period to the modern. Two credits per quarter; autumn, winter, spring.

Professor Glen

7-8-9. *Sight Singing.*—For prospective grade supervisors and for music students. Two sections — one for beginners and the other for students who have had some experience in sight singing. Two credits per quarter; autumn, winter, spring.

Assistant Professor Dickey

10. *Choral Study.*—The university chorus provides the opportunity, for those qualified, to study the more serious as well as the lighter forms of choral composition. Candidates must satisfy the

director as to the extent of their musical ability. One credit; autumn or winter. Glen

14-15-16. *Ear Training and Melody Writing*.—Principles of melodic invention and training in hearing accurately; study in notation. Two credits per quarter; autumn, winter, spring. Dickey

17. *Choral Study*.—Part songs for men's voices. Candidates admitted only upon examination. Two credits; autumn. Glen

31-32-33. *Applied Music (Freshman)*.

68-69-70. *Applied Music (Sophomore)*.

118-119-120. *Applied Music (Junior)*.

168-169-170. *Applied Music (Senior)*.

Students of other colleges and schools may earn one or two credits per quarter in the applied music courses. Students of the College of Fine Arts carry a larger number of credits—one and one-half to three—as indicated in the set courses. Students enrolled in these courses will be given opportunity, upon demonstration of the required ability, to participate in the public recitals of the department.

Unless excused by reason of advanced standing upon entrance, students who major in courses in applied music will require two lessons a week, ordinarily, in order to cover the work necessary for a degree. One to three credits per quarter.

Piano—Venino, Van Ogle, Ferryman

Violin—Rosen

Voice—Glen, Bogardus

19-20-21. *University Orchestra*.—The University orchestra affords to the qualified students an unusual opportunity for the study of the better grades of orchestral composition. None is eligible to enter the course unless the director is satisfied of the ability of the applicant. One credit per quarter; autumn, winter, spring. Glen

22-23-24. *University Band*.—Competent players of band instruments are admitted to the band upon consent of the bandmaster. Two credits per quarter; autumn, winter, spring. Mr. Adams

25-26-27. *Chamber Music*.—Advanced study of the musical literature for string trios, quartets and quintets. One credit per quarter; autumn, winter, spring. Assistant Professor Rosen

28-29-30. *Ensemble Singing*.—A choral course for women. Only advanced students will be admitted. One credit per quarter; autumn, winter, spring. Glen

51-52-53. *Harmony*.—Ear training, analysis, and keyboard practice. Prerequisite, courses 7-8-9 and 14-15-16. Three credits per quarter; autumn, winter, spring. Assistant Professor Wood

54-55-56. *School Music*.—A course for supervisors. Two credits per quarter; autumn, winter, spring. Dickey

101-102-103. *Advanced Harmony*.—Prerequisite, courses 51-52-53. Three credits per quarter; autumn, winter, spring. Wood

104-105-106. History of Music, Advanced.—A detailed study of important periods and composers of modern music. Two credits per quarter; autumn, winter, spring. Van Ogle

107-108-109. Counterpoint.—Prerequisite, courses 51-52-53. Two credits per quarter; autumn, winter, spring. Wood

110-111-112. Instrumental Form.—Analysis of many examples and simple exercises in composition. Prerequisite, courses 51-52-53. Two credits per quarter; autumn, winter, spring. Wood

113, 114, 115. Music Education.—Psychological and pedagogical principles and their application to the teaching of music. Two credits per quarter; autumn, winter, spring. Dickey

151, 152, 153. Musical Appreciation.—An appreciative study of some modern composers and schools. Two credits per quarter; autumn, winter, spring. Van Ogle

154, 155, 156. Music Education and Supervision.—This course is for seniors and students of experience. High school, normal school and institute music. Two credits per quarter; autumn, winter, spring. Dickey

157-158-159. Free Composition.—Choral work, piano accompaniment idioms, vocal and instrumental solos and pieces in the smaller forms. Prerequisite, courses 101-102-103. Two credits per quarter; autumn, winter, spring. Wood

160-161-162. Polyphonic Forms.—Free counterpoint applied to the invention, canon, fugue, etc. Analysis and composition. Prerequisite, courses 107-108-109. Two credits per quarter; autumn, winter, spring. Wood

COLLEGE COURSES IN APPLIED MUSIC

The courses outlined are not arbitrary. They indicate the amount and character of the work that the student is expected to cover for his musical degree. Credit will be given for equivalent courses pursued elsewhere prior to entering the University.

Students not wishing to offer work in applied music as a major, may receive credit for applied music work done under the supervision of others than the instructional staff of the department, upon satisfying departmental and University requirements by examination. Approved equivalents of applied music courses in piano, voice, and violin may also be credited.

PIANO

Freshman and Sophomore Years.—Major and minor scales and arpeggios; studies selected from Czerny, Cramer, Loeschorn, Kullak, Hiller and Krause; sonatas by Scarlatti, Haydn, Clementi, Mozart and Beethoven; shorter compositions and inventions by Bach; and works from the classic and romantic schools.

Junior and Senior Years.—Scales in thirds, sixths and tenths; studies by Czerny, Clementi, Chopin, Brahms, MacDowell and Moszkowski; Well-tempered Clavichord and suites by Bach; sonatas, pieces including at least one concerto, taken from the classic, romantic or mod-

ern composers. At least one recital program must be played from memory from the repertoire studied.

VOCAL MUSIC

The course in vocal music is even more flexible than that outlined for piano study. The purpose is to develop the voice and musical understanding so that the best in vocal music may be faithfully interpreted. The fact of having studied vocal music for four years will not necessarily entitle a student to graduation.

Freshman.—Practical work in voice placing, breathing studies, from among the following: Concone, Op. 9; Marchesi, Op. 1; Panofka, Op. 85; Vaccai, Book I; simple Italian and English songs.

Sophomore.—Progressive tone work; Bordogni, Concone, Marchesi, Panofka, simple Italian arias, Italian and English songs.

Junior.—Tone work; advanced technique. Arias from Italian, French and German operas. German song classics; modern French and English songs.

Senior.—Tone work and technique. Repertoire in opera and oratorio; recitals; senior program.

VIOLIN

Freshman.—Violin Method, Book I, Rosen; Exercises Op. 45, Book I, Wohlfahrt; Book I, De Beriot; Exercises, Op. 68.

Sophomore.—Scales, Hrimaly; Studies, Blumenstengel Op. 33, Mazas, Books I and II; Concerto, Accoly; Scene de Ballet, De Beriot.

Junior.—Scales, Book II, Baillot; Exercises, Books I and II, Schraedieck; Etudes, Krentzer, Fiorillo, Rode, Rovelli; Concerto, 9 and 7, De Beriot; Concerto, 2 and 8, Spohr, also one sonata by Handel.

Senior.—Scales, Rosen; Etudes, Dancla; Op. 73, Gavini; Op. 35, Dont; Sonata for violin alone, Bach; Concerto, Bruch, Mendelssohn, D-Minor, Wieniaski and No. 4 Vieuxtemps.

In the last semester the student is obliged to memorize one sonata by Bach for violin alone and one of the concertos given in the fourth year.

FEEES

Since most of the work in the courses in applied music must necessarily be of the character of individual instruction, the student will be required to pay tuition fees for this work in addition to the general University tuition fee.

All fees are payable in advance to the Comptroller of the University. The following quotations of regular fees are based on one lesson per week. More than one lesson per week will be charged for at the same rate. All lessons are one-half hour in length.

Piano.—Mr. Venino, \$17 per quarter; Mrs. Van Ogle, \$17 per quarter; Miss Ferryman, \$12 per quarter.

Vocal Music.—\$17 per quarter.

Dean Glen will give individual instruction in singing and repertoire to a maximum number of ten students. The fee will be at the rate of \$27 per quarter for one lesson weekly.

Violin.—Mr. Rosen, \$17 per quarter.

Band and Orchestra Instruments.—Mr. Adams, \$12 per quarter.

Arrangements may be made for individual instruction in other musical courses if necessary or desirable.

Piano for practice may be rented at the music department at the following rates:

One hour daily, \$3 per quarter.

Two hours daily, \$5 per quarter.

All rental charges must be paid in advance. No rebate in these charges will be allowed. Lessons lost through enforced absence may not be made up unless the teacher in charge has been previously notified of the intended absence and is willing to accept the excuse for the absence.

II. ARCHITECTURE

A student should have some previous training in free hand drawing and he will be required to confer with the head of the department as to his special qualifications for taking the subject. It is desirable that a student have credits in plane geometry, algebra through quadratics, trigonometry, physics, and at least two years of modern language. Forty hours of modern language will be required before graduation. Twenty hours are provided for in the curriculum.

Methods of Instruction.—The plan of study recognizes that architecture is essentially a fine art, the practice of which must be based upon a thorough knowledge of construction and of the practical requirements of buildings. Technical training which has not recognized the importance of the knowledge of the principles of design has failed notably to raise the skilled draughtsman to the position of an architect.

The University recognizes that its function in teaching the profession is to equip men to obtain not only a general knowledge of the subject of architecture, but that they may become able to cope with the problems that occur in actual practice.

It must be recognized, however, that knowledge of design is the most essential subject in a course preparing students for the profession of architecture.

Design.—The program of studies is so arranged as to allow students to give the greater part of their afternoons to the work in the draughting room. This work will be largely problems in architectural design presented as far as possible with the object of developing technical skill without hindering individually in expression. The problems after the freshman year will be judged by a visiting committee of architects appointed by the dean and the head of the department. All drawings made by the students are the property of the department until returned by the department to the students.

Construction.—The theory and practice of construction is taught as a necessary basis for and in connection with architectural design and is such as to prepare students in the best way for architectural practice.

It is strongly recommended that the student supplement his university training by working in an architect's office and three months of office work at least will be required of a student before a degree may be obtained. This three months of office work may be substituted for a thesis but only upon the approval of the head of the department of architecture.

Engineering.—At the beginning of the fourth year a student, upon the approval of the head of the department, may elect a fourth year course in architectural engineering. This course is distinct from that in fourth year design and meets a practical need for added training in the engineering and administrative problems of the practice of architecture.

Prizes and Competitions.—An annual prize of twenty dollars in gold, donated by William W. Kellogg for the best designs for tile or faience, is awarded to the successful competitor among juniors and seniors in architecture and design. The program for the competition is arranged by the department of architecture each year. A committee of visiting architects will act as judges.

COURSES

1-2-3. History and Elements of Architecture.—Illustrated lectures and exercises in drawing and simpler elements of buildings. Excursions will be made to buildings and to builders' supply houses. In second and third quarters a general course in the history of architecture. Juniors in department of home economics and majors in painting and design take first and second quarters consecutively, receiving three credits first quarter. In the first quarter one two-hour laboratory period per week is required of juniors in home economics and juniors majoring in painting and design. One credit is added for this work. Two credits per quarter; autumn, winter, spring.

Associate Professor Gould

4-5-6. Architectural Design.—Practical methods of presenting an architectural problem by means of plan, section and elevation. Individual instruction with occasional conferences. Recommended to students in engineering. Three credits per quarter; autumn, winter, spring.

Mr. Sexsmith

7. Descriptive Geometry.—Training in draftsmanship and the ability to read drawings. Two three-hour laboratory periods per week. Three credits; autumn.

Sexsmith

8. Shades and Shadows.—Construction by descriptive geometry of shades and shadows found in architectural renderings. Prerequisite, course 7. Two three-hour laboratory periods per week. Three credits; winter.

Sexsmith

9. Perspective Drawing.—The theory of architectural perspective from simple problems in single point perspective up to and including the more complicated problems. Office methods and short-cut methods will be studied and compared with the theory. Two three-hour laboratory periods. Three credits; spring.

10-11-12. *Free Hand Drawing*.—The fundamentals of free hand drawing and free hand perspective. Drawing in charcoal or crayon from cast or architectural ornament and from still life. One credit per quarter; autumn, winter, spring.

47-48. *Mechanics*.—Statics; mechanics of building materials. No prerequisites. Five credits per quarter; autumn, winter. Sexsmith

51-52-53. *History and Elements of Architecture*.—First quarter, Egyptian, Greek and Roman architecture; second and third, Byzantine, Romanesque and Gothic, with concurrent study of outlines of general history. Illustrated lectures. Sophomore course, but may be taken the autumn quarter as a part course. Required of all students in the department and open to all students in the University. Two credits per quarter; autumn, winter, spring. Gould

54-55-56. *Architectural Design*.—Problems in design and planning. Society in Beaux Arts Architects program will be used and work sent to New York City for judgment in competition with work from leading architectural schools. Laboratory fee, \$2. Five credits per quarter; autumn, winter, spring. Gould

60-61-62. *Building Construction and Inspection*.—Lectures on methods employed in building construction, supplemented by detail drawing of various parts of buildings of all types. Visits will be made to the manufacturing plants of building materials and to all types of buildings under construction. Two credits per quarter; autumn, winter, spring. Mr. McClelland

72. *Modeling*.—Studies in clay of architectural ornament. One credit; autumn. Mr. Wehn

73-74. *Free Hand Drawing*.—Studies of architectural ornament and cast of the human figure. One credit per quarter; winter, spring.

101-102-103. *History of Architecture*.—The architecture of the Renaissance; problems in ornamental design and planning. Two credits per quarter; autumn, winter, spring. McClelland

104-105-106. *Architectural Design*.—Advanced problems in ornamental design and planning as applied to different materials. Problems of industrial layouts, city squares, playgrounds, etc. Laboratory fee, \$2. Three credits per quarter; autumn, winter, spring. McClelland

112. *Modeling*.—Design of simple architectural forms. One credit; autumn. Wehn

113-114. *Water Color*.—Still life studies, out-door subjects and architectural rendering. One credit per quarter; autumn, spring. McClelland

115-116. *Sanitation and Plumbing*.—Methods of sewage disposal and water supply in modern buildings; modern appliances and office practice; specifications. One credit per quarter; autumn, winter. Sexsmith

151-152-153. *History of Architecture*.—Modern architecture; city and industrial planning. Prerequisite Architecture 103. Two credits per quarter; autumn, winter, spring. Gould

154-155-156. *Architectural Design*.—Beaux Arts Class A projects first two quarters; third quarter, thesis. Five credits per quarter; autumn, winter, spring. McClelland

157-158-159. *Free Hand Drawing*.—Studies from life. Two credits per quarter; autumn, winter, spring.

166-167-168. *Art Appreciation*.—A survey of the history of art, principles of composition and arrangement. One credit per quarter; autumn, winter, spring.

Electives.—Electives may be chosen from among the following subjects: Analytical geometry, calculus, modern language, music, economics, naval architecture, psychology, public speaking, geology 5, public speaking and debate 1.

In addition students who elect design in their fourth year may select from the following subjects: Bridges, higher structures, structural materials (C. E. 167), frame structures (C. E. 184), electrical engineering 11.

These two courses are suggested as electives in the spring quarter of the junior year in architecture: Engineering geology (Geology 5), and practical public speaking (Dramatic Art 31).

III. SCULPTURE, PAINTING AND DESIGN

Advanced students applying for credit must present work to head of the department.

3. *Principles of Design*.—The principles of design in line, dark and light, and color. For students in home economics. Three credits; winter. Ziese

5-6-7. *Freehand Still Life and Cast*.—The technique of drawing from elementary forms, with all mediums—water color, oil, pen, etc. Prerequisite for any subsequent course in drawing and painting; cast drawing from models of antique and modern sculpture, preparatory to drawing from living model. Three credits per quarter; autumn, winter, spring.

9-10-11. *Art Structure*.—A study of the principles of design in line, dark and light, and color, to develop power of appreciation and creation of good design. Prerequisite for any subsequent course in art structure. Laboratory deposit, \$1. Four credits per quarter; autumn, winter, spring. Ziese

16-17-18. *Art Appreciation*.—Historical development, from the art of primitive man to the present day, including the anatomical structure and function of the human body as related to artistic construction. One credit per quarter; autumn, winter, spring.

53. *Art Structure*.—Working out simple units, borders, and all-over patterns with needle and cloth as medium. Four credits; autumn. Ziese

54. *Art Structure*.—Bookbinding and woodblock printing. Four credits; winter. Ziese

55. *Art Structure*.—Woodblock printing and furniture decoration. Designing of woodblocks and printing on textiles. Four credits; spring. Ziese

56-57-58. *Illustration and Life Study*.—Drawing and painting, from the model in various mediums, for reproductive processes such as magazines, newspapers and commercial work, including a study of the anatomy of the human figure. Prerequisite, freshman freehand. Laboratory deposit, \$8. Three credits per quarter; autumn, winter, spring.

72. *Clay Modeling*.—Construction of plaster moulds, elementary construction; modeling in clay and wax. Three credits; autumn.

Wehn

101. *Public School Drawing*.—For drawing supervisors. The working out of such drawings as would be used in the public schools. Three credits; spring.

Miss Edens

103-104. *Art Structure. Pottery*.—Advanced students will be allowed to work for advanced credits. Laboratory deposit, \$2. Three credits per quarter; autumn, winter.

Edens

105. *Art Structure*.—Design as applied to lettering, advertising, and cartooning. Three credits; autumn.

Edens

106. *Art Structure*.—Posters. Advanced

107-108-109. *Portrait*.—Portraiture in all mediums. Prerequisite, freshman freehand. Laboratory deposit, \$8. Three credits per quarter; autumn, winter, spring.

111-112. *Art Structure*.—Interior decoration. Three credits per quarter.

Edens

*151-152. *Landscape*.—Design.

153. *Methods of Teaching Art*.—Courses of study, methods and material. Five credits; autumn.

154. *Practice Teaching*.—Teaching under supervision in city schools. Five credits; winter.

Edens

157. *Art Structure*.—Simple metal work—etching, sawing, and hammering of copper and brass. Laboratory deposit, \$2. Three credits; autumn.

Edens

158. *Art Structure*.—Jewelry. Three credits; winter.

Edens

159. *Art Structure*.—Landscape composition. Three credits; spring.

Edens

160-161-162. *Portrait and Life*.—Three credits per quarter; autumn, winter, spring.

163-164-165. *Mural Decoration*.—Decorative compositions done in oil, applied to the beautifying of wall spaces, in harmony with the scheme of architecture. Prerequisite, junior standing. Four credits per quarter; autumn, winter, spring.

166. *Landscape*.

169-170-171. *Textile and Costume Drawing*.—Two credits per quarter; autumn, winter, spring.

Edens

*Not offered in 1919-1920.

IV. DRAMATIC ART

The work in this department is planned for three classes of students: (a) those who desire some knowledge of dramatic art as part of a liberal education; (b) those who need some knowledge of dramatic

art as part of their technical training; and (c) those who wish to pursue the subject more intensively than either of the former groups.

For a major the department requires 38 to 60 credits, of which 24 must be in the department, including courses 1-2-3 and 21-22-23.

Courses 1-31 (inclusive) may be entered at the beginning of the first, second or third quarters.

COURSES

1-2-3. Dramatic Literature.—Introductory course. Selected plays of the great dramatists are studied with the purpose of increasing the students' power of analysis and appreciation. Three credits per quarter; autumn, winter, spring. Professor Gorsuch

21-22-23. Shakespeare.—Dramatic reading and interpretation of selected plays. Courses 21-22-23 have as their general purpose the interpretation of the drama. Selected plays are used as exercises in dramatic delivery and for the study of effectiveness in the reading of lines. The special aims are to correct personal mannerisms of vocal expression and to encourage habits of speech that are right and natural; to cultivate proper instinctive expression, and the use of imagination in conceiving the situation, relation and characterization as these are manifested in utterance. Three credits per quarter; autumn, winter, spring. Gorsuch

27-28-29. Contemporary Drama.—Dramatic reading and interpretation of selected plays. For further information see courses 21-22-23. Three credits per quarter; autumn, winter, spring. Gorsuch

Work to be announced later will include courses in Dramatic Composition, Producing, General Stagecraft, Acting.

31. Practical Public Speaking.—An introductory course. Principles of public speaking are studied and short, original talks are prepared and delivered. Prerequisite, English 1. Three credits per quarter; autumn, winter, spring. Gorsuch

COURSES IN ALLIED DEPARTMENTS

Courses in other departments listed below may be counted towards a major in dramatic art. These courses are to be taken in the order given, which may not be changed except with the consent of the head of the department of dramatic art. For fuller information regarding these courses the student is referred to the section Departments of Instruction.

ENGLISH

57-58-59. Dramatic Composition.

73-74-75. Contemporary Literature.—Three credits per quarter; autumn, winter, spring.

103-104-105. Contemporary Literature.—Three credits per quarter; autumn, winter, spring.

123. Philosophy in English Literature of the Nineteenth Century.—Five credits; spring.

130-131-132. *The English Drama.*

137. *Philosophy in Contemporary Drama.*—Five credits; spring.

PHYSICAL EDUCATION

104-105-106. *Methods of Folk Dancing.*—Two credits per quarter.

PHILOSOPHY

129. *Esthetics.*—Five credits; spring.

CLASSICAL LANGUAGES AND LITERATURE

LATIN

70. *Plautus and Terence.*—Three credits; spring.

ROMANIC LANGUAGES AND LITERATURE

FRENCH

41. *Phonetics.*—Three credits; any quarter.

*141-142-143. *The French Drama.*

SPANISH

*141-142-143. *Drama.*

GERMANIC LANGUAGES AND LITERATURE

*100-102. *Schiller and Goethe.*

103-104-105. *Recent Writers.*—Three credits; autumn, winter, spring.

*152. *Goethe's Faust.*

*Not offered in 1919-1920.

SCANDINAVIAN LANGUAGES AND LITERATURE

109-110-111. *Modern Scandinavian Authors in English Translation.*—One credit per quarter; autumn, winter, spring.

The following are suggested as elective that may be counted toward the degree.

CLASSICAL LANGUAGES AND LITERATURE

8-9-10. *Greek Art.*—One credit per quarter; autumn, winter, spring.

*14-15-16. *Roman Art.*

ENGLISH

141-142-143. *Social Ideals in English Literature.*—Three credits per quarter; autumn, winter, spring.

The Georgian Poets.

174-175-176. *Romantic and Victorian Poets.*—Three credits per quarter; autumn, winter, spring.

183-184-185. *General Literature.*—Three credits per quarter; autumn, winter, spring.

LAW

103-104-105. *Contracts.*—Four, two, and three credits, respectively for autumn, winter, and spring quarters.

PSYCHOLOGY

1. *General Psychology*.—Five credits; any quarter.
 121. *Applied Psychology*.—Five credits; winter.
 126. *Abnormal Psychology*.—Five credits; winter.

SOCIOLOGY

Social Psychology.

MUSIC

151, 152, 153. *Musical Appreciation*.—Two credits per quarter; autumn, winter, spring.

ARCHITECTURE

1-2-3. *History and Elements of Architecture*.—Two credits per quarter; autumn, winter, spring.

SCULPTURE, PAINTING, AND DESIGN

3. *Principles of Design*.—Three credits; winter.
 5-6-7. *Freehands Still life and cast*.—Three credits per quarter; autumn, winter, spring.
 16-17-18. *Art Appreciation*.—One credit per quarter; autumn, winter, spring.

SUBJECTS PRESENTED BY DEPARTMENTS OF OTHER COLLEGES

The following subjects, given in departments of other colleges of the University, are included in the required curricula, or are useful electives for different lines of work in fine arts. They are described in the section of the General Catalogue entitled "Departments of Instruction" (also published as a separate bulletin, Section 15).

Education.—For courses in education see Departments of Instruction.

Civil Engineering.—Plane surveying, mechanics, reinforced concrete, frame structures, structural materials.

Electrical Engineering.—Electricians' course.

Mechanical Engineering.—Steam engineering, heating and ventilation.

English.—Composition.

Forestry.—Wood analysis.

Law.—Business Law.

Mathematics.—Mathematics 57-58-59 (for architects).

Military Science.—Required for two years. Elective R. O. T. C. course thereafter.

Modern Language.—See descriptions of modern language departments in Departments of Instruction.

Philosophy.—Esthetics.

Physical Education.—Required of all women and of men not taking military science, for two years. Twelve credits.

Physics.—General physics, acoustics, and illumination.

Political Science.—See description in Departments of Instruction.

Psychology.—General psychology.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

APRIL, 1919

NO. 127—SECTION 7

COLLEGE OF FISHERIES

1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

Entered as Second Class Matter, at Seattle, Under the Act of July 16, 1894

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

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*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

THE COLLEGE OF FISHERIES

FACULTY

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PURPOSE AND LOCATION

The College of Fisheries was established in 1919. It has a two-fold purpose: First, to afford instruction in the principles and practices of fishery; second, to promote the interest of fisheries in the state of Washington and on the Pacific coast by encouraging the right use of fishery resources.

The college has exceptional advantages in its location. The university campus is located on the shores of Lakes Washington and Union, which bodies of water are connected by canals with each other and with Puget Sound. In the latter are carried on extensive commercial fisheries for fishes, oysters, clams, crabs, etc., while fleets of vessels with headquarters at Seattle and other cities on the Sound, carry on extensive fisheries in the ocean adjacent to the Washington coast, and on the fishing banks along the Alaska coast. Numerous canneries, smokehouses, cold storage plants, fertilizer plants, etc., are to be found in Seattle and other places on the Sound. A number of fish hatcheries are owned and operated in the state of Washington by the federal and state governments. At Friday Harbor the University owns and operates an excellent marine biological laboratory. These many advantages present unrivaled opportunities for the studying of the fisheries, aquatic life and fish culture.

Degrees.—The four-year curricula in the College of Fisheries lead to the degree of bachelor of science (B. S.) in fisheries.

The degree of master of science (M. S.) in fisheries will be conferred upon any graduate of the four-year curricula who has completed at least one year of graduate work and has presented a satisfactory thesis with the grade of A, B, or C. A graduate of any other institution of equal rank will be given full graduate standing. The selection of work for this degree must, in each case, be approved by the Director of the College.

ADMISSION

Freshman Standing.—A student must offer for admission to freshman standing in the University fifteen units by examination or by certificate from an accredited school from which he has graduated. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented).
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units selected from the above groups.
- 5 units selected from any subjects accepted by an approved high school for its diploma; not more than four, however, to be in vocational subjects.

Advanced Standing.—Credit will be given for subjects pursued at other colleges of recognized rank upon presentation to the Registrar of certificates that such subjects have been satisfactorily completed. Graduates of this institution and others of similar rank are admitted to graduate standing. (See Entrance Information, page 18).

Special Students.—Persons twenty-one years of age, or over, who are not regularly qualified for admission, but who have pursued special lines of study related to fishery, may be admitted as special students, on giving satisfactory evidence of their ability to pursue the work and conforming with the regulations regarding the admission of special students. (See Entrance Information, page 17).

Short Courses for Fishermen and Fish Culturists.—These courses will be given during 1920, providing there are a sufficient number of applicants. Applicants must be at least twenty years old and show ability to carry the work with profit to themselves. Admission to courses is without examination.

LABORATORIES AND FACILITIES FOR STUDY

As the College of Fisheries was established in 1919, its laboratory equipment is not at present as complete as it is hoped to make it eventually. In the list noted below the laboratories are described as they will be when completed.

Ichthyology Laboratory.—The ichthyology laboratory contains an extensive collection of named fishes, particularly rich in species from Puget Sound and Alaska. By exchange and other means it is hoped to build up a representative series of the fishes found in American waters, with particular reference to forms of economic importance. The foundation has also been established for a collection to illustrate the species of shellfish, crustaceans, and other invertebrate animals constituting the bases for the corresponding industries.

Fisheries Laboratories.—This is equipped with working models of the larger forms, and fully rigged types of the smaller forms of fishery apparatus, also detailed plans for the construction of same; equipment for the manufacture, repair, care and preservation of nets; models of fishing vessels and boats, and samples of various fishery products prepared for market in the United States.

The curing laboratory contains all the necessary equipment for the pickling, dry-salting, and mild-curing of fishery products.

It is expected that eventually a fully equipped cannery will be installed in Fisheries Hall, where, in addition to practical instruction in canning methods, tests may be made of various species, while research in food canning will be carried on under conditions similar to those prevailing in commercial plants.

Ultimately a small refrigeration and cold storage plant will be installed for the purpose of economic study of the various methods of freezing and keeping fishery products in cold storage.

A smokehouse will be built for the purpose of carrying on experiments in the smoking of various species and their utilization as food either in this condition or canned.

The drying laboratory will be equipped with hot-air blowers and other devices for the artificial drying of fishery products.

The testing room will have a constant temperature of approximately 98° Fahrenheit, and in it samples of canned fishery products may be incubated, by means of which swells may be separated from the other cans and the sufficiency of the process used in the cannery determined. Various vacuum gauges and can testers will also be available.

Fish Hatchery.—The fish hatchery will occupy about one thousand square feet of floor space in the fisheries building. It will be furnished with hatching troughs, baskets, and other essential equipment for the care of 500,000 salmon or trout eggs. A complete equipment consisting of batteries of open-top and closed-top jars is provided for the care of several millions of semi-buoyant eggs. Feeding tanks and aquaria are also provided in which experimental work in fish culture may be carried on.

Within easy reach of the university are located state and federal fish hatcheries where a study may be made of the actual conditions under which fish culture is carried on. A model hatchery with feeding tanks and aquaria is located in the office building of the State Fish Commissioner in the city. This is open at all times for inspection.

Shellfish Culture.—On Puget Sound and in Hood Canal are located numerous private oyster beds where cultivation has been practiced for some years. The state also owns certain oyster reserves which could be utilized for experimental purposes. These are all within reasonable distance of Seattle and are available for study purposes by the students of the college.

Fishery Operations.—Trap netting, purse and haul seining, gill netting, trolling, hand and long-line fishing, oyster gathering, clam digging, kelp harvesting, and other forms of commercial fishing, are carried on either in the harbor of Seattle, or waters adjacent, during the proper seasons, and can be observed and studied on the ground.

Commercial Plants.—In or near Seattle and available for study are plants for the canning of salmon, pilchards, clams, etc.; the mild-curing of salmon; the pickling of salmon, herring, sablefish, etc.; the freezing and cold storage of salmon, halibut, sablefish, herring, steel-head trout, and smelt; the smoking of salmon, sablefish, herring, sturgeon, etc.; the extraction of oils from fishery products and the prep-

aration of fish meal and fertilizer from the residue; and the extraction of chemical products from kelp and other aquatic plants. Two large can-making establishments, several plants manufacturing canning machinery, and a number of others supplying various machines and supplies for the fisheries, are also located in Seattle. Such of these industries as are not in Seattle are conveniently situated on Puget Sound, and the transportation costs to them would be very low.

Aquarium.—In the Fisheries building of the State Fish and Game Commission, at Fourth avenue and University street, Seattle, a working aquarium is available for study purposes.

Field Excursions.—Much of the instruction in fish culture and fisheries technology is given in the field, necessitating frequent excursions to nearby hatcheries, fishing camps, oyster beds, and industrial plants. The expenses of these excursions will be comparatively small.

Summer Work.—Students of fisheries are urged to spend their summer vacation in some line of practical work connected with the fishery industry. As the college is convenient to the more important fisheries and hatcheries of the Northwest coast, ample opportunity is offered for summer employment. Students not only acquire valuable experience in this way, but earn a considerable portion of their university expenses.

CURRICULA

I. FISH CULTURE

FRESHMAN

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Zoology 1.....	5	Zoology 2.....	5	Genl. Embryology (Zool. 5.)	5
Intro. to Fisheries 1.....	2	Intro. to Fisheries 2.....	2	Chemistry 3.....	5
Chemistry 5.....	5	Chemistry 6.....	5	Economics 1.....	5
English.....	3	English.....	3	Military Science.....	2
Military Science.....	2	Military Science.....	2		

SOPHOMORE

Bacteriology 101.....	4	Bacteriology 102.....	4	Aquatic Botany 53.....	5
Ichthyology 8.....	5	Ichthyology 4.....	5	Ichthyology 5.....	5
Physics 1 or 47.....	5	Physics 2 or 48.....	5	Pacific Fisheries 6.....	2
Elective.....	2	Elective.....	2	Elective.....	3
Military Science.....	2	Military Science.....	2	Military Science.....	2

JUNIOR

Fish Culture 101.....	5	Fish Culture 102.....	5	Fish Culture 103.....	5
Plankton (Zool. 106).....	5	Elective.....	5	Parasitology (Zool. 107).....	5
Elective.....	5	Fishery Methods 104.....	5	Fishery Methods 105.....	5

SENIOR

Culture Problems 107.....	5	Culture Problems 108.....	5	Culture Problems 109.....	5
Fish Diseases (Zool. 109).....	5	Electives.....	10	Electives.....	10
Electives.....	5				

II. FISHERIES TECHNOLOGY

FRESHMAN

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Zoology 1.....	5	Zoology 2.....	5	Parasitology (Zool. 107).....	5
Intro. to Fisheries 1.....	2	Intro. to Fisheries 2.....	2	Chemistry 3.....	5
Chemistry 5.....	5	Chemistry 6.....	5	Electives.....	5
English.....	3	English.....	3	Military Science.....	2
Military Science.....	2	Military Science.....	2		

SOPHOMORE

Bacteriology 101..... 4	Bacteriology 102..... 4	Quantitative Chemistry 101. 4
Organic Chem. 37..... 5	Org. Chemistry 38..... 5	Pacific Fisheries 6..... 2
Ichthyology 3..... 5	Ichthyology 4..... 5	Biology of the Seas (Zool. 108)..... 3
Elective 2	Food Laws (Phar. 16)..... 1	Economics 1..... 5
Military Science..... 2	Military Science 2	Military Science..... 2

JUNIOR

Bus. Principles 10..... 3	Bus. Administration 159.... 3	Industrial Management 195. 3
Physics 1 or 47..... 5	Physics 2 or 48..... 5	Fishery Methods 105..... 5
Prep. Fishery Prod. 106.... 5	Fishery Methods 104..... 5	Ichthyology 5..... 5
Admiralty Law 165..... 3	Dev. of Pacific (Hist. 154). 3	Electives 2

SENIOR

Fishery Problems 110..... 5	Fishery Problems 111..... 5	Fishery Problems 112..... 5
M. Engineering 82..... 3	M. Engineering 140..... 3	Electives 10
Electives 7	Electives 7	

While no regular fishing curriculum has been tabulated, students desiring it can, by means of electives given, easily arrange one. Courses in navigation, meteorology, oceanography and gas engineering are available, and these, in conjunction with either fish culture or fisheries technology curriculum, will amply answer the purpose.

DEPARTMENTS OF INSTRUCTION

FISHERIES

1-2. *Introduction to Fisheries.*—A general review and history of the world's fisheries. Two credits per quarter; autumn, winter.

Professor Cobb

3-4-5. *Ichthyology.*—The structure, classification and habits of economic fishes. Course 5 will also include other economic marine animals. Prerequisite, Zoology 1, 2. Laboratory deposit, \$2. Five credits per quarter; autumn, winter, spring.

Professor Kincaid

6. *Pacific Fisheries.*—A general review and history of the fisheries of the Pacific. Prerequisite, course 1-2. Two credits; spring.

Cobb

101-102-103. *Fish Culture.*—The developmental history and artificial propagation of economic fishes. Prerequisite, courses 3-5, and Zoology 5. Laboratory deposit, \$2. Five credits per quarter; autumn, winter, spring.

104-105. *Fishery Methods.*—The construction and uses of apparatus; handling and transportation of products, etc. Prerequisite, courses 1-2, 6. Three lectures and two laboratory periods. Laboratory deposit, \$2. Five credits; winter, spring.

Cobb

106. *Preparation of Fishery Products.*—The curing and preservation of fishery products. Prerequisite, courses 3-5. Three lectures and two laboratory periods. Laboratory deposit, \$2. Five credits; autumn.

Cobb

107, 108, 109. *Problems in Fish or Shellfish Culture.*—Students with the proper preparation, which should include at least 15 hours work in fish culture or 15 hours work in shellfish culture and course

5, will be assigned special topics to be worked upon under the direction of one of the instructors. Five credits per quarter; autumn, winter, spring.

110, 111, 112. Problems in Fisheries.—Students with the proper preparation, which should include at least 15 hours work in fishery methods and preparation of fishery products, will be assigned special topics to be worked upon under the direction of the instructor. Five credits per quarter; autumn, winter, spring. Cobb

**112-113. Shellfish Culture.*—The development and propagation of shellfish and crustaceans. Elective. Prerequisites, junior standing and course 5. Laboratory deposit, \$2. Five credits per quarter; autumn, winter.

**114. Terrapin, Turtle, Frog, Etc., Culture.*—The developmental history and propagation of terrapins, turtles, frogs, etc. Elective. Prerequisite, course 5. Laboratory deposit, \$2. Five credits; spring.

COURSES GIVEN BY OTHER DEPARTMENTS

Fuller descriptions of these courses may be found in the section of the General Catalogue entitled "Departments of Instruction" (also published as a separate bulletin, Section 15).

Astronomy 1.—Navigation. Five credits; winter.

Bacteriology 101.—General bacteriology. Four credits; autumn or summer.

102.—Sanitary bacteriology. Four credits; winter or summer.

Botany 53.—Aquatic botany. Five credits; spring.

130.—Economic marine botany. Four credits. autumn.

Chemistry 1, 2, 3.—General Chemistry. Five credits per quarter; autumn, winter, spring.

3, 1, 2.—A repetition of the above; spring, autumn, winter.

5, 6.—General Chemistry. Five credits per quarter; autumn, winter.

21, 22, 23.—General Chemistry. Five credits per quarter; autumn, winter spring.

22, 23, 21.—A repetition of the above; spring, autumn, winter.

37, 38.—Organic Chemistry.—Five credits per quarter; autumn, winter.

51.—Engineering Chemistry. Three credits; spring.

101-102-103.—Quantitative Analysis. Four credits per quarter; autumn, winter, spring.

121-122-123.—Industrial Chemistry. Five credits per quarter; autumn, winter, spring.

133.—Sanitary Chemistry. Three credits; autumn.

*These courses will not be given in 1919-20.

- 141, 142, 143.—Physiological Chemistry. Five credits per quarter; autumn, winter, spring.
- Economics and Business Administration 1.*—General Economics. Five credits; autumn, winter, or spring.
- 10.—Business Principles. Three credits; winter.
- 42.—Introduction to Statistics. Three credits; winter.
- 145.—Business Statistics. Two credits; spring.
- 171.—Organization of Foreign Trade. Three credits; autumn.
- 191.—Business Management. Three credits; autumn or spring.
- 195.—Industrial Management. Three credits; autumn.
- English 1, 2, 3.*—Composition and Literature. Three credits per quarter; autumn, winter.
- Geology 11.*—Meteorology and Elementary Climatology. Three to five credits; autumn or winter.
- 114.—Oceanography. Two credits; spring.
- History 154.*—Development of the Pacific. Three credits; winter.
- Law 165.*—Admiralty. Three credits; autumn.
- Mechanical Engineering 82.*—Steam engineering. Three credits; autumn, winter, or spring.
- 140.—Steam Engineering laboratory. Three credits; autumn; winter, or spring.
- 180.—Refrigeration. Two credits; spring.
- 199.—Gas Engineering. Three credits; winter.
- Mathematics 4.*—Plane Trigonometry. Five credits; autumn, winter, or spring.
- Military Science.*—Required of all freshmen and sophomores; advanced R. O. T. C. course elective for qualified juniors and seniors.
- Modern Language.*—For modern language courses open to election see the statement of the modern language department in the Departments of Instruction bulletin.
- Pharmacy 16.*—Food Laws. One credit; winter.
- 105, 106, 107.—Chemistry and Analysis of Food. Five credits per quarter; autumn, winter, spring.
- Physics 1, 2.*—General Physics. Five credits per quarter; autumn, winter.
- 47, 48, 49.—Elementary Physics. Five credits; autumn, winter, spring.
- Psychology 1.*—General Psychology. Five credits; autumn, winter, or spring.
- 121.—Applied Psychology. Three credits; winter.

Zoology. 1, 2.—Elements of Zoology. Five credits per quarter; autumn and winter; repeated winter and spring.

5.—General Embryology. Five credits; spring.

106.—Plankton. Five credits; autumn.

107.—Parasitology. Five credits; spring.

108.—Biology of the Seas. Three credits; spring.

109.—Diseases of Fishes. Five credits; autumn.

CORRESPONDENCE

Inquiries in regard to the College of Fisheries may be addressed to the Director of the College. All correspondence regarding admission should be sent to the Registrar of the University.

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday.
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess.....
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations.....
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations.....
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus Day.....Friday, April 23
Junior Day.....Saturday, May 29
Quarter examinations.....
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's reception.....Saturday, June 19
Baccalaureate Sunday.....June 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration days.....Tuesday and Wednesday, June 22 and 23
Instruction begins.....Thursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

WINLOCK W. MILLER, President	Seattle
Term ends March, 1920	
WILLIAM T. PERKINS	Seattle
Term ends March, 1920	
ELDRIDGE WHEELER	Montesano
Term ends March, 1921	
OSCAR A. FECHTER	Yakima
Term ends March, 1922	
JOHN A. REA	Tacoma
Term ends March, 1922	
WILLIAM A. SHANNON	Seattle
Term ends March, 1923	
RUTH KARR MCKEE	Olympia
Term ends March, 1923	

OFFICERS OF ADMINISTRATION THE UNIVERSITY

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HERBERT THOMAS CONDON, LL. B.....	Comptroller Administration Hall
EDWARD NOBLE STONE, A. M.....	Registrar Administration Hall
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ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
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CARL EDWARD MAGNUSSON, Ph. D.....	Acting Dean of the College of Engineering Engineering Hall
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*COLIN VICTOR DYMMENT, B. A.....	Director of the School of Journalism Commerce Hall
JOHN THOMAS CONDON, LL. M.....	Dean of the Law School Commerce Hall
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MILNOR ROBERTS, A. B.....	Dean of the College of Mines Mines Hall
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FREDERICK MORGAN PADEL FORD, Ph. D.....	Acting Dean of the Graduate School Denny Hall
*J. ALLEN SMITH, Ph. D.....	Dean of the Graduate School Denny Hall

THE EXTENSION SERVICE

*EDWIN AUGUSTUS START, A. M.....	Director
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

COLLEGE OF FORESTRY

THE FACULTY

HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.
HUGO WINKENWERDER, M. F. (Yale), Professor of Forestry, DEAN.
BURT PERSONS KIRKLAND, A. B. (Cornell), Associate Professor of Forestry.
ELIAS TREAT CLARK, M. F. (Yale), Assistant Professor of Forestry.
BROR LEONARD GRONDAL, M. S. F. (Washington), Assistant Professor of Forestry.
CONRAD W. ZIMMERMAN, A. B. (Washington), Lecturer in Timber Physics.

TREVOR KINCAID, A. M. (Washington), Professor of Zoology.
HENRY KREITZER BENSON, PH. D. (Columbia), Professor of Industrial Chemistry.
GEORGE SAMUEL WILSON, B. S. (Nebraska), Associate Professor of Mechanical Engineering.
GEORGE IRVING GAVETT, B. S. (C. E.) (Michigan), Assistant Professor of Mathematics.
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JOHN WILLIAM HOTSON, PH. D. (Harvard), Assistant Professor of Botany.
HAROLD EUGENE CULVER, PH. M. (Wisconsin), Assistant Professor of Geology.
DAVID CONNOLLY HALL, M. D. (Chicago), University Health Officer; Director of Physical Education for Men.
WALTER EDWARD ROLOFF, PH. D. (Wisconsin), Assistant Professor of German.
HORACE HARDY LESTER, PH. D. (Princeton), Instructor in Physics.
FRANK DEMETRIUS HAYDEN, B. S. (Massachusetts Institute of Technology), Instructor in Civil Engineering.

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W. E. CROSBY, Editor, West Coast Lumberman, Seattle.

PACIFIC LOGGING CONGRESS REPRESENTATIVE

R. W. VINNEDGE, North Bend Lumber Company, Edgewick.

PURPOSE AND LOCATION

The College of Forestry was established in 1907. It has a twofold purpose: first, to afford instruction in the principles and practice of forestry; second, to promote the interests of forestry in the state of Washington by encouraging the right use of forest resources.

The college has exceptional advantages in its location. The university campus comprises 355 acres, a portion of which is in timber, and offers splendid opportunities for field work in silviculture and forest measurements. Other excellent forests are within walking distance of the campus. The University also owns large forest tracts in various parts of the state, where students may conduct extensive research work. The immense national forests within a few hours' ride of Seattle afford practical object lessons in the art of forest

management. The city of Seattle is in the center of the timber industry of Washington and the Northwest. In its many sawmills and wood-working industries, the student has unrivaled opportunities for studying wood utilization.

FOREST AND LUMBERING LABORATORIES

Dendrology.—Individual lockers. Extensive collections of tree seeds, cones and bark specimens. An arboretum is under way and a large number of the less common tree species are to be found on the campus.

Lumbering.—Field work is given at logging camps and sawmills about Seattle. A complete equipment of instruments and tools is available for work in logging engineering. One room contains a complete collection of lumber, showing grades and patterns, charts of lumber grades, exhibits of sawmill and wood saws, logging equipment, such as wire ropes, axes, hooks, blocks, special appliances for donkey engines, sawmill belts, a model of high lead logging, and other tools or equipment used in logging and milling.

Mensuration.—Equipment selected to show all principal types of instruments in use. Those particularly adapted for use in the Northwest are provided in quantities sufficient for all practice work by students in cruising, surveying, volume, growth and yield studies.

Silviculture.—Forests in and near Seattle offer wide opportunities for practical studies and demonstrations. An extensive forest tree nursery maintained by the College of Forestry affords an excellent opportunity for demonstrations and practice in modern nursery methods.

Timber Physics.—Laboratory work in timber physics is carried on in the U. S. Forest Service Timber Testing Laboratory, operated in cooperation with the University. The laboratory is magnificently equipped with seven large testing machines for static and impact loading, circular and band saws, planer and other shop equipment for wood-working.

Wood Technology.—Elementary work in wood technology is carried on in the same room as the work in dendrology. Individual lockers, gas, water, compound microscopes and all apparatus for preparing and sectioning wood for the microscopic study of woody tissues are provided. Hand specimens and planks of domestic and foreign commercial timbers are provided in large quantities. These include extensive collections of South American and Philippine hardwoods. Microscopic slides of nearly all American woods are kept on hand for check specimens.

Forest Products Laboratories.—A movement is now on foot for the establishment of a completely equipped Forest Products Laboratory to cost approximately \$60,000. The laboratories for work in forest products now ready on the campus consist of four distinct units, as follows:

1. *General Laboratory.*—This is equipped with microtome, water baths, drying ovens, microscopes, chemical and pulp balances, all apparatus necessary for technical examination of wood preservatives, standardized thermometers, cameras and other apparatus required for photomicrography, dark room, and all incidental apparatus required for the detailed study of wood tissues.

2. *Wood Preservation Laboratory.*—This consists of both an open tank and a pressure plant. The former is of commercial size for treating ties. It is composed of two treating tanks and two storage tanks, one of steel for creosote, the other a wooden tank for salt solutions and other preservatives. The pressure plant consists of a 12-foot retort, air compressor and vacuum pumps and a duplex pressure pump, and is so constructed that it may be used for any of the different pressure processes.

3. *Wood Distillation Plant.*—This plant consists of a retort of one-half cord capacity per charge, gas tank, and refining apparatus. The retort has been installed by the U. S. Forest Service for cooperative work with the University.

4. *The Dry Kiln.*—This is a plant of about one carload capacity, and is thoroughly equipped with all apparatus necessary for scientific experimentation in kiln drying.

Commercial Plants.—Plants for the manufacture of paper, wood pipe, cooperage, excelsior, wood conduit, veneers, furniture, boxes, and numerous other secondary wood products are located in or very near Seattle and are available for study. Four large creosoting plants and several smaller preservation plants are also available. As such of these industries not in Seattle are conveniently situated on Puget Sound, transportation costs to them are very low.

Demonstration Forest and Experiment Station.—Arrangements are now nearly completed whereby the University will acquire title to a 60,000-acre tract of forest land to be used by the College of Forestry as a demonstration forest and forest experiment station. This tract, which consists of the Pilchuck-Sultan watersheds of the Snoqualmie Forest, is very conveniently reached from Seattle, and offers almost ideal conditions for a school forest. It has a total stand of timber of over a billion and a half feet, representing nearly all species of the Pacific Northwest, but more than three-fourths is composed of

Douglas fir, cedar and hemlock, the most important commercial species. As there is an excellent representation of age classes, it will lend itself readily to scientific forest management. It is estimated that the tract will yield from \$20,000 to \$25,000 annually on a sustained yield basis.

ADMISSION TO FRESHMAN STANDING

A student must offer for admission to freshman standing in the University fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a unit a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented):
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work.)
- 2 units selected from the above groups.
- 5 units selected from any subjects accepted by an approved high school for its diploma, not more than four, however, to be in vocational subjects.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University, it is recommended that a student expecting to enter the College of Forestry should elect his work from the groups (a) to (d), so as to offer the following subjects:

Advanced algebra	½ unit
Solid geometry	½ unit
Physics	1 unit
Botany	½ or 1 unit

If he shall not have included these subjects in his high school elections, it will be necessary for him to include them among his elections in college.

More detailed information concerning admission to the University will be found in that part of the General Catalogue devoted to Entrance Information, also published separately as Section I.

Advanced Standing.—Credit will be given for subjects pursued at other colleges of recognized rank upon presentation to the registrar of certificates that such subjects have been satisfactorily completed. Graduates of this institution and others of similar rank are admitted to graduate standing. (See Entrance Information, page 18.)

Special Students.—Persons twenty-one years of age, or over, who are not regularly qualified for admission, but who have pursued special lines of studies related to forestry, may be admitted as special students on giving satisfactory evidence of their ability to pursue the work and conforming with the regulations regarding the admission of special students. (See Entrance Information, page 17.)

Short Courses for Forest Rangers and Lumbermen.—These

courses will be given during 1920, providing there are sufficient number of applicants. Applicants must be at least twenty years old and show ability to carry the work with profit to themselves. Admission to classes is without examination.

EXPENSES

(a) A tuition fee of \$10 per quarter, to be paid by each student of the University.

(b) *Laboratory Deposits.*—Forestry 1, 5, 53, 58, 104, \$1; Forestry 101, 102, 105, 187, \$2; Forestry 51, 52, 183, 188, 213, 214, \$3; Botany, \$2; Chemistry, \$7; Geology, \$1; Physics, \$2.50; Zoology, \$4.

The laboratory deposits in each case are for materials used and cover repairs of apparatus. The student is entitled to a refund for such portion of the deposit as is not used.

Associated Student Fee.—The Associated Student Fee of \$5 is paid by every student of the University. This entitles the student to a subscription to the University of Washington Daily and free admission to all athletic, debating and oratorical contests given under the auspices of the Associated Students of the University of Washington, the annual music concert and discounts in the cooperative bookstore.

Field Excursions.—Much of the instruction in technical forestry is given in the field, necessitating frequent field excursions in nearby forests, logging camps and sawmills. The expenses of these excursions never exceed \$10 for the freshman year, \$15 for the sophomore year, \$20 for the junior year, \$50 for the senior year, and usually are much less.

Students of forestry are urged to spend their summer vacation in some line of practical work connected with the forest industry. Situated as the school is in the heart of a great lumbering section and near

SUMMER WORK

extensive national forests, ample opportunity is offered for summer employment. Students not only acquire valuable experience in this way, but earn a considerable portion of their university expenses.

FOREST CLUB

The Forest Club is an organization open to all students of the College of Forestry. Its aims: To secure acquaintance and good fellowship among students and instructors; to keep in touch with everyday problems in forestry and lumbering, and the men who are doing things worth while in these industries; to interest the public in the college and in the forestry and lumbering problems of the state.

Officers of the club for the year 1918-1919 are: President, William Durland; vice-president, Will Morgan; secretary-treasurer, Seldon Andrews.

The club issues every May "The Forest Club Annual," a publication which contains articles and illustrations descriptive of the school, of scientific interest, and a complete roster of students, ex-students, and alumni. A special College of Forestry page is also published each month in the West Coast Lumberman.

REQUIREMENTS FOR GRADUATION

Courses and Degrees.—Beginning with September, 1914, the College of Forestry abandoned its fixed four-year groups of study, and has since then offered only one five-year course with a liberal allowance for electives. As technical forestry has reached a stage where some specialization is almost necessary, this arrangement gives the student ample opportunity for specialization along four distinct lines: (1) Forest service and state work, (2) logging engineering, (3) forest products and (4) the lumber business. *The course may, however, be pursued for only four years, and on the completion of four years of work the student will be awarded the degree of bachelor of science.* It should be emphasized that this arrangement will allow the student to receive practically as broad a training in four years as heretofore, but that if he desires to specialize he should pursue the work for five years.

Undergraduate Work.—For the degree of bachelor of science (B. S.) the student shall have completed, in addition to the required subjects outlined in the curriculum, at least 46 credits in subjects selected from forestry, lumbering, engineering, or the botanical, chemical, zoological, geological or economic sciences, the subjects to be approved by the students' class adviser, but in no case shall more than 23 in any department other than forestry be allowed toward graduation. The total number of credits required for graduation shall be 180 exclusive of shop and military science. Candidates for the degree must furthermore receive grades of A, B, or C in at least three-fourths of the credits required for the degree.

Graduate Work.—For the degree of master of science in forestry (M. S. F.), the student in addition to being a graduate of this University or other institution of equal rank, and having a satisfactory knowledge of botany, geology, physics, chemistry, mathematics, surveying and languages, shall have been credited at this University with 225 credits, of which at least 78 are in technical forestry subjects, including silviculture, dendrology, wood technology, mensuration, management, lumbering, wood preservation, forest economics, and thesis. Only grades of A, B, and C can be counted toward a graduate degree.

Attention is called to the equipment and to the special advanced courses for graduate students. The physical equipment of the College of Forestry and the exceptional advantages of its location should prove particularly attractive to graduate students. The advanced courses include dendrology, silviculture, wood technology, timber physics, wood preservation, advanced forest products, the business of lumbering, and research. Special facilities and apparatus are provided for this advanced work. Emphasis is placed upon the fact that a graduate from a college of forestry of equal rank with the College of Forestry of this University may complete the requirements for the advanced degree in one year. Graduates from other institutions of equal rank, but giving no courses in technical forestry, may complete the required work in two years.

OUTLINE OF CURRICULUM

Choice of Electives.—In the election of studies, students should follow the sequence of subjects as outlined in the curriculum. Deviations from the prescribed order will not be allowed by class advisers unless such deviation is imperative.

For specialization in Forest Management the following electives are recommended: Economics 11-12, 163 (Accounting); Law 54, 55, 56 (Contracts); and Forestry and Lumbering 119, 120 (Administration).

For specialization in Logging Engineering: Civil Engineering 22 (Logging Railroads); Law 54-55-56 (Contracts); Electrical Engineering, 101, 102; and Forestry and Lumbering 185-186-187 (Logging Engineering) and 159 (Scientific Management).

For specialization in Forest Products: Chemistry 31-32-33; Botany 142 (Tree Diseases); Electrical Engineering; and Forestry 183 (Milling), 184 (Marketing) and 159 (Scientific Management).

For specialization in the Business of Lumbering: Economics 11-12; 163; Business Administration (Advertising); and Forestry 183, 184, and 159.

LOWER DIVISION

It will be the aim to prepare students who cannot go farther than the end of the Lower Division for forest ranger service, and as assistants to logging engineers. Upon approval of the dean they will be allowed to substitute certain of the subjects of the junior year for chemistry.

FRESHMAN

Autumn	Credits	Winter	Credits	Spring	Credits
For. 1 (Dend.)	5	Bot.	5	Bot. 12	5
For. 2 (Gen. For.)	3	For. 3	3	Math.	3
Mat. 54 (Foresters)	3	Math. 58	3	For. 4 (Protection)	3
English	3	C. E. 1	3	C. E. 56	5
For. 5 (Woodcraft)	2	C. E. 21	3	Recreation	+1
Recreation	+1	Recreation	+1	Mil. Science	+4
Mil. Science	+2	Mil. Science	+2		
Required	16+3	Required	16+3	Required	16+3
Shop		Shop		Shop	

SOPHOMORE		
For. 53 (Const.)..... 3	Chem. 2 5	For. 52 (Mensurat.).... 5
For. 57 (Silvics)..... 3	For. 51 (Mensurat.).... 5	For. 58 (Silvicol.)..... 5
Chem. 1 5	Elective 5	Geol. 5 (Forestry)..... 5
Econ. 1 (Gen.)..... 5	Recreation +1	Recreation +1
Recreation +1	Mill. Science +2	Mill. Science +2
Mill. Science +2		
Required .....16+3	Required .....15+3	Required .....15+3

UPPER DIVISION

Beginning with the Upper Division, the student should carefully consider the electives with reference to the specialty he intends to make his life work.

JUNIOR		
For. 101 (Technol.) 5	For. 158 (Uttl.) 5	For. 105 (Preserva.).... 5
Phys. 92 (For.) 5	Phys. 98 5	For. 104 (Tim. Tests)... 5
M. E. (Steam Engines)... 3	Elective 5	Elective 5
Elective 3	Recreation +1	
Recreation +1		
Required .....16+1	Required .....15+1	Required .....15

<i>Suggested Electives</i>		
Chem. 31 (Organic).... 5	Chem. 32 (Organic).... 5	Chem. 32 (Organic).... 5
Econ. 3	Bot. 141 (Fungl)..... 5	Econ. 139 (Salesman)... 3
C. E. 22 (Log. R. R.).. 5	Econ. 163 (Acc't)..... 3	Econ. 81 (Acc't)..... 3
Bot. 140 (Fungl)..... 3	Law 55 3	Bot. 142 (Fungl)..... 5
Law 54 (Bus. Law).... 3		

SENIOR		
For. 151 (Management). 5	Econ. 126 3	All elective.
For. 153 (Gen. Lumber.) 5	For. 152 (Management). 3	
	<i>Suggested Electives</i>	
For. 185 (Log. Eng.)... 4	For. 186 (Log. Eng.)... 4	For. 187 (Log. Eng.)...16
For. 183 (Milling)..... 5	Elective 5	For. 184 (Marketing)... 5
		For. 188 (Adv. Prod.).. 5

GRADUATE

The following subjects are primarily for graduate students. Seniors will be allowed to elect them only upon recommendation of the dean and the instructor concerned. With the exception of the thesis none of the subjects is, strictly speaking, required, but the student will elect all those belonging to one specialty as determined upon consultation with his class adviser. A sufficient number will have to be taken to fulfill the requirements for the master's degree.

For. 202 (Thesis)..... 3	For. 202 (Thesis) 3	For. 202 (Thesis)..... 3
For. 201 (Adv. Dend.).. 3	For. 209 (Seminar)..... 2	For. 222 (Adv. Prod.).. 5
For. 208 (Seminar)..... 2	Elective .....12	For. 223 (Adv. Manage.) 8
Elective 8		For. 224 (Adv. Milling and Marketing) 8

DEPARTMENTS OF INSTRUCTION

FORESTRY AND LUMBERING

1. *Elementary Dendrology*.—Nomenclature and classification of trees, with a study of one type species of each genus of the important timber trees of North America. Prerequisite, high school botany. Required of freshmen. Two recitations, four laboratory periods per week, field trips additional. Laboratory deposit, \$1. Five credits; autumn or spring. Winkenwerder, Gröndal

2-3. *General Forestry*.—To familiarize the student with the field of work he is about to enter. Required of freshmen. Three credits per quarter; autumn, winter. Winkenwerder

4. *Forest Protection*.—Its economic importance; forest fires, their prevention and control. Required of freshmen. Three credits; spring. Winkenwerder

5. *Woodcraft*.—Food and clothing, camp equipment and sanitation, packing a horse, and general woodcraft. A section will be arranged for students not enrolled in forestry if not less than six apply. Two lectures per week; demonstrations and practice work additional. Laboratory deposit, \$1. Two credits. Clark

51-52. *Forest Mensuration*.—Principles and methods of computing, scaling, estimating, mapping. Required of freshmen. Principally field work given at the college demonstration forest. Laboratory deposit, \$3. Five credits per quarter; winter and spring. Kirkland, Clark

53. *Construction*.—Trails, roads, logging railroads, telephone lines, wooden bridges, cabins, barns, and fences; clearings from the standpoint of United States Forest Service improvement work, and logging construction. Required of sophomores. Laboratory deposit, \$1. Three credits; autumn. Clark

55. *First Aid*.—Lectures and demonstrations. Winter. Instructor to be assigned.

57-58. *Silviculture*.—The individual tree, the forest as a whole, and cultural practices. Required of sophomores. Laboratory deposit, \$1. Three credits, autumn; five credits, spring. Kirkland

101. *Wood Technology*.—Wood structure, leading to identification of the commercial timbers of the United States; physical properties of woods. Each student is required to prepare permanent microscopic mounts of fifty species. Required of juniors. Prerequisite, college botany, 8 hours. Laboratory deposit, \$2. Five credits; autumn. Gröndal

102. Wood Identification.—This course includes the laboratory work only of course 101. Open to students in other departments of the University who can show ability to carry on the work. Prerequisite, college botany, 8 hours. Laboratory deposit, \$2. Two credits; autumn. Gröndal

103. Wood Analysis.—Identification, physical properties and characteristics of woods used in building construction. For juniors in architecture. Two credits. Gröndal

104. Timber Testing.—Stresses, tests, theory of flexure, moisture and strength; mechanical properties of wood. Prerequisite, mathematics. Required of juniors. Laboratory deposit, \$1. Five credits; winter. Zimmerman

105. Wood Preservation.—Nature of decay of timber and methods and economics of preservation. Laboratory work with the college treating plant and reports on local creosoting plants. Required of seniors and graduates. Prerequisites, course 101 and one year of chemistry. Laboratory deposit, \$2. Five credits; spring. Gröndal

109. General Forestry.—Lectures, assigned readings, and reports. Occasional field trips. Offered only to students not enrolled in the College of Forestry, and may be taken at the University or as an extension course by correspondence. Two credits; autumn. Winkenwerder

110. Characteristics of Trees.—The identification, distribution, life habits, and uses of trees of the Pacific Northwest. Offered only to students not enrolled in the College of Forestry, and may be taken at the University or as an extension course by correspondence. Two lectures weekly and occasional field trips. Two credits; spring. Winkenwerder

111. Teachers' Course.—Offered only as a correspondence course. Must be accompanied or preceded by course 109. One credit. Winkenwerder

112. Properties and Uses of Woods.—Offered only as a correspondence course. Gröndal

119. Forest Administration.—Objects, principles, and methods of administering private and public forests. Prerequisite, course 126. Three credits; autumn. Kirkland

120. National Forest Administration.—National Forest land regulations, protection, fiscal matters, improvement. Three credits; winter. Kirkland

126. Forest Economics.—The forests of the United States, their uses, their relation to industries and resources. Required of juniors

or seniors in forestry and open to students in other departments. Prerequisite, Economics 51. Two credits; autumn. Kirkland

151-152. Forest Management.—Forest finance, organization, methods of silviculture, administration. Required of students in senior or graduate year. Prerequisites, courses 51-52, 57-58. Five credits, autumn; three credits, spring. Kirkland

153. General Lumbering.—Comparative methods of logging on the Pacific Coast and in other lumbering regions of the United States. Required of seniors and graduates. Prerequisites, courses 51-52. Five credits; autumn. Clark

158. Forest Utilization.—Paper making, wood distillation, tanbark, naval stores, and other secondary forest products; lumber and its economic uses in construction. Required of seniors and graduates. Prerequisites, course 101, and one year in chemistry. Five credits; winter. Gröndal

159. Scientific Management.—Fundamental principles of scientific management, with special reference to the lumber industry. Given in alternate years, not in 1920-1921. Two credits; autumn. Kirkland

160. Camp Sanitation.—Primarily for students in commerce specializing in employment management. One credit; winter. Clark

183. Milling.—The sawmill; yard arrangements; practical operation. Primarily for graduates. Three credits; winter. Gröndal

185-186-187. Logging Engineering.—Logging machinery and equipment, organization of logging companies, construction of railroads, camps, etc. Lectures, demonstrations at plants, manufacturing logging machinery, and field work in nearby logging camps. During the third quarter the work is transferred to the field, where extensive work in logging engineering is carried on. No credit is given for 186 unless followed by 187. Primarily for seniors and graduates. Prerequisites, courses 51, 52, 53, 153. Laboratory deposit for 187, \$2. Five credits per quarter, autumn and winter; fifteen credits, spring. Clark

188. Advanced Forest Products.—Advanced studies in wood technology and utilization, with individual problems. A laboratory course. Prerequisite, courses 101, 158. Laboratory deposit, \$3. Five credits; spring. Gröndal

201. Advanced Dendrology.—An extension of course 1, covering the identification and distribution of all important commercial tree species of the United States. Elective. Prerequisite, course 1. Given in alternate years, not in 1920-1921. Three credits; autumn. Winkenwerder

208-209. Seminar.—Reviews, assigned readings, reports, and discussions on current periodical literature and the more recent Forest Service publications. Prerequisite, senior or graduate standing. Two credits per quarter; autumn, winter.

Winkenwerder, Kirkland, Gröndal

221. Forest History and Policy.—Forest policy of the United States; forestry in the states and island possessions; the rise of forestry abroad. Prerequisite, courses 107-108. Two credits. Kirkland

223. Advanced Forest Management.—About one week of field work on a tract of 50,000 to 100,000 acres on which data concerning different soil classes, forest types, etc., and volume of timber is already available. This work will be followed by the actual formation of a working plan providing for regulation of the yield and organization of all forest work on the area, with estimates of outlay and income. Prerequisite, courses 151-152. Eight credits; spring. Kirkland

SUBJECTS GIVEN BY DEPARTMENTS OF OTHER COLLEGES

The following subjects, forming a part of the forestry curriculum, are given by departments of other colleges of the University. They are listed in the section of the catalogue entitled Departments of Instruction, also published as a separate bulletin:

Botany—Foresters' Botany, General Fungi, Plant Physiology.

Chemistry—General and Organic.

Civil Engineering—Railroads, Forest Surveying.

Economics—General Economics, Advertising, Accounting, Advanced Accounting, Salesmanship.

English—Composition.

Geology—Engineering Geology.

Home Economics—Foods.

Law—Business Law.

Mathematics—Mathematics for Foresters.

Mechanical Engineering—Woodwork, Steam Engineering.

Military Science—Required of all freshmen and sophomores.

Elective for juniors, seniors, and graduates.

Modern Languages—See Departments of Instruction.

Physics—General Physics.

Zoology—Forest Entomology.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

AUGUST, 1919

NO. 127 SECTION 10

SCHOOL OF LAW
1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

Entered as Second Class Matter, at Seattle, Under the Act of July 16, 1894

THE BOARD OF REGENTS

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UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

OFFICERS OF ADMINISTRATION

THE UNIVERSITY

HENRY SUZZALLO, Ph. D., LL. D.....	President of the University Administration Hall
JOHN THOMAS CONDON, LL. M.....	Dean of Faculties Administration Hall
HERBERT THOMAS CONDON, LL. B.....	Comptroller Administration Hall
EDWARD NOBLE STONE, A. M.....	Registrar Administration Hall
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THE COLLEGES AND SCHOOLS

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THE EXTENSION SERVICE

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*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

SCHOOL OF LAW

THE FACULTY

HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
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CLARK PRESCOTT BISSETT, A. B. (Hobart), Professor of Law.
LESLIE JAMES AYER, B. S., J. D. (Chicago), Professor of Law.
JOSEPH GRATTAN O'BRYAN, A. B. (Jesuit College), Lecturer on Law.

ORGANIZATION AND EQUIPMENT

General Statement.—The Law School of the University of Washington was established in 1899. The case system is generally used and is designed to give an effective knowledge of legal principles and to develop the power of independent legal reasoning. A thorough legal training is offered to students of maturity and with previous preliminary education, and the courses offered are adapted to train and fit the student for practice in any state or jurisdiction. Special attention and emphasis is given to the law of the state of Washington, and in the illustrations and development of legal principles, cases and statutes are largely cited from the state of Washington and other Northwestern and Pacific states.

The Law Building.—The Law School occupies the entire upper floor of the new Commerce building. This building, which is one of the largest of the University buildings and is in the center of the campus, in the Liberal Arts Quadrangle, represents the best in modern construction and equipment. The law library occupies the entire end, and an idea of its roominess may be gained from its dimensions, which are, exclusive of stacks, forty by seventy feet. In addition to this general reading room, there is a large consultation room, twenty-five feet square, adjoining. There are three large lecture or recitation rooms, and a large room fitted and used exclusively for the trial court. These are all readily accessible to each other, and every convenience and improvement tending to add to the efficiency of the student, from an equipment standpoint, is present.

The Libraries.—The University Law Library consists of about 20,000 volumes. It contains the reports of all the courts of last resort, the reported lower courts of several states and the English courts. The latest revisions of all the state statutes and a large collection of the

session laws of the various states, including a complete set of each of the Pacific Coast states, are important features.

The library is catalogued and indexed by the Library of Congress cards.

The University General Library contains 82,401 volumes and is especially strong in reference works.

The Public Library of the city of Seattle is open to the free use of our students and is within easy distance of the campus by street car.

GENERAL INFORMATION

The four quarter system is adopted in the Law School. Each quarter is approximately for twelve weeks, and credit for work is usually on the basis of one credit representing a recitation or lecture course one hour per week for one quarter. In adopting this system the total hour values of courses prevailing in the schools of the Association of American Law Schools have been retained—*e. g.*, courses formerly given two hours per week per semester are under the quarter system given three hours per week per quarter. This makes possible a better sequence of courses in the first year and permits students to enter, even the beginning students, at the opening of any quarter, except students beginning the study of law cannot enter advantageously at the opening of the third or spring quarter.

Fees and Expenses.—A fee of ten dollars (\$10) per quarter is charged in the Law School, payable at the beginning of each quarter.

A diploma fee of five dollars (\$5) is charged all students to whom diplomas are issued.

Expenses are reasonable. Seattle, because of its location, makes possible a relatively low cost of living. A special bulletin is issued by the University, which gives the information in detail and may be obtained upon application.

Self-Help for Students.—The needs of a large city and particularly the demand for labor created by war conditions afford ample opportunity to the student for employment. The law courses are offered almost entirely in the forenoons, leaving the afternoons or evenings for employment. The University also offers employment for a smaller number of students. Many students earn a portion of their expenses while in the University, and a number earn their entire way. An employment bureau makes systematic efforts to obtain positions for students desiring work.

Admission to the Bar.—The Law School of the University of Washington is by law made the standard of approved law schools for the purpose of admission to the bar of this state. Students intending to practice in the state of Washington should consult the dean of the

Law School upon entering the Law School, and register in accordance with the rules of the State Board of Law Examiners.

ADMISSION AND GRADUATION

To be admitted to regular standing in the Law School students must present acceptable credits or pass examination entitling them to admission to this University and in addition thereto present a junior certificate from the College of Liberal Arts or the College of Science of this University, or present acceptable credits or pass examinations equivalent to the junior certificates. The entrance requirements are stated fully in the section of the catalogue relating to Entrance Information.

Advanced Standing.—If, in addition to satisfying the entrance requirements for regular standing in the Law School, the student has earned credits in another law school of satisfactory standing, by regular attendance for at least one academic year of not less than eight months, he will ordinarily receive credit for such work, subject to the following restrictions: The work must equal in amount and character that required by this Law School. Not more than two years' credit will be allowed for such work. The right is reserved to refuse advance credit in law in whole or in part, save upon examination. Candidates for a degree, with advanced standing, must spend at least one full college year in the Law School.

Special Students.—No person will be admitted as a special student in law, unless he is twenty-one years of age and his general education is such as to entitle him to take the state bar examination.

Special students who comply with these requirements and with the regulations for admission of special students (see Entrance Information, page 10) will be admitted to take such work in law as their previous preparation enables them to carry successfully, and upon satisfactory completion of sufficient law work to entitle them to take the state bar examination, will be given a certificate or affidavit entitling them to apply for examination. Students who intend to take this method must file notice of their intention to study law with the clerk of the Supreme Court as required by law.

Special Students Becoming Candidates for Degree.—Special students may become candidates for a degree upon complying with all the entrance requirements as above set forth in reference to regular students. If a special student intends to become a candidate for a degree by clearing up his entrance requirements during his law studies, he must notify the dean of the Law School upon registration. Such students will be permitted to carry a limited amount of work in the College of Liberal Arts or the College of Science to enable them to clear up their entrance requirements in law.

Combined Curriculum in Arts and Law.—This combined course allows the student with a good record to complete the requirements for the degrees of bachelor of arts and bachelor of laws in six years. It is open only to those students who have maintained a uniformly

good record for scholarship during the first three years of Liberal Arts.

The student is enrolled in the College of Liberal Arts during the first three years. If at the end of three years he has uniformly good record for scholarship and has earned 185 or more credits, including all the required work, he may for the fourth year register in the Law School for the first year's work in law and must earn in the College of Liberal Arts additional credits sufficient to make his total of arts and science credits amount to 144, and earn in the Law School at least 36 credits in the first year law work, to apply on his bachelor of arts degree, thus making his 180 credits required for the degree of bachelor of arts. The degree of bachelor of arts will be granted upon the completion of both courses.

The last two years of this combined course are devoted to completing the rest of the work in the Law School.

Students are strongly advised to complete their full 144 credits in Liberal Arts by the end of the third year, so they can enter the law work clear in the fourth year.

Students from other schools entering this University with advanced standing may take advantage of this combined course, provided they are registered in the College of Liberal Arts for at least one full year's work and earn at least 45 credits in this University before entering the law work.

This privilege will not be extended to normal graduates attempting to graduate in two years nor to undergraduates of other colleges who enter this University with the rank of senior.

Thesis.—It is the desire of the faculty to encourage original investigation and research by the students. Each candidate for a degree is required to prepare and deposit with the dean of the Law School, before the beginning of the spring vacation of his senior year, a thesis of not less than thirty folios in length, upon some legal topic selected by the student and approved by the faculty. The student will be examined by the faculty upon this thesis. It must be printed or typewritten, and is to be kept permanently in the library of the Law School.

Carkeek Prize for Thesis upon Washington Law.—Mr. Vivian M. Carkeek, of the Seattle Bar, a graduate of this Law School, class of '01 (the first class to graduate from the Law School), offers an annual prize of \$25 for the best thesis submitted by members of the senior class, candidates for the degree of bachelor of laws, upon a subject of Washington law, or upon a subject of peculiar interest to Washington lawyers, the subject to be selected by the dean of the Law School.

The Jaggard Prize.—Miss Anne Wright Jaggard, daughter of the late Edwin Ames Jaggard, LL. D., Justice of the Supreme Court of Minnesota, offers an annual prize of \$50 for the best thesis submitted by members of the senior class, candidates for the degree of bachelor of laws, upon a subject in the courses of history of the law or jurisprudence.

Summer Session of the Law School.—Courses are offered each summer by the Law School for both beginning and advanced students. Different courses are offered successive summers. This work counts toward a degree as a part of the regular instruction of the Law School. By increasing the number of periods per week, the equivalent of a quarter's work in the regular session is completed in each of the offered courses.

Instruction in Other Departments.—Students in the Law School may pursue studies, for which they are prepared, in other departments of the University without charge, except that in the laboratory courses the usual laboratory deposits will be required.

Degrees.—The degree of bachelor of laws (LL. B.) will be conferred on all students who comply with the entrance requirements for regular students stated hereinbefore, remain in residence in the Law School for three school years, successfully complete all the law work in the Law School, aggregating 135 credits, and comply with all the rules and regulations of the faculty and board of regents of this University.

Students admitted to advanced standing based upon credits earned at another law school may count that work toward graduation, subject to the restrictions heretofore stated.

Examination.—The members of each class are examined daily throughout the year in their studies, and may be subjected to written examinations at any time in the discretion of the faculty without notice. At the end of each quarter the members of each class are subject to written examination on the courses during the year, and their promotion is dependent on successfully passing such examination.

To receive the degree of bachelor of laws it is necessary to pass satisfactory examinations in the entire course of three years. Students who pass these examinations with distinguished excellence will receive the degree of bachelor of laws *cum laude*.

LAW

Commerce Hall

PROFESSORS CONDON, LANTZ, GOODNER, BISSETT, ATER; MR. O'BRYAN

FIRST YEAR

All first year courses required

100. *Agency.*—Wambaugh's Cases. Five credits; spring.
 Daily, 9. C. 309. ATER
- 103-104. *Contracts.*—Williston's Cases. Five credits per quarter; autumn and winter.
 Daily, 9. C. 309. LANTZ
- 106-107. *Criminal Law and Procedure.*—Mikell's Cases supplemented by Washington Criminal Code and Cases. Three credits per quarter; autumn and winter.
 M, W, F, 8. C. 309. LANTZ
- 108-109. *Pleading.*—Sunderland's Cases on Common Law Pleading, winter. Sunderland's Cases on Code Pleading, spring. Two and five credits, respectively, for winter and spring quarters.
 Winter, T, Th, 10. C. 309. Spring, daily, 10. C. 309. GOODNER

110. Persons.—Woodruff's Cases on Domestic Relations and the Law of Persons, supplemented by Washington Cases. Three credits; spring.

M, W, F, S. C. 309.

LANTZ

112. Procedure II.—This course is a laboratory study in aid of the course in pleading. Two credits, spring.

M, W, 11. C. 309.

GOODNER

115-116. Property I.—Warren's Cases. Three credits per quarter; autumn and winter.

M, W, F, 11. C. 309.

BISSETT

117-118. Torts.—Ames' and Smith's Cases. Four and two credits, respectively, for autumn and winter quarters.

Autumn, M, T, W, Th, 10. Winter, M, W, 10. 309.

AYER

SECOND YEAR

156. Bankruptcy.—Holbrook and Aigler's Cases on Bankruptcy and Selected Cases. Three credits; spring.

T, Th, 8; F, 9. C. 308.

O'BRYAN

180. Damages.—Mechem and Gilbert's Cases on Damages, supplemented by Washington Cases. Three credits; spring.

M, W, F, 8. C. 308.

O'BRYAN

125-126. Equity.—Ames' Cases in Equity Jurisdiction, Volumes I and II. Three credits per quarter; autumn and winter.

M, W, F, 9. C. 308.

AYER

129-130. Evidence.—Wigmore's Cases. Four and five credits respectively, for autumn and winter.

Autumn, Daily 8; winter, M, T, W, Th, 8. C. 308.

CONDON

161. Procedure IV.—This course relates to procedure in civil actions in the Superior Court and is prerequisite to Procedure V. Three credits; autumn.

T, Th, 9; Th, 11. C. 308.

GOODNER

139-140. Property II.—Gray's Cases, Volumes III and V. Four and two credits, respectively, for autumn and winter quarters.

Autumn, M, T, W, Th, 10. Winter, T, Th, 11. C. 314.

BISSETT

142-143. Public Utilities.—Green's Cases on Carriers and Wyman's Cases on Public Service Companies. Three credits per quarter; winter and spring quarters.

M, W, F, 11. C. 308.

LANTZ

138. Quasi-Contracts.—Woodruff's Cases on Quasi-Contracts. Three credits; spring.

T, Th, 9; F, 10. C. 308.

CONDON

146-147. Sales.—Woodward's Cases. Three credits per quarter; winter and spring.

Winter, T, Th, F, 10. Spring, M, W, Th, 10. C. 308.

AYER

NOTE.—Courses in Bills and Notes, Irrigation Law, Mining Law, Negligence, Partnership, Taxation, and Wills, heretofore offered, will not be offered until further notice, except upon petition of students for same and subject to action of the law faculty. Such courses when offered will be in substitution of the foregoing.

THIRD YEAR

165. Admiralty.—Ames' Cases. Three credits; autumn.

M, W, F, 8. C. 314.

LANTZ

168. Conflict of Laws.—Lorenzen's Cases. Five credits; winter.

Daily, 10. C. 314.

LANTZ

170-171. *Constitutional Law*.—Three credits per quarter; winter and spring.

M, 11; T, Th, 9. C. 314.

BISSETT

166. *Office Practice*.—Conveyancing and examination of abstracts, care of a law office generally, drawing wills and contracts, preparation of briefs and office accounts. Spring.

Daily, 8. C. 314.

CONDON

187-188. *Private Corporations*.—Canfield and Wormser's Cases. Four and two credits, respectively, for winter and spring quarters.

Winter, T, W, Th, F, 11. C. 314. Spring, W, F, 9. C. 314.

GOODNER

162. *Procedure V*.—A continuation of Procedure IV, with jury in attendance. Course also includes the taking of appeals to the Supreme Court and practice in the extraordinary legal remedies of habeas corpus, mandamus, quo warranto, and prohibition. Procedure IV is a prerequisite. Autumn.

M, W, 10; T, 11. C. 308.

GOODNER

163. *Procedure VI*.—A course in probate proceedings, covering administration of estates, probate of wills, appointment of guardians, etc. Three credits; autumn.

M, W, F, 11. C. 308.

GOODNER

153. *Property III*.—Gray's Cases on Property (2d ed.), Volume VI. Three credits; autumn.

T, Th, 9; F, 10. C. 314.

BISSETT

191. *Property: Community*.—Washington Statutes and selected cases on community property. Five credits; spring.

Daily, 11. C. 314.

BISSETT

195-196. *Trusts*.—Kenneson's Cases. Three credits per quarter; autumn and winter.

M, W, F, 9. C. 314.

GOODNER

NOTE.—Courses in Insurance, History of the Law, Jurisprudence, Mortgages, Municipal Corporations, and Suretyship, heretofore offered, will not be offered until further notice except on petition of the students, and then in substitution of the foregoing courses and subject to action of the law faculty.

Fifteen hours or credits in each quarter are required, making a minimum total of 135 hours or credits for completion of the law course.

Students are limited to fifteen hours per quarter, except upon special permission of the dean.

COURSES OFFERED IN OTHER COLLEGES AND SCHOOLS

(These courses not counted toward the degree of LL. B.)

54-55-56. *Business Law*.—This course covers the fundamental principles of law. The more general and practical principles are developed from problems and selected cases, particularly as related to the law of contracts, property, agency, negotiable paper, insurance, partnership and corporation, with special lectures as to the statutory regulations. Three credits per quarter; autumn, winter and spring.

ATBR

OTHER INFORMATION

Information on subjects not covered by the foregoing statement will be furnished in answer to communications addressed to the Law School of the University of Washington, University Station, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

JULY, 1919

NO. 127 SECTION 11

LIBRARY SCHOOL

1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

WINLOCK W. MILLER, President	Seattle
Term ends March, 1920	
WILLIAM T. PERKINS	Seattle
Term ends March, 1920	
ELDRIDGE WHEELER	Montesano
Term ends March, 1921	
OSCAR A. FECHTER	Yakima
Term ends March, 1922	
JOHN A. REA	Tacoma
Term ends March, 1922	
WILLIAM A. SHANNON	Seattle
Term ends March, 1923	
RUTH KARR McKEE	Olympia
Term ends March, 1923	

OFFICERS OF ADMINISTRATION THE UNIVERSITY

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ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
WILLIAM ELMER HENRY, A. M.....	Librarian Library
FRANK STEVENS HALL.....	Director of Museum Museum
JAMES GARFIELD FLETCHER, A. B.....	Vocational Secretary Administration Hall

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WILLIAM ELMER HENRY, A. M.....	Director of Library School Library
MILNOR ROBERTS, A. B.....	Dean of the College of Mines Mines Hall
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THE EXTENSION SERVICE

*EDWIN AUGUSTUS START, A. M.....	Director
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

*Absent on leave 1918-1919.

*Absent on leave 1918-19; resigned 1919.

*Detached on special service 1917-19.

*In charge of service 1918-1919; resigned July 31, 1919.

LIBRARY SCHOOL

THE FACULTY

HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.

JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.

WILLIAM ELMER HENRY, A. M. (Indiana), Professor of Library Economy, DIRECTOR.

CHARLES WESLEY SMITH, A. B., B. L. S. (Illinois), Associate Professor of Library Economy.

ELLEN F. HOWE, A. B. (Washington), Graduate in Library Economy (Washington), Certificate (Carnegie Library School), Instructor in Library Economy.

ROBINSON SPENCER, A. B. (Wesleyan University), B. L. S. (Illinois), Instructor in Library Economy.

GERTRUDE E. ANDRUS, Diploma (Carnegie Library School), Superintendent Children's Department, Seattle Public Library, Lecturer on work with schools and children.

THE LIBRARY SCHOOL

The Library School is a graduate professional school established for the purpose of training young men and women in librarianship.

It is made a graduate school because it is believed that the conduct of a library requires a larger and more comprehensive educational equipment and outlook than can be had with less than the equivalent of the bachelor's degree. The library is an educational institution, and cannot be entrusted to persons of only elementary acquirements.

The technical curriculum is but one year in length, based upon the baccalaureate degree, because the general educational equipment of the librarian is of larger significance than the technical training, but neither is sufficient without the other.

The graduates are competent to take charge of the smaller type of public library, or to take an assistant's position in any department of the larger libraries, and after a reasonable experience in either of these two positions have shown themselves competent to conduct libraries of medium size with excellent success.

Admission.—The Library School curriculum is based upon two years of college work (known as the lower division) in either the College of Liberal Arts or the College of Science, as the student may elect.

It consists of a three-year curriculum of liberal arts or sciences and library economy combined, making a five-year curriculum, four of which are academic and one professional. For admission to the Library School, therefore, the student must complete the requirements of the lower division in either the College of Liberal Arts or the College of Science.

CURRICULA

I. Requirements for the Degree of Bachelor of Arts.—The bachelor of arts degree is granted at the end of the senior year to those who have finished the liberal arts requirements of the lower division and who have taken liberal arts electives totaling 192 credits.

The electives taken must include three groups of minors of not less than 24 credits each in the following groups: language and literature; natural sciences; history, political, economic and social sciences; philosophy; psychology, and education.

A subject major is not required.

II. Requirements for the Degree of Bachelor of Science.—The bachelor of science degree is granted at the end of the senior year

to those who have finished the work of the lower division in the College of Science and who shall have earned 192 credits, 90 of which shall be in science under the following restrictions:

A student may select any three of the following sciences and must do the amount of work in any particular science as indicated:

Botany, 24 credits
 Chemistry, 24 credits
 Geology, 24 credits
 Mathematics, 24 credits
 Physics, 24 credits
 Zoology, 24 credits

B. Either included or in addition to the work in (A) every student must take six credits in mathematics, 12 credits in physics, 12 credits in chemistry, 12 credits in botany or zoology.

C. If 24 credits in chemistry are taken, only 18 credits in geology are required.

The following would ordinarily be the most satisfactory combination:

Botany, 24 credits
 Chemistry, 24 credits
 Geology, 18 credits
 Mathematics, 6 credits
 Physics, 12 credits
 Zoology, 6 credits

III. Requirements for the Degree of Bachelor of Library Economy.—The curriculum in library economy, constituting one year of work, consists of 48 credits distributed through the senior and graduate years, 20 credits being earned in the senior year and 28 in the graduate year.

At the end of the graduate or fifth year, or upon the completion of 240 credits, 48 of which must be in library economy, the degree of bachelor of library economy is granted.

CURRICULUM IN LIBRARY ECONOMY

	Credits
Order, accession, and loan systems.....	2
Classification and subject headings.....	3
Cataloging	6
Reference	6
Books and libraries	1
Organization and extension.....	3
Administration	2
Subject bibliography	2
Book selection	7
Work with children and schools.....	2
Special lectures	1
Special study of specific libraries.....	1
Practice (800 clock hours).....	12

Each recitation or lecture period presupposes two hours preparation and twelve such periods are counted as one credit. Two and one-half clock hours of practice count as one recitation or lecture

period, and thirty clock hours of practice are counted as one credit.

No course in this curriculum is open to election by students outside the Library School.

Practice.—Practice work under careful supervision covers 360 practice hours, distributed as six hours per week through five quarters for those who do a part of the work as under-graduates, or 12 hours per week for 30 weeks for those who enter as graduate students and complete the work in three quarters.

The practice time is divided about equally between the University Library and the Seattle Public Library.

The Seattle Public Library offers rather unusual opportunity for students to practice in varied phases of work under careful supervision of trained librarians of large experience.

Graduate Standing.—Graduates of the University of Washington or of other colleges and universities of equal rank may enter the Library School and finish the work and receive the professional degree in one year, upon compliance with the following provisions:

A. No one may be admitted to the senior year or to graduate standing with less than 20 credits each in French and German.

B. Before entering upon the work of the senior year each student must be able to operate a typewriting machine with accuracy and fair speed.

C. If at any time there are more applicants for admission to the Library School than can be adequately cared for, preference will be given to residents of the state of Washington if other qualifications are essentially equal.

ADVISORY SUGGESTIONS

A. No one with serious physical defects or in ill health can readily secure a position in library work, and therefore such persons should not ask admission to the Library School.

B. Persons beyond thirty years of age should not attempt to enter library work, unless they have been continuously engaged in intellectual pursuits since graduating from college.

COURSES OF STUDY

For the work of the lower division and for courses in other departments than that of library economy the sections of the catalogue relating to the Colleges of Liberal Arts and Science and Departments of Instruction should be consulted.

LIBRARY ECONOMY

101. Order Accession and Circulation.—In this course the routine of ordering, receiving, checking, accessioning and mechanical preparation of books and elements of trade bibliography are treated. Also loan administration, covering charging systems, registration of borrowers, circulation of books and circulation records are dealt with. Two credits; autumn. Howe

102. Classification and Subject Headings.—The work in classification is mainly a study of the decimal system. An exercise in classifying selected books follow each lecture with later revision, correction and discussion. Other classification systems are briefly described. Under subject-headings lectures and practice work with selected books are given. Three credits; autumn. Spencer

103-104. Cataloguing.—The course in cataloguing, including book numbers, shelf-listing, alphabeting and name lists consists of lectures, recitations and practice work selected as illustrative examples of rules given in class. The A. L. A. rules are used as a basis for study. Three credits per quarter; winter and spring. Spencer

105-106-207. Reference.—The purpose of these courses is to give a working knowledge of important types of reference books and to develop the power of research. Lectures cover books and methods. Practical problems are assigned and worked out. These courses include also the work with government documents. Two credits per quarter; autumn, winter, spring. Smith

208. Subject Bibliography.—Practical work in the preparation of bibliographic list; lectures on sources and methods of work. Problems cover arrangement and form of entry. One piece of independent bibliographic work is required of each student. Two credits; spring. Smith

109-110-211-212-213. Practice.—Each student is expected to do approximately one hour of practice or laboratory work under expert personal supervision for each class period of instruction as a test of practical ability and as an opportunity to exhibit personality in service. The practice work is given in both the University Library and the Seattle Public Library, and consists of six hours per week for five quarters or twelve hours per week for thirty weeks. Twelve credits; winter and spring quarters of senior year; autumn, winter, and spring of graduate year.

214. Books and Libraries.—Lectures, readings and reports on the evolution of the book and the library. One credit; autumn. Henry

215-216. Library Organization and Extension.—In this course such subjects are treated as legalization and organization of a general library system for city, county or state, as the unit of organization; also the organization of various types of libraries with varying degrees of equipment. One credit, autumn; two credits, winter. Henry

116-217-218-219. Book Selection.—Designed to cultivate taste and judgment in the evaluation of books through a study of the principles of book selection, annotation and book reviewing. One credit, winter quarter of senior year; two credits per quarter, autumn, winter, spring of graduate year. Howe

220. Library Administration and Library Literature.—Lectures, readings and discussions upon library legislation, local taxation, library budget, and all means and instruments for realizing the educational and social functions of the library. Reading and class discussion of the literature of libraries and librarianship, including library periodicals and the publications of library organizations, with special emphasis upon the best papers in the A. L. A. Proceedings for recent years. Two credits; spring. Henry

221. Work with Children and Schools.—This course is planned to meet the needs of general library assistants and librarians in charge of small libraries. It deals with principles of book selection with special attention to choice of books for children of various ages. Students read and discuss children's books with these ideals in mind. Two credits; winter. Andrus

222. Special Lectures by Active Librarians.—Ten lectures are given by as many persons, each upon some vital problem of library service or administration. These persons are selected because of their experience and success in dealing with the problems treated. One credit; spring.

223. Study of a Selected Public Library.—Each student is assigned to make a study of some specific public library reasonably near Seattle, and write a report upon its general policy and plans of organization, extension and administration. One credit; spring. Henry

**THE BULLETIN OF
THE UNIVERSITY OF WASHINGTON**

is published quarterly, with frequent supplementary issues. Once a
year is issued the

CATALOGUE AND ANNOUNCEMENTS

containing the register of officers, faculty and students for the current year and announcements of the several schools, colleges, and departments for the coming year. Separate sections of the Announcements are also published, as follows:

1. ENTRANCE INFORMATION
2. COLLEGE OF LIBERAL ARTS AND COLLEGE OF SCIENCE
3. COLLEGE OF BUSINESS ADMINISTRATION
4. COLLEGE OF EDUCATION
5. COLLEGE OF ENGINEERING
6. COLLEGE OF FINE ARTS
7. COLLEGE OF FISHERIES
8. COLLEGE OF FORESTRY
9. SCHOOL OF JOURNALISM
10. SCHOOL OF LAW
11. LIBRARY SCHOOL
12. COLLEGE OF MINES
13. COLLEGE OF PHARMACY
14. GRADUATE SCHOOL
15. DEPARTMENTS OF INSTRUCTION
16. THE EXTENSION SERVICE

Bulletins are also published containing announcements of

**THE SUMMER QUARTER
PUGET SOUND BIOLOGICAL STATION**

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation, should be addressed to THE REGISTRAR, UNIVERSITY OF WASHINGTON, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

AUGUST, 1919

NO. 127—SECTION 12

COLLEGE OF MINES
1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

UNIVERSITY CALENDAR

1919-1920

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Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
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Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess.....
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations.....
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations.....
.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus Day.....Friday, April 23
Junior Day.....Saturday, May 29
Quarter examinations.....
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's reception.....Saturday, June 19
Baccalaureate Sunday.....June 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration days.....Tuesday and Wednesday, June 22 and 23
Instruction begins.....Thursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

WINLOCK W. MILLER, President.....Seattle
Term ends March, 1920

WILLIAM T. PERKINS.....Seattle
Term ends March, 1920

ELDRIDGE WHEELER.....Montesano
Term ends March, 1921

OSCAR A. FECHTER.....Yakima
Term ends March, 1922

JOHN A. REA.....Tacoma
Term ends March, 1922

WILLIAM A. SHANNON.....Seattle
Term ends March, 1923

RUTH KARR McKEE.....Olympia
Term ends March, 1923

WILLIAM MARKHAM, Secretary to the Board

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WILLIAM ELMER HENRY, A. M.....	Librarian Library
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COLLEGE OF MINES

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JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.
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JOSEPH DANIELS, S. B. (Massachusetts Institute of Technology), M. S. (Lehigh), Associate Professor of Mining Engineering and Metallurgy.
CLARENCE RAYMOND COREY, E. M. (Montana State School of Mines), A. M. (Columbia), Assistant Professor of Mining Engineering and Metallurgy.
IRA A. WILLIAMS, A. M. (Columbia), Assistant Professor of Ceramics.
HEWITT WILSON, Assistant Professor of Ceramics.
HARVEY L. GLENN, B. S. (Iowa State College), Lecturer on Assaying of Bullion.
GUY M. KERR, PH. D. (Goettingen), Lecturer on Copper Smelting.
FREDERICK POWELL, E. M. (Columbia), Lecturer on Gold Dredging.
K. H. CHISHOLM, Foreman Miner in charge of Mines Rescue Training, U. S. Bureau of Mines, Mining Experiment Station.
ERNEST N. PATTY, Assistant in Metallurgy.
EARL ROSCOE WILCOX, Assistant in Mining.

JOHN THOMAS CONDON, LL. M. (Northwestern), Professor of Law.
HENRY KREITZER BENSON, PH. D. (Columbia), Professor of Industrial Chemistry.
TRYBON KINGGAD, A. M. (Washington), Professor of Zoology.
FREDERICK ARTHUR OSBORN, PH. D. (Michigan), Professor of Physics.
ROBERT EDOUARD MORITZ, PH. D. (Nebraska), PH. N. D. (Strassburg), Professor of Mathematics.
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EVERETT OWEN EASTWOOD, C. E., A. M. (Virginia), S. B. (Massachusetts Institute of Technology), Professor of Mechanical Engineering.
DAVID CONNOLLY HALL, Sc. M., M. D. (Chicago), Professor of Physical Education and Hygiene.
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WILLIAM FRANKLIN ALLISON, C. E. (Cornell), Professor of Municipal and Highway Engineering.
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MILLER, JOHN WILLIAM, B. S., C. E. (Nebraska), Assistant Professor of Civil Engineering.
HAROLD EUGENE CULVER, PH. M. (Wisconsin), Assistant Professor of Geology.
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SAMUEL THOMAS BEATTIE, Instructor in Woodwork.
SANDY MORROW KANE, Instructor in Metal Work.
LIVINGSTON WERNECKE, E. M. (Washington), Instructor in Civil Engineering.

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NATHANIEL D. MOORE, General Manager of Pacific Coast Coal Company, Seattle.

¹ Withdrawn.

² Absent on leave, 1919-1920.

* Deceased.

COLLEGE OF MINES

SCOPE AND FACILITIES

Degrees.—The College of Mines offers specialized training in mining engineering, metallurgy, and ceramics. The four-year curricula lead to degrees as follows:

- I. Bachelor of science in mining engineering, B. S. (Min. E.)
- II. Bachelor of science in geology and mining, B. S. (Geol. and Min.)
- III. Bachelor of science in metallurgical engineering, B. S. (Met. E.)
- IV. Bachelor of science in coal mining engineering, B. S. (Coal Mine E.)
- V. Bachelor of science in electrometallurgy, B. S. (E.-Met.)
- VI. Bachelor of science in ceramics, B. S. (Ceramics)

The degree of engineer of mines (E. M.) is given to graduates in mining engineering who have practiced their profession for at least three years and who present a satisfactory thesis. Graduates in metallurgy may receive the degree of metallurgical engineer (Met. E.) under similar conditions, and the appropriate advanced degrees are open to graduates of the other curricula.

Mining and Metallurgical Industries Available for Study.—Excellent opportunities for becoming familiar with mining and metallurgical operations are open to students in the College of Mines. Mining machinery of the best type is in operation within easy reach of the University. Much of the heavy mining machinery used in the neighboring states and Alaska is built in the city of Seattle, while patented machines, such as drills and concentrating tables of all makes, are kept in stock and as working exhibits by the firms that supply the North Pacific coast regions. More than 40 eastern firms dealing in mining equipment make their Seattle branches the distributing center for the Pacific Northwest, British Columbia and Alaska. The application of hydraulic mining methods to city grading is being carried on locally on a very large scale and with the most approved pumping and piping appliances and methods. Equally important to the mining engineer are the operations of the steam shovels, which are used largely now in iron, copper and gold mining. The engineers in charge of these plants have given the mining students every opportunity to become familiar with the methods of planning and carrying on the work, and the same statement applies to the mine operators throughout the state.

A partial list of the other available works of interest includes coal mines and coke ovens, with the largest production west of the Rocky mountains; metal mines of gold, silver, copper, arsenic, antimony, iron, etc.; cement plants, several stone quarries and dressing works; clay mines, clay and pottery works; gravel and sand pits with large production and approved methods; a region of varied geology with many economic minerals; the Tacoma smelters and refineries; the U. S. assay office; the blast furnace plant at Irondale; the West Seattle steel plant

of the Pacific Coast Steel Co., and several plants engaged in electro-metallurgical work.

Mining and Metallurgical Laboratories.—The laboratories of the College of Mines are housed in a two-story building of pressed brick. The main portion of the structure, measuring 50 by 60 feet, contains the offices, library, classrooms, drafting room and museum, as well as laboratories, desks, stockroom and balance room for assaying and general metallurgy. The rear wing, 40 by 66 feet, with tower, is occupied by mining and milling machinery, electric furnaces, and stocks of ore, coals and clays. An addition contains a steel locker room, shower-bath room and a metallographic laboratory.

The metallurgical equipment includes standard size furnaces fired by six methods—coal, coke, gasoline, gas, fuel-oil and electricity. Electric current to the amount of 280 kilowatts is available for experiments in electric smelting. Other important pieces of equipment are a reverberatory furnace, high temperature electric furnace, pyrometers of several types, cyanide equipment, amalgamating devices, blowers, calorimeters, balances, sampling machines, and exhibits of metallurgical processes and products.

The mining equipment consists of an air compressor, receiver, three rock drills, aerial tram, loading and tamping models, hand tools, full equipment for practice in blasting, models, drawings, blueprints, photographs, lantern with 1,600 slides, and collection of ores and minerals. The College of Mines' mill contains breakers, rolls, 3-stamp battery, feeders, screens, classifiers, jigs, six concentrating tables, flotation cells of six types, Dings magnetic separator, coal washing equipment, and accessory apparatus.

Mining Society.—The Mining Society, affiliated with the American Institute of Mining Engineers, has a membership composed of upper-classmen, graduate students and three sophomores, chosen for the excellence of their records in actual mining. At the monthly meetings of the society addresses are made by prominent mining engineers, and papers descriptive of their summer work are presented by the student members.

MINING AND METALLURGICAL RESEARCH

The purpose of this department is to stimulate and encourage development in the mining and metallurgical industry of Washington, the Pacific Northwest and Alaska by research in the special problems presented, and to solve the problems through the efforts of fellowship holders and others studying in the department.

Graduates from suitable technical courses at institutions of recognized standing, or men who present evidence of technical training which has fitted them to undertake investigations, are eligible to enroll in mining and metallurgical research. The degree of master of science may be granted to those students who, holding a suitable bachelor of science degree, complete investigative work in compliance with the Uni-

versity requirements for the master's degree. Although as much latitude as possible will be allowed in the choice of subjects for research, the general topics will be those which are of special importance to this region.

Research Fellowships.—In connection with the department, five research fellowships of \$720 annual value have been established. These fellowships are open to qualified graduates of scientific or technical courses in institutions of recognized standing. Applicants should send a copy of their record from the registrar's office of the college where they have been, or will be, graduated, and the names and addresses of at least three references who know their character, training, and ability. Applications for these fellowships are due not later than June 1st, and should be addressed to the Dean, College of Mines, Seattle, Washington.

Appointees to the fellowships report for duty on July 1, and are required to be on duty during the entire year, except that in case of reappointment for a second year, the fellowship holder is given a vacation from June 15 to July 1.

Fellowship holders are required to register as graduate students in the University of Washington and to become candidates for the degree of master of science in mining engineering, or metallurgy, unless an equivalent degree has been previously earned.

Investigations of Problems.—The University will, under certain conditions, permit mining and metallurgical companies who have special problems for solution, to detail a representative to work on such problems, or to meet the expense of engaging a man to do so. Experiments which can be carried on as readily in commercial laboratories and which do not require direction from the Bureau's experts are not undertaken. The research work shall be under the direction of the department, and complete records of all the data obtained in the investigation of the problems shall be filed with the department, which shall have the right to publish this information for the benefit of the mining and metallurgical industry.

UNITED STATES BUREAU OF MINES SEATTLE MINING EXPERIMENT STATION

The United States Bureau of Mines maintains a mining and metallurgical experiment station for the Pacific Northwest and the coast regions of Alaska at the College of Mines. The headquarters of the station, from which all operations in this territory are directed, are in the Bureau of Mines building, between Mines and Bagley halls. An analytical laboratory is in the same building, while the electric furnaces and other equipment used by the bureau in cooperation with the college are housed in the Mines building. At present the principal investigations being conducted by the station are in ore dressing, electro-metallurgy, and the treatment and uses of coal. Members of the experiment

station staff give occasional lectures to the students of the University on subjects dealing with their special lines of work.

Mines Rescue Training Station.—The Mines Rescue Training Station, opposite Mines Hall, occupies a separate building. The "smokeroom" is the largest of its kind in the country, measuring 25 x 50 feet. Several sets of various types of oxygen rescue and resuscitation apparatus are kept on hand for practice as well as for use in mine rescue work. The purpose of the station is to train miners in the use of oxygen helmets, which are used in cases of mine fires and explosions in both coal and metal mines. From ten days to two weeks' time is required for the course of training. The applicant is taught the construction of the apparatus and is required to wear it for four hours each day, in two periods of two hours each. The practice is carried on in a room filled with gas which cannot be breathed without immediate danger, and the work to be performed is the same as that which would be required in actual mining operations or rescue work. The smokeroom represents a portion of a mine, and is equipped with mine car, track, overcast, timbers and brick. First-aid instruction is also given. Applicants who have completed the course of training receive a certificate from the United States Bureau of Mines.

A one-ton 45-horsepower automobile truck, equipped with rescue apparatus ready for emergency calls, forms part of the equipment of the rescue station.

Instruction for Coal Mining Men.—Miners taking the rescue training also receive instruction in the College of Mines on the subjects of mine gases, explosions and the origin and distribution of Pacific Coast and Alaska coals. Laboratory experiments are carried on to show the methods of analyzing coals and determining the uses to which they may be put. The methods of testing for permissible explosives at the Pittsburg station and the safe methods of charging, tamping, and firing are explained. Coal men interested in the washing of coals are given full practice with the several types of apparatus used for this purpose.

ADMISSION TO FRESHMAN STANDING

A student must offer for admission to freshman standing in the University fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a unit a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following combinations:

8 units of English.

2 units of mathematics (1 unit of algebra, 1 unit of plane geometry).

3 units selected from one of the following groups (or 2 units, if 3 units of mathematics are presented):

(a) Latin and Greek (not less than 2 units of Latin, or 1 of Greek counted).

(b) Modern foreign language (at least 2 units in one language; not less than one unit counted in any language).

- (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
- (d) Physics, chemistry, botany, zoology, general biology, physical geography, geology, physiology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work.)

2 units in subjects represented in the above groups (a)-(d).
 5 units selected from any subjects accepted by an approved high school for its diploma; not more than 4 units, however, may be in vocational subjects.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University it is recommended that a student expecting to enter the College of Mines should elect his work from the groups (a) to (d), so as to offer the following subjects:

Advanced algebra	½ unit
Solid geometry	½ unit
Physics	1 unit

If he shall not have included these subjects in his high school elections, it will be necessary for him to include them among his elections in college.

Full information regarding entrance to the University, registration, requirements, and expenses, may be found in the section of the catalogue entitled Entrance Information, also published as a separate bulletin.

CURRICULA OF THE COLLEGE OF MINES

FIRST AND SECOND YEAR FOR ALL CURRICULA

FRESHMAN

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Math. 51 (algebra).....	3	Math. 52 (trig.).....	3	Math. 53 (analytics).....	3
C. E. 11 (engr. problems)...	3	C. E. 12 (engr. problems)...	3	C. E. 13 (engr. problems)...	3
Chem. 1 or 21 (general)...	5	Chem. 2 or 22 (general)...	5	Chem. 3 or 23 (general).....	5
C. E. 1 (drawing).....	3	C. E. 2 (drawing).....	3	C. E. 21 (surveying).....	3
M. E. 1 (shop).....	1	Min. 20 (timbering).....	1	Min. 21 (timber framing)...	1
Mil. Sci.....	2	Mil. Sci.	2	Mil. Sci.....	2
	<u>17</u>		<u>17</u>		<u>17</u>

Summer camp in mining and topographical surveying (four weeks), 6 credits.

SOPHOMORE

Min. 51 (elements).....	3	C. E. 27 (mine surv.).....	3	Geol. 22 (petrology).....	3
Geol. 5 (engr.).....	5	Geol. 121 (mineralogy).....	3	Physics 99 (engr.).....	5
Physics 97 (engr.).....	5	Physics 98 (engr.).....	5	Chem. 101 (quant.).....	4
Math. 61 (calculus).....	3	Math. 62 (calculus).....	3	Eng. 5 (comp. for engr.)...	3
Mil. Sci.....	2	M. E. 53 (shop).....	1	Mil. Sci.....	2
	<u>18</u>	Mil. Sci.....	2		<u>17</u>

182 + 12

†Mining practice in summer vacations.

MINING ENGINEERING (OPTION I)

JUNIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Min. 101 (milling).....	3	Min. 108 (rescue).....	1	Met. 102 (general).....	5
Met. 101 (fire assay).....	5	Min. 158 (law).....	2	E. E. 121-122 (A. C.).....	5
Geol. 123 (opt. miner).....	3	Geol. 124 (petrog.).....	4	C. E. 142 (hydraulics).....	5
C. E. 131 (mechanics).....	3	E. E. 102 (D. C.).....	3	Min. 106 (June excursion)...	3
	<u>15</u>	C. E. 132 (mechanics).....	3		<u>18</u>

† Mining, metallurgical, or ceramics practice is required of all students during a summer vacation following the sophomore or junior year.

SENIOR

Min. 151 (mining)..... 5	Min. 154 (thesis)..... 2	Min. 152 (ore dressing).... 5
Min. 153 (thesis)..... 1	Met. 157 (design)..... 3	Min. 155 (thesis)..... 2
Met. 151 (gold-silver)..... 3	Met. 162 (metalog.)..... 2	Min. 152 (management) ... 3
Met. 153 (wet assay)..... 3	Geol. 128 (economic)..... 3	Econ. 51 (introduction).... 3
Met. 155 (iron-steel)..... 8	Elective 8	
15	15	15

GEOLOGY AND MINING (OPTION II)

JUNIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Min. 101 (milling)..... 3		Min. 103 (rescue) 1		Met. 102 (general)..... 5	
Met. 101 (fire assay)..... 5		Min. 153 (law) 2		Geol. 125 (adv. petrog.)... 2	
Met. 103 (fuels)..... 3		Geol. 124 (petrog.)..... 4		Geol. (elective)..... 3	
Geol. 123 (opt. miner)..... 3		Zool. 16 (evolution)..... 2		Econ. 1 (general)..... 5	
		Met. 160 (analysis)..... 3		Min. 100 (June excursion).. 3	
		Elective 2			
	14		14		18

SENIOR

Min. 151 (mining)..... 5	Min. 154 (thesis)..... 2	Min. 152 (ore dressing).... 5
Min. 153 (thesis)..... 1	Min. 893 (methods)..... 3	Min. 155 (thesis)..... 2
Met. 151 (gold-silver)..... 3	Met. 162 (metalog.)..... 2	Geol. 132 (paleo.)..... 3
Met. 153 (wet assay)..... 3	Geol. 128 (economic)..... 2	Elective 5
Geol. 127 (economic)..... 3	Geol. 131 (paleo.)..... 3	
	Elective 2	
15	14	15

METALLURGY (OPTION III)

JUNIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Min. 101 (milling)..... 3		Min. 103 (rescue)..... 1		Met. 102 (general)..... 5	
Met. 101 (fire assay)..... 5		Geol. 128 (economic)..... 3		E. E. 121-122 (A. C.)..... 5	
Met. 103 (fuels)..... 3		C. E. 132 (mechanics)..... 3		Econ. 1 (general)..... 5	
C. E. 131 (mechanics)..... 3		E. E. 101-102 (D. C.)..... 3		Min. 106 (June excursion).. 3	
M. E. 105 (mach. shop)..... 1		Elective 3			
	15		15		18

SENIOR

Min. 151 (mining)..... 5	Min. 154 (thesis)..... 2	Min. 152 (ore dressing).... 5
Min. 153 (thesis)..... 1	Met. 104 (copper-lead)..... 3	Min. 155 (thesis)..... 2
Met. 151 (gold-silver)..... 3	Met. 157 (design)..... 3	Met. 163 (metalog.)..... 2
Met. 153 (wet assay)..... 3	Met. 160 (analysis)..... 3	C. E. 142 (hydraulics)..... 5
Met. 155 (iron-steel)..... 8	Met. 162 (metalog.)..... 2	Elective 1
	Met. 165 (calculations)..... 2	
15	15	14

COAL MINING (OPTION IV)

JUNIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Min. 101 (milling)..... 3		Min. 103 (rescue)..... 1		Met. 102 (general)..... 5	
Met. 101 (fire assay)..... 5		Min. 120 (coal resources).. 3		E. E. 121-122 (A. C.)..... 5	
M. E. 8 (mechanism)..... 3		Min. 122 (coal mining)..... 3		C. E. 142 (hydraulics)..... 5	
C. E. 131 (mechanics)..... 3		E. E. 101-102 (D. C.)..... 3		Min. 106 (June excursion).. 3	
M. E. 105 (machine shop)..... 1		C. E. 132 (mechanics)..... 3			
	15		15		18

SENIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Min. 151 (mining).....	5	Min. 154 (thesis)	2	Min. 155 (thesis)	2
Min. 153 (thesis)	1	Min. 171 (gases)	3	Min. 172 (plant)	3
Met. 156 (iron-steel).....	3	Min. 176 (washing)	5	Min. 174 (mach.)	3
M. E. 82 (steam eng.).....	3	Elective	5	Min. 182 (management)....	3
M. E. 340 (exp. eng.).....	3			Econ. 32 (introduction)....	5
	83		15		18

ELECTROMETALLURGY (OPTION V)

JUNIOR
Same as Option III
SENIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Min. 151 (mining)	5	Min. 154 (thesis).....	2	Min. 152 (ore dressing)....	5
Min. 153 (thesis)	1	Met. 104 (copper-lead)....	3	Min. 154 (thesis).....	2
Met. 151 (gold-silver)....	3	Met. 162 (metalog.).....	2	Met. 166 (electro).....	3
Met. 153 (wet assay).....	3	Met. 165 (calculations)....	2	Chem. 204 (electro).....	5
Met. 155 (iron-steel)	3	C. E. 142 (hydraulics).....	5		
		Elective	1		
	15		15		15

CERAMICS (OPTION VI)

JUNIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Cer. 101 (raw materials)...	2	Cer. 102 (raw mat. test.)... 2		Cer. 111 (mfr. clay prod.).. 3	
Met. 153 (wet assay).....	3	Met. 160 (met. anal.)..... 3		Met. 102 (general)..... 5	
Min. 101 (milling).....	3	E. E. 102 (D. E. 34 - (2) 3		E. E. 121 (A. C.)..... 5	
C. E. 181 (mechanics).....	3	C. E. 182 (mechanics)..... 3		Geol. 129 (field meth.).... 2	
Geol. 123 (opt. min.).....	3	Geol. 124 (petrog.)..... 4		Min. 106 (June excursion).. 3	
	15		15		18

SENIOR

Cer. 151 (clay prod. lab.)..	5	Cer. 173 (cements, limes).. 4		Cer. 164 (field work)..... 2	
Cer. 152 (clay prod. test)..	2	Cer. 182 (glasses, glazes).. 3		Cer. 183 (enamels)..... 3	
Cer. 161 (thesis).....	2	Cer. 162 (thesis).....	3	Cer. 163 (thesis).....	3
Met. 103 (fuels).....	3	Min. 151 (mining)	5	Min. 182 (management)....	3
Geol. 127 (economic).....	3			Elective	4
	15		15		15

I. MINING

20. *Mine Timbering*.—Materials and methods used in timbering shafts, tunnels, and drifts in hard and soft ground. Particular attention is paid to those methods used by military engineers. One credit per quarter; winter. Associate Professor Daniels

21. *Mine Timber Framing*.—Shop practice in framing mine timbers. One laboratory period. Laboratory deposit, \$2. One credit; spring. Daniels

51. *Elements of Mining*.—A general study of the field of mining, considering prospecting, boring, drilling, explosives, rock breaking, methods of development and working, transportation and drainage. Prerequisite, sophomore standing. Three credits; autumn. Daniels

101. *Milling*.—A preliminary course designed to familiarize all students in the department with the principles and uses of the various types of crushing, sampling, concentrating and washing machinery in

the Mines Building. Prerequisite, junior standing. Two recitations and one laboratory period. Laboratory deposit, \$3. Three credits; autumn. Professor Roberts

103. *Mine Rescue Training*.—Twenty-five hours of instruction. Practice in the care and use of oxygen rescue apparatus, smokeroom training, and first-aid-to-the-injured work in the U. S. Bureau of Mines Rescue Station. Required of all students in the College of Mines. One credit; winter. Daniels, Chisholm

106. *Mining Excursion*.—A two-weeks excursion taken in June of each year to a neighboring mining region; detailed examinations of mining and metallurgical industries. Expenses, \$20 to \$40. Three credits; spring. Roberts, Daniels, Assistant Professor Corey

120. *Coal Resources of North America*.—The occurrence of coal in North America with especial reference to geographic and geologic distribution and structure; classification and commercial requirements of coals. Prerequisite, course 51. Three credits; winter. Daniels

122. *Coal Mining Methods*.—Prospecting and development. A detailed study is made of a nearby mine. Prerequisite, courses 51, 120. Daniels

151. *Mining Engineering*.—Lectures on exploration, mine development and operation, with mining costs, power generation, air compression, hoisting and transportation. Practice with air compressors, machine drills and mine equipment in laboratories and local plants. Prerequisite, senior standing. Three recitations, one laboratory period and excursions. Laboratory deposit, \$3. Five credits; autumn. Roberts

152. *Ore Dressing*.—A detailed study of certain branches of ore dressing accompanied by mill tests of ores checked by assays. Prerequisite, senior standing. Three recitations and two laboratory periods. Laboratory deposit, \$5. Five credits; spring. Roberts, Daniels

153. *Thesis Outline*.—The outlining of senior thesis, the gathering of material, study of references, making of drawings, maps, etc. See course 154-155. Prerequisite, senior or graduate standing. One laboratory period. One credit; autumn. Roberts, Daniels, Corey

154-155. *Thesis*.—A continuation of course 153. Weekly consultation and seminars. Prerequisite, course 153. A deposit of \$5 or \$10 will be required to cover cost of materials and equipment in thesis work involving the use of mining or metallurgical equipment. Two laboratory periods. Two credits per quarter; winter and spring. Roberts, Daniels, Corey

158. *Mining Law*.—A series of lectures on the mining laws of the United States and Alaska; illustrated by diagrams and mine maps. Two lectures. Two credits; winter. O'Bryan

162. *Mining Methods*.—An advanced study of mining methods. Prerequisite, senior or graduate standing. Three credits; winter. Roberts

163. Mine Operation.—The complete operations at a few typical mines, including mining, transportation and treatment of ore, disposal of products, company finances and management. Illustrated by ores and products, maps and photographs, cost sheets, engineering and financial reports of the mines studied. Prerequisite, senior or graduate standing. Three credits; spring. Roberts

171. Mine Gases and Ventilation.—Composition and properties of mine gases, methods of testing; lighting of mines; principles of ventilation; ventilating machinery. Prerequisite, course 122. Three recitations. Three credits; winter. Daniels

172. Coal Mining Plant.—Design of plant and machinery employed in mining and preparing coal for market. Prerequisite, senior standing. Three drafting periods. Three credits; spring. Daniels

174. Coal Mining Machinery.—Study of coal cutting machines, mine locomotives, fans, hoists, pumps and tippie or breaker machinery with especial reference to application to coal mining. Prerequisite, senior standing. Three recitations; three credits; spring. Daniels

176. Coal Washing.—Methods of preparing coal for market, together with laboratory tests and runs on various coals to determine best methods of preparation. Prerequisite, course 101, Met. 103. Three recitations and two laboratory periods. Laboratory deposit, \$5. Five credits; winter. Daniels

182. Mine Management.—The organizations and administration of engineering plants, involving the keeping and interpretation of cost accounts, the efficiency of labor and methods, the financial, legal and social aspects of engineering operation. Prerequisite, senior standing. Three recitations. Three credits; spring. Daniels

201-202-203. Seminar.—Lectures and discussions by Bureau of Mines staff, College of Mines faculty and fellows. Required of Bureau of Mines fellowship holders. Prerequisite, senior or graduate standing. One credit; autumn, winter, spring. Roberts

II. METALLURGY

101. Fire Assaying.—The testing of reagents, the crushing, sampling and assaying of ores, furnace and mill products. Prerequisite, Chemistry 101. One recitation and three laboratory periods. Laboratory deposit, \$20. Five credits; autumn. Corey, Glenn, Patty

102. General Metallurgy.—The properties of metals and alloys, fuels, refractory materials, furnaces, and the extraction of the common metals from their ores. Visits to smelters. Prerequisite, course 101. Three recitations and two laboratory periods. Laboratory deposit, \$10. Five credits; spring. Corey, Kerr

103. Metallurgical Fuels.—The analysis of fuels and a consideration of the most effective utilization of the country's present supplies. Prerequisite, junior standing. Two recitations and one laboratory period. Laboratory deposit, \$5. Three credits; autumn. Daniels

104. *Copper and Lead.*—The metallurgy of copper and lead, especially the methods of roasting, smelting and refining. Prerequisite, junior standing. Three credits; spring. Corey

106. *Refractories.*—Methods of testing clays, refractory materials, cement-making materials. One recitation and one laboratory period. Laboratory deposit, \$5. Two credits; spring. Corey

151. *Gold and Silver.*—Amalgamation, cyaniding and chlorination of gold and silver ores. Prerequisite, course 102. Three credits; autumn. Corey

153. *Wet Assaying.*—Technical methods for the determination of copper, lead, zinc, etc., in ores and furnace products. For students in ceramics, the analysis of clays and ceramic products. Prerequisite, course 102, Chemistry 101. One recitation and two laboratory periods. Laboratory deposit, \$12. Three credits; autumn. Corey

155. *Iron and Steel.*—The metallurgy and manufacture of commercial iron and steel, with especial reference to their properties and uses in engineering work. Prerequisite, junior standing. Three recitations. Three credits; autumn. Daniels

157. *Design of Plant.*—The designing of a piece of equipment or a structure for mining, milling, or metallurgical purpose. Prerequisite, senior or graduate standing. Three drafting periods. Three credits; spring. Roberts, Daniels

158. *Minor Metals.*—The metallurgy of zinc, antimony, tin, aluminum, nickel, etc.; a study of the plant required, the methods and costs of treatment. Three credits; winter. Corey

160. *Metallurgical Analysis.*—Technical methods of analysis of slags and industrial products. Prerequisite, Chemistry 101. One recitation and two laboratory periods. Laboratory deposit, \$12. Three credits; winter.

162. *Metallography.*—The constitution and microstructure of metals and alloys, especially iron and steel. Prerequisite, junior standing. Two recitations. Two credits; winter. Daniels, Corey

163. *Metallography.*—The preparation and study of metal sections, photomicrography and the use of the microscope to aid in testing industrial alloys. Two laboratory periods per week. Laboratory deposit, \$5. Two credits; spring. Corey

164. *Pyrometry and Alloys.*—Methods of measuring high temperatures; union of metals by fusion, compression and electro-deposition; the behavior of metals and alloys under heat. Laboratory practice in thermal measurements, synthesis and testing of alloys. One recitation and one laboratory period. Laboratory deposit, \$5. Two credits; spring. Corey

165. *Metallurgy Calculations.*—Physical chemistry for the metallurgist, slag calculations, etc., illustrated by figures quoted from the present practice at a number of smelting plants. Prerequisite, course 102, Chemistry 101. Two credits; winter. Corey

166. *Electro-Metallurgy.*—A study of methods and practice with special consideration of the possibilities of electrometallurgical indus-

tries in the Pacific Northwest. Prerequisite, senior or graduate standing. Three credits; spring.

Thesis.—See Mining 153 and 154-155.

Summer Field Work.—See Mining 106.

III. CERAMICS

101. *Ceramic Raw Materials.*—The occurrence, properties and winning of clays, shales, limestones, silica and other ceramic raw materials. Two credits; autumn.

102. *Raw Materials Testing.*—Laboratory and occasional lectures. Laboratory deposit, \$3. Prerequisite, Ceramics 101. Two credits; winter.

105. *Pottery.*—Compositions and properties of materials used in making pottery and glazes. Prerequisite, junior standing. Optional for students in Fine Arts. Two credits; autumn.

111. *Manufacture of Clay Products.*—Principles governing the manufacture of clay wares; equipment, drying, and burning. Three credits; spring.

121. *Ceramic Calculations.*—Calculations involved in the blending of raw materials for pottery bodies, glazes, enamels, etc. Practical ceramic problems. One credit; spring.

151. *Clay Products Laboratory.*—Practice in the actual processes of manufacture of the various clay wares. Prerequisite, course 111. Two recitations and three laboratories. Laboratory deposit, \$7. Five credits; autumn.

152. *Clay Products Testing.*—Requisite qualities of structural clay products and refractories. Standard tests. One recitation and one laboratory. Laboratory deposit, \$3. Two credits; autumn.

161. *Thesis.*—A detailed study of some special or original ceramic problems. Prerequisite, senior or graduate standing. Laboratory and conference. Laboratory deposit, \$5 to \$10, depending upon the nature of the work. Two credits; autumn.

162-163. *Thesis.*—A detailed study of some special or original ceramic problem. Prerequisite, senior or graduate standing. Laboratory and conference. Laboratory deposit, \$5 to \$10 per quarter, depending upon the nature of the work. Three credits per quarter; winter, spring.

164. *Field Work.*—Visits to and reports upon individual plants. Prospecting trips. Two credits; spring.

172. *Cements and Limes.*—Lime, Portland cement, plaster and other cementing materials, and sand-lime products. Production, properties, and uses. Four lectures. Four credits; winter.

182. *Glasses and Glazes.*—Classification, production, properties and defects. Application to ceramic wares. Two lectures and one laboratory. Laboratory deposit, \$3. Three credits; winter.

183. *Enamels.*—Composition and properties of enamels. Application to clay and metal wares. Prerequisite, course 311. Three credits; spring.

IV. MINING AND METALLURGICAL RESEARCH

THE TECHNICAL STAFF OF THE UNITED STATES BUREAU OF MINES MINING EXPERIMENT STATION IN CO-OPERATION WITH THE INSTRUCTORS IN THE COLLEGE OF MINES

Class work will be directed by members of the instructional staff of the University. The research work is under the joint direction of the United States Bureau of Mines and the College of Mines. The subjects of research relate to the mining and metallurgical industries of the state and adjacent regions.

During the coming year investigations are contemplated in the following subjects:

1. Ore treatment, especially flotation.
2. The preparation and utilization of coal
3. Ceramics.
4. Electrometallurgy.

SUBJECTS GIVEN BY DEPARTMENTS OF OTHER COLLEGES

Chemistry 1, 2, 3.—General Chemistry. Five credits per quarter; autumn, winter, spring.

21, 22, 23.—General Chemistry. Five credits per quarter; autumn, winter, spring.

101-102-103.—Quantitative Analysis. Four credits per quarter; autumn, winter, spring.

204.—Electro-Chemistry. Five credits; spring.

Economic and Business Administration.—Available courses in this department may be found in the section Departments of Instruction.

Engineering, Civil, 1, 2.—Engineering Drawing. Three credits per quarter; any quarter.

English 5, 6.—Composition for Engineers. Three credits; autumn, winter.

11, 12, 13.—Engineering Problems. Three credits per quarter; any quarter.

21.—Plane Surveying. Three credits; any quarter.

131, 132.—Mechanics. Three credits; any quarter.

142.—Hydraulics. Five credits; spring.

Engineering, Electrical, 99-100.—Direct Currents. Four credits; any quarter; laboratory, two credits; any quarter.

121.—Alternating Currents. Four credits; autumn or winter.

Engineering, Mechanical, 1, 2, 3.—Woodwork. One credit per quarter; autumn, winter, spring.

53, 54, 55.—Metalwork. One credit per quarter; autumn, winter, spring.

82.—Steam Engineering. Three credits; any quarter.

83.—Steam Engineering Laboratory. Three credits; any quarter.

105-106-107.—Metalwork. One credit per quarter; autumn, winter, spring.

- Geology 5.*—Engineering Geology. Five credits; autumn or spring.
21.—Mineralogy. Five credits; winter.
31.—General Paleontology. Five credits; autumn or spring.
32.—Stratigraphic Paleontology. Five credits; winter.
120.—Petrology. Three credits; spring.
123.—Optical Mineralogy. Three credits; autumn.
124.—Petrography. Four credits; winter.
125.—Advanced Petrography. Two credits, with additional credits optional; spring.
127-128.—Economic Geology. Five credits per quarter; winter, spring.
- Law 54-55-56.*—Business Law. Three credits; autumn, winter, spring.
- Mathematics 51.*—Algebra. Three credits; any quarter.
52.—Plane Trigonometry. Three credits; any quarter.
53.—Analytical Geometry. Three credits; any quarter.
61-62-63.—Calculus. Three credits per quarter; autumn, winter, spring.
- Military Science and Tactics.*—A course of two years in military training is required. All able-bodied male students except those from foreign countries, not intending to become naturalized, must take the course, which by regulation of the University is required during the first and second years. Furthermore, every male undergraduate student is required to take physical exercise or athletics during each week of his attendance at the University, unless excused by his dean and the physical director.
- Modern Languages.*—For description of courses in modern languages see the statements of the modern language departments in the section Departments of Instruction.
- Physics 97-98-99.*—Physics for Engineers.
- Zoölogy 16.*—Evolution. Two credits; autumn.

WINTER SESSION FOR MINING MEN

The twenty-fourth annual short session for mining men will open on January 5, 1920, and continue until March 25. During this period each year twelve of the instructors in mining engineering offer a course for the benefit of persons who are interested in prospecting, mining, milling, assaying or smelting. Admission to the class is without examination. No previous preparation, training, or mining experience is necessary to enter the course, other than ability to read and write English. Many practical men with an interest in some branch of mining but without much education have obtained satisfactory results from the course; others with a college education and mining experience have gained much up-to-date training and information. The past experience and future aims of each student are taken into consideration, and the character of his work arranged accordingly. Prospectors and mining men may bring in their own ores and minerals

for study, for assay, or for concentration tests, by ordinary wet methods or by flotation.

Instruction is given by lectures, laboratory exercises, and visits to mines and plants in operation. Each year a group of mining men is engaged to give special lectures during the period of the short session. These men represent the fields of coal, quartz and placer mining, dredging, milling and smelting.

Three general groups of studies are offered: (1) quartz mining; (2) placer mining; (3) coal mining.

1. *Quartz Mining*.—For men interested in quartz or lode mining, the course outlined consists of geology, mineralogy, mining, milling, field trips, mining law, surveying, chemistry and fire assaying. Optional subjects are forge and foundry, mine timber framing, and mine rescue and first-aid training.

2. *Placer Mining*.—The placer mining group embraces surveying, hydraulic mining, placer mining, geology, mineralogy, mining, milling, mining law, and forge and foundry.

3. *Coal Mining*.—For coal miners the courses consist of coal analysis, coal washing, gas and lamp testing, mine rescue and first-aid training, chemistry, geology, mineralogy and surveying.

GENERAL INFORMATION

Full descriptions of all these subjects are given in the following pages. Students need not enroll for all the subjects listed in a group and changes in the choice of subjects in each group may be made, depending on the individual circumstances. For students who return a second year, special courses are arranged in continuation of their previous work.

No charges are made in the course, except the tuition fee of \$10 required of all students in the University, but each student makes deposits for laboratory supplies actually used and also buys his own books. The deposits in the various courses are stated under the description of the subjects. Books and supplies cost on the average about \$10. The total cost of the full course is less than \$30 in the placer group for the three months and \$50 in the quartz mining studies. All deposits are made at the beginning of the course.

Rooms and board may be obtained in the university district at reasonable cost. The University operates a cafeteria, the cost of board averaging about \$20 per month. Several good restaurants are located close to the University. A list of boarding- and rooming-houses is kept on file at Mines Hall for the benefit of prospective students. The use of library, gymnasium, showers and the privilege of attending lectures, concerts and assemblies, are open to all winter session students.

Students who satisfactorily complete a course of study are given upon request a certificate stating the amount and character of the work done.

TIME SCHEDULE, WINTER SESSION, COLLEGE OF MINES

	8:00	9:00	10:00	11:00	1:00-5:00
Mon.	Milling DANIELS Mines Hall	Geology, CULVER Science Hall	Mineralogy CULVER, Science Hall		Survey Field Work, Mines Hall or Forge and Foundry. KANE Foundry Bldg.
Tues.	Mining Law O'BRYAN Commerce Hall	Mining, ROBERTS Mines Hall	Chemistry BENSON Bagley Hall	Milling DANIELS Mines Hall	Mining & Milling Laboratory Mines Hall
Wed.	Surveying Mines Hall	Geology, CULVER Science Hall	Mineralogy CULVER, Science Hall		Fire Assaying Laboratory COREY Mines Hall
Thurs.	Mining Law D'BRYAN Commerce Hall	Mining, ROBERTS Mines Hall	Chemistry BENSON Bagley Hall	Fire Assaying COREY Mines Hall	Fire Assaying Laboratory COREY Mines Hall
Fri.	Surveying Mines Hall	Mining, ROBERTS Mines Hall	Chemistry BENSON Bagley Hall	Milling DANIELS Mines Hall	Chemistry Labor- atory, BENSON Bagley Hall
Sat.	Surveying field work or field trips.			(Time of other courses to be arranged)	

SUBJECTS IN THE WINTER MINING SESSION

Mining S. C. 1.—Lectures on prospecting, development, boring, air-compression, drilling, mining systems, timbering and transportation. Practice in air-compression, machine drilling and sampling. Study of mine maps, ore deposits and mining districts. Three lectures and one laboratory period per week. Roberts

Mining S. C. 2.—Milling. Lectures and recitations on ore treatment and concentration. Laboratory practice in ore sampling, testing, and dressing, using breakers, rolls, screens, stamp battery, tables, vanners, jigs, electromagnetic and flotation machinery. Three lectures and one afternoon per week. Laboratory deposit, \$3. Daniels

Mining S. C. 3.—Placer Mining. Lectures and laboratory work in methods of placer mining. Laboratory practice in panning, sluicing, amalgamating, retorting, assaying of bullion. Lectures on testing and valuing placer ground, methods of operation, thawing, sluicing, dredging. Study of formation of placers and of type localities. Laboratory deposit, \$3. Two lectures and one afternoon per week.

Mining S. C. 4.—Field Trips. An outline study of the operations at neighboring mines, mills, and smelters; geological field studies, followed by laboratory practice on the rocks and minerals found. Saturdays. Roberts, Daniels, Corey

Metallurgy S. C. 1.—Fire Assaying. Lectures on sampling, preparing ores for assay, furnaces, fuels, reagents, and the fire assay of gold, silver and lead ores. The laboratory work includes the testing of reagents, and the assaying of various ores. One lecture and two afternoons a week in laboratory. Laboratory deposit, \$20. Corey

Metallurgy S. C. 2.—A study of the principles of metallurgy for the benefit of those who are engaged in the metal trades or in the mining of ores requiring smelter treatment. Two lectures and one afternoon a week. Laboratory deposit, \$5. Corey

Metallurgy S. C. 3.—Wet assaying. Technical methods for the determination of copper, lead, zinc, etc., in ores and smelter products. Two afternoons a week. Laboratory deposit, \$12. Corey

Chemistry S. C. 4.—General Chemistry and Qualitative Analysis. Laboratory practice in the determination of the common elements. Three lectures a week, and one laboratory. Laboratory deposit, \$7. Benson

Geology S. C. 2.—Mineralogy. Instruction and practice in blow-pipe analysis, with lectures upon the common minerals, and practice in the identification of minerals by field tests. Two two-hour laboratory periods per week. Laboratory deposit, \$2.

Geology S. C. 3.—Elements of Geology. Lectures on the elements of geology, the common varieties of rocks, ore deposits, etc. Two lectures per week.

Mining Law.—A series of lectures on the mining laws of the United States and Alaska. Illustrated by drawings and mine maps. Two lectures per week. O'Bryan

Surveying (C. E. 33).—Instruction and field practice in the use of simple instruments for making underground and surface surveys; the elements of drawing, lettering, sketch-mapping and field notes; the rules governing mineral surveys. Two lectures and two laboratory periods per week. Laboratory deposit, \$3. Wernecke

Hydraulic Mining (C. E. 144).—The elements of hydraulics; the flow and measurement of water in pipes, flumes and ditches with special reference to placer mining. Two lectures a week. Harris

Forge.—Practice in sharpening and tempering drill steel and picks; systematic training in the making and care of fires, and the application of various heats, drawing, punching, riveting, bending, twisting, upsetting, welding iron and steel, and making and tempering machine tools. Laboratory deposit, \$2. One afternoon a week. Kane

Mine Timber Framing.—Shop practice in framing and erecting the principal types of timbers employed in mining operations. Laboratory deposit, \$2. One afternoon a week. Daniels

Mining 103.—Mine Rescue Training. Twenty-five hours' instruction. Practice in the care and use of oxygen rescue apparatus, smoke-room training, and first-aid-to-the-injured at the U. S. Bureau of Mines Rescue Station. Daniels, Chisholm

THE BULLETIN OF
THE UNIVERSITY OF WASHINGTON

is published quarterly, with frequent supplementary issues. Once a year is issued the

CATALOGUE AND ANNOUNCEMENTS

containing the register of officers, faculty and students for the current year and announcements of the several schools, colleges, and departments for the coming year. Separate sections of the Announcements are also published, as follows:

1. ENTRANCE INFORMATION
2. COLLEGE OF LIBERAL ARTS AND COLLEGE OF SCIENCE
3. COLLEGE OF BUSINESS ADMINISTRATION
4. COLLEGE OF EDUCATION
5. COLLEGE OF ENGINEERING
6. COLLEGE OF FINE ARTS
7. COLLEGE OF FISHERIES
8. COLLEGE OF FORESTRY
9. SCHOOL OF JOURNALISM
10. SCHOOL OF LAW
11. LIBRARY SCHOOL
12. COLLEGE OF MINES
13. COLLEGE OF PHARMACY
14. GRADUATE SCHOOL
15. DEPARTMENTS OF INSTRUCTION
16. THE EXTENSION SERVICE

Bulletins are also published containing announcements of

THE SUMMER QUARTER
PUGET SOUND BIOLOGICAL STATION

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation, should be addressed to THE REGISTRAR, UNIVERSITY OF WASHINGTON, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

JUNE, 1919

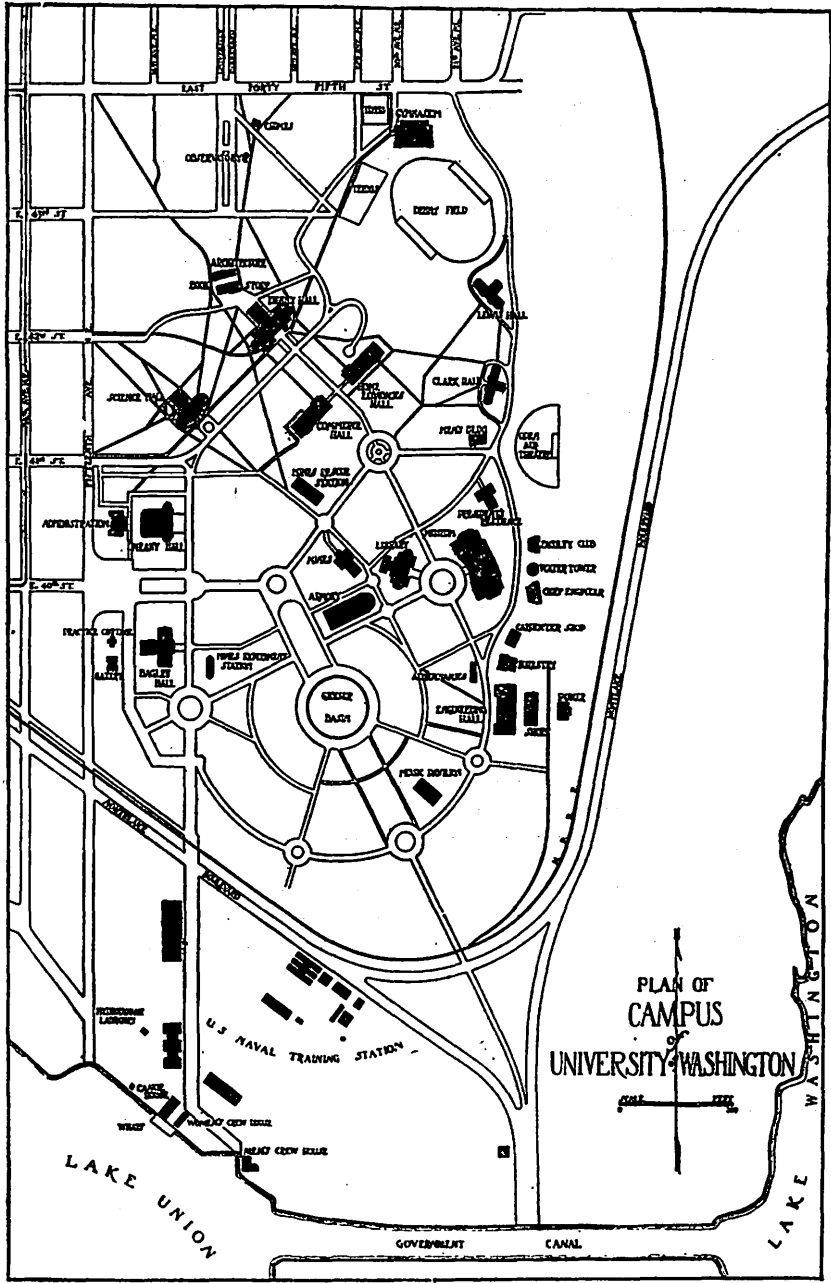
NO. 127—SECTION 13

COLLEGE OF PHARMACY

1919-1920



SEATTLE, WASHINGTON
PUBLISHED BY THE UNIVERSITY
1919



PLAN OF
 CAMPUS
 of
 UNIVERSITY OF WASHINGTON

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LAKE UNION
 LAKE WASHINGTON
 GOVERNMENT CANAL

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

THE BOARD OF REGENTS

WINLOCK W. MILLER, President	Seattle
Term ends March, 1920	
WILLIAM T. PERKINS	Seattle
Term ends March, 1920	
ELDRIDGE WHEELER	Montesano
Term ends March, 1921	
OSCAR A. FECHTER	Yakima
Term ends March, 1922	
JOHN A. REA	Tacoma
Term ends March, 1922	
WILLIAM A. SHANNON	Seattle
Term ends March, 1923	
RUTH KARR MCKEE	Olympia
Term ends March, 1923	

OFFICERS OF ADMINISTRATION

THE UNIVERSITY

HENRY SUZZALLO, Ph. D., LL. D.....	President of the University Administration Hall
JOHN THOMAS CONDON, LL. M.....	Dean of Faculties Administration Hall
HERBERT THOMAS CONDON, LL. B.....	Comptroller Administration Hall
EDWARD NOBLE STONE, A. M.....	Registrar Administration Hall
EDWIN BICKNELL STEVENS, A. M.....	Executive Secretary Administration Hall
*ARTHUR RAGAN PRIEST, A. M.....	Dean of Men Administration Hall
ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
WILLIAM ELMER HENRY, A. M.....	Librarian Library
FRANK STEVENS HALL.....	Director of Museum Museum
JAMES GARFIELD FLETCHER, A. B.....	Vocational Secretary Administration Hall

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HENRY LANDES, A. M.....	Dean of the College of Science Science Hall
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JOHN NATHAN COBB.....	Director of the College of Fisheries Commerce Hall
HUGO WINKENWERDER, M. F.....	Dean of the College of Forestry Forestry Hall
*COLIN VICTOR DYMENT, B. A.....	Director of the School of Journalism Commerce Hall
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THE EXTENSION SERVICE

*EDWIN AUGUSTUS START, A. M.....	Director
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director Administration Hall

¹Absent on leave 1918-1919.²Absent on leave 1918-19; resigned 1919.³Detached on special service 1917-19.⁴In charge of service 1918-1919; resigned July 31, 1919.

COLLEGE OF PHARMACY

THE FACULTY

- HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES.
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FOREST J. GOODRICH, PH. C., M. S. (Washington), Instructor in Pharmacy.
CORNELIUS OSSEWARD, PH. G. (Columbia), PH. C. (Northwestern), Lecturer on Commercial
Pharmacy.
MARIA Y. OROSA, PH. C. (Washington), Assistant State Chemist.
JAMES THOMPSON, B. S. (Minnesota), Specialist U. S. Bureau of Plant Industry.
-
- HORACE G. BYERS, PH. D. (Johns Hopkins), Professor of Chemistry.
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ROBERT EDOUARD MORITZ, PH. N. D. (Strassburg), Professor of Mathematics.
LESLIE J. AYER, J. D. (Chicago), Professor of Law.
ERNST OTTO ECKELMAN, PH. D. (Heidelberg), Assistant Professor of German.
JOHN WEINZIRL, PH. D. (Wisconsin), Professor of Bacteriology.
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ELI VICTOR SMITH, PH. D. (Northwestern) Assistant Professor of Zoology.
GEORGE BURTON RIGG, PH. D. (Chicago), Assistant Professor of Botany.
FRED H. HEATH, PH. D. (Yale), Assistant Professor of Chemistry.

COLLEGE OF PHARMACY

The College of Pharmacy was organized in 1894 for the purpose of offering an opportunity to young men and women to become well trained practical pharmacists. The work of the two year course as first organized has been extended to three, four and five year courses. In the two and three year courses a complete training is offered in technical and commercial pharmacy; in the four year course an opportunity for training in more advanced scientific pharmacy together with a liberal training in other sciences and in languages. The five year or graduate course offers an opportunity to do research work in one of the most fertile fields of modern science.

The students in pharmacy share the advantage and enjoy the spirit of one of the foremost educational institutions of the Pacific Coast.

Requirements to Practice Pharmacy in Washington.—To become a registered pharmacist, one must be twenty-one years of age and must be a graduate of at least a two year course in a college of pharmacy recognized by the Washington State Board of Pharmacy. This board recognizes such colleges as hold membership in the American Conference of Pharmaceutical Faculties and such foreign colleges as meet the requirements of the conference.

Graduates of the two year course of the College of Pharmacy are admitted as registered pharmacists without examination, providing they have had two years of practical experience, and of the three year course providing they have had one and one-half years of practical experience.

Graduates of the four year course of the College of Pharmacy are admitted as registered pharmacists without examination, providing they have had one year of practical experience.

Graduates of any course of the College of Pharmacy who have not had practical experience are admitted without examination as assistant registered pharmacists and serve as such until they have received the required practical experience for full registration.

Assistant registered pharmacists may work under the direction of a registered pharmacist and may take charge of a store only during his temporary absence.

Higher Standard in Pharmacy.—Never have opportunities in pharmaceutical vocations been so great as at the present time. Rapid advances are being made in educational requirements to practice pharmacy. Many states now require graduation from a college of pharmacy as a prerequisite to become a registered pharmacist. In the Northwest, the states of Montana, Oregon and Washington now have the educational requirement. The National Association of Boards

of Pharmacy at its 1915 meeting recommended that in 1920 all state boards holding membership in the organization should require graduation as a prerequisite for registering pharmacists. This advance in the requirements for the practice of pharmacy is certain to make the profession more attractive.

The American Conference of Pharmaceutical Faculties.—The College of Pharmacy is a member of the American Conference of Pharmaceutical Faculties. The objects of the conference are: to promote closer relations between the several colleges of pharmacy of the United States, to standardize pharmaceutical education and to encourage a higher standard of proficiency for members of the profession.

GENERAL INFORMATION

Garden of Medicinal Plants.—For several years the College of Pharmacy has maintained on the campus a garden in which plants of pharmaceutical importance have been cultivated. The area and scope of this garden have been gradually extended, until the college now has a very complete collection of medicinal plants which furnishes valuable material for classes in botany, materia medica and drug assay.

The bureau of plant industry of the United States Department of Agriculture has, for some time, taken an active interest in the garden and has rendered valuable assistance in its maintenance. During the season of 1918 the bureau will extend this cooperation by detailing a specialist in scientific drug plant cultivation to be stationed at the college. This specialist will give his full time to the management and supervision of the garden. It is expected that with the large area now under cultivation, and with the active cooperation of the bureau of plant industry, substantial progress will be made in the solution of problems connected with the cultivation of medicinal plants on a commercial scale.

Service to Pharmacists of the State.—It is the desire of the college to render every possible service to the pharmacists of the state. We therefore invite the pharmacists to write us in regard to their prescription difficulties. Many pharmacists are now availing themselves of this privilege, and it is our wish to extend this service to the entire profession.

Food and Drug Analysis.—The enactment of the Food and Drug Act by Congress, and of similar legislation by most of the states (Washington included), has given great importance to pharmaceutical education. It is at once apparent that a knowledge of drugs is equally important with chemistry in the administration and enforcement of this legislation. The graduate in chemistry is not wholly qualified to act as a food and drug inspection chemist for the government, states, private individuals, and corporations, if he is not trained

in those subjects included in the collective name of pharmacy. These allied subjects are: Theory and practice of pharmacy, manufacturing pharmacy, drug assaying, pharmaceutical botany, study of the United States Pharmacopœia and National Formulary, pharmacognosy, materia medica and therapeutics, etc., A great many pharmaceutical chemists are needed to carry out the analytical processes involved in the enforcement of this legislation, but the number of men adequately trained is very limited. Students with high school training are urged to consider these opportunities and to prepare themselves for such positions. The Dean of the College of Pharmacy is chemist for the Washington State Department of Agriculture and is also in close touch with the government food and drug work. Courses are offered that will fit students for this line of work.

Expenses.—(a) The tuition fee is \$10 per quarter. Students who have served in the United States army or navy during the war, or as nurses in either branch of the service, are exempt by law from payment of this fee.

(b) The laboratory deposits for freshmen in the autumn quarter are \$12; winter quarter \$12; spring quarter \$8. Deposits for sophomores in the two year courses in the autumn quarter are \$10; winter quarter \$12.50; spring quarter \$12.50. In addition the student must purchase a breakage ticket costing \$5.

(c) Associated Student fee \$5 per year.

(d) Cost of books will average about \$15 per year.

The students pay only the actual cost of the drugs and chemicals used; the remainder of the deposit, less breakage, is returned at the end of the quarter.

The Associated Student fee of \$5 is paid by every student of the University. This entitles the student to a subscription to the University of Washington Daily and free admission to all athletic, debating and oratorical contests given under the auspices of the Associated Students of the University of Washington, the annual music concert and discounts in the cooperative bookstore.

Library Facilities.—A branch of the university library containing books and current publications on pharmacy and chemistry is maintained in the pharmacy building. Practically all the domestic and some foreign journals on pharmacy are received by the college. The student is expected to make use of the library and to report from time to time on current topics of interest.

Observation Trips.—The observation visits made each year by the classes in pharmacy to the various large manufacturing and wholesale establishments of Seattle and to the large retail stores are an important feature of the work of the college. Among the places visited during the year 1918-1919 were Stewart & Holmes Drug Com-

pany, branch houses of Parke, Davis & Co., H. K. Mulford Company and some of the leading prescription and commercial pharmacies of the city. Also to the hydrastis and ginseng farm of Mr. C. E. Thorpe, situated near the university campus.

Pharmacy, Materia Medica and Chemistry Laboratories.—Rooms devoted to pharmacy, materia medica and chemistry are located in Bagley Hall, a three-story fireproof building. Special sections are provided for pharmacy students in general, organic and qualitative chemistry. Work in prescription practice receives special attention in a room constructed and arranged as a model prescription pharmacy. The materia medica room contains a museum of several hundred samples of official and unofficial crude drugs. It also contains an extensive collection of commercial and biological products manufactured and donated by the H. K. Mulford Company of Philadelphia, Pennsylvania; Parke, Davis & Co., of Detroit, Michigan, and Eli Lilly and Company, of Indianapolis, Indiana. One room is given to drug assaying and food analysis. The examination of official food and drug samples for the state is under the direction of the Dean of the College of Pharmacy. A well equipped laboratory is devoted to this purpose. Pharmacy students taking botany, physiology and bacteriology have well equipped laboratories in Science Hall.

Military Science and Physical Education.—The University requirements in military science, physical education and hygiene are satisfied as follows:

Men students, freshmen and sophomores: Five hours of military science per week. Juniors and seniors: Two hours of physical education per week.

Women students in the two year course: Physical education three times per week for one year; in all other courses three times per week for two years.

Correspondence.—Inquiries in regard to the College of Pharmacy may be addressed to the Dean of the College or to the Registrar of the University. Students desiring to enter the College of Pharmacy will be furnished proper blanks for filing entrance credentials on request to the Registrar. Entrance credentials should be sent to the Registrar before August 15. The student will then be notified if his credentials are satisfactory. Copies of the bulletin of the College of Pharmacy may be had upon application.

ADMISSION AND GRADUATION

ADMISSION TO THE COLLEGE OF PHARMACY

1. ADMISSION TO THE TWO YEAR COURSE LEADING TO THE DEGREE OF GRADUATE IN PHARMACY.
2. ADMISSION TO THE THREE YEAR COURSE LEADING TO THE DEGREE OF PHARMACEUTICAL CHEMIST.

For admission to the two and three year courses, a student must offer fifteen units by examination or by certificate from an accredited school from which he has graduated. To count as a unit a subject must have been taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks. The fifteen units must include the following combinations:

- 3 units of English.
- 2 units of mathematics (one unit algebra, one unit plane geometry).
- 3 units in one of the following groups (or two units, if three units of mathematics are presented).
 - (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
 - (b) Modern foreign language (at least two units in one language; not less than one unit counted in any language).
 - (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
 - (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).
- 2 units selected from the above groups.
- 5 units selected from any subjects accepted by an approved high school for its diploma; not more than four, however, to be in vocational subjects.

3. ADMISSION TO THE FOUR YEAR COURSE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN PHARMACY.

For admission to the four year course the student must present in the fifteen units, as listed under paragraph 2, two units of a foreign language and one unit of science selected from the following: physics, 1 unit; chemistry, 1 unit; general biology, 1 unit; botany, $\frac{1}{2}$ or 1 unit; zoology, $\frac{1}{2}$ or 1 unit; physiology, $\frac{1}{2}$ unit. No science will be counted as applying on this requirement unless it includes a satisfactory amount of laboratory work.

A student who fulfills the entrance requirements as listed under paragraph 2 will be admitted to freshman standing, but if any of the prescribed subjects as listed in the preceding paragraph have not been taken in the high school he will take them in the University and receive college credit to apply toward the degree, so far as elective courses may allow.

4. THE FIVE YEAR COURSE LEADING TO THE DEGREE OF MASTER OF SCIENCE IN PHARMACY.

Candidates for the degree of master of science must have received the bachelor's degree from this college or from some other college of equal rank maintaining a four year course which is the equivalent of the course at this institution.

5. STUDENTS NOT CANDIDATES FOR DEGREES.

Students over twenty-one years of age may enter as specials, providing they present evidence of adequate preparation. In general, a student from an accredited high school will not be admitted as a special if he has been in attendance in high school the previous year. Persons desiring admission as specials should write to the dean, giving a detailed statement of their preparation. The necessary application blanks will then be forwarded.

DEGREES

1. The degree of graduate in pharmacy (Ph. G.) will be conferred upon any student who has fulfilled the requirements for entrance to the two year course and has completed the two year course as outlined.

2. The degree of pharmaceutical chemist (Ph. C.) will be conferred upon any student who has complied with the entrance conditions and has completed the three year course.

3. The degree of bachelor of science (B. S.) will be conferred upon any student who has fulfilled the entrance requirements and has completed either the four year scientific course or the combined scientific and business course. This degree with honors may be conferred upon a student of the College of Pharmacy if recommended for this distinction by the pharmacy faculty.

4. The degree of master of science in pharmacy (M. S.) will be conferred upon any graduate of the four year course who has completed at least one year of graduate work and has presented a satisfactory thesis.

CURRICULA REQUIRED FOR GRADUATION

1. A two year course which prepares its graduates for responsible positions as practical pharmacists.

2. A three year course which includes the work of the two year course and in addition offers opportunity for training in commercial pharmacy, business law, advertising, accounting, advanced work in scientific pharmacy, bacteriology and chemistry.

3. A four year scientific course which offers a well-rounded scientific and liberal training. Graduates of this course are prepared for positions as, (a) practical and manufacturing pharmacists; (b) manufacturing and technical chemists; (c) bacteriologists; (d) teachers in colleges of pharmacy; (e) food and drug inspection chemists and bacteriologists in the United States Civil Service; (f) pharmaceutical journalism.

Graduates of the four year course have clear entrance to the best medical colleges and are well equipped to carry on their medical studies.

4. A four year combined scientific and business course which includes the regular pharmacy work of the two year course together with advanced training in pharmacy, and courses in the College of Business Administration and Schools of Journalism and Law which will insure the student a thorough business training. Special attention will be given to courses in business law, advertising, accounting, salesmanship, insurance, money and banking and business organization. This course is designed to produce well trained men for either retail or wholesale pharmacy.

5. A five year course offers opportunity to the four year grad-

uate to do graduate and research work in some line of scientific pharmacy and graduate work in some branch of allied science. Graduates of this course are prepared for responsible positions in many different lines of work.

1. WITH DEGREE OF GRADUATE IN PHARMACY. (Two Year Course)

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Phar. 1 (Manufacturing)...	5	Phar. 2 (Manufacturing)...	5	Phar. 3 (Commercial).....	2
Chem. (General).....	5	Chem. 9 (General).....	5	Chem. 10 (Qualitative)....	4
Zool. 7 (Physiology).....	5	Bot. 13 (General).....	5	Bot. 14 (Microscopy).....	4
				Phar. 4 (Materia Medica)..	5
				Phar. 15 (Field Materia Medica)	1
SOPHOMORE YEAR					
Phar. 5 (Drug Assay).....	5	Phar. 6 (Drug Assay).....	5	Phar. 7 (Urinalysis).....	3
Chem. 37 (Organic).....	5	Chem. 38 (Organic).....	5	Bacteriology 5.....	4
		Phar. 8 (U. S. Pharm.)....	2	Phar. 9 (Pharm. Chem.)... 5	
		Phar. 10 (Prescriptions)...	2	Phar. 11 (Prescriptions)... 4	
Phar. 13 (Therapeutics)....	5	Phar. 14 (Toxicology).....	2		

Two years of Military Training (12 credits) are required of men.
One year of Physical Education (6 credits) is required of women.

2. WITH DEGREE OF PHARMACEUTICAL CHEMIST. (Three Year Course)

FRESHMAN YEAR					
<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Phar. 1 (Manufacturing)...	5	Phar. 2 (Manufacturing)...	5	Phar. 3 (Commercial).....	2
Chem. 8 (General).....	5	Chem. 9 (General).....	5	Chem. 10 (Qualitative)....	4
Zool. 7 (Physiology).....	5	Bot. 13 (General).....	5	Bot. 14 (Microscopy).....	4
				Phar. 4 (Materia Medica)..	5
				Phar. 15 (Field Materia Medica)	1
SOPHOMORE YEAR					
Phar. 5 (Drug Assay).....	5	Phar. 6 (Drug Assay).....	5	Phar. 7 (Urinalysis).....	3
Chem. 37 (Organic).....	5	Chem. 38 (Organic).....	5	Bacteriology 5.....	4
		Phar. 8 (U. S. Pharm.)....	2	Phar. 9 (Pharm. Chem.)... 5	
		Phar. 10 (Prescriptions)...	2	Phar. 11 (Prescriptions)... 4	
Phar. 13 (Therapeutics)....	5	Phar. 14 (Toxicology)....	2		
JUNIOR YEAR					
Pharmacy	5	Pharmacy	5	Pharmacy	5
Elective	5	Elective	5	Elective	5
Elective	5	Elective	5	Elective	5

In addition to the work required in the two-year course, the student must complete 15 hours credit in pharmacy and electives sufficient to make 185 hours credit. Students expecting to go into commercial work are urged to elect courses in psychology, economics, business law, advertising and accounting. This work will apply on the four-year combined business and scientific course. Students expecting to enter a scientific field of work are expected to elect courses that will apply on the four-year scientific course. Two years of Military Training or Physical Education (12 credits) must be taken by the student.

3. WITH DEGREE OF BACHELOR OF SCIENCE. (Four Year Scientific Course)

FRESHMAN YEAR					
<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Phar. 1 (Manufacturing)...	5	Phar. 2 (Manufacturing)...	5	Phar. 3 (Commercial).....	2
Chem. 8 (General).....	5	Chem. 9 (General).....	5	Chem. 10 (Qualitative)....	4
Zool. 7 (Physiology).....	5	Bot. 13 (General).....	5	Bot. 14 (Microscopy).....	4
				Phar. 4 (Materia Medica)..	5
				Phar. 15 (Field Materia Medica)	1
SOPHOMORE YEAR					
Phar. 5 (Drug Assay).....	5	Phar. 6 (Drug Assay).....	5	Phar. 7 (Urinalysis).....	3
Chem. 37 (Organic).....	5	Chem. 38 (Organic).....	5	Bact. 5.....	4
Language	5	Language	5	Phar. 9 (U. S. Pharm.)....	5
				Language	5

JUNIOR YEAR

Phar. 13 (Therapeutics)..... 5	Phar. 14 (Toxicology)..... 2	Phar. 11 (Prescriptions).... 4
Language 5	Phar. 8 (U. S. P.)..... 2	English I..... 3
Science 5	Phar. 10 (Prescriptions)... 2	Elective 3
	Language 5	Science 5
	Science 5	

SENIOR YEAR

Math. 4 (Trigonometry)..... 5	Physics 5	Physics 5
Science 5	Science 5	
English 2..... 3	Elective 5	
Elective		

The student is required to take 25 hours of one modern foreign language or 30 hours (15 each) if two languages are taken.

The elective work in science may be varied so as to prepare students for: (a) Entrance to Colleges of Medicine; (b) manufacturing pharmacists and chemists; (c) food and drug chemists; (d) bacteriologists; or (e) physiological chemists.

A total of 180 hours plus two years of military training or physical education (12 credits) are required for graduation.

4. WITH DEGREE OF BACHELOR OF SCIENCE. (Four Year Combined Scientific and Business Course)

FRESHMAN YEAR

First Quarter	Credits	Second Quarter	Credits	Third Quarter	Credits
Phar. 1 (Manufacturing).... 5		Phar. 2 (Manufacturing).... 5		Phar. 3 (Commercial)..... 2	
Chem. 8 (General)..... 5		Chem. 9 (General)..... 5		Chem. 10 (Qualitative)... 4	
Zool 7 (Physiology)..... 5		Bot. 13 (General)..... 5		Bot. 14 (Microscopy)..... 4	
				Phar. 4 (Materia Medica)... 5	
				Phar. 15 (Field Mat. Med.) 1	

SOPHOMORE YEAR

Phar. 5 (Drug Assay)..... 5	Phar. 6 (Drug Assay)..... 5	Phar. 7 (Urinalysis)..... 3
Chem. 37 (Organic)..... 5	Chem. 38 (Organic)..... 5	Bact. 5..... 4
Psychology 1..... 5	English 1..... 3	Phar. 9 (Phar. 9)..... 5
	Economics 1..... 3	English 2..... 3

JUNIOR YEAR

Phar. 13 (Therapeutics).... 5	Phar. 8 (U. S. P.)..... 2	Phar. 11. (Prescriptions).... 4
Law 54 (Business)..... 3	Phar. 10 (Prescriptions)... 2	Law 56 (Business)..... 3
Bus. 11 (Accounting)..... 3	Phar. 14 (Toxicology)..... 2	Bus. 13 (Accounting)..... 3
Bus. 71 (Evol. of Market).. 3	Law 55 (Business)..... 3	Bus. 73 (Sales Mngmnt)... 3
	Bus. 12 (Accounting)..... 3	Elective 2
	Bus. 10 (Bus. Principles).. 3	

SENIOR YEAR

Pharmacy 5	Pharmacy 5	Pharmacy 5
Bus. 76 (Advertising)..... 3	Bus. 77 (Advertising)..... 3	Bus. 78 (Advertising)..... 3
Bus. 195 (Indus. Mngmnt). 3	Bus. 89 (Office Mngmnt)... 3	Bus. 194 (Bus. Mngmnt)... 3
Elective	Elective	Elective 147

A total of 180 hours plus two years of military training or physical education (12 credits) are required for graduation.

5. WITH DEGREE OF MASTER OF SCIENCE IN PHARMACY. (Five Year Course)

Graduates of the four year course may continue work for the master's degree as follows:

Not more than 22 credits allowed outside of the department of pharmacy. Election may be made in one or more of the following studies: Bacteriology, 8 to 22 credits; botany, 4 to 22 credits; physics, 10 to 22 credits; chemistry, 5 to 22 credits; zoology, 4 to 12 credits.

Not less than 23 credits shall be elected in the department of pharmacy. At least 12 credits of the major work must be a research problem and the preparation of a thesis. Examination and thesis must conform to the regulations of the Graduate School.

DEPARTMENTS OF INSTRUCTION

PHARMACY, PHARMACEUTICAL CHEMISTRY, MATERIA MEDICA
AND FOOD CHEMISTRY
Bagley Hall

1-2. Theoretical and Manufacturing Pharmacy.—The study of the principles of pharmacopœial operations, and the manufacture of Pharmacopœial and National Formulary preparations. Three lectures and two laboratory periods per week. Pharmacy 1 is repeated in the winter quarter. Pharmacy 2 is repeated in the spring quarter. Laboratory deposits \$5 per quarter. Five credits per quarter; autumn, winter. Associate Professor Linton, Mr. Goodrich

3. Commercial Pharmacy.—A lecture course covering the commercial problems of the practical pharmacist. Two credits; spring. Mr. Osseward

4. Materia Medica.—A study of crude drugs, their source, methods of collecting and preserving, identification, active constituents and adulterations. Five credits; spring. Linton

5-6-7. Drug Assaying.—Experiments in gravimetric and volumetric analysis are given with the idea of training the students in the fundamental principles of quantitative chemistry, and at the same time making them familiar with the analysis of substances of pharmaceutical importance. Two recitations and three laboratory periods per week in autumn and winter quarters; one recitation and one laboratory period per week in spring quarter. Laboratory deposit \$5 per quarter. Five credits, autumn and winter; three credits, spring. Professor Johnson, Mr. Goodrich

8. U. S. Pharmacopœia and National Formulary.—A study of the methods and the chemistry involved in Pharmacopœial and National Formulary preparations. Two credits; winter. Linton

9. Pharmaceutical Chemistry.—Inorganic and organic chemicals of the Pharmacopœia and the National Formulary. Five credits; spring. Johnson

10-11. Prescriptions.—Special attention will be given to incompatibilities and to the more important of the "new remedies." The students are required to criticize and compound approximately two hundred difficult prescriptions. One recitation and one laboratory periods per week during winter quarter; two recitations and two laboratory periods per week during spring quarter. Laboratory deposit: Winter quarter \$2.50; spring quarter \$5. Two credits, winter; four credits, spring. Linton, Goodrich

13. *Pharmacology and Therapeutics*.—The actions and uses of chemicals, drugs and their preparations on the human organism in health and disease. Five credits; autumn. Linton

14. *Toxicology*.—The action of poisons, methods of treatment in cases of poisoning, and methods of identification and separation of poisons from tissue. Two credits; winter. Linton

15. *Field Materia Medica*.—A study of the native medicinal plants of Washington and also of plants under cultivation in the drug garden. One laboratory period per week, consisting largely of work in the drug garden and field trips. Laboratory deposit \$1. One credit; spring. Linton

16. *Food Laws*.—National, state and foreign food laws. For students in the department of fisheries. One credit; winter. Johnson

104. *Food Analysis*.—For students in the Department of Home Economics. Two lectures and two laboratory periods per week. Laboratory deposit \$5. Four credits; autumn.

105-106-107. *Chemistry and Analysis of Food*.—Methods of analysis of food products and the study of federal and state laws regulating the sale of foods and drug products. Methods of the Association of Official Agricultural Chemists are used. Graduate students, if prepared, may elect a research problem in food analysis. Laboratory deposit \$5 per quarter. Five credits per quarter; autumn, winter, spring. Johnson

109-110-111. *Toxicology*.—A laboratory course in the separation, identification and estimation of inorganic and organic poisons and in the analysis of alkaloids. Laboratory deposit according to credit. Credit to be arranged; autumn, winter, spring. Johnson

113-114-115. *Advanced Prescriptions*.—Extensive practice in difficult and incompatible prescriptions; also a study of special problems. Laboratory deposit according to credit. Credit to be arranged; autumn, winter and summer. Linton

117-118-119. *Current Problems*.—A lecture and recitation course on current problems of scientific importance. One credit per quarter; autumn, winter, spring. Linton

121-122-123. *Manufacturing Pharmacy*.—An advanced course in pharmaceutical manufacturing, including the manufacture of some of the more difficult of the Pharmacopoeial and National Formulary preparations, as well as a number of organic and inorganic compounds used in pharmacy and medicine. Laboratory deposit according to credit. Credit to be arranged; autumn, winter, spring.

201-202-203. Investigation.—Senior and graduate students may undertake some original investigation in pharmacy, pharmaceutical chemistry or chemistry of foods under the direction of one of the instructors. Laboratory deposit according to credit. Credit to be arranged; autumn, winter, spring.

BACTERIOLOGY

5. Pharmacy Bacteriology.—A general course with emphasis upon pharmaceutical problems. Prerequisite, sophomore standing and general chemistry. Laboratory deposit \$3. Four credits; spring. Lectures T, Th, 1; T, Th, 2-5. Weinzirl

102. Sanitary Bacteriology.—Consideration of water supplies and sewage disposal; foods; industrial applications; inspection trips. Prerequisite, Bacteriology 101. Laboratory deposit \$3. Four credits; winter.

Lectures, T, Th, 1; laboratory, T, Th, 2-5, or M, W, 2-5. Weinzirl

103. Public Hygiene.—The conservation of health; prevention of disease; school and industrial hygiene. Prerequisite, junior standing except for bacteriology majors. Four credits; spring.

Lectures, T, Th, 2. Weinzirl

201. Serology.—Immunity and immunization in animals and man. Prerequisites, Bacteriology 5, 102, 105 and senior or graduate standing. Laboratory deposit \$3. Four credits; autumn.

Lectures, M, W, 1; laboratory, M, W, 2-5. Weinzirl

202. Bacteriological Diagnosis.—The diagnosis of infectious diseases. Intended for those specializing in bacteriology. Some time may be spent in public and private laboratories. Prerequisite, Bacteriology 102. Laboratory deposit \$3. Four credits; winter.

Lectures, M, W, 1; laboratory, M, W, 2-5. Weinzirl

203. Clinical Diagnosis.—Examination of sputum, urine, blood, gastric and intestinal contents, parasites, etc., study of the pathological conditions involved. Prerequisites, Bacteriology 105, 106, or 102 and 103. Laboratory deposit \$3. Four credits; spring.

Lectures, M, W, 1; laboratory, M, W, 2-5. Weinzirl

BOTANY

13-14. Pharmacy Botany.—Gross structure of vegetative and reproductive parts of seed plants; brief study of sport plants; microscopy of powdered drugs. Laboratory deposit \$1.50. Five credits, winter; four credits, spring. Rigg

ECONOMICS AND BUSINESS ADMINISTRATION

1. General Economics.—Five credits; autumn, winter or spring.

10. Business Principles.—Three credits; winter.

11-12-13. *Elementary Accounting*.—Three credits per quarter; autumn, winter, spring.

71. *Evolution of the Market*.—Three credits; autumn.

73. *Sales Management*.—Three credits; spring.

76-77-78. *Advertising*.—Three credits per quarter; autumn, winter, spring.

89. *Office Management*.—Two credits; winter.

191. *Business Management*.—Prerequisite, junior standing. Three credits; autumn or spring.

195. *Industrial Management*.—Prerequisite, junior standing. Three credits; autumn.

CHEMISTRY

Laboratory deposits for all laboratory courses are \$5 per quarter; breakage ticket, \$5; locker key, 50 cents.

8-9. *General Chemistry*.—Five credits per quarter; autumn, winter.

10. *Qualitative Analysis*.—Four credits; spring.

37-38. *Organic Chemistry*.—Prerequisite, course 10. Five credits per quarter; autumn, winter.

43. *Qualitative Analysis*.—Prerequisite, course 23 or its equivalent. Five credits; autumn or spring.

101-102-103. *Quantitative Analysis*.—Laboratory. Four credits; autumn, winter, spring. (Repeated as 102-103-101; winter, spring, autumn.)

104. *Food Analysis*.—Four credits; autumn.

105-106-107. *Chemistry and Analysis of Food*.—Five credits per quarter; autumn, winter, spring.

121-122-123. *Industrial Chemistry*.—Prerequisite, 102. Five credits per quarter; autumn, winter, spring.

133. *Sanitary Chemistry*.—Prerequisite course 3 or 23. Three credits; autumn.

141-142-143. *Physiological Chemistry*.—Prerequisite course 33. Five credits per quarter; autumn, winter, spring.

201-202. *Physical Chemistry*.—Prerequisite, Physics 2 and courses 36 and 102. Five credits per quarter; autumn, winter.

203. *Advanced Physical Chemistry*.—Prerequisite, course 202. Five credits; spring.

204. *Electro Chemistry*.—Prerequisite, course 202. Five credits; spring.

206. *Chemistry of Colloids*.—Prerequisite, course 202. Two credits; spring.

212. *Organic Preparations*.—Prerequisite, course 223. Five credits; autumn.

213. *Organic Analysis*.—Prerequisite, courses 33 and 102. Two credits; winter.

221-222-223. *Chemical Theory*.—Prerequisite, course 202. Two credits per quarter; autumn, winter, spring.

231-232-233. *Advanced Organic Chemistry*. — Prerequisites, courses 33 and 202. Five credits per quarter; autumn, winter, spring.

250. *Research*.—The work in research offered by the department is of two types: (1) research for the master's degree. This work is not necessarily laboratory investigation, although the investigation of the literature is ordinarily supplemented by laboratory development of the subject. The maximum credit is nine hours. (2) research for the doctor's degree. Work for this degree may be carried on under the direction of any member of the regular staff of the department, or in food investigation with the dean of the College of Pharmacy. The work may be upon any topic approved by the department. The maximum credit is forty-five hours. First, second and third quarters. Prerequisite, course 202. Credit to be arranged.

ENGLISH

1-2. *Composition*.—Three credits per quarter for two quarters. Any two quarters.

LAW

54-55-56. *Business Law*.—The fundamental principles of law, with special lectures as to the statutory regulations and matters pertaining peculiarly to pharmacy. Three credits per quarter; autumn, winter, spring.

MATHEMATICS

4. *Plane Trigonometry*.—Prerequisite, one year of algebra, one year of plane geometry. Five credits; autumn, winter or spring.

PHYSICS

48-49. *Elementary Physics*.—No prerequisites. Laboratory deposit \$2.50 per quarter. Five credits per quarter; autumn, winter.

92-93. *General Physics*.—A course for pharmacy, forestry and pre-medical students. Prerequisite, high school physics. Laboratory deposit \$2.50 per quarter. Five credits per quarter; winter, spring.

PHYSIOLOGY

7. *Elementary Physiology*.—Laboratory deposit \$2 per quarter. Five credits; autumn, winter or spring.

PSYCHOLOGY

1. *General Psychology*.—Four lectures, one discussion section and one two-hour laboratory a week. Course repeated every quarter. Five credits.

NOTE.—Fuller information regarding courses given by departments in other colleges than the College of Pharmacy may be found in the section of the catalogue entitled Departments of Instruction, published also as a separate bulletin.

**THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
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COLLEGE OF ENGINEERING
COLLEGE OF FINE ARTS
COLLEGE OF FISHERIES
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SCHOOL OF LAW
COLLEGE OF MINES
COLLEGE OF PHARMACY
GRADUATE SCHOOL
EXTENSION SERVICE
SUMMER SESSION
PUGET SOUND BIOLOGICAL STATION
BULLETIN OF VOCATIONAL COURSES
UNIVERSITY DIRECTORY**

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to **THE REGISTRAR**, University of Washington, Seattle, Washington.

BULLETIN
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1919-1920



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¹Absent on leave 1918-1919.

²Absent on leave 1918-19; resigned 1919.

³Detached on special service 1917-19.

⁴In charge of service 1918-1919; resigned July 31, 1919.

UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday.
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
.....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

Graduate School

THE FACULTY

- HENRY SUZZALLO, PH. D. (Columbia), LL. D. (California), PRESIDENT.
JOHN THOMAS CONDON, LL. M. (Northwestern), DEAN OF FACULTIES; Dean of the School of Law.
J. ALLEN SMITH, PH. D. (Michigan), Professor of Political Science; DEAN.
HENRY LANDES, A. M. (Harvard), Professor of Geology and Mineralogy; Dean of the College of Science.
EDMOND STEPHEN MEANT, M. L. (Wisconsin), Professor of History.
CAROLINE HAVEN OBER, Professor of Spanish.
CARL EDWARD MAGNUSSON, E. E. (Minnesota), PH. D. (Wisconsin), Professor of Electrical Engineering; Acting Dean of the College of Engineering.
*HORACE G. BYERS, PH. D. (Johns Hopkins), Professor of Chemistry.
TREVOR KINGAID, A. M. (Washington), Professor of Zoology.
FREDERICK MORGAN PADELFORD, PH. D. (Yale), Professor of English; ACTING DEAN.
MILNOR ROBERTS, A. B. (Stanford), Professor of Mining Engineering and Metallurgy; Dean of the College of Mines.
DAVID THOMSON, B. A. (Toronto), Professor of Latin; Dean of the College of Liberal Arts.
FREDERICK ARTHUR OSBORN, PH. D. (Michigan), Professor of Physics and Director of Physical Laboratories.
WILLIAM SAVERY, PH. D. (Harvard), Professor of Philosophy.
CHARLES WILLIS JOHNSON, PH. D. (Michigan), Professor of Pharmaceutical Chemistry; Dean of the College of Pharmacy.
PIERRE JOSEPH FREIN, PH. D. (Johns Hopkins), Professor of French.
THEODORE CHRISTIAN FRYE, PH. D. (Chicago), Professor of Botany.
ROBERT BODUARD MORITZ, PH. D. (Nebraska), PH. N. D. (Strassburg), Professor of Mathematics.
HARVEY LANTZ, A. M. (De Pauw), LL. B. (Kent Law School), Professor of Law.
EVERETT OWEN EASTWOOD, O. E., M. A. (Virginia), S. B. (Massachusetts Institute of Technology), Professor of Mechanical Engineering.
DAVID CONNOLLY, SC. M., M. D. (Chicago), Professor of Physical Education and Hygiene; University Health Officer.
HERBERT HENRY GOWEN, D. D. (Whitman), F. R. G. S., F. R. S. A., Professor of Oriental Languages and Literature.
OLIVER HUNTINGTON RICHARDSON, PH. D. (Heidelberg), Professor of European History.
STEPHEN IVAN MILLER, JR., A. B. (Stanford), LL. B. (Michigan), Professor of Transportation; Director of the College of Business Administration.
IVAN WILBUR GOODNER, LL. B. (Nebraska), Professor of Law.
IRVING MACKAY GLEN, A. M. (Oregon), Professor of Music; Dean of the College of Fine Arts.
*CHARLES CHURCH MORE, M. S., C. E. (Lafayette), M. C. E. (Cornell), Professor of Civil Engineering.
HENRY KREITZER BENSON, PH. D. (Columbia), Professor of Industrial Chemistry.
JOHN WEINZIEL, PH. D. (Wisconsin), Professor of Bacteriology.
HUGO WINKENWERDER, M. F. (Yale), Professor of Forestry; Dean of the College of Forestry.
VERNON LOUIS PARRINGTON, A. B. (Harvard), A. M. (Emporia), Professor of English.
FREDERICK ELMER BOLTON, PH. D. (Clark), Professor of Education; Dean of the College of Education.
EDWIN JOHN VICKNER, PH. D. (Minnesota), Professor of the Scandinavian Languages.
MATTHEW LYLE SPENCER, PH. D. (Chicago), Professor of Journalism; Director of the School of Journalism.
EFFIE ISABEL RATT, B. S. (Columbia), Professor of Home Economics; Director of the Department of Home Economics.
WILLIAM FRANKLIN ALLISON, B. S., C. E. (Cornell), Professor of Municipal and Highway Engineering.
STEVENSON SMITH, PH. D. (Pennsylvania), Professor of Psychology.
WILLIAM PIERCE GORSUOE, A. B. (Knox), Professor of Public Speaking and Debate.
CLARK BRESCOTT BISSETT, A. B. (Hobart), Professor of Law.
ARTHUR RAGAN PRIEST, A. M. (De Pauw), Professor of Debating and Dean of Men.
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*J. ANTON DE HAAS, PH. D. (Stanford), Professor of Business Administration.
SAMUEL LATIMER BOOTHROYD, M. S. (Colorado Agricultural College), Associate Professor of Astronomy.

* Absent on leave.

* Withdrawn.

BURT PERSONS KIRKLAND, A. B. (Cornell), Associate Professor of Forestry.
THOMAS KAY SIDET, PH. D. (Chicago), Associate Professor of Latin and Greek.
WILLIAM MAURICE DEHN, PH. D. (Illinois), Professor of Chemistry.
EDWARD McMAHON, A. M. (Wisconsin), Associate Professor of American History.
GEORGE SAMUEL WILSON, B. S. (Nebraska), Associate Professor of Mechanical Engineering.
GEORGE WALLACE UMPHREY, PH. D. (Harvard), Associate Professor of Spanish.
OTTO PATZER, PH. D. (Wisconsin), Associate Professor of French.
CHARLES WILLIAM HARRIS, C. E. (Cornell), Associate Professor of Civil Engineering.
EDGAR ALLEN LOEW, B. S., E. E. (Wisconsin), Associate Professor of Electrical Engineering.
EDWIN JAMES SAUNDERS, A. M. (Harvard), Assistant Professor of Geology.
ELIAS TREAT CLARK, M. F. (Yale), Assistant Professor of Forestry.
EDWARD GODFREY COX, PH. D. (Cornell), Associate Professor of English.
JOSEPH DANIELS, S. B. (Massachusetts Institute of Technology), M. S. (Lehigh), Associate Professor of Mining Engineering and Metallurgy.
ELI VICTOR SMITH, PH. D. (Northwestern), Assistant Professor of Zoology.
CHARLES MUNROE STRONG, A. M. (Missouri), Assistant Professor of Spanish.
HENRY LOUIS BRAKEL, PH. D. (Cornell), Assistant Professor of Physics.
HARVEY BRUCE DENSMORE, A. B. (Oxford), Assistant Professor of Greek.
CHARLES EDWIN WEAVER, PH. D. (California), Assistant Professor of Geology.
CHARNOCK RAYMOND COREY, M. S. (Columbia), Assistant Professor of Mining and Metallurgy.
ALLEN FULLER CARPENTER, PH. D. (Chicago), Assistant Professor of Mathematics.
GEORGE BURTON RIGG, PH. D. (Chicago), Assistant Professor of Botany.
HORACE JAMES MACINTYRE, M. M. E. (Harvard), Assistant Professor of Mechanical Engineering.
GINO ARTURO RATTI, PH. D. (Grenoble), Assistant Professor of French.
ERNST OTTO ECKELMAN, PH. D. (Heidelberg), Assistant Professor of German.
JOHN WILLIAM HOTSON, PH. D. (Harvard), Assistant Professor of Botany.
LEWIS IRVING NEIKIRK, PH. D. (Pennsylvania), Assistant Professor of Mathematics.
SAMUEL HERBERT ANDERSON, PH. D. (Illinois), Assistant Professor of Physics.
FRIEDRICH KURT KIRSTEN, B. S. (E. E.) (Washington), Assistant Professor of Electrical Engineering.
CURT JOHN DUCASSE, PH. D. (Harvard), Assistant Professor of Philosophy.
ERIC TEMPLE BELL, PH. D. (Columbia), Assistant Professor of Mathematics.
BROD LEONARD GRONDAHL, M. S. F. (Washington), Assistant Professor of Forestry.
LESLIE FOREST CURTIS, B. E. (Tufts), Assistant Professor of Electrical Engineering.
HERMAN V. TAFTAR, B. S. (Oregon A. C.), Assistant Professor of Chemistry.
RICHARD FREDERICK SCHOLZ, PH. D. (Wisconsin), Professor of Ancient History.
THOMAS TALBOT WATERMAN, A. B. (California), PH. D. (Columbia), Associate Professor of Anthropology.
HJALMAR LAURITS OSTERUD, A. M. (Washington), Instructor in Zoology.
FRANCES EDITH HINDMAN, M. S. (Washington), Instructor in Pharmacy and Assistant State Chemist and Bacteriologist.
EDWIN RAY GUTHRIE, PH. D. (Pennsylvania), Instructor in Philosophy.
HORACE HARDY LESTER, PH. D. (Princeton), Instructor in Physics.

COMMITTEE ON GRADUATE COURSES: PROFESSORS OSBORN, THOMSON, SAVERY, FREIN and MORITZ.

SECRETARY OF GRADUATE FACULTY AND EX-OFFICIO SECRETARY OF COMMITTEE ON GRADUATE COURSES: PROFESSOR THOMSON.

¹ Absent on leave, 1919-1920.

THE GRADUATE SCHOOL

The Aims of Graduate Study.—The principal aims of graduate study are the development of intellectual independence through the cultivation of the scientific attitude of mind, and the promotion of the spirit of research. The graduate student is therefore thrown more largely upon his own resources than the undergraduate, and must measure up to a more severe standard. The University is consistently increasing the emphasis upon graduate work in order that it may be a strong center for advanced study.

Organisation.—The Graduate School was formally organized in May, 1911. The graduate faculty includes:

1. All heads of departments and full professors.
2. All associate professors, assistant professors and instructors offering graduate work for major students; provided no department shall have more than four representatives. If more than that number are eligible, the departmental representatives below the rank of full professor shall be elected by the members of the department.

Fees.—Graduate students, including fellows, associates, and assistants, are required to pay a tuition fee of \$10 a semester.

GRADUATE SCHOLARSHIPS AND FELLOWSHIPS

Fellowships.—There are three Loretta Denny fellowships, of \$416.66 each, open to graduate students in any department of the University. They are awarded by the faculty on the basis of scholastic excellence and general merit, but only to those who need financial assistance. Fellows are expected to give their undivided attention to the prosecution of graduate work and must pay the regular matriculation and tuition fees. Applications for these fellowships should be made on blanks supplied by the Recorder of the University, and must be in his hands on or before March 15 preceding the academic year for which they are granted.

National research fellowships in physics and chemistry, offered by the National Research Council, are open to promising research students, preferably those who have already taken the doctor's degree. A successful candidate can pursue his research at this University. The salary will ordinarily be \$1500 for the first year. Fellows are eligible for successive reappointments, ordinarily with increase of salary.

Scholarships.—A scholarship of \$200, known as the "Samuel Rosenberg Scholarship, endowed in loving memory by Ella S. Rosenberg, his wife," is open to graduate students in French.

Through its chemical department, Du Pont de Nemours & Co. offer a scholarship of \$350 in chemistry, known as the "Du Pont Scholarship," open to a senior student or graduate student in chemistry or chemical engineering.

University Honorary Fellowships.—Three honorary fellowships

have been established by the University. These, like the Loretta Denny fellowships, are open to students in any department of the University. They carry no stipend, and are designed to furnish recognition of exceptional scholastic excellence in the case of graduate students who are not eligible for the Loretta Denny fellowships, either because they do not need financial assistance or because they are not giving their entire time to their work in the University.

University Teaching Fellowships.—There are also a number of teaching fellowships yielding \$450.00 each. Teaching fellows are expected to give about half time to such work as the head of the department may assign. An applicant for a teaching fellowship should apply directly to the head of the department in which he is interested.

Research Fellowships in Mining and Metallurgy.—The College of Mines of the University in cooperation with the United States Bureau of Mines offers five fellowships in mining and metallurgical research. The fellowships are open to graduates of universities and technical schools who are properly qualified to undertake research work. The value of each fellowship is \$720 per year of twelve months. Fellowship holders are required to register as graduate students and to become candidates for the degree of master of science in mining engineering or metallurgy, unless an equivalent degree has previously been earned. Applications are due not later than May 15, and should be addressed to the Dean, College of Mines, University of Washington, Seattle, Washington.

ADMISSION AND DEGREES

Three classes of students are recognized in the Graduate School:

1. Candidates for the master's degree.
2. Candidates for the doctor's degree.
3. Students not candidates for a degree.

Admission—A graduate of the University or of any other institution of equal rank will be given a full graduate standing. If the student is from a college or university which falls below a satisfactory standard in the character of its curriculum, the efficiency of its instruction, its equipment, and its requirement for graduation, he must take such undergraduate courses as may be specified before making application for an advanced degree.

Any graduate student who expects to become a candidate for a degree must file an outline of his proposed work with the Dean of the Graduate School, on a blank provided for the purpose, at the time of his registration. Registration will not be regarded as complete until this outline has been filed. When it has received the approval of the committee on graduate courses or of the graduate faculty, and the student has been notified thereof, he will be enrolled as a candidate for a degree.

Students on the Staff.—Assistants, associates, or others in the employ of the University are permitted to carry three hours of grad-

uate work if full-time employees, and ten or eleven hours if half-time employees.

Graduate Study in the Summer.—As the summer offers leisure for advanced study to a large number of teachers, the University lays special emphasis upon graduate work during the summer quarter. Graduates of colleges or universities in attendance during the summer are urged to enroll for the strictly graduate courses, as these courses give them an opportunity to work with a select group of mature students toward the acquisition of an advanced degree.

Graduate students will enroll with the Dean of the Graduate School and will be given an opportunity to discuss their courses of study in detail.

Attendance during two and one-half summer quarters will satisfy the residence requirement for the master's degree. A fair amount of credit toward the doctor's degree may also be earned in the summer quarter.

DEGREES

Every graduate student who expects to take a degree in June of any given year shall send to the Recorder a written statement to that effect between February 1 and May 1 of that year.

The Master's Degree.—Graduate students may receive the degree of master of arts or master of science by complying with the following requirements:

1. At least one year's work must be done in residence in undivided pursuit of the studies elected; or not less than two years in residence, if the candidate is employed as a teacher or regularly engaged in any other occupation or profession. Attendance during two and one-half summer quarters or their equivalent will satisfy the residence requirement.

2. The candidate must elect a major subject and either one or two minors. He must earn not less than thirty-six credits in residence, with a grade of A, B or C, at least one-half being in the major subject, and present a thesis which shall embody independent though not necessarily original research. The requirement of a minor or minors may be waived, but only upon the recommendation of the head of the major department and with the consent of the committee on graduate courses. The total must represent the equivalent of at least forty-five hours.

3. No work done in the major subject may be counted toward the master's degree until the candidate for such degree has complied with the departmental requirement as to previous work in that subject, which in no case shall be less than eighteen hours.

4. Elementary or lower division courses may not count toward the minor requirement, and the teachers' courses may not count toward either the major or minor requirement.

5. Upon completion of the work as outlined in the application, the candidate shall be given an oral or an oral and written examina-

tion by a committee consisting of the major professor and all instructors with whom he has had work. The candidate in order to be recommended for a degree must receive a two-thirds affirmative vote of each department represented in the examination.

6. The candidate's thesis shall be in charge of the instructor in whose field the subject of it falls, and it must be approved by the instructor in charge and receive a two-thirds favorable vote of the instructors of professorial rank in the department concerned. One copy of the thesis in typewritten or printed form (or library hand, in case the thesis is of such character that it cannot be typewritten), shall be deposited in the University library. The thesis must meet the approval of the librarian, and the cost and form of binding must be deposited with the thesis.

The Doctor's Degree.—Graduate students will be received as candidates for the degree of doctor of philosophy in such departments as are adequately equipped to furnish the requisite training.

Graduate students may receive the degree of doctor of philosophy by complying with the following requirements:

1. At least three years of graduate work, the last year of which must be spent in residence at the University of Washington. If a candidate is otherwise engaged in any regular employment, a correspondingly longer time will be required.

2. Evidence of a reading knowledge of both French and German and such other languages as individual departments may require. Evidence of sufficient attainment in these languages must be presented to the Dean, and, upon his approval, filed with the Recorder at least one academic year before the degree is granted.

3. Completion of courses of study in a major and two minor subjects, the work in the minors to constitute one-third of the total course. The major subject, in addition to the regular courses, shall include the preparation of a thesis embodying the results of a research which shall be a positive contribution to knowledge. This thesis must be approved by a committee appointed by the head of the major department of which the instructor in charge of the thesis shall be a member, and also by the committee on graduate courses.

4. Oral examination in each of the minor subjects before a committee of three, including a representative of the major department. Certificates of the satisfaction of this requirement must be given before the candidate may be admitted to his major examination.

5. An exhaustive written examination in the major subject, not less than six hours in duration, no one session of which may exceed five hours.

6. An oral examination before a committee of three or more representatives of the major department, of not less than two hours. This examination must be approved by the entire committee. All examinations are open to members of the faculty.

7. One copy of the thesis in typewritten form (or library hand) shall be bound at the expense of the candidate and deposited with the librarian for permanent preservation in the University archives.

The thesis, or such parts thereof as may be designated by the committee on graduate courses, must be printed in a form approved by the librarian and one hundred copies must be presented to the University library.

The completion of the requirements as specified shall be certified by the head of the major department not later than the Wednesday preceding commencement day.

The doctor's degree will not be granted to graduates of the University of Washington who have not spent two years in graduate work, or three years in undergraduate work, at some other institution.

For the present, members of the teaching staff of the University, of the grade of instructor or above, will not be received as candidates for the doctor's degree.

Master of Science in Engineering.—Courses leading to the degree of master of science in engineering are provided for students in civil engineering, electrical engineering, mechanical engineering, chemical engineering, and mining engineering.

For further information, see bulletins of the Colleges of Engineering and Mines.

Master of Science in Pharmacy.—The degree of master of science in pharmacy will be conferred upon graduates of the four-year course in pharmacy who complete at least one year of graduate work as outlined and present at satisfactory thesis.

For further information, see the bulletin of the College of Pharmacy.

Master of Science in Forestry.—For the degree of master of science in forestry, the student, in addition to being a graduate of this University or other institution of equal rank, and having a satisfactory knowledge of botany, geology, physics, chemistry, mathematics, surveying and languages, shall have been credited at this University with 249 credits of which at least 78 are in technical forestry subjects, including silviculture, dendrology, wood technology, mensuration, management, lumbering, wood preservation, forest economics, and thesis.

For further information, see the bulletin of the College of Forestry.

Master's Degrees in Education.—Advanced work for teachers leading to the master's degree in education is given by the University. See bulletin of College of Education for further information.

For description of graduate courses, see Departments of Instruction.

**THE BULLETIN OF
THE UNIVERSITY OF WASHINGTON**

is published quarterly, with frequent supplementary issues. Once a year is issued the

CATALOGUE AND ANNOUNCEMENTS

containing the register of officers, faculty and students for the current year and announcements of the several schools, colleges, and departments for the coming year. Separate sections of the Announcements are also published, as follows:

1. ENTRANCE INFORMATION
2. COLLEGE OF LIBERAL ARTS AND COLLEGE OF SCIENCE
3. COLLEGE OF BUSINESS ADMINISTRATION
4. COLLEGE OF EDUCATION
5. COLLEGE OF ENGINEERING
6. COLLEGE OF FINE ARTS
7. COLLEGE OF FISHERIES
8. COLLEGE OF FORESTRY
9. SCHOOL OF JOURNALISM
10. SCHOOL OF LAW
11. LIBRARY SCHOOL
12. COLLEGE OF MINES
13. COLLEGE OF PHARMACY
14. GRADUATE SCHOOL
15. DEPARTMENTS OF INSTRUCTION
16. THE EXTENSION SERVICE

Bulletins are also published containing announcements of

**THE SUMMER QUARTER
PUGET SOUND BIOLOGICAL STATION**

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation, should be addressed to THE REGISTRAR, UNIVERSITY OF WASHINGTON, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

W. H. ...
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GENERAL SERIES

DECEMBER, 1919

NO. 127 SECTION 15

DEPARTMENTS OF
INSTRUCTION

1919-1920



SEATTLE, WASHINGTON
PUBLISHED QUARTERLY BY THE UNIVERSITY
1919

Entered as Second Class Matter, at Seattle, Under the Act of July 16, 1894

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Term ends March, 1920

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Term ends March, 1920

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OSCAR A. FECHTER.....Yakima
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Term ends March, 1923

RUTH KARR McKEE.....Vancouver
Term ends March, 1923

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ARTHUR RAGAN PRIEST, A. M.....	Dean of Men Administration Hall
ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
WILLIAM ELMER HENRY, A. M.....	Librarian Library
FRANK STEVENS HALL.....	Director of Museum Museum
JAMES GARFIELD FLETCHER, A. B.....	Vocational Secretary Administration Hall

THE COLLEGES AND SCHOOLS

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JOHN NATHAN COBB.....	Director of the College of Fisheries Fisheries Hall
HUGO WINKENWERDER, M. F.....	Dean of the College of Forestry Forestry Hall
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CHARLES WILLIS JOHNSON, Ph. C., Ph. D.....	Dean of the College of Pharmacy Bagley Hall
J. ALLEN SMITH, Ph. D.....	Dean of the Graduate School Denny Hall

THE EXTENSION SERVICE

EDWIN AUGUSTUS START, A. M.....	Director Administration Hall
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UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....Thursday,
Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 26 and 27
Registration of all other students.....
.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess
.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations
Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and Saturday, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations
....Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus DayFriday, April 23
Junior DaySaturday, May 29
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's receptionSaturday, June 19
Baccalaureate SundayJune 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration daysTuesday and Wednesday, June 22 and 23
Instruction beginsThursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

EXPLANATIONS

This bulletin contains a list of all courses of study offered in the university. The departments are arranged in alphabetical order.

The University reserves the right to withdraw temporarily any course which has not an adequate enrollment at the end of the sixth day of any quarter. For changes in registration, due to the withdrawal of a course, no fee will be charged.

The four-quarter plan was adopted in order to enable the University to render larger service. It is more flexible than the semester plan, besides adding twelve weeks' instruction to the regular year. It is impossible, however, to provide that every course be given every quarter.

Courses bearing numbers 1 to 99 inclusive are normally offered to freshmen and sophomores; those from 100 to 199, to juniors and seniors; and those from 200 upward to graduate students.

Two or three numbers connected by hyphens indicate a course which ordinarily carries credit only when pursued for the full time; the instructor's permission must be obtained for credit for only a single quarter of such a course. No credit in a beginning foreign language is given for less than two quarters' work.

The credit indicated in connection with each course is the "quarter credit," being based on the class periods per week.

The descriptions of courses in each department include: (1) the number of the course as used in university records; (2) the title of the course; (3) a brief statement of its subject matter and method; (4) number of quarter credits given; (5) quarter in which it is given (autumn, winter, spring, summer); (6) name of instructor.

The following abbreviations are used to designate buildings:

Anat.—Anatomy Laboratory.	E. A.—Engineering Annex.
Ar.—Armory.	F.—Forestry.
Arch.—Architectural Building.	Fish.—Fisheries.
As.—Astronomy Building (Observatory).	Gym.—Gymnasium.
Aud.—Auditorium.	H. E.—Home Economics Hall.
B.—Bagley Hall.	Li.—Library.
BS.—Bookstore Building.	M. H.—Meany Hall.
C.—Commerce Hall.	M.—Mines Hall.
D.—Denny Hall.	S.—Science Hall.
E.—Engineering Hall.	Shop—Shop Building.

Courses preceded by a * are not given in 1919-1920.

DEPARTMENTS OF INSTRUCTION

AERONAUTICAL ENGINEERING

Engineering Hall

ASSISTANT PROFESSOR ANDERSON

101. *Aerodynamics.*—Use of the wind tunnel in the determination of the characteristics of aerofoils; selection of aerofoils for a given purpose. Prerequisite, C. E. 11, 12, and Math. 68. Three credits; autumn, winter, spring.

ANATOMY

Science Hall and Anatomy Laboratory

ASSISTANT PROFESSOR WORCESTER

GROSS ANATOMY

101-102-103. *General Human Anatomy.*—A thorough study of the human body. The dissecting material is prepared after the most modern methods. Osteological collections are loaned to the students. Especially intended for students taking the pre-medical, nurses' or physical education courses, but open to others. Prerequisite, Zoology 3 and 4 or their equivalent. Six credits per quarter; autumn, winter, and spring.

WORCESTER

104. *Topographic Anatomy.*—Cross and sagittal sections for correlation. Prerequisites, Anatomy 101-102, and 103. Four credits; autumn quarter.

WORCESTER

MICROSCOPIC ANATOMY

105-106. *Histology and Embryology.*—The microscopic anatomy of developing and adult mammals studied both in their fresh and fixed conditions. Especially for students in pre-medical and nurses' courses but open to others. Prerequisite, Zoology 3 and 4 or their equivalent. Five credits per quarter; autumn and winter.

WORCESTER

107. *Neurology.*—The dissection of the human brain and cord and special organs of sense, also the comparative developmental history of the central nervous system, followed by a microscopic study of the nuclei and fiber tracts. Prerequisites, Anatomy 105 and 106 or their equivalents. Especially for medical students but open to others. Five credits per quarter; spring.

WORCESTER

ARCHITECTURE

Architecture Building

ASSOCIATE PROFESSOR GOULD; MR. MCCLELLAND, MR. SEKSMITH

3-2-1. *History and Elements of Architecture.*—Illustrated lec-

tures and exercises in drawing and simpler elements of buildings. Excursions will be made to buildings and to builders' supply houses. In second and third quarters a general course in the history of architecture. Juniors in department of home economics and majors in painting and design take first and second quarters consecutively, receiving three credits first quarter. In the first quarter one two-hour laboratory period per week is required of juniors in home economics and juniors majoring in painting and design. One credit is added for this work. Two credits per quarter; autumn, winter, spring.

4-5-6. Architectural Design.—Practical methods of presenting an architectural problem by means of plan, section and elevation. Individual instruction with occasional conferences. Recommended to students in engineering. Three credits per quarter; autumn, winter, spring.

SEKSMITH

7. Descriptive Geometry.—Training in draftsmanship and the ability to read drawings. Two three-hour laboratory periods per week. Three credits; autumn.

SEKSMITH

8. Shades and Shadows.—Construction by descriptive geometry of shades and shadows found in architectural renderings. Prerequisite, course 7. Two three-hour laboratory periods per week. Three credits; winter.

SEKSMITH

9. Perspective Drawing.—The theory of architectural perspective from simple problems in single point perspective up to and including the more complicated problems. Office methods and short-cut methods will be studied and compared with the theory. Two three-hour laboratory periods. Three credits; spring.

10-11-12. Free Hand Drawing.—The fundamentals of free hand drawing and free hand perspective. Drawing in charcoal or crayon from cast or architectural ornament and from still life. One credit per quarter; autumn, winter, spring.

17-18. Mechanics.—Statics; mechanics of building materials. No prerequisites. Five credits per quarter; autumn, winter.

SEKSMITH

51-52-53. History and Elements of Architecture.—First quarter, Egyptian, Greek and Roman architecture; second and third, Byzantine, Romanesque and Gothic, with concurrent study of outlines of general history. Illustrated lectures. Sophomore course, but may be taken the autumn quarter as a part course. Required of all students in the department and open to all students in the University. Two credits per quarter; autumn, winter, spring.

GOULD

54-55-56. Architectural Design.—Problems in design and planning. Society in Beaux Arts Architects program will be used and work

sent to New York City for judgment in competition with work from leading architectural schools. Laboratory fee, \$2. Five credits per quarter; autumn, winter, spring.

GOULD

60-61-62. Building Construction and Inspection.—Lectures on methods employed in building construction, supplemented by detail drawing of various parts of buildings of all types. Visits will be made to the manufacturing plants of building materials and to all types of buildings under construction. Two credits per quarter; autumn, winter, spring.

MCLELLAND

72. Modeling.—Studies in clay of architectural ornament. One credit; autumn.

WHEN

73-74. Free Hand Drawing.—Studies of architectural ornament and cast of the human figure. One credit per quarter; winter, spring.

101-102-103. History of Architecture.—The architecture of the Renaissance; problems in ornamental design and planning. Two credits per quarter; autumn, winter, spring.

MCLELLAND

104-105-106. Architectural Design.—Advanced problems in ornamental design and planning as applied to different materials. Problems of industrial layouts, city squares, playgrounds, etc. Laboratory fee, \$2. Three credits per quarter; autumn, winter, spring.

MCLELLAND

112. Modeling.—Design of simple architectural forms. One credit; autumn.
Time to be arranged.

WHEN

113-114. Water Color.—Still life studies, out-door subjects and architectural rendering. One credit per quarter; autumn, spring.

MCLELLAND

115-116. Sanitation and Plumbing.—Methods of sewage disposal and water supply in modern buildings; modern appliances and office practice; specifications. One credit per quarter; autumn, winter.

SEKSMITH

151-152-153. History of Architecture.—Modern architecture; city and industrial planning. Prerequisite Architecture 103. Two credits per quarter; autumn, winter, spring.

GOULD

154-155-156. Architectural Design.—Beaux Arts Class A projects first two quarters; third quarter, thesis. Five credits per quarter; autumn, winter, spring.

MCLELLAND

157-158-159. Free Hand Drawing.—Studies from life. Two credits per quarter; autumn, winter, spring.

166-167-168. Art Appreciation.—A survey of the history of art, principles of composition and arrangement. One credit per quarter; autumn, winter, spring.

Electives.—Electives may be chosen from among the following subjects: Analytical geometry, calculus, modern language, music, economics, naval architecture, psychology, public speaking, geology 5, English 37, 38, 39.

In addition students who elect design in their fourth year may select from the following subjects: Bridges, higher structures, structural materials (C. E. 167), frame structures (C. E. 134), electrical engineering 11.

These two courses are suggested as electives in the spring quarter of the junior year in architecture: Engineering geology (Geology 5), and practical public speaking (Dramatic Art 31).

ASTRONOMY AND NAVIGATION

The Observatory

ASSOCIATE PROFESSOR BOOTHRODT

The work in astronomy is planned for three classes of students: (a) Those who desire some knowledge of astronomy as a part of a liberal education; (b) engineers and navigators who need some knowledge of the science as a part of their technical training; and (c) those who wish to pursue the subject more intensively than either of the other classes.

In navigation the aim is to give a thorough mastery of the science and as much of the art as can be given with the limited equipment of the laboratory and class room. Men having the necessary experience in seamanship should have no difficulty in securing a master's license after successfully completing the course in navigation.

Any one of the following combinations of courses may be taken to satisfy the fourth science requirement in the College of Science:

- (a) 1, 2, 11 and 12; (b) 1, 2, 11 and 12; (c) 1, 11, 31 and 123; (d) 1, 11 and 5 hours of geology; (e) 10 hours of geology.

In the College of Liberal Arts 1, 11, 12 and 31 are recommended for those electing astronomy for the science requirement.

No major is offered in astronomy. Those contemplating graduate work in the subject should major in mathematics or physics and should arrange their course in consultation with their major professor and the head of the department of astronomy. Those contemplating applying for the "Mars Fellowship" must major in physics or mathematics and arrange their course as above specified. In the College of Engineering those wishing to specialize in geodetic engineering should arrange their electives in consultation with the head of the department of civil engineering and the head of the department of astronomy.

1. *Introduction to Astronomy.*—Eleven lectures, accompanied by studies of the heavens with the unaided eye, with the equatorial telescope and with charts and planetarium, and illustrated by lantern slides. Open to all students of the University. Laboratory fee, \$1. One credit.

BOOTHROYD

2. *The Elements of Practical Astronomy.*—Orbits and planetary motions; observations for time and azimuth with universal instrument and graphical solution for same on small hemispheres; equatorial telescope. Must be preceded or accompanied by Astronomy 1. Laboratory fee, \$1. Two lecture and recitation periods and four laboratory hours per week. Two credits; winter.

BOOTHROYD

11. *The Solar System.*—The solar system as a whole, its individual planets and their satellite systems, and the comets and meteors. Prerequisite, must be preceded by Astronomy 1 or its equivalent. Four lecture and recitation periods per week. ⁵Four credits; autumn, winter and spring.

BOOTHROYD

12. *The Sun and Stars.*—Prerequisite, Astronomy 11. Three lecture and recitation periods per week. Three credits; autumn and winter quarters.

BOOTHROYD

31. *History of Astronomy.*—An exposition of the scientific method as illustrated by the progress of astronomy. Forbes' "History of Astronomy" is used as a basis for the course. Prerequisite, Astronomy 11. Two lecture and recitation periods per week. Two credits per quarter.

BOOTHROYD

106. *Modern Astronomy.*—Recent work on planets, sun, stars and the general problems of the structure of the universe. Prerequisites, physics 93, mathematics 4 or its equivalent, and astronomy 12 and 31. Five lecture and discussion periods per week. Five credits; spring quarter.

BOOTHROYD

*123. *Nautical Astronomy.*—Principles of spherical astronomy as applied to the problems of determining the ship's position by observation; the sextant and its use. Prerequisites, Mathematics 52, or its equivalent, and must be preceded or accompanied by Astronomy 1. Two lecture and recitation periods and four laboratory hours per week. Three credits; ~~autumn~~ quarter. Laboratory fee, \$2.

*124. *Navigation.*—^{Sp}Study of nautical instruments, charts, elements of navigation, piloting, the sailings and dead reckoning, the Sumner method and the "new navigation." Prerequisite, Astronomy 123. Ten hours per week recitations and working problems. Laboratory fee, \$2. Five credits; winter quarter.

171. Engineering Astronomy.—An elementary course designed to give the student ability to determine time, latitude and azimuth from observations on the sun or stars with the surveyor's transit. Prerequisites, Mathematics 52, C. E. 21 or its equivalent, and must be preceded or accompanied by Astronomy 1 or its equivalent. Four laboratory hours per week. Two credits; autumn quarter. Laboratory fee, \$2.

BOOTHROYD

172. Geodetic Astronomy.—The course consists in the solution of problems for the precise determination of time, latitude and azimuth. Prerequisites, Astronomy 122, Mathematics 62. Ten hours laboratory work per week. Five credits; winter quarter. Laboratory deposit, \$5. Hours to be arranged.

BOOTHROYD

173. Geodesy.—Figure of the earth, geodetic positions, adjustment of triangulation systems, gravity determination and isostasy, mapping and map projection. Prerequisites, Astronomy 122 and Mathematics 62. Five lecture and recitation periods per week with outside assignments of problems and reading. Five credits; spring quarter.

BOOTHROYD

*203-204-205. *Practical Astronomy.*

BACTERIOLOGY AND PATHOLOGY

Science Hall

PROFESSOR WEINZIRL, ASSISTANT PROFESSOR NICKSON

With the exception of general bacteriology, all the courses offered are applied in one of the following fields: (a) medicine; (b) sanitation; (c) industry. Laboratory work forms an important part of all courses.

SUGGESTED SELECTIONS

For a major: 101, 102, 103, 110, 111, 112, 201, 202, 203. The work should be begun in the sophomore year if possible.

For arts and science students: 101, 102, 103.

For medical students and nurses: 104, 105, 106, and 203.

For home economics students: 101, and 102, are required, and 103 may be elected.

For pharmacy students: 5.

For chemical and sanitary engineers: either 5 or 101, 102, 103 may be elected.

5. Pharmacy Bacteriology.—A general course with emphasis upon pharmaceutical problems such as sterilization, disinfectants, and biological products. Prerequisite, sophomore standing and general chemistry. Four credits; spring. Laboratory fee, \$8.

WEINZIRL AND ASSISTANT

101. General Bacteriology.—Technique in growing and examining bacteria, their structure, functions and distribution; identification

* Not offered in 1919-1920.

of species; study of common disease bacteria. Prerequisite, junior standing except for bacteriology majors. A knowledge of biology and general chemistry is desirable. Four credits; autumn, summer. Laboratory fee, \$3.

WEINZIRL AND ASSISTANT

102. *Sanitary Bacteriology*.—Consideration of water supplies and sewage disposal; milk, meat, and other foods; certain industrial applications; inspection trips. Prerequisite, Bacteriology 101. Four credits; winter, summer. Laboratory fee, \$3.

WEINZIRL AND ASSISTANT

103. *Public Hygiene*.—The conservation of health; prevention of infectious and other diseases; school hygiene; industrial hygiene, etc. Prerequisite, junior standing except for bacteriology majors. Two credits; spring and summer.

WEINZIRL

104. *Medical Bacteriology*.—The technique and principles of general bacteriology; identification of species; theories of infectious disease and of immunity. Prerequisites, general chemistry, histology, and junior standing. Four credits; autumn. Laboratory fee, \$3.

WEINZIRL AND ASSISTANT

105. *Infectious Diseases*.—A detailed study of the pathogenic bacteria, and methods for the diagnosis of infectious diseases. Prerequisite, Bacteriology 104. Four credits; winter. Laboratory fee, \$3.

WEINZIRL AND ASSISTANT

106. *Hygiene*.—A general course covering both personal and public hygiene. Four credits; spring. Laboratory fee, \$3.

WEINZIRL AND ASSISTANT

110. *Pathology*.—Three credits; autumn. Laboratory fee, \$3.

NICKSON

111. *Pathology*.—Three credits; winter. Laboratory fee, \$3.

NICKSON

112. *Pathology*.—Four credits; spring.

NICKSON

201. *Serology*.—A consideration of the types of immunity; immunization of animals and man; study of immune products. Prerequisite, Bacteriology 5, 102, or 105, and senior or graduate standing. Four credits; autumn. Laboratory fee, \$3.

WEINZIRL

202. *Bacteriological Diagnosis*.—The diagnosis of infectious diseases. Intended for those specializing in bacteriology. Some time may be spent in public and private laboratories. Prerequisite, Bacteriology 102. Four credits; winter quarter. Laboratory fee, \$3.

WEINZIRL

203. *Clinical Diagnosis*.—The examination of sputum, urine, blood, gastric and intestinal contents, parasites, etc.; study of the path-

ological conditions involved in the above. Prerequisite, Bacteriology 105 and 106, or 102 and 103. Four credits; spring. Laboratory fee, \$8.

WEINZIERL

210-211-212. Seminar.—A consideration of topics not included in the regular courses; also reports on recent investigations and of research work done by the members. Prerequisite, senior or graduate standing, and Bacteriology 102 or 105. Two credits per quarter; autumn, winter, spring.

WEINZIERL

213-214-215. Research.—Investigation of assigned problems. Open to qualified students after consultation. Credits and time to be arranged. Autumn, winter, spring quarters. Laboratory fee, \$8.

WEINZIERL

BOTANY

Science Hall

PROFESSOR FRYE, ASSISTANT PROFESSORS RIGG AND HOTSON

SUGGESTED SELECTIONS

For the required biological science in the Colleges of Liberal Arts and Science, only courses 1, 2, 3, 11, 12, 105, 106, 107, will be accepted.

For a major: Courses 105, 106, 107, 140, 141, 142, 143, 144, 145, of which 105 and 106 are required unless 11 and 12 were taken in the freshman year.

For teaching botany: 3, 105, 106, 140, 141, 142, 143, 144, 145.

For pharmacy students: 13, 14.

For forestry students: 11, 12, 140, 141, 142, 261, 262.

For fisheries students: 53, 130.

1. Elementary Botany.—The structure and functions of roots, stems, leaves and seeds. Only for those who have had no botany in the high school. Five credits; autumn.

RIGG AND ASSISTANTS

2. Elementary Botany.—Types of the great groups of plants from the lowest to the highest. Open to students entering the second quarter without any previous botany. Five credits; winter.

FRYE AND ASSISTANTS

3. Elementary Botany.—Plant analysis; field work with local flora. Open to students entering the third quarter without any previous botany. Five credits; spring.

FRYE, RIGG AND ASSISTANTS

8, 9, 10. Ecology and Taxonomy.—For city teachers. Field trips every other Saturday, with noon campfire talks. Two or three credits per quarter; autumn, winter and spring quarters.

FRYE

11, 12. Foresters' Botany.—A study of types of plants to illustrate the advances in complexity. For forestry students. Five credits per quarter; winter and spring. Prerequisite, Course 7.

HOTSON AND ASSISTANT

13, 14. Pharmacy Botany.—Gross structure of vegetative and reproductive parts of seeds; brief study of spore plants; microscopy of powdered drugs. Five credits, winter; four credits, spring quarter.

RIGG AND ASSISTANT

26. School Garden.—Prerequisite, Courses 1, 2, or 10. Five credits; spring quarter.

HOTSON

58. Aquatic Botany.—A course on the plants of fresh water habitats, especially those involved in the study of fishes and their culture. Five credits; spring.

FRYE

105, 106, 107. Morphology and Evolution.—A morphological study of types to show advances in complexity. Required for all majors unless Courses 11 and 12 were taken in the freshman year. Prerequisite, Courses 2 or 10, or Zoology 1 and 2. Sophomore standing, or senior standing without prerequisites. Four credits per quarter; autumn, winter, spring.

FRYE AND ASSISTANT

111. Forest Pathology.—The recognition and treatment of common wood-destroying fungi. Prerequisites, Courses 10 or 105. Five credits; spring.

HOTSON AND ASSISTANT

119. Plant Histology.—Preparation of slides for the compound microscope. Prerequisite, Courses 12 or 106. Three credits; any quarter.

FRYE

130. Economic and Marine Botany.—Economic marine plants, their condition, the products derived therefrom and the process of manufacture. Prerequisite, one year of chemistry and junior standing. Four credits; autumn.

FRYE

137. Journal Club.—Reviews of articles in current journals, suggested for all seniors, graduates and instructors in the department. Prerequisite, junior standing; two years of botany. No credit; each quarter.

FRYE

140, 141, 142. General Fungi.—Morphology and classification of fungi as a basis for plant pathology. Prerequisite, course 11 or 105, junior standing. Five credits per quarter; autumn, winter, spring.

HOTSON

143, 144, 145. Plant Physiology.—Prerequisite, two quarters of botany and Chemistry 21, junior standing. Five credits per quarter; autumn, winter and spring quarters.

RIGG

200. Proseminar.—Semi-independent work by students. Open only on consultation with the head of the department. Credit to be arranged; any quarter.

FRYE, RIGG, HOTSON

233. *Research*.—Credit to be arranged; any quarter.

FRYE, RIGG, HOTSON

250. *Algae*.—Prerequisite, Course 11 or 105. Five credits; any quarter.

FRYE

251. *Bryophytes*.—Prerequisite, Course 12 or 106. Five credits; any quarter.

FRYE

252. *Pteridophytes*.—Prerequisite, Course 12 or 106. Five credits; any quarter.

FRYE

253. *Gymnosperms*.—Prerequisite, Course 12 or 107. Five credits; any quarter.

FRYE

254. *Angiosperms*.—Prerequisite, Course 12 or 107. Five credits; any quarter.

FRYE

261, 262, 263. *Plant Pathology*.—A study of the diseases of plants and the fungi which produce them. Prerequisite, Course 142. Five credits per quarter; autumn, winter, spring.

HOTSON

271. *Experimental Morphology*.—Prerequisite, Course 12 or 106, one year chemistry, senior standing. Five credits; any quarter.

FRYE

279. *Colloidal Biology*.—Prerequisite, Course 143, Chemistry 32, senior standing. Five credits; any quarter.

RIGG

280. *Micrometabolism*.—Prerequisite, Botany 12 or 107, 148, senior standing. Five credits; any quarter.

RIGG

CHEMISTRY

Bagley Hall

PROFESSORS BENSON, JOHNSON, DEHN, SMITH; ASSISTANT PROFESSORS TARTAR, HEATH, BARTON AND THOMPSON; INSTRUCTOR WHETTON; ASSOCIATES POWELL, WHITEWELL

The instruction in this department is designed to satisfy, as far as possible, the requirements of those students who desire to study chemistry as a means of culture and as a necessary complement of a liberal education. It is realized that the subject is eminently practical; hence it is the desire of those in charge so to guide the student that he may fit himself for work in those lines in which chemistry has become an applied science.

REQUIREMENTS OF THE DEPARTMENT

For a major a minimum of thirty-six credits selected from the

NOTE.—Only a limited number of courses 250-280 will be given in any one quarter.

courses outlined and including courses 21, 22, 23, 31, 32, 33 and 101, 102, or their equivalents.

The fee for each laboratory course is \$5 per quarter. This deposit covers the cost of materials furnished by the laboratory and provides the student for a full quarter's work. The student is required to purchase a breakage ticket when he obtains his locker key. The cost of the ticket is \$5, and any portion of it unused will be refunded.

1-2-3. General Chemistry.—The first two quarters are devoted to general chemistry and the chemistry of the non-metals; the third quarter to the chemistry of the metals. Open only to students who have had no high school chemistry. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter, spring.

SMITH

3-1-2. General Chemistry.—A repetition of the course described above. Five credits per quarter.

THOMPSON

4. General Chemistry.—For short course miners. Three lectures and one four-hour laboratory period per week. No credit; winter.

BENSON

5-6. General Chemistry.—For students in the department of home economics. Only women admitted. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter.

TARTAR

8-9. General Chemistry.—For students of pharmacy. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter.

HEATH

10. Qualitative Analysis.—For students of pharmacy. Two lectures and two laboratory periods per week. Four credits; spring.

HEATH

21-22-23. General Chemistry.—For students who have had a high school course in chemistry, and especially for students in the colleges of Science and Engineering. Prerequisite, an accredited high school course in chemistry. Three lectures and two laboratory periods per week. Five credits per quarter; autumn, winter, spring.

SMITH

22-23-21. General Chemistry.—A repetition of the course above beginning the spring quarter. Five credits per quarter.

TARTAR

31-32-33. Organic Chemistry.—Designed especially for major students in chemistry and for students preparing for medicine. Prerequisite, course 3 or its equivalent. Three lectures and two laboratory periods per week. Five credits; autumn, winter, spring.

DEHN

35-36. Organic Chemistry.—For students in the department of home economics. Only women are admitted. Two lectures and two

laboratory periods per week. Prerequisite, course 6 or its equivalent. Five credits per quarter; autumn, winter

DEHN

37-38. Organic Chemistry for Pharmacy Students.—Three lectures and two laboratory periods per week; autumn and winter.

HEATH

43. Qualitative Analysis.—For students of chemistry and chemical engineering. Three lectures and two laboratory periods per week. Prerequisite, course 23 or its equivalent. Five credits; autumn, spring.

THOMPSON

51. Engineering Chemistry.—An elective for engineering students. The course deals with the chemistry of fuels and construction materials. Two lectures and one laboratory period per week. Prerequisite, course 3 or 23. Three credits; spring.

BENSON

101-102-103. Quantitative Analysis.—The first and second quarters deal with gravimetric and volumetric methods; the third with mineral analysis and commercial methods. Three laboratory periods per week. Prerequisite, course 23 or its equivalent. Four credits per quarter; autumn, winter, spring.

HEATH

102-103-101. Quantitative Analysis.—A repetition of the course described above.

HEATH

104. Food Analysis.—For students in the department of home economics. Methods of analysis of various foods and federal and state laws are studied. Two lectures and two laboratory periods per week. Laboratory deposit, \$5. Four credits; autumn.

JOHNSON

105-106-107. Chemistry and Analysis of Food.—Laboratory and class work in analysis of food products and the study of federal and state laws regulating the sale of food and drug products. Laboratory deposit, \$5. Five credits per quarter; autumn, winter, spring.

JOHNSON

121. Industrial Chemistry.—Three lectures and two laboratory periods per week. Prerequisite, 102. Five credits per quarter; autumn.

BENSON

122-123. Industrial Chemistry.—In the first quarter the course deals with the machinery and processes for the manufacture of acids and alkalis. The second deals with organic industrial chemistry, particularly with the technology of oils, fats, paints, rubber and cellulose products. The third quarter deals with fuels, gases, cements, refractories, iron and steel, and alloys with special reference to technical testing. The work of each quarter may be undertaken independently. Three lectures and two laboratory periods per week. Prerequisite, 102. Five credits per quarter; winter, spring.

BENSON

133. Sanitary Chemistry.—Materials and processes used in the purification of water, sewage, and in sanitation. Two lectures, one laboratory period per week. Prerequisite, course 3 or 23. Three credits; autumn.

BENSON

135. Forest Products.—Wood distillation, tannin, wood pulp, alcohol, viscose, vulcanized fiber and wood oils. An elective for students in forestry and chemical engineering. Two lectures and one laboratory period per week. Prerequisite, course 3 or 23. Three credits; autumn.

BENSON

136. Road Materials.—Bitumens and methods of testing. An elective for students in civil and chemical engineering. One lecture and one laboratory period per week. Prerequisite, course 3. Two credits; spring.

BENSON

141-142-143. Physiological Chemistry.—For students preparing for the study of medicine. Three lectures and two laboratory periods per week. Prerequisite, course 33. Five credits per quarter; autumn, winter, spring.

BARTON

144. Physiological Chemistry.—For students in the department of home economics. Three lectures and two laboratory periods per week. Prerequisite, course 36. Five credits; spring.

DEHN

201-202. Physical Chemistry.—An elementary course dealing with the fundamental theories of chemistry based upon physical measurements. Three lectures and two laboratory periods per week. Prerequisite, Physics 2 and courses 36 and 102. Five credits per quarter; autumn, winter.

TARTAR

203. Advanced Physical Chemistry.—Chemical statics and dynamics. Three lectures and two laboratory periods per week. Prerequisite, course 202. Five credits; spring.

TARTAR

204. Electro Chemistry.—Theories and laws of voltaic currents and laboratory work with electro-chemical processes and measurements. Three lectures and two laboratory periods per week. Prerequisite, course 202. Five credits; spring.

TARTAR

211. Inorganic Preparations.—The preparation of special substances involving representative laboratory methods. Four laboratory periods per week. Prerequisite, course 223. Five credits; autumn.

THOMPSON

212. Organic Preparations.—This course and 211 are required of all candidates for the degree of doctor of philosophy. Four labora-

tory periods per week. Prerequisite, course 223. Five credits; autumn.

DEHN

218. Organic Analysis.—The fundamental special methods used in the analysis of organic substances. Two laboratory periods per week. Prerequisite, courses 33 and 102. Two credits; winter.

DEHN

215-216-217. Chemical Engineering.—For seniors and graduates in chemical engineering. In the autumn quarter the course consists of a study of the apparatus, devices and methods used in the chemical control and inspection of manufacturing industries. The winter quarter deals with the study of selected chemical processes in detail, including the preparation of layouts and complete plans of equipment. The spring quarter deals with the evolution of a chemical process from assigned raw materials quantitatively and experimentally tested. This quarter's work may be reported in the form of a thesis for the bachelor's degree. Prerequisite, courses 123, C. E. 2 and M. E. 90. Five credits per quarter; autumn, winter, spring.

BENSON

221-222-223. Advanced Inorganic Chemistry.—A course in chemical theory required of all major and graduate students. Two credits per quarter; autumn, winter, spring.

SMITH

231-232-233. Advanced Organic.—A detailed study of special fields of organic chemistry. Prerequisite, courses 33 and 202. Five credits per quarter; autumn, winter, spring.

DEHN

249. Chemical Engineering.—The design, construction, equipment and operation of a plant for semi-commercially testing the results of laboratory experiments. The results may be reported as a thesis for an advanced degree. Prerequisite, course 217. Credit to be arranged; autumn, winter, spring.

BENSON

250. Research.—The work in research offered by the department is of two types: (1) Research for the master's degree. This work is not necessarily laboratory investigation, although the investigation of the literature is ordinarily supplemented by laboratory development of the subject. The maximum credit is nine hours; (2) research for the doctor's degree. Work for this degree may be carried on under the direction of any member of the regular staff of the department, or in food investigation with Dean Johnson of the College of Pharmacy. The work may be upon any topic approved by the department. The maximum credit is forty-five hours. Prerequisite, course 202. Credit to be arranged; autumn, winter and spring.

NOTE.—For the year 1919-20, course 215 will be offered in lieu of 123.

CIVIL ENGINEERING

Engineering Hall

PROFESSORS MORE, ALLISON; ASSOCIATE PROFESSOR HARRIS; ASSISTANT PROFESSOR HAYDEN; MR. WHITE, MR. FORD

1. *Engineering Drawing*.—The use of instruments, freehand lettering, fundamental principles of making working drawings, platting of traverse from field notes. Laboratory deposit, \$1. Three credits; autumn, winter, spring.

WHITE

2. *Engineering Drawing*.—Reading of working drawings, conventional symbols and standards, tracing. Prerequisite, course 1. Three credits; autumn, winter, spring.

WHITE

5. *Cartography*.—Making of maps and charts, with topographical symbols, U. S. G. S. standard. Three credits; spring.

WHITE

11. *Engineering Problems*.—The investigation of simple structures as to loadings, weights and stresses in members by algebraic and graphic methods. Three credits; autumn, winter, or spring.

FORD

13. *Engineering Problems*.—The problems of dimensioned objects, graphic solution. Three credits; autumn, winter or spring.

WHITE

12. *Engineering Problems*.—Elementary problems dealing with the movement of bodies, work, energy and power. Three credits; autumn, winter, or spring.

21. *Plane Surveying*.—Instruments, computations, mapping, and an introduction to the U. S. system for the survey of the public lands. Prerequisite, course 1 and Mathematics 51. All freshman engineers. Laboratory deposit, \$3. Three credits; autumn, winter, spring.

HAYDEN

22. *Railroad Surveying*.—Elementary railroad engineering. Prerequisite, Course 21. Laboratory deposit, \$3. Four credits; autumn.

HAYDEN

23. *Higher Surveying*.—Meridian observations; triangulation and base line measurements; computations and adjustment of measurements; plane table surveying. Prerequisite, course 21. Four credits; winter.

HAYDEN

24. *Field Engineering*.—Field practice in the survey and construction of highways, railroads, canals, etc. Prerequisite, course 22. Four credits; spring.

HAYDEN

27. *Mine Surveying*.—Surface and underground practice; observation for meridian; topography; mining claim survey; tunnels and

vertical shaft work and connections; mapping. Prerequisite, course 21. Sophomore mining engineers. Laboratory deposit, \$3. Three credits; winter.

HAYDEN

30. *Surveying*.—(Short session in Forestry). Laboratory deposit, \$3. Five credits; winter.

HAYDEN

38. *Surveying*.—(Short session in Mining). Laboratory deposit, \$3. Five credits; winter.

HAYDEN

41. *History of Civil Engineering*.—A general survey of monumental structures from the standpoint of utility, design, construction and maintenance. Three credits; winter or spring.

WHITE

55. *Forest Surveying*.—For students in forestry. Laboratory deposit, \$3. Three credits; winter.

HAYDEN

56. *Forest Surveying*.—Chain, compass, transit and level surveying, with reference to work in forestry. Laboratory deposit, \$3. Five credits; spring.

HAYDEN

112. *Railway Constructing*.—Railway construction methods, machinery and tools; details of track, and terminal structures. Prerequisite, course 24. Five credits; winter.

HAYDEN

115. *Railway Economics*.—The economic theory of railway location, operation, and maintenance. Prerequisite, course 24. Five credits; spring.

HAYDEN

122. *Highways*.—Location, methods, and types of construction, with local application. Prerequisite, C. E. 22. Three credits; winter.

ALLISON

126. *Roads and Pavements*.—Surface materials and maintenance, including comparative laboratory study of properties of local materials. Prerequisite, C. E. 122. Five credits; autumn.

ALLISON, FORD

131. *Mechanics*.—Statics, stresses in structures, beams, columns, flexible cords; theorem of least work; theorem of three moments; combined stresses. Prerequisite, Mathematics 62. Three credits; autumn, winter, or spring.

MORSE

132. *Mechanics*.—Dynamics; translation and rotation; work, energy and power; friction; torsion; inertia of rigid bodies. Prerequisite, C. E. 131. Three credits; autumn, winter, or spring.

133. *Reinforced Concrete*.—The mechanics of reinforced concrete beams, girders, columns and retaining walls and introduction to rein-

forced arch bridges. Prerequisite, C. E. 131. Three credits; spring.

MORRIS

134. *Framed Structures*.—Complete problems presenting structural engineering, cranes, roof trusses, highway bridges and simple railroad spans. Prerequisite, course 131. Three credits; autumn.

142. *Hydraulics*.—Flow of water through pipes, orifices, over weirs and in open channels; energy, impulse and reaction of jets with application to impulse wheels; review of hydrostatics. Prerequisite, C. E. 131. Laboratory deposit, \$3. Five credits; autumn, spring.

HARRIS

143. *Hydraulic Engineering*.—Complete problems presenting hydraulic engineering. Prerequisite, C. E. 142. Three credits; winter.

HARRIS

144. *Hydraulic Mining*.—A course of two lectures per week on theory and practice of hydraulic mining. Two credits; winter.

ALLISON

145. *Hydraulic Machinery*.—Development and theory of water wheels and turbine pumps; design of a reaction turbine; reference to hydrostatic machinery and dredging equipment. Prerequisite, C. E. 12. Senior and graduate E. E. and M. E. Three credits; winter.

HARRIS

147. *Hydraulic Power*.—Generation of power; penstock and turbines; types of installations. Prerequisite, C. E. 142; senior and graduate C. E. Five credits; spring.

HARRIS

153. *Water Supply*.—The principal engineering operation necessary to secure suitable water supplies for cities and towns; purification of water. Prerequisite, C. E. 143; senior and graduate C. E. Five credits; winter.

ALLISON

154. *Sanitary Engineering*.—The design and construction of sewage systems, sewage treatment, and disposal; garbage collection and destruction. Senior and graduate C. E. Prerequisite, C. E. 153. Five credits; spring.

ALLISON

161. *Bridges*.—Stresses, design and deflection of simple trusses; detail drawings; estimates. Prerequisite, C. E. 134. Senior and graduate C. E. Five credits; winter.

MORRIS

164. *Higher Structures*.—Primary and secondary stresses and design. Prerequisite, C. E. 161. Senior and graduate C. E. Five credits; spring.

MORRIS

167. *Strength of Materials*.—An experimental study of the physical properties of materials used in engineering. Prerequisite, C. E.

181. Senior and graduate C. E. and M. E. and graduate E. E. Laboratory deposit, \$3. Three credits; spring.

FORD

169. *Materials of Construction*.—Selection, handling and inspection of builders' materials; critical investigations in laboratory and field. Prerequisite, junior standing. Five credits; winter.

FORD

171. *Engineering Astronomy*—(See Astronomy 171.)

172. *Geodetic Astronomy*—(See Astronomy 172.)

173. *Geodesy*.—(See Astronomy 173.)

CLASSICAL LANGUAGES AND LITERATURE

Denny Hall

PROFESSOR THOMSON, ASSOCIATE PROFESSOR SIDEX, ASSISTANT
PROFESSORS DENSMORE, CLARK

Requirement for a major; at least 36 hours in the department, chosen from courses other than Greek 11 and 13-14; Latin, 1, 2, 3; 11; 14-15-16. A student specializing in Greek must take at least nine hours of Latin; one specializing in Latin must take at least ten hours of Greek.

I. GREEK

1-2-3. *Elementary Greek*.—Translation from a wide range of Greek authors. An especial effort will be made to give students who take but one year of Greek an appreciation of its spirit and its bearing on the English language. Five credits per quarter; autumn, winter, spring.

DENSMORE

4-5. *The World of Homer and Hesiod*.—The epic age as seen in Homer and the renaissance of the Greek world. Illustrated lectures, conferences, and reports. Prerequisite, one year of Greek. Three credits per quarter; autumn and winter.

CLARK

6. *Herodotus*.—A study of the Persian war period. Prerequisite, course 4-5. Three credits; spring.

CLARK

*7. *New Testament*.

8-9-10. *Greek Art*.—Autumn—architecture; winter—sculpture; spring—painting, numismatics, and the minor arts. This course alternates with that in Roman art. Primarily for students of fine arts but open to all students. One credit per quarter.

SIDEX

11. *Greek Civilization*.—An institutional and cultural survey of the Greek world from the earliest times to the Roman conquest. Illustrated lectures, conferences and discussions. Five credits; autumn, or winter.

DENSMORE

12. *Advanced Greek Civilization.*—A continuation of the problems of course 11 with particular attention to their development in modern times. Conferences and discussion groups. Prerequisite, course 11 or junior standing. Five credits; spring.

DENSMORE

13-14. *Greek and Roman Literature.*—A two-quarter course devoted to the study of the chief masterpieces in English translation. Knowledge of Greek and Latin is not required. Five credits; autumn, winter, spring.

SIDNEY

101-102-103. *The Periclean Age.*—An intensive study of Greek civilization from the founding of the Delian confederacy to the death of Socrates. Readings, conferences, and reports. Prerequisites, courses 4-5. Three credits per quarter; autumn, winter, spring.

DENSMORE

*104-105-106. *Greek Poetry.*—Lyric poetry, tragedy, and pastoral poetry. Prerequisite, courses 4-5. Two credits per quarter; autumn, winter, spring.

DENSMORE

*107-108-109. *Greek Prose.*

*151-152-153. *Plato.*—Intensive study of the Republic, the Laws (in part), and some of the shorter dialogues. Prerequisites, courses 101-103. Three to five credits per quarter; autumn, winter, spring.

DENSMORE

Greek History.—(See History 71-72-73 and 171-172-173.)

LATIN

1-2-3. *Elementary Latin.*—This course covers the first and second years of high school Latin. It is designed to help those who have previously had little or no Latin to an appreciation of the sources of the English and Romanic languages, as well as to enable those who desire to study Latin more thoroughly to bring their preparation up to the college requirements. It will be given if any considerable number of students desire it. Five credits per quarter; autumn, winter, spring.

SIDNEY

4. *Ovid.*—Selections, chiefly from the Metamorphoses, with some study of the same myths as they appear in English literature. Prerequisite, three and one-half years of high school Latin. Three credits; autumn.

CLARK

5. *Cicero: De Amicitia.*—A comparison of Cicero's work with similar essays. Prerequisite, three and one-half years of high school Latin. Three credits; winter.

CLARK

*Not offered in 1919-1920.

6. *Catullus*.—The Latin lyric. Emphasis upon finished translation and comparison of the best English versions. Prerequisite, three and one-half years of high school Latin. Three credits; spring.

CLARK

7, 8, 9. *Sight Translation and Composition*.—Prerequisite, three and one-half years of high school Latin. Two credits per quarter; autumn, winter, spring.

CLARK

11. *Roman Civilization*.—The part played in history by the Romans and their contributions to modern civilization. Lectures, illustrated, when possible; collateral reading, and reports. Five credits; autumn, winter, or spring.

CLARK

13. *Roman Literature*.—(See Greek 13-14.)

*14-15-16. *Roman Art*.—Roman architecture for two quarters, followed by sculpture, numismatic and minor arts. Illustrated by photographs and slides. Primarily for students of fine arts but open to all. Alternates with the course in Greek art. One credit per quarter; autumn, winter, spring.

14 (710 4-8) 5 hrs Greek + Roman Art. Sides SIDBY

50. *Horace and Tibullus*.—Selections from the odes of Horace and the elegies of Tibullus and Propertius. Prerequisite, courses 4, 5, 6, or special permission. Three credits; autumn.

THOMSON

60. *Livy*.—One book and selections from the other books. Prerequisite, courses 4, 5, 6, or special permission. Three credits; winter.

THOMSON

70. *Plautus and Terence*.—A study of the Roman drama and its Greek sources. Prerequisite, courses 4, 5, 6, or special permission. Three credits; spring.

THOMSON

103-104-105. *Teachers' Course*.—Caesar, Cicero, and Vergil; methods, practice teaching, and observation. Prerequisite, courses 50, 60, or 70. Three credits per quarter; autumn, winter, spring.

CLARK

110. *Horace's Satires*.—Horace as a representative of the Augustan age; the development of satire among the Romans. Prerequisite, courses 50, 60, or 70. Two credits; autumn.

CLARK

111. *Juvenal and Martial*.—Reading of the Satires of Juvenal and Epigrams of Martial in the original and translation, with further study of the life of the period. Prerequisite, courses 50, 60, or 70. Two credits; winter.

CLARK

112. *Short Stories from Apuleius*.—Readings from the Golden Ass of Apuleius with a study of the development of this literary form among the Greeks and Romans, and some attention to the Latinity of the period. Prerequisite, course 50, 60, or 70. Two credits; spring.

CLARK

151. *Medieval Latin*.—Einhard's Life of Charlemagne and Bede's Ecclesiastical History of England. Two credits; autumn.

SIDBY

152. *Seneca*.—Moral Essays. Two credits; winter.

SIDBY

153. *Latin of the Empire*.—Gudeman's Selections. Two credits; spring.

SIDBY

DRAMATIC ART

Denny Hall

PROFESSOR GORSUCH

The work in this department is planned for three classes of students: (a) those who desire some knowledge of dramatic art as part of a liberal education; (b) those who need some knowledge of dramatic art as part of their technical training; and (c) those who wish to pursue the subject more intensively than either of the former groups.

For a major the department requires 38 to 60 credits, of which 24 must be in the department, including courses 1-2-3 and 21-22-23.

Courses 1-31 (inclusive) may be entered at the beginning of the first, second or third quarters.

1-2-3. *Dramatic Literature*.—Introductory course. Selected plays of the great dramatists are studied with the purpose of increasing the students' power of analysis and appreciation. Three credits per quarter; autumn, winter, spring.

GORSUCH

21-22-23. *Shakespeare*.—Dramatic reading and interpretation of selected plays. Courses 21-22-23 have as their general purpose the interpretation of the drama. Selected plays are used as exercises in dramatic delivery and for the study of effectiveness in the reading of lines. The special aims are to correct personal mannerisms of vocal expression and to encourage habits of speech that are right and natural; to cultivate proper instinctive expression, and the use of imagination in conceiving the situation, relation and characterization as these are manifested in utterance. Three credits per quarter; autumn, winter, spring.

GORSUCH

27-28-29. *Contemporary Drama*.—Dramatic reading and interpretation of selected plays. For further information see courses 21-22-23.

GORSUCH

Work to be announced later will include courses in Dramatic Composition, Producing, General Stagecraft, Acting.

31. Practical Public Speaking.—An introductory course. Principles of public speaking are studied and short, original talks are prepared and delivered. Prerequisite, English 1. Three credits per quarter; autumn, winter, spring.

GORSUCH

ECONOMICS AND BUSINESS ADMINISTRATION

Commerce Hall

PROFESSORS MILLER, DE HAAS; ASSOCIATE PROFESSORS CUSTIS, MORIARTY DOUGLAS, SMITH, ASSISTANT PROFESSORS McMAHON, SKINNER, COX; INSTRUCTORS AKERMAN, THOMA, GOULD; ASSISTANT, MR. TURPIN

1. General Economics.—Introductory course covering the general principles of economics. Five credits; autumn, winter, or spring.

MILLER

4. Economics of Consumption.—The social psychology of consumption in its relation to the economic laws of production and distribution. Two credits; autumn.

McMAHON

7. Economic Resources of the World.—A study of the principal agricultural and mineral resources of the world, their development and commerce and governmental policies of conservation. Three credits; autumn, spring.

SKINNER

8. Economic Resources of the Northwest.—An intensive study of the resources of the Pacific Northwest and of the industries based upon them. Special attention is given to the question of ownership and control of these resources and to the measures of conservation. Three credits; winter.

AKERMAN

9. History of Commerce and Commercial Policies.—The object of this course is to study the evolution of commerce to the present time. The commercial policies of the principal nations are studied in connection with the development of American foreign trade. Prerequisite, courses 1, 7, or 8. Two credits; winter.

AKERMAN

10. Business Principles.—This course considers the economic structure constituting the basis of business. Lectures and discussion will cover the cooperation of the factors of production and the economic limitation of cost. Three credits; winter.

11-12-13. Elementary Accounting.—Fundamental principles of accounting; practice in the keeping of accounts and in the preparation of balance sheets and financial statements. This course is a prerequisite to all other courses in accounting. Three credits per quarter; autumn, winter, spring.

14-15-16. Second Year Accounting.—Designed to give a more thorough training in accounting. The work falls into three sections which correspond approximately with the three quarters, so that any student may discontinue the course at the end of any quarter. The entire course is required of students specializing in accounting. Three credits per quarter; autumn, winter, spring.

17. Economic Resources of the Orient.—An intensive study of the resources of China and Japan as basis for the study of America's trade with the East. Three credits; winter.

SKINNER

21. Money and Banking.—The nature and functions of money, the relation between money and price levels; state and national banks, their functions and government regulation. Prerequisite, sophomore standing. Five credits; autumn, winter, spring.

CUSTIS

24. Banking Practice.—The accounting systems of commercial and savings banks, the duties of the officers and employees, and the preparation of reports. Prerequisites, courses 21, 11, 12, 13. Two credits; winter.

CUSTIS

41. Risk and Insurance.—A study of the risk factor in its economic and social consequences. Classification of important kinds of risks. Solution of the risk problem: 1. Conservation; 2. Distribution of risk; 3. Insurance. This course is a prerequisite to all other courses in insurance. Prerequisite, sophomore standing. Three credits; autumn, spring.

SMITH

42. Elements of Statistics.—Designed to develop appreciation for the correct use of, and familiarity with, common methods of collecting and analyzing quantitative data. Prerequisite, sophomore standing. Three credits; autumn or spring.

DOUGLAS

51. Economics of Transportation.—The history of transportation; railroad problems in relation to industry and society; the present American railway situation. Prerequisite, sophomore standing. Three credits; autumn and spring.

MILLER

58. Water Transportation.—A study of inland and ocean transportation, rate determination, combinations, and government regulations. Prerequisite, course 51. Three credits; winter.

MILLER

BUSINESS LAW 54 7
5A
5C

61. Social and Economic Standards of Living.—An historical study of standards of living; racial differences in habits, and ideals of consumption; economic and social influence in industry; conflict of

standards and racial survival. Prerequisite, course 1 or 4. Two credits; winter.

McMAHON

62. *Social and Economic Standards of Living.*—An analysis of class standards of consumption in the United States; their economic and social background; new standards in their evolutionary development. Prerequisite, course 61. Spring.

McMAHON

63. *Immigration and Labor.*—The influence of immigration upon the American labor movement. Two credits; spring.

McMAHON

71. *Evolution of the Market.*—The development of the market from early times to the present, with emphasis on the marketing of raw products. This course is a prerequisite to all the other courses in marketing. Three credits; autumn.

MORIARTY

72. *Marketing of Manufactured Products.*—A general survey of modern marketing methods in manufactured products and trademarked goods. Three credits; winter.

MORIARTY

73. *Sales Management.*—Selling methods, organization of the sales force and training of salesmen are carefully studied. Three credits; spring.

76-77-78. *Advertising.*—History, purpose, and place of advertising in the business world; psychological factors; principles of copy construction; advertising display; problems of the small advertiser, such as the retailer and professional man; study of media and current campaigns; some practice in preparation of copy and planning campaigns.

MORIARTY

81-82-83. *Typewriting.*—This course requires ten hours practice each week for three quarters. One credit per quarter; autumn, winter, spring.

THOMA

84-85-86. *Shorthand.*—Two hours class work required daily, with from one to two hours preparation. Students with previous training may be admitted to second or third quarters upon examination. Prerequisite, sophomore standing. Two credits per quarter; autumn, winter, spring.

THOMA

87. *Secretarial Accounts.*—A study of accounting for professional offices, societies, clubs, educational, religious, and civic organizations, public subscriptions, etc. Prerequisite, two quarters of accounting. Two credits; autumn.

THOMA

63
 71
 72
 73
 76-77-78
 81-82-83
 84-85-86
 87

88. Office Management.—The principles of office administration, office location, lay-out, and equipment; communication; correspondence; business departments; training office workers. Prerequisites, secretarial accounts, typewriting, and business correspondence. Two credits; winter.

THOMA

89. Secretarial Training.—Use of office appliances and practice in filing, telephoning, and general office work. This course rounds out and completes the training of the stenographer. Prerequisite, typewriting and two quarters of shorthand. Three credits; spring.

THOMA

90. Business Correspondence.—Principles of business writing; theory and practice of various types of letters, sales, adjustment, credit, collection etc., reports and summaries. Three credits, autumn or spring.

MONHARTT

101. The Teaching of Economics.—For those who expect to teach economics in the high schools. A critical study of standard texts; a consideration of the application of general economic theory to the economic and social problems of the day. Prerequisite, senior standing. Three credits; spring.

AKERMAN

103. Advanced Economics.—This course is intended to give a more thorough training in economic theory. The various theories of value and distribution are critically studied. Prerequisite, senior standing. Three credits; autumn.

AKERMAN

105. Trusts and Combinations.—The forms of business organization from the point of view of the concern and from that of the public. Prerequisite, junior standing. Three credits; autumn.

CUSTIS

***106. Fair and Unfair Competition.**—A critical study of methods of competition and their effect on the development of industrial efficiency; the rulings of the Federal Trade Commission and of the courts affecting unfair practices. (Alternates with 107.) Prerequisite, junior standing. Three credits; winter.

CUSTIS

107. The Regulation of Industry.—The policy of the government toward contracts and combinations in restraint of trade, both historical and theoretical, with special attention to the changes in policy to result under the administration of the Webb-Pomerene Act. (Alternates with 106.) Prerequisite, junior standing. Three credits; winter.

CUSTIS

109. Research Course in Combinations and Trusts.—Two credits per quarter; autumn, winter, spring.

CUSTIS

110. Research Course in Economic Theory.—Two credits per quarter; autumn, winter, spring.

AKERMAN

111. Auditing.—Auditing practice and legal responsibilities of the auditor. The student is required to perform an independent audit of a set of books under the supervision of the instructor. Prerequisite, 12 credits in accounting. Three credits; autumn.

Cox

114. C. P. A. Problems.—This course is designed for those intending to take the C. P. A. examinations, and is intended to give a thorough training in the solution of problems which have been given at such examinations by various examination boards. The training aims to develop accuracy and speed. Prerequisite, 18 credits in accounting. Three credits; spring.

Cox

***116. Municipal Accounting.**—Accounting problems resulting from municipal operation of public utilities. Prerequisite, 18 credits in accounting. Two credits; winter.

Cox

117. Cost Accounting.—A study of the principles and methods of cost accounting systems applicable to mercantile and industrial establishments, and the preparation of cost reports. (Alternates with 116.) Three credits; winter.

Cox

118. Practice Work in Accounting.—By special arrangement a student may receive credit for practical accounting work performed under supervision and with the approval of the instructor. This course corresponds to the research courses in other study groups. Prerequisite, 18 hours of accounting. Credit by arrangement but not to exceed three units per quarter nor six units in all; autumn, winter, spring.

Cox

120. Business Administration.—The principles according to which business organizations are conducted. Field work forms an important part of this course. A study of a number of business houses, including bank, steamship line, lumber mill, store, and also trade associations. Prerequisite, junior standing. Three credits; autumn, spring.

121. Corporation Finance.—Methods of financial management and control of corporations; issue of stocks and bonds; problems of reorganization and liquidation; and the relation of stock- and bondholders to the management. Prerequisite, junior standing. Three credits; winter.

CUSTIS

122. Investments.—A critical study of the various classes of investment securities; state, municipal and industrial. Prerequisite, junior standing and course 121. Three credits; spring.

CUSTIS

***123. Stock Exchange Operations.**—The organization of stock exchanges, the methods of dealing in securities, and the operations of the brokerage business. (Alternates with 122.) Two credits; spring.

CUSTIS

*Not offered in 1919-1920.

126. Real Estate Problems.—Factors determining urban and rural land values; methods of operation and administration of the real estate business. Prerequisite, junior standing. Two credits; spring.

AKERMAN

128. Foreign Exchange and Foreign Banking.—The theory of foreign exchange and the methods of dealing in foreign exchange; financing of import and export shipments. Prerequisite, junior standing and courses 21 and 24. Two credits; winter.

135 Municipal Finance See Pol Sci 27 & AKERMAN

141. Property Insurance.—A study of the theory and practice of fire, credit, title and fidelity insurance. Prerequisites, junior standing and course 41. Three credits; autumn.

137 Econ of Adm. 3 cr W. Monthly SMITH

142. Life Insurance.—The functions of life insurance; calculation of premiums, reserves, surrender of loan values and dividends; state regulation of the insurance business. Prerequisites, junior standing and courses 41 and 42. Three credits; winter.

138 Princ of Adm. 3 cr W. Monthly SMITH

146. Business Statistics.—The preparation and interpretation of statistical information concerning business operations; the preparation of graphs for the use of executives. Prerequisites, junior standing and course 42. Two credits; winter.

139 - Adm. Campaign 3 cr Sp Monarch DOUGLAS

147. Social Insurance.—Social risks; the hazards of accident, ill health, old age, invalidity, and unemployment; public, private and mutual insurance systems. Prerequisites, junior standing and course 41. Three credits; winter.

140 Research in Finance See Pol Sci? SMITH

149. Marine Insurance.—The history, principles and practice of marine insurance as applied to ship and cargo. This course is intended to serve the needs of the student of foreign trade as well as those of the student of insurance. Prerequisite, course 41. Three credits; spring.

SMITH

150. Research Course in Insurance and Statistics.—Prerequisites, senior standing and 9 credits in statistics and insurance. Two credits per quarter; autumn, winter.

MUGGERY

151. Rail and Marine Rates.—A study of cases; the jurisdiction of the Interstate Commerce Commission, and of the U. S. Shipping Board; local and commodity tariffs; rate structures. Prerequisites, junior standing and course 51. Three credits; spring.

MILLER

153. Railroad Administration.—A study of railroad administration from the foreign and American viewpoint; divisional and departmental systems compared and criticised; the relation of administration to efficiency will consume considerable time; uniform accounting as a

basis for statistical comparison and railroad efficiency emphasized; typical railroad systems studied and contrasted, conclusions, and constructive criticism developed. Prerequisites, junior standing and courses 51, 11, 12, 13. Three credits; autumn.

MILLER

*154. *State Railroad Commissions.*—The work of the leading state railroad commissions or public utility business; a particular emphasis will be given to the work of the Wisconsin, California and Washington Railroad Commissions. Alternates with 157. Prerequisites, junior standing and courses 51 and 151. Three credits; winter.

157. *Railroad Finance.*—A study of railroad compensation, valuation, bond and stock issues, earnings, and receivership; European methods will be compared with financial methods of the U. S.; government control, its efficiency, earning power and limitations reviewed. (Alternates with 154.) Prerequisites, junior standing and courses 51 and 121. Three credits; winter.

MILLER

159. *Research Course in Transportation.*—Prerequisites, senior standing and nine credits in transportation. Two credits per quarter; autumn, winter, spring.

T, Th, 9. C. 221.

MILLER

161. *History of the American Labor Movement.*—This course aims to show the relation between the development of the American labor movement and free lands, immigration, economic organization, prices and industrial crises. Prerequisites, junior standing and course 1. Three credits; autumn.

MCMAHON

162. *Modern Labor Problems.*—An analysis of the modern labor movement with special emphasis on craft unionism, industrialism, the coöperative movement and profit-sharing; the psychology of laborers as influenced by modern industrial tendencies. Prerequisite, junior standing and course 1. Three credits; winter.

MCMAHON

163. *European Labor Problems.*—Spring. 3 Cr

MCMAHON

165. *Labor Legislation.*—Winter. 3 Cr 7 W. Sp

MCMAHON

166. *Women in Industry.*—A study of the evolution of women's work; their relative importance in industry; social reaction in labor legislation. Prerequisite, junior standing and course 1. Three credits; autumn.

MCMAHON

167. *Employment Management.*—The organization and operation of the employment management department, its relation to the workers and to the management of industrial enterprises. The sociological effect of employment management upon the labor market. Prerequisites, permission of instructor. Three credits; spring.

DOUGLAS

168-169-170. *Seminar in Labor*.—A research course in current labor problems of the Pacific Northwest. Prerequisite, senior standing. Three credits per quarter; autumn, winter, spring.

MOMANON

171. *Organization of Foreign Trade*.—The organization of foreign trade; methods of public and private trade promotion; the principle and practice of international market organization. Prerequisite, junior standing. Three credits; autumn.

SKINNER

172. *Technique of Foreign Trade*.—The technique of importing and exporting. The administration and operation of an export department; the preparation of documents and the calculation of values of staples and of manufactured products. Prerequisite, junior standing. Three credits; winter.

SKINNER

173. *Ports and Terminals*.—The administration and technical equipment of ports and the bearing of these factors on port efficiency. A comparative study of foreign and American ports, their relative importance and their relation to the hinterland. Prerequisites, junior standing. Three credits; spring.

SKINNER

X174. *The Trade of the Pacific*.—The problems of trade with the Orient and with Russia, the products of import and export, the transportation and financial situation. Prerequisites, junior standing and courses 7 and 171. Three credits; spring.

AKERMAN

175. *The Trade of Latin America*.—A study of the products of imports and exportation of the Latin American countries; the methods of buying and selling; the transportation problems and the banking situation. Prerequisites, junior standing and courses 7 and 171. Three credits; winter.

176. *The Trade of Europe*.—The articles of commerce in the principal European countries and a detailed study of the market organization in those countries. Prerequisites, junior standing and courses 7 and 171. Three credits; autumn.

177, 178, 179 *adv advertising & mkt. 3 cr* ^{more} AKERMAN

180. *Research Course in Foreign Trade*.—Prerequisites, senior standing and courses 171 and 172. Two credits per quarter; autumn, winter, spring.

DE HAAS

182-183-184. *Commercial Teachers' Course*.—For those preparing for teaching positions in high schools. A study is made of texts, teaching methods, and of the subject matter of a commercial course for high schools. Prerequisites, secretarial accounting, office management, shorthand, typewriting, secretarial training and economic resources of the world. The student must have senior standing and obtain consent of instructor. Two credits per quarter; autumn, winter, spring.

THOMA

195. Industrial Management.—The internal organization and administration of industrial enterprises. Factors in plant location; accounting records, and executive control. Prerequisite, junior standing. Three credits; winter.

DOUGLAS

196. Research Course in Management.—Prerequisite, course 195. Two credits per quarter; autumn, winter, spring.

201. Seminar in Economics and Business Administration.

EDUCATION

Home Economics Hall

PROFESSORS BOLTON, AYER, COUNTS; ASSOCIATE PROFESSORS WOODY; ASSISTANT PROFESSORS FREELAND, JENSEN

Sociology and zoology as well as psychology are very desirable all other courses in education. Students should take psychology during of education and social foundation of education are fundamental to all other courses in education. Students should take psychology during the freshman or the sophomore year, and principles of education in either the last half of the sophomore year or the first half of the junior year. This should be followed by social foundations of education, secondary education, or childhood and adolescence and methods of teaching; practice teaching should be taken in the senior year. Students who major in the department should take all of the fundamental courses required for the normal diplomas and then select enough to total 36 credits in the department. Major students in education must take course 171, Experimental Education.

Principles of education, see courses 1, 99, 221-222-223.

Educational sociology, see courses 109, 151, 161, 162, 176-177, 211-212-213, 271-272-273.

Educational psychology, see courses 140, 141, 155, 160, 171, 173, 181-182-183, 185, 186-187, 231-232-233.

Educational administration, see courses 191, 192-193, 252-253.

Secondary education 119, 153, 154, 275, 276.

Practice teaching, see courses 145, 146, 167.

Research, see courses 190, 298, 299, 300.

Teachers' training courses in trades and industries (under Smith-Hughes Act), see courses 3, 4, 5, 6.

COURSES FOR UNDERGRADUATES

1. How to Study.—Following a consideration of how to study effectively, an attempt is made to help students to apply this knowledge in their work. Required of all freshmen in the College of Education. Open as an elective to students of other colleges. Counted toward a major in education but not toward the normal diploma. Two credits; autumn, winter.

FREELAND

99. Principles of Education.—An attempt to interpret the meaning of education, to understand human nature and to comprehend how environment may be utilized to promote the development of the individual and of society. Prerequisite, Psychology 1. Five credits; autumn, winter, or spring.

BOLTON

109. Educational Sociology I: Social Foundations.—Introductory course treating social factors in the development of the individual and in school administration, and educational functions of typical social groups. Prerequisite, Psychology 1. Three credits; autumn, winter, or spring.

AYER

119. High School Curriculum.—Secondary school curricula and closely related problems. Prerequisite, courses 99, 109. Three credits; autumn, winter, or spring.

KOOS

135. Childhood and Adolescence.—A study of the characteristics of the child to reveal how education is conditioned upon successive stages of development; physical, mental and moral. Prerequisite, Psychology 1. Three credits; autumn, winter, or spring.

BOLTON

140. Methods of Teaching I.—The application of psychology to high school instruction. Three credits; autumn, winter, or spring.

WOODY

***141. Methods of Teaching II.**

145. Practice Teaching.—One lecture each week, conferences with the instructor, assigned readings, and one period each day during the quarter devoted to observation and practice teaching under supervision in the Seattle city school. As far as possible the details of the course are arranged to meet individual needs. Five credits; autumn, winter, or spring.

FRENLAND

146. Practice Teaching.—A second quarter of practice teaching may be elected.

FRENLAND

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

To be admitted to the following group of courses students must have had at least 18 credits in education:

151. Educational Sociology II: Coöperative Agencies.—Evolution of the school curriculum with reference to social organization; the social and school survey; relation of the school to other educational agencies. Prerequisite, course 109. Three credits; spring.

AYER

153. *Problems in High School Administration.*—Problems in secondary education largely non-curricular in character. Prerequisite, course 119. Two credits; spring.

KOOS

154. *The Junior High School.*—History of the movement for reorganization and functions and relations of this new organization. Prerequisite, course 119. Two credits, winter; or three credits, spring.

155 - Childhood + Adolescence 3 cr KOOS

160. *Play in Education.*—The psychological and biological meaning of play; values and applications. Two credits; autumn, winter, or spring.

FREELAND

161. *History of Education: Ancient and Medieval.*—Social interpretation of the historic beginnings of education, the contributions of the Greeks and Romans, the development of Christianity; medievalism, and the beginning of modern education. Three credits; autumn.

AYER

162. *History of Education: Modern.*—Development of educational practices since the Renaissance. The growth of democracy in and through education will be traced. European countries will be treated chiefly from the point of view of influence upon educational progress in the United States. Three credits; winter.

AYER

167. *Improvement of Teaching.*—This course is offered as a substitute for practice teaching for experienced teachers. (Also offered as a five-hour course in the summer.) Supervised teaching and self-supervision will be emphasized. Credits to be arranged; autumn, winter, or spring.

FREELAND

171. *Experimental Education.*—Designed to show the possibility and value of experimental work in education, to give first hand knowledge in the technique of properly conducting experiments in connection with school work. Three double periods per week. Required of all majors in College of Education. Laboratory fee, \$1. Three credits; autumn or winter.

WOODY

172. *Literature of Experimental Education.*—Survey of experimental studies which furnish the basis for current methods in reading, spelling, arithmetic, penmanship, foreign languages, etc., and their bearing. Prerequisite, course 171. Three credits; spring.

WOODY

176, ¹⁷⁷ *Vocational Guidance.*—A study of the vocational guidance movement in the public schools. Two credits per quarter; winter, spring.

AYER

181-182-183. Educational Problems of Adolescence.—A critical consideration of the physical, intellectual, emotional, moral and social characteristics of adolescence, and the educative activities suited to the period of secondary school education. Two credits per quarter; autumn, winter, and spring.

BOLTON

**184. Elementary Educational Measurements.*—Marks and grading; standardization and standardized tests. Course designed for teachers with little or no experience. Others admitted on consent of the instructor. Laboratory deposit, \$1. Three credits; spring.

185. Educational Statistics.—Statistics needed by the graduate student in conducting research or the teacher, principal, or superintendent in the every day problems of the school room. An introduction to the course in educational measurements and other courses in which statistics are needed. Two credits; autumn.

WOODR

186-187. Educational Measurements.—Lectures, discussions, reading, class experiments, and projects. Primarily for experienced teachers, principals or those preparing for such positions. Prerequisite, course 241. Two credits per quarter; winter and spring.

190. Special Problems.—A course for advanced undergraduates, especially majors in education, who wish preliminary training in individual research methods. Supervised by the instructor representing the special field selected. Credits to be arranged.

191. Educational Administration: State and County.—The principles of administration of school systems in states and counties, including a comparison of school laws and school systems in several states with special attention to Washington and neighboring states. Three credits; autumn.

KOOS

192-193. Educational Administration: City Schools.—For those preparing for superintendencies, principalships, and other supervisory positions, as well as those desiring an acquaintance with the larger problems of city school administration. Three credits per quarter; winter, spring.

KOOS

COURSES FOR GRADUATES ONLY

**211-212-213. Comparative Education.*

**221-222-223. Philosophy of Education.*

231-232-233. Advanced Educational Psychology.—A survey of the latest contributions to educational psychology, with especial emphasis upon the contributions of Thorndike. Two credits per quarter; autumn, winter, spring.

WOODR

*252-253. *Financial Aspects of School Administration.*

*271-272-273. *Seminar in Educational Surveys.*—This course will include a consideration of the purpose and method of the school survey and a study of the principles of educational practice exhibited in the reports of typical school surveys. Two credits per quarter; autumn, winter, and spring.

AYER

275-276. *Seminar in Secondary Education.*—A research course in the problems of high-school administration. Two credits per quarter; autumn, winter.

KOOS

298-299-300. *Individual Research or Thesis Work.*—Intensive study and original investigation of special problems. Results are usually reported in one of the seminars and when especially meritorious may be published. The special problems are directed by the members of the department representing the fields of work chosen by the students. Credits to be arranged.

SMITH-HUGHES COURSES IN TRADES AND INDUSTRIES

The following courses conforming to the methods of teaching trades and industries will be credited toward the bachelor's degree in education if all other requirements for admission and graduation are fulfilled:

3. *Industrial Education.*—The purpose, history, organization, and the promotion of industrial education and its articulation with the traditional school system, with industry and with the Smith-Hughes Law. Brief space will be devoted to the continuation school, prevocational school and vocational guidance. Three credits; autumn.

JENSEN

4. *Methods of Teaching Trades and Class Management.*—This course will include some of the general principles of education that apply particularly to trade education and general methods in teaching trade subjects. It will include the development of lesson plans as an outgrowth of the study of methods of trade teaching. Daily preparation, including both oral and lesson sheets, will be emphasized throughout. (Thirty-six hours in class room.) Three credits; winter.

JENSEN

5. *Trade Analysis and Teaching Program.*—Each member of the class will develop a teaching program or detailed course of study following the analysis of the trade that he expects to teach. (Thirty-six hours in class room.) Three credits; spring.

JENSEN

6. *Practice Teaching in Trades and Industries.*—Work in practice teaching will be carried on under conditions as nearly like the conditions that the individual teachers meet in their respective trades after certification, as possible, and will be closely supervised at all times. (Thirty-six hours in class room.) This course is not a substitute for the regular required practice teaching, Education 145. Three credits; autumn, winter, or spring.

JENSEN

ELECTRICAL ENGINEERING

Engineering Hall

PROFESSOR MAGNUSSON, ASSOCIATE PROFESSOR LOEW, ASSISTANT
PROFESSORS KIRSTEN, CURTIS, MR. SCHUCK

15. *Elementary Direct Currents.*—(Night Class).¹ The laws of the electric and magnetic circuits with application to direct current machinery without the aid of advanced mathematics. For electricians having at least two years of practical experience with electrical machinery. Laboratory deposit, \$4. Four credits per quarter.

20. *Elementary Alternating Currents.*—(Night Class).¹ An introduction to alternating current theory with experimental work on alternating current machinery. Prerequisite course 15. Laboratory deposit, \$4. Four credits per quarter.

99. *Direct Currents.*—Theory of the electric and magnetic circuits; construction, operation and characteristics of direct current generators and motors. Prerequisite, Physics 98. Four credits; autumn, winter, spring.

LOEW, KIRSTEN, CURTIS

100. *Direct Currents Laboratory.*—Laboratory work on direct current machinery. Prerequisite, Physics 98. Laboratory deposit, \$3. Two credits; autumn, winter, spring.

LOEW, KIRSTEN, CURTIS

103. *Direct Currents.*—Continuation of 99 in direct current machinery. Storage batteries. Regulation and control of direct current systems. To be taken in connection with course 104. Prerequisite, course 99. Five credits; autumn, winter, spring.

KIRSTEN, LOEW

104. *Direct Currents Laboratory.*—Experimental work on direct current dynamo machinery and on storage batteries. Prerequisite, course 99. Five credits; autumn, winter, spring.

KIRSTEN, LOEW

121. *Alternating Currents.*—A short course in alternating currents for non-electrical students. To be taken in connection with course 122. Prerequisite, course 99. Four credits; autumn, winter.

LOEW

122. *Alternating Currents Laboratory.*—Experimental work on alternating current machinery. Prerequisite, course 100. Laboratory deposit, \$3. Two credits; autumn, winter.

LOEW, KIRSTEN

¹ Will be offered, provided twelve students apply for course.

131. *Telephones.*—Theory, construction and operation of telephone systems. Central telephone station practice. Prerequisite, courses 99, 100. Junior or senior elective. Three credits; autumn, spring.

CURTIS

132. *Telephones and Telegraphs.*—Details of automatic and manual switchboards; testing and locating faults; multiplex telegraphy; railway signal systems. Junior or senior elective. Prerequisite, course 131. Laboratory deposit, \$2. Three credits.

141. *Electric Lighting.*—Electric lamps; commercial photometry; adaptation of electric lighting to commercial requirements. Junior or senior elective. Prerequisite, courses 99, 100. Laboratory deposit, \$2. Four credits; winter.

KIRSTEN

151. *Electrical Machine Design.*—Complete design of one direct current generator or motor. Prerequisite, courses 103, 104. Five credits; autumn, spring.

KIRSTEN, LOWE

152. *Design of Electrical Apparatus.—Switchboards, transformers, alternators or alternating current motors. Prerequisite, course 151. Four credits.

161. *Alternating Currents.*—The theory of singlephase and polyphase system; energy storage in magnetic and dielectric fields; vector diagrams and the symbolic method of analysis; power factor and power measurements; hysteresis and eddy currents; theory of the transformer, singlephase and polyphase induction motors and alternators. Prerequisite, course 103. Five credits; autumn, spring.

MAGNUSSON

162. *Alternating Currents Laboratory.*—Experimental work with alternating current machinery. Prerequisite, course 104. To be taken in connection with course 161. Laboratory deposit, \$4. Four credits; autumn, spring.

CURTIS

163. *Alternating Currents.*—The theory of rotary converters, synchronous and commutator motors and transmission lines; high tension phenomena; corona; commercial wave forms; unbalanced and interlinked systems. Prerequisite, course 161. Five credits; winter.

MAGNUSSON

164. *Alternating Current Laboratory.*—Prerequisite, course 162. Laboratory deposit, \$4. Winter.

CURTIS

¹170. *Electric Railways.*—Equipment, roadbed, construction and operation. Prerequisite, courses 99, 100. Four credits; autumn.

CURTIS

¹174. *Central Stations.*—Location, design and operation of electric central stations. Prerequisite, courses 161, 162. Three credits; winter.

CURTIS

¹ Will be offered, provided twelve students apply for course.

176. Power Transmission.—Theory, design and operation of electric power transmission lines. Prerequisite, courses 163, 164. Four credits; spring.

KIRSTEN

181, 182. Radio.—Radio systems; lineal, open and complex oscillations; coupled circuits; resonance; transmitters; receivers; vacuum tubes in radio work; quenched and undamped oscillations. Prerequisites, calculus, physics, and direct and alternating currents. Laboratory deposit, \$8. Five credits per quarter; winter, spring.

CURTIS

195. Thesis.—After consultation with the head of the department each student selects a suitable topic for investigation. Reports of progress are made weekly to the instructor in charge of the work selected. A complete report of the work is typewritten and bound and a copy deposited in the University library. Five credits; autumn, winter, spring.

MAGNUSSON, LOEW, KIRSTEN, CURTIS

196. Electric Transients.—The exponential law of simple transients; single and double energy transients; current oscillations and traveling waves; natural period of transmission lines; short circuit transients; surges; corona; lighting phenomena. Prerequisite, courses 161, 162. Three credits; autumn, spring.

MAGNUSSON

197. Electric Transients Laboratory.—To be taken in connection with course 196. Prerequisite, courses 161, 162. Laboratory deposit, \$2. Two credits; winter.

MAGNUSSON

200, 201, 202. Research.—Five credits per quarter; autumn, winter, spring.

MAGNUSSON, LOEW, KIRSTEN, CURTIS

ENGLISH

Denny Hall

PROFESSORS PADELFOED, PARRINGTON, PRIEST, BENHAM; ASSOCIATE PROFESSORS MILLIMAN, COX; ASSISTANT PROFESSORS GARRET, DABBY, CHITTICK, MR. HARRISON, MR. ERNST, DR. GREGG, MRS. HAGGITT, MISS KELSEY, MISS ROCHESTER, MISS STRUBLE

REQUIREMENTS FOR MAJOR STUDENTS

At the conclusion of the course in their senior year, all major students will be required to pass a departmental examination in the history of English literature and literary criticism.

Candidates for the teacher's certificate are required to take 188-189-190.

It is expected that senior major students will take 191-192-193, but the work is not a definite prescription.

1-2-3. Freshman English.—Composition and Literature. A course in the principles and practice of composition, based upon the reading and discussion of works representative of the main currents in contemporary thought. Accompanied by conferences for personal criticism. The work done in this course is regarded as belonging rather to the high school than to the university. Those whose preliminary training has been superior will be excused from the course. Those who receive a grade of A in course 1 will be excused from course 2. Three credits per quarter; autumn, winter, spring.

PADELFORD IN CHARGE

21. An Introduction to Poetry.—Three credits; autumn.

FARRINGTON

24-25-26. Victorian Essayists.—Studies in Carlyle, Ruskin, Arnold, and others. Three credits per quarter; autumn, winter, spring.

CHITTICK

37. Argumentation.—Prerequisite, English 1. Five credits; autumn.

PRIEST

38. Debating.—Prerequisite, course 37. Three credits; winter.

PRIEST

39. Debating.—Prerequisite, course 38. Three credits; spring.

PRIEST

40-41. Development of the Oration.—In this course a study is made of the oration as a distinct type of literature. Three or four weeks will be given to the analysis of modern orations. The remainder of the quarter will be devoted to the development of original orations. Two credits per quarter; winter and spring.

PRIEST

51-52-53. Advanced Composition.—Composition based upon model English and American essays. Prerequisite, courses 1-2-3. Three credits per quarter; autumn, winter, spring.

HARRISON
MILLMAN

57-58-59. Dramatic Composition.—Experiments in playwriting and studies in dramatic technique. Three credits per quarter; autumn, winter, spring.

PADELFORD

61-62-63. Versification.—A study of the principles of English versification, with practice in verse writing. Prerequisite, courses 1-2-3. Two credits per quarter; autumn, winter, spring.

FARRINGTON

67-68-69. Great American Writers.—Studies in the works of Emerson, Hawthorne, Longfellow, Lowell, Whitman, Poe, Bryant, Whittier, Mark Twain, and others. Two credits per quarter; autumn, winter, spring.

MILLMAN

70. *Shakespeare*.—A study of Shakespeare's comedies. Three credits; winter.

COX

71. *Shakespeare*.—A study of Shakespeare's tragedies. Three credits; spring.

COX

73-74-75. *Contemporary Literature*.—Reading and discussion of significant works of the past thirty years. Three credits per quarter; autumn, winter, spring.

GREGG
BENHAM
CHITTICK

76-77-78. *Contemporary Literature*.—For teachers. Two credits per quarter; autumn, winter, spring.

MILLMAN AND GARRETT

81-82-83. *English Colonial Literature*.—Canada, South Africa, Australasia. Two credits per quarter; autumn, winter, spring.

GARRETT

101-102-103. *The Short Story*.—(Journalism 160-161-162.) (See Journalism for description.)

103-104-105. *Contemporary Literature*.—Special studies in contemporary literature for advanced students. Three credits per quarter; autumn, winter, spring.

CHITTICK

*107. *Recent Poetry*.—Tendencies in modern English and American verse. Three credits; autumn.

DARBY

108-109-110. *Romantic Literature*.—The origin of romance in Europe; its affiliation with folk literature, etc., and its importance in the development of the modern novel. Two credits per quarter; autumn, winter, spring.

GARRETT

111-112-113. *History of English Prose*.—A study of the changes in prose style from Malory to the present. Two credits per quarter; autumn, winter, spring.

MILLMAN

123. *Philosophy in English Literature of the Nineteenth Century*.—(Philosophy 123.)

124. *Chaucer*.—A special study of Chaucer in relation to his time. Three credits; autumn.

GARRETT

125. *Medieval Literature*.—Three credits; winter.

GARRETT

126. *The Medieval Revival*.—Three credits; spring.

GARRETT

* Not offered in 1919-1920.

127-128-129. *Milton and His Age.*—The historical background of Milton's poetry and prose. Three credits per quarter; autumn, winter.

GREGG

130-131-132. *The English Drama.*—A study of plays representative of the origin and development of English drama. Three credits per quarter; autumn, winter, spring.

HARRISON

133-134-135. *Main Tendencies in English Literature.*—A study in national ideals, with consideration of significant literary figures and works. Three credits per quarter; autumn, winter, spring.

PARRINGTON

135-136. *The Novel.—An attempt to trace to their source the various tendencies in modern fiction. Two credits per quarter; autumn, winter.

BENHAM

141-142-143. *Social Ideals in English Literature.*—A study of model commonwealths and such other literature as illustrates the growth of English social and economic thought. Three credits per quarter; autumn, winter, spring.

BENHAM

144-145-146. *The Romantic Movement.—Expression of romanticism in England, France, and Germany. Three credits per quarter; autumn, winter, spring.

ERNST

161-162-163. *American Literature from the Beginning to 1870.* A study primarily in the democratic ideals of America. Any quarter may be taken separately. Three credits per quarter; autumn, winter, spring.

PARRINGTON

164-165-166. *American Literature from 1870 to the Present.*—An introduction to current literary ideals and tendencies in America. Two credits per quarter; autumn, winter, spring.

PARRINGTON

168-169. *The Eighteenth Century.*—Literary and social movements of the period. Three credits per quarter; spring.

GREGG

174-175-176. *Romantic and Victorian Poets.*—Studies in Wordsworth, Coleridge, Shelley, Keats, Byron, and English poetry from 1830 to 1890. Three credits per quarter; autumn, winter, spring.

PADBLOFF

177-178-179. *The Nineteenth Century.—Three credits per quarter; autumn, winter, spring.

DABBY

183-184-185. *General Literature.*—Readings in European literature, with conferences and reports. Three credits per quarter; autumn, winter, spring.

HARRISON

* Not offered in 1919-1920.

187. *Philosophy in Contemporary Drama.*—(Philosophy 126.) Social and philosophical ideas in the contemporary drama. Five credits; spring.

BENHAM

188-189-190. *Teachers' Course.*—Methods and problems in the teaching of English in the high school. Two credits per quarter; autumn, winter, spring.

GARRETT

191-192-193. *Senior Conference.*—For senior major students. Individual conferences for the purpose of effecting a correlation of studies, and for guidance in original investigation. Each student is expected to meet the instructor once a week in conference. One-third credit per quarter; autumn, winter, spring.

201-202-203. *English Literature from 1550 to 1660.*—For graduates. Two to eight credits per quarter; autumn, winter, spring.

PADLFPORD

221-222-223. *Modern English Literature.*—For graduates. Two to eight credits per quarter; autumn, winter, spring.

BENHAM

FISHERIES

Fisheries Hall

PROFESSORS COBB, KINCAID, MR. ANDERSON

1-2. *Introduction to Fisheries.*—A general review and history of the world's fisheries. Two credits per quarter; autumn, winter.

COBB

3-4-5. *Ichthyology.*—The structure, classification and habits of economic fishes. Course 5 will also include other economic marine animals. Prerequisite, Zoölogy 1, 2. Laboratory deposit, \$2. Five credits per quarter; autumn, winter, spring.

KINCAID AND ANDERSON

6. *Pacific Fisheries.*—A general review and history of the fisheries of the Pacific. Prerequisite, course 1-2. Two credits; spring.

COBB

101-102-103. *Fish Culture.*—The developmental history and artificial propagation of economic fishes. Prerequisite, courses 3-5, and Zoölogy 5. Laboratory deposit, \$2. Five credits per quarter; autumn, winter, spring.

104-105. *Fishery Methods.*—The construction and uses of apparatus; handling and transportation of products, etc. Prerequisite, courses 1-2, 6. Three lectures and two laboratory periods. Laboratory deposit, \$2. Five credits; winter, spring.

COBB

106. *Preparation of Fishery Products.*—The curing and preservation of fishery products. Prerequisite, courses 3-5. Three lectures

and two laboratory periods. Laboratory deposit, \$2. Five credits; autumn.

COBB AND ANDERSON

107, 108, 109. Problems in Fish or Shellfish Culture.—Students with the proper preparation, which should include at least 15 hours work in fish culture or 15 hours work in shellfish culture and course 5, will be assigned special topics to be worked upon under the direction of one of the instructors. Five credits per quarter; autumn, winter, spring.

110, 111, 112. Problems in Fisheries.—Students with the proper preparation, which should include at least 15 hours work in fishery methods and preparation of fishery products, will be assigned special topics to be worked upon under the direction of the instructor. Five credits per quarter; autumn, winter, spring.

**112-113. Shellfish Culture.*—The development and propagation of shellfish and crustaceans. Elective. Prerequisites, junior standing and course 5. Laboratory deposit, \$2. Five credits per quarter; autumn, winter.

**114. Terrapin, Turtle, Frog, etc., Culture.*—The developmental history and propagation of terrapins, turtles, frogs, etc. Elective. Prerequisite, course 5. Laboratory deposit, \$2. Five credits; spring.

FORESTRY AND LUMBERING

Forestry Hall

PROFESSOR WINKENWERDER, ASSOCIATE PROFESSOR KIRKLAND, ASSISTANT
PROFESSORS CLARK, GRONDAL, MR. ZIMMERMANN

1. Elementary Dendrology.—Nomenclature and classification of trees, with a study of one type species of each genus of the important timber trees of North America. Prerequisite, high school botany. Required of freshmen. Two recitations, four laboratory periods per week, field trips additional. Laboratory deposit, \$1. Five credits; autumn or spring.

WINKENWERDER, GRONDAL

2-3. General Forestry.—To familiarize the student with the field of work he is about to enter. Required of freshmen. Three credits per quarter; autumn, winter.

WINKENWERDER

4. Forest Protection.—Its economic importance; forest fires, their prevention and control. Required of freshmen. Three credits; spring.

WINKENWERDER

5. Woodcraft.—Food and clothing, camp equipment and sanitation, packing a horse, and general woodcraft. A section will be arranged for students not enrolled in forestry if not less than six apply. Two lectures per week; demonstrations and practice work additional. Laboratory deposit, \$1. Two credits.

CLARK

* Not offered in 1919-1920.

51-52. Forest Mensuration.—Principles and methods of computing, scaling, estimating, mapping. Required of freshmen. Principally field work given at the college demonstration forest. Laboratory deposit, \$3. Five credits per quarter; winter and spring.

KIRKLAND, CLARK

53. Construction.—Trails, roads, logging railroads, telephone lines, wooden bridges, cabins, barns, and fences; clearings from the standpoint of United States Forest Service improvement work, and logging construction. Required of sophomores. Laboratory deposit, \$1. Three credits; autumn.

CLARK

55. First Aid.—Lectures and demonstrations. Winter. Instructor to be assigned.

57-58. Silviculture.—The individual tree, the forest as a whole, and cultural practices. Required of sophomores. Laboratory deposit, \$1. Three credits, autumn; five credits, spring.

KIRKLAND

101. Wood Technology.—Wood structure, leading to identification of the commercial timbers of the United States; physical properties of woods. Each student is required to prepare permanent microscopic mounts of fifty species. Required of juniors. Prerequisite, College of Botany, 8 hours. Laboratory deposit, \$2. Five credits; autumn.

GEONDAI

102. Wood Identification.—This course includes the laboratory work only of course 101. Open to students in other departments of the University who can show ability to carry on the work. Prerequisite, botany, 8 hours. Laboratory deposit, \$2. Two credits, autumn.

GEONDAI

103. Wood Analysis.—Identification, physical properties and characteristics of woods used in building construction. For juniors in architecture. Two credits.

GEONDAI

104. Timber Testing.—Stresses, tests, theory of flexure, moisture and strength; mechanical properties of wood. Prerequisite, mathematics. Required of juniors. Laboratory deposit, \$1. Five credits; winter.

ZIMMERMAN

105. Wood Preservation.—Nature of decay of timber and methods and economics of preservation. Laboratory work with the college treating plant and reports on local creosoting plants. Required of seniors and graduates. Prerequisites, course 101 and one year of chemistry. Laboratory deposit, \$2. Five credits; spring.

GEONDAI

109. General Forestry.—Lectures, assigned readings, and reports. Occasional field trips. Offered only to students not enrolled

in the College of Forestry, and may be taken at the University or as an extension course by correspondence. Two credits; autumn.

WINKENWERDER

110. Characteristics of Trees.—The identification, distribution, life habits, and uses of trees of the Pacific Northwest. Offered only to students not enrolled in the College of Forestry, and may be taken at the University or as an extension course by correspondence. Two lectures weekly and occasional field trips. Two credits; spring.

WINKENWERDER

111. Teachers' Course.—Offered only as a correspondence course. Must be accompanied or preceded by course 109. One credit.

WINKENWERDER

112. Properties and Uses of Woods.—Offered only as a correspondence course.

GRONDAL

119. Forest Administration.—Objects, principles, and methods of administering private and public forests. Prerequisite, course 126. Three credits; autumn.

KIRKLAND

120. National Forest Administration.—National Forest land regulations; protection, fiscal matters; improvement. Three credits; winter.

KIRKLAND

126. Forest Economics.—The forests of the United States, their uses, their relation to industries and resources. Required of juniors or seniors in forestry and open to students in other departments. Prerequisite, Economics 51. Two credits; autumn.

KIRKLAND

151-152. Forest Management.—Forest finance, organization, methods of silviculture, administration. Required of students in senior or graduate year. Prerequisites, courses 51-52, 57-58. Five credits, autumn; three credits, spring.

KIRKLAND

153. General Lumbering.—Comparative methods of logging on the Pacific Coast and in other lumbering regions of the United States. Required of seniors and graduates. Prerequisites, courses 51-52. Five credits; autumn.

CLARK

158. Forest Utilization.—Paper making, wood distillation, tan-bark, naval stores, and other secondary forest products; lumber and its economic uses in construction. Required of seniors and graduates. Prerequisites, course 101, and one year in chemistry. Five credits; winter.

GRONDAL

159. Scientific Management.—Fundamental principles of scientific management, with special reference to the lumber industry. Given in alternate years, not in 1920-1921. Two credits; autumn.

KIRKLAND

160. Camp Sanitation.—Primarily for students in commerce specializing in employment management. One credit; winter.

CLARK

183. Milling.—The sawmill; yard arrangements; practical operation. Primarily for graduates. Three credits; winter.

GRONDAL

185-186-187. Logging Engineering.—Logging machinery and equipment, organization of logging companies, construction of railroads, camps, etc. Lectures, demonstrations at plants, manufacturing logging machinery, and field work in nearby logging camps. During the third quarter the work is transferred to the field, where extensive work in logging engineering is carried on. No credit is given for 186 unless followed by 187. Primarily for seniors and graduates. Prerequisites, courses 51, 52, 53, 153. Laboratory deposit for 187, \$2. Five credits per quarter, autumn and winter; fifteen credits, spring.

CLARK

188. Advanced Forest Products.—Advanced studies in wood technology and utilization, with individual problems. A laboratory course. Prerequisite, courses 101, 153. Laboratory deposit, \$3. Five credits; spring.

GRONDAL

202. Advanced Dendrology.—An extension of course 1, covering the identification and distribution of all important commercial tree species of the United States. Elective. Prerequisite, course 1. Given in alternate years, not in 1920-1921. Three credits; autumn.

WINKENWIEDER

208-209. Seminar.—Reviews, assigned readings, reports, and discussions on current periodical literature and the more recent Forest Service publications. Prerequisite, senior or graduate standing. Two credits per quarter; autumn, winter.

WINKENWIEDER, KIRKLAND, GRONDAL

221. Forest History and Policy.—Forest policy of the United States; forestry in the states and island possessions; the rise of forestry abroad. Prerequisite, courses 107-108. Two credits.

KIRKLAND

223. Advanced Forest Management.—About one week of field work on a tract of 50,000 to 100,000 acres on which data concerning different soil classes, forest types, etc., and volume of timber is already available. This work will be followed by the actual formation of a working plan providing for regulation of the yield and organization of all forest work on the area, with estimates of outlay and income. Prerequisite, courses 151-152. Eight credits; spring.

KIRKLAND

GEOLOGY

Science Hall

PROFESSOR LANDES, ASSOCIATE PROFESSOR WEAVER, ASSISTANT
PROFESSORS SAUNDERS, GOODSPEED

Courses in the department are grouped to lead into the different fields of geological work, as follows:

General Geology: Courses 1-9, 100-109, 200-209.

Geography, Climatology, and Physiography: Courses 10-19, 110-119, 210-219.

Mineralogy, Petrography and Economic Geology: Courses 20-29, 120-129, 220-229.

Paleontology and Stratigraphy: 30-39, 130-139, 230-239.

For the required earth science in the College of Science: Courses 1-2, 12 and 2; or one quarter with laboratory work, together with one quarter of astronomy.

For the third year of Science in Liberal Arts: Any of the elementary courses to make the required number of credits: Courses 1 and 2, 3 and 4; 11 and 12.

1. *General Geology*.—Dynamical. Geological agencies and processes affecting the earth. Lectures and laboratory work, with occasional half-day field trips. Laboratory deposit, \$1. Five credits; autumn or winter.

GOODSPEED

2. *General Geology*.—Historical. Continuation of course 1, dealing with the origin and evolution of the earth. Lectures and laboratory work, with some field excursions. Prerequisite, 1, 5 or 12. Laboratory deposit, \$1. Five credits; autumn, winter or spring.

GOODSPEED

3. *Principles of Geology*.—Dynamical and Structural. The fundamental facts and principles of geology given without laboratory work. Three credits; autumn.

SAUNDERS

4. *Principles of Geology*.—Historical. The earth's origin and the general history of the continent. Lectures and recitations, without laboratory work. Three credits; winter.

SAUNDERS

5. *Engineering Geology*.—A survey of the field of general geology. Occasional field trips. This course, modified to fit the special needs of students in forestry, is repeated in the spring quarter. Primarily for mining students, chemical and civil engineers. Laboratory deposit, \$1. Five credits; autumn or spring.

GOODSPEED

10. *Fundamentals of Modern Geography*.—An introductory study of the problems of modern geography. Five credits; autumn.

SAUNDERS

11. *Meteorology and Elementary Climatology*.—Weather elements and controls; causes and effects of atmospheric conditions. With or

without laboratory. Laboratory deposit, \$1. Three to five credits; winter.

SAUNDERS

12. *Physiography*.—Land forms or earth's features with reference to origin and characteristic changes under different agencies during geographic cycle. Occasional field trips. With or without laboratory. Laboratory deposit, \$1. Three or five credits; spring.

SAUNDERS

14. *Economic and Commercial Geography*.—The topographic and climatic factors influencing the production of commodities of commerce. Five credits; autumn.

SAUNDERS

17. *Geography of Asia*.—A study of the continent by natural regions based on topography and climate. Prerequisite desirable, 10 or 14. Three credits; spring.

SAUNDERS

18. *Geography of South America*.—Physiographic features, climate and resources of the continent and their effects on development and relations of different countries. Prerequisite desirable, 10 or 14. Three credits; winter.

SAUNDERS

21. *Mineralogy*.—A brief study of crystallography followed by descriptive mineralogy and blowpipe methods. A knowledge of chemistry is essential and general geology is desirable. One or more field trips to some mineral center. Laboratory deposit, \$3. Five credits; winter.

107. *Geology of Washington*.—Lectures with assigned readings and laboratory study. Prerequisite, one quarter of general geology or physiography. Three credits; spring.

LANDES

110. *Teachers' Course in Geography*.—The teaching of geography, physical geography, and commercial geography in the schools. Prerequisites, one term in geology, physiography and geography. Two credits; winter.

SAUNDERS

111. *Climatology*.—The broader aspects of climate controls and characteristics of different climates and climatic provinces, with special references to United States and the Pacific Coast. Prerequisite, Geology II. Three credits; spring.

SAUNDERS

112. *Physiography of the United States*.—The physiographic regions of the United States and their effects on development and history of the country. Lectures and map study. Prerequisite, Geology 10 or 12, or 1, 3, or 5. Laboratory deposit, \$1. Three credits; autumn.

SAUNDERS

113. *Physiography of Europe*.—The physiographic regions of Europe and effects of topography and climate on development and

relations of different countries. Lectures and map study. Prerequisite, Geology 10 or 12 or 1, 3 or 5. Laboratory deposit, \$1. Three credits; winter.

SAUNDERS

114. *Oceanography*.—Study of the ocean, oceanic circulation and temperatures in their geographic relations and influence. Prerequisite, Geology 2 or equivalent work. Two credits; spring.

SAUNDERS

116. *Economic Geography of Washington*.—The economic and industrial development of the state, based on the geological, physiographic and climatic conditions. Three credits; autumn.

LANDER

123. *Optical Mineralogy*.—The use of the polarizing microscope in the examination of minerals and rocks in thin sections. Prerequisite, courses 5, and 21. Laboratory deposit, \$2. Three credits; autumn.

124. *Petrography*.—The principles of petrography and petrographic methods in the systematic study of igneous, sedimentary and metamorphic rocks. Prerequisite, course 123. Laboratory deposit, \$2. Four credits; winter.

GOODSPEED

125. *Advanced Petrography*.—A continuation of the work in petrography for majors in mining and geology. Prerequisite, course 124. Two credits with additional credits optional; spring.

GOODSPEED

126. *Economic Geology*.—Economic deposits of non-metallic minerals, their production and use. Lectures and discussions of papers. Prerequisites, courses 1 or 5, and 21. Three credits; autumn.

LANDER

127. *Economic Geology*.—Economic deposits of metals, their production and use. Lectures and discussion of papers. Prerequisite, course 1 or 5, and 21, 124. Five credits; winter.

LANDER

128. *Economic Geology*.—An intensive study of certain economic minerals or of particular areas of great importance. Prerequisite, course 126 or 127. Two credits; spring.

LANDER

* 131-132 Paleontology

* 129 - Field Geol.

GRADUATE COURSES

200.—Field studies or advanced work in general geology. Credits and hours to be arranged.

210.—Advanced or research work in geography, climatology or physiography. Credits and hours to be arranged. Each quarter.

SAUNDERS

220.—Advanced or research work in mineralogy, petrography and metamorphism. Credits and hours to be arranged. Each quarter.

225.—Advanced or research work in economic geology. Credits and hours to be arranged. Each quarter.

LANDER

SPECIAL SHORT COURSES

S. C. 1. Geology.—Two lectures per week. Laboratory deposit, \$1. Two credits; winter.

S. C. 2. Mineralogy.—A laboratory course in physical determination of minerals and the use of blowpipe methods. Two laboratory periods per week. Laboratory deposit, \$2. Two credits; winter.

GERMANIC LANGUAGES AND LITERATURE

Denny Hall

ASSISTANT PROFESSOR ECKELMAN

REQUIREMENTS OF THE DEPARTMENT

For a major: 35 to 60 credits, including at least 30 credits in courses above 100.

For the normal diploma: The same as for a major, including course 160-161-162.

Credit is allowed for any quarter in any course except 1-2.

All courses are conducted in German unless otherwise specified.

1-2. First Year.—Stage pronunciations, grammar, reading of easy prose and verse, conversation. Five credits per quarter; autumn and winter, winter and spring.

ECKELMAN AND ASSISTANTS

3. First Year Reading.—Reading of modern prose, conversation, composition, continuation of grammar. Prerequisite, course 1-2 or one year in high school. Five credits per quarter; autumn, spring.

ECKELMAN AND ASSISTANTS

5. Second Year Reading.—Pronunciation, review of grammar with emphasis on syntax, reading of modern prose, simple conversation. Prerequisite, course 3 or one and one-half to two years high school. Five credits; winter.

ECKELMAN AND ASSISTANTS

6. Second Year Rapid Reading.—Special sections with suitable prose for students in colleges of Science, Engineering and Forestry. Prerequisite, course 5 or two and one-half to three years high school. Three credits; winter, spring (combined with 7).

7. Second Year Rapid Reading.—Modern prose and at least one drama by Schiller, Goethe or Lessing. Prerequisite, course 5 or two and one-half to three years high school. Three credits; spring.

ASSISTANT

*10-11. *Second Year Supplementary Reading.*

*100-102. *Schiller and Goethe.*

103-4-5. Recent Writers.—Social problems as represented in the works of Hauptmann, Sudermann, Fulda, Wolzogen, Lienhard, Echnitzler, Paul Ernst. Prerequisite, courses 6 or 7, or four years high school. Three credits; autumn, winter, spring.

ECKELMAN

110-111. *Advanced Grammar and Composition.

112-113-114. *Scientific German.*—Scientific essays, monographs and technical periodicals. Each student does private reading in his own field under the guidance of the instructor and major professor. Prerequisite, course 5 or two to two and one-half years in high school. Two or three credits per quarter; autumn, winter, spring.

BOOKELMAN

116-117-118. *German Prose Reading.

120. *Phonetics.

130-131-132. *German Institutions.

133-134-135. *Modern Novels.

136-137-138. *Modern Drama.

140-141. *History of German Literature.

142. *Lyrics and Ballads.

151. *Lessing.*—Dramas and prose. A study of the life of the author. For advanced students. Two credits; autumn.

BOOKELMAN

152. *Goethe's Faust.—Parts I and II.

160-161. *Teachers' Course.

170-171-172. *German Classics in English.

180. *Nineteenth Century Literature.*—Study of the drama and novel to 1880. Kleist, Grillparzer, Hebbel, Ludwig, Raabe, Keller, Storm, C. F. Meyer. For advanced students. Three credits; spring.

BOOKELMAN

200-201-202. *Goethe's Lyrics and Letters.

203-204-205. *Storm and Stress Period.

206-207-208. *Romantic School.

220-221-222. *Inter-relations of German and English Literature.

250-251-252. *History of the German Language.

253-254-255. *Middle High German.

256-257-258. *Gothic.

259. *Old Saxon.

HISTORY

Denny Hall

PROFESSORS MBANT, RICHARDSON, SCHOLZ; ASSOCIATE PROFESSOR McMAHON; ASSISTANT PROFESSOR LUTZ; PROFESSOR GOWEN

REQUIREMENTS OF THE DEPARTMENTS

The University requirements in history may be satisfied by one of the following courses:

History of Europe and the Near East (1-2-3). It is desirable that this course be selected in fulfillment of the history requirements and that it be taken in the freshman year. This course is repeated beginning with the winter quarter.

History of the United States (57-58-59). Primarily for sophomores.

* Not offered in 1919-1920.

English Political and Social History (5-6-7). Open without prerequisites to freshmen, sophomores and upper classmen.

Ancient History (71-72-73). Open without prerequisites to sophomores and upperclassmen.

For a major at least ten credits shall be obtained in the most advanced undergraduate courses. Course 1-2-3 is required of all history majors.

It is recommended that all history majors shall take, in excess of departmental requirements, additional work in history, political and social science, philosophy, modern languages, and English literature. Medieval Latin is desirable for those who intend to study history for advanced professional purposes.

Prospective teachers of history as a major subject in high schools who desire the recommendation of the department of history must become acquainted with the elementary facts requisite for the teaching of all courses in history and in civil government taught in the high schools of the state, and have specialized knowledge in their chosen fields. Courses in history, government and economics should be elected with this aim in view.

The work in undergraduate courses consists of lectures, papers, assigned and collateral readings, with quiz sections organized for the larger classes. Graduate courses are devoted to research work and reports thereon.

1-2-3. History of Europe and the Near East.—A general survey from the Roman world empire of Augustus to our own times. Three credits per quarter; autumn, winter and spring quarters.

SCHOLZ AND LUTE

The above course is repeated beginning with the winter quarter.

LUTE

5-6-7. English Political and Social History.—A survey of the political, social, economic and intellectual development of the English people from the Saxon conquest to the present time. Three credits per quarter. (By performance of special work under direction of the instructor upper division students may receive upper division credit.) Autumn, winter and spring.

RICHARDSON

21-22. History of China.—From the earliest time to the present. Three credits per quarter; autumn and winter.

GOWEN

23. History of Japan.—Three credits per quarter; spring.

GOWEN

57-58-59. History of the United States.—A general survey with emphasis upon political history. Not open to freshmen. Three credits per quarter; autumn, winter and spring.

McMAHON

60-61-62. *Makers of the Nation.*—American history through the biographies of prominent characters. Not open to freshmen. Two credits per quarter; autumn, winter and spring.

MEANY

71-72-73. *Ancient History.*—A survey during the first quarter to about 400-387 B. C., during the second quarter to the death of Augustus, during the third quarter to Justinian. Not open to freshmen. Three credits per quarter; autumn, winter and spring.

SCHOLZ

105-106-107. *English Constitutional History.*—The development of the legal and governmental institutions of the English people to the present time. A course valuable for students of political science and law as well as history. Prerequisite, 5-6-7, except for upper division students who are majoring in economics, sociology and political science. Open also to upper division students who are taking 5-6-7, and to pre-law sophomores who have taken 5-6-7 in freshman year. Three credits per quarter; autumn, winter and spring.

RICHARDSON

109-110. *Economic and Social History of the Middle Ages.

111. *Medieval Civilization.

114. *Medieval France.

115. *The Renaissance.

116. *The Reformation.

117-118-119. *France from the Reformation to the French Revolution.*—An advanced course which deals not only with the internal history of France but also with its relations to the larger problems of European history. Prerequisite, 1-2-3. Two credits per quarter; autumn, winter and spring.

RICHARDSON

121-122-123. *Prussia and Northern Europe.*—Two credits.

RICHARDSON

126-127-128. *England Since the Accession of George III.*—The development of recent English institutions and of social reform, foreign relations and the British "Commonwealth of Nations" from 1760 to the present time. Prerequisite, 1-2-3 or 5-6-7-. Two credits per quarter; autumn, winter, spring.

LUTZ

129. *The French Revolution and Napoleonic Era.*—Prerequisite, 1-2-3. Three credits; autumn.

LUTZ

130. *Europe, 1814-1870.*—European development from the Congress of Vienna to the foundation of the German Empire at the close of the Franco-German war. Prerequisite, 1-2. Three credits; winter.

LUTZ

131. *Europe Since 1870: the War and Its Background.*—The

* Not offered in 1919-1920.

historical background, fundamental causes and progressive development of events and issues in the world war. Peace problems and current events will be discussed and related to their historical antecedents. Prerequisite, 1-2-3, or upper division standing. Not open to freshmen. Five credits; spring.

RICHARDSON AND LUTS

139-140-141. *The American Colonies.*—The planting, development and the growth of independence. Open only to juniors, seniors and graduates. Three credits per quarter; autumn, winter and spring.

McMAHON

*143-144-145. *History of the United States.*—Three credits.

McMAHON

147. *History of the Civil War Period.*—Open only to juniors, seniors and graduates. Three credits per quarter; autumn.

McMAHON

148. *History of the Reconstruction Period.*—Open only to juniors, seniors and graduates. Three credits per quarter; winter.

McMAHON

149. *History of National Development.*—The development of the American nation from the close of the reconstruction period to the present time. Open to juniors, seniors, graduates and to such sophomores as have completed courses 57-58-59. Five credits per quarter; spring.

McMAHON

153. *Spain in America.*—The rise and fall of Spanish power in America, and an outline of the history of the Spanish-American republics. Three credits per quarter; autumn. Open to juniors, seniors and graduates.

MRANT

154. *Development of the Pacific.*—History of the countries bordering upon the Pacific Ocean with especial reference to recent changes. Open to juniors, seniors and graduates. Three credits per quarter; winter.

MRANT

155. *History of Canada.*—Canadian development to the present time. Open to juniors, seniors and graduates. Three credits per quarter; spring.

MRANT

157-158-159. *History of American Diplomacy.*—American relations with foreign powers from colonial times to the present. Open to juniors, seniors and graduates. Two credits per quarter; autumn, winter and spring.

MRANT

163-164-165. *Northwestern History.*—From the earliest voyages to the Pacific Northwest to the organization of the present form of government. Open to juniors, seniors and graduates. Two credits per quarter; autumn, winter and spring.

MRANT

* Not offered in 1919-1920.

*171-172-173. *Hellenism*.—The spread and transformation of Greek civilization from its beginning to the fall of Constantinople (1453 A. D.). Open to juniors, seniors and graduates. Two credits per quarter; autumn, winter and spring.

SCHOLE

*175. *Ancient Imperialism*.—Two credits.

SCHOLE

*176. *History of Ancient Law*.—Two credits.

SCHOLE

196-197. *Methods of Teaching History*.—Required of advanced students who expect to teach history. Two credits per quarter; autumn, winter.

McMAHON

201-202-203. *Historical Criticism and Historiography*.—Two credits per quarter; autumn, winter and spring.

SCHOLE

215-216-217. *Seminar in English History*.—A graduate course which lays more stress upon the constitutional than upon the political side of the subject. The course will deal with topics in the Tudor and Stuart period and with the antecedents of the Puritan Revolution. Two to four credits per quarter; autumn, winter and spring.

RICHARDSON

221-222-223. *Seminar in American History*.—Two credits per quarter; autumn, winter and spring.

McMAHON

227-228-229. *Seminar in State History*.—Two credits per quarter; autumn, winter and spring.
W. 4-6. D. 203.

MEANY

* Not offered in 1919-1920.

HOME ECONOMICS

Home Economics Hall

PROFESSOR RAITT; ASSISTANT PROFESSORS DENNY, PATTY, AMBBY, FITZGERALD; MISS SHANK,
MRS ELDER, MISS DESSLER

(For curricula in Home Economics see College of Science)

1-2-3. *General Course*.—This course is planned for those students who will elect no other work in this department. It will include consideration of the selection, decoration and furnishing of the home; the organization of the household; the principles of food selection and preparation; elements of nutrition; textiles and clothing; home care of the sick. Laboratory deposit, \$3. Three credits per quarter; autumn, winter, spring.

DENNY, DESSLER

4. *Foods: Principles and Practice of Food Preparation*.—Prerequisite or parallel, Chemistry 3. Laboratory deposit, \$4. Three credits; spring.

DESSLER

5-6. Foods: Selection and Preparation.—Continuation of course 4. Prerequisite, course 4, or two years' high school domestic science, or equivalent, Chemistry 5-6. Laboratory deposit, \$6. Five credits per quarter; autumn, winter, spring.

DRESSLAR

8. Clothing: Principles of Hand and Machine Sewing.—Materials, design, and construction. Problem, garment making. Laboratory deposit, \$1. Three credits; winter.

AMBRY

11-12. Needlework.—History and art of needlework. Problems: Marking of household linens, decorative stitches, fine mending. Consult instructor before electing. Prerequisite, H. E. 8. Laboratory deposit, \$1. Two credits per quarter; winter, spring.

DENNY

20. Laundering and Dyeing.

25. Textiles.—Fabrics and fibers; economic phases of textile industry. Laboratory deposit, \$2. Five credits per quarter; autumn, winter or spring.

27. Non-Textiles.—A study of merchandise from non-textile sources, such as leather, rubbers, paper and metals. Raw materials, sources of supply, manufacture, methods of judging. A classification of departmental stock. Four credits; winter.

DENNY

32. Economics of Clothing.—The evolution of dress, its economic and physiological importance. Three credits; spring.

PATTY

43. Housewifery.—Materials used in the household; selection, sanitation, and care. Three credits; autumn.

61-62. Clothing: Selection and Construction.—Patterns, fitting, simple tailoring, construction of dresses. Prerequisite, course 8, or two years' high school clothing. Laboratory deposit, \$2. Five credits; autumn and winter.

PATTY

***101. General Survey.**—The social, economic and educational function of the household, traced from primitive ages to modern times.

RAITT

***103. Foods: Comparative Studies of Food Materials and Cooking Processes.**—Prerequisite, course 5-6. Laboratory deposit, \$4. Three credits per quarter.

DRESSLAR

106. Nutrition: Elementary Dietetics.—Functions and nutritive value of food. For those who wish to obtain a practical knowledge of nutrition as part of a liberal education but who are not preparing to teach the subject. Prerequisite or parallel, course 4, Chemistry 5-6, Zoölogy 7. Laboratory deposit, \$3. Five credits; autumn.

RAITT

107. Nutrition: Dietetics.—Principles of human nutrition. Prerequisites, course 5-6, Chemistry 144. Laboratory deposit, \$3. Five credits; spring.

PATT

108. Diet for the Sick and Convalescents.—Two credits; winter.

PATT

***110. Nutrition.**—The development of the science of nutrition. Original sources; library research. Prerequisite, course 107. Three credits.

DESSLER

119. Methods for Training Teachers of Part Time Classes in Vocational Home Economics.—Subject matter, organization of courses and methods of teaching suitable for part time and evening classes in vocational home making. The investigation will be carried on by means of class discussions, laboratory work, readings and supervised field work. Three credits; autumn.

SHANK

121. Large Quantity Cookery.—Preparation of food in large quantities for cafeterias, tea rooms, dormitories, hospitals and camps. Laboratory practice. Laboratory deposit, \$4. Three credits.

ELDER

122. Buying and Dietaries.—Marketing, buying, institution equipment and supplies. Planning menus for dormitories, hospitals, cafeterias and tea rooms. Three credits; spring.

ELDER

***123. Institutional Management.**

124. Practice Work I.—At least nine hours per week spent in the different departments of the University Commons and university dormitories, under supervision of the instructor in charge. Conferences, service in food preparation. Three credits; autumn, winter, or spring.

ELDER

125. Practice Work II.—Eight hours' work off the campus among the following: Tea rooms, cafeterias, school lunch rooms, hospitals. Conferences, services in food preparation. Three credits; autumn, winter, or spring.

ELDER

130-131. Clothing: Dressmaking.—Designing and draping on the form, practice in dress construction, and a study of trade conditions. Prerequisite, course 61, Fine Arts III, 170-171. Laboratory deposit, \$3. Six credits; spring.

PATT

133. Clothing: Costume and Design.—Development of fashion from ancient times to the present with emphasis upon the best art periods. Prerequisite, Fine Arts III. Laboratory deposit, \$5. Five credits; spring.

PATT

* Not offered in 1919-1920.

135. Clothing: Millinery.—The making and covering of frames, fitting and trimming of hats and a study of trade methods and materials. Prerequisite, course 8, Fine Arts III, 3. Laboratory deposit, \$4. Three credits; autumn.

RAYT

143. Home Furnishing.—Application of structural art principles to choice and arrangement of household furnishings. Prerequisite, Fine Arts III, 3. Laboratory deposit, \$1.50. Autumn or spring.

DENNY

145. Household Management.—Organization of the household and application of the principles of scientific management. Prerequisite, courses 5-6, 61-62, 107 or 106, 143, Fine Arts II, Physics 89-90. Three credits; autumn, winter.

RAYT

146-147. Teachers' Course.—Curricula, methods of teaching and equipment. Prerequisite, courses 5-6, 107, 61-62, 143, 144; Fine Arts II 1; Physics 89-90; Bacteriology 101. Three credits; autumn, winter.

RAYT

148. Practice Cottage.—Students required to live in Practice Cottage one month.

189. Special Food Problems.—Marketing, cold storage, dietaries, adulterations, preservatives. Prerequisite, course 106 or 107. Laboratory deposit, \$1. Three credits; spring.

RAYT

***150. Foods: Problems in Feeding Industrial Groups.**—Principles of food preparation; selection of food; meal planning; marketing; equipping kitchens. Laboratory deposit, \$4. Three credits.

ELDER

200. Special Food Problems.—Investigation of local food products. Prerequisite, courses 5-6, 107, 189, Chemistry 33. Laboratory deposit, \$1. Three credits.

RAYT

202. Seminar.—A study of the present status of home economics education with special attention to the work in the elementary and high schools of the state of Washington. Prerequisite, 30 credits in home economics, including course 146-147. Four credits.

RAYT

203. Research.—Investigations of recent discoveries in the biological or physical sciences of immediate value to the housewife and consideration of methods for their utilization. Credits to be arranged.

AMBY

JOURNALISM

Commerces Hall

PROFESSOR SPENCER; ASSISTANT PROFESSORS KENNEDY, CASEY; MISS EDGINGTON; PROFESSOR AYER OF THE SCHOOL OF LAW, AND DR. LESTER OF THE DEPARTMENT OF PHYSICS

101-102-103. *Elements of Journalism.*—A general introduction to the newspaper business, and a course in practical reporting. The year course is required of all majors. Non-majors of junior or senior standing, particularly home economics students, may take two quarters. The emphasis is on actual reporting. Three credits per quarter; autumn, winter, spring. Laboratory deposit, \$2.

CASEY

104-105-106. *Mechanics of Publishing.*—Heads; practice in the journalism laboratory; proofreading; modern appliances; history of printing, with thesis. Required of all majors. One credit per quarter; autumn, winter, spring. One lecture and two laboratory periods per week. Laboratory deposit, \$2.

KENNEDY

General Advertising.—See Economics and Business Administration 76-77-78.

110-111-112. *Current Events.*—A general information course in world movements; newspaper, periodical, magazine, and occasionally new book readings. Open to any non-major above freshman rank.

151-152-153. *Editing and Advanced News-writing.*—Copyreading, headwriting, and other desk work, with a study of types of news-writing and practice in getting and writing news stories involving difficulties. Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2.

SPENCER

154-155-156. *Magazine and Feature Writing.*—Study of the writing of feature stories, with special reference to Sunday sections and the magazines. Study of contemporary magazines and their policies. Fortnightly assignments. Three credits per quarter; autumn, winter, spring. Laboratory deposit.

SPENCER

157-158-159. *History of Journalism, Editorial Writing, Newspaper Policy.*—A course that covers the allied fields of editorial writing (with practice); the history of journalism with especial reference to newspapers that have been made or unmade by their editorial policies; a general study of newspaper policy, with emphasis on the ethics of journalism, and the history of newspaper ethics; newspaper campaigns; a study of current tendencies through the editorial page. Credits and hours to be arranged. Laboratory deposit.

SPENCER

160-161-162. *Short Story.*—A critical appreciation of the composition, human aspects, and tendencies of the short story, and its

place in literature. Short stories must be produced throughout the year at regular intervals, and are graded in proportion to their probable marketability. Open to non-majors above sophomore rank who bring a recommendation from the department of English. (English 101-102.) Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2, which covers prescribed textbooks, short story periodicals, library facilities, and use of typewriters.

EDDINGTON

163-164-165. *The Business Office*.—Cost finding; estimating; simplified accounting for newspaper plants; business office management; buying and selling; efficiency; plant hygiene; letter composition. This course is intended primarily for students who aspire to ultimate ownership or management of newspaper or job plants. Open to students in the School of Business Administration who have had prerequisite training. Compulsory for majors on the business side. Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2.

KENNEDY

166-167-168. *Advanced Advertising and Publicity*.—An intensive study of mediums and markets is made, campaigns are prepared and copy is written. Two credits per quarter; autumn, winter, spring. One lecture and one discussion per week. Laboratory deposit, \$2.

169-170-171. *Country Journalism and Circulation Management*.—Study of successful country newspapers; methods of handling local advertising, and of securing and handling foreign business; circulation; scientific management as applied to a newspaper plant; office systems and simple front office accounting. Compulsory for majors on the business side. Three credits per quarter; autumn, winter, spring. Two lectures and one discussion per week. Laboratory deposit, \$2.

CASEY

175. *Senior Conference*.—A course in practical newspaper problems and procedure in all departments. One credit; autumn, winter, or spring. One recitation per week. Required of all senior majors.

JOURNALISM FACULTY

178-179-189. *Advanced News Writing*.—Special stories; political writing; interpretative news.

CASEY

SUBJECTS PRESENTED BY OTHER DEPARTMENTS

54-55-56. *Business Law*.—The law of libel, with copyright, postal, advertising, circulation, and state and federal statutes generally as they relate to the publishing industry, will be covered in the first quarter of this course. Majors are advised to take all three quarters, however. Open to journalism majors of sophomore standing. For detailed description see curriculum of the College of Law. Three credits per quarter; autumn, winter, spring.

AYER

179-180-181. *Freehand Drawing*.—A foundation course for newspaper and magazine illustrating and cartooning. For further description, see curriculum of the College of Fine Arts.

*54. *Newspaper Photography*.—The course aims to give a familiarity with the construction and use of cameras, with the technique of picture-taking for still and moving objects, and with methods of developing and printing. Some attention will be given to the making of halftones, three color work, and newspaper reproduction. Class limit, 16. Credits and hours to be arranged. Laboratory deposit.

LAW

Commerco Hall

PROFESSORS CONDON, LANTZ, GOODNER, BISSETT, AYER; MR. O'BRYAN

FIRST YEAR

All first year courses required

100. *Agency*.—Wambaugh's Cases. Five credits; spring.

AYER

103-104. *Contracts*.—Williston's Cases. Five credits per quarter; autumn and winter.

LANTZ

106-107. *Criminal Law and Procedure*.—Mikell's Cases supplemented by Washington Criminal Code and Cases. Three credits per quarter; autumn and winter.

LANTZ

108-109. *Pleading*.—Sunderland's Cases on Common Law Pleading, winter. Sunderland's Cases on Code Pleading, spring. Two and five credits, respectively, for winter and spring quarters.

GOODNER

110. *Persons*.—Woodruff's Cases on Domestic Relations and the Law of Persons, supplemented by Washington Cases. Three credits; spring.

LANTZ

112. *Procedure II*.—This course is a laboratory study in aid of the course in pleading. Two credits, spring.

GOODNER

115-116. *Property I*.—Warren's Cases. Three credits per quarter; autumn and winter.

BISSETT

117-118. *Torts*.—Ames' and Smith's Cases. Four and two credits, respectively, for autumn and winter quarters.

AYER

SECOND YEAR

156. *Bankruptcy*.—Holbrook and Aigler's Cases on Bankruptcy and Selected Cases. Three credits; spring.

O'BRYAN

* Not offered in 1919-1920.

180. *Damages*.—Mechem and Gilbert's Cases on Damages, supplemented by Washington Cases. Three credits; spring.

O'BRYAN

125-126. *Equity*.—Ames' Cases in Equity Jurisdiction, Volumes I and II. Three credits per quarter; autumn and winter.

AYER

129-130. *Evidence*.—Wigmore's Cases. Four and five credits respectively, for autumn and winter.

CONDON

161. *Procedure IV*.—This course relates to procedure in civil actions in the Superior Court and is prerequisite to Procedure V. Three credits; autumn.

GOODNER

139-140. *Property II*.—Gray's Cases, Volumes III and V. Four and two credits, respectively, for autumn and winter quarters.

BISSETT

142-143. *Public Utilities*.—Green's Cases on Carriers and Wyman's Cases on Public Service Companies. Three credits per quarter; winter and spring quarters.

LANTS

138. *Quasi-Contracts*.—Woodruff's Cases on Quasi-Contracts. Three credits; spring.

CONDON

146-147. *Sales*.—Woodward's Cases. Three credits per quarter; winter and spring.

AYER

THIRD YEAR

165. *Admiralty*.—Ames' Cases. Three credits; autumn.

LANTS

168. *Conflict of Laws*.—Lorenzen's Cases. Five credits; winter.

LANTS

170-171. *Constitutional Law*.—Three credits per quarter; winter and spring.

BISSETT

166. *Office Practice*.—Conveyancing and examination of abstracts, care of a law office generally, drawing wills and contracts, preparation of briefs and office accounts. Spring.

CONDON

187-188. *Private Corporations*.—Canfield and Wormser's Cases. Four and two credits, respectively, for winter and spring quarters.

GOODNER

162. *Procedure V*.—A continuation of Procedure IV, with jury in attendance. Course also includes the taking of appeals to the Supreme Court and practice in the extraordinary legal remedies of habeas corpus, mandamus, quo warranto, and prohibition. Procedure IV is a prerequisite. Autumn.

GOODNER

163. *Procedure VI.*—A course in probate proceedings, covering administration of estates, probate of wills, appointment of guardians, etc. Three credits; autumn.

GOODNER

153. *Property III.*—Gray's Cases on Property (2d ed.), Volume VI. Three credits; autumn.

BISSETT

191. *Property: Community.*—Washington Statutes and selected cases on community property. Five credits; spring.

BISSETT

195-196. *Trusts.*—Kenneson's Cases. Three credits per quarter; autumn and winter.

GOODNER

(The following courses not counted toward the degree of LL. B.)

54-55-56. *Business Law.*—This course covers the fundamental principles of law. The more general and practical principles are developed from problems and selected cases, particularly as related to the law of contracts, property, agency, negotiable paper, insurance, partnership and corporation, with special lectures as to the statutory regulations. Three credits per quarter; autumn, winter and spring.

ATEN

NOTE.—Courses in Bills and Notes, Irrigation Law, Mining Law, Negligence, Partnership, Taxation, and Wills, heretofore offered, will not be offered until further notice, except upon petition of students for same and subject to action of the law faculty. Such courses when offered will be in substitution of the foregoing.

NOTE.—Courses in Insurance, History of the Law, Jurisprudence, Mortgages, Municipal Corporations, and Suretyship, heretofore offered, will not be offered until further notice except on petition of the students, and then in substitution of the foregoing courses and subject to action of the law faculty.

Fifteen hours or credits in each quarter are required, making a minimum total of 135 hours or credits for completion of the law course.

Students are limited to fifteen hours per quarter, except upon special permission of the dean.

LIBRARY ECONOMY

Library

PROFESSOR HENBY, ASSOCIATE PROFESSOR SMITH, MISS HOWE,
MR. SPENCER, MISS ANDRUS

101. *Order Accession and Circulation.*—In this course the routine of ordering, receiving, checking, accessioning and mechanical preparation of books and elements of trade bibliography are treated. Also loan administration, covering charging systems, registration of borrowers, circulation of books and circulation records are dealt with. Two credits; autumn.

HOWE

102. *Classification and Subject Headings.*—The work in classification is mainly a study of the decimal system. An exercise in classifying selected books follows each lecture with later revision, correction and discussion. Other classification systems are briefly described.

Under subject-headings lectures and practice work with selected books are given. Three credits; autumn.

SPENCER

103-104. *Cataloguing*.—The course in cataloguing, including book numbers, shelf-listing, alphabeting and name lists consists of lectures, recitations and practice work selected as illustrative examples of rules given in class. The A. L. A. rules are used as a basis for study. Three credits per quarter; winter and spring.

SPENCER

105-106-207. *Reference*.—The purpose of these courses is to give a working knowledge of important types of reference books and to develop the power of research. Lectures cover books and methods. Practical problems are assigned and worked out. These courses include also the work with government documents. Two credits per quarter; autumn, winter, spring.

SMITH

208. *Subject Bibliography*.—Practical work in the preparation of bibliographic list lectures on sources and methods of work. Problems cover arrangement and form of entry. One piece of independent bibliographic work is required of each student. Two credits; spring.

SMITH

109-110-212-213. *Practice*.—Each student is expected to do approximately one hour of practice or laboratory work under expert personal supervision for each class period of instruction as a test of practical ability and as an opportunity to exhibit personality in service. The practice work is given in both the University Library and the Seattle Public Library, and consists of six hours per week for five quarters or twelve hours per week for thirty weeks. Twelve credits; winter and spring quarters of senior year; autumn, winter, and spring of graduate year.

212: *Books and Libraries*.—Lectures, readings and reports on the evolution of the book and the library. One credit; autumn.

HENRY

216. *Library Organisation and Extension*.—In this course such subjects are treated as legalization and organization of a general library system for city, county or state, as the unit of organization; also the organization of various types of libraries with varying degrees of equipment. One credit, autumn; two credits, winter.

HENRY

216-217-218-219. *Book Selection*.—Designed to cultivate taste and judgment in the evaluation of books through a study of the principles of book selection, annotation and book reviewing. One credit, winter quarter of senior year; two credits per quarter, autumn, winter, and spring of graduate year.

HOWE

220. Library Administration and Library Literature.—Lectures, readings and discussions upon library legislation, local taxation, library budget, and all means and instruments for realizing the educational and social functions of the library. Reading and class discussion of the literature of libraries and librarianship, including library periodicals and the publications of library organizations, with special emphasis upon the best papers in the A. L. A. Proceedings for recent years. Two credits; spring.

HENRY

221. Work with Children and Schools.—This course is planned to meet the needs of general library assistants and librarians in charge of small libraries. It deals with principles of book selection with special attention to choice of books for children of various ages. Students read and discuss children's books with these ideals in mind. Two credits; winter.

ANDRUS

222. Special Lectures by Active Librarians.—Ten lectures are given by as many persons, each upon some vital problem of library service or administration. These persons are selected because of their experience and success in dealing with the problem treated. One credit; spring.

223. Study of a Selected Public Library.—Each student is assigned to make a study of some specific public library reasonably near Seattle, and write a report upon its general policy and plans of organization, extension and administration. One credit; spring.

HENRY

MATHEMATICS

Science Hall

PROFESSOR MORITZ; ASSOCIATE PROFESSOR CARPENTER; ASSISTANT PROFESSOR GAVETT,
WINGES, NEIKIRK, BELL; DR. SMAIL; ASSOCIATE, DR. MULLMEIST

REQUIREMENTS OF THE DEPARTMENT

For a major in mathematics, 36 credits, including course and 9. Candidates for the normal diploma must complete course 127 (teachers' course) in addition to the major requirement.

Candidates who are not majors in mathematics but wish to teach mathematics as a minor subject must have earned at least 12 credits in mathematics, including Math. 4 and Math. 5, before receiving the recommendation of the department.

Major students in mathematics should, if possible, select their courses in mathematics in the following order: Math. 4, 5, 6, 7, 8, 9. In addition they should elect physics as their freshman science and take solid geometry (Math. 2) in their freshman year.

1. *Advanced Algebra*.—Algebra from quadratics on. Prerequisite, one year of high school algebra. Five credits; each quarter.

BELL (A), CARPENTER (W), ——— (S)

2. *Solid Geometry*.—Prerequisite, one year of plane geometry. Five credits; winter or spring.

———— (W), BELL (S)

4. *Plane Trigonometry*.—For students in the Colleges of Liberal Arts, Science, Education, Fisheries, Law, and Pharmacy. Prerequisite, one year of algebra and one year of geometry. Five credits; each quarter.

5. *College Algebra*.—Prerequisite, course 1 or one and one-half years high school algebra. Five credits; winter.

WINGER

6. *Analytical Geometry*.—Primarily for students in the College of Science. Prerequisite, courses 1, 2 and 4. Five credits; spring.

WINGER

7-8-9. *Calculus*.—Elements of differential and integral calculus, primarily for students in the College of Science. Prerequisite, course 6. Five credits per quarter; autumn, winter, spring.

MONTE

11-12. *Theory of Investment*.—Primarily for students in Commerce. Preliminary processes of algebra with the application of this preliminary work to problems of compound interest, annuities, amortization, bonds, sinking funds, depreciation, and building and loan associations. Prerequisite, one year algebra, one year geometry. Five credits per quarter; autumn, winter; winter, spring, or spring and autumn.

MONTE IN CHARGE

13. *Elements of Statistical Methods*.—Data obtained by observation, enumeration or estimate, and their application to interpreting social or natural phenomena. Prerequisite, one year algebra, one year plane geometry.

GAVETT

51. *Algebra and Trigonometry*.—Primarily for students in the Colleges of Engineering and Mines. Prerequisite, one and one-half years algebra, one year plane geometry. Three credits; each quarter.

52. *Trigonometry and Analytical Geometry*.—Primarily for students in the Colleges of Engineering and Mines. Prerequisite, course 51. Three credits; each quarter.

53. *Analytical Geometry*.—Primarily for students in the Colleges of Engineering and Mines. Prerequisite, course 52. Three credits; each quarter.

54-55-56. *Mathematics for Foresters*.—A study of advanced numerical and graphical methods and solution of plane triangles by trigonometric methods. Prerequisite, one and one-half years algebra,

one year plane geometry. Three credits per quarter; autumn, winter and spring.

GAVETT

57-58-59. *Mathematics for Architects*.—Algebra through quadratic equations and plane trigonometry through solution of triangles. Advanced topics in algebra; the elements of analytical geometry; elementary differential and integral calculus. Prerequisite, one year algebra, one year plane geometry. Three credits per quarter; autumn, winter, spring.

GAVETT

61-62-63. *Calculus*.—Primarily for students in the Colleges of Engineering and Mines. Prerequisite, courses 2 and 53. Three credits per quarter; autumn, winter, spring.

101. *Spherical Trigonometry, with Applications*.—Prerequisite, courses 2 and 4. Two credits; autumn.

SMALL

102-103. *Solid Analytical Geometry*.—Prerequisite, course 8 or 63. Two credits per quarter; winter, spring.

SMALL

111-112-113. *Applications of Mathematics to Physics and Chemistry*.—Topics and processes most needed by the student of the physical sciences in working, or in reading scientific papers in which mathematics is applied. Prerequisite, course 8 or 61. Two credits per quarter; autumn, winter, spring.

BELL

114-115-116. *Ordinary and Partial Differential Equations*.—With applications to problems in physics, chemistry, astronomy and engineering. Prerequisite, course 8 or 63. Two credits per quarter; autumn, winter, spring.

NEUBERG

117-118-119. *Projective Geometry*.—An analytic treatment. The relation of projective to metric geometry is emphasized. Prerequisite, course 8 or 61. Two credits per quarter; autumn, winter, spring.

WINGEN

121-122-123. *Higher Plane Curves*.—The projective properties of algebraic curves. Prerequisite, course 8 or 61. Two credits per quarter; autumn, winter, spring.

WINGEN

124-125-126. *Real Variables*.

SMALL

127. *Teachers' Course*.—Required of those who make mathematics their major study and who are applicants for the teachers' certificate. Prerequisite, course 9. Five credits; autumn.

WINGEN

*130-131-132. *Vector Analysis*.

*133-134-135. *Analytical Mechanics*.—Prerequisite, course 9. Two credits per quarter; autumn, winter, spring.

GAVETT

151, 152, 153. *Actuarial Theory and Practice*.—Mathematical principles underlying life insurance. Construction and graduation of life tables. Computation of life annuities and life insurance. Various forms of policies and their premiums. Calculation of reserves. Survivorship and joint life policies and premiums. Prerequisite, one year of college mathematics. Three credits per quarter; autumn, winter, spring.

MORITT

201-202-203. *Differential Geometry*.

CARPENTER

*204-205-206. *Modern Algebra*.

207-208-209. *Infinite Series*.—Prerequisite, courses 5 and 9. Two credits per quarter; autumn, winter, spring.

SMALL

*211-212-213. *Foundations of Mathematics*.—Prerequisite, course 9. Two credits per quarter; autumn, winter, spring.

*214-215-216. *Complex Variable*.—Prerequisite courses 5, 9. Two credits per quarter; autumn, winter, spring.

SMALL

217-218-219. *Elliptic and Theta Functions*.—The theory will be developed in the lectures and amplified in the seminar by a study of the classical memoirs in the subject. Credit for seminar to be determined in each case. Prerequisite, one year of graduate work in mathematics. Two to four credits per quarter; autumn, winter, spring.

BELL

251-252-253. *Mathematical Journal and Research Club*. Meets on the third Tuesday of each month in Science Hall, room 2, at 8 p. m. The club consists of advanced students and teachers in the department of mathematics. The purpose of the club is primarily to discuss the research work carried on by members of the club, and secondarily to review important recent mathematical literature. Prerequisite, open to all graduate students in mathematics. No credit; autumn, winter, spring.

MECHANICAL ENGINEERING

Engineering Hall

PROFESSOR EASTWOOD; ASSOCIATE PROFESSOR, WILSON; ASSISTANT PROFESSOR WINSLOW; MR. BEATTIE, MR. KANE

1, 2, 3. *Woodwork*.—Bench work; cabinet work; pattern making. Laboratory deposit, \$2. One credit per quarter; autumn, winter, spring.

BEATTIE

4. *Woodwork*.—Mine timber framing. Prerequisite, Mining 50. Laboratory deposit, \$2. One credit; spring.

DANIELS, BRATTIE

53, 54, 55. *Metalwork*.—Foundry; forge; machine work. Laboratory deposit, \$2. One credit per quarter; autumn, winter, spring.

KANE

81. *Mechanism*.—The operation of machines involving the transmission of forces and the production of determinate motions. Prerequisite, C. E. 2, Math. 52. Three credits; autumn, winter or spring.

WILSON, WINSLOW

82. *Steam Engineering*.—The various forms of steam apparatus used in modern steam plants; their construction, use, and reason for their installation. Not open to freshmen. Prerequisite, C. E. 2. Three credits; autumn, winter, or spring.

EASTWOOD, WINSLOW

83. *Steam Engineering Laboratory*.—Calibrations of thermometers, gages, indicator springs, etc.; tests of the simple steam engine; one complete engine and boiler test with report. Preceded or accompanied by course 82. Laboratory deposit, \$2. Three credits; autumn, winter, or spring.

WILSON

90, 91. *Machine Design*.—The design of machine details. Preceded or accompanied by course 81. Prerequisite, C. E. 2. Three credits per quarter; autumn, winter or spring.

101-102-103. *Machine Design*.—The design of hoisting and pumping machinery; special machines. Prerequisite, course 90, C. E. 181, 182. Three credits per quarter; autumn, winter, spring.

105-106-107. *Metalwork*.—Advanced machine shop practice. Prerequisite, course 55. Laboratory deposit, \$2. One credit per quarter; autumn, winter, spring.

KANE

108. *Metalwork*.—Manual arts for teachers. Prerequisite, course 107. One credit; autumn, winter, or spring.

KANE

109. *Woodwork*.—Manual arts for teachers. Prerequisite, course 8. One credit; autumn.

BRATTIE

115. *Machine Design*.—Special problems in the design of chemical machinery. Prerequisite, course 90, C. E. 181. Three credits; autumn.

* Not offered in 1919-1920.

123-124-125. Engines and Boilers.—The generation and use of steam in various types of boilers and engines. Three lectures per week first quarter; one lecture and six laboratory periods per week second and third quarter. Prerequisite, courses 82, 91, C. E. 131. Three credits per quarter; autumn, winter, spring.

151-152-153. Experimental Engineering.—A continuation of M. E. 83, involving more extended and complete investigations. Prerequisite, M. E. 83. Laboratory deposit, \$2. Three credits per quarter; autumn, winter, spring.

WILSON

179. Steam Turbines.—The theory, construction and design of steam turbines. Prerequisite, course 82. Three credits; autumn.

EASTWOOD

180. Refrigeration.—The theory and application of mechanical refrigeration. Prerequisite, Physics 98. Two credits; spring.

182. Heating and Ventilation.—The various systems of heating and ventilating, methods of design and tests. Prerequisite, course 82. Three credits; winter.

EASTWOOD

183. Thermodynamics.—The fundamental principles underlying the transformation of heat into work, with special application to engineering. Prerequisite, M. E. 82. Three credits; autumn.

EASTWOOD

184. Power Plants.—The design of steam power plants, involving their location, buildings, prime movers, power transmission, etc. Prerequisite, courses 123, 140. Three credits; spring.

EASTWOOD

185-186-187. Naval Architecture.—The theory of naval architecture, as pertains to displacement, stability and strength, and the usual calculations involved in construction. Not open to freshmen. Three credits per quarter; autumn, winter, spring.

EASTWOOD

188, 189. Ship Design.—Application of the principles of naval architecture to the design of a ship for a definite purpose. Prerequisite, M. E. 186. Two credits per quarter; autumn and winter.

EASTWOOD

190. Marine Engineering.—The power plant equipment of ships, including boilers, engines, auxiliaries and propellers. Prerequisite, courses 82, 185. Three credits; spring.

EASTWOOD

199. Gas Engineering.—The development of gas engineering, including stationary, marine, automobile and airplane motors, and gas producer plants. Prerequisite, course 82. Three credits; winter.

WILSON

201. Gas Engine Design.—Calculations and plans for the design of a given type of motor. Prerequisite, course 199. Three credits; spring.

WILSON

210. Thesis.—An investigation, design or experiment under the direction of the professor in charge. Three credits; senior year.

MILITARY SCIENCE AND TACTICS

The Armory

COLONEL PHILLIPS; LIEUTENANT COLONEL FRAZER; MAJOR BETOHER; CAPTAIN MEREDITH; SERGEANTS KENT AND MEEKER

All students in the University who are American citizens, and not physically disqualified, are required to take military training during their first two years. The present requirement is five hours per week. Three hours of the work is given by lecture and text book instruction and the remainder in practical work.

The instruction of these two years, together with that provided for the third and fourth years, constitute the courses prescribed by the War Department, Committee on Education and Special Training, for institutional units of the Reserve Officers Training Corps.

Two R. O. T. C. units have been established in the University, one leading to commissions in the Infantry Officers Reserve Corps and one leading to commissions in the Coast Artillery Officers Reserve Corps. The advanced courses provided in either of these for the third and fourth years are open to all students who have completed the first two years of instruction and training.

These advanced courses are mainly composed of subjects taught in the regular collegiate courses, and to this extent do not impose additional work upon students who elect to pursue the R. O. T. C. courses for the purpose of securing reserve officers' commissions in connection with their other collegiate work.

Several electives are provided so that students in nearly every department of the colleges of the University will find subjects in the R. O. T. C. course consistent with the normal professional work of the regular course. These electives will be published later.

In addition to the above courses, the University has provided for those students who desire to major in military science a four-year curriculum which will give a good general college education upon which any line of professional or technical study may be based and which will give to the graduate the degree of B. S. in Military Science, and at the same time enable him to obtain a commission as second lieutenant in the Officers Reserve Corps of the United States Army in accordance with the provisions of the National Defense Act.

1-2-3. Theoretical Military Science.—*Autumn Quarter.*—Infantry Drill Regulations through the School of the Battalion, close order; ceremonies; military courtesy, individual and by units of troops; care

of arms, care of small arms, general care of material and equipment of the various service branches. *Winter Quarter*.—Morale, nature and importance, responsibility of officers and N. C. O.'s, means of developing in soldiers; guard duty, principles of; hygiene and sanitation personal hygiene, care of troops, camp sanitation and first aid. *Spring Quarter*.—Use of small arms, theory and principles; organizations, elements of military organization, functions of the various service branches; administration, interior economy of the company, mess management; laws, regulations and orders, pertinent laws and the more important army regulations and orders. One credit per quarter. Three hours per week.

4-5-6. Practical Military Science.—Required during first year of all men. *Autumn Quarter*.—Disciplinary close order drill; care of arms and equipment; bayonet drill. *Winter Quarter*.—Disciplinary close order drill; care of arms and equipment; guard duty; first aid. *Spring Quarter*.—Disciplinary close order drill; care of arms and equipment; gallery practice. Two hours per week. One credit per quarter.

51-52-53. Theoretical Military Science.—Autumn, winter, spring quarters. Courses to be announced. Required during second year of all men who elect to take Infantry course R. O. T. C. Three hours per week. One credit per quarter.

54-55-56. Practical Military Science, Infantry.—Autumn, winter, spring quarters. Courses to be announced. Required during second year of all men who elect to take Infantry course, R. O. T. C. Two hours per week. One credit per quarter.

61-62-63. Theoretical Military Science, Coast Artillery.—Autumn, winter, spring quarters. Courses to be announced. Required during second year of all men who elect to take Coast Artillery course, R. O. T. C. Three hours per week. One credit per quarter.

64-65-66. Practical Military Science, Coast Artillery.—Required during second year of all men who elect to take Coast Artillery course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Two hours per week. One credit per quarter.

71. Practical and Theoretical Military Science, Infantry.—Prerequisite for advanced courses, third and fourth years, Infantry, R. O. T. C. Summer quarter: Encampment for six weeks, following close of second year, place and time to be announced, for intensive practical and theoretical training.

81. Practical and Theoretical Military Science, Coast Artillery.—Fourth quarter: Encampment for six weeks following close of second year, place and time to be announced, for intensive practical and theoretical training. Prerequisite for advanced courses, third and fourth years. Coast Artillery, R. O. T. C.

101-102-103. *Theoretical Military Science, Infantry*.—Required during third year of all men electing to take Infantry Course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced later. Three hours per week.

104-105-106. *Practical Military Science, Infantry*.—Required during third year of all men electing to take Infantry Course R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Two hours per week.

121-122-123. *Theoretical Military Science, Coast Artillery*.—Required during third year of all men electing to take Coast Artillery course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Three hours per week.

124-125-126. *Practical Military Science, Coast Artillery*.—Required during third year of all men electing to take Coast Artillery course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Two hours per week.

171. *Practical and Theoretical Military Science, Infantry*.—Required of all men electing to take Infantry course, R. O. T. C. Summer quarter: Encampment for six weeks following close of third year, place and time to be announced, for intensive, practical and theoretical training.

181. *Practical and Theoretical Military Science, Coast Artillery*.—Required of all men electing to take Coast Artillery course, R. O. T. C. Summer quarter: Encampment for six weeks following close of third year, place and time to be announced, for intensive practical and theoretical training.

111-112-113. *Theoretical Military Science, Infantry*.—Required of all men, during fourth year, electing to take Infantry course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Three hours per week.

114-115-116.—*Practical Military Science, Infantry*.—Required during fourth year of all men electing to take Infantry course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Two hours per week.

131-132-133. *Theoretical Military Science, Coast Artillery*.—Required during fourth year of all men electing to take Coast Artillery course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Three hours per week.

134-135-136. *Practical Military Science, Coast Artillery*.—Required during fourth year of all men electing to take Coast Artillery course, R. O. T. C. Autumn, winter, spring quarters: Courses to be announced. Two hours per week.

MINING AND METALLURGY

Mines Hall

PROFESSOR ROBERTS; ASSOCIATE PROFESSOR DANIELS; ASSISTANT PROFESSORS COREY, WILLIAMS, WILSON; LECTURERS, MR. GLENN, MR. KERR, MR. POWELL;
ASSISTANTS, MR. PATTY, MR. WILCOX

I. MINING

20. Mine Timbering.—Materials and methods used in timbering shafts, tunnels, and drifts in hard and soft ground. Particular attention is paid to those methods used by military engineers. One credit per quarter; winter.

DANIELS

21. Mine Timber Framing.—Shop practice in framing mine timbers. One laboratory period. Laboratory deposit, \$2. One credit; spring.

DANIELS

51. Elements of Mining.—A general study of the field of mining, considering prospecting, boring, drilling, explosives, rock breaking, methods of development and working, transportation and drainage. Prerequisite, sophomore standing. Three credits; autumn.

DANIELS

101. Milling.—A preliminary course designed to familiarize all students in the department with the principles and uses of the various types of crushing, sampling, concentrating and washing machinery in the Mines Building. Prerequisite, junior standing. Two recitations and one laboratory period. Laboratory deposit, \$8. Three credits; autumn.

ROBERTS

103. Mine Rescue Training.—Twenty-five hours of instruction. Practice in the care and use of oxygen rescue apparatus, smokeroom training, and first-aid-to-the-injured work in the U. S. Bureau of Mines Rescue Station. Required of all students in the College of Mines. One credit; winter.

DANIELS, CHISHOLM

106. Mining Excursion.—A two-weeks excursion taken in June of each year to a neighboring mining region; detailed examinations of mining and metallurgical industries. Expenses, \$20 to \$40. Three credits; spring.

ROBERTS, DANIELS, COREY

120. Coal Resources of North America.—The occurrence of coal in North America with especial reference to geographic and geologic distribution and structure; classification and commercial requirements of coals. Prerequisite, course 51. Three credits; winter.

DANIELS

122. Coal Mining Methods.—Prospecting and development. A detailed study is made of a nearby mine. Prerequisite, courses 51, 120.

DANIELS

151. Mining Engineering.—Lectures on exploration, mine development and operation, with mining costs, power generation, air compression, hoisting and transportation. Practice with air compressors, machine drills and mine equipment in laboratories and local plants. Prerequisite, senior standing. Three recitations, one laboratory period and excursions. Laboratory deposit, \$3. Five credits; autumn.

ROBERTS

152. Ore Dressing.—A detailed study of certain branches of ore dressing accompanied by mill tests of ores checked by assays. Prerequisite, senior standing. Three recitations and two laboratory periods. Laboratory deposit, \$5. Five credits; spring.

ROBERTS, DANIELS

153. Thesis Outline.—The outlining of senior thesis, the gathering of material, study of references, making of drawings, maps, etc. See course 154-155. Prerequisite, senior or graduate standing. One laboratory period. One credit; autumn.

ROBERTS, DANIELS, CORRY

154-155. Thesis.—A continuation of course 153. Weekly consultation and seminars. Prerequisite, course 153. A deposit of \$5 or \$10 will be required to cover cost of materials and equipment in thesis work involving the use of mining or metallurgical equipment. Two laboratory periods. Two credits per quarter; winter and spring.

ROBERTS, DANIELS, CORRY

158. Mining Law.—A series of lectures on the mining laws of the United States and Alaska; illustrated by diagrams and mine maps. Two lectures. Two credits; winter.

O'BRYAN

162. Mining Methods.—An advanced study of mining methods. Prerequisite, senior or graduate standing. Three credits; winter.

ROBERTS

163. Mine Operation.—The complete operations at a few typical mines, including mining, transportation and treatment of ore, disposal of products, company finances and management. Illustrated by ores and products, maps and photographs, cost sheets, engineering and financial reports of the mines studied. Prerequisite, senior or graduate standing. Three credits; spring.

ROBERTS

171. Mine Gases and Ventilation.—Composition and properties of mine gases, methods of testing; lighting of mines; principles of ventilation; ventilating machinery. Prerequisite, course 122. Three recitations. Three credits; winter.

DANIELS

172. Coal Mining Plant.—Design of plant and machinery employed in mining and preparing coal for market. Prerequisite, senior standing. Three drafting periods. Three credits; spring.

DANIELS

~~154-155-156~~ 156. *Methods of Dancing*.—Prerequisite Dancing 64-65-mine locomotives, fans, hoists, pumps and tippie or breaker machinery with especial reference to application to coal mining. Prerequisite, senior standing. Three recitations; three credits; spring.

DANIELS

176. *Coal Washing*.—Methods of preparing coal for market, together with laboratory tests and runs on various coals to determine best methods of preparation. Prerequisite, course 101, Met. 103. Three recitations and two laboratory periods. Laboratory deposit, \$5. Five credits; winter.

DANIELS

182. *Mine Management*.—The organizations and administration of engineering plants, involving the keeping and interpretation of cost accounts, the efficiency of labor and methods, the financial, legal and social aspects of engineering operation. Prerequisite, senior standing. Three recitations. Three credits; spring.

DANIELS

201-202-203. *Seminar*.—Lectures and discussions by Bureau of Mines staff, College of Mines faculty and fellows. Required of Bureau of Mines fellowship holders. Prerequisite, senior or graduate standing. One credit; autumn, winter, spring.

ROBERTS

II. METALLURGY

101. *Fire Assaying*.—The testing of reagents, the crushing, sampling and assaying of ores, furnace and mill products. Prerequisite, Chemistry 101. One recitation and three laboratory periods. Laboratory deposit, \$20. Five credits; autumn.

COREY, GLENN, PATTY

102. *General Metallurgy*.—The properties of metals and alloys, fuels, refractory materials, furnaces, and the extraction of the common metals from their ores. Visits to smelters. Prerequisite, course 101. Three recitations and two laboratory periods. Laboratory deposit, \$10. Five credits; spring.

COREY, KERR

103. *Metallurgical Fuels*.—The analysis of fuels and a consideration of the most effective utilization of the country's present supplies. Prerequisite, junior standing. Two recitations and one laboratory period. Laboratory deposit, \$5. Three credits; autumn.

DANIELS

104. *Copper and Lead*.—The metallurgy of copper and lead, especially the methods of roasting, smelting and refining. Prerequisite, junior standing. Three credits; spring.

COREY

106. *Refractories*.—Methods of testing clays, refractory materials, cement-making materials. One recitation and one laboratory period. Laboratory deposit, \$5. Two credits; spring.

COREY

151. *Gold and Silver*.—Amalgamation, cyaniding and chlorination of gold and silver ores. Prerequisite, course 102. Three credits; autumn.

COREY

153. *Wet Assaying*.—Technical methods for the determination of copper, lead, zinc, etc., in ores and furnace products. For students in ceramics, the analysis of clays and ceramic products. Prerequisite, course 102, Chemistry 101. One recitation and two laboratory periods. Laboratory deposit, \$12. Three credits; autumn.

COREY

155. *Iron and Steel*.—The metallurgy and manufacture of commercial iron and steel, with especial reference to their properties and uses in engineering work. Prerequisite, junior standing. Three recitations. Three credits; autumn.

DANIELS

157. *Design of Plant*.—The designing of a piece of equipment or a structure for mining, milling, or metallurgical purpose. Prerequisite, senior or graduate standing. Three drafting periods. Three credits; spring.

ROBERTS, DANIELS

158. *Minor Metals*.—The metallurgy of zinc, antimony, tin, aluminum, nickel, etc.; a study of the plant required, the methods and costs of treatment. Three credits; winter.

COREY

160. *Metallurgical Analysis*.—Technical methods of analysis of slags and industrial products. Prerequisite, Chemistry 101. One recitation and two laboratory periods. Laboratory deposit, \$12. Three credits; winter.

162. *Metallography*.—The constitution and microstructure of metals and alloys, especially iron and steel. Prerequisite, junior standing. Two recitations. Two credits; winter.

DANIELS, COREY

163. *Metallography*.—The preparation and study of metal sections, photomicrography and the use of the microscope to aid in testing industrial alloys. Two laboratory periods per week. Laboratory deposit, \$5. Two credits; spring.

COREY

164. *Pyrometry and Alloys*.—Methods of measuring high temperatures; union of metals by fusion, compression and electro-deposition; the behavior of metals and alloys under heat. Laboratory practice in thermal measurements, synthesis and testing of alloys. One recitation and one laboratory period. Laboratory deposit, \$5. Two credits; spring.

COREY

165. *Metallurgy Calculations*.—Physical chemistry for the metallurgist, slag calculations, etc., illustrated by figures quoted from the present practice at a number of smelting plants. Prerequisite, course 102, Chemistry 101. Two credits; winter.

COREY

166. *Electro-Metallurgy.*—A study of methods and practice with special consideration of the possibilities of electrometallurgical industries in the Pacific Northwest. Prerequisite, senior or graduate standing. Three credits; spring.

CORRY

Thesis.—See Mining 153 and 154-155.

Summer Field Work.—See mining 106.

III. CERAMICS

101. *Ceramic Raw Materials.*—The occurrence, properties and winning of clays, shales, limestones, silica and other ceramic raw materials. Two credits; autumn.

102. *Raw Materials Testing.*—Laboratory and occasional lectures. Laboratory deposit, \$3. Prerequisite, Ceramics 101. Two credits; winter.

105. *Pottery.*—Compositions and properties of materials used in making pottery and glazes. Prerequisite, junior standing. Optional for students in Fine Arts. Two credits; autumn.

111. *Manufacture of Clay Products.*—Principles governing the manufacture of clay wares; equipment, drying, and burning. Three credits; spring.

121. *Ceramic Calculations.*—Calculations involved in the blending of raw materials for pottery bodies, glazes, enamels, etc. Practical ceramic problems. One credit; spring.

151. *Clay Products Laboratory.*—Practice in the actual processes of manufacture of the various clay wares. Prerequisite, course 111. Two recitations and three laboratories. Laboratory deposit, \$7. Five credits; autumn.

152. *Clay Products Testing.*—Requisite qualities of structural clay products and refractories. Standard tests. One recitation and one laboratory. Laboratory deposit, \$3. Two credits; autumn.

161. *Thesis.*—A detailed study of some special or original ceramic problems. Prerequisite, senior or graduate standing. Laboratory and conference. Laboratory deposit, \$5 to \$10, depending upon the nature of the work. Two credits; autumn.

162-163. *Thesis.*—A detailed study of some special or original ceramic problem. Prerequisite, senior or graduate standing. Laboratory and conference. Laboratory deposit, \$5 to \$10 per quarter, depending upon the nature of the work. Three credits per quarter; winter, spring.

164. *Field Work.*—Visits to and reports upon individual plants. Prospecting trips. Two credits; spring.

172. *Cements and Limes.*—Lime, Portland cement, plaster and other cementing materials, and sand-lime products. Production, properties, and uses. Four lectures. Four credits; winter.

182. *Glasses and Glazes.*—Classification, production, properties and defects. Application to ceramic wares. Two lectures and one laboratory. Laboratory deposit, \$8. Three credits; winter.

183. *Enamels.*—Composition and properties of enamels. Application to clay and metal wares. Prerequisite, course 311. Three credits; spring.

MUSIC

Meany Hall

PROFESSOR GLEN; ASSISTANT PROFESSORS WOOD, ROSEN, VENINO, DIOKEY; MRS. BOGARDUS, MRS. VAN OGLE, MR. ADAMS; ASSISTANT, MISS FERRYMAN

1-2-3. *Music Appreciation.*—This course is planned to aid not only music students but also all interested in music to become intelligent and discriminating listeners. Musical masterpieces, both instrumental and vocal, of different periods and forms, will be presented and discussed. Two credits per quarter; autumn, winter, spring.

VAN OGLE

4-5-6. *History of Music.*—The progress of musical development from the primitive period to the modern. Two credits per quarter; autumn, winter, spring.

GLEN

7-8-9. *Sight Singing.*—For prospective grade supervisors and for music students. Two sections—one for beginners and the other for students who have had some experience in sight singing. Two credits per quarter; autumn, winter, spring.

DIOKEY

10. *Choral Study.*—The university chorus provides the opportunity, for those qualified, to study the more serious as well as the lighter forms of choral composition. Candidates must satisfy the director as to the extent of their musical ability. One credit; autumn or winter.

GLEN

14-15-16. *Ear Training and Melody Writing.*—Principles of melodic invention and training in hearing accurately; study in notation. Two credits per quarter; autumn, winter, spring.

DIOKEY

17. *Choral Study.*—Part songs for men's voices. Candidates admitted only upon examination. Two credits; autumn.

GLEN

31-32-33. *Applied Music (Freshman).*

68-69-70. *Applied Music (Sophomore).*

118-119-120. *Applied Music (Junior).*

168-169-170. *Applied Music (Senior).*

Students of other colleges and schools may earn one or two credits per quarter in the applied music courses. Students of the College of Fine Arts carry a larger number of credits—one and one-half to three—as indicated in the set courses. Students enrolled in these courses will be given opportunity, upon demonstration of the required ability, to participate in the public recitals of the department.

Unless excused by reason of advanced standing upon entrance, students who major in courses in applied music will require two lessons a week, ordinarily, in order to cover the work necessary for a degree. One to three credits per quarter.

Piano—Venino, Van Ogle, Ferryman
Violin—Rosen
Voice—Glen, Bogardus

19-20-21. University Orchestra.—The University orchestra affords to the qualified students an unusual opportunity for the study of the better grades of orchestral composition. None is eligible to enter the course unless the director is satisfied of the ability of the applicant. One credit per quarter; autumn, winter, spring.

GLEN

22-23-24. University Band.—Competent players of band instruments are admitted to the band upon consent of the bandmaster. Two credits per quarter; autumn, winter, spring.

ADAMS

25-26-27. Chamber Music.—Advanced study of the musical literature for string trios, quartets and quintets. One credit per quarter; autumn, winter, spring.

ROSEN

28-29-30. Ensemble Singing.—A choral course for women. Only advanced students will be admitted. One credit per quarter; autumn, winter, spring.

GLEN

51-52-53. Harmony.—Ear training, analysis, and keyboard practice. Prerequisite, courses 7-8-9 and 14-15-16. Three credits per quarter; autumn, winter, spring.

WOOD

54-55-56. School Music.—A course for supervisors. Two credits per quarter; autumn, winter, spring.

DICKET

101-102-103. Advanced Harmony.—Prerequisite, courses 51-52-53. Three credits per quarter; autumn, winter, spring.

WOOD

104-105-106. History of Music, Advanced.—A detailed study of important periods and composers of modern music. Two credits per quarter; autumn, winter, spring.

VAN OGLE

107-108-109. Counterpoint.—Prerequisite, courses 51-52-53. Two credits per quarter; autumn, winter, spring.

WOOD

110-111-112. Instrumental Form.—Analysis of many examples and simple exercises in composition. Prerequisite, courses 51-52-53. Two credits per quarter; autumn, winter, spring.

WOOD

113, 114, 115. Music Education.—Psychological and pedagogical principles and their application to the teaching of music. Two credits per quarter; autumn, winter, spring.

DICKEN

151, 152, 153. Musical Appreciation.—An appreciative study of some modern composers and schools. Two credits per quarter; autumn, winter, spring.

VAN OGLE

154, 155, 156. Music Education and Supervision.—This course is for seniors and students of experience. High school, normal school and institute music. Two credits per quarter; autumn, winter, spring.

DICKEN

157-158-159. Free Composition.—Choral work, piano accompaniment idioms, vocal and instrumental solos and pieces in the smaller forms. Prerequisite, courses 101-102-103. Two credits per quarter; autumn, winter, spring.

WOOD

160-161-162. Polyphonic Forms.—Free counterpoint applied to the invention, canon, fugue, etc. Analysis and composition. Prerequisite, courses 107-108-109. Two credits per quarter; autumn, winter, spring.

WOOD

NURSING

ASSISTANT PROFESSOR BARTLETT

1. Nursing as a Profession.—An informational course dealing with the traditions and development of nursing, the newer branches of public health work, and the opportunities for college women in the nursing profession. Prerequisites, none. Open to any women student in the University. Two credits; winter, spring.

MRS. BARTLETT

5. Home Nursing.—A practical course in home nursing for women students. Object of course is to enable these women to care for patients in their own home. The course also gives instruction in care of chronics, invalids and babies. Prerequisites, none. Three credits; winter and spring.

MRS. BARTLETT

203. Administration in Public Health Nursing Organizations.—Course deals with the organization and administration of societies organized for visiting nursing, methods of collecting funds, boards of directors, and various committees of these associations, office equipment, records, vital statistics, and supervision of staff nurses will be dealt with. Prerequisites: Open to public health nurses who have had one year of public health nursing. Three credits. Hours to be arranged.

MRS. BARTLETT

ORIENTAL HISTORY, LITERATURE AND LANGUAGES

315 Denny Hall

PROFESSOR GOWEN, MISS SIMMON

The requirement of one year's work in ancient languages and literature may be satisfied by courses 50, 51 and 52. Courses 1, 2 and 3 count for credits in the department of history; courses 40, 41 and 42 in the College of Business Administration; and courses 114, 115 and 116 in the department of philosophy. Courses above 100 are for juniors, seniors and graduates.

1. *History of China I.*—History of China from the earliest times to the Manchu Conquest. Three credits; autumn.

PROFESSOR GOWEN

2. *History of China II.*—History of China from the Manchu Conquest to the present day. Three credits; winter.

GOWEN

3. *History of Japan.*—Japan from the earliest times to the present day. Three credits; spring.

GOWEN

30-31-32. *Semitic Literature.*—A study of the literature of the Old Testament. Continuous through the three quarters, but each course independent and self-contained. One credit per quarter; autumn, winter, spring.

GOWEN

40-41-42. *Oriental Institutions—Japan, Russia, and China.*—The physical geography, social character and commercial resources of the Orient. Two credits per quarter; autumn, winter, spring.

GOWEN

50. *Literature of India.*—Five credits; autumn.

GOWEN

51. *Literature of Egypt and Babylonia.*—Five credits; winter.

GOWEN

52. *Literature of Arabia and Persia.*—Five credits; spring.

GOWEN

100-101-102. *Hebrew or Arabic.*—The giving of these courses depends upon registration. Five credits per quarter; autumn, winter, spring.

GOWEN

104-105-106. *Sanscrit.*—The giving of these courses depends upon registration. Five credits per quarter; autumn, winter, spring.

GOWEN

114-115-116. *History of Religion.*—See Philosophy 114-115-116.) First quarter—Primitive conceptions of religion, the religions of Egypt and the Euphrates valley. Second quarter—The religions of the Far East. Third quarter—Judaism, Muhammadanism, and Christianity. Three credits per quarter; autumn, winter, spring.

GOWEN

PAINTING, SCULPTURE AND DESIGN

Book Store Building

MISS EDENS, MISS ZIESE, MRS. WORMAN, MR. GUSTIN, MR. WHEN

Advanced students applying for credit must present work to head of the department.

3. Principles of Design.—The principles of design in line, dark and light, and color. For students in home economics. Three credits; winter.

ZIESE

5-6-7. Freehand Still Life and Cast.—The technique of drawing from elementary forms, with all mediums—water color, oil, pen, etc. Prerequisite for any subsequent course in drawing and painting; cast drawing from models of antique and modern sculpture, preparatory to drawing from living model. Three credits per quarter; autumn, winter, spring.

9-10-11. Art Structure.—A study of the principles of design in line, dark and light, and color, to develop power of appreciation and creation of good design. Prerequisite for any subsequent course in art structure. Laboratory deposit, \$1. Four credits per quarter; autumn, winter, spring.

ZIESE

16-17-18. Art Appreciation.—Historical development, from the art of primitive man to the present day, including the anatomical structure and function of the human body as related to artistic construction. One credit per quarter; autumn, winter, spring.

53. Art Structure.—Working out simple units, borders, and all-over patterns with needle and cloth as medium. Four credits; autumn.

ZIESE

54. Art Structure.—Bookbinding and woodblock printing. Four credits; winter.

ZIESE

55. Art Structure.—Woodblock printing and furniture decoration. Designing of woodblocks and printing on textiles. Four credits; spring.

ZIESE

56-57-58. Illustration and Life Study.—Drawing and painting, from the model in various mediums, for reproductive processes such as magazines, newspapers and commercial work, including a study of the anatomy of the human figure. Prerequisite, freshman freehand. Laboratory deposit, \$3. Three credits per quarter; autumn, winter, spring.

WHEN

72. Clay Modeling.—Construction of plaster moulds, elementary construction; modeling in clay and wax. Three credits; autumn.

101. Public School Drawing.—For drawing supervisors. The working out of such drawings as would be used in the public schools. Three credits; spring.

EDENS

103-104. *Art Structure. Pottery.*—Advanced students will be allowed to work for advanced credits. Laboratory deposit, \$2. Three credits per quarter; autumn, winter.

EDENS

105. *Art Structure.*—Design as applied to lettering, advertising, and cartooning. Three credits; autumn.

EDENS

106. *Art Structure.*—Posters. Advanced

107-108-109. *Portrait.*—Portraiture in all mediums. Prerequisite, freshman freehand. Laboratory deposit, \$3. Three credits per quarter; autumn, winter, spring.

111-112. *Art Structure.*—Interior decoration. Three credits per quarter.

EDENS

*151-152. *Landscape.*—Design.

153. *Methods of Teaching Art.*—Courses of study, methods and material. Five credits; autumn.

154. *Practice Teaching.*—Teaching under supervision in city schools. Five credits; winter.

EDENS

157. *Art Structure.*—Simple metal work—etching, sawing, and hammering of copper and brass. Laboratory deposit, \$2. Three credits; autumn.

158. *Art Structure.*—Jewelry. Three credits; winter.

EDENS

159. *Art Structure.*—Landscape composition. Three credits; spring.

EDENS

160-161-162. *Portrait and Life.*—Three credits per quarter; autumn, winter, spring.

EDENS

163-164-165. *Mural Decoration.*—Decorative compositions done in oil, applied to the beautifying of wall spaces, in harmony with the scheme of architecture. Prerequisite, junior standing. Four credits per quarter; autumn, winter, spring.

166. *Landscape.*

169-170-171. *Textile and Costume Drawing.*—Two credits per quarter; autumn, winter, spring.

EDENS

PHARMACY, PHARMACEUTICAL CHEMISTRY, MATERIA MEDICA AND FOOD CHEMISTRY

Bagley Hall

PROFESSOR JOHNSON, ASSOCIATE PROFESSOR LINTON, MISS HINDMAN, MR. GOODRICH,
MR. OSSEWARD, ASSISTANTS

1-2. *Theoretical and Manufacturing Pharmacy.*—The study of the principles of pharmacopoeial operations, and the manufacture of

*Not offered in 1919-1920.

Pharmacopœial and National Formulary preparations. Three lectures and two laboratory periods per week. Pharmacy 1 is repeated in the winter quarter. Pharmacy 2 is repeated in the spring quarter. Laboratory deposits, \$5 per quarter. Five credits per quarter; autumn, winter.

LINTON, GOODRICH

4. *Materia Medica*.—A study of crude drugs, their source, methods of collecting and preserving identification, active constituents and adulterations. Five credits; autumn, spring.

LINTON

5-6-7. *Drug Assaying*.—Experiments in gravimetric and volumetric analysis are given with the idea of training the students in the fundamental principles of quantitative chemistry, and at the same time making them familiar with the analysis of substances of pharmaceutical importance. Two recitations and three laboratory periods per week in autumn and winter quarters; one recitation and one laboratory period per week in spring quarter. Laboratory deposit, \$5 per quarter. Five credits, autumn and winter; three credits, spring.

JOHNSON, GOODRICH

8. *U. S. Pharmacopœia and National Formulary*.—A study of the methods and the chemistry involved in Pharmacopœial and National Formulary preparations. Two credits; winter.

LINTON

9. *Pharmaceutical Chemistry*.—Inorganic and organic chemicals of the Pharmacopœia and the National Formulary. Five credits; spring.

JOHNSON

10-11. *Prescriptions*.—Special attention will be given to incompatibilities and to the more important of the "new remedies." The students are required to criticise and compound approximately two hundred difficult prescriptions. One recitation and one laboratory period per week during winter quarter; two recitations and two laboratory periods per week during spring quarter. Laboratory deposit: Winter quarter, \$2.50; spring quarter, \$5. Two credits, winter; four credits, spring.

LINTON, GOODRICH

13. *Pharmacology and Therapeutics*.—The action and uses of chemicals, drugs and their preparations on the human organism in health and disease. Five credits; autumn.

LINTON

14. *Toxicology*.—The action of poisons, methods of treatment in cases of poisoning, and methods of identification and separation of poisons from tissue. Two credits; winter.

LINTON

15. *Field Materia Medica*.—A study of the native medicinal plants of Washington and also of plants under cultivation in the drug

garden. One laboratory period per week, consisting largely of work in the drug garden and field trips. Laboratory deposit, \$1. One credit; spring.

LINTON

16. *Food Laws*.—National, state and foreign food laws. For students in the department of fisheries. One credit; winter.

JOHNSON

104. *Food Analysis*.—For students in the Department of Home Economics. Two lectures and two laboratory periods per week. Laboratory deposit, \$5. Four credits; autumn.

105-106-107. *Chemistry and Analysis of Food*.—Methods of analysis of food products and the study of federal and state laws regulating the sale of foods and drug products. Methods of the Association of Official Agricultural Chemists are used. Graduate students, if prepared, may elect a research problem in food analysis. Laboratory deposit, \$5 per quarter. Five credits per quarter; autumn, winter, spring.

JOHNSON

109-110-111. *Toxicology*.—A laboratory course in the separation, identification and estimation of inorganic and organic poisons and in the analysis of alkaloids. Laboratory deposit according to credit. Credit to be arranged; autumn, winter, spring.

JOHNSON

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113-114-~~116~~. *Advanced Prescriptions*.—Extensive practice in difficult and incompatible prescriptions; also a study of special problems. Laboratory deposit according to credit. Credit to be arranged; autumn, winter and summer.

LINTON

117-118-119. *Current Problems*.—A lecture and recitation course on current problems of scientific importance. One credit per quarter; autumn, winter, spring.

LINTON

*121-122-123. *Manufacturing Pharmacy*.—An advanced course in pharmaceutical manufacturing, including the manufacture of some of the more difficult of the Pharmacopœial and National Formulary preparations, as well as a number of organic and inorganic compounds used in pharmacy and medicine. Laboratory deposit according to credit. Credit to be arranged; autumn, winter, spring.

201-202-203. *Investigation*.—Senior and graduate students may undertake some original investigation in pharmacy, pharmaceutical chemistry or chemistry of foods under the direction of one of the instructors. Laboratory deposit according to credit. Credit to be arranged; autumn, winter, spring.

PHILOSOPHY

Denny Hall

PROFESSOR HALL, UNIVERSITY HEALTH OFFICER, ADMINISTRATIVE HEAD; ASSISTANT PROFESSOR

The Liberal Arts requirements are a total of ten credits in the departments of philosophy and psychology. The College of Science requirements are five credits in philosophy. These requirements may be satisfied from the following courses: Philosophy 1, 2, 3, 5 (all introductory courses).

Philosophy 1, 2, and 5 are suited to arts-law students.

Psychology 1 is required of majors in philosophy and will satisfy a part of the major requirement.

1. Introduction to Philosophy.—Five credits; autumn, winter, or spring.

SAVERY, DUCASSE

2. Introduction to Social Ethics.—Social ideals and problems, with special emphasis upon the opposition of democracy and aristocracy in government, industry, law, education, art, and religion. Five credits; winter.

SAVERY

3. Introduction to Ethics.—Ethical principles and their application to the problems of life. Five credits; spring.

5. Introduction to Logic.—The conditions of clear statement, adequate evidence, and valid reasoning, and their establishment in the mental processes of the student. Five credits; winter.

DUCASSE

101-102-103. History of Philosophy.—Ancient, medieval and modern. Prerequisite, Philosophy 1. Three credits per quarter; autumn, winter, spring.

104-105-106. Philosophy of Nature.—A course in metaphysics, with special reference to the concepts and principles of science. For advanced students in philosophy or in the physical or biological sciences. Three credits per quarter; autumn, winter, spring.

SAVERY

**107-108-109. Philosophy of Science.*

113. Philosophy of Religion.—(1) The religious experience; (2) the truth of religion. Prerequisite, Philosophy 1. Five credits; spring.

SAVERY

114-115-116. History of Religion.—(Identical with Oriental Languages and Literature 114-115-116.) Autumn quarter: Primitive conceptions of religion, the religions of Egypt and the Euphrates Valley. Winter quarter: The religions of the Far East. Spring quarter: Judaism, Muhammedanism, and Christianity. Three credits per quarter; autumn, winter, spring.

GOWEN

123. *Philosophy in English Literature of the Nineteenth Century.—Alternates with course 126 as requirement for seniors in the Library School.) Prerequisite, Philosophy 1. Five credits; spring.

SAVERY

126. *Philosophy in Contemporary Drama.*—(Identical with English 187.) Social and philosophical ideas in the contemporary drama. (Alternates with course 123 as requirement for seniors in Library School.) Prerequisite, Philosophy 1 previous or concurrent. Five credits; spring.

BENHAM

129. *Aesthetics.*—The origin and motives of art and the esthetic principles of the different forms of art. Five credits; spring.

DUCASSE

133. *Ethical Theory.*—An advanced course in the fundamental concepts and principles of ethics. Prerequisite, Philosophy 2 or 3. Two credits; spring.

SAVERY

134-135-136. *Typical Philosophies of Life.*—Interpretations of life in terms of the romantic, the aesthetic, the religious, and other fundamental human values, will be considered as found in literature. The reading will include portions of the works of such writers as Amiel, Omar Khayyam, Goethe, Nietzsche, Schopenhauer, Oscar Wilde, etc. The course may be entered any quarter. Prerequisite, one course in philosophy or psychology. Two credits per quarter; autumn, winter, spring.

DUCASSE

141. *Contemporary Philosophy.*—Readings from authors representing the main tendencies in contemporary philosophy. Three credits; autumn.

PHYSICAL EDUCATION AND HYGIENE

PROFESSOR HALL, UNIVERSITY HEALTH OFFICER, ADMINISTRATION HEAD; ASSISTANT PROFESSOR ARBUTHNOT, SUPERVISOR, DIVISION OF MEN; ASSISTANT PROFESSOR GOSS, SUPERVISOR, DIVISION OF WOMEN; ASSOCIATE HUNT, SUPERVISOR, DIVISION OF ATHLETICS;
DR. IRWIN, LECTURER ON HYGIENE; INSTRUCTORS, DEVER AND LEMON; ASSOCIATE BLOOM; ASSISTANTS, MACKINNON AND EDMUNDSON

Requirements for Graduation.—All students, both men and women, are required to take a prescribed amount of directed physical exercise, not less than two hours per week during their entire college course.

Military Training.—Requirements in military science and tactics take precedence over the requirements in physical education. (See Military Science and Tactics.)

Requirements for a Major.—The completion of thirty-six hours, exclusive of the work prescribed for all students for exercise.

Zoölogy 3-4 and 5-6 are prerequisite for courses 151-152-153-154, and should be completed during the first two years. Students wishing

to major in physical education should begin the work in their freshman year. It is quite difficult to begin later on account of the prerequisite courses in the first two years.

Hygiene.—All freshmen are required to complete a given amount of hygiene during their freshman year. This is carried out in conjunction with the prescribed work.

COURSES FOR MEN

A physical examination is given to each student upon entering college, segregating them into divisions A, B and C, according to their health and development. Work appropriate for each division is then prescribed.

1-2-3. Calisthenics and Athletics.—Introductory course for first year men. One credit per quarter; autumn, winter, spring.

ARBUTHNOT

51-52-53. Gymnastics and Athletics.—For second year men. Prerequisite, course 1-2-3. One credit per quarter; autumn, winter, spring.

ARBUTHNOT, HEDRICK

*104. *Hygiene: Emergencies.*

115-116-117. Intramural Athletics.—Corrective gymnastics, systematic exercise in class. Required of all junior men. Two periods per week; autumn, winter, spring.

ARBUTHNOT, HUNT, VANDREVER

121-122-123. Recreation.—Healthful exercises and games. Required of all junior men. One credit per quarter. Two periods per week; autumn, winter and spring.

ARBUTHNOT, HEDRICK

154. Games of Skill and Supervision of Athletics.

158-159-160. Intramural Athletics.—A continuation of courses 115-116-117. Required of all senior men. Autumn, winter, spring.

ARBUTHNOT, HUNT, VANDREVER

161-162-163. Recreation.—A continuation of courses 121-122-123. Required of all senior men. Two periods per week. One credit per quarter; autumn, winter, spring.

ARBUTHNOT

COURSES FOR WOMEN

All women are required to participate in some form of healthful exercise during their college course. The kinds of exercise is determined by the result of the physical examination. Entering students are required to have a physical and medical examination.

A uniform suit for women is required. The fee, which will depend upon the market price of suits (approximately \$8 to \$10) is to be paid upon registration. It consists of: 2 white middle blouses, black serge bloomers, black gymnasium shoes. No part of suit should be purchased before entering college.

SPORT FOR SPORT'S SAKE

All students are urged to secure at least two hours of recreative exercise each day, and the facilities of the department are open for this purpose, whenever not required for prescribed activities. Advice and direction may be secured by any student at any time.

TOURNAMENTS AND CONTESTS

Intramural tournaments and contests are conducted in all sports under the supervision and control of the department. The Women's League and the Women's Athletic Association cooperate with the department in the conduct of women's activities.

Freshmen: Three periods per week, one period hygiene, two periods practice. Courses 1 to 11.

Sophomores: Three periods per week, one period food, two periods practice. Courses 51 to 65.

COURSES

1-2-3. *Gymnastics.*—Required of all first year women. Athletics may be added second and third quarters. One credit per quarter. Two hours of floor work. Autumn, winter, spring.

4-5-6. *Hygiene.*—Required of all first year women. Parallel requirement with 1-3 or 7-9 or 12-13. One hour of lecture. One credit per quarter; autumn, winter, spring.

7-8-9. *Corrective Gymnastics.*—Supplement 1-2-3. Two hours of practice. One credit per quarter; autumn, winter, spring.

12-13. *Athletics.*—Two hours of practice. One credit per quarter; winter, spring.

51-52-53. *Gymnastics.*—Second year women. Two hours of floor work. One credit per quarter; autumn, winter, spring.

54-55-56. *Food.*—Required of all second year women. Parallel requirement with 51-53 or 57-59 or 61-63. One hour of lecture. One credit per quarter; autumn, winter, spring.

57-58-59. *Corrective Gymnastics.*—Supplements 51-52-53. One credit per quarter. Two hours of practice; autumn, winter, spring.

61-62-63. *Athletics.*—Two hours of practice. One credit per quarter; autumn, winter, spring.

64-65-66. *Dancing.*—Two hours of practice. One credit per quarter; autumn, winter, spring.

71a. *Hockey.*—Autumn quarter; basketball, winter quarter; hockey, spring quarter. Credit to be arranged.

71b. *Baseball.*—Autumn quarter; basketball, winter quarter; baseball, spring quarter. Credit to be arranged.

91. *Gymnastics.*—Autumn, winter, spring quarters.

MACKINNON

DEVVER

LEMON

93. Apparatus.—One hour lecture, two hours practice in theory and practice of gymnasium apparatus. Two credits; spring.

94. Dancing.—Autumn, winter, spring quarters.

DEVEL

101-102-103. Methods of Gynastics.—Drill in gymnastic floor work. Gymnastic terminology and survey and classification of gymnastic material. Principles and technique and teaching. Required of majors. One hour lecture and one hour practice per week. One and one-half credits per quarter for a year.

111-112-113. Plays and Games.—Nature, function and theory of play. Singing games, dramatic plays, graded games, organization and administration of playgrounds, conduct and equipment of play centers. Play in education and civic life. Commercial and municipal recreation and agencies promoting activity. Administration of athletics. Required of majors. One lecture and three hours practical work per week. Three credits per quarter for a year.

121-122-123. Kinesiology.—Required of majors. Lectures and recitations on the science of joint movement, muscular action, gravity, inertia and resistance applied to gymnastic movements.

104-105-106. Methods of Folk Dancing.—Dances of the nations arranged for teaching in the public schools. Fundamental steps, methods of teaching, relation of music to dancing, costuming, school festivities, etc. On hour lecture and two hours practical work per week. Two credits per quarter for a year.

109. History of Physical Education.—Purpose of course is to trace history of physical education as a science, to familiarize students with the literature bearing on physical education. Emphasis on health movement. Required of majors. Lectures and assigned reading. Two credits for one quarter; spring.

131-132-133. Corrective Gymnastic Theory.—Deviations from the normal remedial gymnastics and application of exercises for correction. Required of majors. Two lectures per week. Two credits per quarter for a year.

134-135-136. Corrective Gymnastic Practice.—Four hours clinical practice under supervision, in applying methods taught in 131-132-133. Required of majors. Two credits per quarter for a year.

151-152-153. Advanced Methods in Gymnastics.—Prerequisite course 101-102-103. Advanced gymnastics. Development of lesson plan. Gymnasium problems. Adaptation to schoolroom. Practice teaching correlation. Required of majors. One hour lecture and one hour practical work. One and one-half credits per quarter for a year.

154-155-156. Methods of Dancing.—Prerequisite Dancing 56-58-59. Technique of natural dancing, based on natural movements and expression of the body. Festival and pageantry for school and com-

munity. Normal course. Required of majors. One hour lecture and one hour practice. One and one-half credits per quarter for a year.

161. Normal Diagnosis.—Treatment of the normal and deviations from the normal. Required of majors. Three credits for autumn quarter.

162. Anthropometry and Emergencies.—Standards of efficiency in measurements. First aid. Required of majors. Three credits for winter quarter.

163. Personal Hygiene and Health Problems of School and Community.—The problem of the communicable disease in the home, school and community. Required of majors. Three credits for the spring quarter.

PHYSICS

Denny Hall

PROFESSOR OSBORN, ASSOCIATE PROFESSOR BRAKEL, ASSISTANT PROFESSOR ANDERSON, MR. UTTERBAUGH, MR. HIGGS

1, 2. General Physics.—Course 1, 2 will satisfy the physical science requirement in the College of Liberal Arts and Science. Prerequisite, high school physics. Five credits per quarter; autumn, winter.

OSBORN

3. General Electricity.—Course 3 is required of physics majors, and of mathematics majors taking physics as a minor, and also for pre-medical students. Prerequisite, course 1, 2. Five credits; spring.

OSBORN

47-48-49. Elementary Physics.—For students without high school physics these courses will satisfy the entrance condition in physics or the physical science requirement in the College of Liberal Arts and Science. Five credits per quarter; autumn, winter, spring.

UTTERBAUGH

50-51. Sound and Music.—For students in the College of Fine Arts only. Five credits per quarter; winter, spring.

ANDERSON

89-90. Physics of the Home.—For students in home economics. These courses will also satisfy for women the physical science requirement in the College of Liberal Arts. Five credits per quarter; autumn, winter.

OSBORN

92-93. General Physics.—For students in forestry and pharmacy. Prerequisite, high school physics. Five credits per quarter; winter, spring.

BRAKEL

97. Physics for Engineers.—Prerequisite, high school physics and fifteen hours of college mathematics. Five credits; autumn, spring.

98. Physics for Engineers.—Prerequisite, course 97. Three class and two three-hour laboratory periods. Five credits; winter.

BRAKEL

99. *Physics for Engineers*.—Prerequisite, course 97. Five credits; autumn, spring.

101. *Mechanics*.—Prerequisite, courses 1-2 or 47, 48, 49 and trigonometry. The laboratory work may be omitted by non-majors. Five credits; autumn.

ANDERSON

103. *Light*. Prerequisites, courses 1-2, and ten hours of college mathematics. Five credits; spring.

OSBORN

104. *Vibratory Motion and Sound*.—Prerequisites, courses 1-2, and calculus.

OSBORN

114. *Electrical Measurements*.—Prerequisite, courses 97, 98, 99. Three credits; autumn or spring.

BRANKE

203. *Theoretical Electricity and Magnetism*.—Prerequisites, graduate standing and calculus. Five credits; winter.

BRANKE

209. *Electron Theory*.—The important researches leading to the electron theory are presented and its applications in explaining the varied phenomena of physics and chemistry are considered. Prerequisite, courses 1, 2, 3 and senior standing. Three credits; winter.

ANDERSON

POLITICAL SCIENCE

Denny Hall

PROFESSOR J. ALLEN SMITH AND MR. LAUBE

The work in the department of political science is designed to give a scientific account of the activities of the state and of the functioning of the electorate and legislative bodies in determining state action. Some of the courses are planned to give that knowledge of public affairs which ought to be a part of a liberal education, while others lead to the special study and investigation of problems and methods in the different branches of the government. The aim is to train the powers of observation and reasoning, to develop correct methods of research, and to apply the knowledge gained to the solution of practical problems.

1. *Elements of Government*.—An introductory course in which special attention is given to the citizen's part in government. Five credits; autumn, winter, or spring.

SMITH

10. *American Government*.—A general study of the American system of national government. Prerequisite, course 1. Three credits; winter.

SMITH

11. *State Government.*—A general study of the American system of state government. Prerequisite, course 1. Three credits; spring.

SMITH

50. *Comparative Government.*—The constitutional organization of the principal governments of Europe; with emphasis on political parties and current questions. Prerequisite, course 1. Three credits; autumn, spring.

SMITH

*51. *Principles of Political Science.*—The state; political organization. Prerequisite, course 1. Three credits; winter.

52. *Political Parties.*—Organization and methods of modern political parties; growth and theory of the party system. Prerequisite, course 1. Three credits; spring.

LAUBS

100. *Municipal Government.*—Municipal organization and administration in the United States and Europe with some consideration of functions and problems. Prerequisite, eight credits in political science. Five credits; autumn.

LAUBS

102. *Municipal Problems.*—Problems of city government, with special attention to municipal utilities. Prerequisite, eight credits in political science. Three credits; winter.

LAUBS

109. *Colonial Politics.*—Colonization and colonial government, with special attention to the colonial problems of the United States.

BISSETT

110. *International Law.* 3 cr Fall

111. *International Politics.*—The economic basis of international relationship; nationalism; imperialism; political relationship between advanced and backward peoples; self-determination; cultural interchange; community of policy. Prerequisite, eight credits in political science. Three credits; winter.

112. *Oriental Politics.*—Relations of the European powers and the United States to China and Japan. Prerequisite, eight credits in political science. Three credits; spring.

LAUBS

125. *Public Finance and Taxation.*—Prerequisite, course 1, Econ. 51. Five credits; autumn.

LAUBS

126. *Problems in Taxation.*—Advanced problems in taxation, with special reference to the state of Washington. Prerequisite, course 125. Three credits; winter.

LAUBS

127. *Municipal Finance.*—Prerequisite, course 125. Three credits; spring.

LAUBS

* Not offered in 1919-1920.

150-151-152. Reading Course.—Discussions based on selective readings in political theory. Prerequisite, eight credits in political science. Two credits per quarter; autumn, winter, spring.

SMITH

153-154-155. Political Problems.—Prerequisite, eight credits in political science. Two credits per quarter; autumn, winter, spring.

181-182-183. Research in Public Finance.—Two credits per quarter; autumn, winter, spring.

201-202-203. Seminar.—Graduates; first, second and third quarter.

PSYCHOLOGY

Science Hall 4116

PROFESSOR SMITH, ASSISTANT PROFESSOR GUTHRIE, DR. WILTRANK, MISS WILKINSON

The Liberal Arts requirements are a total of ten credits in the departments of philosophy and psychology.

The College of Science requirements are five credits in psychology.

For psychology as prerequisite to education, see announcement of department of education.

Majors in psychology may count five hours in Philosophy 1, or in 101-102-103 toward satisfying their major requirement.

1. General Psychology.—A survey of the science as a whole. No prerequisites. Four lectures, one discussion section, and one two-hour laboratory a week. Five credits; course repeated every quarter.

SMITH, GUTHRIE, WILTRANK

101. Physiological Psychology.—Man's behavior viewed as a result of his neurological mechanism. Students who so desire will be offered an opportunity for individual work in dissection and microscopic study. Prerequisite, Psychology 1. Two credits; winter.

GUTHRIE

106. Experimental Psychology.—Students taking this course receive training in laboratory methods, are made familiar with the more important kinds of psychological apparatus, and perform many of the classical experiments in psychology. Prerequisite Psychology 1. Three credits; spring.

GUTHRIE

109. Mental Tests.—Training in applying tests for intelligence and for mental analysis. The principles of experimental procedure, methods of measurement, and statistical treatment of results form the major part of this course. The course is essential to work in clinical psychology. Prerequisite, Psychology 1. Three credits; spring.

SMITH, WILTRANK

111. History of Psychology.—The origin and development of psychology, beginning with the primitive conceptions of mind, and in-

cluding a comprehensive view of the sources of scientific psychology. Prerequisite, Psychology 1. Two credits; autumn.

GUTHRIE

112. *Modern Psychological Theory*.—A criticism of psychological theories in the light of recent experimental findings. The significance of behaviorism and of the concept of the unconscious in psychology. Prerequisite, Psychology 1. Three credits; spring.

GUTHRIE

114. *Current Psychological Literature*.—This course offers each student the opportunity of reading and discussion in the direction of his particular interests, and at the same time makes him familiar with a wide range of subjects treated in recent journals and with the new developments in psychology. Prerequisite, Psychology 1. Three credits; winter.

GUTHRIE

116. *Animal Behavior*.—The mind of animals as shown by their behavior under natural conditions and in the laboratory. A discussion of current theory concerning insect societies, bird migration, and other obscure capacities of animals. Prerequisite, Psychology 1. Three credits; autumn.

GUTHRIE

118. *Folk Psychology*.—A psychological study of social human nature; language, custom, public opinion, morals, war, nationalism, classes, religion. Prerequisite, Psychology 1. Two credits; autumn.

GUTHRIE

121. *Applied Psychology*.—Psychology as applied to personal efficiency, vocational guidance and the measurement of vocational fitness, scientific management, the psychology of advertising, legal testimony and the mental states affecting its reliability. The significance of sex and individual differences in practical life. Prerequisite, Psychology 1. Five credits; winter.

WILZBANK

124. *Psychology of Learning*.—The principles of learning and the transfer of training, based upon experimental results, and an examination of the various explanations of learning. Prerequisite, Psychology 1. Two credits; spring.

WILZBANK

126. *Abnormal Psychology*.—The explanation of unusual behavior and the influence of the subconscious mind upon conduct. The nature of instinct and an analysis of learning. Prerequisite, Psychology 1. Five credits; winter.

GUTHRIE

131. *Child Psychology*.—A study of mental development from infancy to adult age with the purpose of giving the student a scientific understanding of childhood. Prerequisite, Psychology 1. Five credits; autumn.

SMITH

132. *Psychology of Exceptional Children.*—The nature and cause of mental defects and peculiarities of children, with special reference to methods of diagnosis and to physical pathology. Prerequisite, Psychology 1. Three credits; spring.

SMITH

151-152-153-154. *Undergraduate Research.*—Prerequisites, Psychology 1 and 106. Each quarter.

SMITH, GUTHRIE, WILTRANK

201-202-203-204. *Graduate Research.*

SMITH, GUTHRIE, WILTRANK

PUBLIC SPEAKING

Denny Hall

(See Dramatic Art)

ROMANIC LANGUAGES AND LITERATURE

Denny Hall

PROFESSORS FREIN AND OREB; ASSOCIATE PROFESSORS UMPHREY AND PATZER; ASSISTANT PROFESSORS RATTI, HELMLINGE, SANTANDER, GOGGIO; MR. WHITTLESBY AND MR. PHILBRICK

Students entering with high school credits in French or Spanish will be admitted to classes upon the basis of one high school semester counting as the equivalent of one university quarter. Exceptional cases will be determined by the head of this department.

Students may not begin French 1 and Spanish 1, nor Italian 1) during the same quarter, and it is better to have three quarters of one Romanic language before beginning another.

Course 117-118-119, listed under Italian, belongs also in French and Spanish.

I. FRENCH

Requirements of the Department.—Courses 41, 101, 102, 103, 191, 192, 193 are required of majors and those who wish to be recommended to teach.

1-2-3. *Elementary.*—As much as possible French will be used in the class room, but one section of the class will be devoted exclusively to those who wish only the ability to translate French. Each of the courses 1, 2, 3, is repeated each quarter. No credits will be given for course 1 until course 2 has been completed. Five credits per quarter; autumn, winter, spring.

4-5-6. *Reading of Modern Texts.*—One section of the class will be devoted to translation, exclusively, while the other sections will read and be questioned in French. Each of the courses 4, 5, 6, is repeated each quarter. Course 4 may be combined with 7, making a five-hour course. The same is true of 5 and 8, 6 and 9. Prerequisite to course 4 is course 3, or equivalent. Three credits per quarter; autumn, winter, spring.

* Not offered in 1919-1920.

7-8-9. *Grammar and Composition*.—These courses must be taken by those who intend to major in French, unless they have already done the equivalent in high school. Course 7 may be combined with course 4. The same is true of 8 and 5, 9 and 6. Prerequisite to course 7 is course 3, or equivalent. Two credits per quarter; autumn, winter, spring.

41. *Phonetics*.—This course is intended to furnish the student an opportunity to acquire a reasonably correct pronunciation, and to bring more order out of what seems a mass of exceptions. Prerequisite, course 1. Three credits; repeated each quarter.

FRANK

101-102-103. *Composition and Conversation*.—With each of these courses is offered (at the same hour, but not on the same days) a course in literature, with lectures in French by the same professor who gives these courses. See courses 171, Helmlinge; 161, Patzer; 151, Ratti. These courses in literature are substitutes for courses 104, 105, 106, and several books per quarter will be assigned to each student for outside reading and reports. Prerequisites, 6 and 9. Three credits per quarter; autumn, winter, spring.

HELMINGE, PATZER, RATTI

*104-105-106. *Advanced Reading*.

117-118-119. *Renaissance Literature*.—See under Italian 117-118-119.

FRANK

*121-122-123. *The French Novel*.

124-125-126. *The Short Story*.—Lectures in French upon the origin and development of the French short story. Many of the short stories will be read outside of class and reports made to the class. Students may enter at the beginning of any quarter. Prerequisite, course 101, or equivalent. Three credits per quarter; autumn, winter, spring.

131-132-133. *Lyric Poetry*.

HELMINGE

*141-142-143. *The French Drama*.

151-152-153. *History of the French Literature of the Nineteenth Century*.—Lectures in French, and assignments of reading to be done outside of class. Intended to give an opportunity to hear French spoken connectedly, though slowly. This course may be taken with 101-102-103, making a five-hour course. See 101-102-103. Students may enter at the beginning of any quarter. Prerequisite, 6 and 9, or equivalent. Two credits per quarter; autumn, winter, spring.

RATTI

161-162-163. *History of the French Literature of the Eighteenth Century*.—Lectures in French, with assignments of reading to be done outside of class. Intended to give an opportunity to hear French spoken

* Not offered in 1919-1920.

connectedly, though slowly. This course may be taken with 101-102-103, making a five-hour course. See 101-102-103. Students may enter at the beginning of any quarter. Prerequisites, 6 and 9, or equivalent. Two credits per quarter; autumn, winter, spring.

PATER

171-172-173. History of the French Literature of the Seventeenth Century.—Lectures in French and assigned reading to be done outside of class. Intended to give an opportunity to hear French spoken connectedly, through slowly. This course may be taken with 101-102-103, making a five-hour course. See 101-102-103. Students may enter at the beginning of any quarter. Prerequisites, 6 and 9, or equivalent. Two credits per quarter; autumn, winter, spring.

HELMUTH

191-192-193. Teachers' Course.—Emphasis on the methods of teaching pronunciation and syntax; review of phonetics and syntax, with students conducting the recitations. Prerequisite, courses 41, 101, 102, 103, and at least one of the literature courses. Two credits per quarter; autumn, winter, spring.

FRAN

**201-202-203. Middle and Sixteenth Century.*

221-222-223. Old French Readings.—One of the most helpful courses for teachers of French. Open to graduates and seniors who have studied French at least four years. Five credits per quarter; autumn, winter, spring.

FRAN

**231-232-233. History of Old French Literature.*

**241-242-243. Seminar.*

II. SPANISH

Requirements of the Department.—Courses 191, 192 are required of majors and of all who wish to be recommended as teachers.

1-2-3. Elementary.—No credit will be given for course 1 until course 2 has been completed. Each of the courses 1, 2, 3, is repeated each quarter. Five credits per quarter; autumn, winter, spring.

4-5-6. Reading of Modern Authors.—Reading some of the best works of the nineteenth century. If desired, courses 4, 5, 6 may be combined with courses 7, 8, 9, making a five-hour course each quarter. Prerequisite to 4 is 3, or equivalent. Three credits per quarter; autumn, winter, spring.

7-8-9. Grammar, Composition, Conversation.—These courses may be combined with courses 4, 5, 6, making a five-hour course. Prerequisite to course 7 is course 3. Course 7 is prerequisite to course 8. Two credits per quarter; autumn, winter, spring.

112-113. Commercial Spanish.—Commercial terms and business correspondence. Prerequisite, course 9. Three credits per quarter.

SANTANER

* Not offered in 1919-1920.

115. *Outline History of Spanish Literature.*—Selected texts, collateral reading, lectures. Prerequisite, 6. Three credits; spring.

UMPHREY

117-118-119. *Renaissance Literature.*—See Italian 117-118-119.

121-122-123. *The Novel.*—The origin of the Spanish novel and its development. Reading of selected texts; collateral reading and reports. Prerequisite, 6. Three credits; autumn, winter, spring.

STONE

*131-132. *Lyrics and Ballads.*

*141-142-143. *Drama.*

181-182-183. *Spanish-American Institutions.*—Lectures, in Spanish, upon the institutions, history, and government of Spanish-American republics. Collateral reading and reports. Prerequisites, courses 6, 9. Two credits per quarter; autumn, winter, spring.

STONE

184-185-186. *Spanish-American Literature.*—The literature of one or more Spanish-American countries will be studied each quarter, with special attention to present day writers. Prerequisite, course 6. Two credits per quarter; autumn, winter, spring.

UMPHREY, SANTANDER

191-192. *Teachers' Course.*—Methods of teaching Spanish; practice teaching; observation; review of linguistic difficulties. Open to major students. Two credits per quarter; winter, spring.

ORR

*241-242. *Old Spanish.*

III. ITALIAN

Requirements of the Department.—No student will be allowed to begin Italian and French or Spanish the same year. Upper classmen who have had considerable French or Spanish may elect elementary Italian. Not enough courses are offered to major in Italian.

1-2-3. *Elementary.*—No credits given in 1, 2, until 3 is complete. Five credits per quarter; autumn, winter, spring.

GOSZ

117-118-119. *Renaissance Literature of Italy, France and Spain.*—This course will be conducted in English. It is intended to give students an opportunity to become acquainted with the Renaissance literature of the principal three Romanic countries. Prerequisite, two years of French or Spanish or one year of Italian. Two credits per quarter; autumn, winter, spring.

GOSZ

* Not offered in 1918-1920.

SCANDINAVIAN LANGUAGES AND LITERATURE

Denny Hall

PROFESSOR VICKNER

1-2-3. Elementary Swedish—Grammar and reading; composition and conversation. Courses, 1, 2 are so arranged that they may be taken with courses 4, 5, making a five-hour course. Three credits per quarter; autumn, winter, spring.

VICKNER

4-5. Swedish Reading Course for Beginners.—Reading of easy texts. These courses are supplementary to courses 1, 2, but may also be taken separately by students desiring a reading knowledge of Swedish with a minimum of grammatical study. No previous knowledge of Swedish necessary. Courses 4, 5 are especially adapted to meet the needs of students in the Colleges of Science, Education, Business Administration, and in the Library School. Two credits per quarter; autumn and winter.

VICKNER

10-11-12. Elementary Norwegian-Danish.—Grammar and reading; composition and conversation. Courses 10, 11 are so arranged that they may be taken with courses 13, 14, making a five-hour course. Three credits per quarter; autumn, winter, spring.

VICKNER

13-14. Norwegian-Danish Reading Course for Beginners.—Reading of easy texts. These courses are supplementary to courses 10, 11, but may also be taken separately by students desiring a reading knowledge of Norwegian-Danish with a minimum of grammatical study. No previous knowledge of Norwegian-Danish necessary. Courses 13-14 are especially adapted to meet the needs of students in the Colleges of Science, Education, Business Administration and in the Library School. Two credits per quarter; autumn and winter.

VICKNER

20-21-22. Norwegian-Danish Literature.—Representative authors are read in connection with a survey of the Norwegian-Danish literature. Prerequisite, ability to read easy Norwegian-Danish. Course may be entered at the beginning of any quarter. Two credits per quarter; autumn, winter, spring.

VICKNER

23-24-25. Swedish Literature.—Representative authors are read in connection with a survey of the Swedish literature. Prerequisite, ability to read easy Swedish. Course may be entered at the beginning of any quarter. Two credits per quarter; autumn, winter, spring.

VICKNER

30. Scandinavian Culture and Institutions.—A lecture course dealing with the literature, art, political, social, commercial, and industrial development of Scandinavia. Lectures in English, collateral reading, slides. Especially adapted to meet the needs of students in the College of Business Administration. Knowledge of the Scandi-

navian languages not necessary. Two credits; autumn; repeated winter and spring.

VICKNER

***31-32-33. Reading Course in Norwegian and Swedish.**

103-104-105. *Recent Swedish Writers.*—Representative writers of the nineteenth and twentieth centuries are read, including Strindberg, Fröding, Selma Lagerlöf. Study of cultural movements and social problems of modern Sweden. Course may be entered at the beginning of any quarter. Two credits per quarter; autumn, winter, spring.

VICKNER

106-107-108. *Recent Norwegian-Danish Writers.*—Representative writers of the nineteenth and twentieth centuries are read, including Ibsen, Björnson, Kielland, Jacobsen, Drachman. Study of cultural movements and social problems of modern Norway and Denmark. Course may be entered at the beginning of winter or spring quarter. Two credits per quarter; autumn, winter, spring.

VICKNER

109-110-111. *Study of Modern Scandinavian Authors in English Translation.*—A study of Ibsen, Björnson, Strindberg and Selma Lagerlöf the main feature of the course. A brief survey of Scandinavian culture and literature. Open to all. No knowledge of the Scandinavian languages necessary. Course may be entered at the beginning of winter or spring quarter. One credit per quarter; autumn, winter, spring.

VICKNER

***201-202. Old Norse. Scandinavian and Comparative Philology:**

***203. History of the Swedish Language.**

205-206. *Scandinavian Literature in the Nineteenth Century.*—Two credits per quarter; winter and spring.

VICKNER

***207. Scandinavian Lyric Poetry.**

209. *History of Scandinavian Literature.*—Lectures in Scandinavian or English. Some of the masterpieces assigned for outside reading and report. One credit per quarter; spring.

VICKNER

180. *Recent Scandinavian Literature in English Translation.*—The principal writers of recent Scandinavian literature will be read with special attention to literary and social movements and to the interrelation of English and Scandinavian literature. Lectures, reports, and discussion. For advanced students. Two credits; autumn; repeated winter and spring.

VICKNER

* Not offered in 1919-1920.

SOCIOLOGY

Commerces Hall

PROFESSOR WOOLSTON AND ASSOCIATE PROFESSOR WATERMAN

For a major in Sociology, 86 credits are required. Major students should include course 197-198-199 (the pro-seminar) in their program. Courses numbered above 100 are for advanced students, and course 1 or its equivalent is prerequisite throughout. Courses numbered above 200 are for graduates purely. Candidates who wish the recommendation of the department for teaching credentials, should complete the major requirement.

For students working in heredity, statistics, social surveys, and public welfare, appropriate courses in the biological sciences, mathematics, and psychology, may, with the approval of the dean, be counted toward the major requirement. Such matters should be arranged by conference with the department. Attention is especially called to the following: Psychology 118 (Folk Psychology), Psychology 106 (Experimental Psychology), Zoology 15 (Evolution and Eugenics), Economics 55 (Economic and Social Standards of Living), Economics 155 (Women in Industry), History 110 (Economic and Social History of the Middle Ages).

1. *Introductory Sociology.*—The principal features of the science of social institutions, including folk psychology, customs, and folkways, the social problems arising from industries, the family, crime, immigration, welfare work. Five credits; autumn, spring.

WOOLSTON

2. *The Study of Man.*—Human populations from the standpoint of heredity and race; Mendelian heredity in human beings; various forms of defectiveness as problems of heredity; inheritance of traits in cases of racial crossing; the problem of the half-breed. Five credits; winter.

WATERMAN

51. *Evolution of Material Culture.*—The origin and evolution of devices, implements, and arts, the stages in industrial history. Three credits; autumn.

WATERMAN

*52. *Primitive Social Life.*—The social institutions of primitive folk, including various forms of marriage, the family, the clan, totemism, blood-revenge, primitive systems of writing, folkways among savages. Three credits; winter.

WATERMAN

53. *Fossil Man.*—Evolution as illustrated in the skeletal remains of early man and his forerunners. Primitive life as shown by prehistoric implements and other remains. Three credits; spring.

WATERMAN

55. *Programs of Social Reform.*—A critical examination of individualism, conservatism, philanthropy, social justice, liberalism, union-

ism, the coöperative movement, the single tax, socialism and syndicalism. Three credits; autumn.

WOOLSTON

56. *Criminology*.—A study of the social, economic, and heredity causes of crime; various theories and plans of prison reform; the relations of prisons and criminals to society. Three credits; winter.

WOOLSTON

57. *Municipal Sociology*.—A study of the social conditions and problems of modern social life in American cities, and a discussion of the various agencies developed to deal with them. Three credits; spring.

WOOLSTON

60. *Social Psychology*.—The instinctive and psychological side of man, and his adjustment to civilization. Three credits; autumn.

WOOLSTON

70. *History of Sociology*.—The principal contributions to sociological science, from the standpoint of their background. Three credits; autumn, winter

WOOLSTON

91. *Cultural History*.—The origin and diffusion of certain concepts and inventions. The topics for 1919 will include concepts of geography, and the nature of the world, from primitive times. Discussions and reports. Primarily for teachers. Two credits; autumn.

WATERMAN

93. *Race Problems in America*.—Race as a factor in human behavior; the negro; legislation on race mixture. Discussions and reports. Primarily for teachers. Two credits; spring.

WATERMAN

*103. *Problems of Maladjustment*.—An examination of the biological, psychological, pathological, and economic factors involved in the various types of social maladjustment. Three credits; autumn.

WOOLSTON

106. *American Social Conditions*.—An analytical and descriptive study of social conditions in America today and their relation to social progress. Primarily for teachers. Two credits; winter.

WOOLSTON

*129. *Social Statistics*.—A study of the elements of statistical theory and practice, with special reference to the problems encountered by the practical worker in the field of economics and sociology. Three credits; spring.

WOOLSTON

155. *Community Organization*.—A study of the principles of community organization, forms of community action, essentials of leadership, and the social survey. Three credits; autumn.

WOOLSTON

156. *The Family*.—The origin of marriage, the family and its status, the effects of the industrial revolution, and the functions of the

modern family; three credits; winter.

WOOLSTON

157. *Child Welfare*.—A study of the biological, psychological, social, and economic factors bearing on the welfare of children in modern society. Three credits; spring.

WOOLSTON

171-172-173. *Methods of Social Service and Field Work*.—The purpose of the course is to train students for social work, by enabling them to observe the methods of local organizations and to do practice work under supervision in conjunction with these agencies. Two after-noon a week will be required in the field. Open to mature students who have had work in sociology. Four credits per quarter. Hours to be arranged.

181. *The North American Indian*.—A study of the Indian and his mode of life; dwellings, warfare, architecture, ceremonies, and art; the problem of cultural relations. Discussions and reports. Three credits; autumn.

WATERMAN

*182. *The Indians of Mexico and Central America*.—The ancient cities of the Aztec and Mayan region. Architecture, writing, calendar systems, ceremonies, government, poetry, and art of the ancient and modern peoples. Discussions and reports. Three credits; winter.

WATERMAN

183. *Ethnography of the Old World*.—The peoples and types of Europe, Asia and Africa, with emphasis on the uncivilized tribes. Discussions and reports; three credits; spring.

WATERMAN

*184. *Phonetics of Indian Languages*.—A study of the anatomy of the speech organs, and the vocal mechanics of languages, from the standpoint of American Indian dialects. The course includes experience in recording information in the Indian idioms of the Puget Sound region. Two credits; autumn.

WATERMAN

*185. *Structure of American Indian Languages*.—The course intended for the practical training of students in recording the rapidly disappearing native tongues of North America. Two credits; winter.
T, TH, S, C. 215.

WATERMAN

186. *North American Mythologies*.—The myths and songs of the North American Indian studied (1) from the comparative standpoint; (2) for their literary interest, and (3) as illustrating the beginnings of style. Two credits; spring.

WATERMAN

197-198-199. *Pro-Seminar*.—Enrolment is limited to students majoring in sociology. The essential feature is the prosecution of independent investigations, limited in scope by the ability and leisure of the student. The work for 1919-20 will concern the geographical diffusion of culture, or similar problems. Credits will be adjusted in indi-

vidual cases, depending upon the time expended by the student, but must be arranged in advance. Autumn, winter, spring quarters.

201-202-203. Seminar in Sociology.—Research in special topics. The emphasis is on current problems and methods. Two credits; autumn, winter, spring.

WOOLSON

204-205-206. Seminar in Ethnography.—The special problem of 1919-20 is the relation between the Indian cultures of the Northwest coast of North America and California. Two credits; autumn, winter, spring.

WATERMAN

ZOOLOGY

Science Hall

PROFESSOR KINCAID, ASSISTANT PROFESSORS E. V. SMITH AND FASTEN

1-2. Elements of Zoology.—A general review of zoological science, stressing the economic and philosophic aspects of the subject. Laboratory deposit, \$2. Five credits per quarter; autumn, winter, repeated winter, spring.

KINCAID, ANDERSON AND ASSISTANTS

3. Pre-Medical Zoology.—For students entering upon a medical course. Laboratory deposit, \$2. Five credits; autumn.

FASTEN

4. Vertebrate Zoology.—The structure of vertebrates, with emphasis on mammalian organization. For students in medicine and physical education. Prerequisite, course 3. Laboratory deposit, \$2. Five credits; winter.

5. General Embryology.—The comparative developmental history of animals, with emphasis on vertebrate forms. For students in medicine, pharmacy and fisheries, but open to others. Prerequisite, course 1-2 or 3-4. Five credits; spring quarter.

FASTEN

16. Evolution.—A series of lectures upon the more important biological problems related to the general theory of evolution. Two credits; autumn.

KINCAID

17. Eugenics.—The principles of evolution in their relation to human welfare. Two credits; spring.

51. Elementary Entomology.—The structure, classification and economic relations of insects. Prerequisite, course 1-2 or its equivalent. Laboratory deposit, \$2. Five credits; spring.

KINCAID

101. Cytology.—The anatomical, physical and chemical properties of the animal cell with special reference to the problems of development and inheritance. Prerequisite, course 1-2 or 3-4. Laboratory deposit, \$2. Five credits; winter.

FASTEN

108. Forest Entomology.—The classification and economic relations of insects injurious to forests. For students in forestry, but open to others. Laboratory deposit, \$2. Three credits; winter.

KINGAID

106. Plankton.—The life of the sea and fresh water in its relation to the food of fishes. For students in fisheries, but open to others. Prerequisite, course 1-2. Laboratory deposit, \$2. Five credits; autumn.

KINGAID

107. Parasitology.—A study of animal parasites. This course is designed to meet the needs of students in medicine and fisheries, and those interested in problems of public health. Prerequisite, courses 1-2 or 3-4. Laboratory deposit, \$2. Five credits; spring.

FASTEN

108. Biology of the Seas.—Distribution, adaptations and interdependence of the several categories of marine organisms. For students in fisheries, but open to others. Prerequisite, course 1-2. Three credits; spring.

KINGAID

109. Diseases of Fish.—A study of the nature and causes of disease in fishes. For students in fisheries. Prerequisite, course 1-2. Laboratory deposit, \$2. Five credits; autumn.

FASTEN

154. Advanced Entomology.—The morphology and ecology of insects, with emphasis on forms of economic importance. Prerequisite, course 51. Laboratory deposit, \$2. Five credits; winter.

155-156-157. Elementary Problems.—Students will be assigned minor problems which will be worked upon under the direction of one of the instructors in the department. Prerequisite, twenty hours in zoology or physiology. Three credits; autumn, winter, spring.

KINGAID, SMITH, FASTEN

201-202-203. Research.—Students capable of carrying on independent research will be assigned special problems to be worked upon under the direction of one of the instructors. Prerequisite, twenty-five hours of zoology or physiology. Credit to be arranged.

KINGAID, SMITH, FASTEN

PHYSIOLOGY

7. Elementary Physiology.—A general survey of the structure and functions of the human body. Special emphasis will be placed on the processes of metabolism. A course especially designed for students in home economics, but open to others. Laboratory deposit, \$2. Five credits; autumn, winter, spring.

SMITH

54-55. General Physiology.—Adapted to meet the needs of students expecting to teach the subject in high school. Required of

students majoring in physical culture, and recommended for students majoring in home economics who desire more extended training than is offered in course 7, and for students in sanitary science. Laboratory deposit, \$3. Five credits; autumn, winter.

SMITH

151-152-153. Advanced Physiology.—Designed to meet the needs of students in medicine. Open to others prepared to carry on the work. Prerequisites, Zoology 2, Chemistry 3 or 23, and Physics 3. Laboratory deposit, \$5. Five credits; autumn, winter, spring.

SMITH

165. Principles of General Physiology.—The application of the laws of physics and chemistry to physiological problems. Prerequisites, Zoology 2, Chemistry 3 or 23, Physics 3, and Physiology 55. Laboratory deposit, \$5. Three or five credits; spring.

SMITH

**THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS**

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COLLEGE OF ENGINEERING

COLLEGE OF FINE ARTS

COLLEGE OF FISHERIES

COLLEGE OF FORESTRY

SCHOOL OF LAW

COLLEGE OF MINES

SHORT MINING SESSION

COLLEGE OF PHARMACY

GRADUATE SCHOOL

EXTENSION SERVICE

SUMMER SESSION

PUGET SOUND BIOLOGICAL STATION

UNIVERSITY DIRECTORY (price 25 cents)

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to **THE REGISTRAR**, University of Washington, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

GENERAL SERIES

DECEMBER, 1919

NO. 127—SUPPLEMENT

REGISTER OF
OFFICERS AND STUDENTS
1918-1919



SEATTLE, WASHINGTON
PUBLISHED BY THE UNIVERSITY
1919

Entered as second class matter, at Seattle, under the Act of July 16th, 1894

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UNIVERSITY CALENDAR

1919-1920

AUTUMN QUARTER

Examinations for admission.....
.....Thursday, Friday and Saturday, September 25, 26 and 27, at 9 a. m. and 2 p. m.
Registration of new first year students.....Friday and Saturday, September 26 and 27
Registration of all other students.....Monday and Tuesday, September 29 and 30
Instruction begins.....Wednesday, October 1
President's annual address.....Friday, October 3, 10 a. m.
Women's assembly.....Friday, October 10, 11 a. m.
Thanksgiving recess.....Wednesday, November 26, 6 p. m., to Monday, December 1, 8 a. m.
Quarter examinations..Tuesday, Wednesday, Thursday and Friday, December 16, 17, 18 and 19

WINTER QUARTER

Registration days.....Friday and ~~Saturday~~, January 2 and 3
Instruction begins.....Monday, January 5
Quarter examinations...Monday, Tuesday, Wednesday and Thursday, March 22, 23, 24 and 25

SPRING QUARTER

Registration days.....Friday and Saturday, April 2 and 3
Instruction begins.....Monday, April 5
Campus Day.....Friday, April 23
Junior Day.....Saturday, May 29
Quarter examinations.....Tuesday, Wednesday, Thursday and Friday, June 15, 16, 17 and 18
Class Day and President's reception.....Saturday, June 19
Baccalaureate Sunday.....June 20
Commencement and Alumni Day.....Monday, June 21

SUMMER QUARTER

Registration days.....Tuesday and Wednesday, June 22 and 23
Instruction begins.....Thursday, June 24
Quarter examinations.....Monday and Tuesday, August 30 and 31

BOARD OF REGENTS

WINLOCK W. MILLER, President.....Seattle
Term ends March, 1920

WILLIAM T. PERKINS.....Seattle
Term ends March, 1920

ELDRIDGE WHEELER.....Montesano
Term ends March, 1921

OSCAR A. FECHTER.....Yakima
Term ends March, 1922

JOHN A. REA.....Tacoma
Term ends March, 1922

WILLIAM A. SHANNON.....Seattle
Term ends March, 1923

RUTH KARR McKEE.....Olympia
Term ends March, 1923

WILLIAM MARKHAM, Secretary to the Board.....
.....*Offices, Administration Hall, at the University, and 1041 Henry Building*

OFFICERS OF ADMINISTRATION

THE UNIVERSITY

HENRY SUZZALLO, Ph. D., LL. D.....	President of the University Administration Hall
JOHN THOMAS CONDON, LL. M.....	Dean of Faculties Administration Hall
HERBERT THOMAS CONDON, LL. B.....	Comptroller Administration Hall
EDWARD NOBLE STONE, A. M.....	Registrar Administration Hall
EDWIN BICKNELL STEVENS, A. M.....	Executive Secretary Administration Hall
*ARTHUR RAGAN PRIEST, A. M.....	Dean of Men Administration Hall
ETHEL HUNLEY COLDWELL, A. M.....	Dean of Women Administration Hall
WILLIAM ELMER HENRY, A. M.....	Librarian Library
FRANK STEVENS HALL.....	Director of Museum Museum
JAMES GARFIELD FLETCHER, A. B.....	Vocational Secretary Administration Hall

THE COLLEGES AND SCHOOLS

DAVID THOMSON, B. A.....	Dean of the College of Liberal Arts Denny Hall
CARL EDWARD MAGNUSSON, Ph. D.....	Acting Dean of the College of Engineering Engineering Hall
MILNOR ROBERTS, A. B.....	Dean of the College of Mines. Mines Hall
CHARLES WILLIS JOHNSON, Ph. C., Ph. D.....	Dean of the College of Pharmacy Bagley Hall
JOHN THOMAS CONDON, LL. M.....	Dean of the School of Law Commerce Hall
HUGO WINKENWERDER, M. F.....	Dean of the College of Forestry Forestry Hall
*J. ALLEN SMITH, Ph. D.....	Dean of the Graduate School Denny Hall
HENRY LANDES, A. M.....	Dean of the College of Science Science Hall
FREDERICK ELMER BOLTON, Ph. D.....	Dean of the College of Education Home Economics Hall
IRVING MACKEY GLEN, A. M.....	Dean of the College of Fine Arts Meany Hall
WILLIAM ELMER HENRY, A. M.....	Director of the Library School Library
*COLIN VICTOR DYMENT, B. A.....	Director of the School of Journalism Commerce Hall
STEPHEN IVAN MILLER, A. B., LL. B.....	Director of the College of Business Administration Commerce Hall
FREDERICK MORGAN PADEL FORD, Ph. D.....	Acting Dean of the Graduate School Denny Hall
JOHN NATHAN COBB.....	Director of the College of Fisheries Commerce Hall

THE EXTENSION SERVICE

*EDWIN AUGUSTUS START, A. M.....	Director Administration Hall
*EVERETT FRANCIS DAHM, A. B.....	Assistant Director

OTHER ADMINISTRATIVE OFFICERS

LILLIAN BROWN GETTY, Secretary to the President.
 MAX HIPKOE, Assistant Purchasing Agent.
 WILLIAM BEACH JONES, A. B., Cashier.
 AMEE WILSON, Secretary to the Comptroller.
 MABEL SHUEY, A. B., Secretary to the Registrar.
 MAY WARD, A. B., Assistant Dean of Women.

¹ Absent on War Service, autumn, winter, spring.
² Absent on leave 1918-19; resigned 1919.
³ Detached on special service 1917-19.
⁴ In charge of service 1918-19; resigned July 31, 1919.

BUILDINGS AND GROUNDS

WILLIAM WORTH DURHAM, Superintendent.
SANDY MORROW KANE, Engineer.
L. R. KETTENRING, Acting Electrician.
STANLEY O. CARPENTER, Head Carpenter.
GEORGE LEWIS MOTTER, Head Gardener.

UNIVERSITY COMMONS AND RESIDENCE HALLS

CHLOE SHERMAN CLARKE, B. S., Supervisor of Dining Halls.

UNIVERSITY OF WASHINGTON STATION OF THE UNITED STATES FOREST SERVICE

CONRAD W. ZIMMERMAN, A. B., Engineer in Timber Tests, in Charge.

UNITED STATES NAVAL RESERVE UNIT

ROBERT DUDLEY LONGYEAR, Lieutenant (J. G.) U. S. Navy.
ALFRED COLES HAVEN, Ensign, U. S. Navy.

STATE FOOD AND DRUG WORK

CHARLES WILLIS JOHNSON, Ph. C., Ph. D., State Chemist.
FRANCES EDITH HINDMAN, M. S., Assistant State Chemist and Bacteriologist.
MARIA OROSA, Ph. C., Assistant State Chemist.

ENGINEERING EXPERIMENT STATION

CARL EDWARD MAGNUSSON, Ph. D., Acting Director.

LIBRARY STAFF

WILLIAM ELMER HENRY, A. M. (Indiana); Librarian and Director of the Library School.
CHARLES WESLEY SMITH, A. B., B. L. S. (Illinois); Reference Librarian and Associate Professor of Library Economy.
EMMA PEARL McDONNELL, A. B. (Washington); Periodicals Librarian.
EVELYN MAY BLODGETT, A. B. (Vassar); Pratt Institute Library School; Catalogue Librarian, and Instructor in Library Economy.
LOUISE FENTIMORE SCHWARTZ, A. B. (Knox College), B. L. S. (Illinois); Circulation Librarian.
MADELL ASHLEY, A. B. (Kansas); (Washington) Graduate in Library Economy; Order and Accession Librarian and Instructor in Library Economy.
MARGARET SCHUMACHER, A. B. (Washington); Assistant Reference Librarian.
ROBERTSON SCHUMACHER, A. B. (Wesleyan), B. L. S. (Illinois); Assistant Catalogue Librarian.
HELEN MORRILL STONE, A. B. (Washington); Assistant Circulation Librarian.

THE MUSEUM

FRANK STEVENS HALL, Director of the Museum.
CLARENCE JOHN ALBRECHT, A. B. (Iowa); Taxidermist, in charge of Invertebrate Exhibits.

UNITED STATES ARMY RESERVE OFFICERS' TRAINING CORPS

CHARLES LEONARD PHILLIPS, Colonel C. A. C., U. S. A., Professor of Military Science and Tactics.
*KIRWIN TAYLOR SMITH, Lieutenant Colonel, Infantry, U. S. A., Professor of Military Science and Tactics.
*HERBERT CLARENCE EARNSHAW, Major, Infantry, U. S. A., Professor of Military Science and Tactics.
EVAN KIRKPATRICK MEREDITH, Captain, Infantry, U. S. A., Assistant Professor of Military Science and Tactics.
RYLAND OSCAR SCOTT, Captain, Infantry, U. S. A., Assistant Professor of Military Science and Tactics.
ELE DUPAR, First Sergeant, U. S. A., Assistant in Military Science and Tactics.
LESLIE W. WINDSOR, Sergeant, U. S. A., Assistant in Military Science and Tactics.
LESLIE A. KENT, Sergeant, U. S. A., Assistant in Military Science and Tactics.
DAVID E. MEEKER, Sergeant, U. S. A., Assistant in Military Science and Tactics.

UNITED STATES BUREAU OF MINES SEATTLE MINING EXPERIMENT STATION

FRANK K. OVITZ, Superintendent.
GEORGE W. EVANS, Engineer.
W. H. COGHILL, Metallurgist.
EDWARD P. BARRETT, Assistant Chemist.
U. B. WHITE, Chief Clerk.
KENNETH H. CHISHOLM, Foreman Miner.
IRA W. WILLIAMS, Ceramist.

UNITED STATES SHIPPING BOARD SCHOOLS

JAMES E. GOULD, A. M., Special Expert in charge of Navigation Classes.
EVERETT O. EASTWOOD, A. M., C. E., in charge of Marine Engineering Classes.
UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF PLANT INDUSTRY
JAMES THOMPSON, B. S., Specialist in charge of Medicinal Plants.

UNITED STATES GEOLOGICAL SURVEY

HENRY LANDES, A. M., State Geologist.

¹ Relieved during the year.

UNITED STATES BUREAU OF EDUCATION PACIFIC NORTHWEST RESEARCH STATION

CLIFFORD WOODY, Ph. D., Supervisor.

UNIVERSITY FACULTY

In this list the names of the faculty are arranged in six groups—professors, associate professors, assistant professors, associates, lecturers, and instructors—followed by the names of the teaching fellows and assistants. In each of the six groups the names occur in the order of academic seniority. An alphabetical list of the faculty is given on pages 9-15.

HENRY SUZZALLO, President of the University, *ex-officio* Chairman.

EDWARD NOBLE STONE, Registrar, *ex-officio* Secretary.

PROFESSORS

<p>HENRY LANDES EDMOND STEPHEN MEANY *J ALLEN SMITH CAROLINE HAYEN OBER JOHN THOMAS CONDON HORACE G. BYERS TREVOR KINCAID FREDERICK MORGAN PADELFORD WILLIAM SAVERY MILNOR ROBERTS FREDERICK ARTHUR OSBORN DAVID THOMSON CHARLES WILLIS JOHNSON PIERRE JOSEPH FREIN THEODORE CHRISTIAN FRYE ROBERT EDOUARD MORITZ CARL EDWARD MAGNUSSON HARVEY LANTZ EVERETT OWEN EASTWOOD WILLIAM ELMER HENRY *DAVID CONNOLLY HALL HERBERT HENRY GOWEN OLIVER HUNTINGTON RICHARDSON IVAN WILBUR GOODNER IRVING MACKEY GLEN EDWIN AUGUSTUS START</p>	<p>*CHARLES CHURCH MORE HENRY KREITZER BENSON JOHN WEINZEL HUGO WINKENWEDDER VERNON LEWIS PARRINGTON FREDERICK ELMER BOLTON EDWIN JOHN VICKNER EFFIE ISABEL RAITT WILLIAM FRANKLIN ALLISON STEVENSON SMITH WILLIAM PIERCE GORSUCH CLARK PRESCOTT BISSETT ETHEL HUNLEY COLDWELL *ARTHUR RAGAN PRIEST *ALLEN ROGERS BENHAM *LESLIE JAMES AYER *COLIN VICTOR DYMENT STEPHEN IVAN MILLER, JR. RICHARD FREDERICK SCHOLZ LEONARD VINCENT KOOS FRED CARLETON AYER JACOB ANTON DE HAAS LAURA EMMA LOCKWOOD JAMES DUFF BARNETT HERBERT CLARENCE BARNSHAW JOHN NATHAN COBB CHARLES LEONARD PHILLIPS</p>
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- * Absent on war service.
- * Absent on leave 1918-1919.
- * Absent winter and spring quarters 1918-19.

ASSOCIATE PROFESSORS

<p>LOREN DOUGLAS MILLIMAN SAMUEL LATTICE BOOTHBYOT BURT PERRSONS KIRKLAND THOMAS KAY SIDBY WILLIAM MAURICE DEHN EDWARD McMAHON CHARLES WESLEY SMITH *JACOB NEIBERT BOWMAN ARTHUR WILSON LINTON GEORGE SAMUEL WILSON GEORGE WALLACE UMPHREY</p>	<p>OTTO PATZER CHARLES WILLIAM HARRIS *VANDERVEER CUSTIS *EDGAR ALLEN LOEW *JOSEPH DANIELS THOMAS TALBOT WATERMAN *CHARLES EDWIN WEAVER *EDWARD GODFREY COX *HORACE JAMES MACINTIRE ALLEN FULLER CARPENTHER J. FRANKLIN THOMAS</p>
--	--

- * Absent on leave 1918-1919.
- * Absent on government service.
- * Absent winter and spring quarters 1918-1919.
- * Resigned.

ASSISTANT PROFESSORS

<p>EDWIN JAMES SAUNDERS OTTILIE GERTRUDE BOSTEKES GEORGE IRVING GAYETT *ROBERT EVSTAFIEFF ROSE ROBERT MAX GARRETT ELIAS TREAT CLARK ELI VICTOR SMITH HENRY LOUIS BRAKEL CHARLES MUNRO STRONG *WILLIAM THEODORE DABBY HARVEY BRUCE DENSMORE CLARENCE RAYMOND COREY GEORGE BURTON RIGG GRACE GOLDENA DENNY GINO ARTURO RATTI</p>	<p>JOEL MARCUS JOHANSON JOHN WILLIAM MILLER FRED WASHINGTON KENNEDY ERNST OTTO ECKELMAN CHARLES LOUIS HELMLING JOHN WILLIAM HOTSON THERESA SCHMID McMAHON LOUIS IRVING NSIRIKI HAROLD EUGENE CULVER FRANCES DIORBY CARL FRELINGHUYSEN GOULD *WALTER EDWARD SQUIRE MORITZ ROSEN ALBERT FRANK VENINO *SAMUEL HERBERT ANDERSON</p>
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UNIVERSITY OF WASHINGTON

*FRANK MELVILLE WARNER
 *FRIEDRICH KUHT KIRSTEN
 SERENO BURTON CLARK
 CLIFFORD WOODY
 MACY MILLMORE SKINNER
 *HAMILTON ACHILLE WOLF
 *RALPH HASWELL LUTZ
 *HARLAN LEO TRUMBULL
 CURT JOHN DUCASSE
 ERIC TEMPLE BELL
 BROD LEONARD GRONDAL
 LUIS A. SANTANDER
 FRED HARVEY HEATH
 *LEWIS LILLY
 *BRUCE MUDGEET
 *REXFORD GUY TUGWELL
 *VICTOR LOVITT OAKES CHITTICK
 LESLIE FORBES CURTIS
 EVERETT FRANCIS DAHM
 *WILLIAM ELMHURST DUCKERING
 *WALTER EDWARD ROLOFF
 FRANCIS PATRICK GOSS

JOHN LOCKE WORCESTER
 FREDERIC ARTHUR RUSSELL
 EMILIO GOGGIO
 GEORGE EARL FREELAND
 DAVID JOHN MYERS
 GEORGE HENRY JENSEN
 HERMAN VANCE TANTAR
 JAMES GEORGE ARBUTHNOT
 EDWIN RAY GUTHRIE
 FRANK DEMETRIUS HAYDEN
 *MORRIS MORGAN LEIGHTON
 ARTHUR MELVIN WINSLOW
 CARL PAIGE WOOD
 BARBARA HAECKER BARTLETT
 GRACE RUSSELL CONNELLY
 ARTHUR WILLIS BARTON
 NELLIE FITZGERALD
 ROY MARTIN WINGER
 THEODOSIA DURAND
 IRA ABRAHAM WILLIAMS
 RYLAND OSCAR SCOTT
 EVAN KIRKPATRICK MEREDITH

¹ Assent on war service.

² Absent on leave 1918-1919.

³ Absent on government service.

⁴ Absent winter and spring quarters 1918-1919.

⁵ Resigned.

LECTURERS AND ASSOCIATES

HARVEY GLENN
 FREDERICK POWELL
 CORNELIUS OSSEWARD
 CONRAD ZIMMERMAN
 LILIAN COLLISON IRWIN
 PHILIP V. VON PHUL
 GUY KERR
 FRED WAYNE CARLETT
 CASSID PAINE SMALL
 JAMES EDWARD GOULD
 ORVILLE PORTER COCKERILL
 FRANCIS WALDRON COBB
 PAUL ALEXIS UMOPP
 JOHN HENRY PIPER
 MELVIN WESLEY CASSMORE
 NUNOSUKE KOBAYASHI
 *MARGARET PROSSER
 GRACE EDGINGTON

LILIAN BLOOM
 CLAUDE HUNT
 CHARLES WILCOX VANDER VEEB
 WINIFRED SUNDBERLIN HAGGETT
 CLARENCE JOHN ALBRECHT
 ELIZABETH VINSONHALER
 OSMAN CADY
 CLINTON LOUIS UTTERBACH
 VERA KELSEY
 LETTIE LEE ROCHSTER
 EDWARD HENRY CRUSSELL
 OSCAR W. BAIRD
 HALSEY WATSON
 ROBERT DUDLEY LONGMYAR
 ALFRED COLES HAVEN
 WILLIAM FRANCIS EGERTON DURRANT
 MILDRED STRUBLE
 SAUL WILLIAM BARNISH
 JOHN VICTOR FARRAR

INSTRUCTORS

SAMUEL THOMAS BEATTIE
 SANDY MORROW KANE
 WALTER BELL WHITTLESEY
 *JESSIE BEE MERRICK
 HJALMAR LAURITS OSTERUD
 RUDOLF HERBERT ERNST
 JOSEPH BARLOW HARRISON
 LLOYD LEROY SMALL
 *FRANCES EDITH HINDMAN
 *CLEMENT AKERMAN
 MABEL ASHLEY
 HELEN BALCH CULVER
 NATHAN FASTEN
 *FRANK JOSEPH LAUBE
 JOSEPH GRATTAN O'BRYAN
 HAROLD OGDEN SEKSMITH
 ALLETTA GILLETTE
 CHARLES ALEXANDER GUBERARD
 *SETH CHARIN LANGDON
 *HORACE HARDY LESTER
 LOUISE VAN OGLE
 MABEL ASHLEY
 ALBERT PORTER ADAMS
 KATE LELA GREGG
 MAX PATTEN PHILBRICK
 MARY IRENE PRAY

HELEN HARRINGTON
 ELYNE SIMON
 CHLOE SHERMAN CLARKE
 ANNETTE EBENS
 MILDRED WEST LORING
 RUTLEDGE WITBANK
 *ROBERT FULTON McCLELLAND
 EVELYN BLODGETT
 JAMES BAKER HAMILTON
 MYRTA DOROTHY SHANK
 GORDON RUSSELL SHUCK
 CLARENCE LESTER WHITE
 EARL R. THOMA
 ALICE COLEMAN BOGARDUS
 MARTHA DRESSLAR
 JASPAR PHILIP RUSSETT
 FOREST JACKSON GOODHIGH
 ETHEL CHRISMAN JACKSON
 LIVINGSTON WERNESKE
 LEON WALLACE MOORE
 SARA VINSONHALER
 FRED FALCONER WELD
 RALPH STEWARD BARDWELL
 JAMES DOUGLAS MUDGE
 PAUL NEWCOMB FORD
 THOMAS GORDON THOMPSON

¹ Absent on war service.

² Absent on leave 1918-1919.

³ Absent on government service.

⁵ Resigned.

ALPHABETICAL LIST OF THE UNIVERSITY FACULTY

- HENRY SUZZALLO, President of the University.
A. B., Stanford, 1899; A. M., Columbia, 1902; Ph. D., 1905; LL. D., California, 1918.
- ALBERT PORTER ADAMS, Instructor in Music.
- CLEMENT AKERMAN, Instructor in Economics.
A. B., Georgia, 1898; A. M., Harvard, 1914.
(1st Lieutenant, U. S. A., Historical Section, General Staff, 1918-1919.)
- WILLIAM FRANKLIN ALLISON, Professor of Municipal and Highway Engineering.
B. S., South Dakota State College, 1895; B. S. (C. E.), Purdue, 1897; C. E., Cornell, 1904.
(Major, U. S. A., Engineers, 1917-1919.)
- SAMUEL HERBERT ANDERSON, Assistant Professor of Physics.
A. B., Park College, 1902; A. M., 1908; Ph. D., Illinois, 1912.
(2nd Lieutenant, U. S. A., Engineers, 1918-1919.)
- JAMES GEORGE ARBUTHNOT, Assistant Professor and Acting Head of the Department of Physical Education and Hygiene.
B. S., Kansas State College, 1904.
- MABEL ASHLEY, Instructor in Library Economy.
A. B., Kansas, 1905.
- FRED CARLETON AYER, Professor of Education.
B. S., Upper Iowa University, 1902; M. S., Georgetown University, 1905; Ph. D., Chicago, 1915.
- LESLIE JAMES AYER, Professor of Law.
B. S., Upper Iowa University, 1895; J. D., Chicago, 1906.
- OSCAR W. BAIRD, Associate in Physics.
A. B., Wisconsin, 1910.
- RALPH STEWARD BARDWELL, Acting Instructor in Civil Engineering (Winter Quarter).
Boston University; Carnegie Technical Schools.
- SAUL WILLIAM BARISH, Acting Research Associate in Business Administration (Spring Quarter).
B. S., Columbia, 1910.
- JAMES DUFF BARNETT, Acting Professor of Political Science (Winter and Spring Quarters).
A. B., College of Emporia, 1890; Ph. D., Wisconsin, 1905.
- BARBARA HAECKER BARTLETT, Assistant Professor of Nursing and Public Health.
B. S., Teachers College, Columbia University, 1917.
- ARTHUR WILLIS BARTON, Acting Assistant Professor of Chemistry.
Ph. G., Washington, 1897; A. B., 1902; Ph. D., Northwestern, 1918.
- ALICE COLEMAN BOGARDUS, Instructor in Singing (Fall Quarter).
B. L., Mills College, 1913; Columbia University.
- SAMUEL THOMAS BEATTIE, Instructor in Woodwork.
- ERIC TEMPLE BELL, Assistant Professor of Mathematics.
A. B., Stanford, 1904; A. M., University of Washington, 1908; Ph. D., Columbia, 1912.
- ALLEN ROGERS BENHAM, Professor of English.
A. B., Minnesota, 1900; A. M., 1901; Ph. D., Yale, 1905.
(Y. M. C. A. Service in France, 1918-1919.)
- HENRY KREITZER BENSON, Professor of Industrial Chemistry.
A. B., Franklin and Marshall, 1899; A. M., 1902; Ph. D., Columbia, 1907.
(Captain, U. S. A., Ordnance Department, Fall Quarter.)
- CLARK PRESCOTT BISSETT, Professor of Law.
A. B., Hobart College, 1896.
- EVELYN MAY BLODGETT, Instructor in Library Economy.
A. B., Vassar, 1909; Graduate, Pratt Institute Library School, 1911.
- LILLIAN BLOOM, Associate in Physical Education for Women.
Graduate, Medical Gymnastic Institute, Stockholm.
- OTTILIE GERTRUDE BOETZKES, Assistant Professor of German.
A. B., University of Washington, 1901; A. M., 1902.
- FREDERICK ELMER BOLTON, Professor of Education and Dean of the College of Education.
B. S., Wisconsin, 1898; M. S., 1896; Ph. D., Clark, 1898.
- SAMUEL LATIMER BOOTHROYD, Associate Professor of Astronomy.
B. S., Colorado Agricultural College, 1893; M. S., 1904.
- JACOB NICHOLS BOWMAN, Associate Professor of European History.
A. B., Heidelberg (Ohio), 1896; Ph. D., Heidelberg (Germany), 1900.
- HENRY LOUIS BRAKEL, Assistant Professor of Physics.
B. A., Olivet, 1902; A. M., University of Washington, 1905; Ph. D., Cornell, 1912.
- HORACE G. BYERS, Professor of Chemistry.
A. B. and B. S., Westminster, 1895; A. M., 1898; Ph. D., Johns Hopkins, 1899.
(Captain, U. S. A., Research Division, Chemical Warfare Service, Fall Quarter, 1918-1919.)
- OSMAN H. CADY, Associate in Chemistry.
B. S., University of Washington, 1915.
- ALLEN FULLER CARPENTER, Associate Professor of Mathematics.
A. B., Hastings, 1901; A. M., Nebraska, 1909; Ph. D., Chicago, 1915.
- MELVIN WESLEY CASSMORS, Extension Lecturer on Business Administration.
Ferris Institute.
- FRED WAYNE CATLETT, Lecturer on Law.
A. B., Harvard, 1904; A. M., 1905; LL. B., 1907.
- VICTOR LOVITT OAKES CHITTICK, Assistant Professor of English.
A. B., Acadia, 1905; A. M., 1906; A. M., Harvard, 1908; Ph. D., Columbia, 1910.

- ELIAS TREAT CLARK, Assistant Professor of Forestry.
Ph. B., Yale, 1907; M. F., 1908.
- SERENO BURTON CLARK, Assistant Professor of Latin and Greek.
A. B., Michigan, 1901; Ph. D., Harvard, 1907.
- CHLOE SHERMAN CLARKE, Instructor in Institutional Management.
Ph. B., Alfred University, 1911; B. S., Columbia, 1915.
- FRANCIS WALDRON COBB, Extension Lecturer on Business Administration.
B. S., Alma College, 1908.
- JOHN NATHAN COBB, Professor of Fisheries and Director of the College of Fisheries.
(U. S. Bureau of Fisheries. Appointment effective March 1, 1919.)
- ORVILLE PORTER COCKEHELL, Lecturer in Charge of Debate.
A. B., Ohio State University, 1902; LL. B., 1905.
- ETHEL HUNLEY COLDWELL, Dean of Women.
B. L., Mills College, 1894; A. M., Stanford, 1899.
- JOHN THOMAS CONDON, Professor of Law, Dean of the School of Law, and Dean of Faculties.
LL. B., Michigan, 1891; LL. M., Northwestern, 1892.
- GRACE RUSSELL CONNELLY, Acting Assistant Professor of Home Economics.
B. S., Teachers College, Columbia University, 1908.
- CLARENCE RAYMOND COREY, Assistant Professor of Mining and Metallurgy.
E. M., Montana State School of Mines, 1905; A. M., Columbia, 1915.
- EDWARD GODFREY COX, Associate Professor of English.
A. B., Wabash, 1899; A. M., Cornell, 1901; Ph. D., 1906.
(With Federal Board for Vocational Education, January 1, 1919.)
- EDWARD RUSSELL CRUSSELL, Associate in Vocational and Assistant Supervisor of Teacher Training in the Trades and Industries.
- HAROLD EUGENE CULVER, Assistant Professor of Geology.
Ph. B., Wisconsin, 1910; Ph. M., 1911.
(Absent Fall and Winter Quarters.)
- HELEN BALOH CULVER, Instructor in Design.
Graduate, Pratt Institute, 1905; Graduate, Teachers College, Columbia, 1909.
(Absent Fall and Winter Quarters.)
- LESLIE FORREST CURTIS, Assistant Professor of Electrical Engineering.
B. S., Tufts, 1910; M. S. (E. E.), University of Washington, 1916.
- VANDERVEER CURTIS, Associate Professor of Economics.
A. B., Harvard, 1901; A. M., 1902; Ph. D., 1905.
- EVERETT FRANCIS DAHM, Assistant Professor of Business Administration, and Assistant Director of the Extension Service.
A. B., Wisconsin, 1913.
- JOSEPH DANIELS, Associate Professor of Mining Engineering and Metallurgy.
S. B., Massachusetts Institute of Technology, 1905; M. S., Lehigh, 1908.
- WILLIAM THEODORE DARRY, Assistant Professor of English.
A. B., Yale, 1905; A. M., Columbia, 1907.
- JACOB ANTON DE HAAS, Professor of Business Administration.
A. B., Stanford, 1910; A. M. Harvard, 1911; Ph. D., Stanford, 1915.
(Captain, U. S. A., Ordnance Department, Fall Quarter.)
- WILLIAM MAURICE DEHN, Associate Professor of Chemistry.
A. B., Hope, 1898; A. M., 1896; Ph. D., Illinois, 1903.
- GRACE GOLDENA DENNY, Associate Professor of Home Economics.
A. B., Nebraska, 1907; A. M., Columbia, 1919.
(Absent Fall Quarter.)
- HARVEY BRUCE DENSMORE, Assistant Professor of Greek.
A. B., Oxford, 1907.
- FRANCES DICKEY, Assistant Professor of Music.
Graduate, Iowa State Teachers College, 1901; B. S., Columbia, 1912; A. M., 1918.
- MARTHA ESTELLA DRESSLAW, Instructor in Home Economics.
B. A., University of Southern California, 1913; B. S., University of Washington, 1917;
M. S., Teachers College, Columbia, 1918.
- CURT JOHN DUCASSE, Assistant Professor of Philosophy.
A. B., University of Washington, 1908; A. M., 1909; Ph. D., Harvard, 1912.
- WILLIAM ELMHURST DUCKERING, Assistant Professor of Civil Engineering.
A. B., University of Washington, 1903; B. S. (C. E.), 1909; C. E., 1916.
(Lieutenant, U. S. A., 1918-1919.)
- THEODOSIA DURAND, Acting Assistant Professor of Fine Arts.
Ecole des Beaux Arts, Paris.
- WILLIAM FRANCIS EGBERTON DURRANT, Associate in French (Fall and Winter Quarters).
Kings College.
- COLIN VICTOR DYMENT, Professor of Journalism, and Director of the School of Journalism.
B. A., Toronto, 1900.
(Lieutenant, A. R. C., 1918-1919.)
- HERBERT CLARENCE EARNSHAW, Professor of Military Science (Winter Quarter).
Major, U. S. A.
- EVERETT OWEN EASTWOOD, Professor of Mechanical Engineering.
C. E., Virginia, 1896; A. B., 1897; A. M., 1899; S. B., Massachusetts Institute of Technology, 1902.
- ERNST OTTO ECKELMAN, Assistant Professor of German.
A. B., Northwestern (Watertown, Wis.), 1897; B. L., Wisconsin, 1898; Ph. D., Heidelberg (Germany), 1906.

- ANNETTE EDENS, Instructor in Drawing.
New York School of Fine and Applied Arts, Columbia.
- GRACE HARTLEY EDGINGTON, Associate and Editorial Secretary in the Department of Journalism.
A. B., Oregon, 1916.
- RUDOLF HERBERT ERNST, Instructor in English.
A. B., Northwestern (Watertown, Wis.), 1904; A. M., Harvard, 1911.
- VICTOR JOHN FARRAR, Associate in Historical Research.
A. B., Wisconsin, 1911; A. M. 1912.
(Sergeant, U. S. A., Base Hospital No. 50, 1918-19.)
- NATHAN FASTEN, Instructor in Zoology.
B. S., College of New York, 1910; Ph. D., Wisconsin, 1914.
- NELLIE FITZGERALD, Acting Assistant Professor of Home Economics.
B. S., Teachers College, Columbia University, 1913.
- PAUL NEWCOMB FORD, Acting Instructor in Civil Engineering. (Winter and Spring quarters.)
B. S., Cornell College, 1907; C. E., 1909.
- GEORGE EARL FRESLAND, Assistant Professor of Education.
A. B., Kansas Normal, 1909; A. M., Clark, 1913.
- PIERRE JOSEPH FREIN, Professor of Romanic Languages.
A. B., Williams, 1892; Ph. D., Johns Hopkins, 1899.
- THEODORE CHRISTIAN FRYE, Professor of Botany.
B. S., Illinois, 1894; Ph. D., Chicago, 1902.
- ROBERT MAX GARRETT, Assistant Professor of English.
A. B., Idaho, 1902; A. M., University of Washington, 1903; Ph. D., Munich, 1909.
- GEORGE IRVING GAVETT, Assistant Professor of Mathematics.
B. S. (C. E.), Michigan, 1898.
- ALLETTA GILLETTE, Extension Instructor in English.
A. B., Smith, 1907; University of Washington, 1911.
- IRVING MACKEY GLEN, Professor of Music, and Dean of the College of Fine Arts.
A. B., Oregon, 1894; A. M., 1897.
- HARVEY L. GLENN, Lecturer on Assaying of Bullion.
B. S., Iowa State College.
- EMILIO GOGGIO, Assistant Professor of Romanic Languages.
A. B., Harvard, 1909; A. M., Toronto, 1910; Ph. D., Harvard, 1917.
- IVAN WILBUR GOODNER, Professor of Law.
LL. B., Nebraska, 1897.
- FOREST JACKSON GOODRICH, Instructor in Pharmacy.
Ph. C., University of Washington, 1913; B. S. 1914; M. S., 1917.
Lieutenant, U. S. A., Chemical Warfare Service. (Fall Quarter.)
- WILLIAM PIERCE GORSUCH, Professor of Public Speaking.
A. B., Knox, 1898.
- FRANCIS PATRICK GOSS, Assistant Professor of Journalism.
(Absent winter quarter.)
- CARL FRELINGHUYSEN GOULD, Assistant Professor of Architecture.
A. B., Harvard, 1898.
- JAMES EDWARD GOULD, Lecturer on Navigation.
B. Ph., University of Washington, 1906; B. Pd., 1898; M. A., Harvard, 1907.
- HERBERT HENRY GOWEN, Professor of Oriental History, Literature and Institutions.
St. Augustine's College (Canterbury); D. D., Whitman College, 1912.
- KATE LELIA GREGG, Instructor in English.
A. B., University of Washington, 1908; Ph. D., 1916.
- BROD LEONARD GRONDAL, Assistant Professor of Forestry.
A. B., Bethany (Kansas), 1910; M. S. F., University of Washington, 1913.
- CHARLES ALEXANDRE GUERARD, Instructor in French in the Extension Service.
B. L., University of France, 1876.
- EDWIN RAY GUTHRIE, Assistant Professor of Philosophy.
A. B., Nebraska, 1897; A. M., 1910; Ph. D., Pennsylvania, 1912.
- WINNIFRED SUNDERLIN HAGGETT, Associate in English.
A. B., Olivet, 1897; A. M., Michigan, 1898.
- DAVID CONNOLLY HALL, University Health Officer and Director of Physical Education for Men.
Ph. B., Brown, 1901; Sc. M., Chicago, 1903; M. D., Rush Medical College, 1907.
(Lieutenant Colonel, U. S. A. S., 1918-19.)
- JAMES BARBER HAMILTON, Instructor in Civil Engineering.
University of Washington.
- HELEN HARRINGTON, Instructor in Physical Education for Women.
Wellesley College; University of California.
- CHARLES WILLIAM HARRIS, Associate Professor of Civil Engineering.
B. S. (C. E.), University of Washington, 1903; C. E., Cornell, 1905.
- JOSEPH BARLOW HARRISON, Instructor in English.
A. B., University of Washington, 1910; A. B., Oxford, 1913.
(Lieutenant, U. S. A. Fall quarter.)
- ALFRED COLDS HAVEN, Ensign, U. S. N., Associate in Naval Science. (Winter quarter.)
"A. B. Honoris Causa," Amherst, 1918.
- FRANK DEMETRIUS HAYDEN, Assistant Professor of Civil Engineering.
B. S., Massachusetts Institute of Technology, 1902.
- FRED HARVEY HEATE, Assistant Professor of Chemistry.
B. S., New Hampshire, 1905; Ph. D., Yale, 1909.
- CHARLES LOUIS HELMINGE, Assistant Professor of Romanic Languages.
B. Ph., Wallace College (Ohio), 1911; A. M., University of Washington, 1915.

- WILLIAM ELMER HENRY**, Librarian and Director of the Library School.
A. B., Indiana, 1891; A. M., 1892.
- FRANCES EDITH HINDMAN**, Instructor in Pharmacy and Assistant State Chemist and Bacteriologist.
Ph. C., University of Washington, 1910; B. S., 1912; M. S., 1914.
- JOHN WILLIAM HOBSON**, Assistant Professor of Botany.
A. B., McMaster, 1901; A. M., 1902; Ph. D., Harvard, 1918.
- CLAUDE HUNT**, Director of Athletics.
A. B., De Pauw, 1911.
- LILLIAN IRWIN**, Lecturer on Physical Education for Women.
M. D., Cooper Medical College, 1898.
- ETHEL CHRISMAN JACKSON**, Acting Instructor in Singing. (Winter and spring quarters.)
B. M., King Conservatory of Music, 1903.
- GEORGE HENRY JENSEN**, Assistant Professor of Vocational Education and Supervisor of Teacher Training in the Trades and Industries.
B. S., Valparaiso University, 1906.
- JOEL MARCUS JOHANSON**, Assistant Professor of English.
A. B., University of Washington, 1904.
- CHARLES WILLIS JOHNSON**, Professor of Pharmaceutical Chemistry and Dean of the College of Pharmacy.
Ph. C., Michigan, 1896; B. S., 1900; Ph. D., 1903.
- SANDY MORROW KANE**, Instructor in Metalwork.
- VERA KILSEY**, Associate in English.
B. A., North Dakota, 1914; A. M., Brown, 1916.
- GUY M. KERR**, Lecturer on Copper Smelting.
Ph. D., Goettingen.
- FRED WASHINGTON KENNEDY**, Assistant Professor and Director of the Journalism Laboratories.
TREVOR KINCAID, Professor of Zoology.
B. S., University of Washington, 1899; A. M., 1901.
- EURT PEBBONS KIRKLAND**, Associate Professor of Forestry.
A. B., Cornell, 1905.
- FRIEDRICH KURT KIRSTEN**, Assistant Professor of Electrical Engineering.
B. S., University of Washington, 1909; E. E., 1914.
- NUMOSUKE KOBAYASHI**, Extension Lecturer on the Japanese Language.
A. M., University of Washington, 1916.
- LEONARD VINCENT KOOS**, Professor of Education.
A. B., Oberlin, 1907; A. M., Chicago, 1915; Ph. D., 1916.
- HENRY LANDES**, Professor of Geology and Mineralogy and Dean of the College of Science.
A. B., Indiana, 1892; A. B., Harvard, 1892; A. M., 1893.
- SETH CHAPIN LANGDON**, Instructor in Chemistry.
B. S., Northwestern, 1911; A. M., University of Washington, 1913; Ph. D., 1915.
- HARVEY LANTZ**, Professor of Law.
Ph. B., De Pauw, 1888; A. M., 1891; LL. B., Kent Law School, 1893.
- FRANK JOSEPH LAUBE**, Instructor in Economics.
A. B., Wisconsin, 1899; A. M., University of Washington, 1913.
- MORRIS MORGAN LEIGHTON**, Assistant Professor of Geology.
A. B., University of Iowa, 1912; A. M., 1913; Ph. D., Chicago, 1917.
- HORACE HARDY LESTER**, Instructor in Physics.
A. B., Minnesota, 1906; A. M., University of Washington, 1912; Ph. D., Princeton, 1915.
- LEWIS LILLY**, Assistant Professor of Accounting and Finance.
A. B., Wisconsin, 1914.
- ARTHUR WILSON LINTON**, Associate Professor of Pharmacy.
Ph. G., Highland Park, 1902; B. S., Michigan, 1909; M. S., University of Washington, 1915.
- LAURA EMMA LOCKWOOD**, Acting Professor of English.
A. B., Kansas, 1891; A. M., 1894; Ph. D., Yale, 1898.
(Resigned February 1, 1919.)
- EDGAR ALLEN LOEW**, Associate Professor of Electrical Engineering.
B. S. (E. E.), Wisconsin, 1906.
- ROBERT DUDLEY LONGYEAR**, Lieutenant (J. G.), U. S. N., Associate in Naval Science. (Winter and spring quarters.)
(Harvard University.)
- MILDRED WEST LORING**, Instructor in Psychology.
A. B., University of Washington, 1912; A. M., 1913; Ph. D., Johns Hopkins, 1916.
- RALPH HASWELL LUTZ**, Assistant Professor of History.
A. B., Stanford, 1906; LL. B., University of Washington, 1907; A. M., Ph. D., Heidelberg (Germany), 1910.
(Lieutenant, U. S. A., Intelligence Service, 1918-19.)
- ROBERT FULTON MCCLELLAN**, Instructor in Architecture.
Massachusetts Institute of Technology.
(Corporal, U. S. A., 1918-19.)
- EDWARD MCMAHON**, Associate Professor of American History.
Ph. B., University of Washington, 1898; A. M., Wisconsin, 1907.
- THERESA SCHMID MCMAHON**, Assistant Professor of Economics.
A. B., University of Washington, 1899; A. M., 1901; Ph. D., Wisconsin, 1909.
- HORACE JAMES MACINTYRE**, Associate Professor of Mechanical Engineering.
S. B., Massachusetts Institute of Technology, 1905; M. M. E., Harvard, 1911.

- CARL EDWARD MAGNUSSON, Professor of Electrical Engineering and Acting Dean of the College of Engineering.
B. B. E., Minnesota, 1896; M. S., 1897; E. E., 1905; Ph. D., Wisconsin, 1900.
- EDMOND STEPHEN MEANT, Professor of History.
B. S., University of Washington, 1885; M. S., 1899; M. L., Wisconsin, 1901.
- EVAN KIRKPATRICK MERRITH, Captain Infantry, U. S. A., Assistant Professor of Military Science and Tactics.
Stanford University.
- JESSIE B. MERRICK, Instructor in Physical Education for Women.
Ph. B., Wisconsin, 1904; B. S., Columbia, 1907.
- JOHN WILLIAM MILLER, Assistant Professor of Civil Engineering.
B. S. (C. E.), Nebraska, 1905.
(Absent full quarter.)
- STEPHEN IVAN MILLER, Professor of Transportation, Head of the Department of Economics and Business Administration and Director of the College of Business Administration.
LL. B., Michigan, 1896; A. B., Stanford, 1898.
- LOREN DOUGLAS MILLMAN, Associate Professor of English.
A. B., Michigan, 1890.
- LEON WALLACE MOORE, Acting Instructor in Civil Engineering.
B. S., Cornell College, 1900; C. E., 1903; B. D., Drew Theological Seminary, 1911.
- CHARLES CHEVROH MORE, Professor of Civil Engineering.
C. E., Lafayette, 1898; M. C. E., Cornell, 1899; M. S., Lafayette, 1901.
(Major, U. S. A., Ordnance, 1918-19.)
- ROBERT EDOUARD MORITZ, Professor of Mathematics.
B. S., Hastings, 1892; Ph. M., Chicago, 1896; Ph. D., Nebraska, 1901; Ph. x. D., Universitaet Strassburg, 1902.
- JAMES DOUGLAS MUDGE, Acting Instructor in Mechanical Engineering. (Winter and spring quarter.)
M. E., Cornell University, 1904.
- BRUCE MUDGE, Assistant Professor of Insurance.
A. B., Idaho, 1908; Ph. D., Pennsylvania, 1914.
- DAVID JOHN MYERS, Assistant Professor of Architecture. (Fall and winter quarters.)
Massachusetts Institute of Technology.
- LEWIS IRVING NEHEK, Assistant Professor of Mathematics.
B. S., Colorado, 1898; M. S., 1901; Ph. D., Pennsylvania, 1908.
- CAROLINE HAVEN ORBE, Professor of Spanish.
- JOSEPH GRATTAN O'BRYAN, Lecturer on Law.
A. B., Jesuit College (Denver), 1893.
- FREDERICK ARTHUR OSBORN, Professor of Physics and Director of Physics Laboratories.
Ph. B., Michigan, 1896; Ph. D., 1907.
- CORNELIUS OSSEWARD, Lecturer on Commercial Pharmacy.
Ph. G., Columbia; Ph. C., Northwestern.
- HYALMAR LAURITS OSTERUD, Instructor in Zoology.
A. B., University of Washington, 1909; A. M., 1910.
- FREDERICK MORGAN PADELFOED, Professor of English, and Acting Dean of the Graduate School.
A. B., Colby, 1896; A. M., 1899; Ph. D., Yale, 1899.
- VERNON LOUIS PARRINGTON, Professor of English.
A. B., Harvard, 1898; A. M., Emporia, 1895.
- OTTO PATZER, Associate Professor of French.
B. L., Wisconsin, 1898; M. L., 1899; Ph. D., 1907.
- MAX PATTEN PHILBRICK, Instructor in Romanic Languages.
A. B., Colby College, 1902.
- JOHN HENRY PIFER, Extension Lecturer on Special Education.
- FREDERICK POWELL, Lecturer on Gold Dredging.
E. M., Columbia.
- CHARLES LEONARD PHILLIPS, Colonel, U. S. A., Professor of Military Science and Tactics.
A. B., Colby, 1878; graduate, U. S. Military Academy, West Point, 1881; C. E., University of Maine, 1888; graduate, Coast Artillery School, 1890.
- MARY IRENE PRAY, Instructor in Physical Education for Women.
B. S., Teachers' College, Columbia, 1913.
- ARTHUR RAGAN PRIEST, Professor of Debating and Dean of Men.
A. B., De Pauw, 1891; A. M., 1894.
- MARGARET PROSSER, Associate in English.
A. B., Vassar, 1913.
- EFFIE ISABEL RAITT, Professor of Home Economics and Director of the Department of Home Economics.
B. S., Columbia, 1912.
- GINO ARTURO RAITT, Assistant Professor of Romanic Languages.
A. B., Middlebury, 1907; A. M., 1909; Docteur de l'Universite de Grenoble, 1911.
- OLIVER HUNTINGTON RICHARDSON, Professor of European History.
A. B., Yale, 1889; A. M., Ph. D., Heidelberg (Germany), 1897.
- GEORGE BURTON RIGG, Assistant Professor of Botany.
B. S., Iowa, 1896; B. D., 1899; A. M., University of Washington, 1909; Ph. D., Chicago, 1914.
- MILNOR ROBERTS, Professor of Mining Engineering and Metallurgy and Dean of the College of Mines.
A. B., Stanford, 1899.

- LETTIE LEE ROCHESTER**, Associate in English.
A. B., University of Washington, 1915.
- WALTER EDWARD ROLOFF**, Assistant Professor of German.
A. B., Northwestern, 1904; A. M., 1905; Ph. D., Wisconsin, 1912.
- ROBERT EYSTAFIEFF ROSE**, Assistant Professor of Chemistry.
Ph. D., Leipzig, 1903.
- MORITZ ROSEN**, Assistant Professor of Music.
Graduate, Warsaw Conservatory, Russia.
- FREDERIC ARTHUR RUSSELL**, Assistant Professor of Economics.
A. B., Albion, 1898; A. M., 1909; Ph. D., Illinois, 1916.
- JASPAR PHILIP RUSSETT**, Instructor in Architecture.
B. S., Illinois, 1916.
- LUIS A. SANTANDER**, Assistant Professor of Spanish.
B. S., and Ph. B., University of Santiago, Chile, 1894; LL. B., 1898; Licenciado in Laws, 1899.
- EDWIN JAMES SAUNDERS**, Assistant Professor of Geology.
B. A., Toronto, 1896; A. M., Harvard, 1907.
- WILLIAM SAVERY**, Professor of Philosophy.
A. B., Brown, 1896; A. M., Harvard, 1897; Ph. D., 1899.
- RICHARD FREDERICK SCHOLZ**, Professor of Ancient History.
A. B., Wisconsin, 1902; A. M., 1908; Ph. D., 1911.
- RYLAND OSCAR SCOTT**, Captain, Inf., U. S. A., Assistant Professor of Military Science and Tactics.
Portland University; Willamette University.
- HAROLD OGDEN SEXTSMITH**, Instructor in Architecture. (Fall and winter quarters.)
Armour Institute of Technology; Chicago Art Institute.
(Captain, U. S. A. S.)
- MYRTA DOROTHY SHANK**, Instructor in Home Economics for Extension Service.
B. S., Teachers' College, Columbia, 1918.
- GORDON RUSSELL SHUCK**, Instructor in Electrical Engineering.
E. E., Minnesota, 1906.
- THOMAS KAY SIDBY**, Associate Professor of Latin and Greek.
B. A., Toronto, 1891; Ph. D., Chicago, 1900.
- ELVINE SIMON**, Instructor in Russian.
Graduate, St. Annen Schule; University of Geneva.
- MACY MILMORE SKINNER**, Assistant Professor of Chinese and Assistant Dean of Men.
A. B., Harvard, 1894; A. M., 1895; Ph. D., 1897.
- CASSIE PAINE SMALL**, Lecturer on Textile and Non-Textile Merchandise.
Teachers College, Columbia University.
- LLOYD LEROY SMALL**, Instructor in Mathematics.
A. B., University of Washington, 1911; A. M., 1912; Ph. D., Columbia, 1918.
- CHARLES WESLEY SMITH**, Reference Librarian and Associate Professor of Library Economy.
A. B., Illinois, 1903; B. L. S., 1905.
- ELI VICTOR SMITH**, Assistant Professor of Zoology.
Ph. B., Illinois Wesleyan, 1907; A. M., University of Washington, 1909; Ph. D. Northwestern, 1911.
- J. ALLEN SMITH**, Professor of Political Science and Dean of the Graduate School.
A. B., Missouri, 1886; LL. B., 1887; Ph. D., Michigan, 1894.
- STEVENSON SMITH**, Professor of Psychology.
A. B., Pennsylvania, 1904; Ph. D., 1909.
- WALTER EDMUND SQUIRE**, Assistant Professor of Music.
Graduate in Music, Northwestern, 1906.
- EDWIN AUGUSTUS START**, Director of the Extension Service.
A. B., Tufts, 1884; A. M., Harvard, 1893.
- CHARLES MUNROB STRONG**, Assistant Professor of Spanish.
A. B., Missouri, 1897; A. M., 1900.
- MILDRED STRUBLE**, Associate in English. (Spring quarter.)
A. B., University of Washington, 1916.
- HERMAN VANCE TARTAR**, Acting Assistant Professor of Chemistry.
B. S., Oregon Agricultural College, 1902.
- EARL R. THOMA**, Acting Instructor in Business Administration.
State Normal, Fremont, Nebraska.
- J. FRANKLIN THOMAS**, Associate Professor of Sociology.
A. B., Beloit, 1904; Columbia University.
- THOMAS GORDON THOMPSON**, Acting Instructor in Chemistry. (Winter and spring quarters.)
A. B., Clark College, 1914; M. S., University of Washington, 1915; Ph. D., 1918.
- DAVID THOMSON**, Professor of Latin and Dean of the College of Liberal Arts.
B. A., Toronto, 1892.
- HARLAN LEO TRUMBULL**, Assistant Professor of Chemistry. (Fall quarter.)
A. B., University of Washington, 1907; A. M., 1908; Ph. D., Chicago, 1911.
(Captain, U. S. A., Chemical Warfare Service.)
- REXFORD GUY TUGWELL**, Assistant Professor of Marketing.
A. B., Pennsylvania, 1915; A. M., 1916.
- PAUL ALEXIS UMOFF**, Extension Lecturer on the Russian Language.
Polytechnic Institute of Petrograd.
- GEORGE WALLACE UMPHREY**, Associate Professor of Spanish.
B. A., Toronto, 1899; A. M., Harvard, 1901; Ph. D., Harvard, 1905.

- CLINTON LOUIS UTTERBACH, Associate in Physics.
B. S., Purdue, 1908; M. S., University of Washington, 1918.
- LOUISE VAN OGLE, Instructor in Music.
Theoretical Work, Dr. Bridge, Chester, England; Richter, Leipzig; Piano, Godowsky, Berlin; Lhevinne, Berlin; Harold Bauer, Paris.
- CHARLES WILCOX VANDER VEER, Track Coach.
Union College.
- ALBERT FRANZ VENING, Assistant Professor of Music.
New York College; Pupil, Stuttgart Conservatory of Music; Pupil of Leschetizky.
- EDWIN JOHN VICKNER, Professor of the Scandinavian Language.
A. B., Minnesota, 1901; A. M., 1902; Ph. D., 1905.
- ELIZABETH VINSONHALER, Associate in Chemistry. (Fall quarter.)
B. S., University of Washington, 1917; M. S., 1918.
- SARA REA VINSONHALER, Acting Instructor in Drawing. (Winter quarter.)
B. F. A., University of Washington, 1918.
- PHILIP V. VON PHUL, Lecturer on Practical Hygiene.
A. B., St. Louis University, 1893; A. M., 1895; M. D., Missouri Medical College, Washington University, 1896.
- FRANK MELVILLE WARNER, Assistant Professor of Engineering Drawing.
B. S. (M. E.), Wisconsin, 1907.
- THOMAS TALBOT WATERMAN, Associate Professor of Anthropology.
A. B., California, 1907; Ph. D., Columbia, 1913.
- HALBERT WATSON, Associate in Journalism. (Winter quarter.)
- CHARLES EDWIN WEAVER, Associate Professor of Geology.
B. S., California, 1904; Ph. D., 1907.
- JOHN WEINZEL, Professor of Bacteriology.
B. S., Wisconsin, 1896; M. S., 1899; Ph. D., 1906; Dr. P. H., Harvard, 1918.
- FRED FALCONER WELD, Acting Instructor in Civil Engineering. (Winter and spring quarters.)
B. S., Pennsylvania State College, 1893; C. E., 1902.
- LIVINGSTON WERNICKE, Acting Instructor in Civil Engineering. (Winter quarter.)
B. S., University of Washington, 1906; E. M., 1917.
- CLARENCE LESTER WHITE, Instructor in Civil Engineering.
B. S., State University of Iowa, 1909; C. E., 1914.
- WALTER BELL WHITTLESEY, Instructor in French. (Fall quarter.)
A. B., University of Washington, 1907; A. M., 1909.
(Lieutenant, U. S. A.)
- IRA ABRAHAM WILLIAMS, Assistant Professor of Mining, Caramist U. S. Bureau of Mines.
B. S., Iowa State College, 1898; M. S., 1903; A. M., Columbia, 1904.
- ARTHUR MELVIN WINSLOW, Assistant Professor of Mechanical Engineering.
Ph. B., Brown University, 1903; B. S., Massachusetts Institute of Technology, 1906.
- GEORGE SAMUEL WILSON, Associate Professor of Mechanical Engineering.
B. S., Nebraska, 1906.
- RUTLEDGE WILTRANK, Instructor in Psychology.
Ph. B., Bucknell, 1898; Ph. D., Chicago, 1917.
- HUGO WINKENWERDER, Professor of Forestry and Dean of the College of Forestry.
B. S., Wisconsin, 1902; M. F., Yale, 1907.
- HAMILTON ACHILLE WOLF, Assistant Professor of Fine Arts.
National Academy of Design; Art Students' League; Columbia University.
- CARL PAIGE WOOD, Assistant Professor of Music.
A. B., Harvard, 1906; A. M., 1907.
- ROY MARTIN WINGER, Assistant Professor of Mathematics.
A. B., Baker, 1906; Ph. D., Johns Hopkins, 1912.
- CLIFFORD WOODY, Assistant Professor of Education.
A. B., Indiana, 1908; A. M., 1913; Ph. D., Columbia, 1916.
- JOHN LOCKE WORCESTER, Assistant Professor of Anatomy.
M. D., Birmingham School of Medicine, University of Alabama, 1900.
- CONRAD ZIMMERMAN, Lecturer on Timber Physics.
A. B., University of Washington, 1908.

OTHER INSTRUCTORS

- CHARLES CHEVALLAZ, Associate in French.
State College, Lausanne, Switzerland; State School of Art and Industry, Bern, Switzerland.
- JOHN L. CROZIER, Associate in Mathematics.
B. E., Washington, 1917.
- JULES FRANCOIS DE JOSEZ, Associate in French.
College de la Paix, Namur, Belgium; C. E., Universite de Louvain, Belgium.
- EDWIN HAVILAND, Associate in Mathematics.
B. S., Swarthmore, 1885; M. A., Cornell University, 1899.
- ALVIN JACKSON LOOMIS, Associate in Mathematics.
A. B., Olivet College, 1906; Washington.
- HEERMANDE MULLEMESTER, Associate in Mathematics.
Phil. Cand., Royal University of Utrecht, Holland, 1910; Ph. D., 1913.
- LUCIEN PERROT, Associate in French.
College Dom Bosco, Paris.
- ROBERT WEST ROGERS, Associate in Mathematics.
A. B., Wheaton College, 1913.

ALFRED E. SCHERR, Associate in Physics.

Ph. B., Hamline, 1911; M. S., University of Washington, 1915.

EMERY E. SMITH, Associate in Mathematics.

B. S., Cornell College, 1910; University of Washington.

EDWIN LEONARD STRANBERG, Instructor in Civil Engineering.

B. S. (C. E.), University of Washington, 1912.

RALPH W. SWETMAN, Associate in Mathematics.

Ph. B., Hamilton College, 1907; A. M., Teachers College, 1917.

JOSEPH MARION TAYLOR, Associate in Mathematics.

M. S., Adrian College, 1886; California.

CHARLES AMELIUS WHALLEY, Associate in French.

ASSISTANTS AND TEACHING FELLOWS

MARTHA REEKIE, A. B., Assistant in the Museum.

MADGE WILKINSON, Clinical Assistant.

ANNE VOELKER, Assistant in Music.

HELEN FERRYMAN, B. M., Assistant in Music.

MABELLE GILLE, M. S., Teaching Fellow in Zoology.

STUDENT ARMY TRAINING CORPS

In addition to members of the regular teaching staff, the following served as temporary instructors for the Student Army Training Corps.

Army Unit—

A. E. AUB, Capt., U. S. A.
 Commanding Officer.
 H. C. DUNBAR, Capt., U. S. A.
 A. G. SNOW, Capt., Medical Corps.
 AROHD C. SHREVE, Lieut., U. S. A.
 JOSEPH B. HARRISON, Lieut., U. S. A.
 GERALD B. BARNARD, Lieut., U. S. A.
 EUGENE D. BARTON, Lieut., U. S. A.
 HARVEY B. FOULKES, Lieut., U. S. A.
 EUGENE L. HARLIN, Lieut., U. S. A.
 VICTOR F. LARSE, Lieut., U. S. A.
 HENRY S. LEWIS, Lieut., U. S. A.
 ALFRED E. MCFARLANE, Lieut., U. S. A.
 D. W. MEDLEY, Lieut., U. S. A.
 LESLIE N. MOB, Lieut., U. S. A.
 DOUGLAS OSBORN, Lieut., U. S. A.
 CURTISS A. PETERSON, Lieut., U. S. A.
 ALMOS K. REYNOLDS, Lieut., U. S. A.
 MELVILLE K. SPIEGEL, Lieut., U. S. A.
 LESLIE S. TROMANHAUSEE, Lieut., U. S. A.
 JOHN H. WALDO, Lieut., U. S. A.
 WM. H. WALTERSKIRCHEN, Lieut., U. S. A.

Naval Unit—

CHAUNCEY THOMAS,
 Rear Admiral, U.S.N.
 Commanding Officer.

ENSIGN ANDERSON
 ENSIGN DENNY
 ENSIGN LONGYEAR
 ENSIGN PEELER
 ENSIGN STEPHENS

Marine Unit—

ERIC JOHNSTON,
 1st Lieut.
 Commanding Officer

BOARDS AND COMMITTEES

1919-1920

ADMINISTRATIVE BOARDS

- ADVISORY TO THE PRESIDENT**—The Board of Deans, Professors Meany, Padelford, Gowen, Osborn, Kincaid, Eastwood.
- EXTENSION SERVICE**—Director Start, Deans Thomson, Landes, Bolton, Director Miller, Professor Raitt, Comptroller Condon.
- BOARD OF DEANS**—Deans Condon, Thomson, Magnusson, Roberts, Johnson, Winkenwerder, Smith, Landes, Bolton, Glen; Directors Henry, Miller, Start; Deans Priest and Coldwell; Registrar Stone.
- SUMMER QUARTER**—Board of Deans and Comptroller Condon.
- CONSULTING ENGINEERS**—Professors Eastwood, Magnusson and Harris.
- DEVELOPMENT OF MENTOR SYSTEM**—Deans Thomson, Priest and Coldwell.
- DEVELOPMENT OF URBAN CENTERS FOR EXTENSION SERVICE**—Miss Shank, chairman; Regent McKee, Directors Start, Miller; Professors Raitt, Gould; Comptroller Condon, Mrs. E. C. Beck, Mr. John J. Elliott and Mr. Harlan Thomas.

COMMITTEES OF THE FACULTY

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

- ADMISSIONS AND REGISTRATION**—The Deans of the Colleges and Schools and the Registrar.
- ASSEMBLY**—Professors Densmore, Glen and Benson.
- ATHLETICS**—Deans Priest and Thomson; Professors Hall, Moritz, Densmore, Dehn and Hunt.
- CURRICULUM**—Professors Savery, Bolton, Johnson, Magnusson, Winkenwerder, Glen, Henry, Osborn, Ayer, Daniels and Mr. Stone.
- GRADUATION**—Deans Thomson, Landes, Magnusson; Professors Lantz, Kirkland, Custis and Mr. Stone.
- HONORS**—Professors Padelford, Byers, Savery, Carpenter, Curtis and Mrs. McMahon.
- HYGIENE AND SANITATION**—Professors Hall, Weinzirl, Allison, Stevenson Smith and Raitt.
- JUNIOR COLLEGES**—Professors Padelford, Thomson, Frye, Bolton, McMahon and Mr. Stone.
- LIBRARY**—Professors Henry, Thomson, Frye, Padelford, Richardson, Patzer and Loew.
- PRE-MEDICAL COURSE**—Professors Worcester, Weinzirl, Kincaid, Hall and Dean Johnson.
- PUBLICATIONS**—Professors Henry, Start, Landes, Umphrey, Padelford, J. A. Smith, Densmore, Kennedy and Bell. (Catalogue, Directory, the Registrar.)
- RELATIONS WITH SECONDARY SCHOOLS**—Deans Bolton and Thomson; Professors Padelford, Frye, Frein and Mr. Stone.
- RULES**—Professors Benham, Goodner, Strong, Bell and Mr. Stone.
- SCHEDULE**—Mr. Stevens; Professors Wilson, Rigg, Johanson, Woody and Mr. Langdon.
- SPECIAL STUDENTS**—The Deans and the Registrar.
- STUDENT AFFAIRS**—Dean Thomson; Professors McMahon, Scholz, Padelford and Curtis; Dean Winkenwerder, Mrs. Haggatt, and seven representatives of student organizations.
- STUDENT HEALTH AND WELFARE**—Professor Bartlett; Deans Coldwell and Priest; Professors Hall, Stevenson Smith, Weinzirl, E. V. Smith.
- RHODES SCHOLARSHIP**—Professors Johanson, Leslie Ayer, Scholz, Densmore, Harrison.
- WASHINGTON UNION**—Professor Meany, Deans Condon, Landes, Thomson, Director Miller and Comptroller Condon.
- MILITARY AND NAVAL AFFAIRS**—Professors Osborn, Eastwood, More, Start, Boothroyd; J. W. Miller, and Mr. Harrison.

DEGREES

DEGREES CONFERRED JUNE 15, 1918

(For degrees conferred at the end of the Summer Session, see pages 23-25)

BACHELOR DEGREES COLLEGE OF LIBERAL ARTS

Bachelor of Arts

Adams, Frances True
Adams, Lucile Elizabeth
Adams, Violette Beatrice
Agassiz, Florence Mary
Aitchison, Irene
Anasawa, Selichi
Andersen, Gudrun Cecelia
Angle, Joseph Eber
Aono, Ousuka
Arthur, Agnes
Baker, Alice Harriet
Baker, Ella Graham
Bartley, Georgia Lulu
Bean, Frances Lorraine
Beazley, Phona Cassius
Bennett, Helen Marcia (*Magna Cum Laude*)
Bjorkman, Frank Walfred (*Cum Laude*)
Boening, Rose Marie
Brawley, Edith May
Brueggerhoff, Anna Marie (*Cum Laude*)
Bushnell, Helen
Carrigan, John Beardslee
Chandler, Elsie Rose
Combs, Ualla Ruth
Constantine, Dorothy Edna
Daulton, Elizabeth Katherine
Davis, May Eleanor
Dean, Mildred
DeBruyn, Paul Marcellus
Delaney, Kathleen Nanon
Dickinson, Lois Atherton
Draper, Elisabeth
Esterbrook, Gladys Fannie (*Cum Laude*)
Ellis, John Boyd
Elmore, Roma Marie Sartoris (Mrs.)
Falkoff, Anna Lea (Mrs.)
Fleming, Eloise
Fleming, Eloise
Francis, Violet Eloise
French, Irma
Freyd, Florence Sarah
Gates, Louise Margaret (*Cum Laude*)
Gerischer, Lillian Wilhelmine
Gerriets, Anna
Graves, Orville Raymond
Gresham, Marie Cole
Grout, Genevieve Ament
Hamel, Floyd Raymond
Hartmann, Elsie Anna (*Cum Laude*)
Hill, Helen Elizabeth
Holmes, Anne Matilda (*Cum Laude*)
Hoppeck, Adele Louise (*Cum Laude*)
Huft, Virginia (*Cum Laude*)
Hutchinson, Pansy Ethlyn
Jacobson, Pauline
James, Jeanette
Johnston, Violet Kathleen
Joiner, Anna Elmira
Keenan, Mary Antoinette
Kelsey, Louise
Kelton, Viola
Kronschable, Mercedes Ethel (*Cum Laude*)
Larson, Esther Mildred
Lieberg, Vivian Helen
Lottfield, Gabriel
McColl, Nellie Natalie
McCorkle, Mae Diana (*Cum Laude*)
MacPherson, Lexie
Mann, Marguerite
Mattson, Norma Claire
Meade, Emily Hulse
Melkild, Mildred Eunice
Meyer, George Frederick (*Cum Laude*)
Middleton, Una Belle (*Cum Laude*)
Miller, Margery Merle
Miyasaki, Tachiro
Moe, Nettie Amelia
Moffet, Edith Pauline
Myer, Edna Margaret
Nelson, Adlene Roberta
Nelson, Helen
Olsen, Paul Crandall
Osawa, Yuki Geda
Otsuki, George Jogi
Parsons, Rosamond
Perry, Francis Wayland (*Cum Laude*)
Porter, Frances Rice (Mrs.) (*Cum Laude*)
Proctor, Muriel Esther
Quast, Ruth Iola
Riddle, Helen Jane
Rohr, Gertrude Emilie Bertha
Ruppenthal, Anna Barbara
Russell, Beulah Henrietta
Sanders, Alvis Monroe
Sater, Gertrude Pauline
Schreiner, Gertrude Mary
Severns, Edward Ellsworth
Sharpe, Ruth Cole
Simonds, Esther
Smallwood, Gladys Nelsine
Starr, Beatrice Evangeline
Steln, Waldemar Lingeman
Stoner, Lillian Una
Sundquist, Leonia Maria
Swanson, Edward Benjamin
Taylor, Dorothea
Thomas, Christine
Tromp, Theresa
Tucker, Ruth Elisabeth
Turner, Ellen Mildred (*Cum Laude*)
Uchikata, Henson
Van Engelen, Jennie
Vining, Marie Thelma
Welxel, Besse
Welts, Florence Aurelia
White, Marjorie Whitworth
Williams, Roger Ellis
Wilson, Evelyn
Wright, Charlotte Helen

COLLEGE OF SCIENCE

Bachelor of Science

Carlson, Agnes Naomi	Phillips, Gertrude Anne
Cooper, Evelyn Frances	Raynor, George Emil (<i>Magna Cum Laude</i>)
Deamond, Margaret Rose (<i>Cum Laude</i>)	Reekie, Jean
Griffiths, Marion Alice	Russell, Flora Wilhelmina Emma
Haugum, Cyrus James	Sargent, Winford Graydon
Johnson, Martha Ragna	Simpson, Helen Margaret
Kahler, Herbert	Swegle, Adele Mae
LeViolette, Melvin Francis	Taylor, Margie Williston Winifred
McIntire, Doris Helen	Van Winkle, Katharine Evangeline
McKinney, Eva	Wood, Arthur Rollitt
Meek, Georgia Ella	

Bachelor of Science in Home Economics

Armstrong, Grace	McCormick, Irma Alnita
Cameron, Marion Brownlee	McLaren, Gay Elizabeth
Church, Mabel Minerva	Moore, Alice Irene
Fay, Helen Frances	Myers, Dorothy (<i>Cum Laude</i>)
Fraser, Alice Rosena	Pollard, Bertha Christine (<i>Cum Laude</i>)
Gearhart, Esther	Price, Frances Mary
Gilbert, Lois Marion	Roberts, Margaret
Good, Jane	Robinson, Bessie Veryl
Hamilton, Alleen Ames	Shumway, Antoinette Elizabeth
Jean, Mildred	Slack, Jean Gertrude
Kennedy, Mabel Josephine	Smith, Virginia Florence
Keppel, Susan (Mrs.) (<i>Cum Laude</i>)	Stilson, Lenore Alice
Knudson, Esther	Ware, Sarah Amella
Langdon, Frances Elaine Fisk (Mrs.)	Wilson, Alva
Lusby, Ruth Margaret (<i>Cum Laude</i>)	

COLLEGE OF EDUCATION

Bachelor of Education

Barrows, Jeanette Virginia	Holman, Zelma Leone
Burnside, Catharine (<i>Cum Laude</i>)	Hosner, Ruth Rachel
Calloway, Gertrude	Lawson, Peninnah Belle
Connors, Edna Eliza	McFee, Jean
Culliton, Elaine Clazier	Mackey, Cora Lois
Ederer, Pauline	Michael, Sadie
Goodman, Leo (<i>Cum Laude</i>)	*Parker, Frances Estella

*Died June 5, 1918

COLLEGE OF FINE ARTS

Bachelor of Arts in Music

Hall, Emily (*Cum Laude*)

Bachelor of Music

Bonell, Aura Minerva	Manson, Gladys
Ferryman, Helen Louise	Marsh, Constance Ardna
Koren, Helen Marie	

Bachelor of Fine Arts

Vinsonhaler, Sara Rea

Bachelor of Architecture

Anderson, Arthur William

COLLEGE OF ENGINEERING

Bachelor of Science in Chemical Engineering

Canfield, Ralph Edward	Hopkins, Hubert Vincent
Handforth, Stanley Longheed	Martin, Leonard Alexander

Bachelor of Science in Civil Engineering

Adams, John Middleton	Tipton, Richard Randolph
Mellish, John Frederick	Turnbull, Benjamin Frank
Nelson, Wesley Roy	Waller, Harold Henkle
Pioda, Fernando Charles Reno	Woolfolk, Paul Albert
Sellick, Jesse Herry Rowe	

UNIVERSITY OF WASHINGTON

Bachelor of Science in Electrical EngineeringKongsted, Ludvig Petersen
Lubcke, Charles MaxPeterson, Charles Wallace
Zaugg, Felix Rudolph**Bachelor of Science in Mechanical Engineering**

Hoffman, Valentine

Bachelor of Science

Hedrick, Langdon Bruce

Wassberg, Clarence Edward

COLLEGE OF MINES

Bachelor of Science in Mining EngineeringBullard, Lloyd Francis
Clulow, William Montgomery
Opperman, Conrad JohnSlack, Albert Elvira
Williams, Joseph Augustin**Bachelor of Science in Metallurgical Engineering**

Bird, Byron Matthew

Slack, Albert Elvira

Bachelor of Science in Coal Mining Engineering

McMillan, Earl Renwick

COLLEGE OF FORESTRY

Bachelor of ScienceGillespie, James Thomas
O'Brien, George William

Zeller, Earl Henry

COLLEGE OF PHARMACY

Pharmaceutical ChemistCurry, Mark Elmore
Orosa, Maria Ylagan

Swart, Dennis Siegel

Graduate in PharmacyKracover, Bella
Madden, Kathryn Olive
Smith, Gertrude EleanorWilkes, Jean Robin
Zenler, Theodore William

SCHOOL OF LAW

Bachelor of LawsBackus, Le Roy Manson
Beardsley, Arthur SydneyKolmitz, Charlotte
Watanabe, Harley Shulchi

LIBRARY SCHOOL

Bachelor of Library Economy

Hitchcock, Jeanette McCrory

Bachelor of ArtsArney, Mary
Bateman, Stella
Cleaves, Edith Lorena
Clement, Vera Lyman
Coleman, Louise
Corbett, Helen Dorothy
Donnell, Georgia Marie
Frew, Rosamond
Giudici, Pauline Amanda
Hayes, Dorothy
Henry, Elizabeth GilletteHolt, Doris Leonora
Monk, Edith Mary
Owen, Eleanor Murray
Plimmer, Hilda More
Seeley, Harriet Butler
Stanton, Kathryn Bryce
Stone, Helen Morrill
Unger, Nell Avery (*Oum Laude*)
Wallace, Edith Edna
Walsworth, Esther**Certificate in Library Economy**

Martin, Margaret Belle

DEGREES

21

COLLEGE OF BUSINESS ADMINISTRATION

Bachelor of Business Administration

Coleman, Donald John

McGovern, Foster Lincoln

COLLEGE OF NAVAL, MILITARY AND AERONAUTICAL SCIENCE

Bachelor of Science in Military Science

Dewhurst, James Frederick

GRADUATE DEGREES

GRADUATE SCHOOL

Master of Arts

Florence Ball (Education)

A. B., University of Washington, 1915

Thesis: Recreational Activities of Seattle School Children

Ethel Summer Hatch (English)

A. B., University of Wisconsin, 1917

Thesis: Tom Paine's Contribution to Democracy

Louise Julia Ingersoll (History)

A. B., University of Washington, 1914

Thesis: Reconstruction and the Courts

Aletha Sophia McPhee (English)

A. B., University of Washington, 1916

Thesis: Phases of Realism in American Literature of the Nineties

Frank Seely Salisbury (Education)

A. B., University of Washington, 1916

Thesis: A Method of Comparing Spellers with Respect to the Usefulness of Their Subject Matter in the Writing Vocabulary of Adults

Robert James White (Education)

A. B. in Ed., University of Minnesota, 1911

Thesis: Cost of High School Instruction in Washington

Master of Science

Walter Ethan Bagley (Mathematics)

B. S., University of Washington 1915

Thesis: A Few Methods of Developing the Sine and Cosine Series

Jacob Roy Bender (Mathematics)

A. B., Ohio University, 1916

Thesis: Some General Formulas for the Summation of Certain Special Types of Series

George Walter Pucher (Chemistry)

B. S., University of Washington, 1917

Thesis: Solubilities in Mixtures of Two Solvents

Lester Lewis Spessard (Zoology)

A. B., Lebanon Valley College, 1911

Thesis: Insect Pests of the Madrona

Elizabeth Vinsonhaler (Chemistry)

B. S., University of Washington, 1917

Thesis: Chemistry of Carbon Monoxide

Master of Science in Mining Engineering

Arthur Homer Fischer

B. S. in Mining Engineering, University of Washington, 1908

Thesis: A Summary of Mining and Metalliferous Mineral Resources in the State of Washington

UNIVERSITY OF WASHINGTON

Master of Science in Metallurgy

Carl Otto Anderson
B. S. in Mining Engineering, University of Kansas, 1916
Thesis: On the Physics of Ore Flotation

Charles Denham Grier
E. M., Colorado School of Mines, 1912
Thesis: Electro-Metallurgical and Electro-Chemical Industry in the State of Washington

Doctor of Philosophy

Thomas Gordon Thompson
A. B., Clark College, 1914
M. S., University of Washington, 1915
Thesis: Preservation of Iron and Steel by Means of Passifying Factors

NORMAL DIPLOMAS

University Life Diploma

Backowske, Mary
Balkema, Richard Roy
Barber, David
Barrows, Jeanette Virginia
Batcheller, Elva Leonore
Bessesen, Grace Seydell (Mrs.)
Bickford, Ethel Mary
Boening, Rose Marie
Bonney, Catherine Alicia
Boucher, Jessie Louisa
Brennesholtz, Catherine Willson
Burkheimer, Florence
Crozier, John Louis
de Tourville, Audrey
Dougherty, Dola May
Drotning, Theodore Melvin
Eakins, Bess Dacotah
Emery, Ethel Anna
Firth, Mildred
Fowler, Louise Hobson
Gabbert, Gertrude Marguerite
Griffin, Enzal Belle
Hall, Eva Rachel
Hamilton, Juanita
Helmlinger, Winifred Johnson (Mrs.)
Hunt, Marguerite Jean

Hunter, Gordon Chester
Irvine, Marguerite Isabel
Jacobson, Rose Ethel
Knapp, Dora Ethel
Lottfield, Gabriel
Mearns, Edith Helena
Morrison, Bessie Mae
Myers, Margaret
Neighbors, Nancy Cella
Olson, Jennie Almeda
Paige, Susie Boone
Pettibone, Louise Anita
Reavis, Nan Preston
Riddle, Helen Jane
Rochester, Lettie Lee
Roe, Nellie Virginia
Siemens, Margaret
Sifton, Edith
Stahl, Eleanor Elizabeth
Stevenson, Janet Elizabeth
Stuart, Zara Althea
Sweet, Elsie Sears
Waite, Netta Marguerite
Waldrip, Sarah Pauline
Wharton, Verna Marie
Woods, Arra Jane

University Normal Diploma

Adams Frances True
Adams, Violette Beatrice
Agassiz, Mary Florence
Aitchison, Irene
Arthur, Agnes
Baker, Alice Harriet
Baker, Ella Graham
Bartley, Georgia Lulu
Bennett, Helen Marcia
Bruggerhoff, Anna Marie
Buhnside, Catherine
Bushnell, Helen
Calloway, Gertrude
Cameron, Marion Brownlee
Carlson, Agnes Naomi
Chandler, Elsie Rose
Church, Mabel Minerva
Combs, Uialla Ruth
Cooper, Evelyne Frances
Culliton, Elaine Claxier
Dean, Mildred
Desmond, Margaret Rose
Dickinson, Lois Atherton
Draper, Elizabeth
Edger, Pauline
Erspaner, Frank
Fay, Helen Frances

Fleming, Eloine
Fleming, Eloise
Foreman, Leotta Marie
Francis, Violet Eloise
Fraser, Alice Rosena
French, Irma
Freyd, Florence Sarah
Gates, Louise Margaret
Gearhart, Esther
Gerriets, Anna
Gilbert, Lois Marion
Good, Jane
Goodman, Leo
Gresham, Marie Cole
Hamilton, Alleen Ames
Hartmann, Elsie Anna
Haugum, Cyrus James
Herner, Helen
Holman, Zelma Leone
Holmes, Anne Matilda
Hosner, Ruth Rachel
Hutchinson, Pansy Ethlyn
James, Jeanette
Jeans, Mildred
Johnson, Martha Ragna
Johnston, Violet Kathleen
Kelsey, Louise

Kelton, Viola
 Knudson, Esther
 Koren, Helen Marie
 Kronschnable, Mercedes Ethel
 Larson, Esther Mildred
 Lawson, Peninnah Belle
 Lusby, Ruth Margaret
 McColl, Nellie Natalie
 McFee, Jean
 McLaren, Gay Elizabeth
 Mackey, Cora Lois
 Manson, Gladys
 Marsh, Constance Ardena
 Mattson, Norma Claire
 Melkild, Mildred Eunice
 Meyer, George Frederick
 Michael, Sadie
 Middleton, Una Belle
 Miller, Margery Merle
 Moe, Nettie Amella
 Moffet, Edith Pauline
 Moore, Alice Irene
 Myer, Edna Marguerite
 Nelson, Adlene Roberta

*Parker, Frances Estella
 Pollard, Bertha Christine
 Price, Frances Mary
 Proctor, Muriel Esther
 Quast, Ruth Iola
 Robinson, Bessie Veryl
 Rohr, Gertrude Emilie Bertha
 Russell, Beulah Henrietta
 Russell, Flora Wilhelmina Emma
 Sater, Gertrude Pauline
 Sharpe, Ruth Cole
 Shunway, Antoinette Elizabeth
 Simonds, Esther
 Simpson, Helen Margaret
 Slack, Jean Gertrude
 Smallwood, Gladys Nelsine
 Smith, Virginia Florence
 Stilson, Lenore Alice
 Sundquist, Leonia Marie
 Svegle, Adele Mae
 Taylor, Dorothea
 Tucker, Ruth Elizabeth
 Van Engelen, Jannle
 Weixel, Besse
 Welts, Florence Aurelia

*Died June 5, 1918.

DEGREES CONFERRED JULY 27, 1918

BACHELOR DEGREES

COLLEGE OF LIBERAL ARTS

Bachelor of Arts

Allison, Weaver Judson
 Bemis, Catherine M.
 Brewster, Helen Gertrude
 Brooks, LeRoy Wagar
 Campbell, Ernest William
 Crahan, Margaret
 Freyd, Max
 Haacker, Mary M.
 Harris, Olive Mildred
 Jacobs, Isabel
 Laney, Francis Willard
 Leighton, Ada Beach

Linder, Muriel
 Lund, Katharine Louise
 McKee, George Meade
 McKinney, Grace Matthews
 McKnight, John Emmett
 Marot, Ada Beach
 Matheson, Katherine
 Mitchell, Neva Isabel
 Parker, Catherine Anna
 Shepherd, Paul Clark
 Tower, Pearl Adella

COLLEGE OF SCIENCE

Bachelor of Science

Brown, Earl Theodore
 Butcher, Bessie B
 Hughes, Anne

Little, Edward Milton
 McDonald, Mayme
 Sanden, Arthur Gustav Andrew

Bachelor of Science in Home Economics

Bell, Doris Lillian
 Brooks, Mildred

Dodge, Alice
 Hillis, Arnetta

COLLEGE OF EDUCATION

Bachelor of Education

Bowden, Henrietta Lois

Kohlman, Marjorie Xavier

LIBRARY SCHOOL

Bachelor of Arts

Holman, Norma Burnett

COLLEGE OF ENGINEERING

Bachelor of Science in Chemical Engineering

Charles, Perry Lloyd

Fukusawa, Taniso

UNIVERSITY OF WASHINGTON

Bachelor of Science in Civil Engineering

Driscoll, Thomas, Jr.

Moone, Talcott

Bachelor of Science in Electrical Engineering

Chin, June Kee

Sinclair, Bliss Glead

Larson, Axel Martin

COLLEGE OF PHARMACY

Bachelor of Science

Ayres, Harry Warner

Pharmaceutical Chemist

Ayres, Harry Warner

SCHOOL OF LAW

Bachelor of LawsBozarth, Clauda A.
Peterson, Julius E.Van Slatte, Eloise
Ward, Frank Donlan

GRADUATE DEGREES

Master of Arts

Rose Marie Boening (History)

A. B., University of Washington, 1918

Thesis: The History of Irrigation in the State of Washington

Anna Elnora Brakel (Philosophy)

A. B., University of Washington, 1917

Thesis: The Common Ground of Mechanism and Vitalism

Genevieve Elizabeth Caffrey (Education)

B. S., University of Washington, 1916

Thesis: English in the High School from the View Point of the College Student

David Wellington Freeman (Education)

A. B., Drake University, 1903

A. M., Drake University, 1904

Thesis: A Statistical Study of the Development of the American Secondary School During the Last Quarter Century (1889-1916)

Bernard Freyd (Philosophy)

A. B., University of Washington, 1916

Thesis: Problem of Truth in the Light of Modern Logic

Arthur Stanley Gist (Education)

B. Ed., University of Washington, 1916

Thesis: A Concrete Study in Vocational Guidance of Pupils in the Grammar Grades

Robertson Riley Hollingsworth (Education)

A. B., University of Washington, 1915

Thesis: Legal Provisions Relating to School Funds in the Territory of Washington, 1853-1889.

David Hurwich (Economics)

B. S., University of Washington, 1917

Thesis: A consideration of War Finance with Analysis of the American Financial Measures of the First Year of the Great War

Walter Edmund Squire (Psychology)

A. B., University of Washington, 1918

Thesis: A Study of Motor Controls

William Neill Whitelaw (Political Science)

A. B., Yale University, 1895

LL. B., Kansas City School of Law, 1905

Thesis: Political Reform and Constitutional Amendment in Washington

Ella Wintler (German)

A. B., University of Washington, 1910

Thesis: Goethe's Interest in English Literature as Reflected in His Letters

Master of Science

Gordon Luther Cave (Chemistry)
A. B., Bates College, 1913

Thesis: Arc Processes for Nitric Acid; a Fragment of the History of Chemistry

Katherine Eva Ludgate (Psychology)
A. B., University of Washington, 1917

Thesis: Standardization of Some Performance Tests Among School Children

Clinton Louis Utterback (Physics)
B. S. in E. E., Purdue University, 1909

Thesis: Transmission of Colored Light Through Fog

NORMAL DIPLOMAS**University Life Diploma**

Balsden, Leo Bernard
Beckham, Leone Mary
Bowden, Henrietta Lois
Bunch, Agnes
Carroll, Joseph Douglas
Coates, Frank Carl
Cox, Lolo L.
Drake, Ethel
Evans, Florence Baptie
Fisher, Charlotte Lucile
Garland, Martha
Harris, Laura Loretta
Hong, Nils Joseph
Hood, Mary Elizabeth McClure
Hughes, Anne
Hutchinson, Pearl Irene
Imes, Henry T.
Johnson, John Earl
Johnson, Ralph C.

Johnson, Ruth Francis
Jones, Lulu Ione Mower
McCorkle, Mae Diana
McLean, Dollie
Marston, C. May
Moore, Helen Southard
Peterson, Frank William
Platner, Evelyn Ideasa
Pressley, Margaret Thanum
Bambo, Florence Maude
Shawler, Florence
Smith, Linna Pauley
Smith, Marie Caroline
Stoner, Lillian Una
Swope, Helen Eugenia
Tomlinson, Margaret
Trenholme, Lottie
Wilbur, Alvira

University Normal Diplomas

Adams, Lucile Elizabeth
Allison, Weaver Judson
Beaven, Grace May
Bell, Doris Lillian
Bolster, Helen
Brown, Earl Theodore
Butcher, Bessie Elizabeth
Carney, William Harvey
Connors, Edna Eliza
Ellis, John Boyd
Elmore, Roma Marie Sartoris (Mrs.)
Falkoff, Anna Lea (Mrs.)
Flint, Lois E. A.

Jacobs, Isabelle
Little, Edward Milton
Lund, Katharine Louise
McDonald, Claire
MacPherson, Lexie
Nelson, Helen
Parker, Catherine Anna
Starr, Beatrice Evangeline
Steendahl, Anna Serine
Tift, Lillian Bryce
Vining, Marie
Vinsonhaler, Sara Rea
Wilson, Evelyn

SCHOLARSHIPS AND PRIZES AWARDED

June 15, 1918

The Judge Alfred Battle Debating Prize of \$75.00
John Main Coffee Donald John Coleman

The Philo Sherman Bennett Essay Prize of \$25.00
Not awarded 1918

The E. F. Blaine Oratorical Prize of \$100.00
Awarded to the University of Oregon

The Columbia University Fellowship of \$250.00 in
Mining, Engineering and Chemistry
Stanley Lougheed Handforth

The Judge Kenneth Machintosh Debating Prize of \$75.00
Not awarded 1918

The N. Paoella Gold Medal for Excellence in Italian
Emily Hall

The Allen Dale Debating Club
Not awarded 1918

The Isabella Austin Memorial Scholarship for a Freshman Woman
Kathryn Barnhisel

The Edwin A. Jaggard Law Essay Prize of \$50.00
Not awarded 1918

Men's Freshman Latin Prize of \$50.00
Not awarded 1918

Sophomore Latin Prize of \$25.00
Ruth Mayes Gladys Lucile Smith

The University State Bank Prize of \$25.00
William Emanuel Johnson

The Judge Thomas Burke Prize of \$25.00 for Excellence in French
Sarah Patience Sutton

The Judge Thomas Burke Prize of \$15.00 for Excellence in French
Dorothy Helen Chesley

The Loretta Denny Fellowships
Minnie Lorna Johnson (History)
George Frederick Meyer (Education)

Fellowship in the College of Mines and
the Seattle Station United States Bureau of Mines for 1918-19
Earl Roscoe Wilcox

The Mars Fellowship
Not awarded 1918

REGISTER OF STUDENTS

Abel, Robert Bryan.....Montesano	Allen, Lorraine.....Seattle
1st Law.....5082 21st Av NE	LD, Bus.....4710 Univ Blvd—Ken 1857
Abel, Lena Blanche.....Montesano	Allen, Mabel D.....Seattle
UD, Sci.....4547 19th Av NE—Ken 23	UD, Sci.....4311 Brooklyn Av
Abel, Marjory.....Montesano	Allen, Robert Lee.....Seattle
LD, Ed.....4547 19th Av NE—Ken 23	LD, Bus.....2323 32d St S
Abelset, Mark.....Seattle	Allibone, Pearl Hannah.....Seattle
2d Law.....4227 1st Av NE—N 2085	Sp, Phar.....1909 Howard Pl
Adams, Anna Cate.....Seattle	Allper, Morris.....Seattle
LD Bus.....1068 E Newton St—Cap 1177	LD, ME.....104 17th Av, Apt 2
Adams, Anne Brooks.....Bellingham	Almqvist, Paul Bernhard.....Seattle
Unc, FA.....2153 N 64th St—Ken 1146	UD, EE.....7630 2d Av NE—Ken 3538
Adams, Jeannette.....Spokane	Alvord, Mary Hamilton.....Chehalis
LD, LA.....4535 18th Av NE—Ken 1429	LD, Unc.....Clark Hall—N 262
Adams, Leta Zoe.....Seattle	Amundsen, Roy Edmund.....Seattle
LD, Bus.....715 Jefferson St—El 3143W	LD, Sci.....1933 30th Av S
Adams, William Mahlon.....Spokane	Anderberg, Marvin Ofelt.....Spokane
LD, LA.....4506 Univ Blvd—Ken 291	LD, ME.....Seattle YMCA
Adams, George Stanley.....Spokane	Andersen, Edna Florence.....Ferndale, RFD 1
LD, EE.....YMCA	LD, LA.....5038 20th Av NE—Ken 735
Adamson, John Quincy.....Sherman, Tex	Anderson, Arthur Joel.....Seattle
LD, For.....4738 19th Av NE—Ken 916	LD, Bus.....2646 W 58th St—Bal 599
Adams, Verona Ione.....Seattle	Anderson, Andrew Wallace.....Seattle
LD, FA.....4552 12th Av NE—Ken 1913	LD, Sci.....1635 14th Av—E 4403
Addy, Helen Frances.....Seattle	Anderson, August Reinhold.....Seattle
LD, FA.....4715 18th Av NE—Ken 888	LD, Sci.....406 11th Av NE—Cap 1643
Agoff, Alex.....Treadwell, Alas	Anderson, Blanche Price.....Baker, Or
SC, Min.....825 Kilbourne Av—N 2169	LD, LA.....4710 16th Av NE
Ahblad, Gerda.....Seattle	Anderson, Dorothea Marie.....Seattle
LD, FA.....4027 Whitman Av—N 1793	LD, LA.....3605 12th Av NE
Ahlakog, Amella.....Coeur d'Alene, Ida	Anderson, Dorothy.....Seattle
Bus Ad.....4731 19th Av NE—Ken 878	UD, Sci.....616 Shelby St
Ainsworth, Ruth.....Newport	Anderson, Edgar.....Ketchikan, Alas
LD, LA.....4755 11th Av NE—Ken 1218	LD, Phar.....4121 14th Av NE—N 745
Aitken, Victor Marshall.....Ferndale	Anderson, Evelyn Martha.....Seattle
UD, Bus.....4628 Bagley Av—N 3453	LD, Sci.....1724 W 64th St
Aitchinson, Clyde Stanley.....Seattle	Anderson, Fred.....Seattle
LD, ME.....5043 18th Av NE—Ken 1879	Sp, CE.....1569 Ferry Av
Akiyama, Aiaki.....Japan	Andersen, Frances Bertine.....Seattle
Unc, LA.....2986 1st Av	LD, Ed.....3409 25th Av S
Alambra, Rufe Zanduetta. S Tomas, Union P I	Anderson, Grace Richard.....Baker, Or
Sp, CE.....1404 E 41st St	LD, LA.....4710 16th Av NE
Albee, Archie Veryl.....Seattle	Anderson, Helen Dorothy.....Mabana
UD, Jour.....2488 W 57th St	Ud, LA.....5208 Univ Blvd
Alberts, Hazel Estella.....Seattle	Anderson, Helen Ethelyn.....Seattle
LD, LA.....609 W Nickerson St—QA 4758	LD, LA.....2712 11th Av W—QA 1168
Aldrich, Eric Newton.....Walla Walla	Anderson, Mrs Isabelle May Joiner.....Seattle
LD, LA.....5214 Univ Blvd—Ken 844	Grad.....4029 Kenyon St
Alexander, Florence.....Chehalis	Anderson, Lydia Cecilia.....Seattle
LD, Sci.....4710 19th Av NE—Ken 1085	UD, LA.....3905 E 46th St
Alfonso, Mrs Marie.....Seattle	Anderson, Mrs Lou E.....Seattle
Grad.....4837 14th Av NE—Ken 576	UD, LA.....
Allan, Doris Olga.....Seattle	Anderson, Mary.....Seattle
Unc, LA.....1816 Bellevue Av	LD, LA.....4710 Univ Blvd—Ken 1857
Allan, Helen Frances.....Seattle	Anderson, Mildred Aurora.....Mount Vernon
LD, LA.....4630 Univ Blvd—Ken 2496	UD, FA.....4704 18th Av NE—Ken 119
Allen, Beatrice.....Seattle	Anderson, Myrtle Elvira...Deer Lodge, Mont
LD, Sci.....7433 48th Av S	LD, LA.....4532 18th Av NE—Ken 2827
Allen, Edward.....Seattle	Anderson, Mary Philena.....Mount Vernon
LD, EE.....1825 7th Av W—QA 3829	LD, LA.....5015 Univ Blvd
Allen, George William.....Spokane	Anderson, Otto Duncan.....Edmonds
LD, LA.....4550 18th Av NE—Ken 3072	8d Law.....Edmonds—304 Edmonds
Allen, Glenna A.....Seattle	Anderson, Ray Horace.....Mt Vernon
LD, Sci.....5046 20th Av NE—Ken 1674	LD, Bus.....4504 16th Av NE—Ken 647
Allen, Herbert Wilmoth.....Spokane	Anderson, Robert Freeman.....Spokane
LD, Bus.....4532 18th Av NE—Ken 2827	Unc, LA.....4506 Univ Blvd—Ken 291
Allen, John M.....Seattle	Anderson, Rubert S.....Mount Vernon
1st Law.....5214 Univ Blvd	LD, Sci.....5212 18th Av NE—Ken 963
Allen, Lulu Wright.....Missoula, Mont	Anderson, Vida.....Everett
UD, Sci.....1688 Boylston Av	LD, LA.....4534 Univ Blvd—Ken 20
Allen, Doris Martha.....Monroe	Anderson, Virgil Leopold.....Tacoma
LD, LA.....4722 15th Av NE	LD, Bus.....5043 18th Av NE—Ken 1879

Andrews, LaMar Bert.....	Spokane
LD, Bus.....	5043 18th Av NE—Ken 1879
Andrews, Spencer Selden.....	Walsenburg, Colo
LD, For.....	5043 18th Av NE—Ken 1879
Andrews, Lucy.....	Seattle
LD, LA.....	4110 10th Av NE—N 8905
Angle, Herbert Grant.....	Shelton
LD, Bus.....	4832 18th Av NE
Angove, Clarence V.....	Seattle
UD, EE.....	4723 21st Av NE—Cap 2249
Angst, Ernest Clement.....	Chehalis, RFD 3
LD, Sci.....	4702 10th Av NE
Annett, Winnifred.....	Hoquiam
LD, Bus.....	4551 Univ Blvd—Ken 501
Anthes, Cora L.....	Everett
UD, FA.....	4704 18th Av NE—Ken 119
Aplin, Harold Cooper.....	Bellingham
Unc, LA.....	5235 Univ Blvd—Ken 618
Applegate, Lindsay Moritz.....	Harrington
LD, Sci.....	4746 18th Av NE
Arai, Clarence Takeya.....	Seattle
LD, CE.....	125 Prefontaine Pl—M 649
Archer, August Charles.....	Seattle
LD, ME.....	2511 9th Av W
Archer, Helen.....	Seattle
LD, LA.....	2306 11th Av N—Cap 2573
Archey, Dean.....	Seattle
LD, Bus.....	2120 E 47th—Ken 1176
Arkley, Helen Lothian.....	Tacoma
LD, LA.....	4547 Univ Blvd—Ken 1004
Arland, Sylvia Josephine.....	Montesano
LD, LA.....	Lewis Hall—N 162
Armond, Leroy Frederick.....	Seattle
LD, Sci.....	1416 W 11th St
Armstrong, Ruth A.....	Seattle
UD, LA.....	4330 11th Av NE
Arnell, Esther.....	Seattle
UD, Ed.....	5010 8th Av NE—Ken 3413
Arnesen, Elias.....	Seattle
LD, LA.....	
Arnold, Eugene Kirkman.....	Seattle
LD, Min.....	9833 Arrowsmith Av
Arnold, Marjorie.....	Portland, Or
LD, LA.....	5004 Univ Blvd—Ken 298
Arnold, George Philbrook.....	Seattle
LD, LA.....	3046 Beacon Av
Arnold, Ruth Louise.....	Naches
LD, FA.....	5014 15th Av NE—Ken 1714
Arthur, Amber.....	Seattle
UD, Bus.....	5004 Univ Blvd—Ken 298
Asmussen, August Julius.....	Settler, Alta
Unc, Min.....	5211 16th Av NE
A. S. U. W.....	Commerce Hall—Loc 49
Auld, Willis R.....	Yakima
Unc, LA.....	Mufti Club, Campus—N 55
Aucerson, Harold Wilbur.....	Seattle
LD, ME.....	67th and Palatine Av
Austin, George.....	Seattle
Sp, Ed.....	3648 Burke Av—N 1408
Axman, Bertram.....	Seattle
LD, EE.....	1010 E Republican St—Cap 1232
Avery, Marjorie Ruvilla.....	Seattle
LD, FA.....	4742 18th Av NE—Ken 806
Axman, Ernest.....	Seattle
LD, EE.....	1010 E Republican St—Cap 1232
Ayer, Elizabeth.....	Olympia, RFD 3
UD, FA.....	4710 19th Av NE—Ken 1085
Ayres, Katharine Mary.....	Seattle
LD, Sci.....	1430 29th Av—E 5624
Ayers, Pearl.....	Wapato
LD, Sci.....	Lewis Hall—N 162
Bach, Roy Odell.....	Seattle
UD, EE.....	4113 7th Av S
Bachelor, Robert Willard.....	Oakville
LD, Bus.....	4724 9th Av NE—Ken 2919
Badley, William Frank.....	Portland, Or
LD, Bus.....	4505 Univ Blvd
Bacher, Gladys A.....	South Prairie
Unc, FA.....	4425 4th Av NE—N 3743
Baehr, John Claus.....	Seattle
LD, EE.....	1809 Nob Hill Av—QA 1361
Baes, Florence Amalia.....	Seattle
LD, LA.....	4703 81st Av S
Balley, Harriette Ruth.....	Seattle
LD, Bus.....	610 83d Av—E 3277
Balley, James Milton.....	Seattle
LD, LA.....	1022 Queen Anne Av
Balley, Norva Elizabeth.....	Elma, RFD A
LD, LA.....	4314 10th Av NE
Bailey, William Locke.....	Seattle
LD, LA.....	4541 14th Av NE—Ken 158
Baird, Elizabeth.....	Seattle
LD, LA.....	5026 16th Av NE—Ken 2124
Baird, Lloyd Tallmadge.....	Seattle
LD, Bus.....	2711 32d S
Bakeman, Frances Louise.....	Snohomish
LD, Ed.....	5516 12th Av NE—Ken 2741
Baker, Charity Foxwell.....	Seattle
LD, LA.....	4822 Graham St—Rain 106M
Baker, Dorothy Ada.....	Seattle
LD, Sci.....	5209 Brooklyn Av
Baker, Florence A.....	Seattle
LD, Sci.....	1005 Summit Av N
Baker, Morton Charles.....	Spokane
LD, Bus.....	4520 21st Av NE—Ken 2600
Baker, Ruth Evangeline.....	Tacoma
LD, Sci.....	4732 21st Av NE—Ken 26
Baker, Samuel Garland.....	Tacoma
LD, Ch E.....	4760 21st Av NE
Balais, Daniel.....	Luchan, P I
Sp, Sci.....	Seattle YMCA
Baldwin, David E.....	Cedarhurst
UD, Bus.....	5043 18th Av NE—Ken 1879
Ballinger, Douglas Trumbull.....	Seattle
LD, Bus.....	1503 Hoge Bldg
Ball, Ardis L.....	Olympia
Unc, FA.....	1421 E Valley—E 3063
Balmer, Albert.....	Interlaken, Switzerland
Sp, LA.....	Seattle YMCA
Balmer, Mary Betty.....	Seattle
LD, FA.....	732 Belmont Pl
Baltuff, Lauraine Blake.....	Bellingham
LD, Min.....	5243 19th Av NE
Baltzer, Eugene Christian.....	Seattle
Grad.....	2230 W 63d St
Banes, Greta Elizabeth.....	Mount Vernon
LD, FA.....	4750 21st Av NE—Ken 1409
Banker, Helen Doris.....	Winthrop
LD, LA.....	916 E Mercer—Cap 303
Banks, Hugh Thomas.....	Tacoma
LD, LA.....	5507 15th Av NE—Ken 2655
Bannwarth, Charles Gustave.....	Seattle
LD, Bus.....	5218 Univ Blvd—Ken 3169
Bar, William Lawrence.....	Seattle
1st Law.....	1615 E Madison St—E 5901
Barbee, Harry James.....	Nez Perce, Ida
Unc, EE.....	Stonybroke Club, Campus—N 55
Barbee, Peyton E.....	Seattle
LD, LA.....	2408 N 46th St
Barbee, William Lee.....	Seattle
UD, EE.....	1111 40th Av NE—E 3270
Barber, Frank Clayton.....	Wenatchee
LD, Min.....	4719 16th Av NE—Ken 927
Barclay, Charles Paul.....	Seattle
LD, LA.....	4504 16th Av NE—Ken 647
Barclay, Elizabeth.....	Tacoma
LD, LA.....	4508 16th Av NE—Ken 2768
Bardanson, Otto Wathee.....	Blaine
LD, LA.....	4505 18th Av NE—Ken 333
Barker, Stuart.....	Seattle
LD, LA.....	4520 21st Av NE—Ken 2600
Barlow, Hertilta.....	Tacoma
LD, Sci.....	4714 Univ Blvd—Ken 2263
Barnes, Grace Rendolin.....	Tacoma
LD, LA.....	4532 19th Av NE—Ken 1092

Barnes, Walter Price.....Seattle Sp, Bus.....Bitter Lake—Bal 1695	Beam, Aubrey Burrows.....Seattle UD, EE.....357 25th Av—E 3146
Barnhisel, Kathryn.....Tacoma LD, LA.....4530 Univ Blvd—Ken 2496	Bemas, Clarisse Helen.....Seattle LD, LA.....East Seattle—Bea 1241
Barry, Georgie C.....Bellingham UD, Ed.....5203 18th Av NE—Ken 1253	Benezra, Hyman.....Seattle UD, EE.....115 20th Av
Bartell, Edyth Lorraine.....Oroville LD, Bus.....5015 Univ Blvd—Ken 1025	Bennett, Albert Lee.....Seattle UD, Ch E.....1432 28th Av
Bartlett, Clara.....Seattle LD, LA.....1205 8th W—QA 2350	Bennett, Anne.....Kopowsin Sp, Ed.....5203 18th Av NE—Ken 1253
Bartholf, Chester Earl.....Anchorage, Alas SC, Min.....819 E 67th—Ken 2271	Bennett, E Allen.....Seattle Grad.....4531 19th Av NE—Ken 1096
Bartholf, Ralph S.....Anchorage, Alas SC, Min.....819 E 67th St—Ken 2271	Bennett, Elmer Lloyd.....Montesano Unc, Law.....4845 11th Av NE
Bartlett, Frederick Arnold.....Boise, Ida LD, For.....2120 E 47th St—Ken 1176	Bennett, Gordon C.....Seattle LD, Bus.....5212 18th Av NE
Bassett, Charlotte Anne.....Hoquiam LD, ScI.....4503 16th Av NE	Bennett, Helen Marcia.....Wenatchee Grad.....4532 19th Av NE—Ken 1092
Bates, John Montague.....Portland, Or LD, Fisheries. 4530 14th Av NE—Ken 555	Bennett, Marjorie.....Yader LD, LA.....Lewis Hall—N 162
Bateman, Margaret Elizabeth.....Seattle LD, LA.....161 24th Av—E 9253	Bennett, Richard Francis.....Seattle LD, LA.....1229 21st Av N
Bath, Gerald Horton.....Seattle UD, Jour.....4550 18th Av NE—Ken 3072	Bennie, Alice Annie.....Stanwood LD, FA.....4724 16th Av NE—Ken 440
Batson, Mabel.....Seattle Baudino, Andrew.....Wallace, Ida Unc, Sci.....4746 16th Av NE	Bennington, C Edith.....The Dalles, Or LD, Phar.....1616 E 47th St—Ken 149
Bauer, Ruby Adele.....Ritzville LD, LA.....4547 19th Av NE—Ken 23	Benson, Virginia.....Seattle LD, LA.....4530 Univ Blvd—Ken 2496
Baungartner, Grace.....Seattle UD, FA.....711 16th Av—E 7770	Benson, Wilkam Glendinning.....Seattle LD, ChE.....5251 16th Av NE—Ken 2993
Baungartner, Walter Louis.....Okanogan 3d Law.....Anchorites Club, Campus—N 55	Benthlen, Elsie.....Tacoma UD, LA.....4711 6th Av NE—Ken 8143
Baxter, Lelah Merle.....Puente, Cal UD, Ed.....4547 19th Av NE—Ken 23	Bentley, Doris Ellen.....Boulder, Colo LD, Bus.....409 16th Av N—E 6691
Bayley, Nancy.....The Dalles, Or LD, LA.....1605 E 47th St	Benton, Harold Morse.....Seattle LD, LA.....5560 20th Av NE—Ken 2279
Beall, Harry.....Raymond LD, Ch E.....4576 11th Av NE	Benton, Louise Dow.....Seattle UD, FA.....5586 20th Av NE—Ken 1239
Beager, Irma Fredericka.....Seattle LD, Ed.....536 E 79th—Ken 2593	Benton, Robert Hugh.....Seattle Sp, Bus.....5560 29th Av NE
Bean, Erma Lois.....Spokane Unc, LA.....1500 E 62d St—Ken 1269	Benveniste, Robert.....Seattle LD, ScI.....705 3d Av
Bean, Mabel Louise.....Seattle LD, ScI.....4726 14th Av NE—Ken 1013	Benz, Fritz Rudolph.....Toppenshaw 3d Law.....4203 11th Av NE—N 2364
Beard, Dorothy.....Vancouver LD, LA.....4524 19th Av NE—Ken 199	Berg, Clifford.....Seattle LD, Bus.....5235 Univ Blvd—Ken 618
Beard, Irene Lucille.....Vancouver LD, LA.....4524 19th Av NE—Ken 199	Berg, Gunnar Hansen.....Kelso LD, ScI.....5224 14th Av NE
Beardsley, George O.....Yakima 3d Law.....5218 Univ Blvd	Berg, Lawrence R.....Missoula, Mont LD, EE.....923 E John St
Beatty, Jephtha Frank.....Seattle LD, ME.....529 Warren Av—QA 3398	Bergh, May Alice.....Seattle UD, LA.....2225 N 60th—Ken 3107
Becker, Gladys Aileen.....Seattle UD, LA.....4213 4th Av NE	Berzlund, Myrtle Ivana.....Mount Vernon LD, LA.....4547 Univ Blvd
Beckerjeck, Rozella Lauretta.....Seattle LD, LA.....417 13th Av N—Cap 2157	Berzlund, Phoebe.....Mount Vernon LD, FA.....4547 Univ Blvd
Beckes, Muriel Gertrude.....Grandview LD, ScI.....4750 Univ Blvd—Ken 806	Berzlund, Theo Henry.....Seattle LD, ScI.....511 Melrose Av N
Beckwith, Hortense.....Seattle UD, LA.....1911 N 49th	Bergman, Carl Odin.....Seattle LD, EE.....319 3d Av W—QA 3063
Beckwith, Samuel Vilas Jr.....Medford, Or LD, Bus.....General Delivery	Bergman, Eugene Elroy.....Breckenridge, Colo LD, ScI.....4504 6th Av NE—Ken 647
Behrens, Jerry Arthur.....Seattle SC, Min.....1912 Nob Hill Av—QA 3414	Bergman, Margaret Eunice.....Port Angeles LD, ScI.....4706 Univ Blvd
Belknap, Clifford V.....Bremerton Unc, EE.....5633 Brooklyn Av	Beromst, Charlotte I.....Tacoma UD, Lib.....4547 Univ Blvd—Ken 1004
Bell, Bonnie.....Spokane UD, LA.....3607 Densmore Av—N 938	Berren, Evelyn.....Seattle LD, ScI.....4130 12th Av NE—N 1087
Bell, John Karl.....Yakima UD, LA.....4616 21st Av NE—Ken 490	Bernhelm, Martha Julia.....Seattle LD, LA.....3742 Brooklyn Av
Bell, Margaret.....Seattle Unc, LA.....720 Bellevue Av N—Cap 2445	Best, Erle Clifton.....Grants Pass, Or LD, LA.....4218 10th Av NE—N 177
Bell, Wyloha Helen.....Spokane LD, Ed.....3607 Densmore Av—N 938	Betterton, Charlotte C.....Seattle Sp, ScI.....818 Roanoke St
Belstad, Walter Cyrus.....Seattle LD, Phar.....102 Fairview Av	Betts, Genevieve Dillaye.....Seattle LD, LA.....700 Kinnear Pl—QA 1291
	Beutel, Frederick K.....Tacoma LD, LA.....4722 18th Av NE—Ken 2861

- Bevis, Urando Gordon.....Lewiston, Ida
LD, Bus.....4506 Univ Blvd—Ken 291
- Bevis, Samuel M.....Lewiston, Ida
LD, Bus.....4506 Univ Blvd—Ken 291
- Biason, Perfecto.....Mang Pang, P I
LD, Sci.....Providence Hospital
- Bibb, Carlisle Hurst.....Tacoma
LD, Sci.....4503 Univ Blvd—Ken 236
- Bibb, John Taylor Jr.....Tacoma
UD, ME.....4503 Univ Blvd—Ken 236
- Bleckford, Ernest D.....Seattle
UD, Sci.....1714 16th Av—E 3869
- Blecksler, Anna Florence.....Salem, Ia
LD, Bus.....4508 16th Av NE—Ken 2768
- Bigelow, Edris.....Edmonds
LD, Bus.....5210 8th Av NE—Ken 1361
- Bigelow, Ernest C.....Edmonds
LD, Bus.....5212 18th Av NE
- Biggs, Mary Catherine.....Seattle
LD, FA.....1022 E Jefferson
- Billings, Charles Newport.....Portland, Or
LD, CE.....K'wai-Ka Club—N 55
- Billings, Oscar H.....Seattle
Grad.....915 E Mercer St—Cap 2243
- Bingham, Blanche Irene.....Seattle
LD, Ed.....1116 23d N
- Bissett, Ernest Eugene.....Seattle
UD, ME.....4522 18th Av NE
- Bissett, Rudolph A.....Vancouver, B C
LD, Sci.....4504 16th Av NE
- Blaxby, Ethel May.....Burton
Unc, Sci.....Sagamore Apts—QA 1001
- Bjorklund, Ellen Margaret.....Tacoma
UD, Sci.....Quarry Station
- Bjorkman, Milton Nathaniel.....Tacoma
LD, Bus.....4700 10th Av NE
- Black, Dorothy Ernestine.....Ellensburg
Unc, LA.....4504 18th Av NE—Ken 146
- Black, Myron Watt.....Spokane
LD, Ch E.....5214 Univ Blvd—Ken 844
- Black, Wendell Wilson.....Everett
2d Law.....4520 21st Av NE—Ken 2600
- Blagen, Celeste Virginia.....Hoquiam
LD, FA.....4508 16th Av NE—Ken 2568
- Blaine, James Arthur.....Seattle
LD, LA.....307 Lovman Bldg—M 4270
- Blair, Anna Clio.....Seattle
UD, LA.....1630 35th Av
- Blair, Doris.....Seattle
LD, LA.....3016 W 61st St—Bal 1250
- Blake, Alice Ainsmore.....Seattle
LD, Sci.....1416 Boylston Av—East 39
- Blake, Emelie Isabelle.....Aberdeen
LD, LA.....4508 16th Av NE—Ken 2768
- Blake, Martha Ellen.....Seattle
LD, Bus.....2021 33d Av S.—Bea 3740
- Blake, Buel B.....Seattle
UD, ME.....4505 18th Av NE—Ken 333
- Blau, Louise Wilhelmina.....Klowa, Tex
LD, LA.....4502 20th Av NE
- Bloss, William Rudolph.....Seattle
LD, Bus.....5152 Juneau St—Rain 452R
- Blue, Eugene Clair.....Woodland
UD, Bus.....4506 Univ Blvd
- Blumenfeld, Herman N.....Seattle
LD, Bus.....528 10th Av—E 4796
- Blumenfeld, Zipora.....Seattle
LD, Sci.....528 10th Av—E 4796
- Blumenthal, Rose.....Seattle
Unc, LA.....108 17th Av
- Bocke, Alma Marie.....Riverton, Wyo
Grad.....4706 Univ Blvd—Ken 702
- Bogardus, Helen Evelyn.....Seattle
LD, LA.....323 14th Av N—Cap 2839
- Bogojavlensky, Boris.....Seattle
Unc, CE.....512 Belmont Av N—Cap 714
- Bolcom, Henry Marfield.....Seattle
UD, CE.....4733 Univ Blvd
- Bolinger, J Clayton.....Seattle
1st Law.....4532 18th Av—Ken 2827
- Bolinger, Morris Albert.....Methow
LD, LA.....4532 18th Av NE
- Bolman, James.....Seattle
UD, Ed.....4714 Brooklyn
- Bolton, Edwin.....Seattle
LD, Ch E.....4514 16th Av NE
- Bomstead, Edward Seymour.....Tacoma
LD, ME.....Ace Club, Campus—N 55
- Bond, Austin DeMell.....Bellingham
LD, FA.....Ace Club, Campus—N 55
- Bonnell, Jenness Mildred.....Tacoma
LD, FA.....4535 18th Av NE—Ken 1429
- Bonnell, Marguerite.....Tacoma
Unc, LA.....4547 Univ Blvd—Ken 1004
- Bonner, Gertrude.....Centralia
LD, LA.....Clark Hall—N 262
- Bonner, Pearl.....Centralia
LD, Ed.....Clark Hall—N 262
- Bonnett, Howbert Bainter.....Seattle
LD, Bus.....1243 5th Av N—QA 4514
- Bookstore.....Campus—N 2950, Loc 37
- Booth, Charlotte L.....Seattle
LD, FA.....4535 18th Av NE—Ken 1429
- Booth, Marion Hunscombe.....Spokane
Unc, FA.....4710 19th Av NE—Ken 1085
- Bordeaux, Wilfred.....Seattle
LD, LA.....810 14th Av N
- Borzlin, Joseph N.....Seattle
LD, Sci.....3711 Burke Av
- Borrow, Robert.....Seattle
Unc, ME.....2220 33d Av S.—Bea 1096
- Boswell, Raymond Chester.....Seattle
Unc, Phar.....313 N 49th St
- Bouffleur, Ethel Julia.....Tacoma
LD, Ed.....Clark Hall—N 262
- Bouillon, Alfred Lincoln.....Seattle
LD, ME.....905 Boylston Av—E 7760
- Bovee, Margaret Alice.....Seattle
LD, LA.....4518 Univ Blvd—N 830
- Bowen, Joseph Chapin.....Walla Walla
LD, EE.....K'al-Ka Club, Campus—N 55
- Bowman, Beulah.....Seattle
LD, LA.....4318 Thackeray Pl—N 380
- Bowman, William.....Willapa
Unc, Bus.....934 Ewing St
- Boyd, Alice S.....Bremerton
LD, Phar.....4547 Univ Blvd—Ken 1004
- Boyd, Dorothy Valencourt.....Victoria, B C
LD, Sci.....Clark Hall—N 262
- Boyd, Lora Fern.....Seattle
Unc, Sci.....Leschi Boathouse—Bea 2344
- Boydston, Bernice.....Seattle
LD, LA.....Washington Annex—M 7192
- Boyrle, Florence Antoinette.....Portland, Or
LD, LA.....Clark Hall—N 262
- Bozarth, Norma.....Lexington, Neb
UD, Ed.....1616 E 47th St—Ken 149
- Brace, Alice.....Seattle
LD, Bus.....2012 E 45th St—QA 3403
- Brace, John Ben.....Seattle
LD, Bus.....2120 E 47th St—Ken 1176
- Brackett, Anson Wendell.....Seattle
UD, LA.....768 Bellevue Av N—Cap 868
- Bradley, Beatrice.....Selnh
LD, LA.....1616 E 47th St—Ken 149
- Brdley, Louis Cornell.....Seattle
LD, ME.....4210 10th Av NE
- Brady, Margaret Wilda.....Tacoma
LD, LA.....4530 Univ Blvd—Ken 2496
- Brady, Mary.....Spokane
LD, LA.....4718 20th Av NE
- Bragdon, Ruth A.....Seattle
UD, LA.....4757 22d Av NE—Ken 1282
- Braid, Frances May Hartwick.....Seattle
LD, FA.....2421 4th Av N—QA 813

REGISTER OF STUDENTS

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Branchflower, Norman Harold. Mount Vernon LD, Sci. 2120 E 47th St—Ken 1176	Brown, Laurine Seattle LD, LA. St Paul Apts—E 2608
Brandenthler, Anthony Arthur. Seattle UD, Bus. 1422 8th Av W—QA 2514	Brown, Marguerite. Seattle Sp, FA. 2126 Laurelhshde Av—E 4973
Branhall, Eugene Hulbert. Wallace, Ida LD, Ch E. 5218 Univ Blvd	Brown, Sarah. Yakima Unc, Bus. Clark Hall—N 162
Brandstrom, Axel, John Felix. Mount Vernon UD, For. 1218 N 49th St	Brown, Stewart Hazelton. Port Angeles Unc, LA. 4504 16th Av NE—Ken 647
Brandwijk, Eric Cornelis. Seattle LD, ME. 1201 James St—El 4873R	Brown, William Joseph. Seattle LD, Bus. 5235 Univ Blvd—Ken 618
Bratcher, Estey. Pomeroy Unc, Ed. 5203 18th Av NE—Ken 1253	Bruce, Helen R. Seattle LD, LA. 1914 E Republican—E 9121
Bratcher, Gladys. Payette, Ida Unc, Ed. 5203 18th Av NE—Ken 1253	Brueggerhoff, Anna Marie. Seattle Grad. 5225 10th Av NE—Ken 40
Brattain, James Theo. Seattle Unc, Bus. 4311 Brooklyn Av	Brueggerhoff, Marguerite. Seattle UD, Bus. 5225 19th Av NE—Ken 408
Braun, Paul John. Edwall LD, EE. 1107 E 47th St	Brueggeman, Kathryn. Seattle LD, Bus. 915 W Garfield—QA 1937
Brawman, Minnie. Spokane LD, Ed. 1815 E Alder—E 2232	Brugger, Andrew Julius. Gresham, Or LD, CE. 4203 11th Av NE
Brawner, Nancy Everett. Livingston, Mont LD, Sci. 4704 18th Av NE—Ken 119	Bruin, Dorothy Anita. Butte, Mont LD, Bus. 5032 21st Av NE
Brazier, John M. Seattle LD, Bus. 4508 Univ Blvd—Ken 236	Bryant, Lucile Swigart. Kennewick UD, LA. 4704 18th Av NE—Ken 119
Brehm, Helen Louise. Seattle LD, LA. 4530 Univ Blvd—Ken 2406	Buckler, Frank Dodge. Portland, Or Sp, Min. Seattle YMCA
Brengan, Samuel McClure. Seattle LD, Sci. 4305 15th Av NE	Budd, Irene Adair. Helena, Mont LD, Sci. 4535 18th Av NE—Ken 1429
Brewer, Harold Tyrrell. Olympia Sp, Sci. 5007 19th Av NE—Ken 2875	Budde, Charles Arthur. Blaine Unc, LA. 4118 10th Av NE—N 3427
Brickell, Charles Bruce. Seattle LD, LA. 1523 E 63d St—Ken 2622	Budden, Mrs Dorothy Perry. Seattle LD, Bus. 4518 Univ Blvd—Ken 96
Briem, Alfred J. Orillia UD, For. 4713 Brooklyn Av	Budden, Frank Wilfrid. Seattle LD, EE. 907 Boren Av—M 1272
Bringhurst, Alice Constance. Seattle LD, LA. 552 18th Av—E 2014	Bullard, Russell J. Vancouver, B C UD, Min. 5235 Univ Blvd—Ken 618
Britton, Hazel. Seattle Unc, LA. 4732 21st Av NE—Ken 26	Burdick, Mildred. Seattle LD, LA. 5251 19th Av NE—Ken 897
Britton, Morrill Vilma. Seattle LD, FA. 321 17th Av—E 8086	Burgess, Henrietta. Seattle UD, Sci. 9208 California Av
Brockman, Fred Williams. Seattle Unc, Sci. 10050 65th St S—Rain 415J	Burgess, Madeline. Pendleton, Or Unc, LA. Sorrento Hotel
Brockman, Matha. Seattle LD, LA. 4207 4th Av NE—N 1977	Burke, Florence Julia. Anaconda, Mont UD, Sci. 1208 E 43d St—Ken 2873
Brockman, Raymond. Seattle Unc, Bus. 4207 4th Av NE—N 1977	Burke, Frederick T. Portland, Or LD, Sci. 5434 15th Av NE
Brockman, Thelma Frances. Seattle LD, LA. 6200 Olympc Pl—QA 1895	Burke, Howard Mason. Walla Walla LD, Bus. 4532 18th Av NE—Ken 2827
Brokaw, Bernice. Stanwood UD, LA. 4714 Univ Blvd—Ken 2253	Burke, James Louis. Stockton, Cal Unc, Bus. 4500 Univ Blvd—Ken 291
Brokaw, Charles Alfred. Townsend, Mont LD, EE. YMCA	Burks, Charles R. Waterville LD, ME. 2722 10th Av N—Cap 345
Brokaw, Marlon. Tacoma LD, LA. 4742 18th Av NE—Ken 396	Burlingham, Frank Wilfrid. Forest Grove, Or LD, Bus. 4505 18th Av NE—Ken 383
Brokaw, Vernita. Stanwood LD, LA. 4714 Univ Blvd—Ken 2253	Burman, Esther Elizabeth. Bellingham Sp, Law. Lisbon Apts
Brouette, Belle Marie. Seattle Sp, FA. 1721 35th Av—E 3616	Burnett, John Andrew. Seattle LD, CE. 1611 30th Av—E 6526
Brown, Beatrice. Seattle UD, Ed. 5085 11th Av NE—Ken 2103	Burns, Evelyn Marie. Wenatchee LD, Bus.
Brown, Bedford Jr. Spokane LD, LA. 4532 18th Av NE—Ken 2827	Burns, Frank B. Oakland, Cal Sp, CE. 4502 12th Av NE—Ken 1686
Brown, Clarice Evangeline. Seattle Unc, LA. 1601 Palm Av—W 144R	Burnside, Mary Frances. Lewiston, Ida LD, LA. 4732 21st Av NE—Ken 26
Brown, Dorothy G. Seattle LD, LA. 934 22d Av N—E 1958	Burpee, Margaret Mary. Bellingham Unc, ME. 1616 E 47th St—Ken 149
Brown, Earl Dwight. Custer LD, Ch E. 4504 16th Av NE—Ken 647	Burque, LeRoy A. Seattle Sp, ME. 8111 Greenwood Av—Bal 1871
Brown, Edith Olivia. Friday Harbor LD, Sci. 4708 18th Av NE—Ken 2826	Burr, Margaret. Seattle UD, Ed. Capitola Apts
Brown, Elva. Ilwaco LD, Bus. RFD 7	Burroughs, Edward Lewis. Seattle LD, EE. 4503 Thackeray Pl—N 549
Brown, Ford Keeler. Seattle UD, LA. 6609 Weedn Pl	Burrows, Eleanor Warren. Seattle Unc, Ed. 4323 12th Av NE
Brown, Hugh Griffiths. Wenatchee LD, Sci. College Hotel—N 9	Burrows, Fremont George. Tacoma Unc, CE. 5012 10th Av NE—Ken 3227
Brown, James Leonard. Saskatchewan, Can SC, For.	Burson, Paul. Seattle LD, Bus. 1918 5th Av N—QA 2249

- Burton, Jennie L. Seattle
UD, Ed. 4713 14th Av N—Ken 2168
- Burton, Ruth Long Beach, Cal
LD, LA. 4561 Univ Blvd
- Bush, Florence Burlington
UD, Ed. 4714 Univ Blvd—Ken 2253
- Bush, Lyle Kenneth Bay Center
LD, LA. 4108 Sunnyside Av—N 1414
- Busse, Arthur Emil Seattle
LD, Ch E. 411 Warren Av
- Busselle, Burdette Brooklyn Tacoma
LD, Bus. 4714 Brooklyn Av—Ken 1170
- Butt, Ferdinand Hinckley Tacoma
Unc, CE. 2802 N 44th St
- Butler, Judson Rea Burton
LD, Bus. 4503 Univ Blvd—Ken 236
- Byars, Alfred T. Goldendale
LD, ME. 5038 Univ Blvd
- Byerly, Oliver Finley Portland, Or
LD, For. 5235 Univ Blvd
- Byles, Helen Bellingham
UD, LA. 4530 Univ Blvd—Ken 2496
- Byrne, L Thaddeus Seattle
LD, LA. 1017 Boren Av—Ell 2741J
- Byrd, Evelyn Lenore Burns, Or
LD, LA. 4704 18th Av NE—Ken 119
- Byrne, Mary Virginia Seattle
LD, LA. 905 Boylston Av—E 1553
- Cade, Ralph Arthur Kirkland
LD, ME. Kirkland—Black 451
- Cage, Mary Seattle
UD, LA. 1112 24th Av—E 7643
- Cain, Ray Carlye Wenatchee
LD, Bus. 4305 15th Av NE—Ken 720
- Cairns, Douglas Millors Seattle
LD, Bus. 3825 Albion Pl
- Cairns, Willard Josephine Walla Walla
LD, LA. Clark Hall—N 262
- Calder, Lester Edward Montesano
Unc, Bus. Barracks Clubs, Campus
- Caldwell, Elsie Georgiana Beaverton, Or
UD, LA. 1616 E 47th St—Ken 149
- Calhoun, Gladys Lillian Seattle
UD, LA. 116th W 76th St
- Calhoun, Helen Seattle
UD, FA. 1104 41st Av N
- Calkins, Ione Janice Bremerton
LD, Sci. 4502 E 50th St, RFD 1—Ken 2052
- Callender, James A. Dayton
LD, Ch E. 2120 E 47th St—Ken 1176
- Callow, Doris Elma
LD, Sci. 4125 Brooklyn Av—N 39
- Calt, Helen Ruth Seattle
LD, Ed. 6530 19th Av NE
- Calvert, Lawrence C. Seattle
LD, Bus. 2120 E 47th St—Ken 1176
- Calvin, Samuel Everett Miles City, Mont
LD, Ch E. 5243 19th Av NE—Ken 3400
- Cameron, Donald William Alice Arm, B O
Sp, Min. 4530 18th Av NE
- Cameron, Fawn Ellensburg
UD, FA. 1906 19th Av NE—Ken 933
- Cameron, Marion Phyllis Yakima
LD, Sci. 4754 16th Av NE—Ken 241
- Camp, Dorothy F. Seattle
LD, Sci. 615 Bell St—Ell 4860J
- Campbell, J Addison Jr. Seattle
LD, Ch E. 88th and 15th Av NE—Ken 740
- Campbell, Alice A. Moberg, S D
LD, FA. 4932 21st Av NE—Ken 26
- Campbell, Donald Stiles Spokane Bridge
LD, BE. 4616 21st Av NE—Ken 1743
- Campbell, Adaline Blanche Kirkland
Unc, Ed. Kirkland—Black 341
- Campbell, Esther Mary Seattle
UD, Sci. 5252 16th Av NE—Ken 2568
- Campbell, Florence Elizabeth Chelan
UD, LA. Clark Hall—N 262
- Campbell, Jean Allison Bremerton
LD, LA. Bremerton
- Campbell, Kenneth Seattle
UD, Sci. 5975 Rainier Av—Rain 123M
- Campbell, Larrabee Alvin Knoxville, Ia
UD, Sci. Barracks Square, Campus
- Campbell, Mary Seattle
UD, LA. 5557 Campbell Pl
- Campbell, Mary Helen Seattle
LD, LA. 1408 17th Av—E 4613
- Campbell, Arthur Talbot Seattle
LD, BE. 1129 21st Av N
- Campbell, Veronica Seattle
LD, Ed. 1522 Taylor St
- Campion, Cyrus Ranke Seattle
LD, Bus. 4520 21st Av NE—Ken 3600
- Caples, Douglas Elwood Vancouver
LD, LA. Mufti Club, Campus
- Caroy, Henry Ames Seattle
Sp, LA. 4318 11th Av NE
- Carl, Emil Seattle
LD, Ch E. 4746 18th Av NE
- Carlson, Agnes Naomi Seattle
Grad. 625 Spring St—M 6172
- Carlson, Clarence Herbert Pasadena, Cal
LD, Bus. 4550 18th Av NE—Ken 3072
- Carlson, Wilma Eloise Fairbanks, Alas
LD, LA. Clark Hall—N 262
- Carman, Josephine Dorothy Seattle
LD, LA. 124 29th Av—Bea 783
- Carmichael, Paul Seattle
LD, LA. 310 E 50th St—Ken 2092
- Carpenter, Mary Jane Seattle
LD, FA. 1015 Ravenna Blvd
- Carr, Eva Sabine Seattle
LD, Phar. 2112 E 47th St—Ken 138
- Carr, Howard Maynard Tacoma
UD, Ch E. 4506 Univ Blvd—Ken 291
- Carrigan, Marian Seattle
LD, LA. 4530 Univ Blvd—Ken 2496
- Carroll, Emmett R. Seattle
Grad. 5007 19th Av NE—Ken 2375
- Carroll, Geneva North Seattle
UD, FA. 5614 11th Av NE
- Carroll, Virginia Wood Seattle
LD, LA. 2008 E 47th St—Ken 185
- Carson, Helen Isabell The Dalles, Or
Unc, Sci. 4539 8th Av NE—N 2698
- Carstens, Wanita Seattle
LD, LA. Cor Charles and Yakima Sts
- Carter, Louis Edward Seattle
Grad. 6309 5th Av NE
- Cartwright, Robin Shaylor Spokane
LD, Sci. 5007 19th Av NE—Ken 2375
- Carver, Mrs Luetta Dorothy Seattle
Sp, FA. 2108 E 54th St—Ken 3059
- Case, Randall Stanway Seattle
2d Law. 5604 16th Av NE—Ken 320
- Cassidy, Dorothy Catherine Seattle
LD, Ed. 503 N 62d St—Bal 3873
- Cate, Thelma Tacoma
Unc, LA. 1718 Minor Av
- Cathcart, Edith Eleanor Seattle
LD, LA. 556 19th Av—E 5712
- Catlin, Brydeen Vena Kelso
LD, Sci. 4738 16th Av NE—Ken 3328
- Catlow, Eunice Marie Bend, Or
LD, LA. 4524 Univ Blvd—Ken 721
- Catlett, James Theodore Seattle
UD, BE. 4015 Meridian Av
- Caughy, Margaret Seattle
Unc, LA. 1431 13th Av—E 5841
- Chamberlain, Ewart Hadley Spokane
LD, Bus. 5212 18th Av NE
- Chamberlain, Percy Ira Seattle
UD, Sci. 1427 28th Av

Chamberlin, Henrietta Bloodgood	Tacoma
2d Law	4518 18th Av NE—Ken 2644
Chambers, Clarke Robert	Port Angeles
LD, ME	1133 33d Av S
Champlin, Winifred Esther	Seattle
LD, Sci	5214 Univ Blvd—Ken 844
Chandler, Louise	Yakima
LD, FA	4540 Univ Blvd—Ken 3216
Chapman, Aleta Elva	Seattle
LD, LA	2356 N Broadway—Cap 505
Chapman, Fred Williams	Parma, Ida
LD, Bus	5037 22d Av NE
Chapman, Thomas Wayne	Seattle
Unc, Sci	3718 18th Av SW
Charroln, Eula	Seattle
LD, Sci	625 5th Av W—QA 1032
Charlton, Harriet Jane	Chehalis
UD, FA	
Chase, Wendell Corwin	Seattle
LD, ME	2120 Warren Av—QA 2750
Chase, Philip N	Seattle
LD, EE	2120 Warren Av—QA 2758
Chase, Shirley McCollister	Edmonds
LD, LA	2116 N 44th St
Chase, Warren LeRoy	Yakima
LD, Bus	4520 21st Av NE—Ken 2000
Cheeseman, Elsie Maybelle	Norton, Kan
LD, Ed	2122 5th Av W
Chesley, Dorothy Helen	Seattle
LD, LA	1416 E 41st St—N 5
Chilberg, Elmer	Spokane
Unc, EE	Ace Club, Campus—N 55
Chilberg, Ernest Edwin	Spokane
LD, EE	Ace Club, Campus—N 55
Chinn, Wing Sam	Seattle
UD, FA	312 12th Av S
Chittenden, Miriam	Paterson, N J
LD, Sci	Clark Hall—N 262
Chittenden, Ruth Henriette	Seattle
LD, Ed	4222 Graham Av
Christian, Byron Hunter	Spokane
UD, Jour	4700 19th Av NE
Christensen, Agnes Birgitte	Parkland
UD, LA	46 E Boston St—Cap 2618
Christianson, Luella	Seattle
LD, Ed	4534 Univ Blvd—Ken 20
Christopher, Ian Wesley	Olympia
Unc, M E	3527 Woodlawn Av
Clark, Carroll Clifton	Kent
LD, For	
Clark, Geraldine Delacour	Bremerton
LD, Phar	4551 Univ Blvd—Ken 501
Clark, Gwendolene Dolores	Bremerton
LD, Phar	4551 Univ Blvd—Ken 501
Clark, Helen Tibbits	Richmond Highlands
LD, LA	4547 19th Av NE—Ken 28
Clark, Laura Elizabeth	Colville
LD, Sci	5204 18th Av NE—Ken 2810
Clark, Newman Hall	Walla Walla
Unc, LA	2120 E 47th St
Clark, Thomas Stuart	Dungeness
LD, EE	1628 6th Av W—QA 1891
Clark, Wendell Whittier	Seattle
LD, Bus	1420 4th Av W
Clarke, Alta M	Portland, Or
UD, FA	2012 E 45th—Ken 2645
Clarke Ellnor	Seattle
UD, Sci	4520 5th Av NE—Ken 2253
Clarke, Linnie Lacey	Auburn
Sp, Ed	4219 15th Av NE
Clarke, Loretta Leslie	Auburn
LD, EE	4238 12th Av NE—N 329
Clarke, Margaret	Auburn
LD, EE	1915 E Cherry St
Clarke, Richard G	Seattle
LD, Bus	4520 5th Av NE—N 1077
LD, LA	4505 18th Av NE—Ken 338
Clarke, Richard K	Seattle
Clausen, Ada	Twin Falls, Ida
UD, Bus	4518 Univ Blvd
Clausen, Elva	Seattle
UD, LA	4718 Univ Blvd, Rain 233W
Clausen, Laura	Twin Falls, Ida
LD, Bus	4332 9th Av NE
Clausen, Wendell Herman	Seattle
LD, Phar	8446 46th Av S—Rain 233W
Claussen, Jeanne	Tacoma
LD, Bus	5014 19th Av NE
Claybaugh, Esther	Castle Rock
LD, LA	4722 Brooklyn Av—Ken 150
Claypool, John Cowles	Seattle
UD, Sci	5210½ 12th Av NE
Clein, Norman	Seattle
Unc, Sci	2533 Shoreland Dr—Bea 807
Cleland, Faith	Seattle
UD, Ed	4710 Univ Blvd—Ken 1857
Cleland, Louise	Seattle
LD, LA	662 Olympic Pl—QA 3221
Cleman, Ralph Carroll	Ellensburg
LD, Bus	4506 Univ Blvd—Ken 291
Clemens, Catharine	Grants Pass, Or
LD, Sci	4742 18th Av NE—Ken 393
Clifford, Ray	Seattle
LD, ME	6518 25th Av NW
Clifton, Clarence Cathcart	Seattle
LD, Ch E	1712 Nob Hill Av
Cline, Felix John	Seattle
UD, Ch E	1222 Summit Av
Cline, Matthew John	Tacoma
LD, EE	4504 16th Av NE—Ken 647
Clithero, Russell Linville	Yakima
LD, ChE	Ace Club, Campus—N 55
Cloes, Harry Guy	Fairbanks, Alas
SC, Min	1503 18th Av
Close, Anita Lillian	Kalama
LD, Sci	4540 Univ Blvd—Ken 3216
Clothier, Lyle Bell	Bellingham
LD, Phar	5218 Univ Blvd—Ken 3169
Culow, John William	Newcastle
UD, Ch E	Box 1443, Renton
Coats, George Franklin	Seattle
LD, Min	128 Highland Dr
Cochran, Avadana	Seattle
UD, FA	120 W Prospect—QA 1390
Cochran, Catharyn Elizabeth	Seattle
LD, LA	4710 Univ Blvd—Ken 1857
Cochran, Nancy Lois	Portland
LD, LA	4710 19th Av NE—Ken 1085
Cochran, Velma	Seattle
LD, LA	209 13th Av N—Cap 1827
Cochrane, Edward Lambert	Kent
Unc, LA	116 25th Av—Bea 2436
Cochrane, Mavis Claire	Seattle
LD, LA	2015 W 60th St—Bal 1291
Coffee, John Main	Tacoma
1st Law	5043 18th Av NE—Ken 1879
Coffin, Geraldine	Yakima
LD, LA	1027 Bellevue Ct—Cap 3436
Coffin, Margaret	Yakima
LD, LA	4520 Univ Blvd
Coffin, Whitney Wenner	Yakima
LD, Bus	4520 21st Av NE—Ken 2600
Cohen, John Wilfrid	Seattle
Unc, Bus	920 7th Av
Cohoos, Orlando	Spokane
LD, LA	3248 19th Av NE—Ken 3460
Cole, Gladys Genevieve	Seattle
Unc, FA	4543 Univ Blvd—Ken 659
Cole, Kenneth Carey	Seattle
LD, LA	2102 E 50th St—Ken 1550
Cole, Miriam Elizabeth	Seattle
UD, LA	4504 18th Av NE—Ken 146
Coleman, John Edward	Portland, Or
LD, Ed	3815 Desmore Av
Coleman, Clarence Joseph	Everett
UD, LA	4520 21st Av NE—Ken 2600

- Coleman, Fred William.....Seattle
 LD, EE.....925 18th Av N
 Coleman, Vera Faye.....Blickleton
 LD, LA.....4532 18th Av NE
 Colesworthy, Margaret E.....Pendleton, Or
 LD, LA.....4710 Univ Blvd—Ken 1857
 Colliard, Harry Eugene.....Spokane
 LD, Bus.....4532 18th Av NE
 Collier, Irene.....Seattle
 LD, Bus.....602 N 41st St
 Collins, Alton Laffey.....Portland, Or
 LD, For.....4503 Univ Blvd—Ken 236
 Collins, Marie.....Seattle
 Grad.....
 Collins, William Chapin.....Seattle
 LD, LA.....324 Harvard Av N—Cap 676
 Collins, Charles Russell Jr.....Seattle
 UD, ME.....824 Harvard Av N—Cap 676
 Colman, Kenneth B.....Seattle
 UD, Sci.....RFD 4, Box 230
 Colson, Belle Tyler.....Seattle
 Sp, Bus.....5529 Kenwood Pl—N 353
 Colton, Grace Edith.....Seattle
 UD, Sci.....4532 19th Av NE—Ken 1092
 Colton, Jeannette.....Seattle
 LD, LA.....4532 19th Av NE—Ken 1092
 Commons.....H E Hall—Loc 56
 Compton, Sue.....Seattle
 LD, FA.....4019 6th Av NE
 Comstock, George Kimball.....Seattle
 LD, Bus.....4506 Univ Blvd—Ken 291
 Condon, Marie Teresa.....Seattle
 LD, LA.....3018 W 58th St
 Condon, Charles McVeigh.....Hanford
 LD, Bus.....5214 Univ Blvd—Ken 844
 Condon, Dorothy.....Seattle
 UD, Sci.....626 13th Av N—Cap 1648
 Conger John Alexander.....Nez Perce, Ida
 LD, EE.....Stonybroke Club, Campus
 Conkey, Glen Byron.....La Grande, Or
 LD, Bus.....5285 Univ Blvd—Ken 618
 Conner, Herbert St Clair Jr.....Seattle
 LD, Bus.....1251 21st Av N—E 5323
 Conway, Harold Joseph.....Seattle
 LD, CE.....106 Lynn St—QA 955
 Cook, Ellis Barber.....Seattle
 LD, For.....1620 3d Av W—QA 82
 Cook, Erving S.....Anacortes
 LD, Bus.....4503 Univ Blvd—Ken 236
 Cook, Etha M.....Seattle
 UD, FA.....5036 21st Av NE—Ken 2492
 Cook, Jennie N.....Burns, Or
 LD, LA.....4704 18th Av NE—Ken 119
 Cook, Lois.....Snohomish
 LD, Ed.....4714 Univ Blvd—Ken 2253
 Cook, Marjorie Virginia.....McKenna
 LD, FA.....4710 Univ Blvd—Ken 1857
 Cooke, Philetus George.....Bellingham
 LD, LA.....Mufti Club, Campus
 Cooley, Austin George.....Seattle
 LD, EE.....2108 Smith Bldg—Ell 870
 Coolidge, Eva Alethea.....Seattle
 Unc, Sci.....5023 Prince St—W 518M
 Cooper, Mrs Elizabeth Ann.....Seattle
 Sp, FA.....714 W Galer St—QA 3171
 Cooper, S Helen.....Charleston
 Unc, LA.....4123 12th Av NE—N 3870
 Cooper, Isabel Donkin.....Tacoma
 LD, Bus.....4547 Univ Blvd—Ken 1004
 Cooper, Rebecca.....Seattle
 LD, Sci.....526 24th Av S—Bea 1566
 Cootes, Sarah.....Dawson, Y T
 LD, Bus.....4604 18th Av NE—Ken 146
 Corbally, John Edward.....Seattle
 Unc, Bus.....6352 51st Av S
 Corbett, Alexander Hazen.....Yakima
 LD, FA.....5043 18th Av NE
 Corbett, Donald Glenn.....Seattle
 LD, Sci.....5525 16th Av NE
 Corbin, Florine Cleo.....Seattle
 Grad.....2347 Broadway N
 Cordero, Rosario M.....Bawan, P I
 LD, Phar.....5010 18th Av NE—Ken 605
 Cordes, Henry G.....Bremerton
 Grad.....
 Cordz, Mamie.....Seattle
 UD, Lib.....5084 16th Av NE—Ken 1024
 Cordz, Ora A.....Seattle
 LD, LA.....5034 16th Av NE—Ken 1024
 Corey, Esther M.....Tacoma
 UD, Sci.....1906 E 45th St—Ken 983
 Cornay, Luther Immanuel.....Seattle
 Grad.....6408 17th Av W—Bal 989
 Cornell, Lora.....Tacoma
 LD, LA.....4714 19th Av NE
 Corner, Watson W.....Wallace, Ida
 UD, Bus.....5235 Univ Blvd—Ken 618
 Cornett, William.....Yakima
 LD, Bus.....5211 16th Av NE—N 184
 Costello, Eleanor.....Mount Vernon
 LD, LA.....4551 Univ Blvd
 Couch, Margaret Jessie.....Missoula, Mont
 UD, LA.....1208 E 48d St—Ken 2873
 Council, Elizabeth.....Seattle
 UD, LA.....5625 15th Av NE—Ken 276
 Countryman, Eva A.....Methow
 UD, Sci.....1906 E 45th St
 Courtney, Charles Edwin.....Seattle
 Unc, Law.....1438 W 46th St
 Covey, Helen A.....Seattle
 LD, Ed.....4131 Whitman Av—N 642
 Cowan, Harry Wilfer.....Seattle
 LD, Bus.....3915 2d Av NE—N 644
 Cowley, Mildred Lockwood.....Seattle
 Sp, Bus.....2663 Thorndyke Av
 Cowgill, Lester Blaine.....Choteau, Mont
 UD, EE.....5651 12th Av NE
 Cox, Beatrice Triban.....Seattle
 LD, FA.....216½ Belmont Av
 Craib, Margaret Cumming.....Seattle
 UD, LA.....2146 N 64th St—Ken 1898
 Craig, Miriam Schutz.....Seattle
 LD, LA.....812 E Lynn St—Cap 2739
 Cramer, Russell Jay.....Seattle
 LD, ME.....500 Collins Bldg
 Crane, Lillian Alice Dean.....Seattle
 LD, LA.....2036 King St—Bea 1946
 Craske, Frederick Holdaway.....Bellingham
 Unc, Ed.....Seattle YMCA
 Craver, Eugenia.....Seattle
 UD, FA.....4704 18th Av NE—Ken 119
 Crawford, Arthur Wallace.....McKenna
 LD, LA.....4506 Univ Blvd—Ken 201
 Crawford, Eugenia.....Butte, Mont
 Unc, Bus.....4219 15th Av NE—N2542
 Crawford, Maude Ethel.....Hoquiam
 LD, LA.....4719 Univ Blvd
 Crawford, Miriam.....Seattle
 Sp, FA.....1520 7th Av W—QA 1645
 Crell, Edward William.....Seattle
 UD, Ch E.....6043 26th Av NE—Ken 1122
 Crimmins, George James.....Bellingham
 LD, LA.....5235 Univ Blvd—Ken 618
 Criss, Charles.....Oaksdale
 LD, Sci.....5020 12th Av NE—Ken 2044
 Cronise, Harry Wilmot.....Salem, Or
 Unc, FA.....4235 9th Av NE
 Croockewit, Alex Pedro.....Spokane
 LD, Bus.....416 E Pine St
 Cropsy, Katherine Margaret.....Tacoma
 UD, Sci.....
 Crosby, Sarah Miriam.....Seattle
 LD, Sci.....321 Univ Blvd—E 8086
 Crouch, Donna Leone.....Custer, Mont
 Unc, LA.....4550 18th Av NE

Crouley, Anne Claire	Seattle	Darlington, Nora Elizabeth.....	Butler, Ky
UD, LA.....4554 18th Av NE—Ken 3212		LD, Jour...Rosemary Club, 9th and Cherry	
Crowder, Harriet	Seattle	Darwin, Mrs Katharine	Seattle
LD, Sci.....5017 12th Av NE—Ken 2001		Sp, LA.....Algonquin Apts	
Crowley, Margaret Montana.....	Butte, Mont	Davidson, Beth	Seattle
Unc, Bus.....1616 E 47th St—Ken 149		LD, LA.....4504 18th Av NE—Ken 146	
Crump, John Kennan	Seattle	Davidson, Martha Harrison..Anaconda, Mont	
LD, LA.....4121 14th Av NE—N 745		LD, LA.....1616 E 47th St—Ken 149	
Cuddy, George A.....	Tacoma	Davidson, Thomas Nelson	Seattle
UD, Bus.....4722 18th Av NE—Ken 2861		LD, LA.....2233 12th Av N—Cap 1922	
Culliton, John Garnet	Seattle	Davies, Dorothy Drew.....	Lakeview
LD, EE.....4046 Latona Av		LD, Ed.....203 E 55th St	
Culver, Evelyn L.....	Friday Harbor	Davies, Elsie.....	Carbonado
UD, LA.....Clark Hall—N 262		Unc, FA.....4238 12th Av NE—N 320	
Culver, Ida	Seattle	Davies, Esther	Seattle
UD, Sci.....1722 Summit Av		LD, Sci.....1944 8th Av W—QA 929	
Culver, Marjorie	Spokane	Davies, Lucille	Port Orchard
LD, FA.....4710 Univ Blvd—Ken 1857		LD, LA.....Port Orchard	
Culver, Ralph Milton	Seattle	Davies, Myron Lloyd	Seattle
Unc, Bus.....604 W Howe St		LD, LA.....5212 18th Av NE	
Cummings, Ardyce Helen	Seattle	Davies, Violet	Tacoma
LD, Ed.....2736 10th Av NE—Ken 2080		LD, Sci.....5711 Kensington Pl—Ken 274	
Cunningham, B Theresa	Seattle	Davis, Dorothy Carvel	Seattle
UD, LA.....4751 10th Av NE		LD, Sci.....5516 10th Av NE—Ken 2347	
Cunningham, Creigh James.....	Everett	Davis, Lois Lillian	Seattle
LD, LA.....4504 18th Av NE—Ken 146		LD, LA.....5516 10th Av NE—Ken 2347	
Cunningham, Marie	Seattle	Davis, Mary Aleen	Bellingham
Unc, LA.....1341 44th St SW		Unc, Sci.....4705 16th Av NE—Ken 98	
Cunningham, Randolph Frick.....	Everett	Davis, Ruth M.....	Bellingham
LD, Bus.....5037 22d Av NE—Ken 647		LD, Phar.....4705 16th Av NE—Ken 98	
Currey, Ruth Seymour	Evanston, Ill	Davis, Stephen Marsh	Portland, Or
Unc, LA.....1616 E 47th St—Ken 149		LD, Bus.....4503 Univ Blvd	
Currie, Mary Esther	Cashmere	Davison, Elmer Edgar.....	Boise, Ida
LD, Sci.....5214 Univ Blvd		Unc, Bus.....4724 9th Av NE—Ken 2919	
Currie, Vera M.....	Bellingham	Day, James F.....	Seattle
UD, Ed.....4543 Univ Blvd—Ken 659		Unc, LA.....Stonybroke Club, Campus	
Curtis, Frank Lewis	Seattle	Dean, Mrs. Emma N Meter	Seattle
LD, Bus.....310 E Harrison St		Grad.....4022 Brooklyn Av—N 1714	
Curtis, Hugh Lee	Centralia	Dean, Eva Grace.....	Livingston, Mont
SC, For		Unc, Bus.....4811 Brooklyn Av—Ken 1547	
Curtiss, Verne E.....	Seattle	Dean, James Strickler	Seattle
LD, Bus.....Lewis Hall—N 162		LD, EE.....4022 Brooklyn Av—N 1714	
Cushman, Edward Henry.....	Tacoma	DeCan, Lawrence Malon	Seattle
Unc, EE.....4520 21st Av NE—Ken 2600		UD, ME.....1416 E 41st St—N 184	
Cutter, Julia Louise	Sheridan, Wyo	Deets, Walter George	Odessa
LD, Sci.....1205 E 45th St—Ken 1016		LD, Sci.....5038 18th Av NE	
Cutter, Susan Ethel	Sheridan, Wyo	Defensor, Hilarton	Pololan, P I
UD, Sci.....1205 E 45th St—Ken 1016		Unc, Law.....4115 15th Av NE—N 2377	
Cutting, Roger Hall	Seattle	DeForce, James Allen	Seattle
LD, Bus.....4510 12th Av NE—Ken 724		LD, LA.....5235 Univ Blvd—Ken 618	
Cutts, Beatrice Tyler	Seattle	DeHaven, Edward E.....	Seattle
LD, LA.....3700 E 44th St		Unc, EE.....3821 Eastern Av—N 2253	
Dalby, Milton Joseph	Ketchikan, Alas	Deierlein, Grace	Everett
UD, EE.....5214 Univ Blvd—Ken 844		UD, LA.....4508 16th Av NE—Ken 2768	
Dahlin, Ebba	Seattle	DeLaney, Henry Lewis	Oswego, Mont
UD, LA.....46 E Boston St—Cap 2618		LD, Bus.....1613 Nob Hill Av—QA 769	
Dalley, Ervin	Everett	DeLong, Abe James	Seattle
LD, LA.....1712 Ravenna Blvd		UD, EE.....4134 12th Av NE	
Dalley, Ethel	Seattle	DeLapp, Virgil C.....	Pasadena, Cal
LD, LA.....4533 19th Av NE—Ken 232		S, For	
Dalley, Ruth E.....	Seattle	Delvendahl, Bertha Marie.....	Charleston
LD, Bus.....5046 10th Av NE—Ken 2802		LD, LA.....1512 3d Av N—QA 3910	
Dally, Katharine Nichols	Seattle	Demro, Grace Winifred	Seattle
LD, Jour.....1207 E Boston St—Cap 2434		LD, LA.....1323 E 45th St	
Dally, Ruth W.....	Seattle	Demuth, Orin	Seattle
LD, LA.....2608 10th Av N—Cap 2623		LD, EE.....320 Summit Av N	
Dammann, Marjorie Luse.....	Parkland	Denney, Charles	Everett
UD, Sci.....1721 35th Av—E 3616		LD, LA.....2120 E 47th St—Ken 1176	
Dand, John Mungo	Seattle	Dennis, Sarah Adelaide	Seattle
LD, Bus.....5040 19th Av NE—Ken 3547		Unc, LA.....4531 36th Av NE—Ken 121	
Daugherty, Anna Mott.....	Newport, Or	Dennis, Harrison	Idaho Falls, Ida
UD, Sci.....1007 E Marion St—E 3334		LD, LA.....6400 Brooklyn Av—Ken 2918	
Daniel, Leland	Spokane	Denny, Robert Orr.....	Seattle
Unc, Bus.....Anchorite Club, Campus		LD, Bus.....Windsor Apts	
Dare, Earl	Seattle	DeSelleme, George Wesley	Toppenish
LD, Bus.....4518 16th Av NE—Ken 2953		UD, EE.....4756 11th Av NE—Ken 2682	
		DeShon, Marguerite.....	Seattle
		UD, LA.....4323 2d Av NE—N 2378	

- DeSpain, Harold S. Palmer, Or
LD, For. 5043 18th Av N—Ken 1879
- Devenish, Olive Calgary, Alta
UD, Ed. 4540 Univ Blvd—Ken 3216
- DeVoe, Donald Robert. Seattle
UD, Bus. 235 Queen Anne Av—QA 738
- Devonshire, Anna Laura Montesano
Unc, Sci. 4714 19th Av NE—Ken 2761
- Dibble, Alice R. Berkeley, Cal
UD, Ed. 1804 E 50th St—Ken 802
- Dibble, Frances Berkeley, Cal
UD, Ed. 1804 E 50th St—Ken 802
- Dickens, Miss Gordon Stellacoom
LD, Sci. 4704 18th Av NE
- Dickey, Frank Heald Seattle
LD, Min. 1424 7th Av W—QA 2711
- Dickenson, Laura Dayton
LD, LA. 4524 19th Av NE—Ken 199
- Dickson, Eleanor Loleta, Cal
UD, Jour. 1616 E 47th St—Ken 149
- Dickson, Laura Tacoma
UD, Lib. 4710 Univ Blvd—Ken 1857
- Dickson, Virgil Paul. Omak
LD, Bus. 5043 18th Av NE—Ken 1879
- Dillon, Margaret Winans Bellingham
UD, LA. 5023 15th Av NE—Ken 1273
- Dimock, Dorothy Seattle
UD, LA. 424 35th Av—E 1670
- Dimock, Stuart Marshall Seattle
LD, CE. 424 35th Av—E 1670
- Dingle, Helen M. Yakima
LD, Bus. 4754 16th Av NE—Ken 2988
- Dirimble, Belle LaConner
UD, LA. 1408 E 42d St—N 48
- Dodd, Hamlet Porch Wapato
LD, LA. 5243 19th Av NE—Ken 8640
- Dodd, Harry LeRoy Seattle
LD, LA. 6801 14th Av NE
- Dodge, Estella Grace Portland, Or
LD, Sci. 912 E 42d St—N 1795
- Dodge, Maxine Harriet. Anacortes
Unc, FA. 2021 33d Av S—Bea 3740
- Dodge, Mildred Laura Portland, Or
LD, Sci. 4535 Brooklyn, Av
- Doell, William Daniel Lind
LD, LA. 5218 Univ Blvd—Ken 3160
- Doheny, Charlotte F. Seattle
UD, LA. 4530 Univ Blvd—Ken 2496
- Doheny, Harriet Josephine Seattle
LD, LA. 526 18th Av—E 42
- Doherty, Ruth Frances. Seattle
Unc, LA. 202 17th Av—E 859
- Dolph, Adelaide Valentine. Cedarhurst
Sp, LA. Clark Hall—N 262
- Donley, Helen Irene Seattle
UD, Lib. 2313 10th Av N—Cap 598
- Donley, Mabel Alice Seattle
LD, Bus. 2313 10th Av N—Cap 598
- Donohue, Mrs Merle Childs Seattle
LD, FA. Weir Apts—N 3492
- Donovan, William McKinley. Seattle
LD, EE. 4215 15th Av NE
- Dore, Esther Agnes Seattle
LD, Ed. 214 Summit Av N—Cap 3040
- Doremus, Dora Ellen. Seattle
LD, Sci. 6514 4th Av NE—Ken 3101
- Doten, Edith Bernice Seattle
LD, Sci. 1912 E Columbia—E 6876
- Doty, Charlotte Chehalis
LD, Ed. 2012 E 45th St—Ken 2645
- Douglas, Donald Emery Seattle
LD, Bus. 1724 E 56th St
- Douglas, Lucille Eva Seattle
LD, FA. 1724 E 56th St—Ken 1436
- Douglas, Robert Duman Seattle
SC, For
- Dover, Leon David Seattle
LD, Bus. 164 25th Av
- Downs, Winifred Corson Tacoma
UD, Ed. 4532 18th Av NE
- Doyle, Edna May Seattle
LD, Sci. 2119 17th Av S
- Doyle, Persis May Seattle
UD, Ed. 1723 Summit Av—E 1622
- Drew, Donald Russell Seattle
LD, Bus. 126 14th Av N
- DriscHEL, Frank Gordon Spokane
LD, Ch E. YMCA
- Driscoll, Marie E. Butte, Mont
UD, LA. 4217 10th Av NE
- Driver, Dorothy Ida. Racine, Wis
LD, Ed. 1240 3d Av N
- Duck, Helen Florence Portland, Or
LD, Sci. 5214 Univ Blvd—Ken 844
- Dudley, Lilla Adele Mullan, Ida
LD, Sci. 4722 18th Av NE—Ken 2861
- Dufall, Esther Frances Tacoma
LD, Sci. 4714 Univ Blvd—Ken 2258
- Duff, Charlotte Louise Seattle
Unc, LA. 414 Boren Av
- Duncan, Walter Earl Seattle
LD, LA. 4532 42d Av SW
- Duniway, Robert Edward. Portland, Or
UD, ME. 4522 18th Av NE
- Dunlap, Theodore Edward Seattle
Grad. 4219 Brooklyn Av—N 3773
- Dunn, Alice Julia Sunnyside
LD, LA. 4551 Univ Blvd—Ken 601
- Dunn, Ariel Evelyn Victoria. Portland, Or
LD, LA. 4719 Univ Blvd—Ken 2886
- Dunn, Beatrice B. Waterville
LD, Bus. Clark Hall—N 262
- Dunn, Edward Albert Seattle
LD, For. 3305 Dose Ter
- Dunn, Helen Marjory Waterville
LD, Sci. Clark Hall—N 262
- Dunn, Ruth Seattle
LD, LA. 2316 Franklin Av—Cap 1040
- Dunphy, Helen Cecelia Walla Walla
LD, LA. 1906 E 45th St—Ken 983
- Durland, William Davies Seattle
UD, For. 1407 E 45th St—Ken 1314
- Dutcher, Helen Seattle
LD, LA. 24 The Hillcourt—Ell 4348J
- Dutcher, Henry Allen Portland, Or
LD, Bus. 4748 19th Av NE—Ken 661
- Dutton, Gladys Seattle
LD, LA. 3822 Ashworth Av—N 1441
- Dwyer, Monica Margaret Rosalia
LD, Sci. Lewis Hall—N 162
- Eades, Glenn Newnel Dayton
LD, ME. Stonybroke Club, Campus—N 55
- Eagan, Frances Bremerton
LD, Ed. 4585 18th Av NE—Ken 1429
- Eagleson, Helen Elizabeth Seattle
UD, LA. 5008 16th Av NE—Ken 14
- Earnest, Robert R. Bothell
Unc, Ed. Bothell
- Eastman, Austin Vitruvius Seattle
LD, EE. 1506 28th Av W—QA 296
- Eby, Harold Edwin Spokane
LD, Sci. 5007 19th Av NE—Ken 2875
- Eckhart, Hulda Harriet Seattle
LD, LA. 1525 2d Av W—QA 1873
- Eckart, Roland William Seattle
LD, Bus. 3827 Denmore Av
- Eckhart, Robert Balsler Enumclaw
LD, Sci. 3827 Denmore Av
- Eckles, Beulah A. Cambridge, Ida
LD, Ed. 4755 Brooklyn Av—Ken 2343
- Eckmann, Laroy Ray Seattle
LD, Bus. 1210 N 49th St—N 747
- Eckmann, Stella Roselia Yakima
LD, LA. 1906 E 45th St

Ector, Phebe Payne	Seattle	Ensley, Talitha Eldora	Seattle
LD, LA	5022 21st Av NE	LD, Ed	841 E 68th St—Ken 532
Eddy, Mrs Addy Cornwall	Seattle	Enyart, Grace M	Seattle
Grad	1106 E Howell St	UD, Sci	1902 Queen Anne Av—QA 3934
Eddy, Dudley Byron	Seattle	Erbinger, Hazel Hildegard	Tacoma
UD, LA	4714 19th Av NE—Ken 2761	UD, Lib	4714 Brooklyn Av
Edgren, Claude A	Kettle Falls	Erdevig, Rebecca Olive	Edmonds
LD, Phar	4305 14th Av NE—Ken 720	LD, Bus	
Edmonds, Harold M	Tacoma	Erickson, Agnes Elizabeth	Seattle
Unc, Sci	3737 14th Av NE—N 615	Unc, Sci	7545 12th Av NW—Bal 1239
Edquist, Paul Englebrect	Seattle	Erickson, Frances Vivian	Aberdeen
Grad	3912 7th Av S	LD, Bus	3704 48th Av NE—Ken 129
Edwards, Esther Frances	Seattle	Ernst, Mrs Alice Henson	Seattle
LD, FA	5026 20th Av NE—Ken 1719	Grad	1838 Ravenna Blvd—Ken 3116
Edwards, George Washington	Seattle	Ernst, Clarence Reinhold	Seattle
LD, EE	5009 11th Av NE—Ken 1718	LD, Bus	301 Harrison St
Edwards, Schuyler B	Port Townsend	Ertle, Una Beatrice	Clarkston
UD, CE	4233 Thackeray Pl—N 3180	UD, LA	4540 Univ Blvd—Ken 3216
Edwards, Thelma Lillian	Seattle	Erwin, Margaret	Spokane
LD, LA	5026 20th Av NE—Ken 1719	Unc, LA	1844 E 62d St—Ken 2745
Ehlen, Esther Rhind	Seattle	Ethel, Garland	Seattle
Unc, FA	Fairfield Hotel	LD, LA	Khaki Club, Campus
Ehret, Arthur Wintermantle	Zillah	Etherington, Thomas John	Oakville
Unc, Sci	4534 Univ Blvd—Ken 20	LD, Min	
Elchner, Isabel	South Bend	Ettinger, Dorothy	Seattle
UD, LA	5022 21st Av NE—Ken 485	LD, Ed	1020 8th Av—Ell 4934V
Eitel, George David	Seattle	Evans, Catharine Loise	Canby, Or
LD, Sci	4017 W Holgate St—W 214E	LD, FA	2012 E 45th
Eldred, Margaret	Whittier, Cal	Evans, Marie Janet	Boise, Ida
LD, LA	1216 1st Av W—QA 2649	LD, Sci	4548 Univ Blvd
Eldridge, Ferris Edwin	Alamogordo, N M	Everett, Mrs Charlotte Elizabeth	Seattle
UD, For	4748 18th Av NE	UD, LA	602 36th Av N
Elford, Florence M	Seattle	Everett, Leonard	Seattle
UD, LA	1057 Summit Av N—Cap 2400	LD, Bus	702 1/2 E Pine St
Elford, Gertrude Louise	Seattle	Ewing Jr, James Reid	Bremerton
LD, LA	1057 Summit Av N—Cap 2400	LD, ME	4522 18th Av NE
Elgin, Etta D	Okanogan	Ewing, Lucile Elliott	Portland, Or
LD, LA	4554 16th Av NE—Ken 3212	LD, LA	4531 18th Av NE—Ken 253
Elliott, John Turner	Seattle	Eyman, Lewis	Seattle
LD, CE	4567 35th Av W	LD, Bus	1806 Minor Av—Ell 3727
Elliott, Carlotta Baker	Bryn Mawr	Fairbanks, Adelaide Louise	Portland, Or
UD, Bus	4703 18th Av NE—Ken 2826	LD, LA	4710 Univ Blvd—Ken 1857
Elliott, Clarence Raymond	Kelso	Falkoff, Anna Lea	Seattle
Unc, LA	5212 18th Av NE	Grad	
Elliott, Oliver Carlisle	Seattle	Falknor, Judson Fahnstock	Seattle
LD, ME	387 E 57th St	1st Law	908 Shelby St
Elliott, Thompson Baker	Walla Walla	Fall, James Davis	Portland, Or
LD, Bus	4530 14th Av NE—Ken 555	LD, EE	4026 12th Av NE
Ellis, Floyd E	Seattle	Fallis, Annie Louise	Seattle
8d Law	4503 Univ Blvd	Grad	5633 Brooklyn Av—Ken 1887
Ellis, Overton G Jr	Tacoma	Fallis, Mrs Irene Crawford	Seattle
LD, Sci	4554 Univ Blvd	UD, Ed	5518 16th Av NE
Elvidge, Earl Charles	Seattle	Fargo, Marian	Pocatello, Ida
LD, ME	2828 N Broadway	LD, LA	4530 Univ Blvd—Ken 2496
Elwick, Andrew	Seattle	Farley, Helen Maria	Seattle
LD, Bus	5812 15th Av NE—Ken 3467	LD, Sci	5104 46th Av S—Rain 736
Ely, John Carl	Seattle	Farley, Irene	Bellingham
LD, FA	3007 44th Av SW	LD, Sci	4515 18th Av NE—Ken 2644
Emery, Ellnor	Canton, O	Farnsworth, Ruah	Lindsay, Cal
LD, LA	Laurelhurst—Ken 1651	LD, LA	Lewis Hall—N 162
Emmons, Margaret Harrison	Seattle	Farquhar, Elizabeth Helen	Portland, Or
LD, LA	5224 12th Av NE—Ken 1861	LD, Phar	4045 14th Av NE—N 1804
Emmons, Amelia Dixon	Seattle	Farquharson, Frederick Burt	Seattle
Sp, Min	1323 Terry Av—M 6828	LD, ME	5236 21st Av NE—Ken 1347
Emory, Dewolfe	Seattle	Faubert, Alice M	Shelton
LD, LA	4520 21st Av NE—Ken 2600	UD, Sci	806 14th Av NE—Cap 1768
Engberg, Paul Kruckow	Bellingham	Felipe, Nemesio M	Laoag, P I
LD, Phar	4527 12th Av NE—Ken 2910	LD, LA	Box 704, University Sta
Enger, Olive May	Tacoma	Fenwick, Frances Ann	Everett
LD, LA	4508 16th Av NE—Ken 2768	LD, Bus	4504 18th Av NE—Ken 146
Englehorn, Ruth Sabina	Spokane	Ferguson, Eugene Ernest	Seattle
LD, Sci	4710 17th Av NE—Ken 1085	LD, FA	1427 W 56th St
Engler, Dora D	Richland	Ferguson, Frances Victoria Patricia	Renton
UD, Sci	5004 Univ Blvd—Ken 298	LD, LA	4340 11th Av NE—Ken 813
Engstrom, Eva Isabel	Seattle	Ferguson, Russell Edward	Portland
Unc, FA	3016 1st Av—M 4480	LD, For	4530 14th Av NE—Ken 555
Ennis, Owen	Seattle		
LD, Sci	1618 33d Av		

- Fetters, MildredAngola, Ind
 LD, Sci.....4540 Univ Blvd—Ken 3216
 Fey, Amos CharlesSeattle
 LD, Sci.....950 20th Av
 Fiedler, Reginald HobsonSeattle
 LD, Bus.....1545 16th Av N
 Filion, FredPort Angeles
 LD, LA.....5224 19th Av NE—Ken 456
 Filz, Franklin JohnSeattle
 LD, Phar.....2913 Washington St—Bea 579
 Filz, Mildred EdnaSeattle
 LD, Ed.....2913 Washington St—Bea 579
 Finlay, DredaButte, Mont
 LD, Sci.....4238 12th Av NE—N 329
 Finlay, Sylvia ElfredaButte, Mont
 UD, LA.....1208 43d St
 Finnicum, RuthSpokane
 LD, LA.....4735 21st Av NE
 Fischer, Alden JacksonSeattle
 LD, Bus.....940 Harvard Av N
 Fischer, GraceSeattle
 Unc, Sci.....940 Harvard Av N
 Fish, Walter HaroldSeattle
 UD, For.....506 E Harrison St—Cap 3426
 Fisher, Ernestine VirginiaTacoma
 Unc, FA.....4530 Univ Blvd—Ken 2496
 Fisher, Grace JoyWallace, Ida
 LD, FASeattle
 Fisher, JuliaSeattle
 UD, LA.....4504 18th Av NE—Ken 146
 Fisher, Raymond ChandlerTacoma
 LD, EE.....4520 21st Av NE
 Fisher, Roberta ClaireSeattle
 UD, Ed.....4529 11th Av NE—Ken 309
 Fisher, Walter CliffordSpokane
 Unc, Bus.....4503 Univ Blvd—Ken 236
 Fiskan, MarjorieSeattle
 LD, LA.....4535 18th Av NE—Ken 1429
 Fitzgerald, Donald RaymondSpokane
 LD, Bus.....5035 10th Av NE
 Fix, Lynwood WatsonLewiston, Ida
 LD, LA.....2120 E 47th St—Ken 1176
 Flanley, Mabel GertrudeSeattle
 LD, Sci.....2028 Federal Av—Cap 1265
 Fleming, Bessie JeanSeattle
 Sp, LA.....337 17th Av N—E 1287
 Flood, Maude EvelynSeattle
 Sp, LA.....4332 Burke Av
 Flowers, Ruby JaneChehalis
 UD, LA.....Fairfield Hotel
 Floyd, Ruth FultonWalla Walla
 Unc, Sci.....4530 Univ Blvd—Ken 2496
 Flumerfelt, Lillian GSeattle
 Unc, Ed.....4000 11th Av NE—N 1183
 Fogelquist, Charles FridolphSelah
 LD, For.....5218 Univ Blvd—Ken 3169
 Foley, KathryneVictor, Mont
 UD, Jour.....Lewis Hall—N 162
 Foley, Venora McKinleyEverett
 LD, LA.....4508 16th Av NE—Ken 2768
 Folk, Mrs Katherine BartlettSeattle
 Sp, LA.....3808 11th Av NE—N 3771
 Foltz, Laura IzallaParkland
 UD, LA.....5210 12th Av NE—N 1795
 Foltz, Lila RParkland
 LD, LA.....5210 12th Av NE—N 1795
 Foote, Leone LaVerneMonse
 LD, Bus.....4748 19th Av NE—Ken 661
 Foote, LuandaPortland, Or
 LD, Ed.....4538 15th Av NE
 Foran, William ThomasSeattle
 LD, Sci.....4759 Brooklyn Av
 Ford, Teresa ElizabethSiemscarey
 LD, Ed.....223 10th Av N—Cap 2692
 Forrest, Ronald CameronSeattle
 LD, Bus.....712 N 49th—N 174
 Forrester, Louise DRedmond
 UD, Ed.....4751 19th Av NE—Ken 655
 Forster, Carl EmilSeattle
 SC, Min.....1717 Boylston Av—E 1907
 Fosdick, Helen WhitmanGoldendale
 LD, LA.....4732 21st Av NE—Ken 26
 Foster, Carroll JSeattle
 LD, EE.....5108 Woodlawn Av—N 2861
 Foster, Gilbert BranscombeSpokane
 LD, LA.....4550 18th Av NE—Ken 3072
 Foster, Harry EllsworthSeattle
 LD, LA.....5218 Univ Blvd—Ken 3169
 Fotheringham, PatriciaSeattle
 LD, LA.....1111 1st Av W—QA 373
 Fouts, MarieSeattle
 LD, Ed.....2011 13th Av S—Bea 1843
 Fowler, Joseph BretSeattle
 LD, LA.....1910 45th Av SW
 Fox, Edna MSeattle
 LD, LA.....120 Lynn St—QA 1359
 Fox, Mrs. Laura CSeattle
 Sp, LA.....1362 32d Av S—Bea 2405
 Fox Jr, Robert RolstonSeattle
 LD, Bus.....229 37th Av N
 Fradenburgh, Grace ArdeneEverett
 LD, BusSeattle
 Frahm, Lawrence WilliamSeattle
 LD, EE.....5043 18th Av NE
 Frame, Howard ATalent, Or
 LD, BusMontesano
 France, Alda MSeattle
 LD, Ed.....4547 19th Av NE—Ken 23
 France, Georgia MadgilMontesano
 UD, FA.....4547 19th Av NE—Ken 23
 Francis, Byron FSeattle
 LD, Sci.....6513 Jones Av NW—Bal 390
 Francis, Glenn SamuelPortland, Or
 LD, LA.....4530 14th Av NE—Ken 555
 Francisovich, Frank MAstoria, Or
 Unc, LawSpokane
 Franck, Thomas GeorgeSeattle
 LD, Bus.....4503 Univ Blvd—Ken 236
 Frankland, LillianSeattle
 LD, Ed.....4714 Univ Blvd—Ken 2253
 Franklin, Alice VirginiaSeattle
 LD, LA.....133 16th Av N—E 4027
 Franklin, Charles HerbertSeattle
 LD, Bus.....4219 8th Av NE
 Franklin, Shadrach RectorSeattle
 LD, Bus.....133 16th Av N—E 4027
 Fransén, Walter CSeattle
 UD, CE.....1737 Boylston Av
 Fraser, Edmund ShepardOntario, Or
 LD, Bus.....4504 16th Av NE—Ken 647
 Fraser, Lillian WNanaimo, B C
 Unc, LA.....4123 12th Av NE—N 3379
 Fratt, Nicholas DEverett
 LD, BusSeattle
 Frazier, Enid AdelaideSeattle
 LD, LA.....4709 16th Av NE—Ken 1292
 Frederick, Doris OttilieSeattle
 UD, LA.....623 Queen Anne Av—QA 3562
 Fredericksen, MatthewPonlsbo
 LD, CE.....4305 16th Av NE—Ken 720
 Frederickson, Albert PhilipSeattle
 LD, Bus.....1753 Sanders Pl
 Free, AlonzoSeattle
 Unc, ME.....5642 42d St SW—W 1219W
 Freedlund, Harry ATacoma
 LD, Bus.....4550 18th Av NE—Ken 8072
 Freeman, Vivian ClaireSeattle
 LD, LA.....Delamar Apts—QA 3987
 Frein, Alice Virginia CrawfordSeattle
 LD, LA.....4317 15th Av NE—Ken 2088
 Frem, AgnesSeattle
 LD, LA.....5517 Univ Blvd—Ken 2496
 Frem, HoraceSeattle
 LD, LA.....5517 Univ Blvd
 French, BerylProsser
 LD, LA.....1820 Jackson St—Bea 2188, B8

French, Mrs. Clara Graves.....	Seattle	Gibson, Clayton B.....	Seattle
Grad.....	Clark Hall—N 262	UD, LA.....	1208 E 67th St—Ken 1299
Freyd, Bertha Irene.....	Seattle	Gibson, Blaine Clyde.....	Nyssa, Or
UD, FA.....	1782 Market St—Bal 1027	LD, Bus.....	4305 15th Av NE—Ken 720
Freyd, Max.....	Seattle	Gibson, Cora Eleanor.....	Seattle
Grad.....	3208 35th Av S—Rain 499	LD, LA.....	814 29th Av
Friars, Lola E.....	Tacoma	Gibson, Merrill Garrison.....	Tillamook, Or
UD, LA.....	4714 Univ Blvd—Ken 2253	LD, Sci.....	4508 Univ Blvd—Ken 291
Friberg, Louis William.....	Portland, Or	Giffin, Leta Beatrice.....	Seattle
LD, CE.....	5203 Brooklyn Av	Unc, LA.....	3453 Belvidere Av—W 1156J
Fried, David D.....	Seattle	Gilbert, Elon James.....	Yakima
Unc, Law.....	2610 E Madison St	LD, LA.....	4616 21st Av NE—Ken 490
Fritch, Eleanor Martha.....	Seattle	Gilbert, Geraldine.....	Seattle
LD, LA.....	1161 E Boston St—Cap 3430	LD, Phar.....	606 W Howe St—QA 3421
Froome, Kathren.....	Athena, Ore	Gilbert, James C.....	Spokane
LD, LA.....	5035 8th Av NE	LD, EE.....	5035 19th Av NE
Fry, Don William.....	Anacortes	Gilbert, Margaret G.....	Yakima
LD, Bus.....	4506 Univ Blvd—Ken 291	LD, LA.....	4710 Univ Blvd—Ken 1857
Fry, Irene.....	Anacortes	Gilbreath, Matilda Karrer.....	Seattle
UD, Ed.....	4508 16th Av NE—Ken 2768	Grad.....	4711 10th Av NE—Ken 1862
Fuller, Georgette Ellen.....	Olympia	Gilchrist, Marion Virginia.....	Wenatchee
Unc, Bus.....	4718 Univ Blvd	LD, Bus.....	4547 19th Av NE—Ken 23
Fuller, Myrtle Margaret.....	Lewiston, Ida	Gilkey, Ruth Overton.....	Kellogg, Ida
LD, LA.....	1906 E 45th St—Ken 983	LD, LA.....	4742 18th Av NE—Ken 896
Furber, George C.....	Seattle	Gill, Marshall Walter.....	Seattle
1st Law.....	2026½ Boyston Av	LD, FA.....	5241 21st Av NE—Ken 1876
Fursman, Oliver Chester.....	Seattle	Gill, Stanley Harold.....	Seattle
LD, Ch E.....	905 Jefferson St—Ell 5150J	UD, ChE.....	7713 Wilson Av—Rain 714J
Gable, Martin.....	Sedro-Woolley	Gille, Madell.....	Seattle
LD, EE.....	New Cecil Hotel	Grad.....	5241 21st Av NE
Gaffney, Eleanor.....	Seattle	Gillespie, Alma.....	Odessa
Unc, LA.....	780 Belmont Pl	LD, Bus.....	2534 Univ Blvd—Ken 20
Galeno, Edward.....	Seattle	Gillespie, Loris Austin.....	Brewster
Unc, Bus.....	703 6th Av N—QA 2870	Unc, Bus.....	1552 16th Av NE—E 1540
Galeno, Eugene.....	Seattle	Gillett, Frank Richard.....	Seattle
LD, ME.....	703 6th Av N	Unc, LA.....	4548 9th Av NE
Gamble, Martha Ursula.....	Brewster	Gilley, Beth May.....	Stony Creek, Conn
Unc, LA.....	Lewis Hall—N 162	LD, Bus.....	Clark Hall—N 262
Gamm, Irvin William Otto.....	Watertown, Wis	Gilliland, William Lester.....	Seattle
UD, For.....	4537 11th Av NE	LD, Sci.....	4746 15th Av NE
Gamwell, Barbara Greene.....	Seattle	Gillman, Ethel.....	Spokane
UD, Bus.....	4718 Univ Blvd—Ken 1882	LD, LA.....	Seattle
Gardner, Inez.....	Seattle	Gilman, Bonnie Ruth.....	Seattle
UD, Bus.....	4718 Univ Blvd—Ken 1882	UD, Sci.....	4738 16th Av NE—Ken 3328
Gardner, Raymond I.....	Seattle	Gilluly, Cora.....	Seattle
UD, LA.....	2120 E 47th St—Ken 1176	UD, Ed.....	1616 E 47th St—Ken 146
Gardner, Miriam N.....	Seattle	Gilluly, James.....	Seattle
UD, FA.....	5222 Univ Blvd—Ken 1682	UD, Ed.....	5212 18th Av NE—Ken 887
Garhart, Dr. Manch Neville.....	Seattle	Gisselberg, Victor E.....	Mist, Or
UD, Sci.....	411 Cobb Bldg—Ell 1001	LD, Min.....	Seattle Y M C A
Garin, Rene Gustave.....	Seattle	Gittelsohn, Jacob.....	Seattle
Sp, For.....	3737 14th Av NE	LD, LA.....	514 19th Av
Garrett, Clarence Byrnwood.....	San Leandro, Cal	Gitzen, Walter Henry.....	Seattle
UD, For.....	5235 Univ Blvd	LD, Ch E.....	1946 9th Av W—QA 4285
Garvey, Edmund John.....	Seattle	Given, Paula.....	Seattle
LD, Sci.....	7633 Bagley Av	Unc, LA.....	309 Summit Av N—Cap 2281
Gaskill, Benjamin Homer.....	Coupeville	Glazer, Bable.....	Seattle
LD, LA.....	LD, LA.....	LD, LA.....	388 16th St—E 509
Gates, George Marion.....	Tacoma	Gleason, Dorothy.....	Seattle
LD, Phar.....	Seattle YMCA	UG, LA.....	1627 6th Av W
Gates, Richard Allen.....	Tacoma	Gleditzsch, Arthur Bernhard.....	Seattle
Unc, Phar.....	Seattle	Grad.....	4515 4th Av NE
Gatewood, Joseph Strong.....	Seattle	Glead, Thomas Frederick.....	Seattle
LD, CE.....	2210 10th Av N	LD, Sci.....	4505 18th Av NE—Ken 333
Gault, Viva Glenn Gibbons.....	Kirkland	Glen, Harold Veazle.....	Seattle
Grad.....	Kirkland, RFD 1	LD, Fisheries.....	4731 15th Av NE—Ken 2800
Gellatly, Bernice.....	Wenatchee	Glover, Freda Moss.....	Hoquiam
LD, FA.....	4504 18th Av NE	LD, LA.....	4547 19th Av NE—Ken 23
Gellermann, Louis Wanger.....	Seattle	Glover, Sheldon Latta.....	Tacoma
Unc, LA.....	4517 Brooklyn Av	UD, Sci.....	1206 Sylvester Pl—Ken 278
Gellerman, William.....	Seattle	Goble, Lucy E.....	Sunnyside
LD, LA.....	4517 18th Av NE	UD, LA.....	4746 16th Av NE—N 701
Gerriets, Eva Alice.....	Mount Vernon	Goddard, Alfred Charles.....	Klukwaf, Alas
LD, LA.....	4532 18th Av NE	SC, Min.....	4115 15th Av NE
Ghornley, Helen Margaret.....	Tacoma	Goheen, Merle Clinton.....	Bellingham
LD, Bus.....	5015 Univ Blvd—Ken 1025	LD, ChE.....	705 Broadway—Ell 88
		Gohlman, Henry Theodore.....	Leavenworth
		LD, LA.....	4723 21st Av NE

- Gonzales, Antonio A. Iba, P I
LD, LA. New Grand Hotel
- Good, Josephine Dolores. Sumner
LD, LA. 1210 16th Av NE
- Good, Stewart Carbonado
LD, Sci. 5212 18th Av NE
- Goode, Helen S. Spokane
UD, Sci. 4710 Univ Blvd—Ken 1857
- Goodheart, Katharine Bellingham
LD, Bus. 4504 18th Av NE—Ken 146
- Goodner, Ernest Francis. Seattle
UD, Ch E. 1612 E 65th St—Ken 875
- Goodrick, Ralph Edward Bellingham
LD, Ch E. 4706 14th Av NE—Ken 1877
- Goodson, Estelle Rae Seattle
LD, LA. 119 N 50th St—N 1312
- Goodwin, Helen Durrle Helena, Mont
UD, Lib. Lewis Hall—N 162
- Gorospe, Eulogio Aquino. Lapog, P I
LD, FA. Box 604, University Sta
- Gose, Gladys Walla Walla
UD, Ed. 1806 E 45th St—Ken 983
- Gould, Beatrice Avita Seattle
LD, FA. 812 L C Smith Bldg—Ell 2132
- Gowran, Dawn Vivian Seattle
LD, LA. 8044 1st Av NE—Ken 809
- Graefe, Herbert William. Seattle
LD, Bus. 6841 Univ Blvd—Ken 788
- Graf, Gladys Hayes Seattle
Unc, Phar. 210 21st Av N—E 3628
- Graham, Fern Yakima
LD, Bus. 4540 Univ Blvd—Ken 3210
- Graham, Marie Edna Yakima
LD, LA. 4548 Univ Blvd—Ken 2034
- Grammer, Eva Seattle
LD, LA. 5014 15th Av NE
- Grant, James Coleman. Seattle
LD, LA. 5038 Univ Blvd—Ken 496
- Grant, Wilfred Leonard. Minn
LD, Bus.
- Graves, Arnold Landon Spokane
Unc, Law. 4549 15th Av NE—Ken 275
- Graves, Francis Davis Bellingham
LD, Bus. 5235 Univ Blvd—Ken 618
- Graves, Harding Dexter Seattle
LD, Bus. 1400 E 63d St
- Graves, Helen Burnett Fargo, N D
LD, FA. 4731 14th Av NE—Ken 1820
- Graves, Hershel Seattle
LD, CE. 1034 E 70th St
- Graves, Lucile Seattle
LD, LA. 1034 E 70th St
- Graves, Lucius Wallis Seattle
LD, Bus. 1034 E 70th St
- Graves, Paul Hyde Spokane
Unc, Law. 4520 21st Av NE—Ken 2600
- Graves, Ralph Alonzo Seattle
LD, LA. 2722 Franklin Av
- Gray, Harold E. Ken 720
UD, EE. 4805 15th Av NE—Ken 720
- Gray, Helen Frances. Seattle
LD, LA. 3649 86th Av S
- Gray, Josephine Arlington
UD, Ed. 4540 Univ Blvd—Ken 3216
- Gray, Max Leslie Darrington
LD, EE. Castle Club, Campus—N 55
- Green, Spencer Seattle
3d Law. 4757 22d Av NE
- Green, Pearl E. Seattle
Sp, LA. 621 W Galer
- Green, Ralph Theodore Seattle
Unc, LA. 4120 Burke Av—N 2205
- Greenberg, Benjamin David. Tacoma
Unc, Bus. 4215 12th Av NE
- Greene, Clyde Joseph Seattle
Grad. 4035 15th Av NE
- Greene, Earle Comings. Etna Mills, Cal
LD, Phar. 5088 18th Av NE—Ken 1108
- Greene, Lew Abrams Bellingham
UD, LA. 4528 20th Av NE—Ken 1301
- Greenleaf, Ruth Stetson Seattle
UD, LA. 602 14th Av N
- Greenleaf, Sidney Nelson Seattle
UD, Ch E. 602 14th Av N
- Greenleaf, Lucile Marcelle. Bellingham
LD, LA. 4532 18th Av NE
- Gregg, Grace Augusta. Hoquiam
LD, Bus. 4508 16th Av NE—Ken 2768
- Gregg, Ralph Coulee City
LD, Sci. 5038 Univ Blvd—Ken 496
- Gregory, Jean Caroline Seattle
Unc, Law. 207 Liberty Bldg—M 7843
- Greguson, Judith Seattle
UD, LA. 4506 Brooklyn Av—Ken 2725
- Greig, Elizabeth Holbrook Tacoma
LD, LA. 4714 19th Av NE
- Greiner, Ruth Seattle
UD, LA. 2242 W 57th St—Bal 94
- Greiner, Wallace Reginald Seattle
LD, Sci. 324 Belmont Av N—Cap 2035
- Griffin, Lois The Dalles, Or
LD, Ed. 1200 E 43d St—Ken 4111
- Griffin, Marcia Aleta Seattle
LD, LA. 619 W Blaine St—QA 4676
- Griffith, Phyllis Seattle
UD, Ed. 4624 19th Av NE—Ken 199
- Grinstein, Alexander Seattle
LD, Sci. 725 28th Av—E 6590
- Griswold, Francis West. Bellingham
LD, LA. 4616 21st Av NE—Ken 490
- Grossen, Matilda Frieda. Hillsboro
LD, LA. 5704 16th Av NE
- Gruger, William Sallada Jr. Seattle
LD, Ch E. 6517 Wilson Av
- Guenther, Chrystal Astoria, Or
UD, LA. 1305 41st St—N 3492
- Gulon, Raymond P. Seattle
LD, Bus. 6002 E Green Lake Way
- Guitteau, Robert George. Thomas
UD, Ed.
- Gundlach, Wilford Richardson. Wallace, Ida
LD, Sci. Mufti Club, Campus—N 55
- Gunn, Marjorie Seattle
UD, Sci. 4230 14th Av NE—N 1774
- Guzman, Macario San Carlos, P I
LD, ME. YMCA, Box 546
- Gwilym, Herald Seattle
LD, EE. 1018 E Republican
- Gwinn, Alice Elizabeth Garfield
UD, Ed. Clark Hall—N 262
- Gwinn, Olive Gertrude Pendleton, Or
UD, LA. 4547 Univ Blvd—Ken 1004
- Gyde, Sally Reeves Wallace, Ida
LD, LA. 4508 16th Av NE—Ken 2763
- Haas, Rosalie Weiser, Ida
LD, FA. Lewis Hall—N 162
- Haas, Selma Weiser, Ida
LD, Phar. Lewis Hall—N 162
- Haaser, Norma J. Lewiston, Ida
UD, LA. 2012 E 45th St—Ken 2645
- Haecker, Mary M. Seattle
UD, LA. 4751 Univ Blvd—Ken 2713
- Hagen, Percy Henry Seattle
LD, Bus. 1929 11th Av N
- Hagler, Lawrence Edward Yakima
LD, Bus. 4520 21st Av NE—Ken 2600
- Hague, Martha Livingston, Mont
UD, Ed. 4548 Univ Blvd
- Hainsworth, Arthur Stretch Seattle
LD, Bus. 2657 87th Av SW
- Hainsworth, Jeannette Seattle
UD, Jour. 4547 19th Av NE—Ken 28
- Hainsworth, Roberta Holt. Seattle
LD, FA. Cor Harvard Av and Olive St

REGISTER OF STUDENTS

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Hales, Rena	Pendleton, Or	Harbke, Jeff Fernando	Maryhill
LD, Sci	Sorrento Hotel	LD, LA	5038 Univ Blvd
Haley, Dorothy Elaine	Juneau, Alas	Harbke, Willis J	Tacoma
LD, LA	8044 1st Av NE—Ken 809	LD, Bus	5212 18th Av NE—Ken 887
Haley, Leon F	Seattle	Hardwick, Freda Phyllis	Pinehurst
LD, Bus	311 24th St S	LD, Ed	5714 16th Av NE—Ken 8440
Haley, Louisa	Seattle	Haritonoff, Samal K	Odessa, Russia
LD, Sci	1609 N 49th St—N 580	LD, CE	3804 10th Av NE—N 1688
Hall, Bessie	Seattle	Harman, Helen	Port Angeles
LD, FA	1933 Harvard Av N—Cap 8676	LD, FA	Washington Apts—M 7400
Hall, Thomas Edward	Wallace, Ida	Harned, Zillah	Seattle
LD, Ch E	5218 Univ Blvd	LD, FA	2016 82d Av S—Bea 109
Hall, Fieta M	Pendleton, Or	Harper, LeRoy	Seattle
LD, Sci	1906 E 45th St—Ken 983	LD, Sci	418 Blewett St
Hall, Inez Elizabeth Bertha	Tacoma	Harpole, Florence Geraldine	Junction City, Or
LD, LA	4508 16th Av NE	Or, Unc, Sci	5728 Univ Blvd
Hall, Mabel Martha	Seattle	Harrild, Hortense Francell	Spokane
LD, LA	4710 Univ Blvd—Ken 1057	LD, LA	4508 16th Av NE—Ken 2768
Hall, Marjorie	Fairfax	Harrington, Florence	Butte, Mont
LD, Sci	1906 E 45th	LD, LA	1616 E 47th St—Ken 149
Hall, Mary Lee	Seattle	Harrington, Irene C	Caldwell, Ida
UD, LA	1933 Harvard Av N—Cap 8676	UD, Sci	4546 18th Av NE—Ken 569
Hall, Maude E	Fairfax	Harris, Edward William	Fort Benton, Mont
UD, Sci	5210 12th Av NE—Ken 1361	LD, Bus	5088 Univ Blvd—Ken 496
Hall, Verne Ruth	Seattle	Harris, Mrs George C	Seattle
Unc, LA	4712 7th Av NE	Sp, LA	5201 19th Av NE
Hall, William Claudwin	Tacoma	Harris, Parker Elmora	Seattle
Unc, CE	4522 18th Av NE	LD, Sci	4725 11th Av NE—Ken 2383
Haller, Bernadine	Seattle	Harris, Sarah Eleanor	Seattle
UD, Sci	1357 33d Av S—Bea 3265	LD, LA	221 18th Av N—E 6502
Hallowell, Lionel Ellsworth	Roundup, Mont	Harrison, Catherine Elizabeth	Seattle
LD, Bus	4121 11th Av NE	LD, Sci	714 N 72d St
Halsey, Jack Samuel	Seattle	Harsch, Alfred E	Xakima
LD, Phar	832 W 52d St	LD, LA	5042 18th Av NE—Ken 1740
Walterman, Carl Gordon	Seattle	Harshberger, Robert Perrine	Tacoma
Unc, ME	4305 15th Av NE—Ken 720	LD, Ch E	4505 18th Av NE
Hamill, M Margaret	Seattle	Harshman, Gertude	Fall City
LD, LA	1922 5th Av N—QA 523	UD, Sci	3909 Burke Av—N 2088
Hamilton, Marjorie Lucille	Weiser, Ida	Hart, Agnes Josephine	Twin Falls, Ida
LD, Sci	4508 Univ Blvd	LD, Ed	4530 Univ Blvd—Ken 2496
Hamilton, Rupert Lehn	Seattle	Hart, Miss Artie-Lee Graham	Seattle
UD, LA	528 1st Av W—QA 1848	LD, LA	121 18th Av N—E 3182
Hamlin, Phyllis Kathryn	Seattle	Hart, Dean Brooks	Tacoma
LD, LA	Olympian Apts	LD, Ch E	2708 E 63d St
Hamm, Gladys V	Sheridan, Wyo	Hart, Mrs. Delphia	Seattle
UD, Sci	Lewis Hall—N 162	Unc, Ed	5245 14th Av NE—Ken 961
Hammar, Gustaf William	Gothenburg, Swed	Hartman, Albert Gus	Seattle
LD, Sci	621 12th Av N	3d Law	Pennington Hotel
Hammberg, Agnes E	Ostersund, Swed	Hartman, George Howard	Knox, N D
LD, LA	Adelphi College	Unc, LA	Khaki Club, Campus
Hammer, Arno Frederic	Spokane	Hartman, Robert Nathaniel	Seattle
Unc, LA	General Delivery	UD, Bus	4503 Univ Blvd—Ken 236
Handley, William James	Hazelwood	Hartman, Lou William	Leavenworth
LD, Bus	YMCA	LD, Phar	145 E 61st St
Hankinson, Helen Adelaide	Moscow, Ida	Hartnett, Richard D	Sumas
LD, LA	4734 Univ Blvd—Ken 598	LD, Bus	4720 7th Av NE
Hanks, Cyrus Alonzo	Port Orchard	Hartnett, Carl H	Seattle
LD, Phar	4311 Brooklyn Av	LD, BE	528 E 59th St—Ken 1031
Hannaford, Josephine	Mount Vernon	Hartnett, Mrs Rowena Fitch	Seattle
Sp, FA	4551 Univ Blvd—Ken 501	Unc, Bus	528 E 59th St—Ken 1631
Hannon, Mark	Seattle	Harvey, Edwin	Seattle
Unc, Law	1116 19th Av	LD, Bus	4238 Meridian Av
Hansen, Harry Fesenbeck	Bellingham	Harvey, Helen	Walla Walla
LD, Ch E	4740 14th Av NE—Ken 1498	LD, LA	4530 Univ Blvd—Ken 2496
Hansen, Helen M	Vashon	Harvey, John Hamilton	Vancouver
LD, Bus	4534 Univ Blvd—Ken 20	LD, Bus	1416 E 41st St
Hansen, Reese Detlef	Spokane	Harvitz, Barnett	Seattle
LD, ME	5235 Univ Blvd—Ken 618	UD, Bus	413 Malden Av
Hansen, Viola	Seattle	Hassenmiller, Kenneth Lyndon	Seattle
LD, LA	107 W Leary Av—N 3885	LD, Ch E	4142 12th Av NE
Hanson, Alice Genevieve	Seattle	Hatch, Ethel Sumner	Seattle
LD, LA	4747 18th Av NE—Ken 2489	Grad	5014 15th Av NE—Ken 1714
Hanson, Marlon Fay	Seattle	Hatch, William Frank	Stanwood
LD, Sci	4747 16th Av NE—Ken 1704	LD, ME	1726 14th Av—E 6052
Harada, Matsutaro	Japan	Hauck, Hazel Marie	Seattle
LD, Sci	125 Prefontaine Pl—M 496	LD, Sci	712 Terry Av—Ell 8805J
Harbaugh, Charles Woolley	Sedro-Woolley	Haug, Andrew John	Seattle
LD, Bus	2120 E 47th St—Ken 1176	LD, BE	4218 Univ Blvd—Ken 8169

Haugen, Niels Sandberg.....Seattle Unc, Bus.....312 E Olive St—E 6697	Hermans, Thomas Gerald.....Chehalis LD, LA.....4550 18th Av NE—Ken 3072
Hawkins, Elma.....Seattle UD, Lib.....5826 McKinley Pl—Ken 529	Herner, Pauline.....Portland, Or LD, LA.....1906 E 45th St
Hawkins, Harry Harlin.....Seattle LD, CE.....4506 Univ Blvd—Ken 291	Heron, Herbert Andrew.....Seattle LD, For.....1102 18th Av—E 3990
Hawkins, William Lewis.....Mount Vernon LD, LA.....5703 Palatine Av	Herrick, Marion Herman.....Seattle LD, Bus.....4121 Linden Av—N 1469
Hawley, Dwight Spencer.....Seattle LD, Bus.....2846 W 64th St	Herring, John P.....Seattle Grad.....1419 N 51st St—N779
Hawley, Edna Tibbits.....Seattle Grad.....904 8th Av W—QA 3873	Hervon, Willard George.....Seattle UD, Sci.....4503 Univ Blvd—Ken 236
Hawley, Sidney James.....Seattle UD, Ch E.....1200 Harvard Av	Hess, August.....Seattle SC, Min.....135 Melrose Av—E 3165
Hawthorne, Rebecca Allison.....Seat'le UD, LA.....1165 E Lynn St—Cap 1182	Hess, Marie Elizabeth.....Spokane LD, LA.....4504 18th Av NE
Haynes, Phyllis.....Seattle LD, FA.....715 30th Av—E 6872	Hesseltine, Lee Frazelle.....Wilbur LD, Bus.....5302 9th Av NE
Haynes, Stephen Bernard.....Seattle Unc, LA.....1008 Washington Blvd—E 3452	Hester, Alice Elizabeth Brown.....Tacoma Unc, Ed.....4524 Univ Blvd—Ken 721
Hayward, Harold Dewey.....Ridgewood, N J LD, For.....5038 Univ Blvd	Hevly, Martin Bernard.....Seattle UD, LA.....5243 19th Av NE
Hazelton, Olga Jane.....Spokane LD, Sci.....1111 E John St—E 809	Heyes, Alice Dorothy.....Seattle LD, LA.....2908 Lane St—Bea 1471
Healy, Timothy.....Bellingham Unc, Law.....4616 21st Av NE—Ken 490	Heywood, Carrie.....Kittitas LD, Sci.....1616 E 47th St—Ken 149
Heath, Dorothy Marion.....Yakima LD, Sci.....4548 Univ Blvd—Ken 2934	Hiatt, Maurine.....Seattle LD, FA.....1604 E 47th St—Ken 978
Heath, Esther M.....Stanfield, Or LD, LA.....317 Barrett St—QA 3895	Hibbard, Myra.....Seattle LD, LA.....223 12th Av N—Cap 2792
Heath, Fred Twitchell.....Tacoma LD, Bus.....4505 18th Av NE—Ken 333	Hickey, Mrs Florence Mayme.....Seattle Unc, Law.....5035 19th Av NE—Ken 939
Heath, Harry French.....Dryad Grad.....5218 Univ Blvd—Ken 3169	Hickman, Mrs Edna M..... Sp, FA.....
Hedden, Eleanor.....Seattle UD, Lib.....4530 Univ Blvd—Ken 2496	Hickok, Beulah G.....Bloomington, Wis Sp, LA.....4751 Univ Blvd—Ken 2713
Hedyes, Ivy Evangeline.....Seattle LD, Bus.....8041 Stroud Av—Ken 2624	Hicks, Earlon.....Seattle LD, Ed.....2225 Atlantic—Bea 821
Hedrick, Paul Harrington.....Seattle LD, Bus.....4520 21st Av NE—Ken 2600	Higgs, Paul McClellan.....Pine City UD, Sci.....5218 Univ Blvd
Heerman, Donald.....Olympia LD, LA.....4530 14th Av NE—Ken 555	Hill, Grace Alma.....Seattle Grad.....4747 18th Av NE—Ken 2489
Heffernan, Grace E.....Seattle UD, LA.....408 Blaine Blvd	Hillman, Robert Kline.....Seattle LD, LA.....1126 15th Av N—E 2751
Heineman, Arthur.....Seattle LD, Sci.....5911 11th Av SW—Sid 909	Hills, Elizabeth.....Seattle UD, Ed.....1819 18th Av—E 5720
Heintz, Wallace Paul.....Yakima LD, Ch E.....4023 11th Av NE—N 2364	Hills, William Chester.....Seattle LD, EE.....1819 13th Av—E 5720
Helst, Lina.....Salem, Or UD, Sci.....5214 Univ Blvd	Hills, Mary Josephine.....Seattle LD, Sci.....1819 13th Av—E 5720
Helst, Lulu.....Salem, Or UD, LA.....5214 Univ Blvd	Hilton, Eleanor Catherine.....Seattle LD, FA.....918 1st Av—QA 4019
Hekel, Norris Julius.....Winthrop, Ia LD, Bus.....Faculty Club Campus	Hindman, Edna.....Baker, Or UD, Ed.....4543 Univ Blvd
Helmich, Leone.....Yakima LD, LA.....4554 16th Av NE—Ken 3212	Hines, Esther Rasberry.....Centralia Unc, LA.....4721 10th Av NE—Ken 2938
Helmich, Merle.....Yakima LD, Sci.....4554 16th Av NE—Ken 3212	Hinman, Carl Burns.....Cashmere LD, Bus.....4724 9th Av NE—Ken 2919
Helmick, Gordon William.....Wenatchee LD, Min.....421 Summit Av N	Hinman, Charles Lee.....Yakima LD, LA.....5020 12th Av NE—Ken 2044
Henderson, Lois Madrid.....Goldendale Unc, LA.....1616 E 47th St	Hinman, Mary Albertine.....Everett LD, FA.....4547 Univ Blvd—Ken 1004
Hendricks, Ruth Gladys.....Seattle LD, Sci.....6215 12th Av NE—Ken 3417	Hirose, Tadayuki.....Redmond UD, Sci.....666Weller St
Hendricks, Robert John.....Gresham, Or LD, Bus.....5038 Univ Blvd—Ken 496	Hitchings, Allen.....Seattle UD, CE.....1729 39th Av—E 2315
Hendrickson, John Clayton.....Enterprise, Or LD, Ch E.....	Hitchings, Eben G.....Seattle Sp, CE.....1729 39th Av—E 2315
Hendrickson, Harvey Francis.....Seattle LD, Bus.....844 18th Av N—E 4863	Hitchings, Esther L.....Seattle LD, LA.....1729 30th Av—E 235
Henehen, Kevin Gormley.....Seattle LD, Bus.....820 15th Av N—E 3326	Hoag, George Elias.....Hoquiam LD, LA.....5211 16th Av NE
Henry, Anna Ruth.....Yakima LD, LA.....4782 21st Av NE—Ken 26	Hoard, Charles Vere.....Seattle 2d Law.....4045 2d Av NE
Hennings, Lawrence Raymond.....Dubuque, Ia Unc, LA.....4026 12th Av NE	Hoard, Mary Gladys.....Seattle Grad.....3939 Burke Av—N 3706
Hergert, Maude Elizabeth.....Seattle LD, LA.....2708 Franklin—Cap 944	Hoare, Julia Katherine.....Seaview UD, Ed.....2012 E 45th St—Ken 2645

- Hoch, Grace.....Portland, Or
LD, LA.....2012 E 45th St—Ken 2645
- Hodge, Homer Hartman.....Seattle
LD, Sci.....4542 19th Av NE—Ken 539
- Hodge, Mary Lorraine.....Seattle
LD, LA.....4542 19th Av NE—Ken 539
- Hodge, Walter Hartman.....Seattle
3d Law.....4542 19th Av NE—Ken 539
- Hodges, George Sheldon...Great Falls, Mont
LD, Bus.....5038 Univ Blvd—Ken 496
- Hodges, James Frederick.....Seattle
LD, ChE.....5117 Myrtle St—Rain 583F
- Hoff, Herman Armin.....Seattle
Grad.....2834 Boylston Av N—Cap 8441
- Hoffman, Bessie.....Seattle
LD, Bus.....820 10th Av
- Hoffman, Jerome G.....Seattle
LD, Bus.....802 15th Av—E 7015
- Hoffman, Ruth.....Seattle
LD, Bus.....4039 8th Av NE
- Hofmann, H Lee.....Portland
UD, ChE.....4121 14th Av NE
- Hogg, Jack McHenry.....Seattle
LD, Bus.....2120 E 47th St—QA 591
- Hogue, Helen.....Seattle
LD, FA.....4727 16th Av NE—Ken 3182
- Holbrook, C Ray.....Vancouver
UD, Ed.....4214 10th Av NE—N 3907
- Holbrook, Mrs Maude Louise.....Seattle
Sp, LA.....4214 10th Av NE
- Holbrook, William Paul.....Seattle
UD, LA.....4214 10th Av NE—Ken 3907
- Holden, James Hector.....Seattle
LD, Ed.....123 6th Av N
- Holland, Ruth.....Seattle
LD, LA.....3936 14th Av NE—N 723
- Hollenbeck, Dale Gilbert.....Seattle
LD, Bus.....4520 21st Av NE—Ken 2600
- Holloway, Albert Cecil.....Washington, Kan
Unc, LA.....Le Gite Club, Campus—N 55
- Holm, Ellen Marie.....Campbell, B C
LD, Sci.....4238 12th Av NE—N 329
- Holman, Alice Naomi.....Oregon City, Or
LD, FA.....4504 18th Av NE—Ken 146
- Holman, Norma Burnett.....Oregon City, Or
UD, Lib.....4504 18th Av NE—Ken 146
- Holmes, Frances Louise.....Seattle
Grad.....5020 15th Av NE—Ken 2193
- Holt, Lillian Blanche.....Seattle
LD, Bus.....3783 Burke Av—2430
- Homan, Marion.....Hoquiam
LD, LA.....4551 Univ Blvd—Ken 501
- Honey, Frederick Drake.....Gresham, Or
UD, Bus.....4503 Univ Blvd—Ken 236
- Honey, Katherine Mead.....Gresham, Or
UD, FA.....4543 Univ Blvd—Ken 659
- Hood, Helen Rowena.....Puyallup
LD, FA.....4551 Univ Blvd—Ken 501
- Hoover, Helen S.....Everett
Sp, FA.....2817 Baker, Everett
- Hopf, Henry Lloyd.....Port Angeles
LD, ME.....1502 Westlake Av N
- Hopkins, Doris Fernald.....Seattle
UD, Lib.....1061 E Lynn St—M 3975
- Hopkins, Ella R.....Des Moines, Ia
Grad.....610 17th Av N—E 548
- Hopkins, George Frederick.....Roseburg, Or
LD, EE.....4235 10th Av NE—Ken 1103
- Hopkinson, Lawrence Tetley.....Seattle
LD, ChE.....Fort Lawton
- Hopper, Dorothea C.....Seattle
LD, LA.....4532 19th Av NE—Ken 1092
- Hopper, George Thomas.....Spokane
LD, Bus.....5235 Univ Blvd
- Hopping, William Daniel.....Tacoma
UD, Bus.....4505 18th Av NE—Ken 333
- Horbach, Eva Elizabeth.....Kelso
LD, LA.....4738 16th Av NE—Ken 3328
- Horiuch, George S.....Seattle
Sp, Law.....211 5th Av S—Main 3750
- Horn, Bertram Storey.....Tacoma
Unc, Bus.....Klivo Club, Campus—N 55
- Hoskins, Naomi.....Lower Bridge, Or
LD, Ed.....4508 16th Av NE—Ken 2768
- Hosmer, Mrs Page Robertson.....Seattle
Sp, LA.....4714 19th Av NE—Ken 2761
- Hossack, Myra Louise.....Seattle
UD, LA.....4704 18th Av NE—Ken 119
- Hotelling, Addison Harold.....Puyallup
UD, Jour.....5017 Latona Av
- Houck, John Anson.....Medina
LD, Sci.....324 Liberty Bldg—Ell 2837
- House, Louise Osceola.....Port Townsend
UD, LA.....4710 Univ Blvd—Ken 1857
- Hover, Ernest John.....Tacoma
Unc, Law.....5043 18th Av NE
- Hovey, Mary C.....Seattle
LD, Bus.....5042 18th Av NE
- Howard, Grace Elizabeth.....Seattle
Grad.....care Title Trust Co—M 2560
- Howard, Hilda Kellogg.....Oakland, Cal
Grad.....4705 16th Av NE
- Howe, Elmer Bernard.....Missoula, Mont
UD, Bus.....5218 Univ Blvd
- Howe, Harold Maxwell.....Seattle
LD, Bus.....4414 Meridian
- Howe, Kendall Lee.....Seattle
LD, EE.....934 Ewing St
- Howell, Emma Louise.....Pomeroy
LD, FA.....4535 18th Av NE—Ken 1429
- Howell, Irma Elizabeth.....Renton
LD, LA.....Renton
- Howes, Jessie.....Hood River, Or
UD, Sci.....4540 Univ Blvd—Ken 2934
- Hoyt, Verna Margaret.....Seattle
LD, LA.....719 33d Av—E 1067
- Hubbard, C Andresen.....Portland, Or
LD, Ed.....4121 14th Av NE
- Hudson, Dorothy Sewall.....Seattle
UD, Lib.....4732 21st Av NE—Ken 26
- Hudson, Mabel Catherine.....Everett
LD, LA.....4508 16th Av NE—Ken 2768
- Hudson, Marjorie Merle.....Seattle
LD, LA.....3617 35th Av W—QA 2681
- Huff, Virginia.....Seattle
Grad.....624 Malden Av—Cap 869
- Hufford, Luzerne.....Seattle
LD, Sci.....5545 Woodlawn Av—N 3664
- Huggett, Cepha Mae.....Pinehurst
LD, LA.....4552 12th Av NE—Ken 1913
- Hughes, Anne Burke.....Seattle
LD, LA.....723 19th Av—E 6229
- Hughes, Mary Monica.....Seattle
UD, Jour.....4504 18th Av NE—Ken 146
- Hughes, Nancy E.....Lind
U D, Sci.....4547 Univ Blvd—Ken 1004
- Hull, Edith Pearle.....Aspen, Colo
LD, LA.....5214 Univ Blvd
- Hummer, Helen Belle.....Seattle
Unc, LA.....4524 10th Av NE—Ken 199
- Hunsaker, Herbert C.....Seattle
LD, LA.....4727 Brooklyn Av—Ken 152
- Hunsaker, James Wiley.....Seattle
LD, ChE.....509 ½ Malden Av—Cap 3409
- Hunt, Caroline.....Colfax
Unc, FA.....4547 19th Av NE—Ken 23
- Hunt, Hector McNeill.....Seattle
LD, Bus.....1206 Summit
- Hunt, Lawrence Wilbur.....Burlington
LD, LA.....3800 9th Av NE
- Hunt, Ozro Harold.....Kennydale
LD, EE.....Seattle
- Hunt, Phebe Alberta.....Seattle
Unc, LA.....2647 Walnut Av—W 228R
- Hunter, Ruth Catherine.....McMinnville, Or
Grad.....4704 18th Av NE—Ken 119

- Hunter, Ruth G. Seattle
 UD, LA. 4704 18th Av NE—Ken 119
 Huntington, Ruth Foster Seattle
 LD, LA. Kirkland—Red 271
 Huntley, Elva Deane Spokane
 LD, FA. 4532 19th Av NE—Ken 1092
 Huntworth, John Willard Seattle
 LD, Bus. 4817 Aurora Av—N 2709
 Hunziker, Dorothy Lucile Seattle
 LD, LA. 4532 19th Av NE—Ken 1092
 Hurd, Evelyn Gracia Goldendale
 LD, LA. 4718 20th Av NE
 Hurley, Dora Seattle
 LD, LA. 416 E 71st St—Ken 814
 Hurley, Douglas Chester Pocatonia, Ill
 UD, Sci. 5038 Univ Blvd—Ken 496
 Hurwich, David Luzina, Russia
 Grad. 3731 14th Av NE—N 3704
 Hurzeler, Gladys Lillian Butte, Mont
 LD, LA. 1208 E 43d St
 Hutcheson, Elwood Montesano
 LD, LA. 4732 21st Av NE—Ken 26
 Hutchinson, Archie Dewey Tacoma
 LD, Min. 4503 Univ Blvd—Ken 236
 Hutchinson, William Harold Seattle
 LD, LA. 1930 14th Av N
 Hutchinson, Zoe Buckley Seattle
 LD, Sci. 1703 Harvard Av
 Hutchison, Patricia Seattle
 LD, Bus. 1906 E 45th St—Ken 983
 Hyman, Benezra Seattle
 UD, EE. 115 20th Av
 Hyman, Norton Beebe Seattle
 Unc, Bus. 3911 Whitman Av—N 2305
 Hyndman, Alva Lucile Seattle
 UD, Ed. 1812 Nob Hill Av—QA 1562
 Hyndman, William Lee Spokane
 Unc, Law. 2437 1st Av S
- Ibarra, Francisco Norberts Manilla, P I
 Unc, Bus. YMCA—M 5208
 Ide, Wilson Glen Seattle
 LD, ChE. 4503 Univ Blvd
 Ingham, Florence Maurine La Conner
 LD, Ed. Des Molnes
 Inglis, John Sidney Seattle
 LD, LA. 2618 N Broadway—Cap 2343
 Ingraham, Laura Winifred Seattle
 UD, Ed. 1323 E Pine—E 4879
 Inman, Mrs Myrtle Nesland East Stanwood
 LD, LA. 4547 16th Av NE—Ken 867
 Inouye, Choei Seattle
 LD, LA.
 Inouye, Isami Tacoma
 UD, EE. Box 631, University Sta—N 3797
 Instrella, Mr Angel P I
 Sp, Ed. 1404 E 41st St
 Iorns, Eleanor Lewis Seaside, Or
 Unc, LA. 1323 E Pine—E 4879
 Irvin, Frieda Ruth Seattle
 LD, Ed. 4532 18th Av NE—Ken 2827
 Irvine, Maybelle Spokane
 Unc, Bus. 5804 15th Av NE—Ken 1148
 Irwin, Marena Valetta Seattle
 LD, Bus. 918 16th Av N
 Ishii, Mamie Seattle
 Grad. 1229 E Spruce St—E 1057
 Ishiyama, Eitsuo Japan
 LD, EE. 4110 12th Av NE—N 3797
 Isogaya, Meizen Japan
 Grad. 701 Washington St—M 2486
 Itkin, Samuel Eugene Russia
 Sp, CE. 160 22d Av
 Ives, Alice Annette Seattle
 LD, LA. 4580 Univ Blvd—Ken 2496
 Ives, Byron Griswold Seattle
 LD, Bus. 3602 Laurel Av
- Iyesaka, Shoha Japan
 UD, EE. 1420 1st Av
- Jackson, Edna Cosby Edison
 UD, Sci. 4543 Univ Blvd—Ken 659
 Jackson, Evelyn Seattle
 Unc, Sci. 2106 Jackson St
 Jackson, Geraldine Seattle
 UD, LA. 2012 E 45th St—Ken 2645
 Jackson, Mildred Helen Seattle
 LD, Bus. 4504 18th Av NE—Ken 146
 Jacobs, Jerome Seattle
 LD, Sci. 701 16th Av—E 2520
 Jacobsen, Albert Edwin Seattle
 Unc, ChE. 3840 Linden Av—N 955
 Jacobson, Charles Everett Seattle
 Sp, Bus. 908 3d Av
 James, Gordon Maxwell Tacoma
 LD, Bus. 4550 18th Av NE—Ken 3072
 James Marjorie Tacoma
 UD, Sci. 4714 19th Av NE—Ken 2761
 Jamieson, Cecil Byron Lynden
 LD, Bus. 5038 Univ Blvd
 Janeck, Kenneth Newcomb Yakima
 LD, Bus. 4503 Univ Blvd—Ken 236
 Janeck, Louis Fechter Yakima
 LD, Bus. 5043 18th Av NE—Ken 1879
 Janeway, Harold Lynn Edmonds
 LD, EE. 4746 18th Av NE
 Janson, Ellen Margaret Seattle
 LD, LA. 1616 E 47th St—Ken 149
 Jaques, Reginald Seattle
 LD, LA. 5037 22d Av NE—Ken 1076
 Jared, Myron Shelby Seattle
 LD, Sci. 534 Federal Av
 Jaspersen, Agnes Seattle
 LD, Ed. 6718 26th Av NW—Bal 929
 Jayne, Sadie Morrill Seattle
 LD, Sci. 5243 19th Av NE—Ken 3460
 Jeffery, Margaret Robinson Seattle
 Unc, LA. 4403 Densmore Av—N 3035
 Jellison, Arthur James Baker, Or
 LD, For. 4514 20th Av NE—Ken 3168
 Jenkins, Lucille Kathryn Tillamook, Or
 LD, LA. 4547 Univ Blvd
 Jenkins, Margaret Seattle
 LD, LA. 4231 12th Av NE—N 935
 Jenkins, Percy Jacob South Bellingham
 Unc, ChE. 4504 16th Av NE—Ken 647
 Jenne, Grace Manetta Coupeville
 UD, LA. 4534 Univ Blvd—Ken 20
 Jenner, Earle Bagley Seattle
 Unc, Sci. 822 2d Av N—QA 1327
 Jensen, Kai Seattle
 LD, LA. 3726 Wallingford—N 2669
 Jensen, Leo C. Black Diamond
 Unc, CE. 3714 Corliss Av—N 2782
 Jerould, Ruth Kathryn Seattle
 LD, LA. 1816 1st Av W—QA 797
 Jerome, Vincent Barnes Astoria
 LD, Ed. 4537 11th Av NE
 Jergensen, Mary Esther Warm Springs
 LD, Bus. 5032 21st Av NE
 Jertson, Edith Viola Charleston
 UD, FA. 1319 Lucas Pl—N 931
 Jewett, Julia Louise Seattle
 LD, Sci. 935 17th Av—E 6898
 Johns, Cyrena Tacoma
 LD, LA. 4547 19th Av NE—Ken 23
 Johnson, Arnold Waldemar Seattle
 LD, Bus. 3830 Stoneway
 Johnson, Bryan Seattle
 Grad. 1906 E 45th St
 Johnson, Charles Morrison Tacoma
 LD, Bus. 133 31st Av
 Johnson, Cyrus Boardman Seattle
 LD, EE. 2120 E 47th St

REGISTER OF STUDENTS

Johnson, Elmer William.....Everett
 LD, Bus.....946 N 78th St
 Johnson, Esther Victoria.....St Paul, Minn
 2d Law.....4714 Univ Biv—Ken 2253
 Johnson, Evelyn Alice.....Seattle
 LD, LA.....4530 Univ Blvd—Ken 1040
 Johnson, Florence A.....Seattle
 Unc, Sci.....904 E Highland Dr—Cap 2648
 Johnson, Frank O.....Fort Lawton
 LD, EE.....Fort Lawton
 Johnson, Halton Julius.....Mount Vernon
 LD, ME.....4504 16th Av NE—Ken 647
 Johnson, Jane Gregg.....Seattle
 LD, LA.....4504 18th Av NE—Ken 146
 Johnson, Jess.....Everett
 UD, Min.....4713 14th Av NE—Ken 2168
 Johnson, John Earl.....Kalama
 Grad.....4519 1/2 14th Av NE
 Johnson, Kenneth Alexander.....Portland, Or
 LD, Sci.....Barracks Square, Campus
 Johnson, Manly M.....Naches
 UD, LA.....4305 15th Av NE—Ken 720
 Johnson, Martha Eleanor.....Naches
 LD, LA.....4554 16th Av NE—Ken 3212
 Johnson, Minnie Lorna.....Seattle
 Grad.....Lewis Hall—N 162
 Johnson, Ofell Hjalmer.....Seattle
 2d Law.....904 N 48th St
 Johnson, Olive M.....Seattle
 Unc, Sci.....904 E Highland Dr—Cap 2648
 Johnson, Rolf Morris.....White Salmon
 Unc, EE.....3807 11th Av NE
 Johnson, Rose.....Buhl, Ida
 UD, LA.....1906 E 45th St—Ken 983
 Johnson, Victor Martin.....Spokane
 LD, LA.....4550 18th Av NE—Ken 3072
 Johnston, Hazel Blanche.....Seattle
 LD, Bus.....3050 6th Av NE—Ken 3501
 Johnston, James Franklin.....Seattle
 UD, Ed.....4714 Brooklyn Av—Ken 1170
 Johnston, Theresa Marguerite.....Seattle
 LD, LA.....4033 15th Av NE—N 3152
 Joiner, Anna Elmira.....Anacortes
 Grad.....4524 19th Av NE—Ken 199
 Jones, Adeline P Groves.....Seattle
 Grad.....823 E 78th St—Ken 3274
 Jones, Mrs Alice Dowell.....Seattle
 UD, LA.....4534 Univ Blvd—Ken 20
 Jones, Miss Carroll D.....Spokane
 LD, LA.....4718 20th Av NE
 Jones, S Dorothy.....Menlo Park, Cal
 UD, LA.....4710 Univ Blvd—Ken 1857
 Jones, Dorothy Marion.....Carbonado
 Unc, LA.....Seattle
 Jones, Ella.....Seattle
 UD, LA.....2115 E 55th
 Jones, Floyd Seymour.....Seattle
 Sp, Bus.....170 11th Av
 Jones, Hazel E.....Seattle
 LD, LA.....4535 18th Av NE—Ken 1429
 Jones, Marjorie.....Seattle
 LD, LA.....2616 Harvard Av N—Cap 8940
 Jones, William James.....Seattle
 Sp, Bus.....6751 22d Av NW
 Jones, William John.....Seattle
 LD, Bus.....3839 Ashworth
 Jones, Zenith Walkins.....Seattle
 LD, LA.....4703 18th Av NE—Ken 2826
 Jordan, Frances Mayes.....Maryhill
 Unc, LA.....5244 Univ Blvd
 Jorgensen, Marguerite.....Seattle
 UD, Ed.....327 Belmont N—Cap 2231
 Joy, Anderson Stickney.....Seattle
 LD, ME.....4520 21st Av NE
 Joy, Arnyess Ione.....Seattle
 LD, LA.....4504 18th Av NE—Ken 146
 Juan, Teofilo.....Folo Bulacan, P I
 LD, LA.....1521 12th Av S—Bea 1787

Judges, Frederick Byron.....Spokane
 LD, LA.....4700 19th Av NE
 Judson, Ruth S.....Seattle
 Sp, Sci.....107 Dorffel Dr—E 8139
 Jullerat, Lee August.....Seattle
 UD, Ed.....147 N 80th
 Jurgensohn, Eva.....Seattle
 UD, Sci.....4524 19th Av NE—Ken 199
 Juve, Henrick Dahl.....Enterprise, Or
 LD, LA.....Univ YMCA
 Juvet, Obel Mark.....Ferndale
 LD, Sci.....4043 12th Av NE

 Kager, Garnet.....Seattle
 LD, LA.....3620 34th Av W
 Kaib, Charles John.....Spokane
 LD, Bus.....4506 Univ Blvd—Ken 291
 Kalin, Albert.....Seattle
 Sp, EE.....1146 Franklin Av—Cap 1322
 Kane, Arthur T.....Edison
 LD, ME.....4134 Brooklyn Av—N 1168
 Kane, Sadie Frances.....Seattle
 LD, LA.....348 16th Av—E 4940
 Kane, Mrs Susan M.....Seattle
 UD, Ed.....Univ Campus—N 2050, Loc 51
 Kaseberg, Mary Elizabeth.....Walla Walla
 LD, Sci.....4524 Univ Blvd—Ken 721
 Kawazoe, Misao.....Tacoma
 LD, EE.....Univ PO Box 631—N 3707
 Keator, Frederic William Jr.....Tacoma
 UD, ME.....4520 21st Av NE—Ken 2600
 Keeton, Brilliant.....Edmonds
 LD, Sci.....5210 12th Av NE—Ken 1361
 Kelfer, Lyman Beecher.....Winesap
 LD, CHE.....4305 15th Av NE—Ken 720
 Keith, Emily Hazelwood.....Seattle
 UD, Lib.....1629 35th Av
 Kellam, Kathleen Vivian.....Seattle
 Unc, Ed.....4311 Brooklyn Av—Ken 948
 Kelleher, John Emmett.....Seattle
 LD, LA.....527 11th Av N
 Kelley, Cecil Starr.....Seattle
 LD, CHE.....6306 15th Av NE
 Kelley, Martha Eugenie.....Seattle
 LD, LA.....6306 15th Av NE—Ken 2428
 Kelling, Vesta Marie.....Seattle
 LD, LA.....338 E 51st St—Ken 2098
 Kellogg, Arvis.....Seattle
 LD, Sci.....6549 19th Av NE
 Kellogg, Howard Butler.....Seattle
 LD, Sci.....4616 21st Av NE—Ken 1743
 Kellogg, Orson Chester.....Hoquiam
 LD, Bus.....4532 18th Av NE—Ken 2827
 Kelly, Mrs Ruth Haslett.....Tacoma
 UD, LA.....4732 21st Av NE—Ken 26
 Kelly, Samuel P.....Bellingham
 Grad.....4520 21st Av NE—Ken 2600
 Keltner, Belle.....Seattle
 LD, LA.....1906 E 45th St—Ken 893
 Kendall, William Henry.....Portland, Or
 LD, ME.....1447 20th Av—E 6610
 Kenman, Charles.....Seattle
 Sp, Bus.....1509 Grand Blvd
 Kennedy, Doreen.....Seattle
 LD, Bus.....5046 12th Av NE—Ken 2005
 Kennedy, Dorothy Allen.....Snoqualmie Falls
 LD, Ed.....Seattle
 Kennett, John Joseph.....Seattle
 Unc, LA.....5720 Univ Blvd
 Kenny, Joel M.....Portland, Or
 Unc, CE.....Broadway and James Sts
 Kappel, Mrs Susan L.....Seattle
 Grad.....2116 N 51st St—N 3821
 Karanen, George Matthew.....Brush Prairie
 LD, Sci.....Seattle
 Kerr, Grace Chamberlaine.....Seattle
 LD, FA.....5280 18th Av NE—Ken 2902

- Kerr, Ruth HamiltonSeattle
 UD, Jour. 5260 18th Av NE—Ken 2902
 Kerschner, Vernon AlginCenterville, Ia
 LD, EE.Anchorite Club, Campus
 Kessinger, Elizabeth JennieSeattle
 Unc, Bus. 2706 11th Av N—Cap 2387
 Ketcham, Ernest JamesSeattle
 LD, Bus. 4100 Densmore Av
 Ketcham, LauraSeattle
 LD, LA. 4100 Densmore Av
 Ketridge, Anna M.Libby, Mont
 UD, Sci. 1616 E 47th St
 Keyes, Harmon EdwardSeattle
 UD, ChE. 402 Prospect St
 Kidwill, Francis ElmerSeattle
 LD, EE. 510 E John St
 Kief, Katherine PoeMountain Home, Ida
 UD, Jour. 5009 21st Av NE—Ken 3298
 Kilpatrick, GenevieveBerkeley, Cal
 Grad. 1906 E 45th St
 Kimball, IsabelAnaconda, Mont
 LD, Ed. 1616 E 47th St—Ken 149
 Kimple, Emily BelleSeattle
 LD, Sci. 1113 E Thomas St—Cap 1837
 King, DorothyPuyallup
 LD, Sci. 4854 8th Av NE—N 4075
 King, John ChesterYelm
 LD, CE. 4508 16th Av NE
 King, MurielSeattle
 LD, FA. 4321 Woodlawn Av—N 676
 King, William Gregory Jr.Seattle
 LD, Bus. 4520 21st Av NE—Ken 2800
 Kingsbury, Emily CelesteButte, Mont
 LD, Sci. 4704 18th Av NE—Ken 119
 Kingsley, FrancesPortland, Or
 Unc, LA. 4543 Univ Blvd
 Klipp, Letha JuliaSeattle
 Unc, LA. 4313 2d Av NE
 Klipp, PearlSeattle
 LD, Sci. 4313 2d Av NE
 Kirkham, Virgil RaymondeRitzville
 UD, Sci. 5211 16th Av NE
 Kitamura, MorimitsuSeattle
 UD, LA. 4110 12th Av NE—N 3707
 Kizer, DorothySeattle
 UD, Ed. 4535 18th Av NE—Ken 1429
 Kleist, Walter A.Tacoma
 UD, EE. 4504 16th Av NE
 Kloeker, Rosetta P.Port Townsend
 LD, FA. 4532 19th Av NE—Ken 1092
 Klopfer, Henrietta J.Seattle
 UD, Sci. 616 21st Av N—E 4828
 Klopfer, LucySeattle
 LD, LA. 616 21st Av N—E 4828
 Knausenberger, Karl HuberSeattle
 LD, Bus. 1616 18th Av—E 4791
 Knight, BethWapato
 Unc, FA. 6548 16th Av NE
 Knight, Morris W.Cass City, Mich
 Sp, LA. 919 Madison St—M 1715
 Knips, GeorgeLismore, Minn
 LD, Bus. Mufti Club, Campus
 Knowlton, Helen ElizabethCaldwell, Ida
 LD, LA. 1906 E 45th St—Ken 983
 Knowlton, Marian RubySeattle
 LD, LA. 4716 16th Av NE—Ken 180
 Knox, EthelEmmett, Ida
 LD, Ed. 4002 Burke Av—N 3609
 Knudsen, Einar MangnusSeattle
 LD, Bus. 4719 2d Av NE
 Knappe, LymanFairbanks, Alas
 Unc, ME. 2004 E Union St
 Kobayashi, HidekichiSeattle
 LD, Bus. 214 8th Av S
 Kobler, Anna HelenSeattle
 LD, Ed. 809 15th Av N—Cap 3780
 Koch, SamuelSeattle
 Grad. 916 20th Av N—E 8767
 Kohlman, MarjorieVancouver, B C
 UD, Ed. 4710 Univ Blvd—Ken 1867
 Koller, HelenSeattle
 UD, Bus. 932 18th Av N—E 9284
 Kolnitz, Abraham VictorSeattle
 UD, LA. 552 16th Av
 Kortmeyer, Clara DMubton
 UD, Bus. 4538 15th Av NE—Ken 1482
 Kozlowski, FrankSeattle
 LD, ME. 5834 3d Av NW
 Kracower, BellaSeattle
 UD, Phar. 939 16th Av N—E 6834
 Kracower, RoseSeattle
 LD, Bus. 939 16th Av N—E 6834
 Kramer, Karl WeinerSeattle
 LD, ME. 6307 12th Av NE
 Krant, Samuel B.Seattle
 UD, EE. 3804 10th Av NE—N 1688
 Krels, Foster HelmSeattle
 Grad. 4503 Univ Blvd
 Kretsinger, John MaurySeattle
 LD, Bus. 1253 23d Av N—E 5084
 Krohn, VioletSeattle
 UD, FA. 6238 Woodlawn—Ken 752
 Kronfield, DavidSeattle
 UD, ChE. 109 15th Av
 Kruse, Mildred MargrettePortland, Or
 LD, LA. 5008 16th Av NE
 Kuballo, HelenSeattle
 Unc, LA. 2533 33d Av S
 Kuebler, Dorothy AdaSeattle
 LD, Sci. 602 N 45th St
 Kuehner, Arthur ChristianSouth Bend
 UD, Sci. 4234 11th Av NE—N 2350
 Kuhn, JessieSeattle
 LD, Sci. 4513 14th Av NE—Ken 3308
 Kuntz, OlivePomona, Cal
 Grad. 4554 16th Av NE—Ken 3212
 Kunze, HelenStanwood
 LD, LA. 4508 16th Av NE
 Kyd, Margaret StewartSeattle
 UD, LA. 3237 35th Av S—Rain 339J
 Kylstra, JohnYakima
 LD, ChE. 5020 12th Av NE—Ken 2044
 Lachman, DorothySeattle
 UD, LA. 2102 Emmons Pl—Cap 1878
 Ladner, James GuySeattle
 UD, CE. 833 14th Av
 Lafromboise, ArthurEnumclaw
 3d Law. 4759 Brooklyn Av
 Lafromboise, Samuel BlakeleyEnumclaw
 LD, EE. 4759 Brooklyn Av
 Lair, CatherineSeattle
 LD, LA. 2009 2d Av N—QA 2673
 Lamb, Grace VirginiaSeattle
 LD, FA. 2007 E Lynn St—E 4778
 Lambers, Rhea IolaSeattle
 Unc, LA. 3234 34th Av W
 Lambkin, Margaret YarbroughCastle Rock
 LD, LA. 509 E 43d St—N 538
 Lancaster, Glynn KirkSeattle
 LD, Phar. Sheridan Apts
 Lance, HelenSeattle
 LD, Bus. Clark Hall—N 262
 Land, PerrySeattle
 LD, Phar. 5038 Univ Blvd
 Landes, Kenneth KnightSeattle
 LD, Sci. 4541 14th Av NE
 Landsburg, Robert A.Seattle
 LD, ChE. 2909 Washington St—Bea 2065
 Landt, Clibern StanleyCoeur d'Alene, Ida
 LD, Bus.
 Lane, IreneSeattle
 Unc, FA. 4523 Corliss Av—N 1017
 Lane, James TiptonSeattle
 Unc, Sci. 4200 6th Av NE

Laney, David Heren	Seattle	Leighorn, Frances Marie	Seattle
Unc, ME	4115 15th Av NE	UD, Jour	811 17th Av
Langenbach, John Joseph	Malone	Leighton, Chester	Seattle
8d Law	5218 Univ Blvd—Ken 8160	LD, EE	116 N 46th
Lanse, Helen	Seattle	Leighton, Elizabeth	Welsler, Ida
LD, Sci	Clark Hall—N 262	LD, FA	4554 16th Av NE
Larkin, Charles Earll	Seattle	Lelse, John Frederic	Seattle
Unc, CE	4618 16th Av NE	LD, Sci	348 W Nickerson—QA 3797
Larkin, Mae Ellen	Seattle	Leith, Donald Gordon	Seattle
Grad	4518 16th Av NE—N 1381	LD, Ed	4305 15th Av NE
Larse, Mona J	Plains, Mont	Leith, Jessie	Mfonco, Wis
LD, Bus	Lewis Hall—N 162	LD, LA	6543 16th Av NE
Larsen, Laura	Seattle	Lemon, John Francis	Watsonville, Cal
LD, Ed	Lewis Hall—N 162	UD, Ed	3731 14th Av NE
Larson, Emma Carolyn	Lisabeula	Lennox, Edward Henry	Tacoma
UD, LA	4543 7th Av NE—N 2259	Unc, LA	4532 18th Av NE—Ken 2827
Larson, Herbert Louis	Tacoma	Leonard, Arthur Ralph	Seattle
LD, LA	419 18th Av N—Cap 3010	LD, CE	387 N 78th St
Larsson, Kirsten	Seattle	Leslie, Cora Ross	Waterville
UD, Sci	5228 20th Av NE—Ken 2331	LD, LA	4554 16th Av NE—Ken 3212
Larson, Lars Oscar	Sweden	Levin, Ben Zion	Spokane
LD, LA	Adelphia College—Cap 705	LD, Sci	4123 11th Av NE—N 2474
Lathers, Olive Gladys	Ann Arbor, Mich	Levis, Edith Harriet	Seattle
Unc, Sci	1714 Palm St	LD, Bus	430 Ravenna Blvd—Ken 2516
Latimer, Allan Wallace	Seattle	Levy, Lucille	Seattle
LD, Bus	723 Terry Av	LD, Phar	918 Boylston Av—E 2088
Latimer, Walter B	Seattle	Lewallen, Marjorie Frances	Rosalina
LD, EE	4503 Univ Blvd—Ken 236	LD, Phar	4703 18th Av NE—Ken 2826
Latta, Susan Hyslop	Seattle	Lewis, Anna	Coulee City
Unc, Ed	3702 W Cloverdale St—W 844W	UD, Sci	4123 11th Av NE—N 2474
Lawless, Bernice	Seattle	Lewis, Gertrude Albertina	Seattle
LD, Ed	1010 10th Av W—QA 654	LD, LA	957 22d Av N—E 7157
Lawless, Grace	Seattle	Lewis, Marion J	Edmonds
LD, Ed	1910 10th Av W—QA 654	UD, Lib	4504 18th Av NE—Ken 146
Lawson, Douglas Clyde	Portland, Or	Lewis, Mildred Frances	Seattle
LD, Bus	4503 Univ Blvd—Ken 236	LD, LA	957 22d Av N
Lawson, Gay	Seattle	Lewis, Olin	Portland, Or
UD, Ed	2575 10th Av W	LD, LA	4748 19th Av NE
Lazo, Leon	Seattle	Lewis, Rubin	Butte, Mont
Sp, Sci	YMCA	LD, ME	4123 11th Av NE—Ken 2474
Lea, Margaret Josephine	Seattle	Lewis, Orvil Wilburn	Seattle
LD, LA	415 30th Av S	Sp, For	4045 14th Av NE
Leaming, Gertrude	Castle Rock	Lichty, Ralph John	Spokane
LD, LA	4754 16th Av NE—Ken 2988	Unc, Law	4546 15th Av NE—Ken 3566
Leaming, Ruth	Castle Rock	Lie, Borghild Constance	Seattle
UD, Jour	4745 16th Av NE—Ken 2988	UD, Ed	4328 Phinney Av—N 1212
Lease, Howard Stiles	Great Falls, Mont	Lieberg, Vivian	Seattle
LD, Sci	4506 Univ Blvd—Ken 291	Grad	4064 5th Av NE—N 1951
Leavitt, Leo B	Seattle	Liggett, Verita M	Mount Vernon
LD, Sci	721 17th Av—E 2105	LD, LA	4540 Univ Blvd
Leavitt, Marlon C	Seattle	Lightle, John Willis	Seattle
LD, LA	6403 Brooklyn Av—N 2391	LD, Sci	3110 8d Av W—QA 3498
Lechner, Leslie A	Seattle	Lilly, Donald Reginald	Bridgeport
Sp, Law	6744 25th Av—Bal 1830	LD, LA	5725 17th Av
Lee, Artrudoe Lazenberry	Seattle	Lilly, Dorothy Carmella	Seattle
Unc, LA	2015 E 52d St	LD, Ed	6543 16th Av NE
Lee, Edith Chalcraft	Seattle	Lin, Fu	China
LD, LA	2303 34th Av S	LD, LA	4528 Brooklyn Av—Ken 27
Lee, Fairman B	Seattle	Lind, Harry Milton	Seattle
UD, ME	1217 6th Av W	UD, For	1116 Eastlake Av
Lee, Henry Raymond	Bellingham	Lindau, Gottfried	Seattle
LD, CE	Stanley Apts	Grad	7408 Woodlawn Av
Lee, Hugh Seymour	Seattle	Lindberg, W Hilding	Tacoma
Unc, Sci	1416 E 41st St	LD, Bus	5087 22d Av NE—Ken 1076
Lee, James Sidney	Spokane	Lindblom, Florence	Turlock, Cal
LD, LA	4506 Univ Blvd—Ken 291	UD, Sci	5214 Univ Blvd—Ken 844
Lee, Marion Winifred	Tacoma	Lindblom, Roy E	Seattle
UD, Lib	4535 18th Av NE—Ken 1429	LD, EE	323 3d Av W
Lee, Richard	Seattle	Lindemann, Helen	Seattle
LD, Phar	2501 Yesley Way	LD, LA	Roanako, Mercer Isl—Bea 4337
Leechman, John Douglas	Seattle	Lindley, Alice B	Seattle
LD, LA	Public Library—M 2466	UD, LA	5517 5th Av NW—Bal 61
Levy, Geraldine	Seattle	Lindsay, Margery Alice	Seattle
LD, Sci	7044 Jones Av NW—Bal 3244	LD, LA	4528 4th Av NE—N 3612
Lefebvre, Adeline	Seattle	Lindsay, Olive Noreen	Everett
LD, Sci	2012 E 45th—Ken 2645	LD, LA	4742 18th Av NE—Ken 396
LeFevre, Howard D	Seattle	Lindsay, Steele Frank	Seattle
Sp, ME	5022 21st Av NE—Ken 486	LD, LA	4528 4th Av NE

- Lindsay, William Klippel.....Seattle
UD, For.....K'wai-Ka Club, Campus
- Lindsey, Louis Burns.....Seattle
LD, Bus.....1506 17th Av—E 3175
- Linton, James Reginald.....Seattle
UD, Sci.....4514 20th Av NE—Ken 3168
- Linton, Robert B.....Seattle
UD, Sci.....4514 20th Av NE—Ken 3168
- Lipscomb, Pearl Irene.....Seattle
LD, Bus.....4732 21st Av NE—Ken 26
- Lisle, Mrs Mabel.....Seattle
Unc, FA.....1416 E 41st St—N 184
- Liston, James G.....Orillia
LD, LA.....Orillia
- Little, Dorothy Vernon.....Seattle
LD, Sci.....210 Crockett St—QA 2847
- Little, Herbert Satterthwaite.....Seattle
LD, LA.....210 Crockett St—QA 2847
- Littlefield, Dorothy.....Seattle
LD, LA.....5417 21st Av NE—Ken 2718
- Lloyd, Robert Denton.....Seattle
Sp, Sci.....2412 Nob Hill Av—QA 4708
- Lloyd, William J.....Seattle
UD, EE.....2060 15th Av W
- Lockerby, McCarthy Frank.....Seattle
LD, Bus.....1723 L C Smith Bldg
- Lockman, Frederick Vincent.....Seattle
UD, FA.....2015 24th Av N—E 4381
- Lockwood, Frances Elizabeth.....Waterville
LD, FA.....4532 18th Av NE
- Lofgren, Frederick Valentine.....Seattle
LD, Phar.....2042 W 63d St—Bal 796
- Logan, Florence L.....Seattle
UD, Jour.....1909 4th Av N—QA 2346
- Logan, Helen Louis.....Boise, Ida
LD, Bus.....6285 20th Av NE—Ken 8144
- Logg, Charles P.....Seattle
LD, Bus.....5002 20th Av NE
- Logg, David Gladstone.....Seattle
UD, LA.....5002 20th Av NE—Ken 1189
- Logg, Frank Stanley.....Seattle
LD, Ed.....5002 20th Av NE—Ken 1189
- London, Lola Margaret.....Seattle
LD, LA.....511 N Broadway—Cap 1394
- Long, Sylvester.....Renton
LD, LA.....Renton
- Long, Tressa.....Renton
LD, LA.....Renton
- Lonke, Lillian.....Seattle
UD, Sci.....1208 E 48d St
- Lonseth, Herbert Cornelius.....Seattle
LD, Sci.....361 Highland Dr—QA 3210
- Loomis, Alvin J.....Seattle
UD, EE.....5008 12th Av NE
- Loomis, Mamie Elizabeth.....Forest Grove
Unc, Bus.....4551 Univ Blvd—Ken 501
- Loomis, Mrs. Minerva Udell.....Portland, Or
UD, LA.....4125 Brooklyn Av—N 39
- Lopp, Weyana.....Seattle
LD, LA.....4738 9th Av NE
- Lorah, James Richard.....Seattle
LD, ChE.....1518 Broadway
- Lorbeer, Norma.....Pomona, Cal
LD, LA.....4418 4th Av NE—N 2409
- Lothrop, Daniel J.....Seattle
Grad.....4742 Thackeray Pl
- Loundagin, Fred G.....Clarkston
LD, ChE.....1405 E 41st St
- Love, Elizabeth Jean.....Tacoma
LD, Sci.....4547 Univ Blvd
- Lovegren, Olga Theresa.....High Point
LD, FA.....Adelphia College—Cap 705
- Loveless, Frances.....Coeur d'Alene, Ida
LD, Sci.....5563 29th Av NE
- Lovely, Josephine Monica.....Arlington
UD, LA.....4534 Univ Blvd—Ken 20
- Low, Nellie.....Dayton
UD, LA.....4704 18th Av NE—Ken 119
- Lowe, Alexander Hewitt.....Portland, Or
LD, CE.....4026 12th Av NE
- Lowman, Willa B.....Anacortes
Unc, Ed.....4508 16th Av NE
- Luce, Margaret.....Seattle
LD, Ed.....1705 35th Av
- Ludgate, Katherine Eva.....Seattle
Grad.....5005 12th Av NE
- Ludington, Flora Belle.....Wenatchee
LD, LA.....4540 Univ Blvd—Ken 3216
- Ludwigs, Flora E.....Walla Walla
UD, Sci.....2012 E 45th St—Ken 2645
- Ludwigs, Frank H.....Walla Walla
LD, Bus.....4305 15th Av NE—Ken 720
- Luft, Herman.....Bremerton
LD, ME.....Khaki Club, Campus—N 55
- Lundell, Berger John Olof.....Issaquah
LL, LA.....4312 9th Av NE—N 2156
- Lundstrom, Margaret.....Sweden
LD, Sci.....Adelphia College—Cap 705
- Lundy, Iris Rachel.....Seattle
LD, LA.....606 17th Av N—E 7400
- Lunge, George Scott.....Seattle
Unc, EE.....4235 12th Av NE
- Lurie, Clara Eugenia.....Seattle
LD, LA.....1202 Madison St—EII 1569
- Luten, Miriam.....Seattle
LD, LA.....1248 22d Av N—E 8500
- Lynch, Angeline.....Butte, Mont
LD, Ed.....1603 20th Av—E 522
- Lynch, Walter S.....Seattle
Unc, EE.....105 McGraw St—QA 1131
- McAdam, William Roy.....Seattle
UD, EE.....541 19th Av—E 8067
- McAllister, Frances Cleva.....Twin Falls, Ida
LD, Sci.....1606 E 47th St—Ken 2431
- McAulay, John Henry.....Yakima
LD, ME.....5038 18th Av NE—Ken 1103
- McBee, Lucia Hazel.....Buhl, Ida
LD, LA.....4029 7th Av NE
- McCabe, Clair.....Seattle
Unc, Bus.....1707 Bellevue Av
- McCabe, Patricia Gertrude.....Seattle
Unc, LA.....1625 E Madison St—E 5547
- McCaig, Grace Ralston.....Spokane
Unc, Sci.....3347 Harvard Av N—Cap 3934
- McCarthy, Clara Genevieve.....Puyallup
LD, LA.....162 15th Av N
- McCausland, T Elizabeth.....Seattle
LD, LA.....1847 N 51st St—N 842
- McCausland, Lelon.....Seattle
LD, Ed.....1620 7th Av W—QA 1514
- McClung, Mildred Ellen.....Portland, Or
LD, FA.....4547 19th Av NE—Ken 23
- McClure, Charles Willard.....Yakima
LD, LA.....5012 10th Av NE—Ken 8227
- McColloch, Elizabeth Zane.....Seattle
LD, LA.....4720 Univ Blvd—Ken 1284
- McComb, Mattie Anna.....Seattle
Unc, Sci.....708 W 73d St
- McConihe, Almee Katherine.....Seattle
UD, LA.....5224 19th Av NE—Ken 456
- McCorkle, Agnes Caroline.....Sumner
LD, LA.....2120 E 47th St
- McCormick, Phillip George.....Portage
LD, Sci.....2120 21st Av NE
- McCormick, Vivian Isabel.....Spirit Lake, Ida
UD, Sci.....1616 E 47th St—Ken 149
- McCormick, William Francis.....Duvall
LD, EE.....5037 21st Av NE
- McCracken, Willis Flowers.....Seattle
LD, EE.....502 31st Av S—Bea 919
- McCrea, Mary Helen.....Spokane
LD, LA.....4714 Univ Blvd—Ken 2253
- McCredy, Noble F.....Bickleton
LD, Bus.....4519 1st Av NE—N 1785

REGISTER OF STUDENTS

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McCreery, Edna Lucile	Seattle	McKinstry, Hardy Cecl	Seattle
LD, LA.....	1817 E 63d St	Unc, Bus.....	318 18th Av
McCroskey, Robert Milton	Colfax	McKnight, John E.....	Seattle
LD, FA.....	2120 E 47th St—Ken 1178	Grad.....	4530 14th Av NE—Ken 555
McCullough, John Joseph Jr.....	Seattle	McLaren, Harold E.....	Seattle
1st Law.....	1612 Ravenna Blvd	LD, Bus.....	1800 E Union
McCutcheon, Claud Harvey.....	Brinnon	McLaughlin, Gay Elizabeth.....	Cosmopolis
SC, For	Seattle	LD, LA.....	5019 16th Av NE—Ken 2220
McDonald, Alice Gertrude	Seattle	McLaughlin, Goldie	Seattle
LD, LA.....	1847 Ravenna Blvd—Ken 2505	LD, LA.....	1521 15th Av—E 520
McDonald, Alice Louise	Seattle	MacLean, Elizabeth	Tacoma
LD, Sci.....	2200 12th Av N	LD, Bus.....	4710 Univ Blvd—Ken 1857
McDonald, Eora	Seattle	MacLean, Katherine Kenyon.....	Seattle
LD, LA.....	5266B 14th Av NE	Unc, Bus.....	2211 Federal Av—C 2520
McDonald, James Michael.....	Seattle	McLean, Winfield Angus.....	Seattle
Grad.....	415 Taylor Av	LD, Bus.....	2215 E Aloha St—E 8924
McDonald, Mary Kathryn	Pocatello, Ida	McLennan, Margaret Isabel	Seattle
LD, Bus.....	5534 8d Av W—QA 2530	UD, LA.....	2012 E 45th St—Ken 2645
McDonald, Mayme	Seattle	McLeod, Annabel Jean.....	Athens, Or
UD, Sci.....	103 3d Av W—QA 2539	Or LD, LA.....	4514 18th NE—Ken 188
MacDonald, Mildred	Seattle	McLeod, Gladys Irene.....	Athens, Or
LD, Bus.....	1906 E 45th St—Ken 983	Or LD, Bus.....	4514 18th NE—Ken 188
MacDonald, Olive	Seattle	McLeod, Lester Rounds	Tacoma
Unc, Sci.....	2218 N 41st St—N 702	UD, ME.....	4116 10th Av NE—N 3661
McDonald, William Lewis	Seattle	McManus, Sarah Catharine.....	Fort Worden
LD, CE.....	1847 Ravenna Blvd	Unc, LA.....	4530 18th NE—Ken 2616
MacDougall, John Brock, Jr.....	Seattle	McManus, Hugh Henry.....	Seattle
UD, Sci.....	1100 Terry Av	Unc, LA.....	3811 Warsaw St
McDowell, John Watson.....	Seattle	McMorrان, Jean Pauline.....	Seattle
LD, Sci.....	Bellevue	LD, FA.....	5563 29th St NE—Ken 2238
McDowell, Lola	Port Angeles	McMorris, Harold Edgington.....	Seattle
Unc, LA.....	211 Queen Anne Av—QA 8443	LD, CE.....	1911 4th Av N
McFarland, Estle Curtis	Kelso	McMurtney, Nellie Byrd	Seattle
LD, Phar.....	5212 18th Av NE—Ken 887	LD, Ed.....	4101 11th Av NE
McGaffey, Wesley Frederick.....	Everett	McPhee, Aletha Sophia.....	Seattle
LD, For.....	Univ Blvd—Ken 618	Grad, FA.....	4045 Brooklyn Av—N 2416
McGahn, Ellen Dolores.....	Seattle	MacPherson, Allan Robin.....	Tacoma
LD, Phar.....	5285 Univ Blvd—Ken 659	Sp, Bus.....	4616 21st Av—Ken 490
McGill, Jerauld	Seattle	McPherson, Virgil I.....	Whites
LD, LA.....	5007 15th Av NE—Ken 2695	LD, Sci.....	4537 11th Av NE—Ken 3000
McGill, Wayne Egbert.....	Portland, Ore	McQuoun, Nell Lorena.....	Twin Falls, Ida
LD, Sci.....	5218 Univ Blvd	LD, Bus.....	4735 21st NE—Ken 946
McGirr, Wilma	Bolsé, Idaho	McVay, Vilo	Seattle
Unc, Bus.....	2012 E 45th St—Ken 2645	LD, LA.....	4535 18th Av NE—Bea 925
McGoran, Irene Marion.....	Merritt, B C	McWalters, Dorothy.....	Vancouver, B C
UD, FA.....	1421 13th Av	LD, LA.....	5208 18th Av NE—Ken 1896
McGrath, Anna Mae.....	Pomeroy	McVean, Florence.....	Seattle
LD, LA.....	4543 Univ Blvd—Ken 659	Unc, LA.....	Seattle
McGrew, Eleanor	Seattle	MacDonald, Anne Lyaill	Tieton
LD, LA.....	4718 Univ Blvd—Ken 1882	LD, CE.....	1616 E 47th St—Ken 149
McHugh, Edward Robert.....	Seattle	MacDonald, Ernestine Charlotte.....	Seattle
UD, LA.....	2024 11th Av N—Cap 850	LD, LA.....	5740 33d Av NE—Ken 1036
McHugh, John Joseph.....	Seattle	Maeda, Munyo.....	Seattle
LD, EE.....	2349 Boylston N—Cap 8196	LD, EE.....	1020 Main St
McInnes, John	Wallace, Ida	Macfarlane, Alan Walter	Seattle
LD, LA.....	4504 16th Av NE—Ken 647	LD, ME.....	5214 Univ Blvd—Ken 844
McInnes, Merville Wayne.....	Spokane	Mackey, Cora Lois	Everett
LD, Bus.....	4532 18th Av NE	Grad.....	4543 Univ Blvd—Ken 659
McIntosh, Elizabeth	Seattle	Macpherson, Katharyn Fraser.....	Seattle
Sp, Ed.....	306 Nesika Apt	LD, LA.....	4532 19th Av NE—Ken 1092
McIntyre, Norman	Skykomish	Madison, Viola Delphine.....	Osborne, Kan
Sp, Law.....	Grand Central Hotel	LD, LA.....	4540 Univ Blvd—Ken 8216
McKee, Bayse Clay	Seattle	Madsen, Albert	Tacoma
LD, EE.....	1819 E Prospect St—E 0739	LD, Phar	Seattle
McKee, George M.....	Seattle	Magnusson, Jennie Marie	Seattle
UD, LA.....	4238 Bagley Av	UD, Ed.....	4521 19th Av NE—Ken 242
McKee, Mary E	Everett	Magnuson, Clarence Edwin	Tacoma
Grad	4554 16th Av NE	LD, Bus.....	4550 18th Av NE—Ken 8072
McKibben, Willbur Blaine	Colville	Magnusson, Sidney T.....	Point Roberts
UD, Bus.....	2120 E 47th—Ken 1178	Unc, LA.....	Univ Y M C A
McKim, James.....	Fuyallup	Magowan, Hazel M.....	Hot Springs, S D
LD, Min.....	Fuyallup	UD, Ed.....	4253 7th Av NE—N 205
McKinley, Edward Vivian.....	Wallace, Ida	Magowan, Thomas Ross.....	Hot Springs, S D
LD, Ch E.....	4746 16th Av NE	LD, Bus.....	4253 7th Av NE—N 205
McKinney, Grace Keene.....	Seattle	Mahoney, Ethel S.....	Seattle
Sp, Sci.....	5502 14th Av NE—Ken 45	LD, Sci.....	4503 Univ Blvd—Ken 236
McKinnon, Carl A.....	Eumclaw	Mahoney, Mary Agnes.....	Portland, Or
LD, Ch E.....	Castle Club, Campus—N 55	UD, Bus.....	3958 Edmunds St—Rain 518J

- Mahony, Margaret B. Portland, Or
 Unc, Bus. 1416 E 41st St—N 184
 Mahony, William Bernard. Portland, Or
 Unc, LA. Mercer Island
 Mahoney, Vera Hipper, Or
 LD, Bus. 4540 Univ Blvd—Ken 3216
 Malin, Clara Duval
 LD, FA. 4109 12th Av NE
 Malmo, Clarence Seattle
 Grad, CE. 1913 Westlake Av—Bea 302
 Maloney, Gilbert Michael. Everett
 LD, Sci. 5235 Univ Blvd—Ken 618
 Mann, Marguerite Seattle
 Grad. 4710 Univ Blvd—Ken 1857
 Mancoogian, Leo H. Seattle
 Sp, Phar. 420 Spring St—Main 5287
 Mansfield, Thelma Seattle
 LD, Sci. 4721 11th Av NE
 Mapes, Carl Herbert Seattle
 LD, LA. 1917 N 40th St
 Marchand, Leslie Seattle
 LD, LA. 4039 14th Av NE
 Marchildon, Maria Yakima
 UD, Ed. 4732 21st Av NE—Ken 26
 Maring, Helen Emma Seattle
 LD, LA. 622 First Av W—QA 2719
 Marks, Anne Lenore Seattle
 UD, LA. 017 E Jefferson St—Ell 3668M
 Marks, Stanley Anthony. Douglas, Alaska
 1st Law. 4215 W Dakota St
 Marquette, Elizabeth Seattle
 UD, LA. 1416 E 41st St—N 184
 Marsh, Francis Seaside, Or
 LD, LA. Univ Y M C A
 Marsh, Gordon Wesley Seattle
 LD, For. 4722 20th Av NE
 Marsh, Urna Lillian. Seattle
 Unc, FA. 4722 20th St NE
 Martin, Aleene Vivian Seattle
 LD, LA. 8024 Dibble Av
 Martin, Annie Mabel. Seattle
 LD, LA. Seattle Y W C A—M 7291
 Martin, Earl Vincent. Portland, Or
 UD, ChE. 5043 18th Av NE—Ken 1679
 Martin, Esther Lee. Seattle
 Grad. 703 Central Bldg
 Martin, Frances Lora. Seattle
 UD, Sci. 4543 Univ Blvd—Ken 659
 Martin, Harry Thomas. Doty
 LD, LA.
 Martin, Harold Morris. Ritzville
 LD, Bus. 4532 18th Av NE—Ken 2827
 Martin, Isabel Seattle
 LD, LA. 2012 E 45th St—Ken 2645
 Martin, Leonora Ruth Seattle
 LD, LA. 2227 Boylston Av N—Cap 2972
 Martin, Mary Geneva Mabton
 LD, LA. 4530 12th Av NE—Ken 1397
 Martin, Phillip Lyle Castle Rock
 LD, LA. 4528 7th Av NE—N 2141
 Martinson, Esther Seattle
 UD, Sci. 4730 20th Av NE—Ken 248
 Masatomi, Emile Spokane
 LD, LA. 4110 12th Av NE—N 8707
 Mason, Dwight Allyn Tacoma
 Unc, EE. 4530 18th Av NE—Ken 2616
 Mason, Frank Douglas Seattle
 LD, ME. 2720 E Roy St—E 2373
 Mason, Lela Seattle
 LD, FA. 4019 15th Av NE—N 725
 Mason, Myrth Seattle
 UD, Lib. 4218 11th Av NE—N 3287
 Mason, Irma Ruth. Seattle
 LD, LA. 4019 15th Av NE—N 725
 Masters, Teresa Ida. Oroville
 LD, Bus. 4139 15th Av NE
 Masul, Leonard Goroku. Seattle
 UD, LA. 4110 12th Av NE—N 8797
 Matheson, Katherine Anacortes
 UD, LA. 4547 19th Av NE—Ken 23
 Matheson, Johanna B. Seattle
 LD, FA. 2021 E Mercer St—E 1952
 Matheson, Roy Grant. Granum, Alia
 LD, Bus. 4134 Brooklyn Av—N 1168
 Mathieu, Beatrice Seattle
 UD, Jour. 4534 Univ Blvd—Ken 20
 Mathis, Floy Gladys Seattle
 UD, Lib. 4335 Meridian Av—N 1911
 Mathis, Madge Seattle
 LD, LA. 111 E 50th St—N 3072
 Matson, Elveda Oriflame Edison
 LD, LA. 4727 18th Av NE—Ken 21
 Matsumoto, Takao Japan
 UD, ChE. Box 631 University Sta—N 3797
 Mathews, Leo A. Seattle
 Sp, LA. 8005 Ashworth Av—Ken 1736
 Matsen, Joseph. Seattle
 Unc, Law. 608 E 63d St—N 856
 Matthews, Michael Seattle
 Sp, Sci. 1012½ King St
 Matthies, Silas Frederick. Pomeroy
 Unc, LA. 5214 Univ Blvd—Ken 844
 Mattson, Mildred Ulrika. Seattle
 LD, Phar. 2743 46th St SW
 Mattson, Nels Emanuel Redmond
 LD, EE. 4134 Brooklyn Av
 Matzke, Alvin Charles Seattle
 LD, LA. 1912 N 44th St
 Matzinger, Helen L. Seattle
 Unc, FA. 5623 15th Av NE—Ken 1067
 Mauerer, Joseph Pe EH
 LD, Sci. 4035 15th Av NE—N 1725
 Maxwell, Dorothy Jane. Crawfordsville, Ind
 LD, LA. 4525 Bagley Av—N 1284
 Maxwell, Mary Bliss Seattle
 Unc, LA. 2328 Franklin Av—Cap 2862
 Mays, June Seattle
 Unc, LA. 726 Boylston Av N
 Medin, Rita Belle Seattle
 LD, FA. 814 30th Av
 Mehan, Lewis Roy
 LD, Bus. 4504 16th Av NE—Ken 647
 Mehan, Paul Roy
 LD, LA. 4504 16th Av NE—Ken 647
 Meler, Fredda Anna Kirkland
 LD, LA. Kirkland
 Melsnest, Darwin Mason. Seattle
 UD, LA. 4705 16th Av NE—Ken 98
 Melsnest, Frederick Holmes Seattle
 LD, LA. 4705 16th Av NE
 Melby, Esther Muriel Seattle
 LD, LA. 5015 15th Av NE—Ken 2272
 Melgard, Christian Seattle
 LD, Sci. 5224 14th Av NE
 Melnicoff, Pavel Seattle
 Sp, Sci. 1425 Thistle St
 Meneely, Alexander Howard. Seattle
 LD, LA. 601 Belmont Av—N
 Mensor, Evelyn Seattle
 LD, Sci. 725 22d Av
 Merchant, Jessie H. Mount Vernon
 UD, For. 1932 11th Av N
 Mercer, Frederick Bernard. Seattle
 UD, LA. 4532 18th Av NE—Ken 2821
 Merrifield, Florine Virginia Kent
 UD, LA. 4714 Univ Blvd—Ken 2263
 Merrill, Grant Warren Seattle
 LD, Sci. 6717 Division Av NW
 Merritt, Fred Sherrill. Seattle
 LD, LA. 2213 13th Av N
 Merritt, Marion A. Seattle
 LD, LA. 1154 21st Av N—E 6571
 Merry, Lorna Mildred. Seattle
 UD, Ed. 4716 5th Av NE—Ken 1706
 Mesford, Jessie Libby Seattle
 LD, Sci. 4513 12th Av NE

Messer, Elisabeth Beatrice.....Rolling Bay	Mitchell, William McGavock.....Spokane
LD, Sci.....4388 11th Av NE—Ken 2501	LD, Sci.....4506 Univ Blvd—Ken 291
Metsker, Margaret Beam.....Seattle	Mitsunaga, Taiyu.....Japan
LD, Sci.....4050 9th Av NE—N 1855	Grad.....1020 Main St—M 2484
Metz, Willard William.....Hatton	Moberg, Alice Janet.....Mount Vernon
Unc, Bus.....General Delivery	Unc, FA.....4714 19th Av NE—Ken 2761
Meyer, Clara E.....Mead	Moe, Dorothy Evelyn.....Kellogg, Ida
Unc, Sci.....4751 Univ Blvd—Ken 2718	LD, FA.....4742 18th Av NE
Meyer, May E.....Welsler, Ida	Moeser, Charles Phillip.....Newport
UD, LA.....4540 Univ Blvd	Unc, Bus.....1800 E Union St
Meyer, Rita.....Seattle	Moffat, Joseph Thomas.....Seattle
LD, LA.....217 23d Av—E 7610	LD, EE.....809 18th Av
Meyer, Walter Charles.....Ritzville	Mogan, Camilla J.....Seattle
LD, Sci.....5218 Univ Blvd—Ken 8169	LD, LA.....304 Lyon Bldg
Michea, Marie Antoinette.....Seattle	Mohr, Esther.....Seattle
LD, Ed.....5247 1/2 14th Av NE	LD, LA.....522 24th St S—Bea 3460
Middletton, Keith Cowper.....Seattle	Moldstad, Corrine.....Mount Vernon
LD, Bus.....1638 17th Av	LD, LA.....4714 19th Av NE—Ken 2761
Mileham, Bessie Liper.....Deer Ridge, Mo	Mollin, Morris James.....Seattle
UD, LA.....4230 14th Av NE—N 1774	LD, Phar.....2202 25th Av N
Miles, Alice.....Seattle	Moll, Cyril Arthur.....South Bend
UD, Ed.....5516 15th Av NE—Ken 189	LD, For.....Castle Club, Campus—N 55
Millard, Bertha G.....Seattle	Montague, Eunice Elizabeth.....Everett
Sp, Phar.....5412 20th Av NE	LD, LA.....4719 Univ Blvd—Cap 3625
Miller, Charles John.....Seattle	Monteagle, Gwendolyn Anne.....Seattle
Unc, Sci.....4112 Eastern Av	LD, LA.....141 39th St N—E 1550
Miller, Elroy George.....Seattle	Monteagle, Vera M.....Seattle
Unc, CE.....4112 Eastern Av	LD, LA.....141 39th St N—E 1550
Miller, Esther Jean.....Seattle	Montgomery, Florence Edna.....Puyallup
LD, LA.....815 38th Av—E 2217	Unc, FA.....4551 Univ Blvd—Ken 501
Miller, Fernand Walton.....Battle Creek, Mich	Moore, Byron Carr.....Seattle
LD, Bus.....4719 16th Av NE—Ken 927	LD, Sci.....5043 18th Av NE
Miller, Gilbert Alfred.....Kallispell, Mont	Moore, Doris.....Seattle
LD, ME.....4508 Univ Blvd—Ken 236	LD, FA.....4502 20th Av NE—Ken 685
Miller, Gladys Emily.....Yakima	Moore, Gerald Edward.....Portland, Or
LD, LA.....Clark Hall—N 262	Or, LD, Mines.....5029 13th Av NE
Miller, Glen William.....Tacoma	Moore, Gerald Edwin.....Seattle
UD, LA.....5043 18th Av NE—Ken 1879	UD, LA.....1434 19th Av—E 7958
Miller, Helen Marie.....Seattle	Moore, Glenn Allen.....Seattle
UD, Ed.....1909 Naomi Pl—Ken 2180	Sp, Bus.....4505 18th Av NE—Ken 333
Miller, Herman.....Spokane	Moore, Lynn Clarence.....Wenatchee
LD, Bus.....4550 18th Av NE—Ken 3072	LD, ME.....5212 18th Av NE
Miller, John K Jr.....Seattle	Moore, Margaret.....Oakland, Or
LD, ME.....La Gite Club, Campus—N 55	Or, LD, Sci.....5015 Univ Blvd—Ken 1025
Miller, Katharine Frances.....Seattle	Moore, Nelle H.....Anacortes
Unc, LA.....2102 E 45th St—Ken 2645	Unc, LA.....4710 17th Av NE—Ken 1857
Miller, Raymond S.....Tacoma	Moran, Charles Gilbert.....Seattle
Unc, For.....1903 2d Av W—QA 679	LD, LA.....Seattle YMCA—M 5208
Miller, Wilhmetta Elizabeth.....Ellensburg	Moran, Jean.....Seattle
UD, Sci.....4045 14th Av NE—N 1804	LD, Sci.....4109 12th Av NE
Millgard, Dorothy.....Colfax	Moran, Jessie.....Seattle
Unc, Ed.....4508 16th Av NE	Unc, LA.....727 16th Av N—E 1012
Millhann, Loren H.....Seattle	Morehead, Bruce Winter.....Baker, Or
LD, LA.....5247 15th Av NE—Ken 610	SC, For.....
Mills, James Russell.....Monroe	Morehouse, Dorothy.....Seattle
LD, CE.....119 E 52d St	UD, LA.....1822 E 55th St—Ken 2352
Mills, Leslie Donald.....Vashon	Morford, Helen Irene.....Seattle
LD, EE.....	LD, Ed.....528 34th Av
Milne, James Donald.....Seattle	Morford, Kenneth James.....Seattle
Unc, EE.....1416 E 41st St	UD, Bus.....528 34th Av
Milner, John William.....Seattle	Morgan, William Edward.....Marysville
Unc, Bus.....3237 Hunter Blvd	UD, For.....5038 Univ Blvd—Ken 496
Milton, Donald K.....Seattle	Moritz, Harold Kennedy.....Seattle
LD, ME.....5235 Univ Blvd—Ken 618	UD, ME.....4705 21st Av NE
Minahan, Campbell.....Seattle	Morris, Erna May.....Seattle
UD, Sci.....738 17th Av N—E 4061	UD, Sci.....4042 Latona Av—N 1619
Minckler, Robert Lee.....Whitefish, Mont	Morris, Leotta Genevieve.....Seattle
LD, Bus.....Khaki Club, Campus—N 55	UD, Sci.....4710 Univ Blvd—Ken 1857
Mines, Henry Walker.....Seattle	Morris, John V.....Seattle
LD, LA.....1720 39th Av	Unc, Law.....117A Taylor Av
Mitchell, Hiram Sherman.....Astoria, Or	Morrow, Leona Marie.....Seattle
UD, Jour.....5043 18th Av NE—Ken 1879	LD, LA.....132 W 85th St
Mitchell, John T.....Seattle	Morrow, Velda.....Seattle
LD, Sci.....4506 Univ Blvd—Ken 291	LD, LA.....132 W 85th St—Bal 8488
Mitchell, Maize B.....Seattle	Morse, Edmund Cooper.....Seattle
UD, Jour.....4506 Univ Blvd—Ken 291	SC, For.....Hotel Stetson
Mitchell, Ruby.....Seattle	Morse, Glen Erwin.....Chelan
LD, FA.....4317 Eastern Av—N 4099	LD, Bus.....5042 18th Av NE—Ken 1740

- Morton, Lucie Wellington.....Redmond
UD, LA.....R 2 B 219 Redmond
- Moses, Helen Leona.....Portland, Or
LD, LA.....4547 19th Av NE—Ken 23
- Motis, Dorothy Catherine.....Spokane
Unc, Sci.....4530 Univ Blvd—Ken 2496
- Mottman, Elizabeth Anne.....Seattle
UD, Ed.....4712 21st Av NE—Ken 474
- Mousseau, Elizabeth White.....Seattle
Sp, LA.....4242 1th Av NE—N 1732
- Moyer, Lester Harold.....Skagway, Alas
LD, ME.....518 Marion St—Eil 4775W
- Mueller, Eugene A.....Seattle
Sp, Law.....Aristo Hotel
- Mueller, Nathanael.....Newberg, Or
LD, Min.....Univ YMCA
- Mulhern, Frances.....Seattle
LD, Sci.....1804 E 50th St—Ken 802
- Mulhern, Marie.....Seattle
LD, Sci.....1804 E 50th St—Ken 802
- Mulker, Lowene.....Seattle
LD, LA.....5035 8th Av NE—Ken 20
- Mulkey, Lucille.....Seattle
LD, FA.....5035 8th Av NE—Ken 20
- Muller, Mary C A.....Seattle
LD, Ed.....5221 12th Av NE
- Munson, Richard.....Seattle
Unc, Bus.....4616 21st Av NE—Ken 490
- Murchison, Mary Kathleen.....Seattle
Grad.....740 16th Av N
- Murdock, Mary Camille.....Portland, Or
UD, LA.....4718 20th Av NE
- Murphy, Harold Morris.....Arlington
LD, Bus.....4550 18th Av NE—Ken 3072
- Murphy, Harry.....Portland, Or
LD, For.....2120 E 47th St—Ken 1176
- Murphy, Matthew Franklin.....Portland, Or
LD, EB.....4532 19th Av NE—N 55
- Murphy, Mildred Pauline.....Seattle
LD, LA.....1104 James St—Main 4710
- Murphy, Miles Bernard.....Seattle
Sp, LA.....
- Murray, Charles Joseph.....Tacoma
LD, Sci.....5043 18th Av NE—Ken 1379
- Murray, Percy Manchester.....Roy
LD, Bus.....Mufti Club, Campus
- Myer, Thelma Anna Cecella.....Seattle
UD, Sci.....RFD 1, Box 321
- Myers, Elmer Walter.....Vashon
Unc, Sci.....Univ YMCA
- Myhre, Edna Theresa.....Seattle
LD, Sci.....1615 N 40th St—N 1543
- Myhre, Laura J.....Seattle
Unc, FA.....1615 N 40th St—N 1543
- Nagler, Russell A.....Seattle
LD, Sci.....4203 11th Av NE
- Nathan, Kenneth Robert.....Seattle
LD, ME.....1115 E 52d St
- Naugle, Fern Elizabeth.....Seattle
LD, Ed.....Lewis Hall—N 162
- Neal, Horace Albert.....Boise, Ida
LD, CE.....2120 E 47th St—Ken 1176
- Needham, George Herbert.....Seattle
LD, Phar.....2608 Mayfair Av—QA 1935
- Neer, Margaret.....Seattle
LD, FA.....533 19th Av—E 5201
- Neffeler, Stuart Hunter.....Everett
LD, MB.....1222 Summit Av
- Neft, Fannie.....Seattle
Unc, FA.....725 16th Av
- Neill, Dolores Anne.....Seattle
LD, LA.....4732 21st Av NE—Ken 26
- Neill, Vera.....Ork Harbor
LD, Ed.....4543 Univ Blvd—Ken 1659
- Nelson, Agnes Ellenore.....Seattle
UD, Lib.....4532 18th Av NE—Ken 2327
- Nelson, Arthur Edward.....Seattle
Sp, Sci.....1743 Summit Av—E 7757
- Nelson, Brenton Benjamin.....Seattle
Unc, Bus.....2617 California Av
- Nelson, Ellen.....Dillon, Mont
LD, LA.....4532 18th Av NE—Ken 2827
- Nelson, Eugene G.....Seattle
UD, Min.....4522 18th Av NE
- Nelson, George E.....Juneau, Alas
UD, Min.....4522 18th Av NE
- Nelson, James Burton.....Indianapolis, Ind
LD, ME.....4506 Univ Blvd—Ken 291
- Nelson, James Marston.....Spokane
LD, Sci.....5043 18th Av NE
- Nelson, Jeannette Helena.....Bellingham
Sp, Sci.....Lewis Hall—N 162
- Nelson, John Reid.....Montborne
Unc, Bus.....5037 22d Av NE—Ken 1076
- Nelson, Laura E.....Missoula, Mont
LD, LA.....4739 16th Av NE—Ken 1230
- Nelson, Lutillus Livy Sydnor.....Seattle
UD, Bus.....1134 20th Av N
- Nelson, Minnie Marie.....Seattle
LD, LA.....3021 17th Av S—Bea 2586
- Nelson, Ned Hillard.....Seattle
LD, ChE.....RFD 6, Box 160
- Nelson, Richard Raymond.....Seattle
LD, Sci.....734 N 76th St
- Nesbitt, Herbert Cedric.....Goldendale
LD, Ed.....4508 16th Av NE—Ken 2768
- Nesbitt, For.....5038 Univ Blvd—Ken 496
- Ness, N Arthur Bernharden.....Tacoma
UD, Ed.....5812 19th Av NE
- Nettleton, Emily Orlene.....Tacoma
LD, LA.....2528 Howard Av—Cap 2502
- Newlove, Gwendolyn George.....Vancouver
LD, LA.....Rm 612, Savoy Hotel—M 2068
- Newman, Sarah Elizabeth.....Bellingham
LD, LA.....4718 Univ Blvd—Ken 1882
- Newman, Margaret.....Bellingham
LD, LA.....4518 Univ Blvd
- Newson, Helen.....Seattle
LD, Sci.....4532 19th Av NE—Ken 1092
- Newton, Ruby.....Colfax
LD, Bus.....4506 Univ Blvd—Ken 291
- Ney, Marie Esther.....Seattle
LD, Ed.....1721 Yeeler Way—Bea 1089
- Nichols, Helen Evelyn.....Briarcliff Manor, N Y
LD, LA.....4535 18th Av NE—Ken 1429
- Nicholson, Georgia A.....Seattle
LD, Ed.....6016 20th Av NW—Bal 229
- Nicholson, Leo.....Heppner, Or
LD, LA.....4714 Brooklyn Av—Ken 1170
- Niemela, Jennie Marie.....Kent
Unc, Sci.....Clark Hall—N 262
- Nightingale, William Thomas.....Portland, Or
UD, Sci.....5212 18th Av NE
- Nix, Martha Jeanette.....Dresden, Tenn
LD, LA.....1605 E 47th St
- Nollar, Perry Fisk Wallace.....Great Falls, Mont
LD, Bus.....5038 Univ Blvd—Ken 496
- Nordahl, Emma Marie.....Seattle
LD, LA.....809 24th Av N—E 7367
- Nordstrom, Esther Catherine.....Seattle
LD, LA.....2810 Montlake Blvd
- Norman Evelyn.....Seattle
LD, Sci.....806 34th Av
- Northfield, Walter Daniel.....Seattle
LD, LA.....4506 Univ Blvd—Ken 291
- Norton, Philip Louis.....Tacoma
Unc, Bus.....5037 22d Av NE—Ken 1076
- Norton, Rose Lee.....Colville
Sp, LA.....Clark Hall—N 262
- Norton, Ruth Arvilla.....Seattle
LD, FA.....1416 E 41st St—N 184
- Norwood, Annie.....Seattle
LD, LA.....508 N 49th St—N 486

- Noyes, Gertrude Heppner, Or
 LD, LA.....4540 Univ Blvd—Ken 8216
 Nuelsen, Harry Edwards Spokane
 LD, Bus.....4528 20th Av NE
 Nusbaum, Keith Westbrook..... Emmett, Ida
 1st Law.....2120 E 47th St—Ken 1176
 Nydin, Alf Clarence Seattle
 LD, LA.....7749 15th Av NW
 Nygard, Erik Seattle
 LD, EE.....611 W Comstock St—QA 3473
 Nylander Towne Joseph..... Seattle
 LD, Ed1514 Boren Av—EHL 1813W
- Oakes, Ruth E..... Lynden
 LD, LA.....5704 16th Av NE
 Oakley, Eldora Viola Seattle
 UD, Ed.....4280 11th Av NE—N 1385
 Ober, John Elliott..... Seattle
 LD, Bus.....115 Olympic Pl—QA 3991
 O'Brien, Evelyn Danforth..... Seattle
 Sp, Ed.....310 1st Av S—M 981
 O'Brien, Paul..... Conrad, Mont
 LD, Bus.....5212 18th Av NE—Ken 887
 O'Brien, Robert Stewart..... Spokane
 LD, Bus.....5214 Univ Blvd—Ken 844
 O'Connell, William Patrick Seattle
 3d Law.....717 Alder St—M 6146
 Oertel, Daniel Theodore Blaine
 Unc, Law.....5088 Univ Blvd
 O'Farrell, Kathleen Seattle
 LL, Ed.....5240 20th Av NE—Ken 3399
 Ogle, Grace Elland..... Seattle
 LD, Bus.....1521 18th Av
 Ohtaguro, Toshio Japan
 Unc, Bus.....4110 12th Av NE
 O'Keefe, Valeska Jessie Chinook, Mont
 LD, Sci.....2117 E 55th St
 Okutani, S George Seattle
 Sp, LA.....721 Yesler Way—EHL 2850J
 O'Leary, Frank Seattle
 LD, ChE.....208 Queen Anne Av—QA 1232
 Oleson, Mildred Elizabeth Seattle
 LD, LA.....23 W Newell St—QA 422
 Oliver, Roneta Seattle
 LD, Sci.....6025 Palatine Av—Bal 679
 Olsen, Florence E..... Yakima
 LD, FA.....Clark Hall—N 262
 Olson, Helen Frances Seattle
 LD, Ed.....3315 E 60th St—Ken 327
 Olson, Lillian E..... Mount Vernon
 LD, Sci.....4704 18th Av NE—Ken 119
 Olson, Marguerite Tacoma
 Unc, LA.....4543 Univ Blvd—Ken 659
 Olson, Mary Edmonds
 LD, Sci.....
 Olsen, Oscar Martin..... Chinook
 LD, EE.....4603 Univ Blvd—Ken 236
 Olsen, Selma Chinook
 UD, Ed.....4564 16th Av NE—Ken 3212
 Olson, Theodore Lawrence..... Rolling Bay
 Unc, Bus.....5002 20th Av NE—Ken 1189
 Olson, William James Seattle
 LD, EE.....124 Melrose Av N
 Olswang, Edith Seattle
 LD, LA.....235 2d Av N—QA 380
 Olwell, Eugene Edward..... Spokane
 LD, Bus.....2120 E 47th St—Ken 1176
 O'Neel, Albert Brigman..... Portland, Or
 LD, Min.....4505 18th Av NE—Ken 333
 O'Neel, Henry Clay Portland, Or
 LD, CE.....4505 18th Av NE—Ken 333
 O'Neill, Agnes Virginia..... Spokane
 Unc, Bus.....2012 E 45th St—Ken 2645
 Onsum, Elizabeth Seattle
 LD, FA.....808 E 55th St—Ken 1303
 Ormsby, Arthur Hopkins..... Seattle
 LD, Bus.....1421 Northlake Av
- Orosa, Maria Y..... Philippine Islands
 UD, Phar.....4742 Brooklyn Av
 Orr, Mrs Maude Redmond
 Unc, Ed
 Orr, Paul Redmond
 UD, Ed
 Orrell, Jessie Seattle
 LD, Ed.....812 Allen Pl
 Osborne, Ruth Frye Seattle
 UD, FA.....5036 21st Av NE—Ken 2492
 Osgood, Wilkins Ernest..... Seattle
 Unc, CE.....2524 1st Av W
 Ostensen, Harold Birge..... Bremerton
 LD, LA.....5243 19th Av NE—Ken 3460
 Osterud, Nena D..... Seattle
 LD, Sci.....4549 Thackeray Pl—N 2512
 Ostrand, Hildur Wilhelmina..... Seattle
 LD, LA.....1621 Bellevue Av—M 5537
 Ostrander, Raymond E..... The Dalles, Or
 Unc, Law.....4616 21st Av NE—Ken 490
 Ostrander, Ruth Elizabeth Seattle
 LD, Sci.....1818 E 50th St—Ken 2384
 Ostrem, Laura Esther..... Puyallup
 LD, LA.....6214 Latona Av—Ken 3094
 Ostrom, Cyrus Warren Seattle
 LD, EE.....2325 N 57th St
 Oswalt, Flora Rice..... Seattle
 UD, Bus.....833 34th Av N—E 4933
 Otaka, Ray Kelzaburo Japan
 UD, Ed.....4110 12th Av NE—N 3797
 Otis, Kenneth Seattle
 Unc, Bus.....6557 8th Av NW
 Otis, Leota B..... Olympia
 LD, LA.....4547 19th Av NE—Ken 23
 Otto, Dorothy Everett
 LD, Sci.....41714 Univ Blvd—Ken 2258
 Overlock, Frances Kent
 LD, LA.....4705 16th Av NE—Ken 98
 Owen, Evelyn Claire Seattle
 LD, LA.....4364 8th Av NE—N 4075
 Owens, Phil Emerson Portland
 LD, Bus.....5214 Univ Blvd—Ken 844
 Owsley, Joseph H..... Seattle
 Sp, CE.....2910 E Spring St—E 5247
- Packard, Dexter R..... Seattle
 LD, LA.....
 Packard, Lyle Dewey Bellingham
 LD, CE.....4508 16th Av NE—Ken 291
 Packer, Florence Seattle
 LD, LA.....1944 7th Av W—QA 1402
 Page, Elsie Belle Olympia
 UD, LA.....4503 Univ Blvd
 Palmer, Lewis A..... Tacoma
 LD, Bus.....4505 18th Av NE—Ken 333
 Palmer, Louetta Alice Seattle
 LD, FA.....7109 Dayton Ave—Bal 2715
 Palmer, Paul Seattle
 LD, LA.....4608 W Walker St
 Panchot, Dwight Harrison Seattle
 Unc, Bus.....5227 16th Av NE
 Parchman, Alice De Somner..... Anacortes
 LD, Ed.....4703 18th Av NE—Ken 2826
 Parker, Marie Nancy Seattle
 LD, LA.....4743 19th Av NE
 Parker, William Arthur Seattle
 UD, Bus.....4743 19th Av NE—Ken 1251
 Parkhouse, Russell K..... Seattle
 LD, FA.....2727 E 54th St
 Parris, Maida Crippen Seattle
 Grad.....115 Olympic Pl—QA 4051
 Parrish, Frank Jr..... Seattle
 LD, EE.....9423 58th St S—Rain 287M
 Partlow, Katharine Olympia
 LD, Sci.....2012 E 45th St—Ken 2645
 Partridge, Ruth Minneapolis, Minn
 UD, Sci.....4340 11th Av NE—Ken 813

Patchin, Wilber Harmon.....	Seattle	Peters, Jennings Dewey	Spokane
UD, Ed.....	3927 11th Av NE—N 1645	LD, ChE.....	3919 12th Av NE
Patterson, Bernice Lillian.....	Puyallup	Peterson, Anita May.....	Tacoma
LD, Sci.....	4554 16th Av NE—Ken 3212	LD, Ed.....	Lewis Hall—N 162
Pattison, Evelyn.....	Seattle	Petersen, Axel Herman.....	Tacoma
LD, FA.....	5225 Univ Blvd—Ken 1717	UD, ChE.....	4522 18th Av NE
Patty, Ernest Newton.....	La Grande, Or	Peterson, Clifford Arthur.....	Seattle
UD, Min.....	Malloy Apts	LD, EE.....	1525 7th Av
Patzold, Oswald Edward.....	Seattle	Peterson, Gladys L.....	Eagle Bend, Minn
LD, Ed.....	Van Stone Hotel	LD, Sci.....	4311 Brooklyn Av
Paulsen, Mary Angeline.....	Seattle	Peterson, Hans J.....	Grad
LD, LA.....	1731 W 57th St—Bal 2373	Peterson, Philip Leonard.....	Spokane
Paulst, Edna.....	Seattle	UD, LA.....	5212 18th Av NE—Ken 837
UD, Sci.....	7001 Jones Av NW	Peterson, Richard Ferdinand.....	Tacoma
Payne, Blanche.....	Seattle	LD, Bus.....	4311 Brooklyn Av
Unc, Sci.....	5728 Univ Blvd—Ken 1033	Peterson, Russel Carl.....	Seattle
Payne, Callista Rachel.....	Seattle	UD, Bus.....	320 E 53d St
UD, LA.....	4557 Brooklyn Av—Ken 1948	Peterson, Wallace.....	Columbia City, Or
Payne, S L.....	Seattle	UD, Bus.....	4513 12th Av NE
Unc, Ed.....	Seattle	Peterson, Walter Robert.....	Port Blakely
Peabody, Margaret Sarah.....	Silver Lake	LD, Sci.....	Le Gite Club, Campus—N 55
LD, LA.....	509 E 43d St—N 538	Pettitt, Florence Mabel.....	Portland, Or
Peacock, Ethelind.....	Spokane	LD, LA.....	4554 16th Av NE—Ken 3212
Unc, FA.....	4045 Brooklyn Av	Peycke, Helen Elsbeth.....	Seattle
Peacock, Louis Frederick.....	Seattle	LD, LA.....	413 15th Av N—Cap 2364
LD, ChE.....	510 Spring St	Peyser, Ethan Allen.....	Cedarhurst
Pearce, John Kenneth.....	Yamhill, Or	LD, LA.....	5043 18th Av NE—Ken 1879
LD, For.....	4505 18th Av NE—Ken 833	Pfeuffer, Philip Paul.....	Grangeville, Ida
Pearson, Conrad.....	Seattle	Unc, Sci.....	Richmond Beach
Sp, CE.....	Seattle	Phelps, Grace Marie.....	Dryad
Pearson, Earl Carlos Hugo.....	Mount Vernon	LD, LA.....	4538 15th Av NE—Ken 1482
LD, Sci.....	5037 22d Av NE	Phelps, Tylar.....	Butte, Mont
Peckenpaugh, Vera.....	Seattle	LD, ME.....	4705 10th Av NE—Ken 3569
UD, Sci.....	2018 31st Av S—Bea 772	Phelps, Vera May.....	Dryad
Peden, Barton Edward.....	Yakima	UD, Sci.....	4538 15th Av NE—Ken 1482
LD, Sci.....	4121 14th Av NE—N 745	Phillips, Alfred Barrow.....	Vancouver
Pedroni, Victor.....	Seattle	LD, LA.....	4550 18th Av NE—Ken 3072
Unc, Bus.....	4223 11th Av NE	Phillips, Elmer.....	Olympia
Peers, Rufus Isaac.....	Wenatchee	Unc, Bus.....	4616 21st Av NE—Ken 400
LD, EE.....	4528 20th Av NE—Ken 1301	Phillips, Herbert.....	Seattle
Pelly, Bernard Berenger.....	Seattle	LD, ME.....	509 21st Av
LD, LA.....	1314 Minor Av	Phillips, Philip.....	Yakima
Pelz, Freda Elizabeth.....	Seattle	LD, Bus.....	4503 Univ Blvd—Ken 236
LD, LA.....	1502 E Garfield St—E 1564	Phillips, Richard Thomas.....	Seattle
Pelz, Irma.....	Seattle	LD, Sci.....	1041 Summit Av—Cap 795
LD, Sci.....	1502 E Garfield St—E 1564	Phillips, Ruth Naomi.....	Seattle
Penberthy, Clara Louise.....	Seattle	LD, LA.....	4616 21st Av NE
Unc, Phar.....	2837 33d Av S—Bea 2077	Platt, Genevieve Mary.....	Seattle
Pence, Iriene Winifred.....	Spokane	LD, LA.....	5525 16th Av NE
Unc, LA.....	4702 18th Av NE—Ken 2826	Pickens, Sarah Grace.....	La Grande, Or
Penewell, Harry B.....	Seattle	LD, For.....	4705 14th Av NE
LD, Min.....	4735 21st Av NE	Pickrell, Evelyn.....	Spokane
Peoples, Margaret.....	Seattle	UD, LA.....	4535 18th Av NE—Ken 1429
LD, Ed.....	1319 E Pine St—E 376	Pidduck, Ruth.....	Seattle
Pepper Miss Echo.....	Seattle	LD, LA.....	724 33d Av
UD, Sci.....	5026 19th Av NE—Ken 1212	Pierson, Erlmine Clark.....	Bellingham
Perkins, Frank Raymond.....	Montesano	UD, Ed.....	4714 Univ Blvd—Ken 2253
LD, Min.....	4532 18th Av NE—Ken 2827	Pihlgren, Freda.....	Seattle
Perkins, Gwendolyn.....	Seattle	Unc, FA.....	6748 Palatine Av
UD, Ed.....	1407 E 45th St—Ken 1597	Pimentel, Rufino.....	Philippine Islands
Perlin, Solomon.....	Seattle	Unc, CE.....	YMCA—M 5208
Sp, CE.....	Seattle	Pinney, Marcus Johnson.....	Ontario, Or
Perry, Francis W.....	Selah	LD, LA.....	4530 14th Av NE—Ken 555
1st Law.....	4532 18th Av NE—Ken 2827	Pitman, LeRoy.....	Bellingham
Perry, Gladys Henrietta.....	Portland, Or	LD, EE.....	Seattle
LD, LA.....	4543 Univ Blvd—Ken 659	Pitt, Mildred Esther.....	Seattle
Perry, Violette M.....	Tacoma	UD, LA.....	4530 10th Av NE—Ken 2038
LD, FA.....	4530 Univ Blvd—Ken 2496	Platt, Gladys Hope.....	Idaho Falls, Ida
Perry, Warren L.....	Tacoma	LD, LA.....	5248 19th Av NE—Ken 3460
LD, LA.....	4714 Brooklyn Av—Ken 1170	Playter, Mirie Denison.....	Seattle
Pershing, Helen Gene.....	Seattle	UD, LA.....	5524 16th Av NE—Ken 1767
UD, Ed.....	4338 11th Av NE—Ken 2501	Plumer, Frank Morris.....	Port Townsend
Person, Esther.....	Seattle	LD, Bus.....	2535 34th Av S—Bea 2055
LD, FA.....	Bea 3581	Poblete, Eusebio.....	Seattle
Persons, Martha Briggs.....	Berkeley, Cal	Sp, Sci.....	4115 15th Av NE
UD, Sci.....	4508 10th Av NE	Pole, Gordon Reginald.....	Tacoma
Persons, Ruth Gilbert.....	Berkeley, Cal	Unc, ChE.....	4505 18th Av NE—Ken 333
UD, Sci.....	4508 10th Av NE—Ken 2768		

- Pollard, Dora Seattle
LD, Bus. 4818 52d Av S—Rain 172W
- Pollock, Esther Chudnov. Colfax
LD, LA. 4735 21st Av NE
- Pool, Esson Jacob Wenatchee
Unc, Bus. 4805 15th Av NE—Ken 720
- Pope, Augustus Russell. Seattle
UD, ME. 1418 Willard Av—QA 288
- Pope, Ezra Tobey Seattle
UD, ME. 1418 Willard Av—QA 288
- Forep, Edward Walter Seattle
LD, LA. 1157 16th Av N
- Preston, Louisa Byrne. Portland, Or
LD, Sci. Clark Hall—N 262
- Popov, Dmitry Seattle
Unc, For. 3804 10th Av NE—N 1688
- Porter, H Clay North Bend
Sp Min.
- Potter, Paul Stevens. Lake Crescent
LD, CE. K'wai-Ka Club, Campus—N 55
- Powell, Frederick Jr. Seattle
LD, LA. 5011 15th Av NE
- Powell, Janet Elizabeth Seattle
UD, LA. 1018 37th Av N—E 4826
- Powell, Mary Dayton Selah
LD, Ed. 1616 E 47th St—Ken 149
- Powers, Alvin James Parma, Ida
UD, LA. 4520 21st Av NE
- Powers, Marie K. Seattle
LD, LA. 1707 Boylston Av—E 1187
- Powers, Mary Madeleine Seattle
Unc, Sci. 123 John St
- Powley, Louise Wilmont. Seattle
LD, LA. 2527 32d Av S
- Powlinson, Lucille Alice. Seattle
UD, LA. 1906 E 45th St—Ken 983
- Pratt, Helen V. Seattle
LD, Bus. 5221 12th Av NE—Ken 8342
- Pratt, Reginald Spokane
LD, ME. 4520 21st Av NE
- Prescott, De Witt Clinton. Seattle
LD, CE. 4588 19th Av NE—Ken 2175
- Prescott, Daniel Corbin Spokane
LD, ME. Univ YMCA
- Prescott, Mildred Emeline Seattle
LD, LA. 5254 12th Av NE—Ken 2379
- Presley, Dorothea Seattle
UD, Sci. 2603 Boylston Av N—Cap 2188
- Pressentin, Marie Olga Seattle
LD, Bus. 5016 12th Av NE—Ken 1608
- Preston, Frank Manly Seattle
2d Law. 712 35th Av
- Prestrud, Jean Porter Seattle
Grad. 1602 E Garfield St
- Price, Faye Kent
Unc, LA. 4714 Univ Blvd—Ken 2253
- Price, Ruth Garland Medina
LD, LA.
- Prim, John Edmondson Seattle
LD, LA. 2455 Day St
- Pritchard, Joseph Gordon Sorrento, Ida
UD, LA. 4742 15th Av NE—Ken 496
- Proctor, Edith Marlon Seattle
Unc, LA. 211 Garfield St—QA 1554
- Protto, Ruth M. Spokane
Unc, LA. 4710 Univ Blvd—Ken 1857
- Pruden, Oliver Bremerton
Sp, LA. Seattle YMCA
- Puffer, Floyd Arthur Seattle
UD, LA. 3307 3d Av W
- Pugh, Louise Katherine Seattle
UD, LA. 833 34th Av N—E 4983
- Pugsley, Myrtle Seattle
UD, LA. 5240 42d Av SW—W 302R
- Pugsley, Walter H. Seattle
LD, Sci. 4718 21st Av NE
- Pumphry, Veronica Seattle
LD, LA. 5018 20th Av NE—Ken 140
- Purdy, Ella Josephine. La Jolla, Cal
LD, Bus. 4704 18th Av NE—Ken 119
- Putnam, Lawrence Edmonds. Winslow
LD, Min. K'wai-Ka Club, Campus—N 55
- Pyle, Mark Wenatchee
LD, EE. 4528 20th Av NE—Ken 1301
- Quast, Florence A. Marysville
UD, Sci. 4502 20th Av NE—Ken 635
- Quevli, Christen Tacoma
LD, Sci. 5218 Univ Blvd—Ken 3169
- Quigg, John W. Seattle
LD, Bus. 1202 Harvard Av
- Quigley, Clarence Black. Seattle
LD, Bus. 3433 Claremont Av
- Rasmussen, Carl John. Seattle
Sp, EE. 2647 W 60th St—Bal 1585
- Rasmussen, George Vincent. Chevelah
LD, Bus. 5038 Univ Blvd—Ken 496
- Rasmussen, Mildred D. Seattle
Unc, LA. 929 33d Av
- Rasmussen, Violet M. Portland, Or
UD, LA. 4746 16th Av NE
- Radcliffe, Robert Gray. Seattle
Unc, Bus. 5833 Woodlawn Av—Ken 1121
- Rader, Bernard Henry Ontario, Or
LD, LA. 4530 14th Av NE—Ken 555
- Rader, Grace McDonald Seattle
UD, Sci. 1847 Ravenna Blvd—Ken 2505
- Rader, Martha Bernice Walla Walla
Unc, Sci. 4524 Univ Blvd—Ken 721
- Ramsay, James Stormont. Ellensburg
LD, Bus. 4520 21st Av NE—Ken 2600
- Ramthun, Lucille Laura. Chehalis
LD, LA. 5233 15th Av NE. Ken 556
- Randall, Theo William. Boise, Ida
Unc, EE. 5003 18th Av NE
- Rankin, Alex. Disbury, Can
SC, Min. 3733 Brooklyn Av
- Rankin, Park Willis Yakima
LD, Bus. 4738 Univ Blvd—Ken 787
- Ranning, Mildred Lauretta. Seattle
LD, FA. 5806 16th Av NE—Ken 1397
- Rawson, Erroll Whitman. Seattle
UD, Sci. 4530 14th Av NE—Ken 555
- Ratcliffe, Kent E. Seattle
LD, Bus. 2120 E 47th St
- Ratigan, Thomas P. Seattle
UD, LA. 1420 20th Av—E 2923
- Ray, Doris Yakima
LD, Bus. 2012 E 45th St—Ken 2645
- Reagor, Ruth Myrtle. Bellingham
LD, FA. 4714 19th Av NE
- Redmond, Harold V. Seattle
LD, Min. 1508 Grand Blvd
- Redway, Frederick A. Tacoma
LD, Sci. 5003 18th Av NE
- Reed, Alfred Williams South Bend
LD, ME. 5214 Univ Blvd—Ken 844
- Reed, Hazel L. Spokane
UD, LA. 4535 18th Av NE—Ken 1429
- Reed, Jennie M. Tacoma
UD, Ed.
- Reed, Lucile Ida. Spokane
Unc, FA. 4540 33d Av
- Reed, Luella May Goshen, Ind
UD, Sci. 4311 7th Av NE—N 8835
- Reed, Mae. Seattle
Sp, Bus. 9731 62d Av S—Rain 126W
- Reed, Raymond Francis. Bellingham
UD, CE. 5218 Univ Blvd—Ken 8169
- Reeves, Marie Adele. South Bend
UD, FA. 4125 Brooklyn Av—N 39
- Reeves, Gilbert Dalton. Leavenworth
LD, For. 145 E 61st St

- Regan, Frank Timothy Seattle
LD, For 5285 Univ Blvd—Ken 618
- Remley, Bertha Seattle
Grad. 1481 Minor Av
- Remley, Miriam Dryden
LD, LA Lewis Hall—N 162
- Rensberg, Helen Seattle
LD, LA 5134 26th Av NE—Ken 1166
- Renner, Fred G. Wenatchee
UD, For 5038 17th Av NE—Ken 496
- Rens, Genevieve Seattle
LD, Phar. 403 11th Av N—Cap 3388
- Rensing, Herman Seattle
Sp, Ed. 4529 Brooklyn Av—Ken 2022
- Requa, Dorothy May Everett
LD, FA 4508 16th Av NE—Ken 2768
- Resos, Eugenio Peratta Seattle
LD, CE Seattle YMCA
- Reuter, Alexia M. Seattle
UD, Sci. 1408 31st Av
- Reyes, Gregorio Seattle
LD, Sci. YMCA—M 2508
- Reynolds, Ada T. Tacoma
UD, Jour. 5238 22d Av NE—Ken 353
- Reynolds, Jack W. Seattle
Unc, Law. 2350 84th Av S
- Reynolds, Margaret Van V C. Spanaway Lake
UD, LA 4532 19th Av NE—Ken 1092
- Reynolds, Richard Williams Seattle
LD, EE 4312 4th Av NE—N 2435
- Reynolds, Rox Missoula, Mont
LD, LA 6212 18th Av NE
- Rhodes, Fay Joseph Seattle
LD, Bus. 5235 Univ Blvd
- Rice, Edith Allegra Yakima
UD, LA 4534 Univ Blvd—Ken 20
- Rice, Margaret Dorothea Prosser
UD, LA 819 11th Av N—Cap 3032
- Rich, Estelle May Walla Walla
UD, Ed. 1604 47th St
- Richards, Bradford A Ormsby. Mount Vernon
LD, LA 5243 19th Av NE—Ken 3460
- Richards, Dorothy Sumner
LD, LA 4535 18th Av NE—Ken 1429
- Richards, Emma Miller Monterey, Ind
Grad. 4518 Univ Blvd—Ken 96
- Richards, Harold Herman Tacoma
LD, LA 2412 Boylston N
- Richards, Walter Nelson Seattle
LD, Bus. 414 W Galer St—QA 2878
- Richardson, Dlo Seattle
Grad. 4746 16th Av NE
- Richardson, Gertrude Helen Tacoma
LD, Sci. 4543 Univ Blvd—Ken 659
- Richardson, George Bible Seattle
LD, CE 5243 19th Av NE—Ken 3460
- Richardson, George Frederick Seattle
3d Law. 4714 Brooklyn Av—Ken 1170
- Richardson, Otis Dunbar Yakima
LD, LA 4616 21st Av NE—Ken 400
- Richmond, Agnes N. Renton
Unc, Law. Renton—Ren 19M
- Richter, Ella Paula Tacoma
LD, LA 4524 19th Av NE—Ken 190
- Riddle, Ernest Farquhar Seattle
LD, LA 1222 15th Av N—E 5338
- Riebe, Mrs Ernest G. Seattle
Sp, Sci. E. Seattle
- Riehm, Helen Dockton
UD, Jour. 4643 Univ Blvd—Ken 659
- Ries, Chester Danton Lyman
Unc, EE 620 Pike St—Edl 701
- Riese, Stella G. Duvall
LL, Ed. 1118 E John St—Cap 1642
- Riggs, Stephen Williamson. Seattle
Grad. 1307 E 41st St—N 8492
- Riley, Genevieve Huston. Twin Falls, Ida
LD, Ed. 4303 11th Av NE—N 3457
- Riley, Gladys F. Tekoa
UD, LA 5022 Univ Blvd
- Rind, Rudla Seattle
UD, Sci. 1702 1st Av N—QA 1710
- Rinehart, Valdimir Gilham Portland, Or
LD, ChE 4724 9th Av NE—Ken 2919
- Ring, Elsie Maurine Buhl, Ida
LD, FA 4029 7th Av NE
- Rinlinger, Helen Dorothy Beaux Arts
LD, LA. 3008 Mt St Helen's Pl—Beo 2944
- Rist, Dorothy Eugenia Yakima
LD, Bus. 4554 16th Av NE—Ken 3212
- Robb, Helen Seattle
UD, Sci. 4032 10th Av NE—N 3542
- Robe, Dorothy C. Seattle
UD, LA 4311 Brooklyn Av
- Robe, Vivian Moore Seattle
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- Roberson, Ury Homer. Los Angeles, Cal
Grad. Fort Lawton—QA 2840
- Roberts, Anna Catharine Tacoma
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- Roberts, Elizabeth Seattle
LD, Phar. 718 17th Av
- Roberts, James Donald Tacoma
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- Roberts, John Terry Seattle
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- Robertson, Emma Grace Seattle
LD, FA 4543 Univ Blvd—Ken 659
- Robertson, Peter Raymond. Buckley
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- Robinson, Frank C. Portland, Or
LD, Sci. 5218 Univ Blvd—Ken 3169
- Robinson, Frank Richard. Portland, Or
LD, Min. Castle Club, Campus—N 55
- Robinson, Laura Marie Everett
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- Robinson, Thomas R. Everett
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- Rock, Clifton D. Cougar
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- Rockwell Jr, John Castle Rock
UD, Ed. 5211 18th Av NE
- Rodolf, Harold Albert Bellingham
UD, Sci. 4510 1/4 14th Av NE—Ken 891
- Roe, Frank Hobson Seattle
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- Rogers, Edwin Lewis Colville
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- Rogers, Florence Aileen Spokane
UD, Jour. 4504 18th Av NE—Ken 146
- Rogers, Lois Maybel Sanborn, N Y
LD, LA 5030 16th Av N E
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- Roon, Edna E M. Bellevue
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- Root, Elmer Stephen Reardan
LD, OE 3002 4th Av W
- Rose, Florence Lauretta Seattle
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- Roseleaf, Dorothy Seattle
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- Rosen, Elsie Elizabeth Monroe
LD, Bus. 5258 19th Av NE—Ken 1837
- Rosenthal, Carolyn Seattle
LD, LA 4547 Univ Blvd—Ken 1004

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 Russell, Pearl Seattle
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 LD, LA. 4524 19th Av NE—Ken 199

Sakamoto, Mine Seattle
 UD, Ed. 1609 Yeaser Way—Bea 2023
 Salcedo, Daniel M. Philippine Islands
 LD, Sci. YMCA—M 2508
 Sallsbury, Helen E. Sprague
 Unc, LA. 4530 Univ Blvd—Ken 2496
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 LD, FA. 4303 11th Av NE
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 UD, ME. 4733 19th Av NE—Ken 3440
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 Sandwith, Phebe May Friday Harbor
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 UD, LA. 616 Edgar St—Cap 2515
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 Schaak, Charles Gustave Seattle
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 Schaefer, F. Bernice Seattle
 LD, LA. 1602 Franklin Av—Cap 2993
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 Schmidtman, Edward Herman Pasco
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 Schrock, Ethel Grace Okanogan
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 LD, FA. 1906 E 45th St—Ken 983
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 Schuett, Marjorie Claire Seattle
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 Schultz, William Edward Seattle
 LD, EE. 4245 8th Av NE—N 3100
 Schultz, Carl Henry Seattle
 Sp, Min. 1119 1st Av—M 4847
 Schumacher, Edna C. Bellingham
 Unc, FA. 4542 14th Av NE—Ken 1952
 Schussler, Margaret Grandview
 LD, Bus. 104 E 58th St—Ken 8079
 Schweitzer, Florence Seattle
 LD, LA. 205 Bennett St—Sid 1265
 Scordan, Louise Margaret Seattle
 UD, Sci. 2610 E Aloha St—Ell 1258
 Scott, Burton Foote Culver, Kans
 UD, LA. 4504 16th Av NE
 Scott, Byron D. Tacoma
 LD, Bus. 4520 21st Av NE—Ken 2600
 Scott, Lydia Louise Seattle
 LD, Sci. 3921 Denmore Av—N 2979
 Scott, Marlon Tacoma
 Unc, Bus. 4532 19th Av NE—Ken 1092
 Scott, Merritt Eugene Bellingham
 LD, Ch E. 5243 19th Av NE
 Scougal, Laura Seattle
 LD, Sci. 1560 Blewett St—N 1462
 Sczuck, Evelyn Violet Everett
 LD, FA. 4551 Univ Blvd
 Sealls, Rachel Joyce Seattle
 LD, LA. 4406 Woodland Park Av—N 1433
 Seddon, John Roslyn
 LD, EE. 509 Belmont Av N—Cap 693

Seddon, Stanley	Roslyn	Shollenberger, Wayne John	Seattle
LD, LA	4223 15th Av NE—N 8376	LD, ME	1847 N 52d St—N 2746
Seely, Anne	Seattle	Shone, Bessie M	South Bend
UD, LA	2617 Harvard Av N—Cap 1610	Unc, Phar	Clark Hall—N 262
Selbert, Constance	Seattle	Short, Clarence Paul	Seattle
LD, FA	2240 13th Av N—Cap 855	Grad, Fisheries	903 9th Av—E11 4697M
Selbert, Doris	Seattle	Short, Esther Lorinda	Ellensburg
LD, FA	223 22nd Av N—E 2380	UD, LA	Lewis Hall—N 162
Selbert, Rachel M	Seattle	Shostrom, Oscar	Tacoma
LD, LA	223 22nd Av N—E 2380	UD, Ch E	College Hotel—N 9
Selbermaster, Nathan Gregory	China	Shotwell, Bertha Susanne	Wenatchee
Unc, For	3804 10th Av NE—Ken 1088	LD, Sci	Clark Hall—N 262
Selby, Harold	Seattle	Shotwell, Catherine	Seattle
LD, Bus	8856 39th St SW—W 1221M	UD, LA	4419 5th Av NE
Selvidge, George	Seattle	Shuey, Paul	Seattle
Sp, Law	4321 9th Av NE	LD, Bus	5260 16th Av NE—Ken 2340
Semon, Waldo Lonsbury	Port Angeles	Shunway, Ruth Katherine	Glendale
LD, Ch E	4524 Corliss Av	LD, Ed	4531 18th Av NE
Senjl, Imal	Seattle	Sidow, Albert Frederick J	Tacoma
Grad	346 16th Av N—E 8637	Unc, Bus	5037 22nd Av NE—Ken 1076
Sereth, Clara	Calgary, Can	Sielk, William Henry	Spangle
LD, LA	317 18th Av N—E 2172	LD, Bus	5235 Univ Blvd—Ken 618
Sereth, Stella	Seattle	Slevers, Esther Elsaye	Seattle
Sp, LA	317 18th Av N—E 2172	LD, LA	5717 Kirkwood Pl
Servis, Estella	Seattle	Sievers, Ruth Elizabeth	Butte, Mont
LD, Bus	421 31st Av—E 3192	Unc, LA	4719 19th Av NE
Seton, Imogene Hurlburt	Portland, Or	Sigmond, Arthur Leonard	Seattle
LD, Ed	4632 19th Av NE—Ken 1092	LD, Bus	319 N 48th Av
Seyster, Margaret J	Wenatchee	Siler, Lillie May	Tacoma
LD, Sci	4540 Univ Blvd	LD, LA	4556 12th Av NE—Ken 3041
Shafer, Walter Robert	Tacoma	Silseth, Ellen	Tacoma
UD, LA	2120 E 47th St—Ken 1176	Unc, Sci	1582 30th Av S—Bea 1888
Shaffer, Wilma Jennie	Waitsburg	Silver, Fannie	Seattle
LD, LA	4524 19th Av NE—Ken 199	LD, Ed	2014 E Cherry St—E 1185
Shalom, Israel Aaron	Seattle	Simon, Rebecca Henrietta	Butte, Mont
UD, Ed	115 20th Av—E 8654	LD, LA	4704 18th Av NE—Ken 119
Shank, Howard	Seattle	Simpson, Lurline	Seattle
LD, Phar	5703 18th Av NE	LD, LA	1912 10th Av N
Shank, Jack	Alton, Ill	Sims, Norma Josephine	Seattle
LD, For	2120 E 47th St—Ken 1176	LD, LA	3950 Angeline St—Rain 58
Shank, Katherine Jean	Seattle	Singer, Fred John	Seattle
LD, LA	632 36th Av N—E 784	UD, EE	4103 38th Av S
Shapeero, Ezra Scotland	Seattle	Singleton, Florida	Seattle
Unc, Law	4306 Whitman Av	Unc, Bus	232 Dorffel Dr—E 5094
Sharp, Clarence Albert	Seattle	Sivertz, Victorian	Victoria, B C
LD Ch E	1726 15th Av	LD, Sci	Barracks Square—N 55
Sharp, Mary Cortis	Seattle	Sizemore, Wendell	Kent
Sp, LA	4547 19th Av NE—Ken 23	LD, LA	Seattle
Shaw, Helen Evelyn	Spokane	Skagerind, Frances Louise	Seattle
LD, Bus	1844 E 62nd St—Ken 2745	UD, Ed	4748 4th Av NE—Ken 2223
Shawler, Clarence Vore	Spokane	Sketh, Austin Jenks	Seattle
LD, Bus	4532 18th Av NE—Ken 2827	LD, LA	1623 22nd Av N
Shay, Alban Aurelius	Seattle	Skewis, Grace Rabling	Tacoma
LD, FA	2188 N 52nd St—N 3635	LD, FA	4547 19th Av NE—Ken 23
Shay, Julia	Seattle	Skewis, Shirley Martin	Tacoma
LD, LA	2188 N 52nd St—N 3635	UD, Lib	4530 Univ Blvd—Ken 2496
Shayler, Ernestine Lee	Seattle	Skinner, Betty	Tacoma
LD, LA	1124 Harvard Av—E 8705	LD, Bus	4547 Univ Blvd
Sheldon, Sarah Meech	Seattle	Skinner, Frank Hammond	Seattle
Grad	1129 37th Av—E 5377	LD, Bus	2006 24th Av N—E 8642
Shelton, Lucy Mnthor	Seattle	Skivington, John Keeves	Portland, Or
Grad	4502 12th Av NE—Ken 1636	LD, LA	Seattle
Shepler, William Emmett Loel	Burlington	Slater, Mary Dorothy	Raymond
Unc, Sci	Seattle	LD, LA	1616 E 47th St—Ken 149
Shields, George William, Jr	Seattle	Slauson, Ruth Irvine	Portland, Or
LD, Ch E	2712 32nd Av S—Bea 1991	UD, LA	2012 E 45th St
Shigaya, Paul Selkicho	Kent	Slipper, Doris Braydeston	Hamilton
LD, Sci	4110 12th Av NE—N 3797	LD, FA	4703 18th Av NE—Ken 2826
Shindel, Morris Henry	Seattle	Sloan, Mrs Nina Herman	Seattle
LD, Sci	200 25th Av S	Sp, FA	802 Seneca St—E11 1582W
Shinn, Duane Thomas	Tacoma	Small, Dorothy Charlotte	Kennedale
Unc, LA	Mufti Club Campus—N 55	LD, LA	Kennydale
Shiple, Dorothy	Seattle	Small, Frank Llewellyn Jr	Seattle
Unc, LA	1703 12th Av—E 2145	LD, LA	2307 2d Av N
Shoemaker, Harry Edwin	Spokane	Small, Mary Frances	Seattle
LD, CE	Triangle Club Campus—N 55	LD, FA	4504 18th Av NE—Ken 146
Shoemaker, Herbert Curtis	Spokane	Smith, Arnold Gallet	Seattle
UD, LA	4550 18th Av NE—Ken 3072	LD, LA	1261 15th Av N—E 5902

- Smith, Catharine WrightPuyallup
 UD, Sci.....Bx 115 Rt 1, Puyallup
- Smith DorothyGold Hill, Or
 LD, FA.....4547 19th Av NE—Ken 28
- Smith, Edward Mack.....Yakima
 LD, ME.....Stonybroke Club, Campus—N 55
- Smith, Ethel Beryl.....Vancouver
 LD, LA.....4546 18th Av NE—Ken 569
- Smith, Elfreda Allen.....Seattle
 UD, LA.....4510 22d Av NE—Ken 1037
- Smith, George Mimms Jr.....Seattle
 LD, LA.....3815 41st Av SW
- Smith, Gladys Lucile.....Seattle
 LD, LA.....1128 83rd Av—E 2258
- Smith, Glenwood Miles.....Seattle
 Unc, LA.....YMCA—M 5208
- Smith, Gordon Kroll.....Spokane
 LD, Sci.....4312 Latona Av
- Smith, Miss Herndon.....Seattle
 LD, LA.....Clark Hall—N 262
- Smith, John Alllande.....Seattle
 LD, Sci.....4505 18th Av NE—Ken 338
- Smith, John Henry Bronson.....Seattle
 LD, For.....6059 Sycamore Av—Bal 1459
- Smith, Madeline Ellen.....Aberdeen
 LD, Sci.....
- Smith, June Keltner.....Seattle
 UD, Ed.....420 N 49th St—N 1112
- Smith, Margaret Mary.....Fort Dodge, Ia
 LD, Bus.....6205 39th Av
- Smith, Mitchell G.....Seattle
 Sp, LA.....2024 33d Av S
- Smith, Priscilla Margaret.....Spokane
 LD, LA.....Clark Hall—N 262
- Smith, Ralph Ryan.....Seattle
 UD, Bus.....6602 Sunnyside Av
- Smith, Sherwood H.....Seattle
 LD, CE.....2217 E Newton St—E 4867
- Smith, Stanley Laurence.....Seattle
 LD, For.....112 Woodlawn Circle
- Smith, Theodore Castle.....Seattle
 UD, EE.....7414 Woodlawn Av—Ken 3259
- Smith, Truman T.....Seattle
 Unc, EE.....1306 E 75th St—Ken 608
- Smith, Truman W.....Seattle
 UD, Phar.....4203 11th Av NE—N 2804
- Smith, Vernetta Terrill.....Hoquiam
 UD, LA.....4508 16th Av NE—Ken 2768
- Smyth, Ralph S.....Seattle
 LD, EE.....8246 Ashworth Av—Ken 1441
- Snapp, John Farrington.....Seattle
 LD, EE.....4532 18th Av NE—Ken 2827
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 LD, LA.....4504 18th Av NE—Ken 146
- Snook, Dorothy E.....Seattle
 LD, FA.....1507 9th Av W—QA 2897
- Snow, Iola.....Seattle
 LD, Sci.....3039 12th Av W—QA 1720
- Snyder, Mr. Dee Deno.....Caldwell, Ida
 Unc, Bus.....5228 19th Av NE—Ken 2429
- Soelberg, Adene Harriet.....Seattle
 LD, LA.....4532 19th Av NE—Ken 1092
- Sohns, Clinton.....Spokane
 Unc, Bus.....4503 Univ Blvd
- Solberg, Peter Bernhard.....Tacoma
 LD, EE.....Khaki Club, Campus—N 55
- Solomon, Hyman.....Seattle
 LD, LA.....1593 8d Av W
- Solorio, Benito.....Seattle
 Sp, Sci.....1404 E 41st St
- Somerville, David Annesley.....Lewiston, Ida
 UD, ChE.....4504 16th Av NE—Ken 647
- Sorenson, Otto Nordahl.....Edmonds
 LD, ME.....
- Sorenson, Sanda Amella.....Ellensburg
 LD, LA.....Clark Hall—N 262
- Soss, Israel.....Spokane
 Unc, ME.....4514 11th Av NE
- Southwick, Glen Harold.....Chelan
 LD, Bus.....4550 18th Av NE—Ken 3072
- Spaulding, Florence Louise.....Monroe
 UD, Sci.....2220 Queen Anne Av
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 UD, Ed.....Anchorite Club, Campus, N 55
- Speir, James Hollister.....Seattle
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 LD, FA.....4505 18th Av NE—Ken 338
- Spencer, Ralph W.....Cle Elum
 LD, CE.....
- Spencer, Rhodes Vaughn.....Seattle
 LD, EE.....4239 11th Av NE
- Spencer, Robinson.....Seattle
 Grad.....5504 Brooklyn Av—Ken 1477
- Sperry, Emery Franklin.....Yakima
 LD, LA.....5042 18th Av NE—Ken 1740
- Spieske, Daisy Marietta.....Seattle
 UD, Ed.....2215 Bigelow Av
- Spongole, Emma A.....Port Orchard
 Sp, Phar.....College Hotel—N 9
- Sprague, Delbert Willis.....Seattle
 LD, For.....5230 21st Av NE—Ken 1109
- Spring, Seymour.....Yakima
 LD, ChE.....104 E 43d St
- Springer, Irene.....Olympia
 LD, LA.....4502 20th Av NE—Ken 685
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 LD, Phar.....4704 18th Av NE—Ken 119
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 Unc, FA.....2322 Harvard Av N—Cap 3916
- Stangland, Bessie Frances.....Madras, Or
 LD, LA.....Clark Hall—N 262
- Stanley, Maxine.....Tacoma
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 Grad.....4814 43d Av S—Rain 917M
- Starin, Joseph.....Seattle
 LD, Bus.....915 20th Av N
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 LD, Bus.....4547 Univ Blvd
- Starrett, Edwin Morris.....Port Townsend
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 UD, Sci.....1615 15th Av—E 1937
- Steel, Bonnie Mae.....Pomeroy
 LD, LA.....4714 16th Av NE
- Steele, Elsie.....Seattle
 UD, Ed.....1426 Warren Av—QA 2018
- Steinke, Pearl Accena.....Glasgow, Mont
 LD, Ed.....4035 15th Av NE—N 1725
- Steinmetz, Harry.....Seattle
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- Stelling, Anita Marie.....Everett
 LD, LA.....4119 12th Av NE
- Stendal, William Henry.....Eau Claire, Wis
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- Stephens, Ruth Elizabeth.....Riverside, Cal
 LD, Sci.....2012 E 45th St—Ken 2645
- Stephenson, Marian Lucile.....Portland, Or
 UD, Sci.....4534 17th Av NE—Ken 20
- Sterling, Laura.....Nanaimo, B C
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- Stern, Fred Rust.....Seattle
 LD, EE.....116 Fairview Av
- Stevens, Anna Leach.....Seattle
 UD, LA.....220 10th Av—M 5129
- Stevens, Belle Alice.....Maltby
 UD, Sci.....Lewis Hall—N 162
- Stevens, Edith F.....Seattle
 LD, LA.....4123 15th Av NE—N 2611
- Stevens, Grant Aaron.....Seattle
 LD, Bus.....806 28th Av
- Stevens, Manuel Edwin.....Seattle
 Unc, ChE.....2902 Eaton St

- Stevensen, Lillie ChristenaTacoma
 Sp, LA.....Lewis Hall—N 162
 Stevenson, (Miss) De.....Seattle
 UD, Sci.....1207 Ravenna Blvd—Ken 246
 Stewart, Arthur William.....Seattle
 LD, ME.....5218 18th Av NE—Ken 887
 Stewart, Edgar Irving Jr.....Seattle
 LD, Ed.....8786 12th Av NE
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 LD, ME.....1113 Lakeside Av
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 Stone, Sally Byrd.....Wallace, Ida
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 Stone, Sylvan Ralph.....Seattle
 Unc, Bus.....5646 14th Av NE
 Stranack, Janet.....Seattle
 LD, LA.....954 20th Av N—E 7778
 Strang, Vernon Bryan.....Tyner, Ind
 Sp, CE.....4208 11th Av NE—N 2864
 Streater, Gertrude Inez.....Seattle
 Grad.....1726 15th Av—E 900
 Strong, Evelyn Blanche.....Kelso
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 Stroud, Rollin Chester.....Seattle
 LD, For.....RFD 4, Box 149
 Strube, Charles Gustav Jr.....Portland, Or
 LD, ME.....4856 7th Av NE
 Struble, Mildred Clara.....Spokane
 Grad.....4704 18th Av NE—Ken 119
 Stuart, MacClelland.....Seattle
 LD, LA.....4515 15th Av NE
 Stuart, Grace Margaretta.....Ellensburg
 LD, LA.....4722 15th Av NE
 Stuart, Josephine.....Seattle
 Unc, Sci.....4514 16th Av NE—Ken 904
 Sturkis, Demetrius.....Spokane
 LD, LA.....Seattle YMCA—M 5208
 Sturtevant, Emily K.....Seattle
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 Stusser, Leslie.....Tacoma
 UD, Bus.....4206 Wallingford Av—N 2223
 Sullivan, Clare Agnes.....Seattle
 LD, LA.....4785 4th Av NE—N 8612
 Sullivan, John Edward.....Seattle
 LD, Sci.....4738 4th Av NE—N 8612
 Sully, Helen M.....Seattle
 UD, Ed.....5031 16th Av NE—Ken 2222
 Sumbardo, Alexander Henry.....Seattle
 LD, CE.....1715 Sunset Av—Ken 1004
 Summers, Paul Dilwyn.....Walla Walla
 LD, Bus.....4528 20th Av NE—Ken 1301
 Sumner, Muriel.....Seattle
 LD, LA.....5102 Woodlawn Av—N 1389
 Sundberg, Hilda Josephine.....Tacoma
 LD, LA.....Stewart Hotel—M 2778
 Sunderland, Anne Genevieve.....Goldendale
 Unc, Sci.....4718 20th Av NE
 Sundling, Doris Mae.....Seattle
 LD, Bus.....3807 11th Av NE
 Sutcliffe, Stanley Earl.....Seattle
 LD, Bus.....2354 W 78d St
 Sutherland, Glenn Ayes.....Seattle
 LD, ME.....409 1/2 Malden Av—Cap 3409
 Suthoff, Helen Katherine.....Seattle
 LD, Bus.....4710 Univ Blvd—Ken 1857
 Sutton, Dorothy Jane.....Seattle
 LD, Bus.....986 20th Av—E 1815
 Sutton, Sarah Patience.....Seattle
 Grad.....5613 Brooklyn Av—Ken 8080
 Swalwell, Arline.....Everett
 LD, LA.....4530 Univ Blvd—Ken 2496
 Swalwell, Corinne.....Everett
 LD, LA.....4530 Univ Blvd—Ken 2406
 Swann, Margaret.....Seattle
 LD, LA.....5244 11th Av NE—Ken 1028
 Swartz, Gladys.....Seattle
 LD, LA.....5703 18th Av NE—Ken 189
 Swartz, Margaret.....Spokane
 UD, Bus.....1120 Terry Av—Eil 2286
 Swash, Mary Jane.....Walla Walla
 LD, LA.....4714 16th Av NE
 Sweany, Fay Harris.....Curtis
 Unc, CE.....5204 15th Av NE
 Swearingin, Dalphine.....Pendleton, Or
 Unc, LA.....2012 E 45th St—Ken 2645
 Swegle, Walter.....Seattle
 LD, ME.....2302 N 44th St
 Swenson, Helen.....Seattle
 LD, Sci.....Clark Hall—N 262
 Swezea, Vernita.....Seattle
 LD, FA.....4530 Univ Blvd—Ken 2496
 Swift, Edward Alonzo.....Seattle
 LD, Bus.....601 34th Av—E 8888
 Swift, Lester John.....Hoquiam
 LD, Sci.....4305 15th Av NE
 Sykes, Irene.....Waterville
 LD, LA.....Clark Hall—N 262
 Sylvin, Helge.....Sweden
 Sp, For.....5218 Univ Blvd
 Tachell, Maud.....Renton
 UD, FA.....1906 E 45th St—Ken 983
 Tada, Euichi H.....Japan
 Unc, CE.....4110 12th Av NE—N 3797
 Taft, Alice Louise.....Seattle
 LD, FA.....1620 12th Av W—QA 4420
 Tainaka, Ben K.....Japan
 UD, EE.....4110 12th Av NE—N 3797
 Takemoto, Ino.....Japan
 Unc, LA.....
 Talbot, Archibald Weatherbee.....Seattle
 LD, Bus.....4503 Univ Blvd—Ken 286
 Talmadge, Walter.....Seattle
 LD, ME.....4022 18th Av NE
 Tamn, Frieda Johanna.....Eunauclaw
 LD, Sci.....4722 15th Av NE—Ken 2804
 Tanabe, George Benjro.....Seattle
 LD, CE.....4110 12th Av NE—N 8797
 Taylor, Bertrand.....Sumner
 LD, LA.....Mufti Club, Campus—N 55
 Taylor, Colin Alexander.....Seattle
 LD, EE.....4757 42d Av S
 Taylor, Donald Hugh.....Seattle
 LD, Bus.....4505 18th Av NE—Ken 383
 Taylor, Faith Elizabeth.....West Sound
 Unc, LA.....1616 E 47th St
 Taylor, Grace Gladys.....Seattle
 UD, LA.....911 N 47th St—N 1624
 Teel, Harold Morrison.....Spokane
 LD, Sci.....Univ YMCA
 Taylor, Margaret Sophia.....Seattle
 LD, LA.....8004 6th Av NW—Bal 1838
 Taylor, Roy Franklin.....Seattle
 UD, Bus.....5043 16th Av NE—Ken 2834
 Taylor Jr, William Sneed.....Darrington
 Unc, For.....2722 Franklin Av—Cap 1473

Teig, Clifford Louis	Seattle
LD, CE	2862 Alki Av
Tenney, Elizabeth Gertrude	Seattle
LD, LA	Clark Hall—N 262
Terrill, Corwin Leroy	Kennewick
LD, Bus	Loyal Heights—Bal 272
Tevis, David Russell Jr.	Seattle
LD, Bus	4527 16th Av NE
Thelsen, Arthur L.	Seattle
UD, Bus	1737 W 56th St
Theiberg, Evelyn Elizabeth	Seattle
UD, Ed	4230 Brooklyn Av—N 1123
Thiel, Cordelia M.	Seattle
Sp, Law	4825 Austin St
Thing, Curtis Willard	Seattle
Grad	4541 14th Av NE—Ken 168
Thomas, Donald Partridge	Seattle
LD, FA	806 W Lee St
Thomas, Dorothy Waitstill	Seattle
UD, LA	4504 18th Av NE—Ken 146
Thomas, Gertrude Marian	Cosmopolis
LD, Sci	4514 16th Av NE—Ken 904
Thomas, Irene	Bellingham
LD, LA	4548 Univ Blvd—Ken 669
Thomas, Jesse Breniser	Bellingham
LD, ChE	5243 19th Av NE
Thomas, Lee Baldwin	Sumas
LD, Bus	4504 16th Av NE—Ken 647
Thomas, Lenore	Bellingham
UD, Sci	4543 17th Av NE—Ken 669
Thomas, Margaret Emma	Seattle
LD, LA	309 Federal Av
Thomas, Ruth Rebecca	Seattle
LD, LA	136 E 52d St—N 3199
Thompson, Aletha	Seattle
LD, LA	4509 11th Av NE—Ken 2997
Thompson, Catherine	Pendleton, Or
LD, FA	4504 18th Av NE—Ken 146
Thompson, Elizabeth R.	Portland, Or
Unc, Sci	1408 E 42d St—N 48
Thompson, Jane Estelle	Tacoma
LD, FA	5298 18th Av NE—Ken 1368
Thompson, John Howard	Seattle
UD, Min	4305 16th Av NE—Ken 720
Thompson, Lola	Tacoma
UD, Ed	5238 22d Av NE—Ken 353
Thompson, Margaret Mary	Seattle
Unc, LA	4132 46th Av SW
Thompson, Pearl Kersten	Seattle
LD, LA	6238 Woodlawn Av—Ken 752
Thompson, Thelma Louise	Pendleton, Or
LD, FA	4.04 18th Av NE
Thomson, Francis Clifton	Seattle
LD, LA	2454 Harvard Av N—Cap 1476
Thomson, Reginald H Jr.	Seattle
LD, Sci	2454 Harvard Av N
Thoreau, Katharine Edmonds	Seattle
Grad	705 1/2 Pike St—Ell 3275
Thoren, Amy J A.	Seattle
LD, Ed	8617 1st Av NE
Thokelson, Borghild Victoria	Seattle
UD, LA	2208 N 44th St—N 1297
Thornburg, Mildred Mercy	Seattle
UD, LA	1802 E 73d St—Ken 1178
Thorp, Einar	Seattle
LD, ChE	925 W 49th St
Thorpe, Clarence Steven	Edwall
LD, EE	1107 E 47th St—Ken 3179
Thorsen, Paul Lorimer	Vashon
LD, LA	
Thorsen, Warren Martin	Portland, Or
LD, Bus	5037 22d Av NE—Ken 1076
Thorsland, Delmont Samuel	Sprague
LD, Bus	2120 E 47th St—Ken 1176
Thwing, Samuel Prestiss	Seattle
LD, Bus	2312 Eastlake Av—Cap 1154
Tiffany, Harry De Witt	Winslow
LD, LA	K'wal-Ka Club, Campus—N 55
Tiffin, Luclus D.	Seattle
Sp, Sci	108 E 43d St
Tiller, Arnet	Seattle
LD, LA	Adelphia College
Tinling, Gertrude Jean	Seattle
LD, LA	4530 Univ Blvd—Ken 2496
Tocher, Mary Wilma	Livingston, Mont
LD, Bus	4735 21st Av NE
Todd, Gerald Bradford	Tacoma
LD, Bus	4503 Univ Blvd—Ken 236
Todd, Ruth Marcellie	Seattle
LD, Sci	5043 15th Av NE—Ken 3154
Toles, Virginia Neilson	Peshastin
LD, LA	1616 E 47th St—Ken 149
Tolmie, Jack Rodewick	Seattle
UD, EE	1213 Columbia St—M 1804
Torrance, Roscoe Conkling	Spokane
LD, Min	4506 Univ Blvd—Ken 291
Totten, Morrell Phelps	Seattle
LD, LA	5626 Brooklyn Av
Tower, Pearl Adella	Seattle
Grad	6525 16th Av NE—Ken 957
Townes, Kathryn Genevieve	Seattle
LD, LA	506 15th Av N—E 6474
Townsend, Aleta K.	Seattle
LD, LA	4737 Brooklyn Av—Ken 3409
Tracy, Floy	Seattle
Grad	820 15th Av—E 5782
Travis, Beverly	Pinehurst
LD, EE	Castle Club, Campus—N 55
Trenholme, Ruth	Seattle
LD, Bus	1000 E 75th St—Ken 250
Troy, Marian Lucille	Olympia
LD, LA	4530 Univ Blvd—Ken 2496
Trow, Arthur Palmer	Santa Barbara, Cal
LD, Bus	4530 14th Av NE—Ken 555
Truebridge, John Kenneth	Seattle
LD, Bus	4532 18th Av NE
Trumbull, John Jonathan	Seattle
LD, Bus	1533 18th Av
Tucker, Glyde Lynne	Tacoma
2d Law	4736 10th Av NE—Ken 2060
Tuesley, Esther	Yakima
LD, LA	4710 Univ Blvd—Ken 1867
Tully, Irene	Tacoma
UD, Lib	4704 18th Av NE—Ken 119
Tunander, Ruth Viola	Seattle
UD, FA	438 E 72d St—Ken 3223
Turnaciff, Mary Lucille	Puyallup
Unc, LA	4551 Univ Blvd—Ken 501
Turner, Charles Maynard	Seattle
LD, EE	6312 10th Av NE—Ken 169
Turner, Harvey	Davenport
LD, LA	2120 E 47th St—Ken 1176
Turner, Herbert Clair	Seattle
LD, Bus	5038 Univ Blvd—Ken 496
Turner, Laura Ann	Oshkosh, Wis
UD, LA	4535 18th Av NE—Ken 1429
Turner, Lloyd Edwin	Spokane
LD, ChE	4749 15th Av NE
Turner, Lucile	Seattle
Unc, LA	4115 Brooklyn Av—N 365
Turner, Milton Marston	Seattle
LD, Bus	2120 E 47th St—Ken 1176
Turner, Paul	Outlook
LD, For	1903 2d Av W—QA 679
Turner, Roy Paris	Seattle
LD, LA	4330 11th Av NE
Turner, Wendell Walter	Seattle
LD, For	1903 2d Av—QA 679
Turnure, Marvel Beatrice	Portland, Or
LD, FA	4954 16th Av NE
Turrell, Claris	Seattle
LD, LA	4323 15th Av NE
Tuttle, Marian Emma	Tacoma
Unc, Ed	4540 Univ Blvd—Ken 3216
Tuttle, Robert Frederick	Tacoma
LD, ME	4616 21st Av NE—Ken 490

Tuttle, SallieSeattle
LD, LA.....4532 19th Av NE—Ken 1092
Tweed, LucileSeattle
UD, Sci.....2451 1st Av W—QA 4186
Twomey, Katherine Mackenzie..Oak Grove, Or
UD, LA.....4718 20th Av NE
Tye, Brent G.....Seattle
LD, Ed.....
Tyler, Frances Mae.....Brewster
LD, Bus.....Lewis Hall—N 162

Uchimura, KiwaSeattle
LD, Ed.....5784 E Greenlake Blvd
Uddenberg, AliceGig Harbor
Unc, Bus.....1519 1st Av N—QA 4652
Ulleland, Astrid OliveKent
UD, LA.....622 Melrose Av—Cap 2788
Umbrite, Samuel PhillipRichmond Beach
LD, Phar.....1708 N 46th St
Underwood, Hugh ColemanSeattle
LD, EE.....1538 16th Av N
Underwood, Robert Cushman.....Elgin, Or
LD, ChE.....4724 9th Av NE—Ken 2919
Ungerhni, BrunoSeattle
LD, Phar.....4311 Brooklyn Av
Uphus, EyanEauclaw
Unc, For.....2908 Mayfair Av—QA 2964
Upton, Beatrice Margaret.....Billings, Mont
LD, LA.....2012 E 45th St—Ken 2645
Upton, Earl EdwardBlack Diamond
LD, LA.....4504 16th Av NE—Ken 647

Vandercook, Jeanette C.....Seattle
Vandercook, Mordeaux William.....Seattle
Unc, Law.....4528 15th Av NE
Vander Las, Richard.....Seattle
UD, Bus.....4503 Univ Blvd—Ken 236
Van Doren, MarthaSeattle
Sp, LA.....4518 14th Av NE—Ken 3445
Van Patten, Paul Edward.....Ontario, Or
LD, Bus.....4530 14th Av NE—Ken 555
Van Sicklin, Grace.....Welsler, Ida
LD, Bus.....2012 E 45th St—Ken 2645
Van Sicklin, NinaWelsler, Ida
LD, LA.....4526 15th Av NE
Van Soelen, Anton C.....Seattle
Sp, Law.....2204 E Olive St
Van Valey, EstherEverett
LD, FA.....4551 Univ Blvd—Ken 501
Van Vleet, Cecll Spicer.....Camas
Grad.....Box 267, RFD 1, Seattle
Van Winter, Rex.....Seattle
Grad.....545 19th Av
Vaughan, Lillian MabelSeattle
LD, LA.....1508 Franklin Av—Cap 2989
Verd, ErnaSeattle
LD, LA.....4504 18th Av NE—Ken 146
Verd, RuthArlington
LD, LA.....4508 16th Av NE—Ken 721
Vestal, Adra CoraPayette, Ida
LD, Sci.....Clark Hall—N 262
Viers, Dorothea BernicePortland, Or
Unc, LA.....4543 Univ Blvd—Ken 659
Villesvik, Geberhard JohannesSpokane
Unc, ChE.....4706 14th Av NE
Vincent, Will PierreFuyallup
LD, Min.....Khaki Club, Campus—N 55
Vining, MarjorySeattle
LD, LA.....4718 Univ Blvd—Ken 1882
Vickner, Bertha AlmenSeattle
Grad.....5521 12th Av NE—Ken 960
Virgin, Howard TuckerWenatchee
LD, LA.....5008 18th Av NE—Ken 1692
Virtue, Eloise B.....Seattle
UD, Sci.....4532 19th Av NE—Ken 1092

Virmeda, AmadeoPhilippine Islands
Sp, Ed.....1404 E 41st St
von Kettler, Wanda Fredericka.....Seattle
LD, LA.....4325 15th Av NE—Ken 8452
von Norman, Alfred George.....Seattle
UD, EE.....910 20th Av
von Fressentin, Agnes Dorothea..Marblemount
LD, Ed.....Clark Hall—N 262
Voorhes, Sol Watson.....Yakima
LD, CE.....4301 2d Av NE

Wabraushik, Robert Anthony.....Seattle
LD, Bus.....908 E Howell St
Waddingham, Elsie KellsSeattle
Grad.....1535 2d Av W
Waechter, William GeraldSeattle
LD, LA.....717 W Garfield St
Wagner, Florence Minerva.....Sequim
LD, LA.....Lewis Hall—N 162
Wagner, Katy MarieWenatchee
LD, Sci.....Rehan Hotel
Wahl, BerntenaSeattle
Unc, Sci.....5412 21st Av NE
Waite, Vera BeatriceSeattle
UD, Sci.....4223 15th Av NE—N 3376
Walker, Glen H.....Seattle
UD, EE.....4722 12th Av NE
Walker, MyrellSeattle
LD, EE.....2011 Eloise Ter
Walker, Richard R.....Seattle
LD, ME.....Ethelton Hotel—EII 5671
Walker, Roberta Louise.....Seattle
Unc, FA.....4110 11th Av NE
Walker, Roger AlbertTacoma
LD, ME...Anachorites Club, Campus—N 55
Wallace, Allan Reed.....Seattle
LD, EE.....5527 25th Av NE—Ken 1131
Wallace, Anne PaulineSeattle
LD, FA.....5527 25th Av NE—Ken 1131
Wallace, Clara Louise.....Seattle
UD, LA.....539 E 79th St
Wallace, DouglasSeattle
LD, Bus.....5218 Holly St
Wallace, Genelle.....Seattle
Unc, Sci.....705½ Pike St—EII 3275
Wallace, Hiram BrainardMonroe
Unc, Bus.....5037 21st Av NE
Wallace, IsabelSeattle
Grad.....2900 E 53rd—Ken 2326
Waller, Donald G.....Seattle
Unc, Bus.....4503 Univ Blvd—Ken 236
Wallin, GenevieveSeattle
LD, FA.....2447 Federal Av—Cap 3942
Walsh, Mary Louise.....Tacoma
LD, Sci.....1003 Ravenna Blvd—Ken 3591
Walthew, Dorothy EleanorSeattle
UD, LA.....1818 E 50th St—Ken 2334
Walthew, Winifred E.....Seattle
LD, LA.....1818 E 50th St—Ken 2334
Ward, Frank G.....Seattle
3d Law.....4516 21st Av NE—Ken 490
Ward, VictorSeattle
UD, Bus.....
Warde, Laurence AngusSeattle
LD, EE.....825 E Denny Way
Wardwell, AdnaSeattle
LD, Ch E.....1217 Sylvester Pl
Warne, Ada MarySeattle
Unc, Sci.....4332 Meridian Av
Warne, Alice MaySeattle
LD, Sci.....4332 Meridian Av
Warner, Sophie ErmaSeattle
UD, Ed.....1061 E Mercer St—Cap 2677
Warren, Earl F J.....Davenport
LD, Bus.....4018 12th Av NE—N 2177
Warren, John EdwinBremerton
LD, Bus.....4504 16th Av NE—Ken 647

Warshal, Adolph	Seattle	LD, Phr.	185 22nd Av—M 5348
Watkins, Inez	Hoquiam	LD, Bus.	4523 18th Av NE—Ken 1844
Watkins, Ruth Emily	Hoquiam	LD, ScI.	4523 18th Av NE—Ken 1844
Watrous, Genie Ida	Bellingham	LD, ScI.	4523 Univ Blvd—Ken 659
Watson, Anna E	Seattle	UD, LA.	402 11th Av N
Watson, Dorothy Moore	Spokane	LD, LA.	4714 Univ Blvd—Ken 2253
Watson, Harold Harrison	Seattle	LD, ME.	380 18th Av N—E 5800
Watson, Jean Ferguson	Seattle	LD, LA.	4532 19th Av NE—Ken 1092
Watson, Ruth Elizabeth	Seattle	UD, ScI.	4026 11th Av NE—N 2523
Watson, William Douglas	Charleston	Sp, ScI.	4026 12th Av NE
Watson, Vivian L	Seattle	UD, ScI.	1416 E 41st St—N 2671
Watt, Mabel	Seattle	LD, ScI.	4311 9th Av NE
Way, Lols Edith	Seattle	LD, ScI.	4730 11th Av NE—Ken 17
Weage, Avery Dudley	Seattle	UD, Ed.	4030 11th Av NE
Weage, Esther Anna	Seattle	LD, Ed.	4030 11th Av NE
Weage, Mary D	Seattle	LD, ScI.	4330 11th Av NE
Weage, Winifred	Tulare, Cal	UD, ScI.	3955 Angeline St—Rain 974W
Weatherwax, John Martin	Aberdeen	LD, LA.	Mufti Club Campus—N 55
Weaver, Grace Elizabeth	Seattle	UD, LA.	5034 18th Av NE—Ken 2930
Webb, Bernice Lovell	Lewiston, Ida	Unc, ScI.	1906 E 45th St—Ken 983
Webb, Dewey	Wenatchee	LD, LA.	4305 15th Av NE—Ken 720
Weber, Clara Rosemond	Prosser	LD, LA.	1616 E 47th St—Ken 149
Weber, Walter Herman	Yakima	UD, EE.	4733 19th Av NE—Ken 3440
Webster, Elmer Charles	Seattle	Unc, Bus.	5233 19th Av NE
Webster, Jessie Elizabeth	Port Angeles	LD, LA.	4502 20th Av NE—Ken 685
Weeks, Mary Louise	Seattle	LD, FA.	1616 E 47th St—Ken 149
Wegener, Marguerite	Seattle	Unc, FA.	8621 2nd Av NW—Bal 1877
Weigel, Charles Maurice	Yakima	LD, Bus.	4503 Univ Blvd—Ken 286
Welkel, Elizabeth Celestia	Yakima	LD, LA.	4540 Univ Blvd—Ken 3216
Welland, Marjorie L	Oakville	Unc, FA.	7 Harrison St
Weimar, Helen Marie	Tieton	LD, ScI.	4547 Univ Blvd
Wein, Clara G	Seattle	Sp, Law.	5527 Univ Blvd—Ken 2079
Weinirl, Adolph	Seattle	LD, ScI.	4144 10th Av NE—Ken 2366
Weiborn, Marguerite	Seattle	Unc, LA.	309 W Prospect St—QA 4711
Welch, Roy Daniel	Kelso	LD, LA.	4722 20th Av NE
Weld, Eleanor Marion	Seattle	LD, ScI.	2153 10th Av W
Wells, Virginia Ribble	Portland, Or	LD, Bus.	4728 21st Av NE—Ken 409
Welty, Consuelo	Seattle	UD, Lib.	5028 10th Av NE—Ken 2228
Wendland, Edwin G	Seattle	LD, FA.	Seattle YMCA—M 5208
Wenke, Francis	Buckley	LD, EE.	
Wenner, Harriett Ann	Okanogan	LD, LA.	1616 E 47th St—Ken 149
Wentworth, Ray	Seattle	LD, ME.	4424 Bagley Av—N 119
Werby, Helena J	Seattle	UD, ScI.	216 3rd Av N—QA 2767
West, Cecil Rowland	Seattle	LD, ScI.	4310 Ferdinand St
West, Constance Mary	Seattle	LD, ScI.	4310 Ferdinand St
West, Garnet Mary	Tacoma	Sp, LA.	4508 16th Av NE—Ken 2788
West, Lelaine Fyolger	Portland, Or	LD, LA.	4531 18th Av NE—Ken 253
Westlund, Elmer Bernard	Bellingham	LD, Ch E.	
Weston, Merle Millicent	Sacramento, Cal	LD, ScI.	
Weston, Nellie Carolyn	Seattle	LD, ScI.	4718 Univ Blvd—Cap 760
Westover, Hazel Elizabeth	Lincoln, Neb	UD, ScI.	5015 Univ Blvd
Westwood, Martha	Baker, Or	LD, ScI.	4718 Univ Blvd—Ken 1882
Wetherby, Harold James	Tacoma	LD, LA.	1605 E Madison St—E 7237
Wetzel, Hilda Bernice	Seattle	UD, FA.	8018 31st Av NW—Bal 149
Wexelstein, Leo	Russia	UD, EE.	3804 10th Av NE—N 1688
Weythman, Ruth	Monitor	LD, ScI.	Clark Hall—N 262
Whaley, Frances Carlisle	Chelan	LD, Bus.	4532 18th Av NE
Whaley, Harry E	Seattle	SC, Min.	4407 Densmore Av—N 951
Whealdon, M Fay	Seattle	UD, LA.	2012 E 45th St—Ken 2645
Wheaton, Marion Elizabeth	Bellingham	LD, LA.	4530 Univ Blvd—Ken 2496
Wheeler, Anita Merry	Tacoma	LD, FA.	4530 Univ Blvd—Ken 2496
Wheeler, Estelle	Seattle	Unc, LA.	1517 4th Av W—QA 960
Wheeler, Gladys Fidele	Seattle	UD, Ed.	3815 Woodlawn Av—N 1752
Wheeler, James Addison	Seattle	LD, Bus.	320 Garfield St
Whipps, Carol Louise	Kallispell, Mont	UD, FA.	4704 18th Av NE—Ken 119
Whitacre, Paul	Ferndale	Unc, LA.	5037 16th Av NE—Ken 931
Whitcomb, Charles Raymond	Portland, Or	LD, EE.	1010 E 73d St
White, Esther May	Seattle	LD, ScI.	1729 Ravenna Blvd—Ken 1012
White, Katharine Eleanor	Seattle	UD, Ed.	5204 15th Av NE
White, Henry Newman, Jr.	Tacoma	LD, LA.	4532 18th Av NE—Ken 2827
White, Phillip Lewis	Oakville	LD, LA.	4714 Brooklyn Av
White, Wesley Fechter	Seattle	LD, LA.	1805 7th Av W—QA 148
Whiteaker, Inez Louisa Denny	Seattle	LD, FA.	4534 16th Av NE—Cap 1576
Whitehead, Virgil	Seattle	UD, Bus.	5218 Univ Blvd—Ken 2827
Whitelaw, Hugh	Seattle	Unc, Bus.	1220 Boren Av
Whiting, Frances Little	Olympia	Unc, LA.	4508 16th Av NE—Ken 2788
Whiting, Helen	Portland, Or	Unc, LA.	5214 Univ Blvd—Ken 844
Whitney, Ralph Fremont	Tacoma	Unc, FA.	4760 21st Av NE—Ken 980

Whittemore, Amos	Seattle	Wilson, Rena Gertrude	Seattle
LD, Bus	Seattle YMCA—M 5208	Unc, FA	2224 1st Av W
Wick, Walter Henry	Seattle	Wilson, Ruth Elizabeth	Ellensburg
LD, LA	New Richmond Hotel—M 8153	LD, Sci	4754 16th Av NE—Ken 2988
Wickstrom, Clarence LeRoy	Seattle	Wilson, Thomas Hugh	Seattle
Grad	415 16th Av N—E 4169	LD, EE	5015 15th Av NE
Wiennand, Carl Marcus	Seattle	Wilson, Victor	Tacoma
LD, Sci	1829 Boren Av—Eli 1868W	LD, EE	Anchorites Club, Campus—N 55
Wiennand, Ruth	Seattle	Wiman, Fred	Seattle
LD, Bus	4250 9th Av NE	UD, Bus	4738 19th Av NE—Ken 916
Wienir, Harry A.	Seattle	Wingate, John Wendell	Seattle
Sp, Phar	341 19th Av—E 1291	LD, Sci	2217 11th Av N
Wienir, Israel T.	Seattle	Winter, Charlotte Lucille	Los Angeles, Cal
Unc, Sci	341 19th Av—E 1291	UD, Bus	4504 18th Av NE—Ken 146
Wiesenbach, Ward (Osman)	Richland	Winter, Katharine	Everett
UD, Bus	Ace Club Campus—N 55	UD, LA	4504 18th Av NE—Ken 146
Wiggins, Charles	Portland, Or	Wintermote, Dorothy	Tacoma
LD, Bus	4506 Univ Blvd—Ken 291	LD, LA	4540 Univ Blvd—Ken 3216
Wiggins, Mildred	Toppenish	Woelber, Harry John	Seattle
UD, LA	4630 Univ Blvd—Ken 2496	LD, Min	5218 Univ Blvd—Ken 3167
Wiggle, James	Seattle	Wohlrabe, Raymond Adolph	Woodland
LD, Sci	4115 16th Av NE—N 2877	LD, Sci	5253 18th Av NE—Ken 1617
Wilbus, Edward P.	Seattle	Wolf, Katherine C	Outlook
UD, Bus	738 Harvard Av N	UD, LA	5731 Univ Blvd—Ken 1659
Wilcox, Elgin Roscoe	Seattle	Wolthausen, Eldon Le Roy	Yakima
Grad	4385 12th Av NE—Ken 438	UD, Sci	4217 Interlake Av—N 590
Wilcox, Howard Glen	Seattle	Wommack, Carl	Algona
UD, Min	1722 E Queen Anne Dv	LD, Sci	4510 12th Av NE—Ken 724
Wilcox, Milo Fay	Montesano	Wong, Chih Fun	Seattle
Unc, CE	1806 N 45th St—N 2018	LD, Min	114 12th Av S
Wiles, Etwood Humphrey	Portland, Or	Wong, Ying Chun	China
LD, Bus	4506 Univ Blvd—Ken 291	UD, Phar	422 8th Av S
Wiley, Lois	Seattle	Wong, Hokkan	China
LD, FA	5414 Latona Av—Ken 2244	UD, LA	4528 Brooklyn Av
Wilhelm, Hedda	Billings, Mont	Woo, May	Seattle
Grad	4550 18th Av NE	LD, LA	303 8th Av S
Wilkes, Miss Jean Robin	Seattle	Wood, Arthur Rollit	Seattle
UD, Phar	1510 Melrose Av—M 3796	Grad	4530 14th Av NE—Ken 555
Wilkinson, Jessie Townley	Sedro-Woolley	Wood, Edith	Helena, Mont
LD, Bus	4542 10th Av NE	LD, Sci	2012 E 45th St—Ken 2645
Wilkinson, Madge Watson	Seattle	Wood, Mary Esther	Seattle
Grad	4525 15th Av NE	LD, Bus	518 E 72nd St—Ken 1602
Willan, Carol	Seattle	Wood, Florence	Edmonds
UD, Jour	803 N 49th St—N 1797	LD, FA	5210 12th Av NE—Ken 1361
Willard, Dorothy	Seattle	Wood, Leighton Howard	Seattle
LD, LA	5241 18th Av NE—Ken 2191	LD, Bus	4520 21st Av NE—Ken 2600
Williams, Carrie Colver	Union, Or	Wood, Lillian	Seattle
UD, Sci	Lewis Hall—N 162	UD, Sci	5628 14th Av NE
Williams, Ethel Marjorie	Wilbur	Wood, Marian	Bellingham
LD, Ed	Clark Hall—N 262	UD, LA	4504 18th Av NE—Ken 146
Williams, Florence Marce	Portland, Or	Wood, Muriel	Seattle
Unc, LA	912 E 42nd St—N 1795	UD, Ed	1906 E 45th St—E 1961
Williams, George Otis	Seattle	Wood, Paul Wallingford	Seattle
UD, Bus	325 Boston Block—Eli 5232	LD, LA	4019 15th Av NE
Williams, Maude	Seattle	Wood, William Russell	Seattle
Sp, Sci	1605 E 47th St—Ken 2431	LD, For	1205 21st Av N—E 1961
Williams, William Owen	Seattle	Woodard, Wave	Loomis
LD, Bus	1225 Sylvester Pl	Unc, LA	4540 Univ Blvd—Ken 3216
Williamson, Lucile Eileen	Seattle	Woods, Eva Jessie	Edmonds
Unc, FA	7401 Greenwood Av—Bal 1639	UD, Sci	4324 8th Av NE
Williamson, Mary Agnes	Seattle	Woodworth, Claude Jones	Seattle
LD, Sci	5221 12th Av NE—Ken 3342	LD, LA	807 Allen Pl
Wilson, Alice Lolita	Seattle	Woodriddle, Reginald C.	Vancouver, B C
LD, LA	Capitola Apts—Cap 1091	SC, For	
Wilson, Carl K.	Seattle	Woolery, Faye C.	Rathdrum, Ida
UD, Bus	4738 19th Av NE—Ken 916	UD, LA	5525 16th Av NE
Wilson, Doris Glasgow	Seattle	Woolpert, Oram Clark	Seattle
LD, LA	2012 E 45th St—Ken 2645	LD, Sci	4727 Brooklyn Av—Ken 152
Wilson, Doris Lillian	Tacoma	Woolpert, Ruth	Hood River, Or
Unc, Bus	1519 1st Av N—QA 4652	UD, LA	Clark Hall—N 262
Wilson, Edwin D.	Seattle	Woodriddle, Ruth	Seattle
UD, ChE		Unc, LA	5531 29th Av NE
Wilson, Glen Evans	Seattle	Woolsey, Eva Fay	Seattle
LD, LA	4550 18th Av NE—Ken 3072	LD, LA	512 N 44th St
Wilson, Lena E	Grandview	Woolverton, Marcellene Frye	Spokane
UD, LA	5046 11th Av NE	LD, LA	1344 E 62nd St—Ken 2745
Wilson, Marjorie F.	Seattle	LD, LA	2453 1st Av W—QA 1163
Grad	5015 18th Av NE	Worboys, Helen Monfort	Seattle

REGISTER OF STUDENTS

Workman, Esther BellePortland, Or
 LD, LA.....4714 18th Av NE
 Worsham, Mary Lavinia.....Evansville, Ind
 UD, LA.....4710 Univ Blvd—Ken 1857
 Worsley, John TSeattle
 SC, For.....318 21st Av N
 Worthen, Clifton BoydLynden
 UD, Ed.....Ace Club, Campus—N 55
 Wotherspoon, John.....Seattle
 Unc, Sci.....523 11th Av N—Cap 1590
 Worthington, Robert EdgarQuilcene
 LD, ME.....4504 16th Av NE—Ken 647
 Worthley, Charles BondTacoma
 LD, EE.....4618 Univ Blvd—Ken 98
 Wrage, BlancheArlington
 LD, Sci.....4508 16th Av NE
 Wray, Marjorie RebeccaSeattle
 LD, Bus.....1911 Broadway N—Cap 1088
 Wright, Allen Carpenter.....Seattle
 LD, EE.....5203 Brooklyn Av
 Wright, Clifford AllenSeattle
 Grad.....4616 21st Av NE—Ken 490
 Wright, Ernest RoyWashington, Kan
 LD, LA.....4616 21st Av NE—Ken 490
 Wright, HelenSeattle
 LD, LA.....919 13th Av N—Cap 2363
 Wright, Howard HoratioEverett
 Unc, ME.....5037 22nd Av NE—Ken 1076
 Wright, Robert B.....Nespece, Ida
 Unc, Bus.....
 Wright, Ruth H.....Seattle
 UD, LA.....4226 Brooklyn Av—N 1845
 Wyman, Mary ReynoldsColfax
 LD, FA.....4508 16th Av NE—Ken 2768
 Yates, JamesGrangeville, Ida
 UD, Bus.....4528 Brooklyn Av—Ken 27

Yeager, Fred AlbertSpokane
 LD, ME.....4700 19th Av NE
 Yerington, MylesOnak
 LD, Sci.....Barracks Square Campus—N 55
 Yerkes, MargaretSeattle
 LD, LA.....1147 18th Av N—E 6875
 Yoshimura, TamekichiSeattle
 LD, Bus.....Box 631 Univ Sta—N 3797
 Youell, MiriamPortland, Or
 LD, LA.....4585 18th Av NE—Ken 1429
 Young, Alvia GordonVancouver
 LD, Sci.....4505 18th Av NE—Ken 833
 Young, Gertrude VioletteAuburn
 LD, FA.....1021 10th Ave N—Cap 1762
 Young, Josephine AdaAuburn
 LD, LA.....1121 10th Av N—Cap 1762
 Yuge, ShichiroJapan
 Grad.....4110 12th Av NE—N 3797
 Youngquist, Marvin William.....Goldendale
 LD, EE.....4616 21st Av NE—Ken 1743

Zaar, Clarence WilliamSeattle
 LD, EE.....3240 41st Av SW—W 271W
 Zacharias, Rose LydiaSeattle
 UD, LA.....Clark Hall—N 262
 Zander, LeoraSeattle
 LD, FA.....RFD 6
 Zener, Francis BertramWhite Salmon
 LD, Sci.....Mufti Club Campus—N 55
 Zickler, Irma PaulineZillah
 UD, Sci.....1616 E 47th St—Ken 149
 Zimmerman, Chloe AniceSapulpa, Okla
 UD, Sci.....4728 18th Av NE—Ken 2768
 Zimmerman, Mary LucileTono
 LD, LA.....Clark Hall—N 262
 Zimmerman, OrvilleGresham, Or
 LD, ME.....4203 11th Av NE—N 2844

SUMMER QUARTER STUDENTS—1918

Abel, Lena Blanche.....Montesano UD, Sci .....7547 19th Av NE—Ken 23	Arne, Lucile G.....Seattle Grad.....1603 Boylston Av—E 6768
Addy, Helen Frances.....Seattle LD, FA.....4715 18th Av NE—Ken 888	Arnell, Esther.....Seattle UD, Ed.....5010 8th Av NE—Ken 3413
Akiyama, Biaki.....Seattle Unc, LA.....1024 Washington St—Ell 4846W	Arnold, E Rosena.....Seattle Sp, FA.....5241 11th Av NE—Ken 987
Albertson, Carl L.....Omaha Sp, CE.....4522 18th Av NE—Ken 2053	Arnold, Helen Florence.....Seattle UD, Ed.....4726 14th Av NE—Ken 1013
Albertson, Genevieve.....Twin Bridges, Mont UD, LA.....4543 University Blvd—Ken 659	Arltson, John Wentworth.....Tacoma LD, LA.....
Alfonso, Mrs Marie.....Seattle Grad.....4937 14th Av NE—Ken 576	Aspenfelter, Christine.....St John UD, Ed.....4585 18th Av NE—Ken 1429
Allen, Beatrice.....Seattle LD, Sci.....7483 47th Av S	Ashley, Gertrude Miriam.....Welsler, Ida Grad.....
Allen, Glenna A.....Seattle LD, Sci.....5046 20th Av NE—Ken 1674	Ashley, Kate Wood.....Welsler, Ida Grad.....2012 E 45th St—Ken 2645
Allen, Lulu Wright.....Missoula, Mont UD, LA.....4714 University Blvd	Atkin, Irene M.....Seattle UD, Sci.....5021 Brooklyn Av—Ken 1640
Allen, Mabel Darry.....Vancouver, B. C. LD, Sci.....4311 Brooklyn Av	Atkinson, Laura R.....Seattle Sp, P H Nursing.....513 11th Av N
Allen, Mabelle.....Pendleton, Or UD, LA.....4515 15th Av NE—Ken 2697	Ayres, Esther Ame.....Seattle LD, LA.....1430 29th Av—E 5624
Allen, Mildred Alice.....Seattle UD, Ed.....626 13th Av N—Cap 1009	Ayres, Harry Warner.....Seattle UD, Phar.....1408 E 42nd St—N 48
Allibone, Pearl Hannah.....Bucoda Sp, Phar.....1909 Howard Pl	Bachar, Gladys Annetta.....South Prairie LD, FA.....4425 4th Av NE—N 3743
Allis, Min.....Libby, Mont Unc, FA.....Clark Hall—N 262	Bade, Augusta Fleetwood.....Walla Walla Sp, P H Nursing.....
Allison, Weaver Judson.....Centralia UD, LA.....5210 12th Av NE—Ken 1861	Bailey, George C.....Seattle Grad.....5007 Brooklyn Av—Ken 104
Allper, Morris.....Manchuria LD, ME.....104 17th Av—E 4429	Dalley, William Locke.....Seattle LD, LA.....4541 14th Av NE—Ken 158
Almquist, Paul Bernhard.....Seattle UD, EE.....7530 2nd Av NE—Ken 3538	Balsden, Zula D.....Wapato Sp, LA.....
Anderberg, Edith L.....Colton, S D Sp, LA.....Clark Hall—N 262	Baker, Agnes.....Missoula, Mont Unc, Ed.....211 Eastlake Av
Anderberg, Mabel Carolyn.....Colton, S D Sp, Ed.....Clark Hall—N 262	Baldwin, Anna L.....Seattle Unc, LA.....109 E Lynn St
Anderen, Frances.....Seattle LD, Ed.....3409 25th Av S	Ballaine, Florence.....Seattle UD, Sci.....4703 15th Av NE—Ken 1680
Anderson, Ada Charlotta.....Seattle Grad.....2248 Day St—Bea 2840	Ballou, Mrs Ellen Holden.....Colebrook, N H LD, LA.....1840 12th Av NE
Anderson, Ethel May.....Seattle Grad.....2448 Day St—Ben 2840	Bar, William Lawrence.....Centralia 1st Law.....1625 E Madison St—E 4805
Anderson, Ethel May.....Seattle UD, LA.....4551 University Blvd—Ken 501	Barber, David A.....Tenino Grad.....4213 1/2 42nd Av NE
Anderson, Lida Eunia.....Kellogg, Ida Sp, LA.....2646 22nd Av W—QA 1981	Bardon, Norma.....Seattle UD, LA.....4254 7th Av NE—N 3795
Anderson, Lydia Cecilia.....Waterman UD, LA.....4513 Brook Pl	Bardshar, Ruth.....Seattle Grad.....1808 E John St—E 1596
Anderson, Martha.....Seattle Sp, LA.....712 E 48rd St	Barker, Carl Vincent.....Entiat Grad.....1718 E 70th St
Anderson, Pearle Elma.....Spokane Grad.....4508 16th Av NE	Barnett, Lula J.....Cheney Unc, Sci.....4722 15th Av NE—Ken 2804
Anderson, Robert Freeman.....Spokane LD, LA.....4506 University Blvd—Ken 291	Barry, Georgie Catheryne.....Bellingham UD, Ed.....5208 15th Av NE—Ken 1253
Andre, Ethel.....Spokane Unc, LA.....4710 15th Av NE—Ken 1085	Bartlett, Clara.....Seattle LD, LA.....1205 8th Av W—QA 2350
Arbuthnot, Katharine.....Independence, Or Unc, Ed.....4723 18th Av NE	Bauer, Philip B.....Seattle Unc, LA.....5427 40th Av SW
Annett, Winnifred.....Hoquiam LD, LA.....4551 University Blvd—Ken 501	Baxter, Lelah M.....Punente, Cal UD, Ed.....4547 19th Av NE
Archer, Kate Worthington.....Jerome, Ida LD, Ed.....4th Av S and Main St—M 3153	Baxter, Le Oro Agnes.....Punente, Cal Grad.....4547 19th Av NE
Argyle, Helen B.....Portland, Or Unc, Ed.....4582 19th Av NE—Ken 1092	Bean, Mabel Louise.....Seattle Unc, Sci.....4726 14th Av NE—Ken 1013
Armstrong, Mrs. Florence Cook.....Tacoma Grad.....4839 11th Av NE—Ken 956	Beardsley, George O.....Yakima 3rd Law.....Law Library, Campus
Armstrong, Mary.....San Jacinto, Cal Grad.....4588 15th Av NE—Ken 1482	

Beaven, Grace May.....Seattle Grad.....4824 Corliss Av—N 2806	Borgman, Rosalie.....Great Falls, Mont Grad.....4280 Brooklyn Av
Beaver, Loretta.....Tracyton Sp, LA.....1540 Rainier Av—Bea 701	Botts, Martha Josephine.....Colville UD, Ed.....4746 15th Av NE
Beckman, Georgiana Dorothy.....Spokane UD, Ed.....124 21st Av N	Bouffleur, Ethel Julia.....Tacoma LD, Ed.....Clark Hall—N 262
Beckwith, Hortense.....Seattle UD, LA.....1911 N 49th St	Bowden, Henrietta Lois.....Sandpoint, Ida UD, Ed.....2012 E 45th St—Ken 2645
Beegle, Burton L.....Seattle Grad.....3209 8rd Av W	Bowman, Beulah Marjorie.....Seattle LD, LA.....5521 16th Av NE—Ken 1990
Bell, Doris Lillian.....Everett UD, Sci.....4524 19th Av NE—Ken 199	Bowman, Edna Elizabeth.....Everett Sp, LA.....4542 14th Av NE—Ken 1952
Bell, John Karl.....Yakima UD, LA.....4506 16th Av NE	Bowne, Nona D.....Valleyford Sp, LA.....
Bellem, A W.....Chicago, Ill Grad.....Friday Harbor	Boyington, Jo Mae.....Coeur d'Alene, Ida UD, LA.....4708 18th Av NE—Ken 2826
Bennett, Edward Allen.....Seattle Grad.....4531 19th Av NE—Ken 1996	Brackett, Bertha.....Seattle Grad.....2005 N Broadway—Cap 2486
Bennett, Irene.....Coeur d'Alene, Ida Unc, LA.....4535 18th Av NE	Brannan, Mary E.....Kellogg, Ida Unc, Ed.....4742 18th Av NE
Bennett, Mary Pearl.....Riverside Grad.....Riverside	Bratcher, Estey.....Seattle Unc, FA.....5208 18th Av NE
Bennett, Phillip A.....Palouse Unc, Ed.....4280 Brooklyn Av	Brengan, Samuel McClure.....Seattle LD, ChE.....3680 Greenwood Av—N 2808
Benson, Lou M.....Spokane Sp, Ed.....4708 18th Av NE	Brennan, Evelyn.....Coeur d'Alene, Ida Unc, FA.....4580 University Blvd
Benthien, Elsie Marie.....Tacoma UD, LA.....4711 6th Av NE—Ken 8148	Brockman, Mildred Florence.....Wells, Ida Grad.....2012 E 45th St
Berg, Ida Blanche.....Seattle Sp, LA.....4722 15th Av NE—Ken 2804	Brokaw, Bernice.....Stanwood UD, LA.....4714 University Blvd—Ken 2263
Bergman, Eugene Elroy.....Port Angeles LD, Sci.....4522 18th Av NE—Ken 2053	Brooks, LeRoy Wager.....Seattle UD, LA.....4222½ 12th Av NE—Ken 8169
Bergren, Evelyn.....Seattle LD, Sci.....4180 12th Av NE—N 1087	Brooks, Mildred.....Bremerton UD, Sci.....Bremerton
Bergtold, Cora L.....Seattle UD, Ed.....9611 Rainier Av—Ral 140M	Brown, Ella Burif.....Twisp Sp, Ed.....4722 14th Av NE
Bevis, Dorothy True.....Lewiston, Ida UD, LA.....2012 E 45th St—Ken 2496	Brown, Cora May.....Bickleton Grad.....4542 14th Av NE—Ken 1952
Bickel, Katharine.....Seattle LD, Bus.....611 80th Av N	Brown, Lois E.....Twisp Unc, LA.....
Billings, Charles N.....Portland, Or LD, CE.....4254 7th Av NE—N 3795	Brown, Margaret Esther.....Wenatchee UD, FA.....1420 N 45th St
Bingham, Elva M.....Seattle LD, Ed.....1814 8th Av—Ell 5466J	Brown, Sadie Reynolds.....Bianco, Col Grad.....4584 University Blvd—Ken 20
Bisazza, Charlotte M.....Seattle Unc, Ed.....2505 Westlake Av N—QA 1518	Browne, Josephine.....Seattle Sp, P H Nursing.....1808 9th Av
Bissett, Allen Jane.....Spokane UD, LA.....4722 47th Av NE	Brownell, Lena V.....Portland, Or Or Unc, LA.....4708 18th Av NE—Ken 2800
Bissett, Ernest Eugene.....Vancouver, B C UD, ME.....4522 18th Av NE—Ken 2053	Bruce, Helen E.....Seattle UD, LA.....1914 E Republican St—E 8121
Bissett, Rudolf Alfred.....Vancouver, B C UD, Sci.....4522 18th Av NE	Bryant, Lucile Swigart.....Yakima UD, LA.....4515 15th Av NE—Ken 2697
Bixby, Mrs Flora A.....Seattle Sp, LA.....2631 Harvard Av N—Cap 298	Buchanan, Fred Lee.....Outlook Unc, LA.....4522 18th Av NE
Black, Mary Adelaide.....Seattle Unc, LA.....4547 14th Av NE	Buckley, Mary.....Portland, Or Or Unc, LA.....4582 19th Av NE
Blair, Anna Cilo.....Seattle UD, LA.....1630 35th Av	Buor, Claire O.....Ketchikan, Alaska Unc, FA.....4524 19th Av NE—Ken 199
Blodgett, Kate.....Seattle Unc, LA.....7217 28th Av NW—Bal 2221	Burdick, Myldred Inger.....Seattle Unc, FA.....5251 19th Av NE—Ken 897
Blosser, Stella B.....Snahomish Unc, LA.....4706 University Blvd—Ken 702	Burn, Doris.....Tacoma Unc, Ed.....4532 19th Av NE—Ken 1092
Bogart, Adella M.....Coulee City Unc, FA.....4543 University Blvd—Ken 659	Burgess, Fidella.....Seattle LD, LA.....9208 California Av
Bolcom, Henry Marfield.....Seattle UD, CE.....The Highlands—Bal 3555	Burgess, Henrietta.....Seattle UD, Sci.....R D No 4
Bolster, Helen.....Seattle UD, LA.....Central Bldg—E 1768	Burgess Ruth.....Spokane Grad.....4708 18th Av NE
Bolton, Edwin.....Seattle LD, ME.....4514 16th Av NE—Ken 904	Burns, Angelina Brhdley.....Bolsé, Ida UD, LA.....4580 University Blvd
Bond, Clara Gertrude.....Spokane Unc, Sci.....5800 E Greenlake Way	Burns, Fern Elizabeth.....Thorp UD, LA.....1407 E 45th St
Bonell, Aura.....Fall City Grad.....Lewis Hall—N 162	Burr, Gold.....Adair, Iowa Grad.....1810 1st Av N—QA 518
Bonney, Caroline Emma.....Pendleton, Or Unc, LA.....4714 University Blvd	Burr, Margaret.....Seattle UD Ed.....4543 University Blvd
Borden, Fred Wallace.....Valley	Burt, Anna Howell.....Indianapolis, Ind Grad.....Portage

Busby, Lurena.....Friday Harbor UD, Ed.....4532 19th Av NE—Ken 1092	Churchill, Galle.....Alberton, Mont Grad.....4530 University Blvd—Ken 2496
Bush, Florence.....Burlington UD, Ed.....Clark Hall—N 262	Clark, Blanche Cecile.....Portland, Or LD, Ed.....
Buss, Bessie.....Spokane Grad.....4722 18th Av NE	Clark, Geraldine D.....Bremerton LD, Phar.....621 Veneta St, Bremerton
Butcher, Bessie E.....Seattle UD, Sci.....Lewis Hall—N 162	Clark Lois.....Minneapolis, Minn Grad.....Friday Harbor
Buttedal, Anton.....Portland Unc, Sci.....	Clark, Lotta Elizabeth.....Billings, Mont Grad.....4547 19th Av NE—Ken 23
Byham, Gladys Marian.....Seattle UD, LA.....R D No 2—Bal 864	Clark, Gwendolen D.....Bremerton LD, Phar.....621 Veneta St, Bremerton
Cade, Vera Josephine.....Seattle LD, LA.....1932 Queen Anne Av—QA 2211	Clausen, Ada.....Twin Falls Ida UD, Bus.....1416 E 45th St
Cady, Osman H.....Seattle Grad.....358 W 52nd St	Clausen, Laura.....Twins Falls, Ida LD, Bus.....1416 E 45th St
Caffrey, Genevieve.....Seattle Grad.....R D No 5—Sidney 1353	Claybaugh, Esther Elizabeth.....Castle Rock LD, Ed.....4342 Brooklyn Av
Calvill, Mona.....Seattle LD, LA.....1174 E Newton St—Cap 726	Clendenny, Percy.....Trout Lake LD, LA.....4542 Brooklyn Av
Caldwell, Elsie G.....Beaverton, Or UD, LA.....Clark Hall—N 262	Cline, Dorothy Dean.....Kahlotus UD, LA.....Clark Hall—N 262
Callaghan, Cassie.....Butte, Mont Sp, P H Nursing.....815 Pike St	Cline, Felix.....Seattle UD, ChE.....1222 Summit—E 6535
Calt, Helen Ruth.....Seattle LD, Ed.....6530 19th Av NE	Clippinger, Agnes B.....Dryad LD, Ed.....5518 16th Av NE
Campbell, Ernest William.....Seattle UD, LA.....4422 California Av—W 793W	Coates, Frank Care.....Coupeville UD, Ed.....4542 14th Av NE—Ken 1952
Campbell, Mary.....Seattle UD, LA.....Clark Hall—N 262	Coats, Zoe.....Seattle Grad.....4554 14th Ave NE—Ken 200
Campbell, M Veronica.....Seattle LD, Ed.....1523 Taylor Av—QA 773	Cochrane, Mavis Claire.....Seattle LD, LA.....2015 W 60th St—Bal 1291
Canfield, Clerice.....Seattle Grad.....1804 E 50th St—Ken 802	Coe, Curtis Pearce.....McMinnville, Or UD, LA.....4308 9th Av NE—N 2620
Carl, Emil.....Seattle LD, ChE.....1569 Alki Av	Coffee, John M.....Tacoma 1st, Law.....1906 E 45th St—Ken 983
Carlson, Hulda Margaret.....Gig Harbor UD, LA.....4388 11th Av NE	Coffinberry, Pearl Sibyl.....Iverness, Mont Grad.....4252 7th Av NE
Carlson, Minnie.....Grantsburg, Wis. Unc, LA.....4742 15th Av NE—Ken 2311	Cole, Alice Huldah.....Forest Grove, Or Grad.....Lewis Hall—N 162
Carney, William H.....Port Gamble UD, LA.....	Coffman, Mabel M.....Bellingham UD, LA.....4710 University Blvd
Carr Eva Sabine.....Selah LD, Phar.....4508 16th Av NE—Ken 2768	Cole, Gladys Genevieve.....Seattle LD, FA.....2671 39th Av SW
Carroll, Geneva.....Seattle UD, FA.....5614 11th Av NE	Cole, Nellie A.....Forest Grove, Or Unc, LA.....Lewis Hall—N 162
Carroll, Joseph D.....Seattle UD, LA.....4217 10th Av NE	Colegrove, Rosannah.....Great Bend, Kan Unc, Bus.....4746 15th Av NE
Case, arriet Lulu.....Juneau, Alaska Unc, LA.....4710 University Blvd—Ken 1857	Coleman, Clarence Joseph.....Everett UD, LA.....4520 21st Av NE—Ken 2600
Castator, Marie.....Winlock Unc, Ed.....4524 19th Av NE—Ken 199	Collins, Opal H.....Seattle Grad.....1246 E 69th St—Ken 1010
Cattlett, James T.....Seattle UD, EE.....4015 Meridian Av	Combo, Catherine.....Butte, Mont Sp, P H Nursing.....815 Pike St
Cave, Gordon Luther.....Seattle Grad.....4706 14th Av NE—Ken 1677	Compton, Susam Maria.....Seattle LD, FA.....3236 22nd Av W
Chalmers, Isabel.....Forest Grove, Or LD, Sci.....4706 University Blvd—Ken 702	Condon, Dorothy.....Seattle UD, Sci.....626 18th Av N
Chandler Gladys E.....Sheridan, Or LD, Ed.....4805 15th Av NE	Conlee, Caroline Jeanette.....Bellingham Grad.....5220 20th Av NE
Chang, Clifton T.....China Grad.....	Connell, Helen Loretta.....Seattle Grad.....1010 Union St—M 2672
Chapman, Florence.....Plummer, Ida LD, LA.....4732 21st Av NE—Ken 26	Conway, Rosemary.....Redlands, Cal Unc, FA.....Terry and Marlon St—E11 1030
Chapman, Grace.....Spokane Sp, Ed.....317 Harvard Av N	Cook, Julia Geraldine.....Seattle UD, LA.....7022 17th Av NE—Ken 1141
Chappelle, Gladys Juanita.....Seattle Grad.....1711 Bellevue Av—E 1316	Cook, Lois.....Snohomish UD, Ed.....4714 University Blvd—Ken 2253
Charlton, Harriet Jane.....Chehalis UD, FA.....	Cooper, Mrs. Elizabeth A.....Seattle Sp, FA.....714 W Galer St—QA 3171
Chesley, Dorothy Helen.....Seattle LD, LA.....1416 E 41st St—N 5	Cooper, Lenna.....Charlevoix, Mich Unc, LA.....1408 E 42d St—N 48
Chin, June Kee.....Seattle UD, EE.....508 7th Av S	Copeland, Eunice D.....Seattle LD, Ed.....1107 E Denny Way—E 5691
Churches, Ada Evelyn.....Everett Sp, Sci.....4142 12th Av NE	Corey Esther M.....Tacoma UD, Sci.....Clark Hall—N 262
	Corner, Martha.....Spokane Sp, Ed.....4548 University Blvd

- Coughlin, EvelynHelmville, Mont
 Unc, La.4722 15th Av NE—Ken 2804
 Council, ElizabethSeattle
 LD, LA5025 15th Av NE—Ken 270
 Countryman, Eva AMethow
 LD, Sci4838 11th Av NE—Ken 2501
 Countryman, LindaBellingham
 Grad5220 20th Av NE
 Cox, Lolo LydaZillah
 Grad4685 18th Av NE—Ken 1429
 Craib, Margaret CummingSeattle
 UD, LA2146 N 64th St—Ken 1398
 Craigen, Ethel FKennydale
 LD, EdKennydale
 Cramlet, Clyde MyronSeattle
 Grad4709 9th Av NE
 Crangle, EdnaGilman, Ill
 LD, SciJames and Second—M 7038
 Cremans, Christie Catherine, Whitefish, Mont
 Unc, LA4524 19th Av NE
 Crum, Earl ZJulietta, Ida
 UD, Ed4714 19th Av NE—Ken 2761
 Crum, Mrs Earl ZJulietta, Ida
 Unc, Sci4714 19th Av NE—Ken 2761
 Crump, James I.Centralia
 GradSeattle
 Crump, John KennanSeattle
 LD, LA4126 Brooklyn Av—N 2295
 Culver, Evelyn LouiseFriday Harbor
 UD, LAClark Hall—N 262
 Cunningham, Grace Katherine Post Falls, Ida
 Unc, LA.5030 University Blvd—Ken 1667
 Currie, Niel AnnaOpportunity
 Sp, SciClark all—N 262
 Cutting, Forrest BSeattle
 Grad4747 46th Av SW—W 797 J
 Cutts, Beatrice TylerSeattle
 LD, LA3700 E 44th St
- Dalgity, Jean VSeattle
 LD, LA589 25th Av S—Bea 1663
 Dalquest, Lena JEverett
 GradSeattle
 Damon, Verne La DueSeattle
 Grad315 W Nickerson St
 Danielson, LillianTacoma
 Sp, LASeattle
 Dashley, Hazel MarieSeattle
 UD, EdE D No 7—Sidney 1788
 Dautoff, VictorPortland, Or
 UD, CE4714 Brooklyn Av
 David, PearlSeattle
 Grad2429 3d Av W—QA 4058
 Davies, IvyBlack Diamond
 Unc, Ed4608 Eastern Av—N 1096
 Davis, Frances SalomeSnohomish
 Sp, EdSeattle
 Davis, MarthaGoldendale
 Grad4710 University Blvd—Ken 1857
 Davis, Mrs. Tomine OProsser
 LD, EdClark Hall—N 262
 Day, Chester GTouchet
 Unc, Ed3804 10th Av NE
 Deach, Burdella DeEtteSeattle
 Unc, Sci1605 28th Av—E 4558
 Dearborn, ElizabethSeattle
 Grad4535 18th Av NE—Ken 1429
 Deets, WalterOdessa
 LD, Sci5038 18th Av NE
 Delano, Lila MarieSeattle
 UD, Ed1431 Minor Av—M 6640
 De Leo, Bessie NinetteHarrison, Ida
 Grad4746 18th Av NE
 DeLong, Abe JSeattle
 LD, EE4080 Brooklyn Av—N 3479
 DePann, Mrs. BerniceHelena, Mont
 LD, EdLewis Hall—N 162
- DeShon, MargueriteSeattle
 UD, Ed4828 2nd Av NE—N 2873
 de Tourville, Audrey JSeattle
 Grad221 28d Av N—E 5027
 Dibble, Alice RBerkeley, Cal.
 UD, Ed1605 E 47th St—Ken 2431
 Dibble, FrancesBerkeley, Cal
 UD, Ed1605 E 47th St—Ken 2431
 Dickson, LauraTacoma
 UD, LA.4710 University Blvd—Ken 2857
 Dimock, DorothySeattle
 UD, LA424 85th Av—E 1670
 Doble, Jeannette EskdalePortland, Or
 Sp, Ed4706 University Blvd—Ken 702
 Dodge, AliceSeattle
 UD, Sci.4751 University Blvd—Ken 2713
 Dodge, Florence FrancesTacoma
 UD, Ed.4551 University Blvd—Ken 501
 Doerrer, LauraSeattle
 Unc, CE123 1st Av N—QA 8023
 Donoghue, Lucy C.Seattle
 LD, LA1122 18th Av
 Donovan, NellieSpokane
 Unc, LA4708 18th Av NE—Ken 2828
 Doolittle, Henry BurtonSedro-Woolley
 UD, Ed1908 E 45th St
 Douglas, Martha BickfordYakima
 UD, LA4782 21st Av NE—Ken 26
 Douglas, MurielSeattle
 Grad388 18th Av N—E 6794
 Driscoll, Anna MarieKallispell, Mont
 UD, Sci4524 19th Av NE
 Driscoll, Marie ESeattle
 UD, LA4340 11th Av NE
 DuBoise, Ella LSeattle
 Unc, Sci4722 15th Av NE—Ken 2804
 Duff, S ETekoa
 Unc, Ed4022 Brooklyn Av
 Dunagan, Dessie MayFerdale
 UD, LALewis Hall—N 162
 Dunlap, Theodore EdwardTacoma
 Grad4134 Brooklyn Av
 Dunn, Mary TeresaButte, Mont
 Sp, LASeattle
 Duns, HelenSeattle
 Grad4546 15th Av NE—Ken 3566
 Dusenberry, MargaretProvo, Utah
 LD, Ed6th Av and Union St—M 6630
 Duskin, Bernard S.Bothel
 Sp, LABother
 Duthie, M EvaTroy, Ida
 LD, Ed4714 19th Av NE—Ken 2761
 Dyer, MildredDes Moines, Ia
 Grad4530 University Blvd—Ken 2496
- Earll, DorothyBoulder, Mont
 Sp, LA4515 University Blvd
 Eckhart, Ribert BEnumclaw
 LD, Sci4504 16th Av NE—Ken 647
 Eckles, Beulah ACambridge, Ida
 LD, Ed4755 Brooklyn Av—Ken 2843
 Eddy, Mrs. Addie CornwallSeattle
 Grad1106 E Howell St
 Edquist, Paul EnglebrechtSeattle
 UD, EE3912 7th Av S
 Edwards, EstherSeattle
 LD, FA5026 20th Av NE
 Edwards, Schuyler BPort Townsend
 UD, CE4238 Thackeray Pl—N 8180
 Edwards, ThelmaSeattle
 LD, CE5026 20th Av NE—Ken 1719
 Einarson, NannaDuluth, Minn
 Unc, Sci4102 Brooklyn Av
 Elford, FlorenceSeattle
 UD, LA.1057 Summit Av N—Cap 2400
 Ellis, Will BryanBurlington
 LD, Sci3625 Phinney Av

- Ellsworth, Paul TheodoreSeattle
 UD, Sci4740 21st Av NE—Ken 519
- Elmore, Roma SartorisYakima
 Grad5030 University Blvd—Ken 1667
- Ely, BerniceKelso
 LD, LA5008 16th Av NE
- Emard, Georgina LenaEureka, Mont
 LD, Sci4506 Brooklyn Av
- Emerson, Frances BargionButte, Mont
 UD, LA4510 22nd Av NE—Ken 1037
- Endres, TeresaSpokane
 Unc, EdClark Hall—N 262
- Erdevig, Olgo JosineEdmonds
 LD, LAEdmonds
- Eustis, Stella AnnetteSeattle
 Grad4547 16th Av NE—Ken 1004
- Evans, Mrs. Florence BaptioSeattle
 Grad1921 3rd Av W—QA 2656
- Evans, Lecll LacySeattle
 UD, LAR D 7
- Evans, Mary EdithOak Hill, Ohio
 Unc, Sci4238 12th Av NW—N 429
- Ewing, Richard HBellingham
 UD, LA4542 14th Av NE
- Fairhurst, Alfred WilliamsTacoma
 LD, For.4526 University Blvd—Ken 721
- Fallis, Annie LouisaSeattle
 Grad5638 Brooklyn Av—Ken 1887
- Farley, Guy FSeattle
 UD, Ed5104 46th Av S—Rai 736
- Farrell, Joanne ElizabethButte, Mont
 Sp, LA5800 15th Av NE
- Farrer, Edith ESeattle
 Sp, P H NursingClark Hall—N 262
- Felitz, Vernita CarolineSeattle
 Unc, Ed617 Mercer St—QA 832
- Fell, HelenParrdale
 UD, Sci4110 10th Av NE—N 8005
- Fenton, Enid ElizabethSeattle
 GradColman Bldg
- Fenwick, FrancesEverett
 LD, LA4504 18th Av NE—Ken 146
- Fertig, N EllisGranger
 Sp, Ed4705 16th Av NE
- File, Viola LouiseIrving, Ill
 Grad4526 University Blvd
- Finch, Mary LouiseHelena, Mont
 LD, Ed1817 8d Av—E 7410
- Fischer, AdelaideSeattle
 Grad502 21st Av—E 7418
- Fisher, Roberta ClaireSeattle
 UD, Ed4529 11th Av NE—Ken 309
- Fisher, Walter CliffordSpokane
 Unc, LA4532 18th Av NE—Ken 2827
- Flowers, Ruby JaneChehalis
 UD, LA4524 10th Av NE—Ken 199
- Floyd, Ruth MarionSeattle
 Grad5518 Holly St—Rai 552 J
- Forbes, EdithPortland, Or
 Unc, LA4708 18th Av NE—Ken 2800
- Ford, Clara LouisaBrooklyn, Mich
 UD, LA4548 University Blvd—Ken 2934
- Ford, PaulineMoscow, Ida
 Unc, LA2616 3rd Av
- Forrest, J. T.Bellingham
 Grad4714 19th Av NE—Ken 2761
- Forrest, VedaBellingham
 Unc, Ed4714 19th Av NE—Ken 2761
- Foss, Mary LorettaWalla Walla
 Unc, FA4508 16th Av NE
- Foster, RuthSeattle
 LD, Sci4738 5th Av NE—Ken 860
- Fox, VergiaSeattle
 Unc, Sci2110 3rd Av W—QA 2484
- Fralick, May ElizabethPortland, Or
 GradLewis Hall—N 162
- Franck, Thomas GeorgeSpokane
 LD, Bus4503 University Blvd—Ken 236
- Frandsen, Mabelle StevensSeattle
 Grad7417 48th Av S
- Frazier, RaymondSeattle
 LD, ME1424 7th Av W—QA 2711
- Frazier, Sebena SOskaloosa, Ia
 Grad4534 University Blvd—Ken 20
- Frazier, Zoe ROskaloosa, Ia
 Grad4534 University Blvd—Ken 20
- Frederick, Clara JuliaSpokane
 UD, LA4703 18th Av NE
- Fredlund, ReynoldSeattle
 LD, EE1622 Summit Av—E 9245
- Freeman, AlvinaWinlock
 Unc, Ed4524 19th Av NE—Ken 199
- Freeman, David WellingtonSpokane
 Grad4626 21st Av NE—Ken 1311
- French, Merle CarolynVancouver
 LD, LAClark Hall—N 262
- French, Mildred PSeattle
 Unc, Sci4703 18th Av NE—Ken 2628
- Freyd, MaxSeattle
 UD, LA3208 35th Av S
- Frick, George WLynden
 Unc, LA5026 12th Av NE—Ken 1257
- Fryer, Beatrice ElizabethSeattle
 UD, LA4748 18th Av NE—Ken 2826
- Fukuzawa, TanizoJapan
 UD, ChE4110 12th Av NE—N 3797
- Fullerton, Serena Berg. Minneapolis, Minn.
 Sp, P H Nursing 3206 Walnut St—M817M
- Fulton, Mrs A LAstoria, Or
 Sp, Ed5023 16th Av NE—Ken 482
- Gaarden, Mary KBear, Ida
 Unc, LA4751 Univ. Blvd—Ken 2713
- Gahogan, Lillian MTacoma
 Unc, Ed4551 University Blvd—Ken 501
- Gannon, William JSpokane
 Grad924 17th Av—E 2839
- Gartrell, Laura MargaretTacoma
 LD, LA4131 14th Av NE
- Gaylord, Louise BelleRosedale
 LD, Ed4508 16th Av NE—Ken 2768
- Gerriets, AnnaMt. Vernon
 GradLewis Hall—N 162
- Gerriets, MinnieMt. Vernon
 GradLewis Hall—N 162
- Getchell, Minnie WSpokane
 Sp, P H Nursing
- Gibson, Clayton ESeattle
 UD, LA1208 E 67th St—Ken 1299
- Gibson, Jessie EdithSpokane
 Grad4705 16th Av NE
- Gift, AdaOmak
 LD, FA
- Gille, MadellSeattle
 GradFriday Harbor
- Gillette, Cora MSeattle
 Sp, Sci4751 Univ. Blvd—Ken 2713
- Gilliland, Gussie DellButte, Mont
 Grad4142 12th Av NE
- Gilliland, William LesterHarrington
 LD, Sci4746 15th Av NE
- Gilluly, CoraSeattle
 UD, Ed4545 12th Av NE
- Gilman, Bonnie RuthSeattle
 UD, Sci4736 16th Av NE—Ken 3328
- Gilman, Isabel AmblerJuneau, Alaska
 Grad1407 E 45th St—Ken 1597
- Gist, Arthur SSeattle
 Grad1817 N 41st St—N 2196
- Gleason, DorothySeattle
 UD, LA1627 6th Av W—QA 277
- Gleason, RuthSeattle
 Grad1627 6th Av W—QA 277

Gleed, Laurel Elida ....Bonners Ferry, Ida LD, FA. 4547 University Blvd—Ken 1004	Hargreaves, Frank K.....Seattle LD, CE .....4045 Brooklyn Av—N 2416
Glidden, Joseph Henry .....Ellensburg UD, CE .....4121 14th Av NE—N 745	Harrington, Anne .....Butte, Mont Sp, Ed .....4548 University Blvd
Gloman, Mrs Dixon Wood .....Portland, Or UD, Sci .....4314 10th Av NE	Harrington, Margaret .....Butte, Mont Unc, Ed .....4548 University Blvd
Glover, Allen Ross .....Mineral Grad .....217 Eastlake Av	Harris, Olive .....Seattle UD, LA .....2012 E 45th St—Ken 2645
Good, Mary Elizabeth .....Gresham, Or Grad .....Lewis Hall—N 162	Harrison, Mary .....Madras, Or Unc, Ed .....4142 12th Av NE—N 560
Goode, Helen .....Hillyard UD, Sci. 4710 University Blvd—Ken 1857	Harshman, Gertrude .....Fall City UD, Sci .....Clark Hall—N 262
Gorham, Edward A .....Butte, Mont Sp Law .....4305 15th Av NE—Ken 720	Hartge, Lena A .....Seattle Grad .....5241 14th Av NE—Ken 3018
Gorman, Vinsen Ellen .....Portland, Or UD, LA.....5008 16th Av NE—Ken 2068	Hartman, Albert Gus .....Victoria, B C Unc Law ..Terry and Madison St—M 2761
Gorrie, Eda C .....Payette, Ida LD, Sci .....4540 University Blvd	Hartman, Lois K .....Tacoma Grad .....1206 E 45th St
Grady, Margaret .....Everett Unc, Sci .....4710 19th Av NE—Ken 1085	Harvey, Edwin .....Sedro-Woolley LD, ME .....3625 Phinney Av
Graham, Albert E .....Tacoma LD LA .....Gravelly, Martha Jane .....Boise, Ida UD, LA. 4714 University Blvd—Ken 2253	Hawkins, Ellen .....Bonners Ferry, Ida Unc, LA .....4723 18th Av NE—Ken 2766
Graveley, Martha Jane .....Boise, Ida UD, LA. 4714 University Blvd—Ken 2253	Hawkins, Mary Viley ..Bonners Ferry, Ida UD, LA .....Hawley, Sydney James .....Seattle UD, ChE .....1200 Harvard Av—E 3943
Graves, Mona Marguerette .....Seattle LD, LA .....4746 20th Av NE—Ell 2758	Hayden, May T .....Lewiston, Ida Sp, Ed .....2012 E 45th St
Gray, Margaret .....Bellingham UD, LA .....4535 18th Av NE	Healy, Timothy .....Bellingham Unc, Law .....4504 16th Avs NE—Ken 647
Greathouse, Nina L .....Portland, Or Unc, Ed .....4706 University Blvd	Heffron, Edna Helen .....Taylor Unc, FA .....Hefty, Katherine Elizabeth .....Bellingham UD, LA .....Clark Hall—N 262
Green, Alice Evangeline .....Seattle Grad .....133 18th Av N	Hegman, Bertha .....Seattle Grad .....4514 16th Av NE—Ken 904
Greene, Letitia A, .....Spokane Sp, P H Nursing .....Lewis Hall—N 162	Henderson, Jean G. ....Dasey, N D Unc, LA .....4256 12th Av NE—Ken 1462
Greguson, Judith .....Seattle UD, LA .....4506 Brooklyn Av—Ken 2725	Henneck, Orpha .....Spokane Grad .....4742 15th Av NE—Ken 2311
Greiner, Ruth .....Seattle LD, LA .....2242 W 57th St—Bal 94	Hendricksen, Agnes .....Tacoma Sp, P H Nursing .....Heny, Clarice Burdelle .....Seattle Unc, LA .....1804 E 50th—Ken 802
Griffin, Mrs. Edna .....Ontario, Or Sp, Sci .....4115 15th Av NE—Ken 2377	Heny, Lillian V .....Wonowoc, Wis UD, Ed .....4547 University Blvd
Griffith, Phyllis .....Seattle LD, CE .....6517 Wilson Av—Ral 1185	Herbert, Margaretta .....Ukiah, Or Grad .....2021 E 45th St
Grime, Florence Lavina .....Seattle Grad .....4338 11th Av NE—Ken 2501	Herman, Mamie O .....Seattle Unc, LA .....Ravenna Av and E 77th St
Grove, Maude Tarleton ..Red Lodge, Mont Grad .....4710 University Blvd—Ken 1857	Hess, Dorothy Ann .....Seattle Grad .....5805 University Blvd—Ken 958
Gruger, William S .....Seattle LD, ChE .....6517 Wilson Av—Ral 1185	Hess, Ella E .....Warland, Mont Sp, Ed .....Hevly, Martin Bernhard .....Silvana UD, LA .....4522 18th Av NE
Guden, Theodora George .....Walla Walla Unc, ME .....Guenther, Chrystal .....Astoria, Or LD, LA .....1305 E 41st St—N 3492	Hickey, Margaret .....Portland, Or Sp, Sci .....Higgs, Paul McClellan .....Pine City UD, Sci .....4735 21st Av NE—Ken 3169
Gunn, Marjorie .....Seattle UD, Sci .....3826 Corlias Av—N 3068	Hill, Grace Alma .....Seattle Grad .....4747 18th Av NE—Ken 2489
Hall, Lucia E .....Underwood Grad .....Lewis Hall—N 162	Hill, Maude Katharine .....St John Unc, LA .....Lewis Hall—N 162
Hall, Mary Lee .....Seattle UD, LA .....1933 Harvard N—Cap 8676	Hill, Nita .....Seattle Unc, LA .....1618 10th Av W—QA 3401
Hall, Ruth N .....Ripon, Wis Unc, LA .....4547 19th Av NE—Ken 23	Hills, Herbert V .....Seattle Unc, Ed .....5023 15th Av NE
Haller, Bernadine .....Seattle UD, Sci .....1857 38rd Av S—Bea 3265	Hitchings, Eben G .....Seattle Sp, CE .....1720 39th Av—E 2315
Halsey, Caroline B .....Burlington Unc, Sci .....5241 11th Av NE	Hitz, Kate .....Yakima Sp, Ed .....1407 E 45th St
Hammarberg, Agnes E .....Sweden LD, LA .....Adelphia College—Cap 705	Hoag, Katharin Vera .....Spokane UD, Sci .....4547 19th Av NE
Hanks, Gertrude M .....Lincoln, Nebr Unc, FA .....4340 11th Av NE	
Hanscom, Howard Henry ..McMinnville, Or Grad .....5046 11th Av NE	
Hardy, William A .....Seattle UD, ChE .....3915 W Lander St—W 1199W	
Hansen, Viola .....Seattle LD, LA .....107 W Leary Av—N 3885	
Hare, Irene Inez .....Quanah, Tex Unc, LA .....4735 11th Av NE—Ken 1210	

Hockett, Edna L	Wabash, Ind	Ishii, Mamie	Seattle
Grad	4722 15th Av NE—Ken 2804	Grad	1229 E Spruce St—E 1057
Hoelsky, Emma Barbara	Woodbury, Ia	Ishiyama, Elitsu	Japan
LD, Ed	4535 18th Av NE	LD, EE	4110 12th Av NE—N 3797
Hoffman, Mrs. Laura M	Kent	Iyesaka, Shohei	Japan
Sp, P H Nursing	Kent	UD, EE	315 Maynard Av—M 5327
Hofmeister, Lillie	Seattle		
Grad	1502 40th Av N—E 6194	Jackson, Anna B	Butte, Mont
Hogan, Phillip	Arlington	Unc, LA	4547 19th Av NE—Ken 23
Unc, Ed	4045 Brooklyn Av—N 2416	Jackson, Geraldine	Seattle
Hohberger, William	Spokane	UD, LA	2012 E 45th St—E 1141
UD, LA	4542 14th Av NE	Jackson, Mabel A	Seattle
Holbrook, C Ray	Vancouver	UD, LA	2106 Jackson St—Bea 2147
UD, Ed	5336 8th Av NE—Ken 3286	Jackson, Marian Louise	Seattle
Holmann, Susan Cecelia	St Paul, Minn	LD, Bus	1416 E 41st St—N 184
2nd Law, 4547 University Blvd—Ken 1004		Jackson, Mildred Helen	Seattle
Holland, Kathleen	Davenport	LD, LA	4504 18th Av NE—Ken 148
Grad	5034 12th Av NE—Ken 385	Jacobs, Isabel	Seattle
Holland, Selma	Roslyn	UD, LA	4539 5th Av NE—N 2023
Unc, FA	Lewis Hall—N 162	Jaeger, Julius P	Spokane
Hollingshead, Laura	Oxford, Mich	Grad	4522 18th Av NE—Ken 2053
Grad	4502 20th Av NE—Ken 685	Jasperson, Agnes	Seattle
Holm, Ellen Marie	Campbell River, B C	LD, Ed	6713 26th Av NW—Bal 927
LD, Sci	4238 12th Av NE	Jenne, Grace Manetta	Coupeville
Hood, Ella	Prosser	UD, LA	4534 University Blvd—Ken 20
Unc, LA	502 Minor Av N—Cap 219	Jenner, Cornelia	Seattle
Hong, Nils Joseph	Parkland	LD, LA	4515 18th Av NE—Ken 2644
Grad	4254 7th Av NE	Jensen, Arne Sigurd	Leavenworth
Hooper, Cornelia Tyner	Winslow	UD, LA	2420 N Broadway—Cap 1071
LD, LA	4504 18th Av NE—Ken 146	Jerome, Vincent Barnes	Asotin
Hoover, Ralph	Montesano	LD, Ed	4746 15th Av NE—Ken 2311
UD, LA	4505 18th Av NE—Ken 333	Jerome, William Jabez	Asotin
Horiuch, George S	Japan	Sp, Ed	
2nd Law	211 5th Av S—M 3750	Jewett, Juliet Louise	Seattle
Houlahan, Annie Eileen	Seattle	Unc, Sci	935 17th Av—E 6898
Grad	2159 Shelby St.—E 3436	Johnson, Alice M	Portland, Or
Howard, Ida E	Kansas City, Mo	Grad	4535 Thackeray Pl—N 774
Grad	4751 University Blvd—Ken 2713	Johnson, Anne Helen	Seattle
Howell, Alma W	Decatur	Grad	2317 N 45th St
Unc, Ed	121 E 53th St—Ken 117	Johnson, Esther Victoria	St Paul, Minn
Howie, Myra Marie	Fort Dodge, Ia	2nd Law	Clark Hall—N 262
Grad	5246 12th Av NE	Johnson, Mrs. Ethel Chambers	Monroe
Huddleston, Agnes	Butte, Mont	LD, FA	4213 14th Av NE
Sp, FA	4524 University Blvd	Johnson, Ettabel Mable	Seattle
Huddleston, Cella	Butte, Mont	Sp, P H Nursing	2415 N 75th St—Ken 337
Sp, FA	4524 University Blvd	Johnson, Fannie	Great Falls, Mont
Hufford, Luzerne Edson	Seattle	Grad	2030 Fuhrman Av N—Cap 1630
LD, Sci	5545 Woodlawn Av—N 3664	Johnson, Harold I	Spokane
Hughes, Anne	Seattle	LD, Sci	4115 14th Av NE
UD, Sci	1408 E 42nd St—N 48	Johnson, Hilda	Cordova, Alaska
Hughes, Mae Ellen	Portland, Or	Grad	Lewis Hall—N 162
Sp, LA	5217 16th Av NE—Ken 2024	Johnson, Jane Gregg	Seattle
Hunkins, Harriett Celia	Portland, Or	LD, LA	Fort Ward
Grad		Johnson, John Earl	Kalama
Hunt, Faith	Kennydale	Grad	4532 18th Av NE
Grad	Kennydale	Johnson, Lillian Valora	Seattle
Hunt, Mrs. Mary H	Seattle	Grad	2008 32nd Av S—Bea 3277
Sp, P H Nursing	1411 25th Av	Johnson, Mrs. Mollie	Walla Walla
Hunt, Ruth A	Walla Walla	Sp, Ed	Clark Hall—N 262
Unc, LA	2012 E 45th St—Ken 2645	Johnson, Manly M	Naches
Hurd, Anna May	Medford, Or	UD, LA	4524 University Blvd—Ken 721
Grad	2012 E 45th St—Ken 2645	Johnson, Ofell H	Seattle
Hurd, Sylvia Belle	Medford, Or	3rd Law	904 N 48th St—N 1471
Grad	2012 E 45th St—Ken 2645	Johnson, Ralph C	Monroe
Hurwich, David	Russin	Grad	4213 1/2 14th Av NE
Grad	3731 14th Av NE—N 3704	Johnson, Vernon B	Everett
Hutchinson, Orral Eldora	Seattle	UD, Sci	Adelphia College—Cap 705
Grad	6027 4th Av NE—Ken 3096	Johnston, William John	Seattle
Hutchinson, Pearl Irene	Seattle	Unc, MB	4714 Brooklyn Av—Ken 1170
Grad	6027 4th Av NE—Ken 3096	Johnston, Madeline	Tacoma
Hyland, Nellie	Butte, Mont	UD, LA	4548 University Blvd
Sp, LA	5800 15th Av NE	Joiner, Winifred	Seattle
		Grad	7743 18th Av NW
Imes, Henry T	Tacoma	Jolliff, William M	Post Falls, Ida
UD, Ed	Gen Del	Grad	4724 9th Av NE
Ingaels, Estelle Margaret	Estacado, Or	Jones, Mrs. Alice M	Seattle
UD, Ed		UD, Ed	4534 University Blvd—Ken 20

- Jones, Annie LauraCle Elum
LD, Ed .4343 University Blvd—Ken 659
- Jones, Effie DoraYakima
UD, Sci4685 18th Av NE
- Jones, Jane OliveSpokane
Grad4524 19th Av NE
- Jones, Lydia ManchesterRoy
LD, Ed6542 Woodlawn Av
- Jones, Nancy EmersonSeattle
Grad4706 University Blvd—Ken 702
- Jones, Mrs ZSeattle
Grad502 Minor Av N—Cap 2231
- Jorgensen, MargueriteSeattle
UD, Ed .327 Belmont Av N—Cap 2231
- Jorgensen, RuthSeattle
LD, LA327 Belmont Av—Cap 2231
- Judd, Elsie GSeattle
UD, Sci1628 Bellevue Av—E 4750
- Judges, BerthaSeattle
UD, LA3 Crockett St—QA 2211
- Jurgensohn, Eva ESeattle
UD, Sci1405 E 56th St—Ken 2476
- Kane, Susan MSeattle
Sp, SciCampus—N 2950
- Kapp, WennieSeattle
Sp, P H Nursing .1614 36th Av—E 2939
- Karrer, JoanneSeattle
GradFriday Harbor
- Kauffman, Harriet RGreely, Colo
Sp, LA4515 15th Av NE
- Kaufman, Edith RBellingham
UD, LA4705 16th Av NE—Ken 98
- Kaull, Mrs. Vera FBoise, Ida
Unc, Ed4710 15th Av NE
- Kaynor, Ella BRoslyn
UD, FA2024 Boylston Av N
- Keeler, JosephineMarysville, Mo
Unc, Sci4045 University Blvd
- Keene, Mrs. MildredSeattle
Sp, Ed1408 E 65th St—Ken 1090
- Kellcher, John EmmettSeattle
LD, LA527 11th Av N—Cap 1903
- Kelley, Jane IWalla Walla
UD, LAClark Hall—N 262
- Kellogg, Ina JohnstonGifford, Ida
UD, Sci4564 16th Av NE
- Kelly, Mary LucyAnaconda, Mont
Unc, Ed .4547 University Blvd—Ken 1004
- Kelly, Samuel PatrickBellingham
Grad4520 21st Av NE—Ken 2600
- Kelsey, LouiseSeattle
Grad4712 5th Av NE
- Kelso, Mary PearlPullman
Grad715 Eastlake Av—Cap 239
- Kendrick, Gladys LeslySeattle
Grad4018 12th Av NE—N 2177
- Kennedy, Mary HKirkland
Sp, EdKirkland
- Kennedy, Stella MargueriteTacoma
Unc, Ed4515 15th Av NE—Ken 2697
- Kennedy, RuthButte, Mont
UD, LA4543 University Blvd—Ken 659
- Kentner, Bess DMedford, Or
Unc, LA5019 21st Av NE—Ken 1
- Kerr, James CharlesSeattle
1st Law1105 Boylston Av N—Cap 3664
- Ketridge, Anna MEvanston, Ill
UD, SciClark Hall—N 262
- Kief, Estella AmandaMontevideo, Minn
Unc, LA5251 19th Av NE—Ken 897
- Kiemle, KatherinePortland, Or
UD, LAClark Hall—N 262
- Kilgore, OwenSpokane
UD, LA4518 University Blvd—Ken 96
- Kincaid, Mrs. LouiseSeattle
Grad4526 Brooklyn Av
- King, Arthur JosephVashon
UD, Sci4229 Brooklyn Av—N 3717
- King, DorothyPuyallup
LD, Sci4354 8th Av NE—N 4075
- King, Walter HSandpoint, Ida
Unc, Bus4207 Brooklyn Av
- Kingsbury, FanniePortage
Unc, Ed5522 27th Av NE—Ken 1200
- Kizer, DorothySeattle
UD, Ed4535 18th Av NE—Ken 1429
- Klein, RoseLewiston, Ida
Grad4530 University Blvd—Ken 2496
- Kleist, Walter ASeattle
UD, EE4522 18th Av NE—Ken 2038
- Knack, ClaraHoquiam
Grad3202 Irving St
- Knapp, MarthaSeattle
UD, LA .4710 University Blvd—Ken 1857
- Knowles, GoldaKent
Sp, EdKent
- Kobayashi, HidekichiSeattle
LD, LA214 8th Av S—Ell 4979
- Koch, SamuelSeattle
Grad916 20th Av N—E 8767
- Koontz, Anna CatherineChehalis
Unc, LAVashon
- Kraft, E. T. GertrudeSpokane
Grad4547 University Blvd—Ken 1004
- Kreamer, LenaSeattle
Unc, Sci4543 University Blvd—Ken 659
- Krogstad, ElvaSeattle
UD, Ed6548 21st Av NW
- Krohn, Anna CQuesta N M
Unc, LAElgin, Ill
- Krueger, Edith LydiaElgin, Ill
Unc, Ed1107 E Denny Way—E 4740
- Kyd, Margaret StewartSeattle
UD, LA3287 35th Av W—Rai 339 J
- LaBossier, Inez JulienneKent
UD, Sci4732 21st Av NE—Ken 26
- Lachman, DorothySeattle
UD, LA2242 Alki Av—W 487 J
- Lakenan, Malinda Caroline .McKelsop Pa
Unc, Ed1108 5th Av—N 744
- Lamb, IrmaSeattle
Unc, Ed382 10th Av
- Lamberty, Anna Margaret .Glendale, Cal
Grad4547 19th Av NE
- Landers, HarrietBlue Rapids, Kan
UD, Ed5256 16th Av NE
- Lareen, Axel MartinSeattle
UD, EE4121 19th Av NE—N 745
- Larson, Edwin EdwardSouth Prairie
LD, ChE .4518 University Blvd—Ken 96
- Larsen, KirstenSeattle
UD, Sci5228 20th Av NE—Ken 2831
- Laubach, Leone MSeattle
LD, FAClark Hall—N 262
- Laughlin, Lester MBellingham
GradSeattle
- Leavitt, Marion ClareSeattle
LD, LA5043 18th Av NE—Ken 2391
- Lechner, Leslie AmbroseSeattle
3rd Law6744 25th Av NW—Bal 1830
- Leechman, John DouglasEngland
LD, Sci907 Boren Av—M 1272
- Lefebvre, AdelineSeattle
Unc, Sci1501 17th Av N—E 2707
- Legg, Lols CorneliaSeattle
UD, Sci4118 Aurora Av—N 70
- Legget, Henry JosephBurton
Unc, Ed4218 10th Av NE—Ken 177
- Lemon, John FrancisMeridian
UD, Ed3731 14th Av NE
- Lennox, Edw HTacoma
Unc, LA4532 18th Av NE—Ken 2827

Lichtenberger, Jessie	Auburn	McGrady, Anna L	Deer Lodge, Mont
Grad	1407 E 45th St—Ken 1597	UD, LA	606½ Pike St—N 3263
Lie, Borghild O	Seattle	McGrady, Lucy L	Deer Lodge, Mont
UD, Ed	4328 Phinney Av—N 1212	Unc, Sci	606½ Pike St—N 3263
Lindblom, Augusta	Turlock, Cal	McGriff, Mary B	Deming, N M
UD, Sci	Clark all—N 262	Unc, Ed	4551 University Blvd
Lindblom, Florence	Turlock, Cal	McInnes, Laura	Wallace, Ida
UD, Sci	Clark Hall—N 262	Unc, LA	4535 18th Av NE
Lindblom, Roy E	Seattle	McIntosh, Belle	Seattle
LD, CE	323 3rd Av W—QA 3118	Unc, Ed	4713 14th Av NE—Ken 2168
Linder, Muriel	Seattle	McKee, Mary E	Everett
UD, LA	1702 Warren Av—QA 1768	Grad	4554 16th Av NE—Ken 3212
Linn, Versa	Seattle	McKinney, Eva	Naches
Unc, Ed	107 1st Av N—QA 192	Grad	Lewis Hall—N 162
Little, Edward Milton	Seattle	MacKinnon, Edna	Lynden
UD, Sci	210 Crockett St—QA 2347	UD, Ed	Clark Hall—N 262
Littoo, Norma	Tacoma	MacKinnon, George Watson	Seattle
Unc, Ed	316 N 46th St	Grad	1172 Howe St
Long, Agnes	Seattle	McLain, Ada Esco	Seattle
UD, LA	3912 Lucile St—Ral 988 J	UD, Ed	5643 20th Av NE
Lonke, Lillian Jensine	Seattle	McLaren, Gay Elizabeth	Seattle
UD, Sci	1914 Canoe Pl—Bal 1376	Grad	1107 N 47th St
Loomis, Alvin J	Seattle	McLean, Victoria	Seattle
UD, EE	5008 12th Av NE—Ken 1549	Grad	1965 12th Av W—QA 3162
Lopp, Weyana	Seattle	McLeod, Lester Rounds	Tacoma
LD, LA	4180 11th Av NE—N 2702	UD, ME	4518 20th Av NE—Ken 157
Lorbeer, Elizabeth	Glendale, Cal	McManus, Mary	Anaconda, Mont
Grad	4418 4th Av NE—N 2409	Unc, Ed	4547 University Blvd—Ken 1004
Lovegren, Olga Theresa	High Point	McMeen, Lola Irene	South Bellingham
LD, FA	Adelphia College—Cap 705	UD, Ed	Clark Hall—N 262
Lucas, June	Chewelah	McNett, Orpha	Walla Walla
Sp, LA	Lewis Hall—N 162	Sp, P H Nursing	Clark Hall—N 262
Lucas, Mary Amanda	Chewelah	McPhee, Aletha Sophia	Seattle
Grad	Lewis Hall—N 162	Grad	4045 Brooklyn Av—N 2416
Luft, Ernest Walter	Bremerton	Maddux, Marie	Chinook, Mont
UD, EE	Bremerton	LD, LA	5614 14th Av NE—Ken 917
Lumbard, Mrs. Frances Jobst	Seattle	Magill, Margaret	Vernon, N D
LD, LA	703 17th Av N—E 5188	Grad	4238 12th Av NE
Lund, Katharine Louise	Seattle	Magowan, Hazel Mae	Hot Springs, S D
UD, LA	1817 14th Av—E 4985	UD, Ed	Clark Hall—N 262
Lundstrom, Margaret	Sweden	Mahoffy, Evelyn	Hoquiam
UD, Sci	Adelphia College—Cap 705	LD, Ed	1420 8th Av
Lustie, William A	Cottonwood, Ida	Mahony, Ethel C.	Bremerton
Grad	4543 Brandon St	LD, Sci	Clark Hall—N 262
Luther, Gordon Demit	Seattle	Mailley, James	Spangle
Unc, CE	3019 Es talle St	Grad	4522 18th Av NE
Lynch, Angeline	Butte, Mont	Malloy, Kathleen	Manette
LD, Ed	Lewis Hall—N 162	Unc, FA	Seattle
Lynch, Anna	Butte, Mont	Mann, Mary	Stanwood
UD, Ed	Lewis Hall—N 162	Grad	Clark Hall—N 262
Lynch, Loretta C	Butte, Mont	Mansfield, Thelma Grace	Seattle
Unc, Ed	Lewis Hall—N 162	LD, Sci	4721 11th Av NE
		Marion, Helen	Takima
		UD, LA	5203 19th Av NE—Ken 2958
McAllister, Marguerite Agnes, Red Lodge Mont		Marlowe, Myrtle	Hartford, Kan
Sp, FA		UD, LA	1303 E 41st St
McAllister, Josephine Emily	Seattle	Marot, Mrs. Ada B.	Kirkland
Unc, LA	1712 Belmont Av—E 807	UD, LA	Kirkland
McArdle, Joseph Rice	South Bend	Marquette, Elizabeth	Shamoken, Pa
Grad	4724 10th Av NE	UD, LA	1416 E 41st St—N 184
McArthur, Beryle	Coeur d'Alene, Ida	Marsh, Constance	Arlington
Unc, Ed	2348 Howard Av N	Grad	Clark Hall—N 262
McArthur, Anna Esther	Entiat	Marston, C. May	Seattle
LD, Sci	4338 11th Av NE—Ken 2501	Grad	3007 4th Av W—QA 46
McCauley, Harriet M	Seattle	Martin, Alice J.	Seattle
Unc, LA	1407 E 45th St—Ken 1597	Unc, LA	334 E 50th St—Ken 1217
McConihe, Aimee Katherine	Seattle	Martin, Earl B.	Grant City, Mo
UD, LA	5224 19th Av NE—Ken 456	UD, LA	4522 18th Av NE—Ken 2053
McCordle, Mae Diana	Kelso	Martin, Harold M.	Spokane
Grad	4311 Brooklyn Av	LD, ME	4532 18th Av NE—Ken 2827
McDaniel, Richard C	Prescott	Martin, Charlotte Isabel	Seattle
Grad	4548 University Blvd	LD, LA	158 Prospect St—QA 1041
McDonall, Helen	Spokane	Martinson, Ida Emelia	Seattle
Grad	4705 16th Av NE	Unc, Ed	4218½ 14th Av NE—N 172
McDonnell, Clara G	Great Falls, Mont	Mason, Grace	Prosser
LD, LA	4142 12th Av NE—N 560	Unc, Ed	508 Pontius Av—Eil 2138
McGinnis, Gertrude	Appleton, Wis	Mason, Harold L.	Bremerton
Grad	717 Marion St—M 977	LD, ChE	1805 E 41st St—N 3492

Mason, Lela	Seattle	Monteagle, Gwendolyn Anne	Seattle
LD, FA	4019 15th Av NE—N 725	LD, LA	3803 E Howell St—E 1550
Masui, Leonard Goroku	Seattle	Montgomery, Catherine	Seattle
UD, LA	215 5th Av S	UD, LA	2809 Franklin Av—Cap 1115
Matson, Ida M.	Bickleton	Moore, Doris	Seattle
Unc, Ed	1707 Bellevue Av—E 3400	UD, Ed	4502 20th Av NE—Ken 685
Mathews, William	Kluber	Morrison, Jennie Marietta Clark .....	.....Milwaukee Wis.
Grad	4305 15th Av NE	Unc, Sci	5780 27th Av NE
Matzger, Edward	Seattle	Morse, Frederica Louise ..	Warrensburg, Mo
UD, Sci	214 17th Av N	Grad	4714 Brooklyn Av—Ken 1170
Mayes, Ruth	Seattle	Motie, Vivian Marie	Spokane
UD, LA	4542 14th Av NE—Ken 1952	Unc, Ed	4703 18th Av NE
Maynard, Gertrude A.	Seattle	Mousseau, Elizabeth	Seattle
Unc, FA	4705 14th Av NE—Ken 2815	Sp, Ed	4242 11th Av NE
Meagher, Kathryn	Helena, Mont	Mulhern, Helen	Penticton, B C
Unc, FA	4524 19th Av NE—Ken 199	UD, Sci	1605 E 47th St—Ken 2431
Meagher, Mary M.	Seattle	Mulhern, Marie	Penticton, B C
Sp, P H Nursing	2014 4th Av—Eil 4897	Unc, Sci	1605 E 47th St—Ken 2431
Madin, Reta Belle	Seattle	Mulhern, Monica P	Penticton, B C
LD, FA	814 30th Av—E 2985	UD, Bus	1605 E 47th St—Ken 2431
Meenach, Gladys	Seattle	Mulker, Lucile	Seattle
UD, Ed	4710 University Blvd—Ken 1857	Unc, FA	5035 8th Av NE—Ken 20
Melby, Sigurd	Everett	Mullis, Frances	Friday Harbor
Unc, Ed	Y. M. C. A. Seattle	UD, Sci	Friday Harbor
Melvin, Belle	Everett	Murchison, Mary Kathleen	Seattle
Sp, Ed	1407 E 45th St—Ken 1597	Grad	740 16th Av N—E 4090
Mendham, Mayme	Spokane	Murdy, Robert C	Aberdeen, S D
Unc, Sci	6211 Brooklyn Av	LD, Sci .....	.....
Mercer, Charles Harry ..	Vancouver, B C	Murphy, Loretta Theresa	Seattle
Grad	9th Av and Madison St	Unc, FA	1712 Belmont Av—E 897
Merrifield, Florine Virginia ..	Kent	Mutton, Ellen M	Moscow, Ida
UD, LA	4714 University Blvd—Ken 2253	UD, LA	4115 15th Av NE—N 2377
Merrill, Honor	Seattle	Myer, Thelma Anna Cecelia	Seattle
LD, Ed	422 Burke Av—N 2280	UD, Sci	E D No. 1
Merritt, Harriett B	Bellingham	Myers, Dorothy	Seattle
Grad .....	.....	Grad	1504 36th Av—E 5940
Meyer, Ambrose	Colfax	Nathan, Kenneth Robert ..	Katalla, Alaska
LD, Sci	7003 Palatine Av	LD, CE	1115 E 52nd St
Meyer, Florence L	Mead	Navin, Mary Mark	Alberton, Mont
Unc, LA	4535 18th Av NE	Unc, FA	Clark Hall—N 262
Meyer, Ole Bergesen	Norway	Nelson, Agnes E	Bellingham
Sp, LA	1727 W 56th St	UD, LA	Lewis Hall—N 162
Meyer, uth F	Norway	Nelson, Ethel B	Tacoma
Sp, LA	1727 W 56th St	Grad	Clark Hall—N 262
Michea, Marie Antoinette	Seattle	Nelson, Harriet	Seattle
LD, Ed	5247 1/2 14th Av NE—Ken 3442	LD, LA	1804 E 47th St
Meyer, Ruth F	Norway	Ness, Nels Arthur B	Tacoma
Sp, LA	1727 W 56th St	UD, Ed	4735 21st Av NE—Ken 3189
Middleton, Keith C	Seattle	Neterer, Inez May	Seattle
LD, Bus	1633 17th Av—E 1358	Grad	2702 N Broadway—Cap 1135
Mileham, Bessie Lipps	Seattle	Newberry, Mammie G	Springfield, Mo
Unc, LA	4230 14th Av NE—N 1774	UD, LA	4735 11th Av NE—Ken 1210
Millard, Bertha G	Seattle	Newcomb, Flo	Coeur d'Alene, Ida
Sp, Phar	5412 20th Av NE	Unc, Ed	Clark Hall—N 262
Miller, Eivena	Bellingham	Newel, Aaron	Seattle
Grad	Clark Hall—N 262	Grad	4708 7th Av NE—Ken 3127
Miller, Emma E	Monterey, Ind	Newhall, Olive	Friday Harbor
Grad	4543 University Blvd—Ken 659	Grad	Friday Harbor
Miller, Herman	Spokane	Newton, Cornelia E	Seattle
LD, LA	5212 18th Av NE—Ken 960	UD, LA	4547 19th Av NE
Miller, Janie Hill	Seattle	Nichols, Reita Mae	Bellingham
Grad	1419 Queen Anne Av—QA 147	UD, Ed	4546 18th Av NE—Ken 569
Miller, Kate Ewing	Seattle	Nichols, Walter Robert	Snoqualmie
LD, LA	1419 Queen Anne Av—QA 147	UD, LA	4714 19th Av NE—Ken 2701
Mills, Jessie M	Tacoma	Nissley, Maude Edith	Sterling, Nebr
Unc, LA	4532 19th Av NE	Sp, LA	4535 18th Av NE—Ken 1429
Milne, Marjorie	Tacoma	Norton, Grace C	Seattle
Unc, LA .....	.....	Grad	4334 Thackery Place—N 1434
Minnick, Nellie H	Maple Fallg	Norton, Mamie Belle	Seattle
Sp, Ed	6810 16th Av NE—Ken 1655	Sp, Sci	4223 Linden Av—N 2242
Minnis, Marjorie E	Seattle	Norton, Nancy Belle	Seattle
Grad	1931 4th Av W	Unc, Sci	4223 Linden Av—N 2242
Minnis, Mrs. Rose L	Seattle	Norton, Rose Lee	Colville
Sp, LA	1931 4th Av W	Sp, LA	5736 University Blvd Ken 663
Mitchell, Neva Isabel	Spokane	Norwood, Annie	Seattle
UD, LA	4311 Brooklyn Av	LD, LA	508 N 49th St—N 486
Mitchell, Ruby	Seattle		
LD, FA	4317 Eastern Av—N 4099		

- O'Brien, Mrs. Hazel B Sequim
 Unc, Ed 4115 Brooklyn Av
 Oakley, Eldora Viola Seattle
 UD, Ed 4230 11th Av NE—N 1885
 O'Callaghan, Vina B ... Bonners Ferry, Ida
 UD, FA. 4547 University Blvd—Ken 1004
 Oertel, Daniel T Blaine
 1st Law ... 4550 18th Av NE—Ken 187
 Oertel, Ernest E Seattle
 UD, Ed ... 4532 Sunnyside Av NE—N 2949
 Ohtaguro, Toshio Japan
 Unc, Bus 4110 12th Av NE—N 3797
 Olds, Dolph F Toppenish
 Grad 5722 E Green Lake Way
 Olney, Pansy Spokane
 Unc, LA. 4530 University Blvd—Ken 2496
 Olsen, Edwin Seattle
 Sp, BE 13 W Etruria St
 Olsen, Leah Ingeborg Bryant, S D
 Sp, LA. 4706 University Blvd—Ken 702
 Osborn, Bertha C Seattle
 UD, LA. 4524 University Blvd—Ken 72
 Osten, Elnifred Seattle
 Unc, Ed 7028 17th Av NE—Ken 2951
 Ostrander, Raymond Everett Seattle
 Unc Law 4506 16th Av NE
 Ostrander, Ruth Elizabeth Seattle
 LD, Sci 1215 E 55th St
 Oswalt, Flora Rice Seattle
 LD, Bus 838 34th Av N—E 4933
 Ouren, Marian Leavenworth
 Sp, Ed 910 Stewart St—M 5471
 Owen, Evelyn Seattle
 LD, LA 4354 8th Av NE—N 4075
 Owsley, Joseph H Seattle
 Sp, ME 2910 E Spring St—E 5247
- Page, Elvie Belle Rainier
 UD, LA Clark Hall—N 262
 Palmer, M Ethel Blaine
 UD, LA 6526 17th Av NE
 Parish, Mrs. Florence Russum. Kellogg, Ida
 Unc, LA 4742 18th Av NE—Ken 396
 Parker, Catherine A Seattle
 UD, LA 4743 19th Av NE—Ken 1251
 Parr, Olney Aurora Seattle
 Unc, LA. 4530 University Blvd—Ken 2496
 Parsons, Elvey T Seattle
 UD, Ed 1814 E 70th St—Ken 1093
 Parson, Irene Edith Oretown, Or
 Unc, LA 4554 16th Av NE
 Parson, Louise Poindexter Seattle
 Sp, P H Nursing .. 1206 N 43d St—N 1832
 Passage, Mary Elizabeth Seattle
 Sp, FA 612 W McGraw St—QA 1318
 Patchin, Wilber Harmon Seattle
 UD, Ed 3927 11th Av NE—N 1695
 Patten, Ethel Mae Seattle
 UD, LA 3203 Franklin Av—Cap 2503
 Pauley, Irene Bloomington, Ind
 Grad . 4th Av and Madison St—Ill 4181
 Paust, Edna L'Berta Seattle
 UD, Sci 7001 Jones Av NW—Bal 1446
 Payne, Callista Rachel Seattle
 UD, LA 5018 University Blvd—Ken 891
 Peak, Albert J Seattle
 Sp, Ed 6206 Woodlawn Av
 Pease, Vinnie A Minneapolis, Minn
 Grad Friday Harbor
 Pelz, Irma Margaret Seattle
 LD, Sci 1502 E Garfield—E 1564
 Perkins, Gwendolyn Seattle
 LD, Ed 1407 E 45th St—Ken 2501
 Perry, Mary Agnes Van Buren
 UD, LA 4557 Brooklyn Av—Ken 1948
 Pershing, Helen G Seattle
 UD, Ed 4388 11th Av NE—Ken 2501
 Persons, Alice Lora San Francisco, Cal
 Grad 212 E 80th St—Ken 2110
- Peterson, Alice Selma Spokane
 Sp, P H Nursing ... Lewis Hall—N 162
 Peterson, Carrie Helen Wardner, Ida
 UD, FA 4742 18th Av NE—Ken 396
 Peterson, Elizabeth Burke, Ida
 Sp, Ed 4385 18th Av NE
 Peterson, Frank W. Bellingham
 Grad 5038 18th Av NE
 Peterson, Inez Helena Seattle
 UD, LA 320 E 53rd St—Ken 2678
 Peterson, Julius E Seattle
 3rd Law 4414 Meridian Av
 Peterson, Nora O Ellsworth, Wis
 Unc, Ed 1723 Summitt—E 1622
 Peterson, Sophie Seattle
 Grad 4217 10th Av NE
 Petrie, James Seattle
 LD, ME 4348 8th Av NE
 Pettitt, Florence Elizabeth... Pt. Angeles
 LD, Sci 4515 16th Av NE
 Payton, Eleonor Louise Spokane
 LD, Sci 4732 21st Av NE—Ken 26
 Phelps, Muriel Green Bay, Wis
 Unc, FA 4732 20th Av NE—Ken 2003
 Phelps, Vera May Dryad
 UD, Sci ... 4538 15th Av NE—Ken 1482
 Pheny, Agnes Everett
 Grad 4535 18th Av NE
 Phillippi, Harry Claire Bellingham
 Grad 4730 20th Av NE—Ken 248
 Phillippi, Mrs. Phoebe K Bellingham
 UD, LA 4730 20th Av NE—Ken 248
 Pickering, Alice Roslyn
 Unc, Ed 4543 17th Av NE—Ken 651
 Pickett, May Belle Mt Vernon
 Sp, LA 3776 14th Av NE
 Pierce, Pearl Adelaide Seattle
 LD, Ed 3823 Densmore Av—N 1481
 Pierson, Mrs Ermine Clark Bellingham
 UD, Ed . 4714 University Blvd—Ken 2263
 Pitt, Mildred Esther Seattle
 UD, LA 4330 10th Av NE
 Plath, Otto Emil Berkeley, Cal
 Grad 4335 12th Av NE—Ken 436
 Plato, Alta Ida Bonners Ferry, Ida
 LD, Ed 4714 19th Av NE—Ken 2761
 Platt, Gladys Seattle
 LD, LA 5243 10th Av NE—Ken 3490
 Pool, Vera Neosho, Mo
 Grad 4534 University Blvd—Ken 20
 Porterfield, Minnie Fullerton, Nebr
 Unc, LA 211 Eastlake Av
 Post, Clara May Spokane
 Unc, LA
 Potter, Mabel Idella Blaine
 Grad 4732 21st Av NE—Ken 26
 Pritchard, Ernest H North Bend
 Unc, Ed 1217 1st Av—M 2769
 Pritchard, James Milton Burton
 UD, Ed Burton—Red 361
 Pugh, Louise Katherine Seattle
 UD, Ed 838 34th Av N—E 4933
 Pyle, Mark Wenatchee
 LD, ChE ... 4528 20th Av NE—Ken 2361
- Quigley, Anna Avon, Mont
 Unc, LA 4635 18th Av NE
 Quinnell, Helen M East Gary, Ind
 .. Unc, Ed 4314 10th Av NE
- Rader, Leona C Ontario, Or
 Unc, Sci. 4710 University Blvd—Ken 1857
 Radmaker, Frank Klaber
 Unc, CE 4115 16th Av NE—N 2377
 Ralston, Elmer Bellingham
 Unc, Ed Bellingham

Ramsdell, Ruby C Seattle
 Grad 5521 15th Av NE—Ken 3549
 Ramsey, George Harvey Seattle
 Sp, Law 2832 W 58th St—Bal 1731
 Raper, Lulu Seattle
 Unc, LA 5019 16th Av NE—Ken 2220
 Rawson, Jessie Pocatello, Ida
 Sp, LA 4523 18th Av NE
 Rayner, Marguerite F Pueblo, Col
 Unc, LA 2012 E 45th St
 Reardon, Claire M Anaconda, Mont
 Unc, Sci 606½ Pike St—M 3263
 Reardon, Gertrude A Anaconda, Mont
 UD, LA 606½ Pike St—M 3263
 Records, Lela E Boise, Ida
 Unc, Ed 2012 E 45th St
 Redding, Bernice Seattle
 LD, Ed 4749 Brooklyn Av—Ken 766
 Redford, Mrs Hazel Beeler Elberton
 Grad 766 30th Av—E 7623
 Redford, Walter Elberton
 Unc, Ed 766 30th Av—E 7623
 Reed, Jennie M Tacoma
 UD, Ed 4515 15th Av NE
 Reedy, Frances Marguerite Tacoma
 UD, Sci Clark Hall—N 262
 Reel, Mirbell Mary Boise, Ida
 LD, Ed 4548 University Blvd—Ken 659
 Reeves, Marie Adele South Bend
 LD, FA 4125 Brooklyn Ave—N 39
 Reeves, Orville G Marshfield, Or
 Unc, CE 1512 1st Av W
 Relchle, Theresa Margaret Butte, Mont
 Unc, LA 4547 19th Av NE—Ken 23
 Remsburg, Helen Seattle
 LD, LA 5134 26th Av NE—Ken 1766
 Rensing, Herman Castle Rock
 Sp, Ed
 Rice, Frances A Caldwell, Ida
 UD, Ed 4123 11th Av NE—N 2474
 Rice, Helen C Bellingham
 LD, FA 4548 18th Av NE—Ken 569
 Rice, Margaret Seattle
 Sp, P H Nursing 651 E 42nd St—N 3798
 Richardson, Nona Blanch Bend, Or
 Unc, LA 4705 16th Av NE
 Richmond, Mrs Agnes N Renton
 Unc, LA
 Ricketts, Lucy Myrtle Pullman
 Grad 343 W 76th St—Bal 2656
 Riddle, Mervie Lawson Caldwell, Ida
 Unc, LA 4123 11th Av NE—N 2474
 Riehm, Helen Dockton
 UD, LA 2407 Boylston Av N—Cap 888
 Ringstad, Myron Henry Seattle
 UD, ChE 4014 36th Av S
 Rivard, Mary Louise Spokane
 Sp, P H Nursing
 Robb, Frances E Everett
 Grad Seattle Pacific College—QA 3489
 Robb, Helen Seattle
 UD, Sci 4032 10th Av NE—N 3542
 Robe, Dorothy Cecll Seattle
 UD, LA 4811 Brooklyn Av
 Roberts, Elizabeth Seattle
 LD, Phar
 Roberts, Ina Streete Butte, Mont
 Unc, Ed 4543 University Blvd—Ken 659
 Roberts, Mary C Seattle
 Grad 1914 N 37th St—N 4048
 Robertson, Berdena Everett
 Unc, LA 4830 University Blvd
 Robertson, Peter Raymond Buckley
 LD, Sci 4522 18th Av NE—Ken 2083
 Robinson, Jenny C Butte, Mont
 Sp, Law 1408 E 42nd St—N 48
 Robinson, Katherine Una Seattle
 LD, FA 1607 Ravenna Blvd—Ken 167.

Sp, P H Nursing 2602 3rd Av
 Robmson, Rosa E Seattle
 Rodolf, Harold Albert Bellingham
 UD, Sci 4535 18th Av NE—Ken 1429
 Roe, Clare Auburn
 Unc, FA
 Rode, Irene Polson, Mont
 LD, FA 4338 11th Av NE
 Rogers, Mary Rebecca Butte, Mont
 Unc, Ed
 Rohlen, Elizabeth Helen Bellevue
 UD, LA Bellevue—Lakeside 39 W
 Rohe, Mrs Ida L Seattle
 Sp, Sci 6022 12th Av S
 Roseleaf, Dorothy Seattle
 UD, LA 221 15th Av N—E 6689
 Row, A Narayana India
 Grad 4115 15th Av NE—N 8277
 Rowe, Eva Spokane
 Unc, LA 4515 15th Av NE—Ken 2697
 Roys, Abby Cheyenne, WY
 Grad 5609 20th Av NE
 Roys, Ruby Portage.
 UD, LA 4750 University Blvd—Ken 806
 Rude, Hazel Irene Seattle
 Unc, Ed 1812 Queen Anne Av—QA 1753
 Rueger, Chas Vernon Birdsview
 UD, FA 3927 11th Av NE—N 1645
 Russell, Catherine Ann Seattle
 Unc, Ed 4750 University Blvd—Ken 806
 Russell, Pearl Elizabeth Seattle
 UD, LA 5528 15th Av NE—Ken 1702
 Russum, Sarah Elizabeth Kellogg, Ida
 Unc, Ed 4742 18th Av NE—Ken 396
 Ruzicki, Henry Seattle
 LD, Ed 1136 W 50th St
 Ryan, Margaret Butte, Mont
 Sp, P H Nursing 815 Pike St
 Ryan, Rose A Butte, Mont
 Sp, Ed 1815 Broadway—E 1486

Safford, Henrietta Reardon
 Grad 2012 E 45th St
 Sakamoto, Mine Seattle
 UD, Ed 1609 Yesler Way—Bea 2023
 Salmon, Mary E Seattle
 Unc, LA 4543 University Blvd—Ken 659
 Samizo, Mataso Japan
 Grad 212 5th Av S—M 626
 Samms, Mrs Margaret Newman Sandpoint, Ida
 Grad 2012 E 45th St—Ken 2645
 Sandborn, Elizabeth K Blue Rapids, Kan
 UD, LA 412 E 43rd St—N 290
 Sanders, Ruth Seattle
 LD, LA 2553 Glenridge Drive
 Sandstadt, Mrs. Etta M Seattle
 LD, LA 1108 2nd Av N—QA 884
 Sater, Gertrude Pauline Seattle
 Grad 411 E Thomas St—Cap 758
 Savannah, Edward J Seattle
 UD, ChE 4748 19th Av NE—Ken 661
 Saxton, Nellie W Seattle
 LD, FA 1018 Marion St—Ell 1076 R
 Sayles, Phyllis Elizabeth Fort Sapwai, Ida
 Unc, FA Lewis Hall—N 162
 Sbedico, Ida J Seattle
 Sp, FA 4522 11th Av NE
 Scherzer, Ellza Vancouver
 Grad 1815 31st Av
 Scheurer, Genevieve Long Beach, Cal
 UD, Ed 4714 University Blvd—Ken 2258
 Schirrmann, Sara Isabell Urban
 UD, Ed 4121 14th Av NE—N 745
 Schmidt, Elizabeth Daly Roslyn
 Sp, Ed 4710 University Blvd—Ken 1857
 Schoettler, Mirlen Chapman Seattle
 UD, Ed 4819 Latona Av—N 8729

Schreiber, Louise P	Tacoma	Singer, Fred J	Seattle
Grad	Clark Hall—N 262	UD, EE	4108 38th Av S—Rai 295 J
Scordan, Louise Margaret	Seattle	Sisler, Roland	Seattle
UD, Sci	2618 E Aloha St	LD, ME	711 33rd Av—E 759
Scott, Lillibelle	Yakima	Sletmoe, Belinda	Seattle
Unc, LA	4731 14th Av NE	Unc, Sci	6739 17th Av NW—Bal 2945
Scott, Percy	Seattle	Sloneker, Bertha Hope	Payette, Ida
LD, Sci	4216 W Alaska St—W 226	Unc, Sci	Lewis Hall—N 162
Seddon, John	Roslyn	Smiley, Clara	Seattle
LD, EE	4223 16th Av NE—N 3376	Grad	2643 22nd Av W—QA 3310
Seely, Anne	Seattle	Smith, Adeline Holsbud	Seattle
UD, LA	2617 Harvard N—Cap 1610	Sp, P H Nursing	1948 6th Av W
Selig, Isabel	Seattle	Smith, Arnold Gallet	Seattle
Grad	717 16th Av No—E 3044	LD, LA	125 13th Av N—E 5002
Selvidge, George	Seattle	Smith, Catherine Wright	Puyallup
Sp Law	5065 6th Av NE	LD, Sci	
Semon, Waldo Lonsbury	Port Angeles	Smith, Elizabeth	Valley, Ida
LD, ChE	4218 10th Av NE—N 177	Unc, Sci	4106 12th Av NE—N 363
Shackelford, Martha Wheatley	Tacoma	Smith, Elsie May	Marysville
UD, LA		Unc, Sci	4534 University Blvd—Ken 20
Schuck, Lola Vae	Eureka, Mont	Smith Herndon	Seattle
LD, Sci	4506 18th Av NE	LD, LA	Clark Hall—N 262
Schweitzer, Florence	Seattle	Smith, Laura	South Bend
LD, LA	205 Bennett St—Sid 1265	LD, FA	4217 Brooklyn Av
Shaffer, Mrs. Alice	New Rockford, N D	Smith, Lillian E	Spokane
Unc, Ed	157 E 59th St—Ken 3206	Unc, LA	4714 University Blvd
Shaffer, Asa Claude	Winamac, Ind	Smith, Medeleine	South Bend
Unc, Ed	157 E 59th St—Ken 3206	LD, FA	4217 Brooklyn Av
Shane, Elizabeth	Tacoma	Smith Margaret Watson	Boise, Ida
Unc, LA	4746 18th Av NE—Ken 2704	Sp, LA	4534 16th Av NE—Ken 522
Sharkey, Margaret	Seattle	Smith, Theodore Castle	Seattle
Unc, LA	620 16th Av N—E 9032	UD, EE	7414 Woodlawn Av—Ken 3259
Shanks, Carrol Metar	Payette, Ida	Smith, Truman Wheeler	Seattle
LD, LA	4530 14th Av NE—Ken 555	UD, Phar	4203 11th Av NE—N 2364
Sharp, Mary Corts	Palo Alto, Cal	Smith, Virgil	Boise, Ida
Sp, LA	4532 19th Av NE—Ken 1092	LD, LA	4534 15th Av NE
Sharp, Ruby Myrtle	Cheney	Snoddy, Esther	Kansas City, Mo
Unc, LA	4238 12th Av NE—N 320	LD, LA	4504 18th Av NE—Ken 148
Shave, Ethel	Seattle	Soule, Elizabeth Sterling	Seattle
Grad	4303 12th Av NE—Ken 2557	Sp, P H Nursing	Clark Hall—N 262
Shea, Mary	Seattle	Sparking, Robert	Vancouver, B C
Sp, P H Nursing	132 N 80th St	Sp, LA	1108 5th Av—M 744
Shea, Mary Margaret	Butte, Mont	Spaulding, Alice Barter	Seattle
Sp, LA	5800 15th Av NE	Unc, Ed	6705 Greenwood Court—N 2582
Sheets, Lora C	Bellingham	Spaulding, Mina	Belt, Mont
UD, Ed	4554 16th Av N E	Sp, Ed	2008 E 47th St
Shelton, Edna	Shelton	Spencer, Frank Curtis	Elgin, Ore
LD, Ed	4543 University Blvd—Ken 659	LD, Bus	Care University State Bank
Shepherd, Mrs Esther Maria	Bremerton	Spencer, Mildred J	Seattle
Unc, LA	4551 University Blvd—Ken 501	UD, Sci	102 Woodland Court
Shepherd, Paul Clark	Seattle	Spongole, Emma Anna	Pt. Orchard
UD, LA	4785 21st Av NE—Ken 3160	Sp, Phar	
Shindel, Maurice Harry	Seattle	Stahlhut, Verna	Sunyside
LD, LA	200 25th Av S	UD, LA	1908 N 46th St—N 8723
Shone, Bessie Mabel	South Bend	Stearns, Grace Velnette	Vancouver
Unc, LA	4751 University Blvd	Unc, LA	4815 Brooklyn Av
Shotwell, Catherine	Seattle	Steele, William Arthur	Clarkston
UD, LA	4470 5th Av NE	UD, LA	4814 11th Av NE
Shull, Renata M	St Joseph, Mo	Steele, Gladys Jones	Renton
Grad	4123 11th Av NE	Sp, LA	Renton
Shumway, Antoinette	Gendale	Steelman, Charlotte	Salt Lake City, Utah
Grad	Kihkland	Unc, LA	4532 19th Av NE—Ken 1092
Siemens, Margaret	Pasco	Steelman, Deborah	Salt Lake City, Utah
Grad		Unc LA	4532 19th Av NE—Ken 1092
Sifton, Edith	Hogulam	Steendahl, Anna Serine	Seattle
Grad	4732 21st Av NE—Ken 26	Grad	2257 14th Av W—QA 2623
Sigmond, Arthur	Seattle	Steinbach, K Anna	Seattle
LD, Bus	310 N 48th St—N 2380	Sp, P H Nursing	
Silverstone, Libbie	Seattle	Steinke, Della	Palouse
Grad	1137 32nd Av—E 6367	LD, LA	4211 Brooklyn Av—N 1657
Simon, Edith Cora	Wenatchee	Steinke, George Henry	Palouse
LD, LA	Lewis Hall—N 162	LD, Ed	4211 Brooklyn Av—N 1657
Simonds, Henry Austin	Bothwell	Stelling, Anita	Everett
Sp, LA		LD, LA	4119 12th Av NE
Simpson, Lurline V	Seattle	Sterling, Mrs. Elizabeth C	Vancouver
LD, LA	1912 10th Av N	Grad	4139 15th Av NE—N 2564
Sinclair, Bliss Gleed	Seattle	Stenberg, Betsy Pauline	Bellingham
UD, EE	4239 11th Av NE—N 3744	LD, Sci	4350 University Blvd

Stephens, Ruth	Riverside, Cal	Tedder, Myrtle A	Walla Walla
LD, Sci	2012 E 45th St—Ken 2645	Sp, P H Nursing	Clark Hall—N 262
Stevens, Belle Alice	Maltby	Terry, Ethel M	Spokane
UD, Sci	Friday Harbor	UD, Ed	4535 18th Av NE
Stevenson, De	Seattle	Thomas, Donald	Seattle
UD, Sci	1207 Ravenna Blvd—Ken 246	LD, EE	4520 21st Av NE—Ken 2600
Stevenson, Lillie Christina	Tacoma	Thomas, Eloise	Walla Walla
Sp, LA	Clark Hall—N 262	Unc, Sci	4508 16th Av NE—Ken 2768
Stewart, Katherine P	Seattle	Thomas, Margaret Jane	Seattle
Sp, Ed	908 W Newell St—QA 1559	Sp, Ed	4543 University Blvd—Ken 650
Stewart, Mrs Lois Allen	Jackson, Or	Thomas, Eleanor A	Seattle
Sp, Ed	4554 16th Av NE	Unc, LA	E D No 1—Ken 379
Stocking, Louise	Port Angeles	Thomas, Ruth	Port Blakeley
LD, Sci	4508 16th Av NE—Ken 2768	LD, LA	136 E 52nd St—N 3100
Stoecker, Mamie B	Seattle	Thompson, Elizabeth	Portland, Or
Sp, FA	3906 E Pine St—E 7554	Or UD, Sci	1408 E 42nd St—N 49
Stolberg, Esther	Mt Vernon	Thompson, Gertrude Marguerite	
Unc, Sci	3835 Interlake Av—N 481	.....	Anaconda, Mont
Stolp, Rose Marie	Sprague	Unc, Ed	4532 19th Av NE—Ken 1092
UD, Ed	1200 E 43rd St—Ken 2004	Thompson, Maud	Seattle
Stone, Ralph Emerson	Seattle	Sp, LA	1454 E Harrison St—Cap 1250
Grad	1205 E 45th St—Ken 1015	Thrun, Beatrice Dorothy	Seattle
Stoneman, Althea Ann	Casper, Wyo	Unc, Sci	1716 Harvard Av—E 5439
Sp, P H Nursing		Tidball, Lewis Cass, Jr.	Bellingham
Stoner, Juanita June	Spokane	Grad	4504 16th Av NE
UD, Ed	4038 12th Av NE	Tiffany, Dewey Emerson	Aberdeen, S D
Stoner, Lillian U	Oscola, Nebr	Unc, Min	4805 15th Av NE—Ken 720
Grad	4714 Brooklyn Av—Ken 1177	Tiffany, Stanley M	Aberdeen, S D
Stranack, Janet K	Seattle	Sp, Min	4305 15th Av NE—Ken 720
LD, LA	1107 20th Av N—E 5950	Tilley, Lella A	Tekoa
Strate, Johanna	Seattle	Grad	2012 E 46th St
LD, LA	1408 E 42nd St	Timm, Ida	Walla Walla
Streator, Gertrude Inez	Seattle	Grad	4547 University Blvd—Ken 1004
Grad	1726 15th Av—E 900	Todd, Vera F	Eugene, Or
Strete, Adelaide	Spokane	Or Grad	4530 University Blvd
Unc, Ed	4718 University Blvd	Tokio, Miyanaga	Japan
Strube, Charles Gustav, Jr.	Portland, Or	.....	687A Washington St—Ell 3164 W
LD, ME	4356 7th Av NE—N 1635	Tompkins, Daisy	Hastings, Nebr
Sturges, Demetrius D	Spokane	Grad	4502 20th Av NE
LD, LA	4142 12th Av NE—N 560	Tower, Pearl Adella	Seattle
Sturley, Ruth Emeline	Tacoma	UD, Sci	6525 16th Av NE—Ken 1837
Grad	4535 18th Av NE—Ken 1429	Towns, Lola Dale	Ludington, Mich
Sullivan, Anna M	Butte, Mont	UD, Sci	2310½ E 51st St
Unc, FA	4143 14th Av NE	Trenholme, Lottie Anna	Seattle
Sullivan, Mary F	Butte, Mont	Grad	1000 E 75th St—Ken 250
Unc, LA	815 Pike St	Trimble, Leota M	Toppenish
Summers, Edith E	Denver, Col	Grad	Lewis Hall—N 262
Grad	4515 16th Av NE—Ken 2697	Trimun, Allene	Renton
Sundling, Doris Moe	Seattle	UD, Ed	Renton
LD, Bus	3807 11th Av NE	Troth, Dennis C	Seattle
Sundquist, Leonia Maria	Snohomish	UD, Ed	4045 Brooklyn Av—N 2416
Grad	Friday Harbor	Truebridge, John Kenneth	Seattle
Sutton, Mary Catherine	Seattle	LD, Bus	4532 18th Av NE—Ken 2827
Grad	5513 Brooklyn Av—Ken 3080	Tucker, Mary Elizabeth	Newport, Ky
Sutton, Sarah Patience	Seattle	Grad	4731 14th Av NE
Grad	5513 Brooklyn Av—Ken 3080	Turk, Eva	Iwaco
Swartz, Florence Wilma	Seattle	Unc, LA	1818 Boylston Av N
Grad	5703 18th Av NE—Ken 189	Tucker, Ruth	Seattle
Sweet, Agnes	Seattle	Grad	4531 Latona Av—N 1610
Sp, P H Nursing, 4754 16th Av NE—Ken 241		Tyler, M Estella	Seattle
Sweet, Elsie Sears	Bellingham	Unc, FA	1954 6th Av N—QA 2836
Grad	Clark Hall—N 262	Ulleland, Astrid Oliva	Kent
Sweet, Helen E	Seattle	UD, LA	622 Melrose Ave
Grad	5217 16th Av NE—Ken 2024	Ullin, Aurora M	Seattle
Sweet, Laura Elizabeth	Bellingham	Grad	4532 Corliss Av
Unc, FA	4742 18th Av NE—Ken 396	Umpleby, Grace May	Fort Uark, N D
		Unc, FA	Clark Hall—N 262
Tait, Eva Celestia	Seattle	Utterback, Clinton Louis	Seattle
UD, Ed	2329 23rd Av S—Bea 731	Grad	Denny Hall—Ken 720
Takahashi, Mrs. Charles T	Seattle	Van Devanter, Louise Mary	Orillia
Sp, Sci	507 22nd Av N—E 2207	Grad	Orillia
Tanner, Josephine	Seattle	Van Doren, Mrs. Martha	Seattle
UD, Ed	4708 8th Av NE	Sp, LA	4513 14th Av NE—Ken 3445
Taylor, Annabe Frances	Forest Grove, Or	Van Slatte, Eloise	Spokane
Grad		3rd Law	Clark Hall—N 262
Taylor, Dorthen,	Seattle	Venn Watson, Arthur L	Kingston
Grad	410 11th Av N—Cap 1070	Sp, Ed	4742 Brooklyn Av—Ken 1847

Venn Watson, Mrs. Edna D	Kingston
Unc, Ed	4742 Brooklyn Av—Ken 1847
Venn-Watson, John William	Port Ludlow
Unc, LA	4340 11th Av NE
Vestal, Marie	Snohomish
Grad	
Victor, Elvera	Bellingham
Grad	4780 20th Av NE
Vincent, Burton J	Seattle
Sp, Ed	3210 3rd Av W—QA 2188
Vining, Marie	Seattle
Grad	1419 8th Av W—QA 1748
Vinsonhaler, Louise	Seattle
Sp, Sci	1416 E 41st St—N 184
Vinsonhaler, Sara Rea	Seattle
Grad	1416 E 41st St—N 184
Voight, Edna E	Seattle
Grad	5109 Wallingford Av—N 1274
UD, Sci	Clark Hall—N 262
Von Norman, Alfred George	Seattle
LD, CE	910 20th Av—E 218
Wabraushek, Anthony Robert	Seattle
LD, Bus	908 E Howell St—E 848
Waite, Netta Marguerite	Seattle
Grad	4223 15th Av NE—N 3870
Waite, Vera Beatrice	Seattle
UD, LA	4223 15th Av NE—N 3870
Walcher, Raymore Bland	Braman, Okla
LD, CE	1408 1/2 E 43rd St
Waldrup, Sarah P	Seattle
Grad	4538 8th Av NE—N 1929
Wales, Marie Isabel	Bonnars Ferry, Ida
Unc, Ed	4722 18th Av NE—Ken 2861
Walker, Glen Hart	Seattle
UD, EE	6201 26th Av NE—Ken 8088
Wallace, Belle	Seattle
Grad	2900 E 53rd St—Ken 2326
Wallace, Douglas	Seattle
LD, Bus	5218 Holly St—Rai 868 W
Wallace, Elizabeth Wyona	Bellingham
UD, Ed	Lewis Hall—N 162
Walker, Mrs. Clara H	Seattle
Unc, Ed	4500 University Blvd—Ken 201
Walter, Avery	Sunnyside
Unc, LA	1906 E 45th St—Ken 988
Walthew, Dorothy Eleanor	Seattle
UD, LA	1818 E 50th St—Ken 2384
Walthew, Winifred Edna	Seattle
LD, LA	1818 E 50th St—Ken 2384
Harley, Shuichi Watanabe	Seattle
Grad	605 1/2 Main St—Ell 3735
Watson, Ruth Elizabeth	Seattle
Unc, Sci	4026 11th Av NE—N 2522
Watt, Mabel	Seattle
Unc, Sci	4811 9th Av NE
Weage, Avery Dudley	Seattle
UD, Ed	4330 11th Av NE
Weaver, Grace Elizabeth	Seattle
UD, LA	5084 18th Av NE—Ken 2980
Weber, Walter Herman	Yakima
UD, EE	4738 19th Av NE
Webster, Clara	Seattle
Grad	5087 21st Av NE—Ken 1210
Webster, Jessie Elizabeth	Port Angeles
UD, LA	408 Galor St—QA 608
Weeks, Mary Louise	Seattle
LD, FA	Clark Hall—N 202
Welch, Berniece C	Seattle
Unc, LA	847 W 64th St
Welts, Florence	Mt. Vernon
Grad	4524 10th Av NE—Ken 199
Werby, Mable Mathilda	Seattle
Grad	218 3rd Ave N—QA 2767
Wharton, Florence	Yakima
UD, Ed	4710 University Blvd
Whealdon, M Fay	Seattle
UD, Ed	112 E 61st St
Wheat, Laura Regina	Seattle
Grad	4931 44th Av S
Wheeler, Chetta H	Seattle
Unc, LA	4211 Brooklyn Av—N 1637
Wheeler, Gladys Fidele	Seattle
UD, LA	3615 Woodlawn Av—N 1752
Whitt, Margaret LeEtta	Bureka, Mont
Unc, Ed	4506 13th Av NE
Whippa, Carol Louise	Kallispell, Mont
UD, FA	4515 15th Av NE—Ken 2697
Whitaker, Lois	Oskaloosa, Ia
Unc, Ed	4551 University Blvd
White, Katharine Eleonore	Wellington
UD, LA	Clark Hall—N 262
White, Warren E	Manette
UD, EE	
Whitfield, Medora	Portland, Or
Unc, Ed	517 Crockett St—QA 2254
Whiting, Edward Parsons	Seattle
UD, EE	1115 8th Av W—QA 1029
Whitman, Mortimer Augustus	Seattle
UD, EE	703 13th Av N—Cap 1904
Wickstrom, R. Pearl	Seattle
Grad	2021 4th Av—M 2848
Wiese, Bertha Frances	Seattle
Sp, P h Nursing	1630 Boylston Av—E6431
Wiggie, James	Falls City
LD, Ed	1612 Boylston Av
Wilbur, Edward Perry	Seattle
LD, LA	738 Harvard Av N—Cap 1650
Wilhelm, Hedda	Billings, Mont
Grad	4540 University Blvd
Wilhelm, Alvina	Billings, Mont
Sp, LA	4540 University Blvd
Wilkinson, Guerdon R	Richmond Beach
LD, Ed	Richmond Beach
Will, Edith	La Porte, Ind
UD, Ed	4106 12th Av NE—N 363
Willhoite, Marjorie	Spokane
Unc, LA	4515 15th Av NE—Ken 2697
Williams, Carrie Colver	Union, Or
Unc, Sci	Lewis Hall—N 162
Williamson, Mary Agnes	Seattle
LD, Sci	4353 W Hudson St—W 884 W
Williamson, Emma	Butte, Mont
Unc, Ed	4543 University Blvd—Ken 659
Williamson, Eva	Butte, Mont
Unc, Ed	4543 University Blvd—Ken 659
Wilson, Evelyn	Seattle
UD, LA	5015 18th Av NE—Ken 2061
Wilson, Florence Alden	Seattle
Grad	5740 33rd Av NE
Wilson, Frances A	Ketchum, Ida
Unc, FA	4751 University Blvd—Ken 2718
Wilson, Lena Eveline	Grandview
UD, LA	Clark Hall—N 262
Wilson, S. Bertta	Spokane
Grad	1416 E 41st St
Wise, Lillian	Prosser
LD, FA	4547 University Blvd—Ken 1004
Wisner, Francis Preston	Berkeley, Cal
UD, Sci	4714 Brooklyn Av—Ken 1170
Witter, Mary E	Roscoe, S D
Sp, LA	4921 Stoneway Av—N 867
Wetty, Karyl L	Lewiston, Ida
UD, FA	
Woelber, Harry	Seattle
LD, Min	4735 27th Av NE
Wold, Karen Helene	Laurel, Mont
LD, Sci	Lewis Hall—N 162
Wold, Mary L	Issaquah
Sp, P H Nursing	412 E Howell St—E 4060
Woldy, Helen M	Edmore, N D
UD, Sci	2012 E 45th St—Ken 2645

REGISTER OF STUDENTS

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<p>Wolfe, Bessie GAlgona, Ia Unc, Sci5246 12th Av NE—Ken 1462 Wong, Ying OChina UD, Phar422 8th Av S Wood, LillianSeattle Unc, Sci5628 14th Av NE Wong, Hishing China Unc, LA4505 18th Av NE—Ken 333 Woodin, AbbieSeattle Grad4722 18th Av NE Woody, Lucy KCarbondale, Ill UD, Ed2111 E 52nd St Wooldridge, Mrs. Hazel RPullman UD, Sci ..4540 University Blvd—Ken 3216 Woolford, RaymondKalama LD, ME ..4532 18th Av NE—Ken 2827 Worchester, Eleanor SewallSpokane Sp, Ed4708 18th Av NE Workman, NellieSheridan, Wy LD, LA4840 11th Av NE Worthington, GraceQuilcene Grad4515 18th Av NE—Ken 2644</p>	<p>Worthly, Chas. BondTacoma LD, EE4518 University Blvd—Ken96</p> <p>Yerger, Bessie PearlRedondo Beach Grad4710 19th Av NE—Ken 1085 Young, Irma VerneSeattle Unc, Ed1711 N 50th St—N 2138 Young, Lorene IdaSumner Unc, Ed4515 15th Av NE—Ken 2697 Yuge, ShichiroJapan Grad4110 12th Av NE—N 3797</p> <p>Zacharias, Rosa LydiaSeattle UD, LAR. D. No. 2 Zeemann, ChristianDenmark LD, EE1301 Western Av—M 971 Zickler, Irma PaulineZillah Unc, Sci4535 18th Av NE—Ken 1429 Zietz, VernaSnohomish Unc, LA Vol Nagel, BerthaSeattle</p>
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SUMMARY OF ENROLMENT—1918-1919

BY COLLEGES AND SCHOOLS

SCHOOLS AND COLLEGES	SUMMER QUARTER			AUTUMN QUARTER	WINTER QUARTER	SPRING QUARTER	TOTAL
	1st T.	2d T.	Total				
	1	2	3	4	5	6	7
GraduateM	45	30	65	17	22	24	36
W	180—281	112—142	210—275	27—44	32—54	38—62	60—96
Liberal Arts.M	44	22	4*	57	212	166	243
W	261—305	174—196	288—333	408—550	509—721	559—725	685—928
ScienceM	21	14	25	56	134	129	173
W	107—128	67—81	125—150	246—302	212—346	215—344	292—465
Bus. Admin.M	7	6	10	42	211	306	306
W	5—12	5—11	8—16	94—136	156—367	119—425	156—462
EducationM	84	10	37	11	25	27	39
W	157—191	134—144	188—225	132—143	149—174	133—160	160—199
EngineeringM	66	59	66	100	295	301	321
W	2—68	—59	2—68	5—105	5—300	2—303	11—332
Fine ArtsM	1	..	1	6	19	9	19
W	68—69	45—45	68—69	153—159	143—162	134—143	157—176
FisheriesM	..	..	..	..	..	..	2
W	..	..	..	..	..	..	2
ForestryM	1	1	1	11	52	47	76
W	—1	—1	—1	1—12	2—54	1—48	2—78
JournalismM	..	..	..	..	13	9	13
W	..	..	..	8—8	4—17	4—13	17—30
LawM	13	5	16	15	52	70	70
W	4—17	—5	6—22	9—24	13—65	11—61	13—83
LibraryM	..	..	..	..	..	..	..
W	3	3	2	3	21	20	19
MinesM	3	3	3	10	42	27	42
W	—3	—3	—3	—10	—42	—27	—42
Nav. & M. Sc.M	..	..	..	..	4	..	..
W	..	..	..	..	..	..	..
PharmacyM	3	2	3	9	28	22	34
W	7—10	4—6	6—9	23—32	25—48	28—50	27—61
Pub. H. Nur.W	..	31	30	31	..	..	..
*U. S. Shipping Board.M	..	..	..	84	17	13	7
S.A.T.C.M	..	..	..	..	1785	..	1785
Total	1069	725	1291	3852	2388	2407	5030

* This course is offered to new students each month.

SUMMARY OF ENROLLMENT

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BY CLASSES

	SUMMER QUARTER			AUTUMN QUARTER	WINTER QUARTER	SPRING QUARTER	TOTAL
	1st T.	2d T.	Total				
	1	2	3	4	5	6	7
Graduates M	40	31	65	19	38	36	48
W	187—236	112—148	210—275	28—47	32—65	38—74	60—108
Seniors M	40	22	45	24	47	53	67
W	74—114	60—82	87—132	103—127	154—201	167—220	169—236
Juniors M	38	23	46	48	108	128	174
W	139—177	97—120	155—201	173—221	198—306	204—332	209—338
Sophomores . . . M	28	20	26	69	243	205	259
W	83—111	56—76	89—115	330—399	301—544	352—557	567—826
Freshmen M	67	49	62	157	624	681	736
W	243—310	184—238	275—337	556—713	672—1196	487—1168	685—1321
Special M	16	7	27	21	36	29	76
W	105—121	64—71	120—147	22—43	22—58	20—49	46—122
*Special Gov. U.			84	17	13	7	249
S. Shpg. B. M.	..	..	..	1783	..	..	1785
S.A.T.C.							
Total	1069	725	1291	3852	2383	2407	5080

TOTAL STUDENTS IN RESIDENCE

During regular academic year	5080
During summer quarter	1291
	6321
Deduct summer quarter duplicates	314
Net total for the year	6007

EXTENSION STUDENTS

Correspondence	274	214	216	259	265
Extension classes . . . . .	..	330	1180	1051	1783
Total extension	274	544	1396	1310	2048

NOTE.—Columns 1, 2, 4, 5 and 6 represent census figures—i. e., the enrollment taken on a stated day within the first month of a term or quarter. Columns 3 and 7 show figures representing the number of different individuals; column 3 the number registered during the summer quarter, column 7 the number registered during the regular academic year. For comparison with other institutions the figures in columns 3 and 7 should be used, as these are the customary catalogue figures.

**THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS**

**ENTRANCE INFORMATION
THE CATALOGUE**
Bulletins of
**COLLEGE OF LIBERAL ARTS
COLLEGE OF SCIENCE
COLLEGE OF EDUCATION
LIBRARY SCHOOL
COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF JOURNALISM
COLLEGE OF ENGINEERING
COLLEGE OF FINE ARTS
COLLEGE OF FISHERIES
COLLEGE OF FORESTRY
SCHOOL OF LAW
COLLEGE OF MINES
SHORT MINING SESSION
COLLEGE OF PHARMACY
DEPARTMENTS OF INSTRUCTION
GRADUATE SCHOOL
EXTENSION SERVICE
SUMMER QUARTER
PUGET SOUND BIOLOGICAL STATION
UNIVERSITY DIRECTORY (price 25 cents)**

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to **THE REGISTRAR, University of Washington, Seattle, Washington.**

BULLETIN
UNIVERSITY OF WASHINGTON

General Series

MARCH, 1918

No. 121

Military Training
WITH
Announcement of New Courses
IN
Military Science
Naval Science
Aeronautical Science



Published Quarterly by the University of Washington
Seattle

Entered as Second Class Matter at Seattle, under the Act of July 16, 1894

GENERAL STATEMENT

Military Training has been given in the University of Washington since 1875, with the exception of a brief interval early in the century. In the autumn of 1916 the University accepted the provisions of the National Defense Act of 1916, and has since maintained an infantry unit of the United States Reserve Officers' Training Corps. New four-year curricula now offer an opportunity to obtain a well-balanced college course, combined with thorough preparation for efficient service in one of the supreme duties of the citizen of a free country—the national defense.

Military Training, comprising drill and instruction in the fundamentals of military service is required, during the first two years at the University of all students who are citizens of the United States and physically qualified.

The New Courses. Students desiring a good general college education, upon which any line of professional or technical study may be based, and which will also prepare them for commissions as reserve officers in the military or naval service, may register in one of the new four-year curricula in Military, Naval, or Aeronautical Science. These courses are, for administrative purposes, attached to the College of Engineering.

They lead respectively to the degrees of Bachelor of Science in Military Science, Bachelor of Science in Naval Science, and Bachelor of Science in Aeronautical Science. In addition to the general education given, with the appropriate degrees, they offer the following opportunities:

(a) Graduates obtaining the degree of B. S. in Military Science will be commissioned as infantry officers in the Officers' Reserve Corps of the United States Army, in accordance with the provision of the National Defense Act.

(b) As soon as engineer and artillery officers shall be detailed as instructors, reserve officers' commissions will be granted in those branches of the service.

(c) Corresponding commissions in the naval and aeronautical branches of the service, for graduates of those courses, are in prospect, though not yet provided for by law.

(d) In the event of failure to secure government co-operation for the plans outlined in either (b) or (c) the University will facilitate all changes of courses necessitated thereby, without penalty to the student.

Entrance. For admission to any of these curricula a student must conform to the general entrance requirements of the University as given in the Catalogue (see Entrance Information), and should present the following credits by examination or by certificate from an accredited school from which he has graduated:

- 3 units of English.
- 1½ units of algebra.
- 1 unit of Plane Geometry.
- ½ unit of Solid Geometry.
- 2 units in one modern foreign language.

- 2 units selected from History, Civics, or Economics (at least one unit to form a year of consecutive work in history).
- 1 unit of Physics.
- 4 units selected from any subjects accepted by an approved high school for its diploma.

The third quarter of each of the first two years of the three curricula will be offered during the spring quarter of 1917-18, for such students as are qualified. Opportunities for pursuing these curricula during the summer quarter will depend upon the war emergency plans of the government. The regular program of the first quarter will begin in the autumn quarter of 1918.

Uniform and Allowances. Students taking the required military training, as well as those enrolled in the military courses, are required to wear the R. O. T. C. uniform prescribed by the War Department. At present the government makes an allowance of fourteen dollars per man for uniform. The balance, of about fourteen or fifteen dollars, is paid by the student. The exact amount is dependent upon conditions which are subject to change at the present time.

Each student enrolled as a candidate for a reserve officers' commission in the course in Military Science receives a ration allowance from the government of thirty cents per day, on the present basis, during the third and fourth years.

In all military work students are subject to the regulations of the United States service as far as they are applicable.

OUTLINE OF COURSES

The three curricula are identical for the first two years, except that the basic course for naval students will conform to the regulations of the United States Navy.

Descriptions of other subjects than those given by the military departments will be found under the corresponding numbers and departments in the catalogue descriptions of the courses in Liberal Arts, Science, or Engineering.

On account of existing war conditions no definite statement is possible in regard to the time, place or conditions of the summer camps which form a part of these courses. Due notice of them will be given.

MILITARY SCIENCE

FRESHMAN YEAR

<i>First Quarter</i>	<i>Second Quarter</i>	<i>Third Quarter</i>
Algebra (Math. 51)..... 8	Trigonometry (Math. 52)... 3	Analyt. Geom. (Math. 53) . 3
Gen. Chem. (Chem. 1 or 21) 5	Gen. Chem. (Chem. 2 or 22) 5	Gen. Chem. (Chem. 3 or 23) 5
*French (1) 5	*French (2) 5	*French (3) 5
Drawing (C. E. 1)..... 3	Drawing (C. E. 2)..... 3	Surveying (C. E. 21)..... 3
Mil. Tr. (M. N. & A. Sci. 1) 2	Mil. Tr. (M. N. & A. Sci. 2) . 2	Mil. Tr. M. N. & A. Sci. 3) 2
18	18	18

Summer Quarter. Military Encampment (M. N. & A. Science 11)

*If French is offered for entrance another modern foreign language may be substituted. For those offering one unit of French, French 3, 4 and 5 and French 7, 8 and 9 may be taken in the Freshman year.

MILITARY SCIENCE—Continued

SOPHOMORE YEAR

<i>First Quarter</i>		<i>Second Quarter</i>		<i>Third Quarter</i>	
Calculus (Math. 7).....	5	Calculus Math. 8).....	5	Calculus (Math. 9).....	5
Physics (97).....	5	Physics (98).....	5	Physics (99).....	5
*French (4).....	3	*French (5).....	3	*French (6).....	3
History.....	3	History.....	3	History.....	3
Mil. Tr. (M. N. & A. Sci. 4)	2	Mil. Tr. (M. N. & A. Sci. 5)	2	Mil. Tr. (M. N. & A. Sci. 6)	2
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	18		18		18

Summer Quarter. Summer Survey Camp (C. E. 103) Military Encampment M. N. & A. Sci. 12)

JUNIOR YEAR

Mechanics.....	3	Mechanics.....	3	Ballistics (Phys. 138).....	3
English (7).....	3	English (8).....	3	English (9).....	3
Phys. & Hyg. (Zool. 8)...	3	Phys. & Hyg. (Zool. 10)...	3	Descript. Geom. (C. E. 3)...	3
Accounting (Bus. Adm. 81)	3	Higher Surv. (C. E. 23)...	5	Engineering.....	3
Mil. Sci. (M. N. & A. Sci. 181)	3	Mil. Sci. (M. N. & A. Sci. 182)	2	Mil. Sci. M. N. & A. Sci. 183)	3
Mil. Tr. (M. N. & A. Sci. 101)	2	Mil. Tr. (M. N. & A. Sci. 102)	2	Mil. Tr. (M. N. & A. Sci. 103)	2
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	17		18		17

Summer Quarter. Military Encampment (M. N. & A. Science 111)

SENIOR YEAR

Ballistics (Phys. 139).....	3	Mil. & Nav. Law (Law 57)...	3	Mil. & Nav. Law (Const.) (Law 58).....	3
Hydraulics (C. E. 142)....	5	Engineering.....	5	Engineering.....	5
Geology (1).....	5	English (190).....	3	Explosives (Mines 161)....	3
Mil. Sci. (M. N. & A. Sci. 184)	3	Miln. & Demolitions (Mines 160)	3	Mil. Sci. (M. N. & A. Sci. 186)	5
Mil. Tr. (M. N. & A. Sci. 104)	2	Mil. Sci. (M. N. & A. Sci. 185)	2	Mil. Tr. (M. N. & A. Sci. 106)	2
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	18		18		18

NAVAL SCIENCE

FRESHMAN YEAR

Algebra (Math. 51).....	3	Trigonometry (Math. 52)...	3	Analyt. Geom. (Math. 53)...	3
Gen. Chem. (Chem. 1 or 21)	5	Gen. Chem. (Chem. 2 or 22)	5	Gen. Chem. (Chem. 3 or 23)	5
*French (1).....	5	*French (2).....	5	*French (2).....	5
Drawing (C. E. 1).....	3	Drawing (C. E. 2).....	3	Surveying (C. E. 21).....	3
Nav. Tr. (M. N. & A. Sc. 21)	2	Nav. Tr. (M. N. & A. Sc. 22)	2	Nav. Tr. (M. N. & A. Sc. 23)	2
	<hr/>		<hr/>		<hr/>
	18		18		18

Summer Quarter. Practical Work in Seamanship and Navigation

SOPHOMORE YEAR

Calculus (Math. 7).....	5	Calculus (Math. 8).....	5	Calculus (Math. 9).....	5
Physics (97).....	5	Physics (98).....	5	Physics (99).....	5
*French (4).....	3	History.....	3	*French (6).....	3
History.....	3	*French (5).....	3	History.....	3
Nav. Tr. (M. N. & A. Sc. 24)	2	Nav. Tr. (M. N. & A. Sc. 25)	2	Nav. Tr. (M. N. & A. Sc. 26)	2
	<hr/>		<hr/>		<hr/>
	18		18		18

Summer Quarter. Practical Work in Seamanship, Surveying and Navigation

JUNIOR YEAR

Mechanics.....	3	Mechanics.....	3	Ballistics (Phys. 138).....	3
English (7).....	3	English (8).....	3	English (9).....	3
Phys. & Hyg. (Zool. 8)...	3	Physiol. & Hyg. (Zool. 10)...	3	Descript. Geom. (C. E. 3)...	3
Mechanism (M. E. 81)....	3	Nautical Astron. (Ast. 23)...	3	Direct Currents (E. E. 101)...	4
Elem. Steam Eng. (M. E. 82)	3	Marine Eng. & Boilers (M. E. 124).....	3	D. C. Lab. (E. E. 102)...	2
Nav. Tr. (M. N. & A. Sci. 121)	2	Nav. Tr. (M. N. & A. Sci. 122)	2	Nav. Tr. (M. N. & A. Sci. 123)	2
	<hr/>		<hr/>		<hr/>
	17		17		17

Summer Quarter. Practical Work in Seamanship, Navigation, Surveying, Ordnance and Marine Engineering

*If French is offered for entrance another modern foreign language may be substituted. For those offering one unit of French, French 3, 4 and 5 and French 7, 8 and 9 may be taken in the Freshman year.

NAVAL SCIENCE—Continued

SENIOR YEAR

<i>First Quarter</i>		<i>Second Quarter</i>		<i>Third Quarter</i>	
Ballistics (Phys. 139).....	3	Mil. & Nav. Law (Law 57) 3		Mil. & Nav. Law (Const)	
Alternating Currents (E. E.		Radio Engineering (E. E.		(Law 58).....	3
121).....	4	181).....	3	Explosives (Mines 161)...	3
A. C. Lab. (E. E. 122).....	2	Steam Turbines (M. E. 179) 3		Naval Arch. (M. E. 185)...	3
Theory & Practice of Nav.		English (190).....	3	Marine Propulsion (M. E.	
(M. N. & A. Sci. 171)...	3	Theory & Practice of Nav.		193).....	3
Gas Engines (M. E. 199)...	3	(M. N. & A. Sci. 172)...	3	Theory & Practice of Nav.	
Nav. Tr. (M. N. & A. Sci.		Nav. Tr. (M. N. & A. Sci.		(M. N. & A. Sci. 173)...	3
124).....	2	125).....	2	Nav. Tr. (M. N. & A. Sci.	
				126).....	2
	—		—		—
	17		17		17
<i>Summer Quarter.</i> Practical Work in Seamanship, Navigation, Ordnance, Marine Engineering and Naval Construction					

AERONAUTICAL SCIENCE

FRESHMAN YEAR

Algebra (Math. 51).....	3	Trigonometry (Math. 52)...	3	Analyt. Geom. (Math. 53) 3	
Gen. Chem. (Chem. 1, or 21) 5		Gen. Chem. Chem. 2, or 22) 5		Gen. Chem. (Chem. 3 or 23) 5	
*French (1).....	5	*French (2).....	5	*French (2).....	5
Drawing (C. E. 1).....	3	Drawing (C. E. 2).....	3	Surveying (C. E. 21).....	3
Mil. or Nav. Training....	2	Mil. or Nav. Training....	2	Mil. or Nav. Training....	2
	—		—		—
	18		18		18
<i>Summer Quarter.</i> Swimming, Handling Small Craft, Shopwork (M. N. & A. Science (51, 52, 53)					

SOPHOMORE YEAR

Calculus (Math. 7).....	5	Calculus (Math. 8).....	5	Calculus (Math. 9).....	5
Physics (97).....	5	Physics (98).....	5	Physics (99).....	5
*French (4).....	3	*French (5).....	3	*French (6).....	3
History.....	3	History.....	3	History.....	3
Mil. or Nav. Training....	2	Mil. or Nav. Training....	2	Mil. or Naval Training....	2
	—		—		—
	18		18		18
<i>Summer Quarter.</i> Summer Survey Camp (E. E. 103), Practical Work in Aviation					

JUNIOR YEAR

Mechanics.....	3	Mechanics.....	3	English (9).....	3
English (7).....	3	English (8).....	3	Descript. Geom. (C. E. 3) 3	
Physiol. & Hyg. (Zool. 8) 3		Physiol. & Hyg. (Zool. 10) 3		Photography (Physics 54) 3	
Mechanism (M. E. 81)...	3	Astronomy (23).....	3	Direct Currents (E. E. 101) 4	
Theory of Aviation (M. E.		Theory of Aviation (M. E.		D. C. Lab. (E. E. 102)...	2
60).....	3	61).....	3	Aern. Tr. M. N. & A. Sci.	
Aern. Tr. (M. N. & A. Sci.		Aern. Tr. (M. N. & A. Sci.		153).....	2
151).....	2	152).....	2		—
	—		—		—
	17		17		17
<i>Summer Quarter.</i> Practical Aviation, Flying Reconnaissance, Rigging of Airplanes					

SENIOR YEAR

Alternating Currents (E. E.		Mil. & Nav. Law (Law 57) 3		Mil. & Nav. Law (Law 58) 3	
121).....	4	Radio Eng. & Sig. (E. E.		Radio Eng. & Sig. (E. E.	
A. C. Lab. (E. E. 122).....	2	181).....	3	182).....	3
Aerodynamics (M. E. 210) 3		Airplane Design (M. E. 193) 3		Airplane Design (M. E. 194) 3	
Location of Mil. Highways. 3		Gas Engines (M. E. 199)...	3	Airplane Propulsion (M. E.	
Meteorology (Geol. 11)...	3	English (190).....	3	198).....	3
Aern. Tr. (M. N. & A. Sci.		Aern. Tr. (M. N. & A. Sci.		Photo-topography.....	3
154).....	2	155).....	2	Aern. Tr. (M. N. & A. Sci.	
	—		—	156).....	2
	17		17		17

*If French is offered for entrance another modern foreign language may be substituted. For those offering one unit of French, French 3, 4 and 5, and French 7, 8 and 9 may be taken in the Freshman year.

DEPARTMENTS OF INSTRUCTION

MILITARY, NAVAL AND AERONAUTICAL SCIENCE

1-2-3. *Military Training*. Two credits each quarter. Required of all Freshmen. Infantry Drill Regulations through the school of the company; Small Arms Firing Manual; intrenchments; signalling; service of security and information; military organization and policy; map reading; hygiene and sanitation. Practical work in these subjects will be accompanied by lectures and text-book study, the principal text-book being the "Manual for Non-Commissioned Officers and Privates", edition of 1917 or later.

4-5-6. *Military Training*. Two credits each quarter. Required of all Sophomores. A continuation of the work of 1, 2, and 3, with progressive study of all topics; school of the battalion; camp sanitation and expedients; marches; military history. The same text will be used as in the preceding courses, with references to various army manuals.

21. *Naval Training*. This and numbers 22, 23, 24, 25 and 26 are the naval training courses, corresponding to 1, 2, 3, 4, 5, 6. The requirements are the same, the differences being in those points wherein the navy differs from the army practice.

101-102-103-104-105-106. *Military Training*. Two credits each quarter. For students electing the course in Military Science who have completed 1, 2, 3, 4, 5, and 6. Duties of officers and non-commissioned officers, exemplified by practical work with the student corps; military sketching. Various texts and reference books will be used.

121. *Naval Training*. This and numbers 122, 123, 124, 125, and 126 are the naval training courses corresponding to 101, 102, 103, 104, 105, and 106. The requirements are the same, the differences being in those points wherein the navy differs from the army.

151. *Aeronautical Training*. This and numbers 152, 153, 154, 155, and 156 are the aeronautical training courses corresponding to 101, 102, 103, 104, 105, and 106.

181. *Military Science*. Three credits. Minor tactics, Field Service Regulations, field orders.

182. *Military Science*. Two credits. Manual of Interior Guard Duty, map maneuvers.

183. *Military Science*. Three credits. Map maneuvers, company administration, property accountability.

184. *Military Science*. Three credits. Map maneuvers and tactical problems.

185. *Military Science*. Two credits. Tactical problems.

186. *Military Science*. Five credits. Psychology of war, tactical problems, courts-martial.

BULLETIN
UNIVERSITY OF WASHINGTON

General Series

AUGUST, 1918

No. 124

Naval Training
at the
University



**How Men May Enlist in the Navy
as Students**
The Course of Study
Advantages

**Published Quarterly by the University of Washington
Seattle**

University Calendar

1918-1919

FIRST QUARTER

Examinations for admission and for exemption from College English, Thursday, Friday and Saturday, September 26, 27 and 28, at 9 a. m. and 2 p. m.
Registration of new first year students.....
.....Friday and Saturday, September 27 and 28
Registration of all other students.....
.....Monday and Tuesday, September 30 and October 1
Instruction begins.....Wednesday, October 2
President's annual address.....Friday, October 4, 10 a. m.
Women's assemblyFriday, October 11, 11 a. m.
Thanksgiving Recess
.....Wednesday, November 27, 6 p. m., to Monday, December 2, 8 a. m.
Quarter examinations
....Tuesday, Wednesday, Thursday and Friday, December 17, 18, 19 and 20

SECOND QUARTER

Registration days.....Thursday and Friday, January 2 and 3
Instruction begins.....Monday, January 6
Washington's birthday (holiday).....Saturday, February 22
Quarter examinations
.....Friday, Saturday, Monday and Tuesday, March 21, 22, 24 and 25

THIRD QUARTER

Registration days.....Monday and Tuesday, March 31 and April 1
Instruction beginsWednesday, April 2
Campus dayFriday, April 25
Junior day.....Saturday, May 24
Memorial day (holiday).....Friday, May 30
Quarter examinations
.....Tuesday, Wednesday, Thursday and Friday, June 10, 11, 12 and 13
Class day and President's reception.....Saturday, June 14
Baccalaureate SundayJune 15
Commencement and alumni day.....Monday, June 16

FOURTH QUARTER

Registration for first term.....Tuesday, June 17
Instruction beginsWednesday, June 18
Term examinationsWednesday, July 23
Registration for second term.....Friday, July 25
Term examinations.....Saturday, August 30

University of Washington

College of Naval, Military, and Aeronautical Science

NAVAL TRAINING AT THE UNIVERSITY

The University of Washington will open September 27, 1918, in the new College of Naval, Military and Aeronautical Science, a four-year course in naval science. This course is similar to that of the United States Naval Academy, and is conducted in coöperation with the Navy Department, which has assigned as professor of naval science and tactics Rear Admiral Chauncey Thomas, U. S. N., Retired, an officer of high attainments and long experience in the service. The successful completion of this course will lead to the degree of Bachelor of Science in Naval Science and, if physically qualified, to an appointment as an officer in the United States Naval Reserve Force.

DISTINCTIVE ADVANTAGES

(1) It is an excellent four-year college course in science and furnishes a good foundation for any peace time work that its graduates may undertake.

(2) It qualifies its graduates to perform their duty as citizens in the national defense by serving when needed as reserve naval officers in the United States Navy.

(3) As a preparation for a career in the navy or the merchant marine. The United States Navy has always been an attractive service, and the expansion of the merchant marine of this country will make in the coming years an opportunity for well-trained young men both on the sea and on land in the shipping business.

ADVANTAGES OF THE UNIVERSITY FOR NAVAL TRAINING

The University of Washington has unusual facilities for naval training. Its campus fronts on deep water, and vessels of considerable size can land at its docks. The Puget Sound Navy Yard, one of the largest and most important yards in the country, is located only a few miles across Puget Sound and is the headquarters of the Commandant of the Thirteenth Naval District, in whose jurisdiction the University lies.

In the summer of 1917, a Naval Training Camp was established by the United States Navy at the University, and the University has turned over to the Navy Department for its uses during the war about 228 acres of the waterfront of the campus. On this ground a Naval Training Camp to accommodate 3000 enlisted men has been established. The Naval Training Camp works in close coöperation with the University, and its men are taking many special courses in University classrooms and laboratories. A great plant is being developed, much of which will be of permanent value to the naval work of the University.

As a part of the Naval Training Camp, the Navy Department has

established two special schools for the intensive training of officers, one school for the line and engineering known as the Officers' Material School, of about 250 men, and the other a Ground School for Navy Aviators, of about 200 men.

For those who do not show the qualifications required for commissioned rank there are numerous special courses for petty officers and enlisted men by which they can fit themselves for some line of work to which they are adapted. At the Puget Sound Navy Yard there are: The listeners' school, petty officers' school, the ordnance school, trade schools, and preparatory officers' material school. At the University Naval Training Camp, in addition to the two schools for commissioned officers, there are schools for petty officers, for radio work, for cooks and bakers, electricians, oil firemen, for signaling and for marine engineering.

STATUS AND ALLOWANCES OF STUDENTS

Students entering the naval course in the University may be enlisted in the United States Naval Reserve and will be put on active service and pay for about four weeks, after which they will be placed on the inactive reserve as students in the University, and may not be called into active service until they are twenty-one, unless a great emergency arises. Should the war continue, those students who are so near the age of twenty-one that they will soon be called into service, will be given an opportunity to enter the Officers' Material School for intensive training so that they may earn ensigns' commissions. If the war is ended before this time, they will take their places in the Naval Officers' Reserve, subject to be called into service in time of war.

Each student will receive an allowance of \$100 for uniforms.

Arrangements may be made for the naval students to live in camp on the University campus. In this case they will be under military discipline at all times and the expense of living at the University will be reduced to a minimum. Living in camp will not be compulsory, but men who elect to do so will receive due credit therefor.

A feature of the naval course will be the summer cruise of from one to two months, during which students will receive the pay of their rating.

Aside from these special provisions and allowances as students in the naval courses the status of these men will be the same as that of other University students, and they will be subject to the same requirements and charges.

*REQUIREMENTS FOR ADMISSION TO THE UNIVERSITY

A student must offer for admission to freshman standing in the University, fifteen units† by examination or by certificate from an accredited school from which he has graduated. The fifteen units must include the following combinations:

3 units of English.

2 units of mathematics (one unit algebra, one unit plane geometry).

* More detailed information concerning admission is furnished in a separate section of the University Bulletin, known as Entrance Information (pages 7-11).

† To count as a "unit" a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of not less than thirty-six weeks.

3 units in *one* of the following groups (or two units, if three units of mathematics are presented):

- (a) Latin and Greek (not less than two units of Latin or one of Greek counted).
- (b) Modern foreign language (at least two units in *one* language; not less than one unit counted in any language).
- (c) History, civics, economics (at least one unit to form a year of consecutive work in history).
- (d) Physics, chemistry, botany, zoology, general biology, physiology, physical geography or geology. (Not less than one unit counted in physics, chemistry, or general biology. No science counted as applying on this requirement unless it includes a satisfactory amount of laboratory work.)

2 units selected from the above groups.

5 units selected from any subjects accepted by an approved high school for its diploma, not more than four, however, to be in vocational subjects.

A candidate who fulfils these requirements will be admitted to freshman standing in any college of the University. However, if he has not taken in high school certain of the subjects recommended for admission to the college that he may decide to enter, he will take them in the University. These subjects may apply toward a degree, as far as elective courses make this practicable. In certain curricula, however, these subjects must be taken in addition to the prescribed subjects.

In addition to the three units of English and the two units of Mathematics required for admission to all colleges of the University, all students expecting to enter the College of Naval, Military and Aeronautical Science should elect their work from the groups (a) to (d) so that they may offer the following subjects, which will have to be taken in the University, in addition to the prescribed curriculum, if not offered for entrance:

$\frac{1}{2}$ unit advanced algebra.

$\frac{1}{2}$ unit solid geometry.

2 units of *one* modern foreign language.

2 units selected from history, civics, or economics (at least *one* unit to form a year of consecutive work in history).

1 unit of physics.

All correspondence regarding the admission of students to the residence courses of the University as well as the requirements for graduation should be addressed to the Registrar. Every applicant for admission at the beginning of the first quarter, is requested to forward his credentials as early in the summer as possible, at the same time indicating the college or school of the University that he intends to enter. By doing this, the student avoids much inconvenience and delay at the time of registration.

Entrance with condition to freshman standing is not permitted. Excess admission credit does not establish any presumptive claim for advanced standing, unless the student has taken a post-graduate course in the high school of at least one semester.

OUTLINE OF COURSE

The curriculum in naval science is identical for the first two years with that in military science, except that the course in naval training will follow the needs of the naval service. It should be noted, however, that the Navy Department has brought its landing force drill and tactics into complete harmony with those of the Army, so that students who have received infantry training for the Army are equally qualified in that branch for the naval work.

Descriptions of the subjects listed in the accompanying outline may be found in the University catalogue and in the bulletin of the College of Naval, Military and Aeronautical Science to be issued later.

This is a tentative program and is subject to change.

NAVAL SCIENCE

FRESHMAN YEAR

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
Algebra (Math. 51).....	3	Trigonometry (Math. 52)...	3	Analyt. Geom. (Math. 53)..	3
Gen. Chem. (Chem. 1 or 21)	5	Gen. Chem. (Chem. 2 or 22)	5	Gen. Chem. (Chem. 3 or 23)	5
*French (1).....	5	*French (2).....	5	*French (3).....	5
Drawing (C. E. 1).....	3	Drawing (C. E. 2).....	3	Surveying (C. E. 21).....	3
Nav. Tr. (Naval Sci. 1)....	2	Nav. Tr. (Naval Sci. 2)....	2	Nav. Tr. (Naval Sci. 3)....	2
	18		18		18

Summer Quarter. Practical Work in Seamanship and Navigation.

SOPHOMORE YEAR

Calculus (Math. 7).....	5	Calculus (Math. 8).....	5	Calculus (Math. 9).....	5
Physics (97).....	5	Physics (98).....	5	Physics (99).....	5
*French (4).....	3	History.....	3	*French (6).....	3
History.....	3	*French (5).....	3	History.....	3
Nav. Tr. (Naval Sci. 4)....	2	Nav. Tr. (Naval Sci. 5)....	2	Nav. Tr. (Naval Sci. 6)....	2
	18		18		18

Summer Quarter. Practical Work in Seamanship, Surveying and Navigation.

JUNIOR YEAR

Mechanics.....	3	Mechanics.....	3	Ballistics (Phys. 138)....	3
English.....	3	English.....	3	English.....	3
Phys. & Hyg. (Zool. 8)....	3	Physiol. & Hyg. (Zool. 10)	3	Descript. Geom. (C. E. 3)	3
Mechanism (M. E. 81)....	3	Nautical Astron. (Ast. 23)	3	Direct Currents (E. E. 101)	4
Elem. Steam Eng. (M. E. 82)	3	Marine Eng. & Boilers (M. E. 124)	3	D. C. Lab. (E. E. 102)....	2
Nav. Tr. (Naval Sci. 101).	2	Nav. Tr. (Naval Sci. 102).	2	Nav. Tr. (Naval Sci. 103).	2
	17		17		17

Summer Quarter. Practical Work in Seamanship, Navigation, Surveying, Ordnance and Marine Engineering.

SENIOR YEAR

Ballistics (Phys. 130)....	3	Mil. & Nav. Law (Law 57).	3	Mil. & Nav. Law (Const. Law 58)	3
Alternating Currents (E. E. 121)	4	Radio Engineering (E. E. 181)	3	Explosives (Mines 161)....	3
A. C. Lab. (E. E. 122)....	2	Steam Turbines (M. E. 170)	3	Naval Arch. (M. E. 185)...	3
Theory & Practice of Nav. (Naval Sci. 171).....	3	English.....	3	Marine Propulsion (M. E. 193)	3
Gas Engines (M. E. 199)...	3	Theory & Practice of Nav. (Naval Sci. 172).....	3	Theory & Practice of Nav. (Naval Sci. 173).....	3
Nav. Tr. (Naval Sci. 104).	2	Nav. Tr. (Naval Sci. 105).	2	Nav. Tr. (Naval Sci. 106).	2
	17		17		17

Summer Quarter. Practical Work in Seamanship, Navigation, Ordnance, Marine Engineering and Naval Construction

* If French is offered for entrance another modern foreign language may be substituted. For those offering one unit of French, French 3, 4 and 5 and French 7, 8 and 9 may be taken in the Freshman year.

NOTE.—The University also offers in coöperation with the War Department a four-year course in Military Science, the successful completion of which leads to the degree of Bachelor of Science in Military Science and a commission in the Officers' Reserve Corps of the United States Army.

A parallel course in Military and Naval Aëronautics is planned and will be put in operation as soon as practicable.

August 12, 1918.

The War and Navy Departments have ordered all enlistments suspended, pending action on the proposal to change the age limits for the draft. Until this is adjusted enlistments cannot be made for the Naval and Military courses at the University, but applications will be received and each applicant will be notified as soon as definite action can be taken.

Applications should be sent to the SECRETARY, *College of Naval, Military, and Aëronautical Science, University of Washington, Seattle.*

THE BULLETIN OF THE UNIVERSITY OF WASHINGTON
INCLUDES THE FOLLOWING PUBLICATIONS

ENTRANCE INFORMATION

THE CATALOGUE

Bulletins of

COLLEGE OF LIBERAL ARTS

COLLEGE OF SCIENCE

COLLEGE OF EDUCATION

LIBRARY SCHOOL

COLLEGE OF BUSINESS ADMINISTRATION

SCHOOL OF JOURNALISM

COLLEGE OF ENGINEERING

COLLEGE OF FINE ARTS

COLLEGE OF FORESTRY

SCHOOL OF LAW

COLLEGE OF MINES

SHORT MINING SESSION

COLLEGE OF NAVAL, MILITARY AND AERONAUTICAL SCIENCE

COLLEGE OF PHARMACY

GRADUATE SCHOOL

EXTENSION DIVISION

SUMMER SESSION

PUGET SOUND BIOLOGICAL STATION

BULLETIN OF VOCATIONAL COURSES

OFFICIAL DIRECTORY

Requests for bulletins, or for general information in regard to the University, and all credentials and correspondence relative to admission, advanced standing, or requirements for graduation should be addressed to THE REGISTRAR, University of Washington, Seattle, Washington.

BULLETIN
UNIVERSITY OF WASHINGTON

Series I

SEPTEMBER, 1918

No. 119—PART 14

S. A. T. C.
Army Navy Marines



Published Quarterly by the University of Washington
Seattle

Entered as Second Class Matter at Seattle, under the Act of July 16, 1894

Calendar

FALL QUARTER

Tuesday, October 1, to Saturday, 12 o'clock noon, December 21

WINTER QUARTER

Monday, 8 a. m., December 30, to Saturday, 12 o'clock noon, March 22

SPRING QUARTER

Monday, 8 a. m., March 31, to Saturday, 12 o'clock noon, June 21

S. A. T. C.

Army

Navy

Marines

WAR TRAINING

The University of Washington is one of the agencies of the United States Government for the training of men for war service. For the duration of the war the University will train men for the Army, the Navy and the Marine Corps, under the general provisions of the plan which has been worked out by the Committee on Education and Special Training of the War Department. The students thus organized will be known as the Students' Army Training Corps.

FOR WHOM INTENDED

For all men who are called to military service the Government has provided higher courses of special intensive training. The following are the requirements for admission: (1) United States citizenship; (2) the attainment of the age of eighteen years, or over, excluding, however, men included in the selective service registrations prior to the registration of September 12, 1918; (3) ability to pass the Army or Navy physical examination; (4) graduation, or its equivalent, from a standard high school, and in the case of high school students who have not graduated, thirteen units or twenty-six credits.

NATURE AND SCOPE OF THE COURSE OF INSTRUCTION

The courses to be given are intensive war courses designed to be of immediate assistance to all men who enter war service. Following the instructions of the Committee on Education and Special Training, the University has outlined the courses of study for the first quarter as given in the following pages. These will occupy the student's time for fifty-three hours a week; approximately eleven hours being given to active military or naval drill; thirty-two hours to a set course of war studies comprising the fundamental sciences necessary for advancing in the various fields of the military, naval and marine services; and the remaining time being devoted to an elective study selected with the advice of the officer of the appropriate service with a view to acquiring a practical use of one of the essential war sciences.

LIVING CONDITIONS

Upon being inducted into service the student will be under military discipline. He will be housed in barracks on the campus under the direct control of regularly appointed government officers. The Army mess will be provided. His status will be that of a private in the Army. He will wear the prescribed uniform of the respective service and will receive the soldier's pay of \$30.00 a month. No tuition, laboratory or other fees are charged by the University.

STATUS OF STUDENTS WHO MAY NOT BE INDUCTED INTO SERVICE

High school graduates under eighteen years of age may be received for instruction in courses prescribed for the Students' Army Training Corps, but such students will not be inducted into service, will not receive pay, nor be permitted to live in the barracks. Such a student will be required to pay the usual University fees, and provide his own uniform at an expense of approximately \$30.00.

STATUS OF STUDENTS WHO ARE INELIGIBLE FOR MILITARY SERVICE

All male students who are ineligible for military service because of age or physical defects are admitted to the regular university work as far as it may be possible to provide the same. Such students may also be admitted to courses provided for the S. A. T. C. as far as size of classes permits.

REQUIRED MILITARY DRILL

All able-bodied male students not in the S. A. T. C. are required to take five hours per week of military training.

REQUIRED COURSE FOR S. A. T. C.

ARMY, NAVY, MARINES

The following subjects are required of all entering men unless excused by the registering officer:

	—CLOCK HOURS PER WEEK—		
	<i>Class</i>	<i>Study</i>	<i>Total</i>
War Aims	3	6	9
War Mathematics—			
Algebra, Geometry, Trigonometry . .	3	6	9
War French, or			
War German*	3	5	8
†Military Law (Army and Marines) . . . }	3	1	4
Naval Law (Navy) }			
For four weeks.			
†Hygiene and Sanitation	3	1	4
For four weeks.			
†War Physics (Explosives and Ballistics) .	3	1	4
Military Topography and Map-Making			
(Army and Marines)	3	0	3
Elements of Navigation (Navy)	5	0	5
†Elective Course . . . . .		..	9
Military, Naval or Marine Training . . . . .		..	11
(Required of all.)			

* Prerequisite, 2 years of High School German or an equivalent.

† These three courses are to be taken one at a time.

‡ This elective should be the beginning of the preparation for the particular arm of the service which the student desires to enter.

ELECTIVE COURSES

An entering man will take one elective, and, if excused from some of the above fundamental courses, will take other elective courses.

The elective courses in each group are arranged in the order of their importance.

1. *Line Officers.*

Any of the electives.

2. *Aviation.*

Physics 1S. Prerequisite, H. S. Physics.

3. *Artillery, Naval Ordnance.*

Physics 97S. Prerequisite, H. S. Physics and Trigonometry.
Mathematics 61S (Calculus). Prerequisite, 1 year College Mathematics.

Chemistry 52S (Chemistry of Explosives). Prerequisite, 1 year College Chemistry.

Physics 116S (Electricity). Prerequisite, Physics 98S.

Physics 139S (Ordnance and Gunnery). Prerequisite, Mathematics 61S and Physics 116S.

4. *Ordnance.*

See electives for Engineers and Chemists.

5. *Chemists.*(a) *Chemical War Service.*

Chemistry 1S.

Chemistry 3S (Qualitative). Prerequisite, Chemistry 1S.

Chemistry 101S (Quantitative). Prerequisite, Chemistry 3S.

Chemistry 31S (Organic). Prerequisite, Chemistry 1S.

For special technical courses consult the head of the department.

(b) *Chemists and Chemical Engineers.*

See (a) above and consult the head of department.

6. *Engineers.*(a) *Freshmen.*

C. E. 11S (Surveying, Drawing, Engineering Problems).

E. E. 1S (Radio-Electricity).

E. E. 31S (Telephone).

M. E. 1S (Elements of Steam Engines).

(b) *Sophomores.**E. E. and M. E.*

Math. 61S. Prerequisite, 1 year of College Math.
 Physics 97S. Prerequisite, H. S. Physics and Trig.
 Physics 98 S. Prerequisite, Physics 97S.
 M. E. 90S (Machine Design). Prerequisite, C. E. 11S.

C. E.

Math. 61S.
 Physics 97S.
 C. E. 22S (Railroads).

(c) *Juniors.**M. E. and E. E.*

C. E. 131S. Prerequisites, C. E. 11S and Math. 61S.
 E. E. 101S (Direct Current Machinery). Prerequisites, Physics 98S and Math. 61S.
 E. E. 120S (Alternating Current Machinery). Prerequisite, E. E. 101S.
 M. E. 199S (Gas Engines). Prerequisites, Physics 97S, M. E. 1S.
 M. E. 183S (Fuel Economy and Thermodynamics). Prerequisites, Physics 98S, M. E. 1S.

C. E.

Physics 98S. Prerequisite, Physics 97S.
 C. E. 131S. Prerequisites, C. E. 11S and Math. 61S.
 For other electives consult the head of the department.

(d) *Seniors.**E. E.*

E. E. 180S (Adv. Radio). Prerequisite, Physics 98S, Math. 61S, E. E. 120S.

M. E. Consult the head of the department.

C. E.

C. E. 184S (Frame Structures). Prerequisite, C. E. 131S.

For all senior electives consult the heads of the respective departments.

7. *Medical, Hospital, Sanitary Corps.*

Bacteriology 103. Prerequisites, 1 year each of Chemistry and Biology.

Bacteriology 110. Prerequisite, Bact. 103.

Pharmacy 1S.

Pharmacy 18S. Prerequisite, Pharm. 1S.

Pharmacy 5S. Prerequisite, 1 year of Chemistry.

8. Quartermaster, Paymaster.

Economics 11S (Elements of Accounting).
Economics 59S (Statistics and Transportation).
Economics 1S (Business Correspondence).

9. Officers' Material (Navy).**(a) Deck Officers.**

Astronomy 2S (Advanced Navigation). Prerequisite, Elements of Navigation.

See electives under Artillery and Naval Ordnance.

(b) Engineering.

Physics 97S, 98S. Prerequisites, H. S. Physics and Trig. Mathematics 61S (Calculus). Prerequisite, 1 year of College Math.

M. E. 1S (Elements of Steam Engines).

E. E. 101S (Direct Current Machinery). Prerequisites, Physics 98S and Math. 61S.

E. E. 120S (Alternating Current Machinery). Prerequisite, E. E. 101S.

M. E. 199S (Gas Engines). Prerequisite, Physics 97S, M. E. 1S.

M. E. 183S (Fuel Economy—Thermodynamics). Prerequisites, Physics 98S, M. E. 1S.

M. E. 90S (Machine Design). Prerequisite, C. E. 11S.

TIME SCHEDULE FOR ELECTIVES

ABBREVIATIONS USED IN TIME SCHEDULE

The following are the abbreviations used for buildings: B.—Bagley Hall; B.S.—Book Store Building; C.—Commerce Hall; D.—Denny Hall; E.—Engineering; F.—Forestry; H.E.—Home Economics Hall; L.—Library; M.H.—Meany Hall; S.—Science.

Course	Section	Time	Room
Astronomy—			
Astron. 2S			
Bacteriology—			
Gen. Bact. 103		M., W., F., 11.....	S. 208
	Lab.....	M. or W. or F., 2-5.....	S. 305
Bact. 110.....		T., 11.....	S. 208
	Lab.....	T., Th., 8-11.....	S. 305
Chemistry—			
Gen. Chem. 1S		M., W., F., 11.....	B.L.H.
	Lab.....	M. or W. or F., 2-5.....	B.
Qual. Chem. 3S		T., Th., S., 11.....	B.L.H.
	Lab.....	M. or W. or F., 2-5.....	B.
Quant. Chem. 101S		T., Th., 11.....	B. 301
	Lab., 2 per..	M., W., F., 2-5.....	B.
Organic Chem. 31S		M., W., F., 11.....	B. 301
	Lab., 2 per..	M., W., F., 2-5.....	B.
Chem. of Explosives 52S..			
Economics—			
Econ. 1S		T., Th., S., 11.....	C. 217
Econ. 11S		M., W., F., 11.....	C. 217
Econ. 59S		M., T., W., Th., F., S., 11	C. 307
Engineering—			
C. E. 11S	1	M., W., F., 11.....	F. 103
	2	T., Th., S., 11.....	F. 103
	Lab. a.....	W., 2-5.....	F. 200
	b.....	F., 2-5.....	F. 200
	c.....	M., 2-5.....	F. 200
	d.....	T., 8-11.....	F. 200
	e.....	Th., 8-11.....	F. 200
	f.....	S., 8-11.....	F. 200
	g.....	M., 2-5.....	E. 308
	h.....	S., 8-11.....	E. 308
C. E. 22S		M., W., F., 10.....	E. 304
	Lab.....	T., Th., 8-11.....	E. 303
C. E. 131S		T., 11.....	E. 303
	Lab.....	M., W., 2-5.....	E. 303
C. E. 134S		W., 11.....	E. 307
	Lab.....	T., Th., 8-11.....	E. 307
E. E. 1S	1.....	M., W., 11.....	E. 317
	2	T., Th., 11.....	E. 317
	Lab. 1	T., 8-11.....	E. 317
	2	Th., 8-11.....	E. 317
E. E. 31S	1	M., F., 11.....	E. 309
	2	W., S., 11.....	E. 309
	Lab. 1.....	W., 2-5.....	E. 317
	2	M., 2-5.....	E. 317
E. E. 101S		M., T., W., Th., F., 8...	E. 313
	Lab.....	T., Th., 9-12.....	E. 201
E. E. 120S		M., T., W., Th., F., 11...	E. 313
	Lab.....	T., Th., 8-11.....	E. 201
E. E. 180S		M., T., W., Th., F., 11...	E. 304
M. E. 1S	Lab. to be ar.		
	1	M., W., F., 11.....	E. 310
	2	M., W., F., 11.....	E. 301
	Lab. 1.....	M., 8-11.....	E. 226
	2.....	S., 8-11.....	E. 226
	3.....	F., 2-5.....	E. 226
	4.....	W., 2-5.....	E. 226
M. E. 90S		S., 11.....	E. 306
	Lab.....	M., W., 2-5.....	E. 307
M. E. 133S		M., T., W., Th., F., 8...	E. 318
M. E. 199S		M., W., F., 9.....	E. 320
	Lab.....	M., W., 2-5.....	E. 313
Mathematics—			
Math. 61S		M., T., W., Th., F., 8...	S. 207

STUDENTS' ARMY TRAINING CORPS

9

<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
Pharmacy—			
Pharm. 1S		M., W., F., 11.....	B. 307
	Lab.....	M. or W. or F., 2-5....	B.
Pharm. 5S		M., 11.....	B. 303
	Lab.....	M. or W., 2-5.....	B.
Pharm. 13S		T., Th., S., 11.....	B. 307
	Lab.....	T., Th., 8-11.....	B. 307
Pharm. 105S		T., 11.....	B. 303
	Lab.....	M., W., 2-5.....	B.
Physics—			
		D	
Physics 1S		M., W., F., 11.....	D. 127
	Lab.....	M. or W. or F., 2-5....	D. 107
Physics 97S		T., Th., S., 11.....	D. 127
	Lab.....	M. or W. or F., 2-5....	D. 107
		or M., 8-11.....	D. 107
Physics 116S		M., W., F., 8.....	D. 127
	Lab.....	M., 2-5.....	D. 105
Physics 139S		M., T., W., Th., F., 1...	D. 105

TIME SCHEDULE FOR REQUIRED COURSES

ARMY AND MARINES

Co.	Course	Section	Time	Room
A	War Aims		M., W., F., 8.....	M.H.
	Military Law		M., W., F., 9.....	M.H.
	French	1.....	T., Th., S., 10.....	D. 305
		2.....	T., Th., S., 10.....	D. 309
	Mathematics	1.....	T., Th., S., 8.....	S. 106
		2.....	T., Th., S., 8.....	S. 110
		3.....	T., Th., S., 8.....	E. 304
		4.....	T., Th., S., 8.....	E. 306
	Topography	1.....	M., 2-5.....	F. 103
		2.....	M., 2-5.....	F. 103
	Military Training		M., W., F., 1.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M	H	L			D	T	T	T
T	M		F		D	D	D	D
W	H	L			D			
Th	M		F		D	D	D	D
F	H	L			D			
S	M		F					

Co.	Course	Section	Time	Room
B	War Aims		M., W., F., 8.....	M.H.
	Military Law		M., W., F., 9.....	M.H.
	French	1	T., Th., S., 10.....	D. 306
		2	T., Th., S., 10.....	D. 310
	Mathematics	1	T., Th., S., 8.....	D. 125
		2	T., Th., S., 8.....	D. 126
		3	T., Th., S., 8.....	D. 317
		4	T., Th., S., 8.....	D. 318
	Topography	1	M., 2-5.....	F. 103
		2	M., 2-5.....	F. 103
	Military Training		M., W., F., 1.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M	H	L			D	T	T	T
T	M		F		D	D	D	D
W	H	L			D			
Th	M		F		D	D	D	D
F	H	L			D			
S	M		F					

STUDENTS' ARMY TRAINING CORPS

<i>Co.</i>	<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
C	War Aims		M., W., F., 8.....	M.H.
	Hygiene		M., W., F., 9.....	D. 320
	French	1	M., W., F., 10.....	D. 305
		2	M., W., F., 10.....	D. 309
	Mathematics	1	T., Th., S., 10.....	S. 106
		2	T., Th., S., 10.....	S. 110
		3	T., Th., S., 10.....	E. 304
		4	T., Th., S., 10.....	E. 306
	Topography	1	W., 2-5.....	F. 103
		2	W., 2-5.....	F. 103
	Military Training		M., W., F., 1.....	F. 103
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M	H	Hy	F		D			
T			M		D	D	D	D
W	H	Hy	F		D	T	T	T
Th			M		D	D	D	D
F	H	Hy	F		D			
S			M					

<i>Co.</i>	<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
D	War Aims		T., Th., S., 8.....	M.H.
	Hygiene		M., W., F., 9.....	D. 320
	French	1	M., W., F., 10.....	D. 306
		2	M., W., F., 10.....	D. 310
	Mathematics	1	T., Th., S., 10.....	D. 125
		2	T., Th., S., 10.....	D. 126
		3	T., Th., S., 10.....	D. 317
		4	T., Th., S., 10.....	D. 318
	Topography	1	W., 2-5.....	F. 103
		2	W., 2-5.....	F. 103
	Military Training		M., W., F., 1.....	F. 103
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M		Hy	F		D			
T	H		M		D	D	D	D
W		Hy	F		D	T	T	T
Th	H		M		D	D	D	D
F		Hy	F		D			
S	H		M					

Co.	Course	Section	Time	Room
E	War Aims		T., Th., S., 8	M.H.
	War Physics	1	M., W., F., 9	D. 127
	French	1	T., Th., S., 9	D. 305
		2	T., Th., S., 9	D. 309
	Mathematics	1	M., W., F., 8	S. 106
		2	M., W., F., 8	S. 110
		3	M., W., F., 8	E. 304
		4	M., W., F., 8	E. 306
	Topography	1	F., 2-5	F. 103
		2	F., 2-5	F. 103
	Military Training		M., W., F., 1	
			T., Th., 1-5	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M	M	P			D			
T	H	F			D	D	D	D
W	M	P			D			
Th	H	F			D	D	D	D
F	M	P			D	T	T	T
S	H	F						

Co.	Course	Section	Time	Room
F	War Aims		T., Th., S., 8	M.H.
	War Physics		M., W., F., 9	D. 209
	French	1	T., Th., S., 9	D. 306
		2	T., Th., S., 9	D. 310
	Mathematics	1	M., W., F., 8	D. 125
		2	M., W., F., 8	D. 126
		3	M., W., F., 8	D. 317
		4	M., W., F., 8	D. 318
	Topography	1	F., 2-5	F. 103
		2	F., 2-5	F. 103
	Military Training		M., W., F., 1	
			T., Th., 1-5	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M	M	P			D			
T	H	F			D	D	D	D
W	M	P			D			
Th	H	F			D	D	D	D
F	M	P			D	T	T	T
S	H	F						

STUDENTS' ARMY TRAINING CORPS

<i>Co.</i>	<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
K—	War Aims		M., W., F., 3.....	M.H.
	War Physics		M., W., F., 4.....	D. 127
	French	1	M., W., F., 9.....	D. 305
		2	M., W., F., 9.....	D. 309
	Mathematics	1	M., W., F., 1.....	S. 106
		2	M., W., F., 1.....	S. 110
		3	M., W., F., 1.....	E. 304
		4	M., W., F., 1.....	E. 306
	Topography	1	S., 8-11	F. 103
		2	S., 8-11	F. 103
	Military Training		M., W., F., 10.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M		F	D		M		H	P
T					D	D	D	D
W		F	D		M		H	P
Th					D	D	D	D
F		F	D		M		H	P
S	T	T	T					

MARINES

<i>Co.</i>	<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
L—	War Aims		M., W., F., 3.....	M.H.
	War Physics		M., W., F., 4.....	D. 209
	French	1	M., W., F., 9.....	D. 306
		2	M., W., F., 9.....	D. 310
	Mathematics	1	M., W., F., 1.....	D. 125
		2	M., W., F., 1.....	D. 126
		3	M., W., F., 1.....	D. 317
		4	M., W., F., 1.....	D. 318
	Topography	1	S., 8-11	F. 103
		2	S., 8-11	F. 103
	Military Training		M., W., F., 10.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M		F	D		M		H	P
T					D	D	D	D
W		F	D		M		H	P
Th					D	D	D	D
F		F	D		M		H	P
S	T	T	T					

<i>Co.</i>	<i>Courses</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
M	War Aims		M., W., F., 3.....	M.H.
	Military Law		M., W., F., 4.....	B.L.H.
	French	1	M., W., F., 9.....	D. 225
	Mathematics	1	M., W., F., 1.....	D. 305
		2	M., W., F., 1.....	D. 309
	Topography	1	S., 8-11	D. 209
	Military Training		M., W., F., 10.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M		F	D		M		H	L
T					D	D	D	D
W		F	D		M		H	L
Th					D	D	D	D
F		F	D		M		H	L
S	T	T	T					

NAVY

<i>Co.</i>	<i>Courses</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
1	War Aims		M., W., F., 2.....	M.H.
	Naval Law		T., Th., S., 10.....	M.H.
	French	1	T., Th., S., 8.....	D. 305
		2	T., Th., S., 8.....	D. 309
	Mathematics	1	T., Th., S., 9.....	S. 106
		2	T., Th., S., 9.....	S. 110
		3	T., Th., S., 9.....	E. 304
		4	T., Th., S., 9.....	E. 306
	Navigation	1	M., 8-11	E. 301
		2	M., 8-11	E. 302
			M., 7:30-9:30	E. 301-302
	Naval Training		M., W., F., 1.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M	N	N	N		D	H		
T	F	M	L		D	D	D	D
W					D	H		
Th	F	M	L		D	D	D	D
F					D	H		
S	F	M	L					

STUDENTS' ARMY TRAINING CORPS

Co.	Course	Section	Time	Room
2	War Aims		M., W., F., 2	M.H.
	Naval Law		T., Th., 8-10	M.H.
	French	1	T., Th., S., 8	D. 306
		2	T., Th., S., 8	D. 310
	Mathematics	1	T., Th., S., 9	D. 125
		2	T., Th., S., 9	D. 128
		3	T., Th., S., 9	D. 317
		4	T., Th., S., 9	D. 318
	Navigation	1	M., 8-11	E. 309
		2	M., 8-11	E. 310
			T., 7:30-9:30	E. 309-310
	Naval Training		M., W., F., 1	
			T., Th., 1-5	

Schedule of the required work:

8	9	10	11	1	2	3	4
M	N	N	N	D	H		
T	F	M	L	D	D	D	D
W				D	H		
Th	F	M	L	D	D	D	D
F				D	H		
S	F	M	L				

Co.	Course	Section	Time	Room
3	War Aims		M., W., F., 2	M.H.
	Hygiene		T., Th., S., 10	D. 320
	French	1	M., W., F., 4	D. 305
		2	M., W., F., 4	D. 309
	Mathematics	1	M., W., F., 3	S. 106
		2	M., W., F., 3	S. 110
		3	M., W., F., 3	E. 304
		4	M., W., F., 3	E. 306
	Navigation	1	W., 8-11	E. 301
		2	W., 8-11	E. 302
			W., 7:30-9:30	E. 301-302
	Naval Training		M., W., F., 1	
			T., Th., 1-5	

Schedule of the required work:

8	9	10	11	1	2	3	4
M				D	H	M	F
T			Hy	D	D	D	D
W	N	N	N	D	H	M	F
Th			Hy	D	D	D	D
F				D	H	M	F
S			Hy				

Co.	Course	Section	Time	Room
4	War Aims		T., Th., S., 9	M.H.
	Hygiene		T., Th., S., 10	D. 320
	French	1	M., W., F., 4	D. 306
		2	M., W., F., 4	D. 310
	Mathematics	1	M., W., F., 3	D. 125
		2	M., W., F., 3	D. 126
		3	M., W., F., 3	D. 317
		4	M., W., F., 3	D. 318
	Navigation	1	W., 8-11	E. 309
		2	W., 8-11	E. 310
			Th., 7:30-9:30	E. 309-310
	Naval Training		M., W., F., 1	
			T., Th., 1-5	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M					D		M	F
T		H	Hy		D	D	D	D
W	N	N	N		D		M	F
Th		H	Hy		D	D	D	D
F					D		M	F
S		H	Hy					

Co.	Course	Section	Time	Room
5	War Aims		T., Th., S., 9	M.H.
	War Physics		T., Th., S., 10	D. 127
	French	1	M., W., F., 2	D. 305
		2	M., W., F., 2	D. 309
	Mathematics	1	M., W., F., 4	S. 106
		2	M., W., F., 4	S. 110
		3	M., W., F., 4	E. 304
		4	M., W., F., 4	E. 306
	Navigation	1	T., 8-11	E. 301
		2	F., 8-11	E. 302
			F., 7:30-9:30	E. 301-302
	Naval Training		M., W., F., 1	
			T., Th., 1-5	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M					D	F		M
T		H	P		D	D	D	D
W					D	F		M
Th		H	P		D	D	D	D
F	N	N	N		D	F		M
S		H	P					

<i>Co.</i>	<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
6	War Aims		T., Th., S., 9.....	M.H.
	War Physics		T., Th., S., 10.....	D. 209
	French	1	M., W., F., 2.....	D. 306
		2	M., W., F., 2.....	D. 310
	Mathematics	1	M., W., F., 4.....	D. 125
		2	M., W., F., 4.....	D. 126
		3	M., W., F., 4.....	D. 317
		4	M., W., F., 4.....	D. 318
	Navigation	1	F., 8-11	E. 309
			M., 7:30-9:30	E. 309
		2	F., 8-11	E. 310
			T., 7:30-9:30	E. 310
	Naval Training		M., W., F., 1.....	
			T., Th., 1-5.....	

Schedule of the required work:

	8	9	10	11	1	2	3	4
M					D	F		M
T		H	P		D	D	D	D
W					D	F		M
Th		H	P		D	D	D	D
F	N	N	N		D	~F		M
S		H	P					

<i>Co.</i>	<i>Course</i>	<i>Section</i>	<i>Time</i>	<i>Room</i>
7	War Aims	1	M., W., F., 8.....	M.H.
		2	T., Th., S., 8.....	M.H.
	Naval Law		M., W., F., 9.....	M.H.
	Hygiene		T., Th., S., 9.....	D. 320
	Physics		T., Th., S., 9.....	D. 209
	French	1	M., W., F., 8.....	D. 225
		2	T., Th., S., 8.....	D. 225
	Mathematics	1	T., Th., S., 10.....	D. 108
		2	M., W., F., 10.....	D. 125
		3	T., Th., S., 10.....	D. 221
		4	M., W., F., 10.....	D. 126
	Navigation	1	M., 2-5	E. 301
			W., 7:30-9:30	E. 309
		2	W., 2-5	E. 301
			Th., 7:30-9:30	E. 302
	Naval Training		M., W., F., 1.....	
			T., Th., 1-5.....	

For this company the sections are irregular. See above.

BULLETIN

UNIVERSITY OF WASHINGTON

Series I

SEPTEMBER, 1918

No. 119—PART 15

Time Schedule First Quarter 1918-1919



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EXPLANATIONS

The following are the abbreviations used for buildings:

Ar.—Armory	F.—Forestry Hall
As.—Astronomy Building	Gym.—Gymnasium
Anat.—Anatomy Building	H.E.—Home Economics Hall
B.—Bagley Hall	Ll.—Library
B.S.—Book Store Building	M.H.—Meany Hall
C.—Commerce Hall.	M.—Mines Hall
D.—Denny Hall	S.—Science Hall
E.—Engineering Hall	Shop—Shop Building

ANATOMY

No. Sec.	Subject	Time	Room	Instructor
101 ..	Anatomy	M, W, F, 10.....	S.206	Worcester
		M, W, F, 1-4.....	Anat.	Worcester
104 ..	Topog. Anat.....	M, F, 4.....	S.206	Worcester
		M, F, 1-4.....	Anat.	Worcester
105 ..	Hist. and Embryol.....	M, W, F, 8.....	S.206	Worcester
		T, Th, 1-4.....	S.206	Worcester

BACTERIOLOGY

103 ..	General	M, W, F, 11.....	S.208	Weinzirl
A	Laboratory	M, 2-5	S.305	Weinzirl
B	Laboratory	W, 2-5	S.305	Weinzirl
C	Laboratory	F, 2-5	S.305	Weinzirl
110 ..	Diagnosis	T, 11	S.306	Weinzirl
		T, Th, 8-11.....	S.305	Weinzirl
209 ..	Research	_____	_____	Weinzirl

BOTANY

1 ..	Elementary	M, F, 1.....	S.208	Rigg
... A	Laboratory	M, F, 2-4.....	S.311	Rigg
... B	Laboratory	T, Th, 2-4.....	S.311	Rigg
... C	Laboratory	T, Th, 8-11	S.311	Rigg
8 ..	Ecology	S, 9-5	Field	Rigg
105 ..	Morph. and Evolution	T, Th, 4	S.306	Frye
		T, Th, 1-4.....	S.308	Frye
119 ..	Plant Hist.	_____	_____	Frye
137 ..	Journal Club	_____	_____	Frye
140 ..	Gen. Fungl	T, Th, 8.....	S.307	Hotson
		T, Th, 9-11.....	S.307	Hotson
143 ..	Plant Physiol.	T, Th, 1.....	S.306	Rigg
		T, Th, 2-5.....	S.311	Rigg
200 ..	Pro-seminar	_____	_____	_____
233 ..	Research	_____	_____	_____
250 ..	_____	_____	_____	_____
to	_____	_____	_____	_____
280 ..	Grad. Courses	_____	_____	_____

CHEMISTRY

1 ..	Lecture	M, W, F, 8.....	B.L.H.	Heath
... A	Laboratory	T, Th, 8-11.....	B.	Heath
... B	Laboratory	M, W, 1-4.....	B.	Heath
... C	Laboratory	T, Th, 8-11.....	B.	Heath
... D	Laboratory	T, Th, 1-4.....	B.	Heath
5 ..	General (Women)	M, W, F, 10.....	B.L.H.	Tarter
... A	Laboratory	T, Th, 1-4.....	B.	Tarter
... B	Laboratory	M, F, 1-4.....	B.	Tarter
... C	Laboratory	M, F, 1-4.....	B.	Tarter
... D	Laboratory	T, Th, 1-4.....	B.	Tarter
21 ..	Lecture	M, W, F, 1.....	B.L.H.	Langdon
... A	Laboratory	W, F, 8-11.....	B.	Langdon
... B	Laboratory	M, W, 8-11.....	B.	Langdon
... C	Laboratory	T, Th, 1-4.....	B.	Langdon
... D	Laboratory	T, Th, 1-4.....	B.	Langdon
31 ..	Organic	M, W, F, 8.....	B.301	Dehn
... A	Laboratory	M, W, 1-4.....	B.	Dehn
... B	Laboratory	T, Th, 1-4.....	B.	Dehn
35 ..	Organic (Women)	T, Th, 9.....	B.301	Dehn
... A	Laboratory	M, F, 1-4.....	B.	Dehn
... B	Laboratory	T, Th, 1-4.....	B.	Dehn
43 ..	Same as 3S.....	_____	_____	_____
103 ..	Same as 101S.....	_____	_____	_____
141 ..	Physiological	T, Th, 8.....	B.303	Dehn
		F, 9	B.303	Dehn
141 ..	Laboratory	M, W, 1-4.....	B.	Dehn
201 ..	Physical Chem.	_____	_____	Tarter
250 ..	Research	_____	_____	_____

TIME SCHEDULE

CIVIL ENGINEERING

No.	Sec.	Subject	Time	Room	Instructor
1	..	Drawing	W, 10	E.308	Harris
			T, Th, 1-4	E.308	Harris
11S	1	Surveying	M, W, F, 11	F.103	—
..	2	Surveying	T, Th, S, 11	F.103	—
..	A	Laboratory	W, 2-5	F.200	—
..	B	Laboratory	F, 2-5	F.200	—
..	C	Laboratory	M, 2-5	F.200	—
..	D	Laboratory	T, 8-11	F.200	—
..	E	Laboratory	Th, 8-11	F.200	—
..	F	Laboratory	S, 8-11	F.200	—
..	G	Laboratory	M, 2-5	E.308	—
..	H	Laboratory	S, 8-11	E.308	—
22S	..	Railroads	M, W, F, 10	E.304	Hayden
			T, Th, 8-11	E.303	Hayden
131S	..	Mechanics	T, 11	E.303	White
			M, W, 2-5	E.303	White
134S	..	Structural	W, 11	E.307	White
			T, Th, 8-11	E.307	White
147	..	Hydraulics	M, W, F, 9	E.321	Harris
			T, Th, 1-4	E.321	Harris

CLASSICAL LANGUAGES

Greek

1	..	Elementary	M, T, W, Th, F, 8	D.311	Sidey
4	..	Homer, Herodotus	M, W, F, 8	D.206	Densmore
11	..	Greek Civilization	M, T, W, Th, F, 10	D.212	Densmore
13	..	Greek-Roman Literature	M, T, W, Th, F, 9	D.212	Sidey
101	..	Periclean Age	M, W, F, 9	D.206	Densmore
104	..	Greek Poetry	T, Th, 9	D.206	Densmore
201	..	Plato	M, W, F, 11	D.206	Densmore

Latin

1	..	Intermediate	M, W, F, 2	D.311	Clark
4	..	Ovid	M, W, F, 9	D.311	Thomson
7	..	Sight Translation	T, Th, 9	D.311	Clark
11	..	Roman Civilization	M, T, W, Th, F, 1	D.212	Clark
14	..	Roman Art	T, 11	D.212	Sidey
50	..	Horace	M, W, F, 10	D.311	Thomson
100	..	Cicero's Letters	T, Th, 11	D.311	Clark
103	..	Teachers' Course	M, W, F, 11	D.311	Clark
106	..	Prose Composition	T, Th, 2	D.311	Clark
201	..	Mediaeval Latin	M, W, 11	—	Sidey

ECONOMICS

1	..	Elements	M, T, W, Th, F, 9	C.217	Miller
102	..	Typewriting	—	C.308	Thoma
104	..	Shorthand	—	C.308	Thoma
142	..	Econ. and Business	M, W, F, 11	C.106	Miller
145	..	Women in Industry	M, T, W, Th, F, 10	C.106	McMahon

EDUCATION

1	..	Introduction to Education	T, Th, 9	H.E.210	Freeland
99	..	Prin. of Education	M, T, W, Th, F, 8	H.E.210	Bolton
109	1A	Educ. Sociology	M, W, F, 9	H.E.210	Ayer
109	1B	Educ. Sociology	M, W, F, 1	H.E.210	Ayer
119	..	High School Curriculum	M, W, F, 9	H.E.314	Koos
151	..	Education Sociology II	M, W, F, 2	H.E.210	Ayer
154	..	Junior High School	M, W, F, 2	H.E.212	Koos
155	..	Childhood and Adolescence	M, W, F, 11	H.E.210	Bolton
157	..	Methods of Teaching	M, W, F, 8	H.E.314	Woody
165	..	Practice Teaching	W, 4	H.E.210	Freeland
171	..	Exp. Education	M, W, F, 1-3	H.E.314	Woody
191	..	Administration (State & Co.)	M, W, F, 1	H.E.212	Koos
201	..	Adolescence	T, Th, 11	H.E.210	Bolton
231	..	Adv. Educ. Psychology	S, 10-12	H.E.314	Woody
241	..	Educ. Statistics	Th, 4-6	H.E.314	Woody
281	..	Seminar on Play	M, 4-6	H.E.210	Freeland
291	..	Seminar (Rehab. of Soldiers)	Th, 4-6	H.E.210	Ayer
298	..	Research	—	—	—

ELECTRICAL ENGINEERING

1S	1	Radio	M, W, 11	E.317	—
..	2	Radio	T, Th, 11	E.317	—
..	1	Laboratory	T, 8-11	E.317	—
..	2	Laboratory	Th, 8-11	E.317	—
31S	1	Telephones	M, F, 11	E.309	Shuck
..	2	Telephones	W, S, 11	E.309	Shuck

ELECTRICAL ENGINEERING—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
...	1	Laboratory	W, 2-5	E.317	Shuck
...	2	Laboratory	M, 2-5	E.317	Shuck
101S	..	Direct Currents	M, T, W, Th, F, 8	E.313	Shuck
120S	..	Alternating Currents	T, Th, 9-12	E.201	Shuck
180S	..	Adv. Radio	M, T, W, Th, F, 11	E.313	Magnusson
...	..	Laboratory to be arranged.	T, Th, 8-11	E.201	Curtis

ENGLISH

1	A	Fresh. Comp.	M, T, W, Th, F, 8	D.226	Haggett
2	B	Fresh. Comp.	M, T, W, Th, F, 8	D.213	Gregg
1	C	Fresh. Comp.	M, T, W, Th, F, 9	D.213	Haggett
1	D	Fresh. Comp.	M, T, W, Th, F, 9	D.226	Milliman
1	E	Fresh. Comp.	M, T, W, Th, F, 1	D.226	Cox
1	F	Fresh. Comp.	M, T, W, Th, F, 2	D.225	Kelsey
1	G	Fresh. Comp.	M, T, W, Th, F, 2	D.226	Stelter
2	H	Fresh. Comp.	M, T, W, Th, F, 3	D.226	Ernst
1	I	Fresh. Comp.	M, T, W, Th, F, 3	D.225	Kelsey
3	A	Fresh. Comp.	M, W, F, 8	D.221	Parrington
3	B	Fresh. Comp.	M, W, F, 1	D.225	Ernst
51	A	Advanced Comp.	M, W, F, 11	D.221	Milliman
51	B	Advanced Comp.	M, W, F, 10	D.221	Fadelford
54	..	Versification	W, 1	D.221	Parrington
73	A	Contemporary Lit.	M, W, F, 10	D.226	Gregg
73	B	Contemporary Lit.	M, W, F, 2	D.221	Ernst
101	..	See Journalism			
104	..	Contemp. Lit. (Jr. and Sr.)	M, W, F, 2	D.230	Cox
133	..	Main Tendencies	M, W, F, 10	D.225	Parrington
136	..	Novel	M, W, F, 8	D.230	Stelter
141	..	Social Ideals	M, W, F, 9	D.221	Gregg
161	..	American Lit.	M, W, F, 11	D.225	Parrington
165	..	Great American Writers	M, W, F, 10	D.230	Milliman
174	..	Georgian Poets	M, W, F, 9	D.230	Fadelford
183	A	General Literature	—	D.224	Johanson
183	B	General Literature	M, W, F, 11	D.226	Stelter
188	..	Teachers' Course	T, 4-6	D.318	Garrett
191	..	Senior Conference	—	D.224	Johanson
221	..	Pro-Seminar, Mod. Eng. Lit.	T, 6:30-8:30 p. m.	Li	Fadelford
231	..	Pro-Seminar, Comparative Lit.	Th, 2-5	D.316	Cox
241	..	Pro-Seminar, Chaucer	T, 7-9 p. m.	D.318	Garrett

FINE ARTS

I—Music

1	..	Fundamentals	T, Th, 10	M.H.119	Van Ogle
4	..	History	M, W, 10	M.H.119	Glen
7	A	Sight Singing	M, W, 9	M.H.110	Dickey
..	B	Sight Singing	T, Th, 9	M.H.110	Dickey
10	..	Choral Study	W, 7:30	M.H.110	Glen
14	..	Ear Trg. and Mel. Writ.	M, W, 10	M.H.110	Dickey
17	..	Choral Study (Men)	—	M.H.110	Glen
18	..	Applied Music	—	—	—
19	..	University Orchestra	T, 7:30	M.H.110	Glen
22	..	University Band	—	—	Adams
25	..	Chamber Music	Th, 7:30	M.H.111	Rosen
28	..	Ensemble Singing	M, 3	M.H.119	—
31	..	Harmony	T, Th, 9	M.H.102	—
34	..	School Music	M, W, 11	M.H.110	Dickey
101	..	Adv. Harmony	M, Th, 10	M.H.102	—
104	..	Adv. Hist. of Music	T, Th, 9	M.H.119	Van Ogle
107	..	Counterpoint	T, F, 10	M.H.102	—
110	..	Analysis Form	M, F, 11	M.H.102	—
113	..	Music Education	T, Th, 10	M.H.110	Dickey
116	..	Composition	M, W, 10-12	M.H.102	—
119	..	Music Application	T, Th, 2	M.H.119	Van Ogle
122	..	Music Education and Super.	F, 1-3	M.H.110	Dickey

II—Architecture

1	..	History and Elements	M, W, 1	D.209	Gould
		Note.—For major courses consult Professor Gould.	W, 2-4	As.	Gould

III—Painting and Design

5	..	Freehand Drawing	M, W, F, 10-12	B.S.	Wolf
9	..	Art Structure	M, T, Th, F, 1-3	B.S.	Edens
16	..	Art Appreciation	T, 4	D.212	Wolf
56	..	Illustration	T, Th, 9-12	B.S.	Wolf

TIME SCHEDULE

FINE ARTS—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
103	..	Art Structure	M, W, F, 10-12	B.S.	Edens
107	..	Portrait	—	—	Wolf
157	..	Art Structure	M, W, F, 1-4	B.S.	Edens
160	..	Portrait and Life	—	—	Wolf
163	..	Mural Decorations	T, Th, 8	B.S.	Wolf
			M, W, F, 8-10	B.S.	Wolf
169	..	Textile and Costume Drawing.	T, Th, 8-10	B.S.	Edens

FORESTRY

Note.—For advanced course consult the Dean of the College.

GEOLOGY

1	..	General	M, W, F, 10	S.108	Weaver
			T, Th, 10-12	S.113	Weaver
11	..	Meteorology	M, W, F, 9	S.108	Saunders
			T, Th, 8-10	S.113	Saunders
31	..	Gen. Paleontology	M, W, F, 1	S.108	Weaver
		Laboratory (optional)	M, W, 2-4	S.113	Weaver
107	..	Geol. of Washington	M, W, F, 9	S.107	Landes
123	..	Optical Mineralogy	M, W, F, 8	S.108	Weaver
127	..	Economic Geol.	M, W, F, 11	S.108	Landes
137	..	Adv. Hist. Geol.	T, Th, 1	S.108	Weaver

GERMAN

1	..	First Year	M, T, W, Th, F, 10	H.E.214	Eckelman
5	..	Second Year	M, T, W, Th, F, 1	H.E.214	Eckelman
6	..	Adv. Second Year	M, W, F, 8	H.E.214	Meany
103	..	Recent Writers	M, W, F, 9	H.E.214	Eckelman
110	..	Adv. Comp.	T, Th, 9	H.E.214	Boetzkes
150	..	Lessing	M, W, F, 10	H.E.203	Boetzkes
210	..	Nineteenth Century Lit.	Th, 3-5	H.E.214	Eckelman

HISTORY

1	..	Med. and Mod. Eur.	M, T, W, Th, F, 11	D.320	Scholz
5	..	Eng. Pol.	M, T, W, Th, F, 10	D.205	Richardson
57	..	U. S. Hist.	M, T, W, Th, F, 11	D.209	McMahon
59	..	Makers of Nation	T, Th, 10	D.203	Meany
117	..	Mediterranean World	T, Th, 10	D.213	Scholz
147	..	Civil War Period.	M, W, F, 10	D.213	McMahon
153	..	Spain in America.	M, W, F, 10	D.203	Meany
157	..	American Diplomacy	T, Th, 9	D.203	Meany
163	..	Northwestern History	T, Th, 11	D.203	Meany
227	..	Seminar State History	W, 4-6	D.203	Meany

HOME ECONOMICS

1	..	General	M, W, F, 1-3	H.E.211	Dressler
4	..	Food Preparation	M, W, F, 8-10	H.E.211	Dressler
5	..	Selection and Preparation.	T, Th, 10	H.E.203	Dressler
			M, W, F, 10-12	H.E.211	Dressler
61	..	Clothing	W, 1	H.E.307	Connelly
			M, T, Th, F, 1-3	H.E.307	Connelly
62	..	Clothing	W, 1	H.E.307	Connelly
			M, T, Th, F, 1-3	H.E.307	Connelly
107	..	Dietetics	F, 9	H.E.218	Raitt
			M, W, F, 10-12	H.E.218	Raitt
108	..	Home Nursing	M, W, F, 2-4	H.E.218	—
109	..	Food Problems	M, W, F, 2-4	H.E.217	Raitt
124	..	Practice Work I.	—	—	Clarke
135	..	Millinery	M, W, F, 8-10	H.E.307	Connelly
27	..	Home Economics	M, W, 9	H.E.203	Small
			Th, 4	H.E.203	Small

JOURNALISM

101	..	Elements	M, W, F, 9	C.106	Goss
104	..	Mechanics	M, 1	C.124	Kennedy
			W, 1-3	C.124	Kennedy
107	..	General Adver.	M, W, F, 8	C.106	Russell
110	..	Current Events	T, 10	C.307	—
151	..	Editing Adv. Newswriting.	M, W, F, 10	C.110	Goss
160	..	Short Story	M, W, F, 2	C.106	Edgington
163	..	Bus. Office	T, 8	C.124	Kennedy
			Th, 8-11	C.124	Kennedy
166	..	Adv. Adver. and Pub.	T, Th, 9	C.110	Russell

UNIVERSITY OF WASHINGTON

JOURNALISM—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
169	..	Circulation Management	M, W, F, 9.....	C.110	Russell
175	..	Senior Conferences	—	—	—

LIBRARY ECONOMY

101	..	Order and Accession	T, Th, 10.....	Li.3	Ashley
102	..	Classification	M, W, F, 10.....	Li.3	Blodgett
207	..	Reference	T, Th, 8.....	Li.3	Smith
211	..	Practice	—	—	Henry
214	..	Printing and Binding	M, 8.....	Li.3	Henry
215	..	Organ. and Extens.	W, 8.....	Li.3	Henry
217	..	Book Selection	F, 8.....	Li.3	Ashley

MATHEMATICS

4	..	Trigonometry	M, T, W, Th, F, 9. S.207	—	—
11	..	Investments	M, T, W, Th, F, 11. S.207	—	—
61S	..	Calculus	M, T, W, Th, F, 8. S.207	—	—

MECHANICAL ENGINEERING

1S	1	Steam Eng.	M, W, F, 11.....	E.310	—
..	2	Steam Eng.	M, W, F, 11.....	E.301	—
..	1	Laboratory	M, 8-11.....	E.226	Kane
..	2	Laboratory	S, 8-11.....	E.226	Kane
..	3	Laboratory	F, 2-5.....	E.226	Kane
..	4	Laboratory	W, 2-5.....	E.226	Kane
90S	..	Machine Design	F, 10.....	E.307	Winslow
..	..	..	M, W, 2-5.....	E.307	Winslow
183S	..	Thermo-dynamics	M, T, W, Th, F, 8. E.318	—	Eastwood
199S	..	Gas Engines	M, W, F, 9.....	E.320	Wilson
..	M, W, 2-5.....	E.313	Wilson

MILITARY SCIENCE AND TACTICS

1	..	Military Training	M, T, W, Th, F, 11.A.	—	Patten
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MINING ENGINEERING

Note.—Consult the Dean of the College.

ORIENTAL LANGUAGES AND LITERATURE

1	..	History of China	M, W, F, 9.....	D.312	Gowen
4	..	Literature of India	M, T, W, Th, F, 10.D.312	—	Gowen
14	..	Semitic Literature	W, 5.....	D.312	Gowen
20	..	Oriental Institutions: Japan..	T, Th, 9.....	D.312	Gowen
105	..	Sanskrit	—	—	Gowen
106	..	Hebrew or Arabic	—	—	Gowen
114	..	Hist. of Religion: Egypt and Babylon	M, W, F, 8.....	D.312	Gowen
8	..	Elementary Russian	—	D.312	Simeon
109	..	Advanced Russian	—	D.312	Simeon
10	..	Elementary Chinese	—	D.312	Skinner
110	..	Advanced Chinese	—	D.312	Skinner

PHARMACY

1	..	Pharmacy	M, W, F, 11.....	B.307	Linton
..	..	..	M, W, 1-4.....	B.	Linton
5	..	Pharmacy	M, W, 11.....	B.303	Johnson
..	..	..	M, T, W, 1-4.....	B.	Johnson
13	..	Pharmacy	T, Th, S, 11.....	B.307	Linton
..	..	..	M, W, 10.....	B.307	Linton
105	..	Pharmacy	T, Th, 11.....	B.303	Johnson
..	..	..	M, T, W, 1-4.....	B.	Johnson

PHILOSOPHY

1	A	Introduction	M, T, W, Th, F, 10.D.215	—	Savery
..	B	Introduction	M, T, W, Th, F, 1.D.213	—	Ducasse
..	C	Introduction	M, T, W, Th, F, 2.D.213	—	Ducasse
101	..	History of Philosophy	M, W, F, 9.....	D.215	Savery
114	..	History of Religion	M, W, F, 8.....	D.312	Gowen
131	..	Philosophy of War	M, W, F, 11.....	D.215	Savery

PHYSICAL EDUCATION

Men

1	A	Gymnastics	M, W, F, 11.....	Gym.	Arbuthnot
..	B	Gymnastics	T, Th, S, 11.....	Gym.	Arbuthnot

Unclassified Freshman, Sophomore, Junior and Senior men not taking Military Science must arrange with the department for a recreation period between the hours of 3 and 6, on M, T, W, Th or F.

TIME SCHEDULE

PHYSICAL EDUCATION—(Continued)

Women

No.	Sec.	Subject	Time	Room	Instructor
1	A	Hygiene	Th, 10	S.208	Irwin
...	B	Hygiene	Th, 11	S.208	Irwin
1	A	Gym.	T, Th, 9	Gym.	Merrick
...	B	Gym.	T, Th, 10	Gym.	Merrick
...	C	Gym.	M, W, 11	Gym.	Merrick
...	D	Gym.	M, W, 3	Gym.	Pray
1	E	Mil. Tr.	T, Th, 4	Ar.	Cashion
5	A	Corrective Gym.	T, F, 11	Gym.	Bloom
...	B	Corrective Gym.	M, W, 10	Gym.	Bloom
...	C	Corrective Gym.	T, Th, 10	Gym.	Bloom
...	D	Corrective Gym.	M, Th, 11	Gym.	Bloom
...	E	Corrective Gym.	T, Th, 2	Gym.	Bloom
51	A	Food	T, 11	S.208	Fitzgerald
...	B	Food	Th, 1	C.307	Fitzgerald
51	A	Gym.	M, W, 9	Gym.	Pray
...	B	Gym.	T, Th, 9	Gym.	Merrick
...	C	Military Drill	T, Th, 4	Ar.	Cashion
56	A	Corrective Gym.	T, F, 11	Gym.	Bloom
...	B	Corrective Gym.	M, W, 10	Gym.	Bloom
...	C	Corrective Gym.	T, Th, 10	Gym.	Bloom
...	D	Corrective Gym.	M, Th, 11	Gym.	Bloom
...	E	Corrective Gym.	T, Th, 2	Gym.	Bloom
59	A	Athletics	M, W, 4	Gym.	Pray
...	B	Athletics	T, Th, 10	Gym.	Pray
...	C	Athletics	M, W, 8	Gym.	Harrington
...	D	Athletics	T, F, 11	Gym.	Harrington
...	E	Athletics	M, W, 9	Gym.	Harrington
...	F	Athletics	T, Th, 9	Gym.	Pray
63	..	Dancing	M, W, 10	Gym.	Pray
101	..	Methods	M, W, F, 10	Gym.	Harrington Merrick
			M, W, 2	Gym.	Pray
107	..	Plays and Games	T, Th, F, 4	Gym.	Harrington
117	..	Folk Dancing	T, Th, F, 3	Gym.	Harrington
125	..	Cor. Gym.	M, W, F, 9	Gym.	Bloom
129	..	Cor. Gym. Prac.	T, Th, 9	Gym.	Bloom
			4 hrs. to be arr.	Gym.	Bloom
123	..	Anthropometry	F, 11	Gym.	Merrick

PHYSICS

89	..	Lecture	T, W, Th, 9	D.128	Osborn
...	..	Laboratory	T or Th, 1-5	D.104	Osborn

POLITICAL SCIENCE

1	..	Elements of Government	M, T, W, Th, F, 9	D.218	Smith
50	..	Comparative Government	M, W, F, 10	D.218	—
100	..	Municipal Government	M, W, F, 1	D.218	—
110	..	International Law	M, W, F, 3	D.218	—
150	..	Readings in Political Science	—	—	Smith
153	..	Political Problems	—	—	Smith
200	..	Seminar	—	—	Smith

PSYCHOLOGY

1	..	General	M, T, W, Th, 10	C.217	Wiltbank
...	A	Laboratory	M, 1-3	S.At.	Loring
...	B	Laboratory	M, 3-5	S.At.	Loring
...	C	Laboratory	T, 1-3	S.At.	Loring
...	D	Laboratory	T, 3-5	S.At.	Loring
...	E	Laboratory	W, 1-3	S.At.	Loring
131	..	Child	M, T, W, Th, F, 9	S.At.	Wiltbank
151	..	Undergrad. Research	—	S.At.	—
201	..	Graduate Research	—	S.At.	—

PUBLIC SPEAKING

1	..	Practice Public Speaking	M, T, W, Th, F, 9	D.300	Gorsuch
4	..	Argumentation	M, W, F, 8	D.300	Cockerill
8	..	Dramatic Reading	M, T, W, Th, F, 10	D.300	Gorsuch
105	..	Advanced Reading	T, Th, 11	D.300	Gorsuch

ROMANIC LANGUAGES

I—French

1	A	Elementary	M, T, W, Th, F, 8	H.E.212	Umphrey
...	B	Elementary	M, T, W, Th, F, 9	D.205	Strong
...	C	Elementary	M, T, W, Th, F, 10	H.E.212	Philbrick
...	D	Elementary	M, T, W, Th, F, 11	D.306	—

ROMANIC LANGUAGES—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
...	E	Elementary	M, T, W, Th, F, 1	D.310	—
...	F	Elementary	M, T, W, Th, F, 2	D.303	—
2	A	Elementary	M, T, W, Th, F, 8	D.108	Goggio
...	B	Elementary	M, T, W, Th, F, 3	D.300	Patzner
3	A	Elementary	M, T, W, Th, F, 8	D.205	Philbrick
...	B	Elementary	M, T, W, Th, F, 1	D.300	Ratti
...	C	Elementary	M, T, W, Th, F, 2	D.218	—
4	A	Reading	M, W, F, 9	D.303	Goggio
...	B	Reading (Trans. only)	M, W, F, 11	H.E.212	Strong
...	C	Reading	M, W, F, 1	D.108	—
...	D	Reading	M, W, F, 2	D.108	Patzner
5	..	Reading	M, W, F, 11	D.309	Philbrick
6	..	Reading	M, W, F, 11	D.318	Ratti
7	A	Gram. and Comp.	T, Th, 9	D.303	Goggio
...	B	Gram. and Comp.	T, Th, 2	D.108	Patzner
8	..	Gram. and Comp.	T, Th, 11	D.309	Philbrick
41	..	Phonetics	M, W, F, 11	D.310	Frein
101	A	Comp. and Conv.	M, W, F, 9	D.108	Ratti
...	B	Comp. and Conv.	M, W, F, 2	D.300	Helmlinge
102	..	Comp. and Conv.	M, W, F, 1	D.306	Patzner
104	A	Adv. Reading	T, Th, 3	D.108	Ratti
...	B	Adv. Reading	T, Th, 1	D.306	Patzner
141	..	Drama	M, W, F, 4	D.303	Frein
151	..	Nineteenth Century Lit.	M, W, F, 10	D.318	Ratti
191	..	Teacher	T, Th, 11	D.310	Frein
241	..	Seminar	T, Th, 4	D.303	Frein

II—Spanish

1	A	Elementary	M, T, W, Th, F, 9	H.E.212	Santander
...	B	Elementary	M, T, W, Th, F, 10	D.303	Ober
2	..	Elementary	M, T, W, Th, F, 11	D.303	Ober
3	A	Elementary	M, T, W, Th, F, 8	D.303	Santander
...	B	Elementary	M, T, W, Th, F, 1	D.303	Ober
4	A	Adv. Reading	M, W, F, 8	D.203	Strong
...	B	Adv. Reading	M, W, F, 10	D.108	Umphrey
5	..	Adv. Reading	M, W, F, 9	D.203	Umphrey
7	..	Gram. and Comp.	T, Th, 10	D.225	Santander
9	..	Gram. and Comp.	T, Th, 8	D.221	Strong
112	..	Commercial	M, W, F, 10	D.317	Santander
141	..	Drama	M, W, F, 1	D.311	Umphrey
181	..	Span. Amer. Inst.	T, Th, 11	D.225	Strong

III—Italian

1	..	Elementary	M, T, W, Th, F, 11	D.311	Goggio
115	..	Surv. Ital. Lit.	T, 4	D.305	Goggio

SCANDINAVIAN

1	..	Swedish	M, T, W, Th, F, 9	D.208	Vickner
3	..	Norw.-Danish	M, T, W, Th, F, 10	D.208	Vickner
5	..	Norw.-Danish Lit.	M, W, 1	D.208	Vickner
8	..	Swedish Lit.	T, Th, 1	D.208	Vickner
11	..	Read. Norw.-Swed.	M, 4	D.208	Vickner
14	..	Scan. Culture and Instit.	W, 4	D.208	Vickner
103	..	Mod. Swed. Lit.	T, Th, 3	D.208	Vickner
106	..	Mod. Norw.-Dan. Lit.	T, Th, 2	D.208	Vickner
109	..	Scan.-Lit. in Trans.	F, 2	D.208	Vickner

SOCIOLOGY

1	..	Introd.	M, T, Th, F, 9	C.307	Waterman
51	..	Social Evolution	M, W, F, 10	C.307	Waterman
55	..	Programs of Soc. Ref.	M, W, F, 2	C.307	—
101	..	Soc. Effects of War and Recon.	M, W, F, 10	H.E.210	—
105	..	The Evolution of Culture	T, 4-6	C.307	Waterman
155	..	The Social Survey	M, W, F, 3	C.307	—

ZOOLOGY

1	..	Elementary	M, W, F, 10	S.208	Kincaid
...	A	Laboratory	T, Th, 8-11	S.205	Fasten
...	B	Laboratory	M, W, 1-4	S.205	Fasten
...	C	Laboratory	T, Th, 1-4	S.205	Fasten
3	..	Pre-med. Zoology	M, W, F, 9	S.208	Fasten
...	..	Laboratory	M, W, 1-4	S.211	Fasten
16	..	Ethnology	T, Th, 9	S.208	Kincaid
103	..	Forest Entomol.	T, Th, 10	S.203	Kincaid
201	..	Problems	—	—	—

II—Physiology

7	..	Elem. Physiology	M, W, F, 10	S.211	Smith
...	..	Laboratory	M, F, 1-4	S.211	Smith

BULLETIN
UNIVERSITY OF WASHINGTON

Series I

DECEMBER, 1918

No. 119—PART 15

Time Schedule
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EXPLANATIONS

An asterisk (*) denotes that the time, place, or instructor, as the case may be, is to be determined.

The following are the abbreviations used for buildings:

Ar.—Armory

Arch.—Architecture Building

Anat.—Anatomy Building

As.—Astronomy Building

B.—Bagley Hall.

B.S.—Book Store Building

C.—Commerce Hall.

D.—Denny Hall.

E.—Engineering Hall

F.—Forestry Hall

Gym.—Gymnasium

H.E.—Home Economics Hall

Li.—Library

M.H.—Meany Hall

M.—Mines Hall

S.—Science Hall

Shop—Shop Building

TIME SCHEDULE

3

ANATOMY

No.	Sec.	Subject	Time	Room	Instructor
102	..	Anatomy	M, W, F, 10	S.206	Worcester
...	..	Laboratory	M, W, F, 1-4	Anat.	Worcester
106	..	Hist. and Embryol.	M, W, F, 8	S.206	Worcester
...	..	Laboratory	T, Th, 1-4	S.206	Worcester
1	..	Anatomy (Nurses)	M, W, F, 11	S.206	Worcester
...	..	Laboratory	T, Th, 10-12	Anat.	Worcester
2	..	His. of Nursing	M, W, 2	H.E.203	Bartlett
3	..	Nursing and Hosp. Econ...	M, W, F, 1-5	*	Bartlett

ASTRONOMY

1	..	Introduction	T, Th, 8	As.	Boothroyd
...	..	Laboratory	T, 7:30-9:30	As.	Boothroyd
2	..	The Solar System	M, W, F, 8	As.	Boothroyd
21	..	Engineering Astron.	M, W, F, 10	As.	Boothroyd
23	..	Nautical Astron.	*	As.	Boothroyd
24	..	Navigation	M, T, W, Th, F, 9	As.	Boothroyd

BACTERIOLOGY

3	..	El. Bact. for Nurses	M, W, F, 8	S.306	Weinzirl
...	..	Laboratory	T, W, 10-12	S.305	Weinzirl
104	..	Sanitary	M, W, 1	S.110	Weinzirl
...	..	Laboratory	M, W, 2-5	S.305	Weinzirl
109	..	Medical	T, Th, 1	S.208	Weinzirl
...	..	Laboratory	T, Th, 2-4	S.305	Weinzirl
209	..	Research	*	*	Weinzirl

BOTANY

2	..	Elementary Botany	M, F, 1	S.208	Frye
...	A	Laboratory	M, F, 2-4	S.311	Hotson
...	B	Laboratory	T, Th, 2-4	S.311	Rigg
9	..	Ecol. and Taxon.	S, 9-4	Field	Frye
11	..	Foresters	T, Th, 1	S.306	Hotson
...	..	Laboratory	T, Th, 2-5	S.307	Hotson
13	..	Pharmacy	M, W, F, 1	S.306	Rigg
...	..	Laboratory	M, W, 2-5	S.308	Rigg
106	..	Morph. and Evol.	T, Th, 4	S.306	Frye
...	..	Laboratory	T, Th, 1-4	S.308	Frye
141	..	Fungi	T, Th, 8	S.307	Hotson
...	..	Laboratory	T, Th, 9-12	S.307	Hotson
144	..	Physiol.	T, Th, 8	S.306	Rigg
...	..	Laboratory	T, Th, 8-11	S.311	Rigg
262	..	Pathology	*	*	Hotson

BUSINESS ADMINISTRATION

1	..	Elements of Economics ...	M, T, W, Th, F, 9	C.217	Miller
7	..	Business Correspondence ..	M, W, F, 9	C.218	Russell
11	..	Elementary Accounting	M, W, F, 10	C.217	de Haas
51	..	Money and Banking	M, T, W, Th, F, 8	C.218	de Haas
53	..	Evolution of Markets	T, Th, 9	C.218	Russell
55	..	Econ. & Soc. Stand. of Liv. .	M, T, W, Th, F, 2	C.309	McMahon
59	..	Elements of Transport	M, W, F, 1	C.217	Miller
61	..	American Econ. Hist.	M, W, F, 3	C.309	McMahon
69	..	Office Practice	T, Th, 10	C.106	Thoma
102	..	Typewriting	*	C.223	Thoma
104	..	Shorthand	*	C.223	Thoma
135	..	Exports and Imports	M, W, F, 2	C.218	de Haas
163	..	Adv. Accounting	M, W, F, 9	C.110	de Haas
159	..	Business Adm'n.	M, W, F, 9	C.159	Dahm
187	..	Seminar in Commerce	*	*	de Haas
190	..	Seminar in Reconstruction. .	*	*	McMahon
191	..	Adv. Seminar	*	*	Miller

CHEMISTRY

1	..	Lecture	M, W, F, 9	B.L.H.	Trumbull
...	A	Laboratory	T, Th, 1-4	B.	Trumbull
...	B	Laboratory	T, Th, 8-11	B.	Trumbull
...	C	Laboratory	T, Th, 8-11	B.	Trumbull
2	..	Lecture	M, W, F, 8	B.L.H.	Heath
...	B	Laboratory	T, Th, 1-4	B.	Heath
...	C	Laboratory	M, W, 1-4	B.	Heath
...	D	Laboratory	T, Th, 8-11	B.	Heath

UNIVERSITY OF WASHINGTON

CHEMISTRY—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
6	..	Lecture	M, W, F, 10	B.L.H.	Tartar
...	A	Laboratory	T, Th, 1-4	B.	Tartar
...	B	Laboratory	M, W, 1-4	B.	Tartar
21	..	Lecture	M, W, F, 2	B.L.H.	Byers
...	A	Laboratory	W, F, 8-11	B.	Byers
...	D	Laboratory	M, W, 8-11	B.	Byers
...	C	Laboratory	T, Th, 1-4	B.	Byers
22	..	Lecture	M, W, F, 1	B.L.H.	Trumbull
...	A	Laboratory	T, Th, 1-4	B.	Trumbull
...	B	Laboratory	M, W, 8-11	B.	Trumbull
...	C	Laboratory	T, Th, 8-11	B.	Trumbull
32	..	Organic	M, W, F, 8	B.301	Dehn
...	A	Laboratory	M, W, 1-4	B.	Dehn
...	B	Laboratory	T, Th, 1-4	B.	Dehn
36	..	Organic (Women)	T, Th, 9	B.301	Dehn
...	A	Laboratory	M, F, 1-4	B.	Dehn
...	B	Laboratory	T, Th, 1-4	B.	Dehn
41	..	Qualitative	M, W, F	B.301	Barton
...			T, Th, 1-4	B.	Barton
43	..	Qualitative	*	B.	Heath
...		Laboratory	*	B.	Heath
101	..	Quantitative	*	B.	Heath
102	..	Quantitative	*	B.	Heath
111	..	See Pharmacy 105.			
121	..	Industrial	*	B.	Benson
122	..	Industrial	*	B.	Benson
142	..	Physiological	*	B.	Barton
202	..	Physical	*	B.	Tartar
204	..	Electro Chem.	*	B.	Byers
221	..	Chem. Theory	*	B.	Byers
231	..	Adv. Organic	*	B.	Dehn
4	..	S. C. Miners	M, W, F, 11	B.301	Tartar
...		Laboratory	F, 1-5	B.	Tartar
7	..	S. C. Nurses	M, W, F, 8	B.307	Barton
...		Laboratory	T, Th, 1-4	B.	Barton
241	..	Journal Club	*	B.	Trumbull

CIVIL ENGINEERING

1	A	Drawing	F, 1	E.304	*
...			T, Th, 8-11	E.301	*
...	B	Drawing	W, 9	E.306	White
...			M, Th, 1-4	E.302	White
...	C	Drawing	W, 8	E.304	*
...			T, Th, 1-4	E.309	*
...	D	Drawing	M, 3	E.304	Harris
...			T, F, 8-11	E.308	Harris
2	A	Drawing	W, 2	E.306	White
...			M, F, 8-11	E.302	White
...	B	Drawing	F, 2	E.304	White
...			T, Th, 8-11	E.309	White
...	C	Drawing	W, 9	E.310	Harris
...			T, Th, 1-4	E.310	Harris
...	D	Drawing	W, 9	E.302	Hamilton
...			T, F, 1-4	E.302	Hamilton
11	A	Problems	M, 1	E.304	*
...			T, Th, 1-4	E.301	*
...	B	Problems	M, 9	E.306	*
...			W, F, 1-4	E.301	*
...	C	Problems	M, 8	E.306	Moore
...			W, F, 1-4	E.309	Moore
...	D	Problems	W, 3	E.304	Hayden
...			T, Th, 1-4	E.308	Hayden
12	A	Problems	M, 2	E.304	*
...			T, Th, 8-11	E.302	*
...	B	Problems	M, 2	E.306	Moore
...			T, Th, 1-4	E.307	Moore
...	C	Problems	M, 9	E.310	Moore
...			T, Th, 8-11	E.310	Moore
...	D	Problems	F, 9	E.304	*
...			M, W, 1-4	E.307	*
13	..	Problems	W, 2	E.304	Harris
...			M, Th, 8-11	E.308	Harris
21	..	Surveying	F, 2	E.303	Miller
...			T, Th, 1-4	E.303	Miller
23	..	Surveying	M, W, F, 8	E.303	Miller
...			T, Th, 8-11	E.303	Miller

TIME SCHEDULE

5

CIVIL ENGINEERING—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
38	..	S. C. Miners.....	W, 8 M, 1-5 S, 8-12	E.306 E.306 M.	Hayden Hayden Hayden
55	..	Foresters	M, W, 9 T, Th, 8-11 F, 1-4	E.304 F.200 F.200	Hayden Hayden Hayden
181	..	Mechanics	M, 10 W, F, 1-4	E.307 E.313	* *
182	..	Mechanics	W, 10 T, Th, 1-4	E.307 E.313	* *
154	..	Sanitary Eng.	*	*	White

CLASSICAL LANGUAGES

Greek

2	..	Elementary	M, T, W, Th, F, 8	D.206	Densmore
5	..	Homer, Herodotus	M, W, F, 11	D.206	Densmore
11	..	Greek Civilization	M, T, W, Th, F, 10	D.212	Densmore
13,14	..	Greek and Roman Lit.....	M, T, W, Th, F, 2	D.212	Sidey
14,13	..	Greek and Roman Lit.....	M, T, W, Th, F, 9	D.212	Sidey

Latin

5	..	Cicero: De Amicitia	M, W, F, 9	D.305	Clark
7	..	Sight Translation	T, Th, 9	D.305	Clark
11	..	Roman Civilization	M, T, W, Th, F, 1	D.212	Clark
15	..	Roman Art	T, 11	D.212	Sidey
60	..	Livy	M, W, F, 10	D.305	Clark
101	..	Pliny's Letters	T, Th, 11	D.305	Clark
104	..	Teachers' Course	M, W, F, 11	D.311	Sidey

EDUCATION

1	..	Introduction to Education...	T, Th, 9	H.E.310	Freeland
99	..	Principles of Education...	M, T, W, Th, F, 10	H.E.310	Bolton
109	..	Educ. Soc. I (Social Found.)	M, W, F, 9	H.E.310	Ayer
119	A	High School Curriculum...	M, W, F, 9	H.E.212	Koos
119	B	High School Curriculum...	M, W, F, 2	H.E.310	Koos
154	..	Junior High School	Th, 7-9 p. m.	H.E.310	Koos
155	..	Childhood and Adolescence.	M, W, F, 11	H.E.310	Bolton
157	A	Methods of Teaching.....	M, W, F, 8	H.E.314	Woody
157	B	Methods of Teaching.....	M, W, F, 10	H.E.314	Woody
165	..	Supervised Teaching	W, 4	H.E.310	Freeland
172	..	Lit. of Exper. Education...	M, W, F, 1	H.E.314	Woody
192	..	Admin. (City Schools).....	M, W, F, 1	H.E.210	Ayer
202	..	Adolescence	T, Th, 11	H.E.210	Bolton
232	..	Adv. Educational Psych.....	S, 10-12	H.E.314	Woody
252	..	Admin. (Financial Aspects)	S, 8-10	H.E.310	Koos
271	..	Seminar (Vocational Guid.)	Th, 4-6	H.E.310	Ayer
282	..	Seminar on Play.....	M, 4-6	H.E.310	Freeland
299	..	Research	*	*	All

ELECTRICAL ENGINEERING

101	..	Elec. Eng.	M, W, F, 9 Th, 1-4	E.319 E.319	Curtis Curtis
102	..	Elec. Eng.	W, F, 1-4	E.201	Shuck
103	..	Elec. Eng.	M, T, W, F, 8 Th, 8-11	E.322 E.319	Shuck Shuck
104	..	Elec. Eng.	M, Th, 1-5	E.201	Shuck
121	..	Elec. Eng.	M, W, F, 8 T, 8-11	E.319 E.319	Curtis Curtis
122	..	Elec. Eng.	Th, 8-11 M, 1-4	E.201 E.201	Curtis Curtis
151	..	Elec. Eng.	M, T, W, F, 9-11	E.313	Shuck
161	..	Elec. Eng.	M, T, W, Th, F, 8-10	E.317	Magnusson
162	..	Elec. Eng.	W, F, 1-5	E.201	Curtis
202	..	Elec. Enñ.	T, Th, 1-4	E.211	Magnusson
211	..	Elec. Eng.	*	E.213	Magnusson

ENGLISH

1	A	Fresh. Comp.	M, T, W, Th, F, 8	D.225	Gregg
1	B	Fresh. Comp.	M, T, W, Th, F, 8	D.213	Rochester
2	C	Fresh. Comp.	M, T, W, Th, F, 8	D.230	Haggett
2	D	Fresh. Comp.	M, T, W, Th, F, 8	D.317	Padelford

ENGLISH—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
2	E	Fresh. Comp.	M, T, W, Th, F, 8.....	D.226	Kelsey
2	F	Fresh. Comp.	M, T, W, Th, F, 8.....	D.318	*
1	G	Fresh. Comp.	M, T, W, Th, F, 9.....	D.225	Parrington
1	H	Fresh. Comp.	M, T, W, Th, F, 9.....	D.318	Harrison
2	I	Fresh. Comp.	M, T, W, Th, F, 9.....	D.226	Haggett
2	J	Fresh. Comp.	M, T, W, Th, F, 9.....	D.230	Milliman
1	K	Fresh. Comp.	M, T, W, Th, F, 10.....	D.230	Ernst
1	L	Fresh. Comp.	M, T, W, Th, F, 1.....	D.225	Garrett
2	M	Fresh. Comp.	M, T, W, Th, F, 1.....	D.230	Rochester
2	N	Fresh. Comp.	M, T, W, Th, F, 1.....	D.226	Kekelman
2	O	Fresh. Comp.	M, T, W, Th, F, 2.....	D.230	Eckley
4	A	Fresh. Comp. (Fine Arts) ..	M, W, F, 3.....	D.221	Eckelman
4	B	Fresh. Comp. (Fine Arts) ..	M, W, F, 1.....	D.317	Ernst
52	..	Advanced Comp.	M, W, F, 11.....	D.221	Milliman
74	A	Contemporary Lit.	M, W, F, 10.....	D.226	Gregg
74	B	Contemporary Lit.	M, W, F, 2.....	D.221	Ernst
74	C	Contemporary Lit.	M, W, F, 2.....	D.226	Harrison
102	..	See Journalism.			
105	..	Contemp. Lit. (Jr. and Sr.) ..	M, W, F, 2.....	D.318	*
134	..	Main Tendencies	M, W, F, 10.....	D.225	Parrington
136	..	Novel	M, W, F, 8.....	D.305	Harrison
142	..	Social Ideals	M, W, F, 9.....	D.221	Gregg
144	..	Age of Milton	M, W, F, 10.....	D.221	Lockwood
162	..	American Literature	M, W, F, 11.....	D.225	Parrington
166	..	Great American Writers	M, W, F, 1.....	D.221	Milliman
176	..	Georgian and Vict. Poets.	M, W, F, 9.....	D.317	Padelford
184	..	General Literature ..	*	D.224	Johanson
189	..	Teachers' Course ..	T, 4-6 ..	D.318	Garrett
192	..	Senior Conference ..	*	D.224	Johanson
195	..	Great English Classics ..	M, W, F, 11.....	D.226	Lockwood
204	..	Pro-Seminar, Milton ..	S, 9-11 ..	D.221	Lockwood
232	..	Pro-Seminar, Comp. Lit.	M, 7:30-9:30 p. m.	D.316	*
242	..	Pro-Seminar, Chaucer ..	T, 7-9 p. m.	Ll.	Garrett

FINE ARTS

I—Music

2	..	Fundamentals ..	T, Th, 10.....	M.H.112	Van Ogle
5	..	History ..	M, W, 10.....	M.H.112	Glen
8	A	Sight Reading ..	M, W, 9.....	M.H.110	Dickey
..	B	Sight Reading ..	M, W, 11.....	M.H.110	Dickey
10	..	Choral Study ..	W, 7:30 p. m.	M.H.110	Glen
12	..	Orchestral Study ..	F, 5.....	M.H.101	Adams
15	..	Ear Trg. and Mel. Writing.	M, W, 10.....	M.H.110	Dickey
17	..	Choral Study (Men) ..	*	M.H.110	Glen
18	..	Applied Music ..	*	*	*
20	..	University Orchestra ..	T, 7:30 p. m.	M.H.110	Glen
23	..	University Band ..	*	*	*
26	..	Chamber Music ..	Th, 7:30 p. m.	M.H.111	Rosen
29	..	Ensemble Singing ..	M, 3.....	M.H.110	Dickey
32	..	Harmony ..	T, Th, 9.....	M.H.102	Wood
35	..	School Music ..	M, W, 11.....	M.H.110	Dickey
102	..	Adv. Harmony ..	M, Th, 10.....	M.H.102	Wood
105	..	Adv. Hist. of Music.	T, Th, 9.....	M.H.112	Van Ogle
108	..	Counterpoint ..	T, F, 10.....	M.H.102	Wood
111	..	Analysis, Form ..	T, F, 8.....	M.H.102	Wood
114	..	Music Education ..	T, Th, 10.....	M.H.110	Dickey
117	..	Composition ..	W, 10-12 ..	M.H.102	Wood
120	..	Music Appreciation ..	T, Th, 2.....	M.H.112	Van Ogle
123	..	Music Ed. and Super.	F, 1-3.....	M.H.110	Dickey

II—Architecture

2	..	Hist. and Elements.	M, W, 1.....	S.108	Gould
5	..	Drawing ..	M, W, F, 2-5.....	Arch.	Gould
8	..	Descriptive Geom.	T, 1-4 ..	Arch.	Russett
48	..	See C. E. 12.			
52	..	Hist. and Elements.	M, W, 11.....	Arch.	Gould
55	..	Arch. Design ..	M, W, F, 1-4.....	Arch.	Gould
60	..	Bldg. Construction ..	W, F, 8-10.....	Arch.	Russett
102	..	Hist. and Elements.	M, W, 8.....	Arch.	Meyer
105	..	Design ..	T, Th, F, 1-4.....	Arch.	Gould
110	..	Watercolor ..	T, Th, 8-10.....	Arch.	Meyer

TIME SCHEDULE

FINE ARTS—(Continued)

III—Painting and Design

No. Sec.	Subject	Time	Room	Instructor
3	Principles	M, W, F, 8-10.....	B.S.	Vinsonhaler
6	Freehand	M, W, F, 10-12.....	B.S.	Durand
10	Art Structure	M, T, Th, F, 1-3.....	B.S.	Vinsonhaler
17	Art Appreciation	T, 4	D.212	Durand
54	Art Structure	T, Th, 8-12.....	B.S.	Vinsonhaler
57	Life Study and Illus.	T, Th, 9-12.....	B.S.	Durand
104	Art Structure	M, W, F, 10-12.....	Arch.1	Edens
106	Art Structure	M, W, F, 8-10.....	Arch.1	Edens
108	Portrait	T, Th, 9-12.....	B.S.	Durand
111	Interior Decoration	M, W, F, 8-10.....	Arch.1	Durand
157	Art Structure	M, F, 1-4.....	Arch.1	Edens
161	Portrait and Life	T, Th, 9-12.....	B.S.	Durand
164	Mural Decoration	T, Th, 8.....	B.S.	Durand
		M, W, F, 8-10.....	B.S.	Durand
170	Textiles, Costume Design..	T, Th, 8-10.....	Arch.2	Edens

FORESTRY

2	General	M, W, F, 10.....	F.103	Winkenw'r
52	For. Mensuration	M, W, 8.....	F.202	Clark
		T, Th, 1-4.....	F.202	Clark
101	For. Technology	M, W, F, 10.....	F.204	Gronal
		T, Th, 8-11.....	F.204	Gronal
104	Timber Tests	M, W, F, 9.....	F.204	Zimmerman
		W, F, 1-4.....	E.	Zimmerman
106	For. Economics	T, Th, 11.....	F.204	Kirkland
152	For. Management	M, W, F, 10.....	F.201	Kirkland
158	For. Utilization	M, W, F, 11.....	F.204	Gronal
		T, Th, 1-4.....	F.205	Gronal
206	Log. Engineering	M, W, F, 9.....	F.202	Clark
		M, 1-4.....	F.202	Clark

GEOLOGY

1	General	M, W, F, 8.....	S.108	Saunders
	Laboratory	T, Th, 8-10.....	S.113	Saunders
2	Historical	M, W, F, 10.....	S.108	Weaver
	Laboratory	T, Th, 10-12.....	S.113	Weaver
11	Meteorology	M, W, F, 9.....	S.108	Saunders
	Laboratory	T, Th, 8-10.....	S.113	Saunders
18	Geology South America	M, W, F, 11.....	S.108	Saunders
21	Mineralogy	M, W, 10.....	S.107	Landes
	Laboratory	T, 9-11.....	S.107	Landes
32	Stratigraphy	M, W, F, 1.....	S.108	Weaver
124	Petrography	M, W, F, 8.....	S.107	Weaver
	Laboratory			Weaver
128	Economic	M, T, W, Th, F, 11.....	S.109	Landes
132	Paleontology	T, Th, 2.....	S.108	Weaver
	Laboratory		*	Weaver
S.C.3	Geology	T, Th, 11.....	S.107	Saunders
S.C.3	Mineralogy	M, W, 10.....	S.107	Landes
	Laboratory	T, 9-11.....	S.107	Landes

GERMAN

1	First Year	M, T, W, Th, F, 10.....	H.E.212	Boetzkes
6	Second Year	M, T, W, Th, F, 1.....	H.E.212	Boetzkes
104	Recent Writers	M, W, F, 9.....	H.E.214	Boetzkes
115	Scientific	T, Th, 9.....	H.E.214	Eckelman
151	Faust	M, W, F, 11.....	H.E.212	Boetzkes
211	19th Century Lit.	T, Th, 11.....	H.E.212	Boetzkes

HISTORY

2	Mediaeval and Modern.....	M, T, W, Th, F, 9.....	D.320	Scholz
6	English Political	M, T, W, Th, F, 10.....	D.205	Richardson
32	European War (Prerequisite: S. A. T. C. Course) ..	T, Th, 8.....	D.205	Richardson
58	U. S. History	M, T, W, Th, F, 9.....	D.209	McMahon
60	Makers of Nation	T, Th, 10.....	D.203	Meany
105	English Constitution	M, W, F, 8.....	D.205	Richardson
118	Mediterranean World	T, Th, 10.....	D.213	Scholz
122	Fr. and Nor. Europe	T, Th, 9.....	D.205	Richardson
148	Reconstruction Period	M, W, F, 10.....	D.213	McMahon
154	Development of Pacific	M, W, F, 10.....	D.203	Meany

HISTORY—(Continued)

No. Sec.	Subject	Time	Room	Instructor
158	American Diplomacy	T, Th, 9	D.203	Meany
164	Northwestern History	T, Th, 1	D.203	Meany
196	Methods of Teaching Hist.	T, Th, 11	D.213	McMahon
202	Historical Criticism	T, 4-6	D.213	Scholz
222	Seminar American History	M, 4-6	D.213	McMahon
228	Seminar in State History	W, 4-6	D.203	Meany

HOME ECONOMICS

2	General	M, W, F, 8-10	H.E.211	Dresslar
5	Foods	T, Th, 1	H.E.211	Dresslar
	Laboratory	M, W, F, 1-3	H.E.211	Dresslar
6	Foods	T, Th, 10	H.E.211	Dresslar
	Laboratory	M, W, F, 10-12	H.E.211	Dresslar
8	Clothing	M, W, F, 8-10	H.E.307	Connolly
25	Textiles	T, Th, 11	H.E.301	Denny
A	Laboratory	M, W, F, 8-10	H.E.301	Denny
B	Laboratory	M, W, F, 2-4	H.E.301	Denny
29	Department Store Service	M, W, F, 9	H.E.203	Small
61	Clothing	W, 10	H.E.307	Connolly
	Laboratory	M, T, Th, F, 10-12	H.E.307	Connolly
62	A Clothing	W, 1	H.E.307	Connolly
		M, T, Th, F, 1-3	H.E.307	Connolly
B	Clothing	T, Th, 4-6	H.E.307	Connolly
106	Elementary Dietetics	T, W, Th, 9	H.E.218	Raitt
	Laboratory	T, Th, 10-12	H.E.218	Raitt
121	Large Quan. Cookery	M, W, F, 2-4	H.E.217	Clarke
124	Practice Work I	*	*	Clarke
125	Practice Work II	*	*	Clarke
138	Store Practice	*	*	Small
143	Home Decoration	M, F, 11	H.E.305	Denny
	Laboratory	Th, 3-5	H.E.305	Denny
144	Household Management	M, W, F, 11	H.E.203	Raitt
146	Teachers' Course	M, W, F, 10	H.E.203	Denny
105	Nutrit'n and Cook. (Nurses)	T, Th, 8	H.E.218	Fitzgerald
		T, Th, 1-5	H.E.218	Fitzgerald

JOURNALISM

102	Elements	M, W, F, 9	C.106	Goss
105	Mechanics	M, 1	C.124	Kennedy
		W, 1-3	C.124	Kennedy
108	General Advertising	M, W, F, 8	C.106	Russell
152	Editing-Adv.-Rept.	M, W, F, 10	C.106	Goss
161	Short Story	M, W, F, 2	C.106	Edgington
164	Business Office	*	C.118	Kennedy
167	Adv. Advertising	T, Th, 2	C.106	Russell
175a	Senior Conference	*	*	*

LAW

NOTE.—Consult the Dean of the College.

LIBRARY ECONOMY

103	Cataloging	M, W, F, 10	Li.3	Blodgett
105	Reference	T, Th, 10	Li.3	Smith
109	Practice	*	*	Henry
212	Practice	*	*	Henry
216	Organ. and Extension	M, W, 8	Li.3	Henry
218	Book Selection	T, F, 8	Li.3	Ashby
221	Work with Children	Th, 8	Li.3	Andrus

MATHEMATICS

4	A Trigonometry	M, T, W, Th, F, 8	D.125	Bell
	B Trigonometry	M, T, W, Th, F, 10	S.106	Winger
5	College Algebra	M, T, W, Th, F, 1	D.125	Small
8	Calculus	M, T, W, Th, F, 2	S.106	Moritz
11	A Investments I	M, T, W, Th, F, 2	S.125	Small
	B Investments I	M, T, W, Th, F, 10	S.207	Gavett
	C Investments I	M, T, W, Th, F, 8	S.110	Nelkirk
	D Investments I	M, T, W, Th, F, 9	D.207	Gavett
	E Investments I	M, T, W, Th, F, 2	D.110	Carpenter
	F Investments I	M, T, W, Th, F, 3	D.125	Small

TIME SCHEDULE

9

MATHEMATICS—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
12	A	Investments II	M, T, W, Th, F, 9	D.125	Bell
...	B	Investments II	M, T, W, Th, F, 3	S.106	Moritz
51	A	Eng. Algebra	M, W, F, 3	D.317	Winger
...	B	Eng. Algebra	M, W, F, 8	S.106	Winger
...	C	Eng. Algebra	M, W, F, 10	D.125	Bell
...	D	Eng. Algebra	M, W, F, 1	D.106	Moritz
52	..	Eng. Trigonometry	M, W, F, 3	D.318	Neikirk
...	B	Eng. Trigonometry	M, W, F, 3	S.110	Carpenter
...	C	Eng. Trigonometry	M, W, F, 10	S.110	Carpenter
...	D	Eng. Trigonometry	M, W, F, 10	S.306	Neikirk
53	..	Eng. Analyt.	M, W, F, 3	S.207	Gavett
57	..	Foresters and Arch.	M, W, F, 8	S.207	Gavett
61	A	Eng. Calculus I	M, W, F, 9	S.306	Neikirk
...	B	Eng. Calculus I	M, W, F, 9	S.106	Winger
62	..	Eng. Calculus II	M, W, F, 9	S.110	Carpenter

MECHANICAL ENGINEERING

1	A	Shop	M, 8-11	Shop	Beattie
...	B	Shop	T, 1-4	Shop	Beattie
...	C	Shop	M, 1-4	Shop	Beattie
...	D	Shop	Th, 8-11	Shop	Beattie
2	A	Shop	W, 8-11	Shop	Beattie
...	B	Shop	F, 8-11	Shop	Beattie
...	C	Shop	F, 1-4	Shop	Beattie
...	D	Shop	Th, 1-4	Shop	Beattie
3	A	Shop	T, 8-11	Shop	Beattie
...	B	Shop	Th, 8-11	Shop	Beattie
53	A	Shop	M, 1-4	Shop	Kane
...	B	Shop	F, 1-4	Shop	Kane
54	A	Shop	T, 1-4	Shop	Kane
...	B	Shop	Th, 1-4	Shop	Kane
105	..	Shop	"	Shop	Kane
81	..	Mechanism	M, W, F, 10	E.320	Wilson
82	..	Steam Engineering	M, W, F, 10	E.322	Winslow
90	..	Machine Design	T, 3	E.322	Winslow
...	..	Machine Design	W, F, 1-4	E.310	Winslow
91	..	Machine Design	M, W, F, 1-4	E.310	Winslow
140	..	Steam Eng. Lab.	M, W, 9	E.320	Wilson
...	..	Heating and Ventilating	T, 1-4	E.226	Wilson
182	..	Heating and Ventilating	M, W, F, 11	E.318	Eastwood

MILITARY SCIENCE AND TACTICS

1	A	Military Training (men with advanced credit)	M, W, F, 11	Ar.	*
...	B	Military Training	M, T, W, Th, F, 11	Ar.	*

MINING ENGINEERING

S.C.	..	Milling	M, 8	M.	Roberts
...	..	Milling	T, F, 10	M.	Roberts
...	..	Milling	T, 1-5	M.	Roberts
S.C.	..	Mining	W, Th, F, 9	M.	Roberts
...	..	Mining	T, 1-5	M.	Roberts
S.C.	..	Fire Assaying	M, 9	M.	Corey
...	..	Fire Assaying	W, Th, 1-5	M.	Corey

NOTE.—For other courses consult the Dean of the College.

ORIENTAL LANGUAGES AND LITERATURE

2	..	History of China	M, W, F, 9	D.312	Gowen
12	..	Lit. of Egypt and Babylon	M, T, W, Th, F, 10	D.312	Gowen
15	..	Semetic Literature	W, 5	D.312	Gowen
105	..	Sanskrit	"	D.312	Gowen
106	..	Hebrew or Arabic	"	D.312	Gowen
(The registration will determine whether 105 or 106 is to be given.)					
115	..	History of Religion	M, W, F, 8	D.312	Gowen
8	..	Elementary Russian	"	"	Simeon
21	..	Oriental Institutions	T, Th, 9	D.312	Simeon
109	..	Advanced Russian	"	"	Simeon
10	..	Elementary Chinese	"	"	Skinner
110	..	Advanced Chinese	"	"	Skinner

PHARMACY

No.	Sec.	Subject	Time	Room	Instructor
1	..	Pharmacy	M, W, F, 10.....	B.301	Goodrich
...	..	Laboratory	T, Th, 8-11.....	B.	Goodrich
2	..	Pharmacy	M, W, F, 10.....	B.307	Linton
...	..	Laboratory	T, Th, 1-4.....	B.	Linton
5	..	Pharmacy	Th, F, 10.....	B.303	Johnson
...	..	Laboratory	T, Th, F, 1-4.....	B.	Goodrich
6	..	Pharmacy	M, W, 10.....	B.303	Johnson
...	..	Laboratory	M, W, F, 1-4.....	B.	Goodrich
8	..	Pharmacy	M, Th, 9.....	B.303	Linton
10	..	Pharmacy	Th, 8.....	B.303	Linton
...	..	Laboratory	T, 8-11.....	B.	Linton
14	..	Pharmacy	W, F, 9.....	B.307	Linton
105	..	Pharmacy	T, Th, 11.....	B.303	Johnson
...	..	Laboratory	W, Th, F, 1-4.....	B.	Johnson
21	..	S. C. Nurses	M, F, 11.....	B.307	Linton
...	..	Laboratory	Th, 10-12.....	B.	Linton

PHILOSOPHY

1	A	Introduction	M, T, W, Th, F, 10.....	D.215	Guthrie
...	B	Introduction	M, T, W, Th, F, 1.....	D.213	Ducasse
...	C	Introduction	M, T, W, Th, F, 1.....	D.209	Guthrie
2a	..	Ethics-Social Problems	M, T, W, Th, F, 10.....	D.320	Savery
5	..	Logic	M, T, W, Th, F, 2.....	D.213	Ducasse
102	..	History	M, W, F, 9.....	D.215	Savery
132	M, W, F, 3.....	D.213	Ducasse

PHYSICAL EDUCATION

Men

1	..	Gymnastics	M, W, F, 11.....	Gym.	Arbuthnot
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Unclassified, Freshman, Sophomore, Junior and Senior men not taking Military Science must arrange with the department for a recreation period between the hours of 3 and 6, on M, T, W, Th or F.

Women

4	A	Hygiene	Th, 10.....	S.208	Irwin
...	B	Hygiene	Th, 11.....	S.208	Irwin
...	C	Hygiene	T, 11.....	S.208	Irwin
2	A	Gym.	T, Th, 9.....	Gym.	Merrick
...	B	Gym.	T, Th, 10.....	Gym.	Merrick
...	C	Gym.	M, W, 11.....	Gym.	Merrick
...	D	Gym.	M, W, 3.....	Gym.	Pray
...	E	Military Drill	T, Th, 4.....	Gym.	Kennedy
6	A	Corrective Gym.	T, F, 11.....	Gym.	Bloom
...	B	Corrective Gym.	M, W, 10.....	Gym.	Bloom
...	C	Corrective Gym.	T, Th, 10.....	Gym.	Bloom
...	D	Corrective Gym.	M, Th, 11.....	Gym.	Bloom
...	E	Corrective Gym.	T, Th, 2.....	Gym.	Bloom
10	A	Athletics	T, Th, 8.....	Gym.	Pray
...	B	Athletics	M, W, 3.....	Gym.	Pray
...	C	Athletics	M, W, 8.....	Gym.	Pray
54	A	Food	T, 11.....	H.E.310	Fitzgerald
...	B	Food	F, 1.....	H.E.310	Fitzgerald
52	A	Gym.	M, W, 9.....	Gym.	Pray
...	B	Gym.	T, Th, 2.....	Gym.	Harrington
...	C	Military Drill	T, Th, 4.....	Gym.	Kennedy
56	A	Corrective Gym.	T, F, 11.....	Gym.	Bloom
...	B	Corrective Gym.	M, W, 10.....	Gym.	Bloom
...	C	Corrective Gym.	T, Th, 10.....	Gym.	Bloom
...	D	Corrective Gym.	M, Th, 11.....	Gym.	Bloom
...	E	Corrective Gym.	T, Th, 2.....	Gym.	Bloom
60	A	Athletics	M, W, 4.....	Gym.	Pray
...	B	Athletics	T, Th, 10.....	Gym.	Pray
...	C	Athletics	M, W, 8.....	Gym.	Harrington
...	D	Athletics	T, F, 11.....	Gym.	Harrington
...	E	Athletics	M, W, 9.....	Gym.	Harrington
...	F	Athletics	T, Th, 9.....	Gym.	Pray
...	G	Athletics	T, Th, 4.....	Gym.	Harrington
64	..	Dancing	M, W, 10.....	Gym.	Pray
102	..	Methods	M, W, 10.....	Gym.	Harrington
...	..	.....	F, 10.....	Gym.	Merrick
...	..	.....	M, W, 2.....	Gym.	Pray
118	..	Folk Dancing	T, Th, F, 3.....	Gym.	Harrington

TIME SCHEDULE

11

PHYSICAL EDUCATION—(Continued)

No. Sec.	Subject	Time	Room	Instructor
126 ..	Corrective Gym. Theory....	M, W, F, 9.....	Gym.	Bloom
130 ..	Corrective Gym. Practice...	T, Th, 9.....	Gym.	Bloom
		4 hrs. to be arranged..	Gym.	Bloom

PHYSICS

2 ..	General (Prereq. 1 or 1s) ..	M, T, Th, F, 10.....	D.127	Osborn
..	Laboratory ..	M or W, 1-4.....	D.107	Osborn
50 ..	Sound and Music.....	M, W, F, 9.....	D.112	Utterbach
..	Laboratory ..	T, Th, 1-4.....	D.112	Utterbach
90 ..	Physics of Home.....	M, W, Th, 9.....	D.127	Osborn
..	Laboratory ..	T or Th, 1-4.....	D.104	Osborn
97 ..	Mechanics ..	M, W, F, 8.....	D.127	Utterbach
.. A	Laboratory ..	T, Th, 8-11.....	D.107	Utterbach
.. B	Laboratory ..	M, W, 1-4.....	D.107	Utterbach
97b ..	Physics for Engineers..... (S. A. T. C. engineers who have had 97s or 1s)	T, Th, 11.....	D.127	Brakel
98 ..	Electricity (prerequisite 1s, 97 or 97s).....	M, W, F, 8.....	D.127	Brakel
.. A	Laboratory ..	T, Th, 8-11.....	D.107	Brakel
.. B	Laboratory ..	M, W, 1-4.....	D.107	Brakel

POLITICAL SCIENCE

1 A	Elements ..	M, T, W, Th, F, 8.....	D.218	Barnett
.. B	Elements ..	M, T, W, Th, F, 9.....	D.218	Barnett
154 ..	Political, Problems ..			Barnett

PSYCHOLOGY

5 ..	Psychology for Nurses.....	M, W, F, 1.....	H.E.203	Smith
101 ..	Physiological ..	M, W, F, 2.....	S.atic	Loring
..	Laboratory ..	T, Th, 1-4.....	S.atic	Loring
109 ..	Tests ..	M, 7-9 p. m.....	S.atic	Smith
..	Laboratory ..	M, 3-6.....	S.atic	Wiltbank
111 ..	History of Psychology.....	M, W, F, 10.....	S.atic	Wiltbank
114 ..	Current Lit. Psychology ..	T, Th, 10.....	S.atic	Wiltbank
121 ..	Applied Psychology ..	M, T, W, Th, F, 1.....	S.atic	Wiltbank
126 ..	Abnormal Psychology ..	M, T, W, Th, F, 9.....	S.atic	Loring
132 ..	Exceptional Ch. ..	M, W, F, 2.....	S.atic	Smith

PUBLIC SPEAKING

2 ..	Practical Public Speaking..	M, T, W, Th, F, 9.....	D.300	Gorsuch
9 ..	Dramatic Reading ..	M, T, W, Th, F, 10.....	D.300	Gorsuch
105 ..	Advanced Reading ..	T, Th, 11.....	D.300	Gorsuch

ROMANIC LANGUAGES

I—French

1 A	Elementary ..	M, T, W, Th, F, 8.....	D.309	Strong
.. B	Elementary ..	M, T, W, Th, F, 9.....	D.311	Philbrick
.. C	Elementary ..	M, T, W, Th, F, 10.....	D.309	Whittlesey
.. D	Elementary ..	M, T, W, Th, F, 1.....	D.306	*
2 A	Elementary ..	M, T, W, Th, F, 8.....	D.306	Umphrey
.. B	Elementary ..	M, T, W, Th, F, 9.....	D.213	Strong
.. C	Elementary ..	M, T, W, Th, F, 10.....	D.310	Philbrick
.. D	Elementary ..	M, T, W, Th, F, 11.....	D.309	Ratti
.. E	Elementary ..	M, T, W, Th, F, 1.....	D.310	Sutton
.. F	Elementary ..	M, T, W, Th, F, 2.....	D.310	Sutton
.. G	Elementary ..	M, T, W, Th, F, 3.....	D.300	Whittlesey
.. H	Elementary ..	M, T, W, Th, F, 1.....	D.309	Helmlinge
3 A	Elementary ..	M, T, W, Th, F, 8.....	D.303	Goggio
.. B	Elementary ..	M, T, W, Th, F, 1.....	D.317	Patzer
4 A	Reading and Conversation..	M, W, F, 8.....	D.310	Philbrick
.. B	Reading and Conversation..	M, W, F, 1.....	D.305	Whittlesey
5 A	Reading and Conversation..	M, W, F, 9.....	D.310	Goggio
.. B	Reading and Conversation..	M, W, F, 11.....	D.311	Whittlesey
.. C	Reading and Conversation..	M, W, F, 2.....	D.306	Patzer
6 ..	Reading and Conversation..	M, W, F, 11.....	D.306	Helmlinge
7 ..	Composition and Conv.....	T, Th, 8.....	D.310	Philbrick
8 A	Composition and Conv.....	T, Th, 9.....	D.310	Goggio
.. B	Composition and Conv.....	T, Th, 2.....	D.306	Patzer

ROMANIC LANGUAGES—(Continued)

No. Sec.	Subject	Time	Room	Instructor
9	.. Composition and Conv.....	T, Th, 11.....	D.306	Helmlinge
41	.. Phonetics	M, W, F, 11.....	D.310	Frein
101	.. Adv. Comp. and Conv.....	M, W, F, 10.....	D.306	Patzner
102	A Adv. Comp. and Conv.....	M, W, F, 9.....	D.306	Rätti
..	B Adv. Comp. and Conv.....	M, W, F, 2.....	D.309	Helmlinge
104	.. Adv. Reading and Conv.....	T, Th, 10.....	D.311	Patzner
105	A Adv. Reading and Conv.....	T, Th, 9.....	D.306	Rätti
..	B Adv. Reading and Conv.....	T, Th, 2.....	D.309	Helmlinge
142	.. Drama	M, W, F, 4.....	D.310	Frein
151	.. Hist. Lit. 19th Century.....	M, W, F, 10.....	D.317	Rätti
192	.. Teachers'	T, Th, 11.....	D.310	Frein
242	.. Seminar	T, Th, 4.....	Li.	Frein

II—Italian

2	.. Elementary	M, T, W, Th, F, 11.....	D.318	Goggio
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III—Spanish

1	.. Elementary	M, T, W, Th, F, 8.....	D.311	Santander
2	A Elementary	M, T, W, Th, F, 9.....	D.309	Santander
..	B Elementary	M, T, W, Th, F, 10.....	D.303	Ober
3	.. Elementary	M, T, W, Th, F, 9.....	D.303	Ober
4	.. Reading and Conversation..	M, W, F, 1.....	D.303	Ober
5	.. Reading and Conversation..	M, W, F, 11.....	D.303	Strong
6	.. Reading and Conversation..	M, W, F, 9.....	D.206	Umphrey
7	.. Composition	T, Th, 10.....	D.306	Santander
8	.. Composition	T, Th, 11.....	D.303	Strong
113	.. Commercial	M, W, F, 10.....	D.318	Santander
142	.. Drama	M, W, F, 10.....	D.206	Umphrey
185	.. Spanish-American Lit.....	T, Th, 9.....	D.206	Umphrey
191	.. Teachers'	T, Th, 1.....	D.303	Ober

SCANDINAVIAN

2	.. Swedish	M, T, W, Th, F, 9.....	D.208	Vickner
4	.. Norwegian-Danish	M, T, W, Th, F, 10.....	D.208	Vickner
6	.. Norwegian-Danish Lit.....	M, W, 1.....	D.208	Vickner
9	.. Swedish Lit.	T, Th, 3.....	D.208	Vickner
14	.. Scan. Culture and Instit.....	W, 4.....	D.208	Vickner
104	.. Modern Swedish Lit.....	M, 4-6.....	D.208	Vickner
107	.. Modern Norw.-Dan. Lit....	T, Th, 2.....	D.208	Vickner
110	.. Scan. Lit. in Trans.....	F, 2.....	D.208	Vickner
202	.. Old Norse (Icelandic).....	M, W, 3.....	D.208	Vickner

SOCIOLOGY

52	.. Social Evolution	M, W, F, 10.....	H.E.304	Waterman
58	.. Americanization	T, Th, 10.....	H.E.304	Waterman
62	.. Influence of Phys. Environ..	M, W, F, 2.....	H.E.210	Thomas
106	.. American Social Conditions.	W, 4-6.....	H.E.210	Thomas
152	.. Ethnology of the Old World	M, W, F, 9.....	H.E.210	Waterman
156	.. Family and the Community	M, W, F, 9.....	H.E.304	Thomas

ZOOLOGY

1	.. Elementary	M, W, F, 8.....	S.208	Kincaid
..	A Laboratory	T, Th, 8-11.....	S.205	Fasten
..	B Laboratory	M, W, 1-4.....	S.205	Fasten
..	C Laboratory	T, Th, 1-4.....	S.205	Fasten
2	.. Elementary	M, W, F, 10.....	S.208	Kincaid
..	A Laboratory	T, Th, 8-11.....	S.205	Fasten
..	B Laboratory	M, W, 1-4.....	S.205	Fasten
..	C Laboratory	T, Th, 1-4.....	S.205	Fasten
4	.. Vertebrate Zoology	M, W, F, 9.....	S.208	Fasten
..	Laboratory	M, W, 1-4.....	S.206	Fasten
104	.. Advanced Entomology	M, W, F, 9.....	S.203	Kincaid
..	Laboratory	T, Th, 1-4.....	S.203	Kincaid
201	.. Problems	*	S.203	Kincaid

II—Physiology

9	.. General	M, W, F, 1.....	S.211	Smith
..	Laboratory	M, F, 2-5.....	S.211	Smith
12	.. Physiology and Hygiene...	M, W, F, 9.....	S.211	Smith
..	Laboratory	T, Th, 8-10.....	S.211	Smith
109	.. Advanced	M, W, F, 8.....	S.211	Smith
..	Laboratory	T, Th, 1-4.....	S.211	Smith

BULLETIN

UNIVERSITY OF WASHINGTON

Series I

MARCH, 1919

No. 126—PART 15

Time Schedule

Spring Quarter
1919



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EXPLANATIONS

An asterisk (*) denotes that the time, place, or instructor, as the case may be, is to be determined.

The following are the abbreviations used for buildings:

Ar.—Armory

Arch.—Architecture Building

Anat.—Anatomy Building

As.—Astronomy Building

B.—Bagley Hall

B.S.—Book Store Building

C.—Commerce Hall

D.—Denny Hall

E.—Engineering Hall

F.—Forestry Hall

Gym.—Gymnasium

H.E.—Home Economics Hall

Li.—Library

M.H.—Meany Hall

M.—Mines Hall

S.—Science Hall

Shop—Shop Building

TIME SCHEDULE

3

ANATOMY

No.	Sec.	Subject	Time	Room	Instructor
103	..	Anatomy	M, W, F, 10.....	S.206	Worcester
...	..	Laboratory	M, W, F, 1-4.....	Anat.	Worcester
107	..	Neurology	M, W, F, 10.....	S.211	Smith
...	..	Laboratory	T, Th, 8-11.....	S.211	Smith

ASTRONOMY

24	..	Navigation	M, T, W, Th, F, 8....	As.	Boothroyd
1	..	Introduction to Astronomy.	T, Th, 11.....	As.	Boothroyd
2	..	Laboratory Astronomy....	M, W, F, 10.....	As.	Boothroyd
11	..	The Solar System.....	M, W, F, 11.....	As.	Boothroyd
12	..	The Sun and Stars.....	T, Th, 9.....	As.	Boothroyd
22	..	Geodetic Surveying.....	Arranged	As.	Boothroyd
31	..	History of Astronomy.....	M, W, F, 9.....	As.	Boothroyd

BACTERIOLOGY

5	..	Pharmacy Bacteriology....	M, W, 8.....	S.306	Weinzirl
111	..	Hygiene	M, W, 2-5.....	S.305	Weinzirl
209	..	Research	M, T, W, Th, 9.....	S.306	Weinzirl

BOTANY

3	..	Elementary	T, Th, 1.....	S.208	Rigg
...	..	Laboratory	T, Th, 2-5.....	S.311	Rigg
10	..	Ecol. & Taxon.....	S, 9-5.....	Field	Frye
12	..	Foresters	T, Th, 1.....	S.306	Hotson
...	..	Foresters	T, Th, 2-5.....	S.307	Hotson
14	..	Pharmacy	M, F, 1.....	S.306	Rigg
...	..	Pharmacy	M, F, 2-5.....	S.308	Rigg
107	..	Morph. & Evol.....	T, Th, 4.....	S.306	Frye
...	..	Morph. & Evol.....	T, Th, 1-4.....	S.308	Frye
142	..	Fungi	T, Th, 8.....	S.307	Hotson
...	..	Fungi	T, Th, 9-12.....	S.307	Hotson
145	..	Physiol.	T, Th, 8.....	S.306	Rigg
...	..	Physiol.	T, Th, 9-12.....	S.311	Rigg
263	..	Pathology .....	.....	.....	Hotson

CHEMISTRY

2	..	General	M, W, F, 9.....	B.L.H.	Byers
...	A	Laboratory	T, Th, 1-4.....	B.	Byers
...	B	Laboratory	T, Th, 8-11.....	B.	Byers
...	C	Laboratory	T, Th, 8-11.....	B.	Byers
...	D	Laboratory	T, Th, 1-4.....	B.	Byers
3	..	General	M, W, F, 8.....	B.L.H.	Heath
...	A	Laboratory	T, Th, 1-4.....	B.	Heath
...	B	Laboratory	M, W, 1-4.....	B.	Heath
21	..	General	M, W, F, 9.....	B.301	Tartar
...	A	Laboratory	M, W, 1-4.....	B.	Tartar
...	B	Laboratory	T, Th, 1-4.....	B.	Tartar
22	..	General	M, W, F, 2.....	B.L.H.	Byers
...	A	Laboratory	W, F, 8-11.....	B.	Byers
...	B	Laboratory	M, W, 8-11.....	B.	Byers
...	C	Laboratory	T, Th, 1-4.....	B.	Byers
23	..	General	M, W, F, 1.....	B.L.H.	Tartar
...	A	Laboratory	T, Th, 1-4.....	B.	Tartar
...	B	Laboratory	M, W, 8-11.....	B.	Tartar
33	..	Organic	M, W, F, 8.....	B.301	Dehn
...	A	Laboratory	M, W, 1-4.....	B.	Dehn
...	B	Laboratory	T, Th, 1-4.....	B.	Dehn

UNIVERSITY OF WASHINGTON

CHEMISTRY—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
43	..	Adv. Qual.	T, Th, F, 1	B.307	Byers
..	..	Laboratory	T, Th, 2-5	B.	Byers
51	..	Engineering	T, Th, 10	B.301	Benson
..	..	Laboratory	Th, 1-4	B.	Benson
102	..	Quantitative	W, 9	B.307	Heath
..	..	Laboratory	Th, 8-12	B.	Heath
..	..		F, 1-5	B.	Heath
103	..	Adv. Quant.	*	B.	Heath
122	..	Industrial	M, W, F, 1	B.301	Benson
..	..	Laboratory	M, W, 2-5	B.	Benson
144	..	Physiological	T, Th, 9	B.301	Dehn
..	A	Laboratory	M, F, 1-4	B.	Dehn
..	B	Laboratory	T, Th, 1-4	B.	Dehn
143	..	Physiological	M, W, F, 8	B.303	Barton
..	..	Laboratory	M, W, 1-4	B.	Barton
204	..	Electro-Chem.	M, W, F, 11	B.303	Tartar
..	..	Laboratory	M, W, 1-4	B.	Tartar
211	..	Inorganic	*	B.	*
221	..	Theory	W, F, 4	B.301	Byers
231	..	Adv. Organic	*	B.	Dehn
250	..	Research	*	B.	*
7	..	Nurses	W, 3-5	B.307	Dehn

CIVIL ENGINEERING

1	..	Drawing	F, 10	E.310	Weld
..	..		T, Th, 8-11	E.310	Weld
2	A	Drawing	W, 1	E.304	White
..	..		T, Th, 1-4	E.302	White
..	B	Drawing	W, 10	E.309	Miller
..	..		T, Th, 1-4	E.309	Miller
..	C	Drawing	W, 8	E.304	Moore
..	..		T, Th, 1-4	E.310	Moore
..	D	Drawing	M, 3	E.304	Moore
..	..		T, Th, 8-11	E.301	Moore
11	..	Eng. Prob.	M, 10	E.322	Miller
..	..		W, F, 1-4	E.302	Miller
12	A	Eng. Prob.	M, 1	E.304	Allison
..	..		T, Th, 8-11	E.302	Allison
..	B	Eng. Prob.	M, 10	E.309	Moore
..	..		W, F, 1-4	E.309	Moore
..	C	Eng. Prob.	F, 8	E.304	Ford
..	..		M, W, 1-4	E.301	Ford
..	D	Eng. Prob.	F, 3	E.304	Ford
..	..		T, Th, 1-4	E.307	Ford
13	A	Eng. Prob.	W, 2	E.304	White
..	..		M, F, 8-11	E.302	White
..	B	Eng. Prob.	M, 2	E.304	Harris
..	..		T, Th, 8-11	E.309	Harris
..	C	Eng. Prob.	W, 10	E.307	White
..	..		T, Th, 8-11	E.307	White
21	A	Surveying	M, 2	E.306	Hamilton
..	..		T, Th, 8-11	E.308	Hamilton
..	B	Surveying	W, 2	E.306	Hayden
..	..		T, Th, 1-4	E.308	Hayden
..	C	Surveying	M, 9	E.306	Allison
..	..		T, F, 1-4	E.301	Allison
24	..	Surveying	F, 8	E.303	Hayden
..	..		M, W, 1-4	E.303	Hayden
56	..	Forest Surv.	M, W, F, 9	E.304	Hayden
..	..		T, Th, 8-11	F.200	Hayden
122	..	Highways	M, W, F, 10	E.306	Allison
132	..	Mechanics	W, 10	E.313	Weld
..	..		T, Th, 1-4	E.313	Weld
133	..	Rein. Concrete	M, W, F, 9	E.313	Weld
134	..	Frame Struc.	*	E *	Allison
142	..	Hydraulics	M, W, F, 9	E.321	Harris
..	A	Laboratory	Th, F, 1-4	E.321	Harris
..	B	Laboratory	T, W, 1-4	E.321	Harris
167	..	Str. Materials	T, 11	E.304	Ford
..	..		Th, 8-11	E.208	Ford
..	..		F, 1-4	E.208	Ford

TIME SCHEDULE

5

CLASSICAL LANGUAGES

I—Greek

No.	Sec.	Subject	Time	Room	Instructor
3	..	Elementary	M, T, W, Th, F, 8.....	D.206	Densmore
6	..	Herodotus	M, W, F, 11.....	D.206	Densmore
12	..	Adv. Greek Civil.....	M, T, W, Th, F, 10....	D.212	Densmore
13	..	Gk-Rom. Lit.	M, T, W, Th, F, 9.....	D.212	Sidey
14	..	Gk-Rom. Lit.	M, T, W, Th, F, 2.....	D.311	Sidey

II—Latin

6	..	Catullus	M, W, F, 9.....	D.305	Clark
9	..	Sight Translation	T, Th, 9.....	D.305	Clark
11	..	Roman Civ.....	M, T, W, Th, F, 1.....	D.212	Clark
16	..	Roman Art	T, 11.....	D.212	Sidey
70	..	Plautus and Terence	M, W, F, 10.....	D.305	Clark
102	..	Tacitus: Annals	T, Th, 11.....	D.305	Clark
125	..	Teachers' Course	M, W, F, 11.....	D.311	Sidey

ECONOMICS AND BUSINESS ADMINISTRATION

1	..	Elements of Economics....	M, T, W, Th, F, 9.....	C.220	Miller
7	..	Business Correspondence...	M, W, F, 10.....	C.218	Russell
9	..	3d Quarter Accounting	M, W, F, 9.....	C.212	Thoma
10	..	Economics of Consumption	T, Th, 10.....	C.220	McMahon
12	A	Accounting	M, W, F, 9.....	C.217	de Haas
..	B	Accounting	M, W, F, 10.....	C.220	Thoma
..	C	Accounting	M, W, F, 1.....	C.220	Thoma
22	..	Typewriting	*	C.223	Thoma
27	..	Shorthand	M, T, W, Th, F, 11.....	C.217	Thoma
56	..	Immigration and Labor....	T, Th, 8.....	C.220	McMahon
65	..	Econ. Hist. of W. Europe....	M, W, F, 8.....	C.220	McMahon
69	..	Office Practice	T, Th, 10.....	C.217	Thoma
90	..	See Journalism 109.....			
125	..	Railway and Marine Rates.	M, W, F, 1.....	C.218	Miller
137	..	Ports and Port Facilities...	M, W, F, 10.....	C.217	de Haas
54	..	Salesmanship and Store Management	T, Th, 9.....	C.217	Russell
80	..	Industrial Management	M, W, F, 8.....	C.217	de Haas
149	..	Hist. of Am. Labor Movement	M, W, F, 11.....	C.220	McMahon
225	..	Pro-Seminar	T, 7 p. m.....	*	Miller, de Haas
187	B	Seminar	*	*	de Haas
190	B	Seminar in Reconstruction.	*	*	McMahon

EDUCATION

99	..	Prin. of Education.....	M, T, W, Th, F, 10....	H.E.310	Bolton
109	A	Sociology I (Soc. Foundations)	M, W, F, 9.....	H.E.210	Ayer
109	B	Educ. Sociology I (Soc. Foundations)	M, W, F, 10.....	H.E.210	Ayer
119	..	High School Curriculum	M, W, F, 9.....	H.E.214	Koos
153	..	Problems of High School Administration	Th, 7-9 p. m.....	H.E.310	Koos
154	..	Junior High School	M, W, F, 2.....	H.E.310	Koos
155	..	Childhood and Adolescence.	M, W, F, 11.....	H.E.310	Bolton
157	A	Methods of Teaching	M, W, F, 8.....	H.E.314	Woody
157	B	Methods of Teaching	M, W, F, 10.....	H.E.314	Woody
165	..	Practice Teaching	Lecture W, 4.....	H.E.310	Freeland
			Practice Teaching arranged at reg. time.		
183	..	Elementary Ed. Meas.....	M, W, at 1.....	H.E.314	Woody
193	..	Admin. (City Schools)	M, W, F, at 1.....	H.E.214	Ayer
203	..	Adolescence	T, Th, at 11.....	H.E.210	Bolton
233	..	Adv. Educ. Psychology	S, 10-12.....	H.E.314	Woody
253	..	Admin. (Finan. Aspects)....	S, 8-10.....	H.E.310	Koos
293	..	Seminar (Voca. Guidance).	Th, 4-6.....	H.E.304	Ayer
283	..	Seminar on Play.....	M, 4-6.....	H.E.310	Freeland
300	..	Research	*	H.E. *	All

UNIVERSITY OF WASHINGTON

ELECTRICAL ENGINEERING

No.	Sec.	Subject	Time	Room	Instructor
101	..	Elec. Eng.	M, W, F, 10	E.319	Curtis
			T, 1-4	E.319	Curtis
102	..	Elec. Eng.	T, 8-11	E.201	Shuck
			Th, 1-4	E.201	Shuck
103	..	Elec. Eng.	M, T, W, F, 8	E.322	Shuck
			M, 1-4	E.317	Shuck
104	..	Elec. Eng.	W, F, 1-5	E.201	Shuck
161	..	Elec. Eng.	M, W, F, 8	E.319	Curtis
			T, Th, 8-10	E.319	Curtis
162	..	Elec. Eng.	W, F, 1-5	E.201	Shuck
163	..	Elec. Eng.	T, Th, 8	E.317	Magnusson
164	..	Elec. Eng.	M, 1-5	E.201	Magnusson
151	..	Elec. Eng.	M, W, F, 9-11	E.317	Shuck
			T, 1-5	E.317	Shuck
201	..	Elec. Eng.	W, 8	E.317	Magnusson
			Th, 1-5	E.211	Magnusson
211	..	Elec. Eng.	*	E.213	Magnusson

ENGLISH

2	A	Fresh. Comp.	M, T, W, Th, F, 8	D.225	Gregg
2	B	Fresh. Comp.	M, T, W, Th, F, 8	D.213	Rochester
1	C	Fresh. Comp.	M, T, W, Th, F, 8	D.230	Haggett
1	D	Fresh. Comp.	M, T, W, Th, F, 8	D.317	*
1	E	Fresh. Comp.	M, T, W, Th, F, 8	D.226	Kelsey
1	F	Fresh. Comp.	M, T, W, Th, F, 8	D.318	Harrison
2	G	Fresh. Comp.	M, T, W, Th, F, 9	D.225	Chittick*
1	H	Fresh. Comp.	M, T, W, Th, F, 9	D.230	Kelsey
1	I	Fresh. Comp.	M, T, W, Th, F, 9	D.226	Haggett
1	J	Fresh. Comp.	M, T, W, Th, F, 9	D.318	Millman
2	K	Fresh. Comp.	M, T, W, Th, F, 10	D.230	Ernst
2	L	Fresh. Comp.	M, T, W, Th, F, 1	D.225	Garrett
1	M	Fresh. Comp.	M, T, W, Th, F, 1	D.230	Rochester
1	N	Fresh. Comp.	M, T, W, Th, F, 1	D.226	Eckelman
5	A	Fresh. Comp. (Fine Arts)	M, W, F, 8	D.221	Eckelman
5	B	Fresh. Comp. (Fine Arts)	M, W, F, 1	D.317	Harrison
53	..	Advanced Comp.	M, W, F, 11	D.221	Millman
75	A	Contemporary Lit.	M, W, F, 10	D.226	Gregg
75	B	Contemporary Lit.	M, W, F, 2	D.221	Ernst
75	C	Contemporary Lit.	M, W, F, 1	D.318	Ernst
70	..	Shakespeare	M, W, F, 10	D.317	Padelford
79	..	Introduction to Poetry	M, W, F, 2	D.225	Farrington
103	..	See Journalism			
106	..	Contemporary Lit. (Jr. Sr.)	M, W, F, 2	D.318	Harrison
135	..	Main Tendencies	M, W, F, 10	D.225	Farrington
143	..	Social Ideals	M, W, F, 9	D.221	Gregg
163	A	American Lit.	M, W, F, 9	D.213	Farrington
163	B	American Lit.	M, W, F, 11	D.225	Farrington
167	..	Great Am. Writers	M, W, F, 1	D.221	Millman
176	..	Victorian Poets	M, W, F, 9	D.317	Padelford
185	..	General Literature	*	D.224	Johanson
190	..	Teachers' Course	T, 4-6	D.318	Garrett
193	..	Senior Conference	*	D.224	Johanson
242	..	Pro-Seminar. Chaucer	T, 7-9 p. m.	Library	Garrett

FINE ARTS

I—Music

3	..	Fundamentals	T, Th, 10	M.H.112	Van Ogle
6	..	History	M, W, 10	M.H.112	Glen
9	A	Sight Reading	M, W, 9	M.H.110	Dickey
..	B	Sight Reading	T, Th, 9	M.H.110	Dickey
10	..	Choral Study	W, 7:30 p. m.	M.H.Aud.	Glen
16	..	Ear Trg. and Mel. Writ.	M, W, 10	M.H.110	Dickey
18	..	Applied Music	*		
21	..	University Orchestra	T, 7:30 p. m.	M.H.Aud.	Glen
24	..	University Band	*		
27	..	Chamber Music	Th, 7:30 p. m.	M.H.111	Rosen
30	..	Ensemble Singing	M, 3	M.H.110	Dickey

TIME SCHEDULE

FINE ARTS—(Continued)

No.	Sec.	Subject	Time	Room	Instructor
33	..	Harmony	T, Th, 9	M.H.102	Wood
36	..	School Music	M, W, 11	M.H.110	Dickey
103	..	Adv. Harmony	M, Th, 10	M.H.102	Wood
106	..	Adv. Hist. of Music	T, Th, 9	M.H.112	Van Ogle
109	..	Counterpoint	T, F, 10	M.H.102	Wood
112	..	Analysis, Form	T, F, 8	M.H.102	Wood
115	..	Music Education	T, Th, 10	M.H.110	Dickey
118	..	Composition	W, 10-12	M.H.102	Wood
121	..	Music Appreciation	T, Th, 2	M.H.112	Van Ogle
123	..	Music Ed. and Supervision	F, 1-3	M.H.110	Dickey

II—Architecture

3	..	Hist. and Elem.	M, W, 1	S.108	Gould
6	..	Drawing	M, W, F, 2-5	Arch.	Gould
9	..	Descriptive Geom.	T, 1-4	Arch.	Russett
49	..	See C. E. 12			
53	..	Hist. and Elem.	M, W, 11	Arch.	Gould
56	..	Arch. Design	M, W, F, 1-4	Arch.	Gould
61	..	Bldg. Construction	W, F, 8-10	Arch.	Russett
103	..	Hist. and Elem.	M, W, 8	Arch.	Meyer
106	..	Design	T, Th, F, 1-4	Arch.	Gould
111	..	Water Color	T, Th, 8-10	Arch.	Meyer

III—Painting, Sculpture and Design

7	..	Freehand Drawing	M, W, F, 10-12	B.S.	Durand
11	..	Art Structure	M, T, Th, F, 1-3	B.S.	Culver
18	..	Art Appreciation	T, 4	D.212	Durand
55	..	Art Structure	T, Th, 8-12	B.S.	Culver
58	..	Life Study and Illus.	T, Th, 9-12	B.S.	Durand
101	..	Public School Drawing	M, W, F, 10-12	B.S.	Culver
109	..	Portrait	T, Th, 9-12	B.S.	Durand
112	..	Interior Decoration	M, W, F, 8-10	Arch.1	Edens
158	..	Art Structure (Jewelry)	M, F, 1-4	Arch.1	Edens
159	..	Landscape	M, W, F, 10-12	Arch.1	Edens
162	..	Portrait and Life	T, Th, 9-12	B.S.	Durand
165	..	Mural Decorating	T, Th, 8	B.S.	Durand
			M, W, F, 8-10	B.S.	Durand
171	..	Textiles and Costume De- sign	T, Th, 8-10	Arch.2	Edens

IV—Dramatic Art

1	..	Practical Public Speaking ..	M, T, W, Th, F, 9	D.300	Gorsuch
8	..	Dramatic Reading	M, T, W, Th, F, 10	D.300	Gorsuch
105	..	Advanced Reading	T, Th, 11	D.300	Gorsuch

FISHERIES

1	..	Introduction	T, Th, 9	S.208	Cobb
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FORESTRY AND LUMBERING

1	..	Dendrology	F, 10	F.204	Grondal
			M, W, 1-4	F.205	Grondal
3	..	Gen. Forestry	M, W, 10	F.103	Winkenw'r
108	..	Silviculture	T, Th, 10	F.204	Kirkland
			F, 1	F.204	Kirkland
			M, W, 1-4	Field	Kirkland
115	..	For. Mensuration	T, Th, 10	F.202	Winkenw'r
			M, W, 1-4	F.200	Winkenw'r
207	..	Logging Eng.		Field	Clark
105	..	Wood Preservation		F.205	Grondal

GEOLOGY

No. Sec.	Subject	Time	Room	Instructor
2	Historical	M, T, W, Th, F, 8	S.108	Saunders
5	Foresters	M, W, F, 8	S.107	Culver
		F, 1-5	S.107	Culver
10	Fundamentals	T, Th, 1	S.108	Saunders
12	Physiography (Beginners)	M, T, W, Th, F, 9	S.108	Saunders
16	Econ. Geog. of Wash.	M, W, F, 9	S.107	Landes
22	Petrology	M, W, F, 10	S.107	Culver
124	Petrography	*	*	Culver
129	Field Methods	M, W, F, 11	S.107	Culver
141	Physiog. of Europe	M, W, F, 11	S.108	Saunders

GERMANIC LANGUAGES AND LITERATURE

2	First Year	M, T, W, Th, F, 10	H.E.212	Boetzkes
7	Second Year	M, W, F, 1	H.E.212	Boetzkes
102	Goethe	T, Th, 9	H.E.212	Boetzkes
105	Recent Writers	M, W, F, 9	H.E.212	Boetzkes
116	Scientific	M, F, 10	H.E.214	Eckelman
190	19th Century Lit.	T, Th, 11	H.E.212	Boetzkes

HISTORY

1	Med. and Mod. Europe	M, T, W, Th, F, 9	D.209	Scholtz
61	Makers of Nation	T, Th, 10	D.320	Meany
100	European War	M, T, W, Th, F, 10	D.205	Richardson
106	English Constitution	M, W, F, 8	D.205	Richardson
119	Mediterranean World	T, Th, 10	D.213	Scholz
122	Prussia and No. Europe	T, Th, 9	D.205	Richardson
145	U. S., 1840-1860	T, Th, 9	D.213	McMahon
149	National Development	M, T, W, Th, F, 8	D.209	McMahon
155	History of Canada	M, W, F, 10	D.203	Meany
159	American Diplomacy	T, Th, 9	D.203	Meany
165	Northwestern History	T, Th, 1	D.203	Meany
197	Methods of Teaching Hist.	T, Th, 11	D.213	McMahon
203	Historical Criticism	W, 4-6	D.213	Scholz
222	Seminar Am. History	M, 4-6	D.213	McMahon
229	Seminar in State Hist.	W, 4-6	D.203	Meany

HOME ECONOMICS

3	General	M, W, F, 8-10	H.E.305	Denny
8	Elem. Clothing	M, W, F, 10-12	H.E.307	Connolly
5	Sel. and Prep. Food	M, W, F, 10-12	H.E.211	Dresslar
		T, Th, 10	H.E.211	Dresslar
6	Sel. and Prep. Food	M, W, F, 2-4	H.E.211	Dresslar
		M, W, 1	H.E.211	Dresslar
25	Textiles	T, Th, 11	H.E.301	Denny
	Sec. A	M, W, F, 2-4	H.E.301	Denny
	Sec. B	M, W, F, 10-12	H.E.301	Denny
108	Home Nursing	M, W, F, 2-4	H.E.218	Fitzgerald
110	Nutrition	T, Th, 4	H.E.203	Dresslar
122	Buying and Dietaries	M, W, F, 2	H.E.203	Clarke
124	Practice Work I	*	*	Clarke
125	Practice Work II	*	*	Clarke
130	Costume Design	M, W, F, 8-10	H.E.307	Connolly
		T, Th, 10-12	H.E.307	Connolly
133	Clothing	M, T, W, Th, F, 1-4	H.E.307	Connolly
	Dressmaking	M, T, W, Th, F, 1-4	H.E.307	Connolly
145	Household Mgt.	M, W, F, 11	H.E.203	Raitt
147	Teachers' Course	M, W, F, 10	H.E.203	Raitt
143	Home Decoration	T, Th, 4	H.E.305	Denny
		Lab. to be arranged	*	*
136	Department Store Service	M, F, 9	H.E.203	Small
		W, 4	H.E.203	Small
140	Store Practice Work II	*	*	Small

TIME SCHEDULE

JOURNALISM

No. Sec.	Subject	Time	Room	Instructor
103	Elements	M, W, F, 9	C.106	Goss
106	Mechanics	M, 1, W, 1-3	C.124	Kennedy
109	General Advertising	M, W, F, 8	C.106	Russell
153	Editing, Advanced Rept.	M, W, F, 10	C.110	Goss
162	Short Story	M, W, F, 2	C.106	Edgington
165	Business Office	T, 8, Th, 8-11	C.118	Kennedy
175b	Senior Conference	*	*	Russell

LAW

101	Agency	M, T, W, Th, 10	C.305	Bissett
105	Contracts	M, W, F, 9	C.305	Lantz
109	Pleading	T, F, 8	C.305	Goodner
113	Procedure II	T, Th, 9; F, 10	C.308	Goodner
119	Stat. Law	M, W, Th, 8	C.305	Condon
125	Equity	T, W, 10; M, Th, F, 11	C.309	Goodner
131	Evidence	M, Th, 10; W, F, 9	C.309	Condon
143	Carriers	M, T, W, 8	C.309	Lantz
147	Sales	T, 11; Th, F, 8	C.309	Lantz
161	Procedure IV	Th, 1-4	C.308	Goodner
187	Priv. Corp'ns	T, Th, 9	C.314	Bissett
191	Comm. Prop.	M, T, W, Th, F, 11	C.314	Bissett
193	Suretyship	T, W, Th, 10	C.314	Lantz
197	History of Law	M, 9; F, 10	C.314	Bissett
56	Business Law	M, W, F, 8	C.218	Bissett

LIBRARY ECONOMY

104	Cataloging	M, W, F, 10	Ll.3	Blodgett
106	Reference	T, Th, 10	Ll.3	Smith
110	Practice	*	*	Henry
208	Subject Bibliography	*	*	Smith
213	Practice	*	*	Henry
219	Book Selection	T, F, 8	Ll.3	Ashley
220	Library Administration and Library Literature	M, W, 8	Ll.3	Henry
222	Special Lectures	Th, 8	Ll.3	*
223	Study of Selected Library..	*	*	Henry

MATHEMATICS

1	Algebra	M, T, Th, F, 2	S.110	Small
2	Solid Geometry	M, T, W, Th, F, 8	S.110	Bell
6	College Algebra	M, T, W, Th, F, 1	S.110	Small
9	Calculus	M, T, W, Th, F, 2	S.106	Moritz
4	Trigonometry	M, T, W, Th, F, 10	D.125	Winger
11	Investments I.	M, T, W, Th, F, 9	S.110	Bell
12 A	Investments II.	M, T, W, Th, F, 2	S.207	Carpenter
12 B	Investments II.	M, T, W, Th, F, 9	S.207	Gavett
12 C	Investments II.	M, T, W, Th, F, 10	S.207	Gavett
12 D	Investments II.	M, T, W, Th, F, 8	S.106	Neikirk
13	Elements of Statistics	M, T, W, Th, F, 3	S.106	Moritz
51 A	Algebra	M, W, F, 8	D.412	Small
51 B	Algebra	M, W, F, 1	D.125	Winger
52 A	Trigonometry	M, W, F, 3	D.125	Small
52 B	Trigonometry	M, W, F, 8	D.125	Winger
52 C	Trigonometry	M, W, F, 10	D.412	Neikirk
52 D	Trigonometry	M, W, F, 1	S.106	Moritz
53 A	Analytics	M, W, F, 3	S.110	Carpenter
53 B	Analytics	M, W, F, 3	S.207	Gavett
53 C	Analytics	M, W, F, 10	S.110	Carpenter
53 D	Analytics	M, W, F, 1	D.412	Neikirk
58	Foresters	M, W, F, 8	S.207	Gavett
61 A	Calculus	M, W, F, 9	D.412	Neikirk
61 B	Calculus	M, W, F, 10	S.106	Bell
62	Calculus	M, W, F, 9	D.125	Winger
63	Calculus	M, W, F, 9	S.106	Carpenter

UNIVERSITY OF WASHINGTON

MECHANICAL ENGINEERING

No.	Sec.	Subject	Time	Room	Instructor
1	..	Shop	M, 1-4.....	Shop	Beattie
2	A	Shop	M, 8-11.....	Shop	Beattie
...	B	Shop	M, 1-4.....	Shop	Beattie
...	C	Shop	F, 1-4.....	Shop	Beattie
...	D	Shop	F, 8-11.....	Shop	Beattie
3	A	Shop	W, 8-11.....	Shop	Beattie
...	B	Shop	F, 8-11.....	Shop	Beattie
...	C	Shop	Th, 1-4.....	Shop	Beattie
53	..	Shop	M, 1-4.....	Shop	Kane
54	A	Shop	T, 1-4.....	Shop	Kane
...	B	Shop	Th, 1-4.....	Shop	Kane
55	A	Shop	Th, 8-11.....	Shop	Kane
...	B	Shop	F, 1-4.....	Shop	Kane
81	..	Mechanism	M, W, F, 9.....	E.322	Winslow
82	..	Steam Engineering	M, W, F, 10.....	E.304	Mudge
90	..	Machine Design	W, 1.....	E.322	Winslow
...	...	...	W, 2-5.....	E.310	Winslow
...	...	...	F, 1-4.....	E.310	Winslow
91	..	Machine Design	M, W, F, 1-4.....	E.308	Mudge
102	..	Machine Design	T, Th, 9-12.....	E.313	Winslow
106	..	Metal Work	*	Shop	Kane
123	..	Eng. and Boilers	M, W, F, 11.....	E.318	Eastwood
140	..	Steam Eng. Lab.....	T, Th, 10.....	E.320	Wilson
...	...	...	T, 1-4.....	E.226	Wilson
153	..	Exp. Eng.	M, Th, 1-5.....	E.226	Wilson
184	..	Power Plants	M, W, F, 10.....	E.318	Eastwood

MINING AND METALLURGY

I—Mining

106	..	Mining Excursion	*	M.	Roberts
152	..	Ore Dressing	*	M.	Roberts
155	..	Thesis	*	M.	Roberts
302	..	Mine Operation	*	M.	Roberts
303	..	Seminar	*	M.	Roberts

II—Metallurgy

102	..	General Metallurgy	M, W, F, 10.....	M.	Corey
...	..	General Metallurgy	M, T, 1-4.....	M.	Corey
158	..	Minor Metals	*	M.	Corey
160	..	Metallurgical Analysis	*	M.	Corey
163	..	Metallurgy	*	M.	Corey
166	..	Electro-Metallurgy	*	M.	Corey

NAVAL AND MILITARY SCIENCE

2	A	Military Training (Men with advanced credit) ..	M, W, F, 11.....	Ar.	Ernshaw
...	B	Military Training	M, T, W, Th, F, 11.....	Ar.	Ernshaw

NURSING

1	..	Nursing as a Profession...	T, Th, 11.....	H.E.214	Bartlett
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ORIENTAL LANGUAGES AND LITERATURE

3	..	History of Japan	M, W, F, 9.....	D.312	Gowen
13	..	Literature of Persia	M, T, W, Th, F, 10.....	D.312	Gowen
15	..	Semetic Literature	W, 5.....	D.312	Gowen
105	..	Sanscrit	Arranged	D.312	Gowen
106	..	Hebrew	Arranged	D.312	Gowen
116	..	History of Religion	M, W, F, 8.....	D.312	Gowen
8	..	Russian for Beginners	M, T, W, Th, F, 1.....	D.312	Simeon
9	..	Russian, Elementary	M, T, W, Th, F, 2.....	D.312	Simeon
109	..	Russian, Advanced	M, T, W, Th, F, 3.....	D.312	Simeon
10	..	Chinese, Elementary	Arranged	D *	Skinner
111	..	Chinese Advanced	Arranged	D *	Skinner

TIME SCHEDULE

PHARMACY

No. Sec.	Subject	Time	Room	Instructor
2 ..	Pharmacy	M, W, F, 10.....	B.301	Goodrich
		W, 1-4.....	B.	Goodrich
		Th, 8-11.....	B.	Goodrich
3 ..	Pharmacy	T, F, 8.....	B.307	Oseward
4 ..	Pharmacy	M, T, W, Th, F, 10.....	B.307	Linton
7 ..	Pharmacy	W, 9.....	B.303	Goodrich
... A	Laboratory	T, F, 1-4.....	B.	Goodrich
... B	Laboratory	T, Th, 1-4.....	B.	Goodrich
9 ..	Pharmacy	M, T, W, Th, F, 10.....	B.303	Johnson
11 ..	Pharmacy	M, F, 9.....	B.303	Linton
... A	Laboratory	T, 8-10.....	B.	Linton
		T, 1-5.....	B.	Linton
... B	Laboratory	Th, 8-10.....	B.	Linton
		F, 1-5.....	B.	Linton
15 ..	Pharmacy	W, 1-4.....	B.	Linton
107 ..	Pharmacy	T, Th, 11.....	B.303	Johnson
... ..	Laboratory	M, W, F, 1-5.....	B.	Johnson

PHILOSOPHY

1 A	Introd. to Philosophy	M, T, W, Th, F, 9.....	D.401	Guthrie
... B	Introd. to Philosophy	M, T, W, Th, F, 2.....	D.401	Ducasse
2 ..	Introd. to Ethics	M, T, W, Th, F, 8.....	D.212	Guthrie
103 ..	History	M, W, F, 9.....	D.215	Savery
116 ..	History of Religion	M, W, F, 8.....	D.312	Gowen
123 ..	19th Century Literature... ..	M, T, W, Th, F, 11.....	D.215	Savery
129 ..	Aesthetics	M, T, W, Th, F, 1.....	D.401	Ducasse
131 ..	Philosophy of the War and Peace	T, Th, 10.....	D.215	Savery

PHYSICAL EDUCATION AND HYGIENE FOR MEN

3 ..	Cal. and Ath.	M, T, W, Th, F, 11.....	Gym.	Arbuthnot
53 ..	Gym and Ath.	M, T, W, Th, F, 11.....	Gym.	Arbuthnot
117 ..	Intramural Ath.	T, Th, 4.....	Gym.	Arbuthnot
124 ..	Adv. Gym. App.	T, Th, F, 10.....	Gym.	Arbuthnot
157 ..	Intramural Ath.	M, W, 4.....	Gym.	Arbuthnot

Unclassified, Freshman, Sophomore, Junior and Senior men not taking Military Science must arrange with the department for recreation period

PHYSICAL EDUCATION AND HYGIENE FOR WOMEN

8 A	Hygiene	Th, 10.....	S.208	Irwin
8 B	Hygiene	Th, 11.....	S.208	Irwin
8 C	Hygiene	T, 11.....	S.208	Irwin
3 B	Gymnastics	T, Th, 10.....	Gym.	*
3 C	Gymnastics	M, W, 11.....	Gym.	*
3 D	Gymnastics	M, W, 3.....	Gym.	*
3 E	Military Drill	T, Th, 4.....	Ar.	Kennedy
7 A	Corr. Gym.	T, F, 11.....	Gym.	Bloom
7 B	Corr. Gym.	M, W, 10.....	Gym.	Bloom
7 C	Corr. Gym.	T, Th, 10.....	Gym.	Bloom
7 D	Corr. Gym.	M, Th, 11.....	Gym.	Bloom
7 E	Corr. Gym.	T, Th, 2.....	Gym.	Bloom
11 A	Baseball	T, Th, 8.....	Field	Pray
11 B	Baseball	M, W, 3.....	Field	Pray
11 C	Hockey	M, W, 8.....	Field	Harrington
11 D	Hockey	T, Th, 4.....	Field	Harrington
58 A	Food	T, 11.....	H.E.310	Fitzgerald
58 B	Food	F, 1.....	H.E.310	Fitzgerald
58 C	Food	Th, 11.....	H.E.310	Raitt
53 A	Gym.	M, W, 9.....	Gym.	Pray
... B	Gym.	T, Th, 2.....	Gym.	Harrington
... C	Military Drill	T, Th, 4.....	Ar.	Kennedy
57 A	Corr. Gym.	T, F, 11.....	Gym.	Bloom
... B	Corr. Gym.	M, W, 10.....	Gym.	Bloom
... C	Corr. Gym.	T, Th, 10.....	Gym.	Bloom
... D	Corr. Gym.	M, Th, 11.....	Gym.	Bloom

PHYSICAL EDUCATION AND HYGIENE FOR WOMEN —(Continued)

No.	Sec.	Subject	Time	Room	Instructor
...	E	Corr. Gym.	T, Th, 2	Gym.	Bloom
65	..	Dancing	M, W, 10	Gym.	Pray
61	A	Baseball	M, W, 4	Field	Pray
...	B	Baseball	T, Th, 10	Field	Pray
...	C	Hockey	T, F, 11	Field	Harrington
...	D	Hockey	M, W, 9	Field	Harrington
...	E	Baseball	T, Th, 9	Field	Pray
103	..	Methods	M, W, 10	Gym.	Harrington
			M, W, 2	Gym.	Pray
			1 hr. arr.		
119	..	Folk Dancing	T, Th, F, 3	Gym.	Harrington
124	..	Adv. Gym. App.	T, Th, F, 10	Gym.	Arbuthnot
127	..	Corr. Gym. Th.	M, W, F, 9	Gym.	Bloom
131	..	Corr. Gym. Pract.	T, Th, 9	Gym.	Bloom
			4 hrs. arr.	Gym.	Bloom
135	..	Kinesiology	T, 12; F, 11	H.E.214	Irwin

PHYSICS

2	..	General	M, W, F, 10	D.127	Osborn
...	A	Laboratory	M or W, 1-4	D.107	Osborn
...	B	Laboratory	T or Th, 8-11	D.107	Osborn
3	..	General	M, W, F, 10	D.128	Brakel
...	A	Laboratory	M or W, 1-4	D.107	Brakel
...	B	Laboratory	T or Th, 8-11	D.107	Brakel
50	..	Sound and Music	M, W, F, 9	D.112	Utterbach
			T, 1	D.112	Utterbach
		Laboratory	Th, 1-4	D.112	Utterbach
98	..	Electricity	M, W, F, 8	D.127	Utterbach
...	A	Laboratory	T, Th, 8-11	D.107	Utterbach
...	B	Laboratory	M, W, 1-4	D.107	Utterbach
99	..	Light and Heat	M, W, F, 8	D.127	Brakel
...	A	Laboratory	T, Th, 8-11	D.107	Brakel
...	B	Laboratory	M, W, 1-4	D.107	Brakel
103	..	Adv Light	M*	D.125	Osborn
116	..	Elec. Meas.	T, Th, F, 1-4	D.105	Brakel

POLITICAL SCIENCE

1	A	Elements	M, T, W, Th, F, 8	D.218	Barnett
...	B	Elements	M, T, W, Th, F, 9	D.218	Barnett
100	..	Municipal Government	M, W, F, 11	D.218	Barnett

PSYCHOLOGY

1	..	General (lectures)*	T, W, Th, F, 10	B.L.H.	Smith
...	A	(laboratory)	M, 1-3	Sc. At.	Loring
...	B	(laboratory)	M, 3-5	Sc. At.	Loring
...	C	(laboratory)	T, 1-3	Sc. At.	Loring
...	D	(laboratory)	T, 3-5	Sc. At.	Loring
...	E	(laboratory)	W, 1-3	Sc. At.	Loring
...	F	(laboratory)	W, 3-5	Sc. At.	Loring
...	G	(laboratory)	Th, 1-3	Sc. At.	Loring
...	H	(laboratory)	Th, 3-5	Sc. At.	Loring
...	A	(quiz section)	*	Sc. At.	Wiltbank
...	B	(quiz section)	*	Sc. At.	Wiltbank
...	C	(quiz section)	*	Sc. At.	Wiltbank
...	D	(quiz section)	*	Sc. At.	Wiltbank
...	E	(quiz section)	*	Sc. At.	Wiltbank
...	F	(quiz section)	*	Sc. At.	Wiltbank
...	G	(quiz section)	*	Sc. At.	Wiltbank
...	H	(quiz section)	*	Sc. At.	Wiltbank
106	..	Experimental (lecture)	W, F, 10	Sc. At.	Loring
...		(Laboratory)	*	Sc. At.	Loring
112	..	Systematic	M, T, W, Th, F, 10	Sc. At.	Wiltbank
124	..	Educational	T, Th, 10	Sc. At.	Wiltbank
153	..	Undergraduate Research	*	Sc. At.	Smith
203	..	Graduate Research	*	Sc. At.	Smith

TIME SCHEDULE

ROMANIC LANGUAGES

I—French

No.	Sec.	Subject	Time	Room	Instructor
1	A	Elementary French	M, T, W, Th, F, 8	D.310	Ratti
...	B	Elementary French	M, T, W, Th, F, 10	D.306	Durrant
...	C	Elementary French	M, T, W, Th, F, 1	D.310	Sidey
2	A	Elementary French	M, T, W, Th, F, 8	D.309	Durrant
...	B	Elementary French	M, T, W, Th, F, 9	D.310	Patzner
...	C	Elementary French	M, T, W, Th, F, 10	D.309	Wittlesey
...	D	Elementary French	M, T, W, Th, F, 1	D.306	Philbrick
3	A	Elementary French	M, T, W, Th, F, 8	D.306	Umphrey
...	B	Elementary French	M, T, W, Th, F, 9	D.311	Strong
...	C	Elementary French	M, T, W, Th, F, 10	D.310	Philbrick
...	D	Elementary French	M, T, W, Th, F, 11	D.306	Patzner
...	E	Elementary French	M, T, W, Th, F, 1	D.309	Helmlinge
...	F	Elementary French	M, T, W, Th, F, 2	D.310	Durrant
...	G	Elementary French	M, T, W, Th, F, 8	D.300	Whittlesey
4	A	Reading and Conversation	M, W, F, 8	D.303	Goggio
...	B	Reading and Conversation	M, W, F, 1	D.303	Patzner
5	A	Reading and Conversation	M, W, F, 8	D.405	Philbrick
...	B	Reading and Conversation	M, W, F, 1	D.405	Ratti
6	A	Reading and Conversation	M, W, F, 9	D.407	Goggio
...	B	Reading and Conversation	M, W, F, 11	D.407	Whittlesey
7	..	Comp. and Conversation	T, Th, 8	D.303	Goggio
8	..	Comp. and Conversation	T, Th, 8	D.405	Philbrick
9	..	Comp. and Conversation	T, Th, 9	D.306	Goggio
41	..	Phonetics	M, W, F, 11	D.310	Frein
101	..	Adv. Comp. and Conv.	M, W, F, 11	D.309	Helmlinge
102	..	Adv. Comp. and Conv.	M, W, F, 10	D.405	Patzner
103	A	Adv. Comp. and Conv.	M, W, F, 9	D.306	Ratti
...	B	Adv. Comp. and Conv.	M, W, F, 2	D.306	Helmlinge
104	..	Adv. Reading and Conv.	T, Th, 11	D.309	Helmlinge
106	A	Adv. Reading and Conv.	T, Th, 9	D.407	Ratti
...	B	Adv. Reading and Conv.	T, Th, 2	D.306	Helmlinge
143	..	Drama	M, W, F, 3	D.306	Frein
152	..	Hist. Lit. 19th Cent.	M, W, F, 10	D.405	Ratti
193	..	Teachers'	T, Th, 11	D.310	Frein
243	..	Seminar	Sat. 10-12	Lt.	Frein

II—Italian

3	..	Elementary	M, T, W, Th, F, 11	D.405	Goggio
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III—Spanish

1	A	Elementary Spanish	M, T, W, Th, F, 9	D.402	Santander
...	B	Elementary Spanish	M, T, W, Th, F, 1	D.311	Strong
2	A	Elementary Spanish	M, T, W, Th, F, 8	D.311	Santander
...	B	Elementary Spanish	M, T, W, Th, F, 9	D.303	Ober
3	A	Elementary Spanish	M, T, W, Th, F, 9	D.309	Umphrey
...	B	Elementary Spanish	M, T, W, Th, F, 10	D.303	Ober
4	..	Reading and Conversation	M, W, F, 11	D.303	Ober
6	..	Reading and Conversation	M, W, F, 11	D.402	Strong
7	..	Comp. and Conversation	T, Th, 10	D.407	Santander
9	..	Adv. Composition	T, Th, 11	D.311	Strong
112	..	Commercial	M, W, F, 10	D.407	Santander
143	..	Drama	M, W, F, 10	D.318	Umphrey
186	..	Sp. Am. Lit.	T, Th, 10	D.318	Umphrey
192	..	Teachers'	T, Th, 1	D.303	Ober

SCANDINAVIAN LANGUAGES AND LITERATURE

7	..	Norwegian-Danish Lit.	M, W, 1	D.208	Vickner
10	..	Swedish Literature	T, Th, 3	D.208	Vickner
13	..	Reading Co. Nor. & Swed.	T, 4	D.208	Vickner
14	..	Scand. Culture & Inst.	W, 4	D.208	Vickner
105	..	Modern Swed. Lit.	M, 4-5:45	D.208	Vickner
108	..	Mod. Norweg.-Dan. Lit.	T, Th, 2	D.208	Vickner
111	..	Scandinav. Lit. in Transl.	F, 2	D.208	Vickner
203	..	Hist. of Swed. Lang.	M, W, 3	D.208	Vickner
206	..	Scand. Lit. of 19th Cent.	T, Th, 1	D.208	Vickner
207	..	Scandinav. Lyric Poetry	M, 11	D.208	Vickner
209	..	History of Scand. Lit.	F, 1	D.208	Vickner

SOCIOLOGY

No.	Sec.	Subject	Time	Room	Instructor
1	..	Introductory Sociology	M, T, W, Th, F, 9.....	D.320	Waterman
159	..	Social Progress	M, W, F, 10.....	H.E.304	Thomas
107	..	Race Problems	W, 4-6.....	H.E.304	Waterman
151	..	The American Indian.....	M, W, F, 10.....	C.215	Waterman
56	..	Criminology	M, W, F, 9.....	H.E.304	Thomas
129	..	Social Statistics	M, W, F, 2.....	H.E.210	Thomas
203	..	Seminar	W, 7:30-9:30.....	*	Waterman & Thomas

ZOOLOGY

2	..	Elementary	M, W, F, 8.....	S.208	Kincaid
...	A	Laboratory	T, Th, 8-11.....	S.205	Fasten
...	B	Laboratory	M, W, 1-4.....	S.205	Gille
...	C	Laboratory	T, Th, 1-4.....	S.205	Fasten
5	..	Embryology	M, W, F, 8.....	S.208	Worcester
...	..	Laboratory	T, Th, 1-4.....	S.206	Worcester
4	..	Vertebrate	M, W, F, 8.....	S.211	Fasten
...	..	Laboratory	M, W, 1-4.....	S.205	Fasten
13	..	Elementary Entomology...	M, W, F, 10.....	S.208	Kincaid
...	..	Laboratory	T, Th, 1-4.....	S.205	Kincaid
16	..	Evolution	M, W, F, 9.....	S.208	Kincaid
203	..	Problems	*	S.203	Kincaid

II—Physiology

7	..	Elementary	M, W, F, 1.....	S.211	Smith
...	..	Laboratory	T, Th, 1-4.....	S.211	Smith
110	..	Advanced Physiology	M, W, F, 8.....	S.203	Smith
...	..	Laboratory	T, Th, 8-11.....	S.211	Smith