

**THE  
UNIVERSITY OF OREGON**

---

**CATALOGUE 1912-1913**

---

**Announcements, 1913-1914**



**EUGENE**

---

**Published by the University**

**April, 1913**

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SALEM, OREGON  
WILLIS S. DUNIWAY, STATE PRINTER  
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# UNIVERSITY OF OREGON BULLETIN

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New Series

APRIL, 1913

Vol. X, No. 8

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**T**HE University of Oregon Bulletin is published monthly during the University year, and will be sent free on application. Requests for Bulletins, or for general information in regard to the University, should be addressed to

THE REGISTRAR,  
University of Oregon, Eugene, Oregon.

## CALENDAR, 1913

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2	1	2	3	4	5	6	
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31			24	25	26	27	28	29	30	28	29	30				
							31													
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4							1		1	2	3	4	5	6	
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31			
							30													

## CALENDAR, 1914.

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28
25	26	27	28	29	30	31								29	30	31				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4							1	2	1	2	3	4	5	6	
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30				
							31													

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## CALENDAR.

September 15.—Admission examinations.

September 16 to February 6.—First semester.

February 9 to June 17.—Second semester.

### CALENDAR IN DETAIL.

September 15, Monday.	Session of the School of Law begins in Portland.
September 15, Monday.	Entrance examinations at Eugene for the College of Literature, Science and the Arts, and the College of Engineering. Examinations for removal of conditions.
Sept. 16, Tuesday } Sept. 17, Wednesday }	First semester opens. Payment of incidental fees and registration. Filing of applications for undergraduate, graduate and special student standing, if such applications have not already been filed. Instructors keep office hours for consultation with the students.
Sept. 18, Thursday.	All University work begins.
Sept. 26, Friday.	Reception to the new students by the Christian Associations.
October 6, Monday.	Session of the School of Medicine begins in Portland.
October 8, Wednesday.	Regular meeting of Associated Students.
November 26, 12 M. to } November 30, Sunday }	Thanksgiving recess.
November 24, Monday.	Second term School of Law begins.
December 1, Monday } December 2, Tuesday }	Examinations for removal of conditions.
December 13, Saturday.	Sophomore party, Gymnasium.

December 20, Saturday to January 4, Sunday, inclusive.	} Christmas vacation.
January 5, Monday.	
January 20, Tuesday.	Recitations begin 8 A. M., after Christmas holidays.
January 23, Friday.	Regular meeting of the Board of Regents, Villard Hall.
January 23, Friday.	Last date for filing with Registrar subjects for Failing and Beekman orations.
January 23, Friday.	Annual contest in Oratory to choose representative for Intercollegiate contest.
February 2, Monday.	Mid-year examinations begin.
February 6, Friday.	First semester ends.
February 9, Monday.	Second semester begins.
February 13, Friday.	Annual contest in Oratory to choose representative for Interstate contest.
February 14, Saturday.	Freshman party, Gymnasium.
February 22, Sunday.	Washington's birthday.
Feb. 25, Wednesday.	Regular meeting of Associated Students.
Feb. 25, Wednesday.	Third term School of Law begins.
April 11, Saturday.	} Spring vacation.
April 19, Sunday.	
April 25, Saturday.	
April 25, Saturday.	
April 25, Saturday.	Graduating exercises School of Medicine. Preliminary tryout for Failing and Beekman orators.
April 25, Saturday.	Date for filing with the Registrar typewritten copies of the Failing and Beekman orations.
May 4, Monday.	} Examinations for removal of conditions.
May 5, Tuesday.	
May 4, Monday.	
May 6, Wednesday.	Last date for filing applications for graduate degrees with the Registrar.
May 6, Wednesday.	Regular meeting of Associated Students.
May 6, Wednesday.	Annual election.

May 8, Friday.	}	Junior Week-End. Holidays.
May 9, Saturday.		Session of the School of Law ends.
May 16, Saturday.		Last date for filing graduate theses with the Registrar.
May 18, Monday.		Memorial Day.
May 30, Saturday.		Last date for filing senior theses with the Registrar.
June 1, Monday.		Final examinations begin.
June 8, Monday.		

## COMMENCEMENT WEEK.

June 14, Sunday.	Baccalaureate sermon, 11 A. M.
June 15, Monday.	Field day, 2 P. M.; recital School of Music, 8 P. M.
June 16, Tuesday.	State Alumnae Association meeting, Villard Hall, 9 A. M.; Alumni business meeting, Villard Hall, 10 A. M.; President's reception, 3 P. M.; Failing-Beekman contest, 8 P. M.
June 16, Tuesday.	Regular meeting of the Board of Regents, President's office, Villard Hall.
June 17, Wednesday.	Commencement exercises, 10 A. M.; Alumni banquet, 1 P. M.; Alumni ball, 9 P. M.

**REGULAR MEETINGS OF THE BOARD OF REGENTS, 1913-14**

Tuesday, January 20,	1914
Tuesday, June 16,	1914

**REGULAR MEETINGS OF THE FACULTY 1913-14**

Thursday, October 2,	1913
Thursday, November 6,	1913
Thursday, December 4,	1913
Thursday, January 1,	1914
Thursday, February 5,	1914
Thursday, March 5,	1914
Thursday, April 2,	1914
Thursday, May 7,	1914
Thursday, June 4,	1914

**REGULAR MEETINGS OF THE ATHLETIC COUNCIL 1913-14**

Saturday, September 13,	1913
Saturday, December 13,	1913
Saturday, March 14,	1914
Saturday, June 13,	1914

**REGULAR MEETINGS OF ASSOCIATED STUDENTS 1913-14**

Wednesday, October 8,	1913
Wednesday, February 25,	1914
Wednesday, May 6,	1914

# OFFICERS OF THE UNIVERSITY

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## THE BOARD OF REGENTS

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### OFFICERS.

HON. ROBERT S. BEAN, President.      L. H. JOHNSON, Secretary.

### EXECUTIVE COMMITTEE

HON. ROBERT S. BEAN, Chairman.

HON. SAMSON H. FRIENDLY.      HON. A. C. DIXON.

HON. CYRUS A. DOLPH.      HON. CHARLES H. FISHER.

### EX-OFFICIO MEMBERS.

HON. OSWALD WEST, Governor.....Salem

HON. BEN W. OLCOTT, Secretary of State.....Salem

HON. L. R. ALDERMAN, Supt. of Public Instruction.....Salem

### APPOINTED BY THE GOVERNOR.

NAMES AND ADDRESSES.	TERM EXPIRES.
HON. JAMES W. HAMILTON, Roseburg.....	April 1, 1913
HON. CYRUS A. DOLPH, Portland.....	April 15, 1915
HON. WILLIAM SMITH, Baker City.....	April 15, 1915
HON. FREDERICK V. HOLMAN, Portland.....	April 15, 1915
HON. R. S. BEAN, Portland.....	April 15, 1917
HON. MILTON A. MILLER, Lebanon.....	April 15, 1917
HON. SAMSON H. FRIENDLY, Eugene.....	April 15, 1919
HON. W. K. NEWELL, Gaston.....	April 15, 1921
HON. A. C. DIXON, Eugene.....	April 15, 1923
HON. CHARLES H. FISHER, Eugene.....	April 15, 1923

**ADMINISTRATIVE OFFICERS****THE UNIVERSITY**

P. L. CAMPBELL, B. A.....	President
A. R. TIFFANY, B. A.....	Registrar
LOUIS H. JOHNSON .....	Financial Agent
M. H. DOUGLASS, M. A.....	Librarian

**THE COLLEGES AND SCHOOLS**

FREDERICK GEORGE YOUNG, B. A.,.....	Dean of Graduate School
JOHN STRAUB, M. A.,	Dean of College of Literature, Science, and the Arts
EDWARD HIRAM MCALISTER, M. A.,	Dean of College of Engineering
FRED CARLETON AYER, M. S., M. A.,	Acting Dean of School of Education
K. A. J. MACKENZIE, M. D.,.....	Dean of School of Medicine
C. U. GANTENBEIN, LL. B.....	Dean of School of Law
CARL V. LACHMUND.....	Acting Dean of School of Music
M. RUTH GUPPY, B. L.....	Dean of Women

**OFFICERS OF INSTRUCTION**  

---

**THE FACULTY\***

P. L. CAMPBELL, B. A., President of the University. B. A. Harvard University, 1886.	EUGENE
PERCY PAGET ADAMS, B. S., Assistant Professor of Civil Engineering. B. A. University of Oregon, 1901; B. S., 1902.	EUGENE
CLYDE B. AITCHISON, B. S., Lecturer on Water Rights.	PORTLAND
ERIC. W. ALLEN, B. A. Professor of Journalism. B. A., University of Wisconsin, 1901.	EUGENE
FRED CARLETON AYER, M. S., M. A., Professor of Education. B. A., Upper Iowa University, 1902. M. S., Georgetown University, 1905. M. A., University of Chicago, 1912. Fellow at Georgetown University, 1905. Scholar and Fellow in Education, University of Chicago, 1912-13.	EUGENE
FRANKLIN L. BARKER, E. M., Professor of Geography. B. A., Colgate University, 1898. E. M., Colorado School of Mines, 1906.	EUGENE
JAMES DUFF BARNETT, Ph. D., Professor of Political Science. B. A., Emporia. Ph. D., University of Wisconsin.	EUGENE

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\*With the exception of the President the Faculty are arranged in alphabetical order.

- BENJAMIN B. BEEKMAN, A. B., LL. B., PORTLAND  
Lecturer on Agency.
- JAMES FRANCIS BELL, M. D., L. R. C. P. (London), PORTLAND  
Professor of Theory and Practice of Medicine.
- ROBERT L. BENSON, M. D., PORTLAND  
Associate Professor of Anatomy.
- OTTO SALY BINSWANGER, Ph. D., M. D., PORTLAND  
Professor of Chemistry and Toxicology.
- JOHN FREEMAN BOVARD, M. S., EUGENE  
Professor of Zoology.  
B. S., University of California, 1903; M. S., 1906.
- WILLIAM PINGRY BOYNTON, Ph. D., EUGENE  
Professor of Physics.  
A. B., Dartmouth College, 1890; A. M., 1893.  
Scholar and Fellow in Physics, Clark University, 1894-97.  
Ph. D., Clark University, 1897.
- EARL C. BRONAUGH, A. M., LL.B., PORTLAND  
Lecturer on Domestic Relations.
- FRANCIS D. CHAMBERLAIN, A. B., LL. B., PORTLAND  
Lecturer on Corporations and Partnership.
- ROBERT CARLTON CLARK, Ph. D., EUGENE  
Professor of History.  
B. A., M. A., University of Texas, 1901.  
Ph. D., University of Wisconsin, 1905.
- JOHN B. CLELAND, LL. B., PORTLAND  
Lecturer on Torts and Sales.
- TIMOTHY CLORAN, Ph. D., EUGENE  
Professor of Romance Languages.  
A. B., Western Reserve University, 1891; Student,  
Universities of Berlin and Strassburg, 1897-99; Ph.D.,  
University of Strassburg, 1901; Student, University of  
Paris, 1904-05; Student, University of Madrid, 1905-06.

- ARTHUR J. COLLIER, M. A.,  
Professor of Geology. EUGENE  
B. A., University of Oregon, 1888.  
M. A., University of Oregon, 1893.  
B. S., Harvard University, 1894.
- EDMUND S. CONKLIN, Ph. D.,  
Assistant Professor of Psychology. EUGENE  
B. H., Springfield (Mass.), 1908.  
Scholar and Fellow in Psychology, Clark University, 1908-11.  
A. M., Clark University, 1909.  
Ph. D., Clark University, 1911.
- JOHN M. CONNOLLY, M. D.,  
Associate Professor of Physiological Chemistry. PORTLAND
- CHARLES W. CONVERSE, M. A.,  
Assistant Professor of Electrical Engineering. EUGENE  
B. A., University of Oregon, 1902; M. A., 1905.
- RICHARD HAROLD DEARBORN, M. E.,  
Professor of Electrical Engineering. EUGENE  
A. B., Portland University, 1895.  
M. E., Cornell University, 1900.
- EDGAR EZEKIEL DECOU, M. S.,  
Professor of Mathematics. EUGENE  
B. S., University of Wisconsin, 1894; M. S., University  
of Chicago, 1897; Graduate Student University of  
Chicago, 1899-1900; University Scholar Yale Uni-  
versity, 1900-01.
- RICHARD BENJAMIN DILLEHUNT, B. S., M. D.,  
Professor of Anatomy and Assistant Dean. PORTLAND
- FREDERIC STANLEY DUNN, M. A.,  
Professor of Latin Language and Literature. EUGENE  
B. A., University of Oregon, 1892; B. A., Harvard  
University, 1894; M. A., University of Oregon, 1899;  
M. A., Harvard University, 1903.

ROBERT H. ELLIS, M. D., Assistant Professor of Obstetrics.	PORTLAND
WALTER H. EVANS, B. S., LL. B., Lecturer on Negotiable Instruments.	PORTLAND
FRED GOODRICH FRINK, B. S., LL. B.,* Professor of Railway Engineering. B. S. in Civil Engineering, University of Michigan; M. S., University of Chicago; Special Student Sanitary Engineering, Massachusetts Institute of Technology.	EUGENE
CALVIN U. GANTENBEIN, LL. B., Dean of the School of Law, and Professor of Criminal Law, Torts and Evidence.	PORTLAND
WILLIAM BALL GILBERT, LL. D. Lecturer on Constitutional Law.	PORTLAND
J. ALLEN GILBERT, Ph. D., M. D., Assistant Professor of Medicine.	PORTLAND
JAMES HENRY GILBERT, Ph. D., Assistant Professor of Economics. B. A., University of Oregon, 1903. Ph. D., Columbia University, 1907.	EUGENE
THOMAS G. GREENE, LL. B., Lecturer on Bankruptcy.	PORTLAND
M. RUTH GUPPY, B. L., Dean of Women. B. L., University of Michigan, 1887. Student Stanford University, 1901-02; Student University of Berlin, 1903.	EUGENE
MONTANA HASTINGS, B. S., Assistant Professor of Education. B. S., Columbia University, 1909. Graduate Student Columbia University, University of Chicago, and University of Jena.	EUGENE

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\*Leave of Absence 1912-13.

- WILLIAM L. HAYWARD, EUGENE  
Director Men's Gymnasium.
- WILLIAM HOUSE, M. D., PORTLAND  
Assistant Professor of Nervous and Mental Diseases.
- HERBERT CROMBIE HOWE, B. A., EUGENE  
Professor of Modern English Literature.  
B. A., Cornell University, 1893; Graduate Scholar  
Cornell University, 1893-94, 1894-95.
- SIMEON EDWARD JOSEPHI, M. D., PORTLAND  
Professor of Mental Nervous Diseases.
- J. C. ELLIOTT KING, M. D., PORTLAND  
Assistant Professor of Dermatology and Syphilology.
- OTTO J. KRAEMER, LL. B., PORTLAND  
Lecturer on Justice's Court Practice.
- EDMUND JOHN LABBE, M. D., PORTLAND  
Professor of Pediatrics.
- HEMAN BURR LEONARD, Ph. D., EUGENE  
Assistant Professor of Mathematics.  
B. S. (E. E.) University of Michigan, 1895.  
Ph. D., University of Colorado, 1906.
- ALBERT EDWARD MACKAY, M. D., PORTLAND  
Professor of Diseases of Genito-Urinary Organs.
- JOHN DICE MACLAREN, M. S., M. D., PORTLAND  
Professor of Physiology.
- KENNETH ALEXANDER J. MACKENZIE, M. D., C. M., L. R. C.  
P. & L. R. C. S., Edinburgh, PORTLAND  
Dean of the School of Medicine and Professor of  
Operative Clinical Surgery.
- RALPH CHARLES MATSON, M. D., PORTLAND  
Assistant Professor of Bacteriology.

- EDWARD HIRAM MCALISTER, A. M., EUGENE  
 Dean of the College of Engineering and Professor of  
 Civil Engineering.  
 A. B., University of Oregon, 1890.  
 A. M., University of Oregon, 1893.
- CARL ARTHUR MCCLAIN, C. E., EUGENE  
 Assistant Professor of Civil Engineering.  
 B. S., University of Oregon, 1906.  
 C. E., University of Oregon, 1912.
- WALLACE MCCAMANT, A. B., PORTLAND  
 Lecturer on Bailments and Carriers.
- FRANKLN CHAMBERS MCLEAN, B. S., M. D. PORTLAND  
 Professor of Materia Medica and Pharmacology.
- RICHARD W. MONTAGUE, Ph. B., LL. B., PORTLAND  
 Lecturer on Equity.
- ROBERT G. MORROW, Ph. B., PORTLAND  
 Lecturer on Brief-Making and Supreme Court Practice.
- HENRY H. NORTHUP, LL. B., PORTLAND  
 Lecturer on Pleading, Practice, and Probate Law.
- RICHARD NUNN, B. A., B. Ch., M. D., PORTLAND  
 Professor of Diseases of Eye, Ear, Nose, and Throat.
- THOMAS O'DAY, LL. B., PORTLAND  
 Lecturer on Bailments and Carriers.
- ROBERT W. PRESCOTT, B. A., EUGENE  
 Assistant Professor of Public Speaking.  
 B. A. University of Oregon, 1908.
- GEORGE REBEC, Ph. D., EUGENE  
 Professor of Education.  
 B. Ph., University of Michigan, 1897.  
 Ph. D., University of Michigan, 1897.
- ARCHIBALD F. REDDIE, B. A., EUGENE  
 Professor of Public Speaking.  
 Graduate Emerson College of Oratory.  
 B. A., Valparaiso University (Honorary).

- DAVID NATHANIEL ROBERG, M. D., PORTLAND  
Professor of Pathology.
- JOSEPH SCHAFFER, Ph. D., EUGENE  
Professor of History.  
B. L., University of Wisconsin, 1894; M. L. University  
of Wisconsin, 1899; Fellow University of Wisconsin,  
1900; Ph. D., University of Wisconsin, 1906.
- FRIEDRICH GEORG G. SCHMIDT, Ph. D., EUGENE  
Professor of the German Language and Literature.  
Student at the University of Erlangen, 1888-90;  
Student at Johns Hopkins University, 1893-96; Uni-  
versity Scholar 1894-95; Fellow, 1895-96; and Ph. D.,  
1896.
- FREDERICK LAFAYETTE SHINN, Ph. D., EUGENE  
Assistant Professor of Chemistry.  
A. B., Indiana University, 1901; A. M., 1902; Ph. D.  
University of Wisconsin, 1906; Scholar, Yale Uni-  
versity, 1902.
- WILLIAM MACKEY SMITH, Ph. D., EUGENE  
Assistant Professor of Mathematics.  
B. A., Lafayette College, 1903; Ph. D., Columbia  
University, 1911.
- ORIN FLETCHER STAFFORD, M. A., EUGENE  
Professor of Chemistry.  
B. A., M. A., University of Kansas.
- GEORGE BURNSIDE STORY, M. D., PORTLAND  
Professor of Physiology.
- JOHN STRAUB, M. A., EUGENE  
Dean of the College of Literature, Science and the Arts,  
and Professor of Greek Language and Literature.  
A. B., Mercersburg College, 1876.  
A. M., Mercersburg College, 1879.

BERTHA STUART, A. B., M. D., Director Women's Gymnasium. A. B., M. D., University of Michigan.	EUGENE
ALBERT RADDIN SWEETSER, M. A., Professor of Botany. A. B., Wesleyan University, 1884. A. M., Wesleyan University, 1887.	EUGENE
EDWARD ALLEN THURBER, M. A., Professor of Rhetoric and American Literature. B. A., Yale, 1891. M. A., Harvard, 1894.	EUGENE
ERNEST FANNING TUCKER, A. B., M. D., Professor of Gynecology.	PORTLAND
ARTHUR L. VEAZIE, A. M., LL.B., Lecturer on Real Property.	PORTLAND
CALVIN S. WHITE, M. D., Assistant Professor of Medicine.	PORTLAND
GEORGE SHATTUCK WHITESIDE, M. D., Assistant Professor of Genito-Urinary Diseases.	PORTLAND
OTIS BUCKMINSTER WIGHT, B. A., M. D., Assistant Professor of Gynecology.	PORTLAND
WALTER T. WILLIAMSON, M. D., Assistant Professor of Nervous and Mental Diseases.	PORTLAND
GEORGE FLANDERS WILSON, M. D., Professor of Principles and Practice of Surgery.	PORTLAND
CHARLES E. WOLVERTON, A. B., LL. D., Lecturer on Federal Procedure.	PORTLAND
ROBERT CLARK YENNEY, M. D., Professor of Clinical Medicine.	PORTLAND

FREDERICK GEORGE YOUNG, B. A., EUGENE  
Dean of Graduate School and Professor of Economics  
and Sociology.  
B. A., Johns Hopkins University, 1886.  
University Scholar, Johns Hopkins University, 1886-87.

JAMES CULLEN ZAN, M. D., PORTLAND  
Associate Professor of Clinical Surgery.

## INSTRUCTORS AND ASSISTANT INSTRUCTORS.

ETHEL BARNARD, B. A., EUGENE  
Assistant Instructor in English Literature.  
B. A., University of Oregon, 1910.

CECILIA SMITH BELL, B. A., EUGENE  
Assistant Instructor in English Literature.  
B. A., University of Oregon, 1911.

JULIA BURGESS, M. A., EUGENE  
Instructor in English.  
B. A., Wellesley College.  
M. A., Radcliffe College.

ALBERTA CAMPBELL, B. A., EUGENE  
Assistant Instructor in English Literature.  
B. A., University of Oregon, 1912.

MOZELLE HAIR, B. A., EUGENE  
Secretary Correspondence-Study Department.  
B. A., University of Oregon, 1908.

WILLIAM B. KEMPTHORNE, Ph. B., EUGENE  
Instructor in Mathematics.  
Ph. B., University of Wisconsin, 1907.

HUGO WILHELM KOEHLER, B. A., EUGENE  
Instructor in German.  
B. A., Syracuse University, 1903.  
Student at Leipzig University, 1903-04.

MABEL HOLMES PARSONS, M. A., Instructor in English. B. A., M. A., University of Michigan.	EUGENE
ELLEN M. PENNELL, Instructor in English and Art.	EUGENE
MARY HOLLOWELL PERKINS, M. A., Instructor in English. B. A., Bates College. M. A., Radcliffe College.	EUGENE
CHARLES ROY REID, B. S., Instructor in Electrical Engineering. B. S., University of Oregon, 1906.	EUGENE
HARRIET THOMSON, B. A., Instructor in Physical Training. B. A., University of Michigan.	EUGENE
MARY WATSON, M. A., Instructor in English Literature. B. A., University of Oregon, 1909. M. A., University of Oregon, 1911.	EUGENE

#### ASSOCIATES, DEPARTMENT OF MEDICINE

GEORGE AINSLIE, M. D., Associate in Ophthalmology.
OTIS FRANKLIN AKIN, M. D., Associate in Surgery.
J. B. BILDERBACK, M. D., Associate in Pediatrics.
RALPH A. FENTON, M. D., Associate in Rhinology and Laryngology.
LUTHER J. HAMILTON, A. B., M. D., Associate in Surgery.
NOBLE WILEY JONES, M. D., Associate in Medicine.
GEORGE F. KOEHLER, M. D., Associate in Medicine.
GEORGE NORMAN PEASE, M. D., Associate in Surgery.
FRANK M. TAYLOR, A. B., M. D., Associate in Medicine.
RALPH WALKER, M. D., Associate in Medicine.
FRED ZEIGLER, M. D., Associate in Surgery.
JOHN N. COUGHLAN, M. D., Associate in Rhinology and Laryngology.

## INSTRUCTORS.

GEORGE ANDREW CATHEY, M. D., Instructor in Bacteriology.  
A. M. CREADICK, M. D., Instructor in Pathology.  
HORACE BURNETT FENTON, A. B., M. D., Instructor in Physiology.  
THEODORE FESSLER, M. D., Instructor in Chemistry.  
DONALD H. JESSOP, Ph. G., M. D., Instructor in Anatomy.  
WILLIAM S. KNOX, M. D., B. S., Instructor in Medicine.  
FREDERICK A. KIEHLE, A. B., M. D., Instructor in Ophthalmology.  
CLARENCE J. MCCUSKER, M. D., Instructor in Anatomy.  
M. BRECKENRIDGE MARCELLUS, B. S., M. D., Instructor in Pathology.  
MARY VERA MADIGAN, M. D., Instructor in Physiological Chemistry.  
JAMES WENDELL ROSENFELD, A. B., M. D., Instructor in Pediatrics.  
LAWRENCE SELLING, A. B., M. D., Instructor in Medicine.  
WILLIAM A. SHAE, M. D., Instructor in Medicine.  
W. E. SMITH, M. D., Instructor in Pathology.  
PERRY J. PAYNE, S. B., M. D., Instructor in Dermatology.

## ASSISTANTS.

GERTRUDE FRENCH, M. D., Assistant in Ophthalmology.  
MARY MACLACHLAN, M. D., Assistant in Obstetrics.

## STAFF OF THE SCHOOL OF MUSIC.

CARL V. LACHMUND, Acting Director School of Music and Instructor in Piano and Theory.	EUGENE
MARY GOODBAR MORGAN, * Instructor in Piano and Theory.	EUGENE
EVE I. STINSON, Mus. B., Instructor in Singing.	EUGENE
DAVID CAMPBELL, Instructor in Piano.	EUGENE

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\*Leave of Absence 1912-13.

WINIFRED FORBES,	Instructor in Violin.	EUGENE
AVIS BENTON,	Instructor in Piano.	EUGENE
ALBERTA CAMPBELL,	Assistant Instructor in Piano.	EUGENE
INA WATKINS,	Assistant in Piano.	EUGENE
NELL G. MURPHEY, Mus. B.,	Assistant in Piano.	EUGENE
LILA C. PROSSER, B. Mus.,	Assistant in Voice.	EUGENE

#### LIBRARY STAFF.

M. H. DOUGLASS, M. A.,	Librarian
MARGARET C. UPLEGER,	Reference Librarian
BEATRICE J. BARKER, Ph. B.,	Cataloguer
MABEL EATON MCCLAIN, B. A.,	Assistant
OLGA E. OLSEN, B. A.,	Assistant
PAULINE POTTER,	Student Assistant
CLARENCE E. RUNYAN,	Student Assistant

#### COMMITTEES OF THE FACULTY\*

THE UNIVERSITY COUNCIL—Consisting of the President of the University and all the full professors of departments at Eugene, who together constitute the legal Faculty of the University.

THE ACADEMIC COUNCIL—The Executive Committee of the University Council—the President, Professors Young, Straub, McAlister, Ayer and Miss Guppy.

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\*The President of the University is *ex-officio* member of all committees.

THE GRADUATE COUNCIL—Professors Young, McAlister, Schmidt, Howe and Stafford.

UNIVERSITY EXTENSION—Professors Ayer, Dunn, Schmidt, Howe and Stafford.

ATHLETICS—Professors Howe, Leonard and Hayward.

CREDENTIALS—Professors Young, Schafer and DeCou.

EXAMINATIONS AND SENIOR CREDITS—Professors McAlister, Dunn, and Ayer.

SPECIAL STUDENTS—Professors DeCou, Young, Sweetser and the President.

LIBRARY—Hon. R. S. Bean, President of the Board of Regents, and the Librarian.

ADVISORY—The President, Professors Young, Straub and Schafer.

ADVANCED STANDING—Professors Stafford, McAlister and Dunn.

STUDENT AFFAIRS—The President, Professors Dearborn, Straub, Bovard and Miss Guppy.

REVISION OF STUDENTS' COURSES—Professors DeCou, Straub and Dearborn.

STUDENT LOAN FUND—The President, Dean Straub, Dean Guppy, the Steward and the Registrar.

APPOINTMENT COMMITTEE—Professors Schafer, Boynton, Thurber, Schmidt, DeCou, Dunn and Ayer.

GRADES—The Registrar, Professors McAlister and Bovard.

## THE UNIVERSITY OF OREGON

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### INTRODUCTION

#### HISTORICAL SKETCH.

The University of Oregon was established by act of the State Legislature October 19, 1872, and located at Eugene. Deady Hall, the first University Building, was erected by the citizens of Lane County, and presented to the Board of Regents in July, 1876. In September of the same year, the University opened its doors for the reception of students. The first class was graduated in June, 1878.

The preamble of the act of October 21, 1876, entitled, "An Act to provide for the support and government of the University of Oregon," is as follows:

"WHEREAS, by an act of the Legislative Assembly, approved October 19, 1872, it was provided that, in order to devote to the purposes of education the seventy-two sections of land donated to the State for the use and support of a State University by the act of Congress of February 14, 1859, a State University, having for its design to provide instruction and complete education in all the departments of science, literature, professional pursuits and general education, be created and permanently located at Eugene; *provided*, that the Union University Association of Eugene should, on or before January 1, 1874, secure a site for the same at or in the vicinity of Eugene, and erect thereon and furnish a building of not less value than fifty thousand dollars, for the use of said University, on a plan to be approved, and after the erection of the same, to be adopted, by the board of commissioners for the sale and management of the school and university lands, and for the investment of the funds arising therefrom; and

"WHEREAS, said University Association of Eugene, having duly provided a site for said University, and erected thereon, on a plan first approved by said board of commissioners, a building for the use thereof, as provided in said act of October 19, 1872, which site and building was by said board of commissioners, in July,

1876, duly accepted, and has since been duly conveyed by said University Association to the board of directors of said University; and,

"WHEREAS, the directors of the University aforesaid did, in pursuance of an act of October 19, 1872, on August 9, 1876, elect and appoint a president and two professors of said University and also a principal and assistant teacher of the preparatory department therein, and did also 'fix the salaries of said president, professors and teachers and prescribe the tenure of their offices, the beginning and end of the school year of said University, the studies to be pursued thereat, the admission fees and rates of tuition, together with the qualifications for admission therein'; therefore,

*"Be it enacted by the Legislative Assembly of the State of Oregon:*

*"That the interest which may hereafter accrue on the fund arising from the sale of the University lands aforesaid, is hereby set apart and perpetually appropriated to the maintenance, use and support of the 'University of Oregon.'"*

The equipment of the University was at first very small, and the courses of instruction were limited practically to literary lines. The University grew rapidly, and the demand for a broader curriculum was met by the addition of engineering, scientific and technical courses. The Law School was established in 1884, and the Medical School in 1887. With the growth and development of the State, the University has increased in numbers and financial resources. Buildings have been erected, new departments added, and a large equipment installed.

The most important single gift to the University was that of \$50,000 made by Henry Villard in 1883 for general endowment.

During the early years of the institution, the only high schools in the State were located in two or three of the larger cities, and it was necessary for the University to offer academic courses in order that students graduating from the schools in smaller towns might continue their work by coming directly to the University. As the high school system of the State developed, it became possible to discontinue the first year of the academy course; a little later the second year was dropped, and finally in 1904 the academy was entirely abolished.

A similar growth may be seen in the evolution of the present course of study. When the University first opened its doors in

1876, the work of the different courses was practically all required. After a few years, options were allowed in the choice of language groups, and substitutions were permitted for some of the technical requirements. Later a great number of possible combinations of required courses were offered, with a few elective hours. Then came the group system with the work for the first two years required, and the greater portion of the last two years elective except for a major elective requirement.

Finally, during the year 1904-05, the University adopted practically a free elective system of undergraduate study, with a major requirement not to exceed one-third of the one hundred and twenty semester hours necessary for graduation. The only specific requirements, besides the major, are eight semester hours of gymnasium work, and two year courses in some language other than English. It is found that by means of the major requirement, the University is able to give a wise direction to the student's chosen line of work. On the other hand, the limit placed on the amount of required work encourages the enlargement of the student's field of study, and makes possible a broad, general culture.

#### THE UNIVERSITY AND THE STATE.

The aim of the University of Oregon in its relation to the educational system of the State is two-fold: First, to supplement the work of the high schools with a four years' university course. Second, to encourage graduate study. In the State's public school system, the University sustains a similar relation to the high schools that the high schools sustain to the grammar grades. As those who have passed through the grammar grades may continue their studies in the high schools, so those who have completed the full high school course may advance to the opportunities offered by the University. In a word, the University (exclusive of the Graduate School) embraces the thirteenth, fourteenth, fifteenth and sixteenth grades of the public school system. It completes the work begun in the grammar schools and continued in the high schools.

While the University furnishes instruction in the various branches requisite for a liberal education, and in the technical

branches of engineering, law, medicine, and music, it also aims to encourage research work in its departments, and to offer to those who have completed college courses at the University or elsewhere an opportunity to do graduate work along general or special lines.

In addition to its work as a part of the public school system, the University attempts to aid in the State's development by gathering exact and detailed information concerning its industrial resources, and by investigating, through its several departments, such civic and industrial problems as are of special interest to the people of the State.

#### GOVERNMENT.

The government of the institution rests upon the inherent obligations of students to the University and to the State. The University is maintained at the public expense for the public good. Those who participate in its benefits are expected, as a matter of honor, not only to fulfill the obligations of loyal members of the institution, of the community, and of the commonwealth, but actively to aid in promoting intellectual and moral interests. Every student owes to the public a full equivalent for its expenditure in his behalf, in the form of superior usefulness to it, both while in the institution and afterwards. Students, therefore, cannot claim any exemption from the duties of good citizens and loyal members of the community and of the University; on the contrary, they are under peculiar obligations loyally to fulfill every duty. As members of the institution, they are held responsible for regular attendance and the proper performance of their duties. As members of the community, students are amenable to the law; and, if guilty of its infraction, are liable to a termination of their relations with the University. The University recognizes its civic relations and rests its administration upon civic obligations.

#### ENVIRONS.

The University of Oregon is located at Eugene, in Lane County, a rapidly growing city of 12,000 people. Eugene is

one of the most prosperous towns in Oregon, but above all is a city of homes, with a sincere pride in its reputation as an ideal place in which to live. Many miles of hard-paved streets give it an air of a city of much larger size. It has an excellent system of public schools, with five grade school buildings and a magnificent high school building. The high school has 600 students and is the largest in the State outside of Portland. All the leading denominations are represented by strong churches. The Eugene public library and the city Y. M. C. A. building are centers of interest.

#### NO SALOONS IN EUGENE.

There are no saloons in Eugene. Under the Oregon local option law the people of Eugene voted out all saloons five years ago, and the majorities against them have increased at each subsequent election. The whole college and city life is entirely free from their evils.

#### BUILDINGS AND GROUNDS.

The University grounds are situated about one mile southeast of the center of the city. Electric cars pass the campus every few minutes, giving easy communication with the business section and other parts of the city. The campus contains 80 acres of land, about evenly divided into two sections by East Thirteenth street. On the north campus are located the main University buildings; on the south campus, the girls' dormitories, the President's house, and the athletic field. The buildings are situated on a natural rise of ground overlooking the city. Native and exotic trees and plants are interspersed here and there with rose hedges and flower gardens. The whole is a beautifully kept lawn, with handsome walks and drives, and is one of the beauty spots of the State. The Willamette River flows along its northern border and the snow-covered Three Sisters and the peaks of the Coast Range are in full view.

The following bulidings are located on the University grounds:

*Deady Hall*, a three-story building, was presented to the State by the citizens of Lane County, and was named in honor of Matthew P. Deady, the first president of the Board of Regents. It contains the Botanical, Zoological and Physical laboratories, and

the departments of Latin, Romance Languages, German, English Literature, Public Speaking and Political Science.

*Villard Hall*, erected in 1885, was named in honor of Henry Villard, the greatest individual donor to the University's endowment. It is an imposing cemented brick building, and contains the offices of the President, the Registrar, the Steward, the Dean of Women, the Assembly Hall of the University, the very valuable Condon geological collection, and the departments of Geology, Greek and Mathematics.

*McClure Hall* was built in 1900. It is devoted largely to the department of Chemistry, and is admirably adapted to its purpose. It has three floors, with laboratory facilities for 200 students, and contains the latest appliances for research work in all lines of mining and of manufacturing chemistry. It has hoods and ventilators for carrying of gases, electric motors for operating machinery, and is modern in every respect. It contains all the departments of Chemistry. The upper floor for the present is used as class rooms in Mathematics, Psychology, and for the psychology laboratory. One-half of the basement has been fitted up for the temporary quarters of the department of Journalism.

*Electrical Building*, erected in 1901, contains the central heating and lighting plant of the University, and the department of Electrical Engineering. The shops are run by electricity and are well equipped with tools and machinery.

*The Timber Testing Station* was established in 1905. The Testing Laboratory is equipped with the latest machines and appliances necessary for testing the strength of timber, stone, and metals.

*The Girls' Gymnasium* is a brick building well fitted with suitable apparatus for the use of the women of the University only. The first floor contains the main hall, a room 45x70 feet, and the Director's office. The basement is completely fitted with shower baths, steel lockers, and dressing rooms.

*The Men's Dormitory*, erected in 1893, is a three-story brick building, equipped with electric lights, steam heat, hot and cold baths, well-furnished parlors and every convenience for the com-

fort of its guests. For full information concerning rates and accommodations, see department of catalogue, "Student Expenses."

*The Library Building*, completed in June, 1907, is a two-story and basement building of buff pressed brick. It is located south of Deady Hall near Thirteenth Street. The first floor contains the University library, a general reading room, a general reference room, a consultation room for faculty and students, and the offices of the Librarian and the Cataloguer. A part of the basement and second floor is used for class rooms.

*Mary Spiller Hall*, erected in 1907, will accommodate about 20 girls. It is a two-story and basement building, modern in all respects, well heated and lighted and comfortably fitted for living. For full information regarding the cost of board and room and of accommodations, see department of catalogue, "Student Expenses."

*Engineering Hall* was completed in February, 1909. It is a handsome two-story building, located on University Avenue, directly east of Mechanical Hall, and was designed especially for engineering instruction. It houses all of the departments of Civil Engineering. The general University repair shops are located in the basement.

*The Men's Gymnasium*. The new gymnasium for men is one of the best arranged on the Coast. It is fitted completely with all modern conveniences, the best apparatus, an indoor running track, a swimming pool, shower baths, lockers, etc.

The athletic field has a four-lap track surrounding a well constructed football field. The grand stand and the bleachers will seat 3,500 people.

**THE UNIVERSITY LIBRARY.****STAFF.**

M. H. DOUGLASS, M. A. ....	Librarian
BEATRICE J. BARKER, Ph. B. ....	Cataloguer
MARGARET C. UPLEGER .....	Reference and Loan Librarian
MABEL EATON MCCLAIN, B. A. ....	Assistant
OLGA C. OLSEN, B. A. ....	Assistant
PAULINE POTTER .....	Student Assistant
CLARENCE E. RUNYAN .....	Student Assistant

**RESOURCES.**

The University library is a well selected and rapidly growing collection of books, now numbering something more than 42,000 volumes.

Since 1908, the regular annual appropriation for the purchase of books and periodicals and for binding has been \$10,000, though in 1911 and 1912, because of pressure in other directions the full amount was not available. This annual appropriation has made possible a much more rapid development of library resources than was possible previous to 1908, when the principal fund regularly available for the purchase of books was \$400 a year from the income of endowment given to the University by the late Henry Villard. During the past five years there have been added to the library about 26,500 volumes.

The library is supplied with the best general and special reference books; the files of the principal American and English periodicals of general interest are being secured, and purchases are also being made of the most needed sets of scientific and learned societies and other valuable works, both American and foreign. Between 450 and 500 periodicals are currently received, besides many of the daily and weekly newspapers of the State. The library is a depository for the public documents published by the United States Government.

## POLICY.

The present annual appropriation for books, besides making it possible to secure those of which there is most pressing need, gives assurance that there will be built up at the University an exceedingly well equipped library for undergraduate work and for general reference purposes, and that provision will also be made for literature necessary for graduate research. At present special attention is being given to securing some of the reference books that have been most needed; to completing files of the most useful periodicals and continuations, both those of general interest and those needed for departmental purposes; to supplying the various departments with books most needed for work being done; and, in a general way, to building up a well rounded collection of books for working purposes.

## HOURS.

The library is open daily except Sunday from 7:45 A. M. to 9 P. M., except that on Fridays and Saturdays it is closed at 5:30 P. M.

## ACCESS TO STACKS.

All students have free access to all the books of the library.

## CIRCULATION.

Books, other than reference books and those especially reserved for use in the library, may be drawn for a period of one month and at the expiration of that time renewed if there is no other demand for them. All persons connected with the University have the privilege of drawing books, and the use of the library for reference purposes is extended to the general public as well.

## CLASSIFICATION.

The library is classified according to the Dewey decimal system—the one in most general use in this country, and is catalogued on cards according to the most approved methods.

## BUILDING.

The library building was erected in 1907 at a cost, exclusive of furnishings, of about \$26,000. Its ground dimensions are 90 by 60 feet, and it includes two stories above a high basement, the construction material being of buff pressed brick and stone and the interior wood finish the Oregon fir. On the main floor are the general reading, reference, and periodical rooms, stack space for the shelving of the main collection of books, and three rooms for the cataloguing department. In the basement are the Librarian's office, the University book store, an unpacking room, storage space for newspapers, documents, duplicates, etc., and there are also two well lighted rooms now used for recitation purposes. On the second floor are five recitation rooms, a seminar room for the department of Economics, and an exhibition room for the display of art and other special collections.

## READING ROOM.

The reading room is furnished with handsome oak tables and chairs, with individual table lights and with the necessary provisions for comfortable reading and study. The building, though attractive and well arranged, has been outgrown, and provision was made by the last legislature for the addition of a fireproof stack room in which to shelve the books.

**THE UNIVERSITY MUSEUMS**

The University museums are three in number, as follows:

**GEOLOGICAL.**

The Geological museum occupies a room 40 by 80 feet on the first floor of Villard Hall. It contains:

(1) The Condon cabinet, consisting of many thousand specimens, and represents the life work of the late Dr. Thomas Condon. The cabinet is especially rich in vertebrate fossils from the John Day Valley, and contains in addition many invertebrate and paleobotanical specimens. This cabinet is the finest collection of paleontological specimens in the Pacific Northwest.

(2) A display collection of minerals. This is a growing collection of especially fine minerals.

(3) A type collection of minerals. A collection of about 1,500 minerals representative of the ordinary occurrence of the different minerals.

(4) A type collection of rock. This contains the United States Geological Survey educational series of rocks and many added from various sources, illustrating the rocks of the world.

(5) Mineral resources of Oregon. The object of this collection is to illustrate the mineral resources of Oregon. It consists of specimens of ores, building stones, and other mineral material of economic importance. The collection is growing and contributions from those engaged in developing the mineral resources are earnestly desired.

(6) An ethnological collection of tools and implements used by early man.

In the museum is also a full size cast of the Willamette meteor, the gift of Mr. E. A. Patullo, of Portland. The original meteor was found at Oregon City. It is now in the museum of the Smithsonian Institution and is valued at \$80,000.

## BOTANICAL.

The botanical museum consists of the following: (1) The Howell collection, consisting of 10,000 specimens collected for the most part in Oregon, many of which are type specimens; (2) the Leiberg collection, presented to the University by Mr. John B. Leiberg in 1908, consisting of 15,000 sheets of specimens, collected principally from Oregon, Washington, and Idaho, but including also some from other states. The specimens are for the most part duplicates of others deposited in the National Herbarium at Washington by Mr. Leiberg for the Government while he was in its employ, and are extremely valuable; (3) the Cusick collection, consisting of 7,000 specimens of Oregon and other flora. These collections are being constantly added to by gift and exchange. All specimens not already classified are being classified and arranged in cases as rapidly as possible.

## ZOOLOGICAL MUSEUM.

The Zoological Museum is located on the third floor of Deady Hall, where ample room is given for the exhibition cases. It contains a fine series of mounted and unmounted birds and mammals, to illustrate different groups; a collection of Oregon reptiles, made by Mr. J. R. Wetherbee; a series of fish, mostly salmonidæ from the Columbia River, donated by the United States Government; a collection of food fishes of the Oregon coast, made by Mr. B. J. Bretherton, of Newport, Oregon, and presented to the University.

It is further supplied with an excellent series of invertebrate animals, models of types from France and Germany. To this may be added casts of brains and head formations of various races, and a particularly fine series of wax models made from drawings by His in Zeigler's laboratory at Freiburg, illustrating different stages in the development of the human embryo and that of the chick; also a similar series showing the development of amphioxus, different forms of segmentation, etc.

**THE UNIVERSITY LABORATORIES****GEOLOGY.**

**Petrology.** A working collection of hand specimens of rock is examined and identified by each student. The department also maintains apparatus for grinding thin sections of rocks and is equipped with petrographical microscopes.

**Paleontology.** The laboratory is especially well equipped for studying the paleontology of Oregon, and is rapidly adding a complete working collection of the fossils of all geologic ages.

**MINERALOGY.**

**Mineralogy.** The laboratory is equipped with specimens of minerals. During the course in mineralogy each student is required to identify about 1,000 different specimens.

Laboratory fee for the year's course in mineralogy and crystallography is \$10.

**ELECTRICAL ENGINEERING.**

The electrical laboratory occupies one-half of the first floor of the Electrical Building, adjoining the University power plant. Electrical power is available from three sources: (1) Three phase alternating current from city service; (2) direct current from a 25-k. w. motor generator set, and (3) direct current from two 10-k. w. compound generators driven from a Russell engine. Other sources of power supply are a 10-h. p. Nagle engine and a 5-h. p. Alamo gasoline engine.

The electrical equipment consists of at least one each of the following pieces of standard apparatus: Series, shunt, compound, and interpole direct current generators and motors; alternating current generators of single-phase, two-phase, and three-phase windings, arranged for parallel operation; alternating current

motors of the induction type, with squirrel cage, internal resistance and external resistance motors, repulsion motor, and synchronous motors; frequency changer; synchronous converter for three-phase or six-phase operation; transformers of various sizes for one, two, three, and six-phase combinations of alternating current; and one 10,000 volt testing transformer. Auxiliaries consist of one two-panel slate switchboard with instruments, generator and feeder switches; plug switchboards for flexible wiring; lamp bank of 200 lamps arranged for 110 or 220-volt direct current, single or three-phase alternating current load; constant current transformer; mercury arc rectifier; storage battery; resistances; choke coils; alternating and direct current arc lamps, open and enclosed; circuit-breakers; switches, etc. Instruments include G. E. oscillograph for determination of alternating wave shapes; current and potential transformers; frequency indicator; power factor indicator; synchroscope; direct current, and single and polyphase watt-hour meters; rotating standard test meter; indicating watt-meters, ammeters, and voltmeters of the Weston, American and Thompson types for measurements up to 30-k. w.

In addition there are numerous pieces of apparatus to illustrate modern practice and to perform various experiments in telephone, telegraph, wireless, and illuminating engineering.

The shop equipment consists of the following:

Pattern shop: Combination rip and cut-off saw, planer, band saw, jig saw, lathes, hand tools, etc.

Forge shop: Down-draft forges equipped with motor driven blower and exhauster, anvils, vises, and the usual auxiliary small tools.

Machine shop: 16-inch and 9-inch engine lathes, planer, shaper, drill presses, centering machine, power hack saw, emery wheels, and small tools for bench work.

All shops are electric motor driven.

#### CIVIL ENGINEERING.

The drafting rooms comprise two rooms on the second floor of the new Engineering Hall, fitted up with good, substantial tables, stools, filing cases, etc. One room, 42x47 feet, used for students in

Drawing and Architecture, will accommodate 120 students. The other room, 22x30 feet, accommodates 40 students and is used for advanced classes in drafting.

The blue print room adjoining the drafting room is equipped with a dark room for storing and cutting sensitized paper, with printing frames and with a large sink and rack for washing and drying prints.

A room on the first floor is fitted up with special lockers in which is kept the surveying equipment, each locker containing a complete party outfit for plane, topographic, and railroad surveying. The equipment includes one 7-inch Fauth & Co. theodolite reading to ten seconds; two Berger & Sons' 4-inch theodolites; one Berger & Sons' complete mountain transit; one Fauth & Co. mountain transit with Saegmuller solar attachment; two Wissler transits, one with Burt solar attachment and one with Shattuck's solar attachment; one Heller & Brightly transit; one Gurley solar compass; one Gurley engineer's compass; one Gurley surveyor's compass; one Gurley plane table; one Berger and Sons precise level; one Gurley 20-inch wye level; one Berger & Sons' dumpy level; one Wissler dumpy level, together with rods, poles, tapes, and pins necessary for complete party outfits. In addition to these there is a good equipment of hand instruments, such as aneroids, hand levels, clinometers, a sextant base line measuring apparatus; level trier, and office equipment, which includes a precision pantagraph, Colby protractor, parallel ruler, steel straight edges, and a set of railroad curves, for use in plane, topographic, and railroad surveying.

On the first floor of the building is located also the laboratory for cement testing, the equipment for which includes one Fairbanks' standard briquette machine, steaming and baking ovens, moist closet, Vicat needles, Gilmour's needles, specific gravity apparatus, balances, moulds, sieves, graduates, etc., necessary for all standard tests of hydraulic cement.

The apparatus for testing structural materials other than cement mortars occupies a separate building 30x40 feet, and consists of one Olsen's 200,000-pound Universal testing machine, one Olsen's 30,000-pound Universal testing machine, extensometers, deflexometers, calipers, scales, and other small accessories. In

addition to these, the building contains a combination rip and cut-off saw, and a pony planer for the preparation of specimens. The machinery in this laboratory is driven by a 20-horsepower individual electric motor.

### CHEMISTRY.

The chemical laboratories are located in McClure Hall, a building especially designed to house the chemistry department. All of the first floor and portions of the basement and second floor are devoted to chemistry. In the basement is the beginner's laboratory, which will accommodate 100 students. This laboratory, at present, is used also by the students in analytical chemistry. The desks are provided with water, gas, and electricity. On one side is a bank of hoods with a very efficient draught, operated by an electrically driven fan. The hoods are supplied with water, gas, steam, waste, and hydrogen sulphide connections. At each end of the room are large drying ovens for drying precipitates, also blast lamps supplied with compressed air. One of the hoods is provided with an electrically heated evaporating plate. Immediately adjacent to the laboratory is the weighing room, containing balances for the use of students doing quantitative work.

On the first floor is the laboratory for organic chemistry with 64 lockers and equipped in all respects as the one just described. Opening from this room are the office and the instructor's private laboratory. Adjoining the organic laboratory is the supply room, from which apparatus and chemicals are dispensed to the students. Across the hall is the lecture room, a well-lighted, comfortable room, with inclined floor, having a seating capacity of about 120. It has modern equipment throughout. Here also are cases containing a very complete collection of organic and inorganic chemical specimens, for illustrating the class work. Just back of the lecture room is the "preparation" room.

On the third floor is an office room, and adjacent to it, a large laboratory, reserved for special and research work, fully equipped as are the others.

Distilled water is supplied to all laboratories through block tin pipes.

All heavy and inflammable chemicals are stored in an annex adjacent to the main building.

The storeroom is kept well supplied with apparatus and chemicals to meet the requirements of all the usual laboratory courses and to provide facilities for original investigation. Many of the books and the periodicals belonging to the department are, at present, kept in the main office room, which is used also as a reading room. Students are encouraged to make free use of the facilities which it offers. Large additions to the list of chemical periodicals are being made, which will greatly increase the attractiveness and usefulness of the chemical library.

#### PSYCHOLOGY.

The department of Psychology occupies rooms on the second floor of McClure Hall for lectures, class demonstrations and laboratory experiments. The rooms are favorably located for experimental work—on the north side of the building, in the second story, having a steady light, and away from noise and interruption. The laboratory is well supplied with all necessary tables, stands, etc., and is equipped with a large amount of apparatus for experimental purposes.

#### PHYSICS.

The physical laboratories are located in the basement and first floor of Deady Hall. The laboratories for elementary and general work are located on the first floor, and furnish accommodations for workers in sections of 24. There is a very complete collection of apparatus for elementary work, available to those who are preparing to teach in the high schools. The additions made in recent years as a result of increased appropriations have been almost entirely in pieces of high grade, of the most substantial and workmanlike character, suited for exact quantitative work, and are well distributed among the various portions of the science. This equipment is supplemented by the collection of lecture-room apparatus, which is especially rich in the departments of light, electricity, and magnetism. Among the more important pieces

may be mentioned apparatus for the study of accelerated motion, of harmonic motion, and of central forces; thermometers of a wide range of sensitiveness, calorimeters for precision work, combustion calorimeters, and apparatus for determining the mechanical equivalent of heat; lenses, laboratory telescopes, spectroscopes, spectrometers, and an unusual collection of prisms and diffraction gratings, two very excellent photometers, polarimeter, and a Michelson interferometer; an exceedingly good collection of galvanometers, resistance boxes, ammeters and voltmeters, and a large electro-magnet.

The special laboratory for electrical measurements is located in the basement, and is provided with concrete piers for apparatus requiring unusual stability, and with storage battery, 110-volt direct current, and alternating current of several potentials, and a system of distributing circuits. The laboratory is equipped with apparatus of the highest grade, and of considerable variety. The equipment includes resistance boxes and resistance standards from the Leeds & Northrup Co., Hartmann & Braun, and O. Wolff, ranging from a standard 1-100 ohm to 100,000 ohms, a Kelvin bridge for measuring resistances from 1 ohm to 1-1,000,000 ohm, a high potential storage battery of 2,000 cells capable of furnishing 4,000 volts, a Leeds & Northrup potentiometer, a large collection of galvanometers, portable and reflecting, suited for a wide range of work, ammeters and voltmeters from the Western Electrical Instrument Co. and the American Instrument Co., both for direct and alternating currents, wattmeters, Siemens and absolute dynamometers, standards of self and mutual-inductance, condensers, both of mica and of paper; precision photometers, standardized incandescent lamps, and the usual accessories of switches, commutators and electric motors.

#### BOTANY.

The Botanical department occupies parts of the third and fourth floors of Deady Hall. The large lecture room and laboratory for the general Botany classes has the regular equipment of work tables, lockers, and compound microscopes as well as provision for the displaying of stereopticon illustrations and charts. This, as are all the other rooms, is furnished with gas and lighted with elec-

tricity. The department possesses a fine series of botanical models of flower types and insectivorous plants. The supply of preserved material is constantly being added to and is fairly representative of the various plant groups. Each student is expected to provide himself with dissecting set and drawing material, but the laboratory is prepared to furnish the necessary microscopical slides, reagents and glassware.

Half of the fourth floor is devoted to the Herbarium and Bacteriological rooms. Mr. Thomas Howell has donated his large herbarium, containing many type specimens, to the University. This, together with Mr. Leiberg's gift of 15,000 specimens last year is available for students in Systematic Botany. Facilities are provided for the study of preservation of local material and for the cataloguing of plants sent from various parts of the State, and the department will be glad to name any specimen that may be sent to the herbarium for determination. The Bacteriological laboratory is well equipped for work with its gas-fitted work tables and locker combined, its autoclave, steam and hot-air sterilizers, incubator, hot water heater and compound microscopes, with oil immersion lenses.

#### ZOOLOGY.

The Zoological laboratories are situated in Deady Hall. The laboratory on the third floor is used for General Zoology, Histology and Embryology, and is a large room, 25 x 37 feet, with a north exposure, thus giving the best light for microscopic work. The apparatus and fittings in this room have been selected with the idea of making the work of each student as independent as possible. Each man is provided with a locker containing all necessary reagents and stains for making microscopical slides. The paraffin ovens are so arranged that each student has his own compartment thus allowing experiments and special work to be carried on without interference. The laboratory keeps on hand a number of microscopical slides to supplement the work of the student and to illustrate special methods. This same room is used for Embryology. Besides a good collection of chick and pig embryos, the laboratory has a number of models illustrating the development of Echinoderms, Amphioxus, frog, chick, pig, and man.

The Anatomy laboratory is located on the fourth floor and is a light, sunny room, 18x37 feet. There is a good collection of skeletons and skulls illustrative of the various types of reptiles and mammals; an articulated human skeleton and one disarticulated; several human skulls, sectional and disarticulated. In Human Osteology, a course required of all premedical students, the bones of the body are modelled in clay. The room is also used as the Physiology laboratory.

The laboratory is well equipped with digestion ovens and water baths. There is also a good equipment for work on muscle, nervous tissue, circulation, and respiration, by which many of the laws of physiology can be worked out by the students.

#### PUGET SOUND MARINE STATION.

The Puget Sound Marine Station is located at Friday Harbor, Washington, and is under the joint management of the universities of the Northwest.

Although the station was established and is financed by the University of Washington, each institution co-operating has on the board of control one member from the Zoology department and one from the Botany department. The director of the laboratory is appointed by the University of Washington, the board of control acting as an advisory committee in the direction and operation of the work of the station.

General supplies of common reagents and simple laboratory instruments are kept in the storeroom for sale. A small library will be available. Apparatus and reagents for unusual experiments will not be provided unless arranged for beforehand.

The equipment of the station will include a steamer fitted with dredging apparatus for deep water work. This with a transport scow will be used for conveying parties to and from more distant collecting grounds. A gasoline launch and row boats will be available for other expeditions.

For full information concerning the station, see announcement of Summer School, this catalogue.

## ADMISSION TO THE UNIVERSITY

## ADMISSION TO THE FRESHMAN CLASS.

The requirements for admission to the freshman class comprise the completion of a four-year high school course, or its equivalent. For full entrance, fifteen units are required. Graduates of high schools who for any reason do not have fifteen units, may enter as conditioned freshmen if they have satisfactorily completed at least thirteen units. All conditions must be made up during the first or second years of residence at the University.

By a unit is meant a subject running one year (36 weeks) five times a week, with recitations not less than forty minutes in length.

## REQUIRED SUBJECTS.

The required subjects with the number of units in each are as follows:

## COLLEGE OF LITERATURE, SCIENCE AND THE ARTS.

English .....	3	units
Algebra .....	1½	units
Plane Geometry .....	1	unit
One Foreign Language .....	2	units
History .....	1	unit
Science* .....	1	unit
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Total .....	9½	units

## COLLEGE OF ENGINEERING.

English .....	3	units
Algebra .....	1½	units
Plane Geometry .....	1	unit
Solid Geometry .....	½	unit
One Foreign Language .....	2	units
History .....	1	unit
Physics .....	1	unit
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Total .....	10	units

\*Science must be one unit of Physics, Chemistry, Botany, Zoology or Biology.

**ELECTIVE SUBJECTS.**

The balance of the fifteen units may be selected from any subjects for which standard high schools give credit toward graduation, and may include additional work in the required subjects. Not more than four units may be offered in vocational subjects. All students are urged to present four units of English.

**EXCESS MATRICULATION CREDIT.**

Students who bring from accredited preparatory schools credits in excess of the requirements for matriculation must pass an examination at the University in the subjects covered by such credits before these may be counted as canceling any part of the 120 semester hours required for graduation, but in no case shall the amount of college credit so allowed exceed 60 per cent of the number of hours such subject or subjects covered in the preparatory school. The preparatory subjects in which advanced credits may be so earned are as follows: Latin—Cicero or Virgil; German, French, Greek, Higher Algebra, and Trigonometry.

**EXAMINATION IN ENGLISH.**

Every student in the College of Literature, Science, and the Arts, at the beginning of his freshman year, shall satisfactorily pass an examination testing facility and accuracy in the use of English; or, he may waive this requirement by taking a course of six semester hours in English during his freshman year, for which college credit will be given.

Every student in the College of Engineering, at the beginning of his freshman year, shall satisfactorily pass an examination testing facility and accuracy in the use of English; or, he may waive this requirement by taking a course of two semester hours in English during his freshman year, for which college credit will be given.

The examination will be held during registration week at an hour and place announced on the bulletin boards.

**METHODS OF ADMISSION.**

There are two ways of entrance to the University: First, by examination; second, by recommendation from accredited schools

without examination. All students from schools not accredited the University are subject to examination at the University. The examinations will be held during the first week of the college year.

#### ACCREDITED HIGH SCHOOLS.

It is the policy of the University so to adjust its standard entrance requirements as not to be out of touch with the schools of the State that do earnest work, and at the same time to protect the scholarship of the University. It will also be the policy, so far as possible, to make the accrediting uniform for the various departments. Schools, therefore, that have a four years' course, with nine months' year, and subjects running for half a year or more five times a week, with recitations forty minutes long, and which have the subjects in the State high school course, or their equivalent, will, as far as possible, have their students admitted to the freshman class in the University.

The State high school course is the basis of the requirement for entrance to the University and the adoption of the State course at once simplifies the passage of students from high schools into the University, and settles almost, if not quite all the questions of accrediting. It is earnestly hoped, therefore, that all high schools will adopt the State course.

#### LIST OF ACCREDITED SCHOOLS.

##### Public High Schools.

Albany.	Klamath Falls, Klamath County
Alsea.	High School.
Ashland.	La Grande.
Astoria.	Lakeview.
Athena.	Lebanon.
Baker.	Marshfield.
Bandon.	McMinnville.
Bay City.	Medford.
Bend.	Merrill.
Brownsville.	Milton.
Brownsville, South.	Monmouth.
Burns, Harney County High	Myrtle Creek.
School.	Myrtle Point.

Canby.	Nehalem Union High School.
Canyonville.	Newberg.
Central Point.	Newport.
Clatskanie.	North Bend.
Coburg.	Nyssa.
Condon, Gilliam County High School.	Ontario.
Coquille.	Oregon City.
Corvallis.	Parkplace.
Cottage Grove.	Pendleton.
Cove.	Pleasant Hill, Union High School No. 1.
Creswell.	Portland: Lincoln, Washington, and Jefferson High Schools.
Dallas.	Prairie City.
Dayton.	Prineville, Crook County High School.
Drain.	Rainier.
Elgin.	Roseburg.
Enterprise, Wallowa County High School.	Salem.
Estacada.	Scappoose.
Eugene.	Seaside.
Fossil, Wheeler County High School.	Sheridan.
Forest Grove.	Silverton.
Glendale.	Springfield.
Grants Pass.	St. John.
Gresham.	St. Helens.
Halsey.	Sumpter.
Harrisburg.	Tillamook.
Heppner.	The Dalles.
Hermiston.	Toledo.
Hillsboro.	Union.
Hood River.	Vale.
Hood River, Frankton High School.	Wasco.
Ione.	Weston.
Jefferson.	Woodburn.
Joseph.	—
Junction City.	Nome, Alaska.

## Private Schools.

Baker—St. Francis Academy.

Milton—Columbia Junior College.

Mt. Angel—Mt. Angel College.

Newberg—Pacific Academy.

Pendleton—St. Joseph's Academy.

Portland—Allen Preparatory School; Columbia University; Hill Military Academy; Portland Academy; St. Helen's Hall; St. Mary Academy; St. Joseph's School; Y. M. C. A. Preparatory School.

## ADMISSION FROM OTHER STATES.

Graduates of high schools outside of Oregon will be admitted to the University without examination when such schools are accredited to their own state university or to universities of equal rank.

## ADMISSION TO ADVANCED UNDERGRADUATE STANDING

Advanced standing will be given students coming from institutions of collegiate rank, who can satisfy the committee on advanced credits that the courses offered are the equivalent to those given by the University. All applications for advanced standing, if not made before the opening of college, should be made as soon as possible after registration in the University, on blanks furnished by the Registrar.

## REQUIREMENTS FOR ADMISSION TO SPECIAL STUDENT STANDING.

The privileges of a special student are intended for those who, for any reason, are unable to complete a college course, but who are qualified by age, character, practical experience, purpose, and habits of study to profit by University courses.

Special students shall be of two classes, as follows:

(1) Persons not candidates for a degree, who have met all the requirements for entrance to the freshman year, to be known as collegiate special students. They may be permitted to take one or more college courses for which they are fitted and shall be subject

to the nine-hour rule, except that when registered for fewer than nine hours they must secure credit in them all.

(2) Persons of maturity, twenty years of age or over, and teachers in public or private schools, who present satisfactory credentials and testimonials, to be known as irregular special students. They may be permitted to take one or more college courses for which they are fitted, subject to the condition that they must complete satisfactorily 60 per cent of the work undertaken.

All applications for special student standing must be passed upon by the Committee on Special Students, who reserve the right to reject any petition, as they may deem wise, and to discuss and change any proposed program of studies. Students, other than those of mature years, must give evidence of a definite object to be attained by the courses sought.

Students who have met all the requirements for entrance to the freshman year, and are candidates for a degree shall be considered regular students, even though for sufficient reasons they may be permitted to take less than the minimum number of hours. They shall be subject to the nine-hour rule, except that when registered for fewer than nine hours they must secure credit in them all.

## DESCRIPTION OF PREPARATORY SUBJECTS.

### ENGLISH.

All regular students must present at least three units (fifteen hours) of entrance English. The entrance English requirements will conform to the State high school course.

All students entering advanced college classes must be accredited with English done elsewhere or fulfill entrance conditions here, through examination or work in class. All freshmen entering the University will be examined in English Composition (except such as prefer to elect a freshman course in English composition of six semester hours). The examination is designed to test the student's ability to write clear, correct, idiomatic English. He will be asked to criticise an extract of classic prose under a few essentials of good English; to write two essays of not less than two hundred words each, one upon some familiar subject drawn from his experi-

ence or observation, and the other upon a subject selected from the books mentioned below. These essays will be tested on the following points: The language must be clear and gramatical; the spelling, punctuation, and capitalization must be reasonably correct; choice of words must show discrimination; sentences and paragraphs must be constructed in accordance with the simpler principles of composition. The essays must show ability to organize thought. (A topical outline may accompany each essay.)

No student will be passed whose work shows serious defects in spelling, punctuation, grammar, and structure of sentences and paragraphs, or who presents illegible or untidy manuscript.

As preparation for satisfactory work in the University, constant and regular practice in writing is earnestly recommended. Throughout the four years of the high school course the student should write exercises and revise them after correction by the teacher so as to secure accuracy and self-reliance. The subjects upon which the student writes should be drawn from both literature and daily life and experience, and some degree of ability should be secured in each of the types of discourses; description, narration, exposition, and argument. The fundamental principles of grammar should be mastered in theory and practice. Such principles of rhetoric as are adapted to the student's practical use should be emphasized; principles that make his speech and writing definite and effective, such as good usage in choice of words, correct sentential structure and paragraphing, and outlining of thought.

#### MATHEMATICS.

*Elementary Algebra.*—The requirements in Algebra embrace the following subjects: Factors, common divisors, and multiples, fractions, involutions, including the binominal theorem for positive integral exponents; evolution, theory of exponents, radicals, and equations involving radicals, ratio, and proportions, elementary logarithms; the ordinary methods of elimination, and the solution of numerical and literal equations of the first and second degrees, with one or more unknown numbers, and problems leading to such equations.

Work based on any of the following text-books will be accepted, the work to have five full recitation periods per week for a year and a half, a school year to be at least thirty-six weeks, and a recitation to be at least forty minutes in length.

Wells' Algebra for Secondary Schools, the State text-book; Slaughter and Lennes' Elementary and Advanced Algebra, or Young and Jackson's Algebra.

*Plane Geometry.*—Required of all students. The course calls for five recitations per week for one year, completing the State text-book. Wentworth's Plane Geometry, revised edition, including two-thirds of the exercises; Shutt's Plane Geometry, with all the exercises.

*Solid Geometry.*—All students of engineering are required to take this course, and those preparing for scientific work are expected to do so. Elective for others. The work covers three books of Wentworth's Solid Geometry with a number of the exercises, and calls for five recitations per week for one semester.

*Higher Arithmetic.*—A one semester course, five recitations weekly, covering the work in Higher Arithmetic by Wells, the State text-book. Elective.

*Advanced Algebra.*—A one semester course, five recitations weekly, presupposing the completion of Elementary Algebra. Text-book, Advanced Algebra by Hawkes. Elective.

*Plane Trigonometry.*—A one semester course, five recitations weekly, covering the work in Plane Trigonometry (with tables), second revised edition, by Wentworth. Elective.

The completion of the courses in Advanced Algebra and Plane Trigonometry permits the student to begin the study of Analytical Geometry and Calculus on entering the University.

#### LANGUAGE.

*French 2 to 4 Units.*—Five recitations per week. Written exercises and grammar work; systematic work in French pronunciation and as much practice in reading as possible to give facility in reading easy French prose.

*German 2 to 4 Units.*—Five recitations per week. Written exercises and grammar work and systematic training in German

pronunciation. As much drill as possible in reading German prose and poetry.

*Latin 2 to 4 Units.*—Five recitations a week each year.

First Year—Latin lessons and grammar, and *Viri Romæ*, or *Nepos*, or *Cæsar's Gallic War* begun.

Second Year—*Cæsar*, four books.

Third Year—*Cicero*, six or seven orations, including the four against *Cataline*, and *Sallust's Jugurtha*.

Fourth Year—*Vergil*, six books of the *Aeneid*.

*Greek, 2 Units.*—Five recitations per week each year.

First Year—Greek lessons and *Xenophon's Anabasis* begun.

Second Year—*Xenophon*, four books of the *Anabasis*.

#### HISTORY.

Five recitations a week for one year. Any of the following:

1. *Greek and Roman History*, with connected geography; (a) *Greek History* to death of *Alexander*; (b) *Roman History* to A. D. 800. *Botsford's Greek History* and *Botsford's Roman History* are the state texts.

Students preparing for the University in History are strongly urged to take *Greek and Roman History*.

2. *Mediaeval and Modern History.*—The following indicate the preparation required: *Myer's Mediaeval and Modern History*, *Fischer's Growth of Nations*, *Adams' European History*.

3. *English History.*—Ground covered in *History of England* by *Coman* and *Kendall*.

4. *American History and Constitution.*—*Montgomery's Student's History of the United States*, *Channing's Student History of the United States*, or some book of like nature, provided a more elementary history has been previously studied. Otherwise some briefer standard high school history. *Strong and Schafer's Government of the American People*.

In all cases the text-book should never be depended upon entirely; supplementary work should be done with one or two other text-books, and at least one large *General History* for reference. See the report of the Committee of Seven on the study of History in Schools.

## SCIENCE.

Five recitations per week for a year in each subject. Science work, to be accepted for entrance to the University, must be from a standard high school text-book; thorough laboratory practice is absolutely necessary when the subject allows. Laboratory manuals and note books must be in constant use, and students coming from schools not accredited to the University, must present their laboratory note books, signed by the teacher. In Chemistry, some text equivalent to Remsen's Briefer Course must be used; in Physics, a text equivalent to Millikan and Gale; in Botany to Bergen's Elements; and in Physical Geography, any standard text.

*Physics.*—The work in Physics, to be accepted, must include the thorough study of a satisfactory text-book with recitations and written tests, and a substantial amount of laboratory work done by the student himself in a suitably equipped laboratory under competent supervision. The primary purpose of this laboratory work should be instruction, and with this end in view the laboratory period should find a regular place on the school schedule, the list of experiments should be carefully selected to illustrate clearly the most important principles of the subject, and the observations and conclusions carefully recorded in a permanent note book.

Some faults to be avoided in the work of the laboratory are: The omissions of large subdivisions of the subject, as for instance the entire topic of electricity and magnetism; substituting training in manipulation for the illustration of scientific laws; the slipshod use of rough and qualitative experiments only; waste of time and distraction of attention from the real purpose of an experiment by over-insistence on accuracy of results; failure to record facts actually observed; failure to see or state the point; lack of clearness in notes, concealing observations, deductions and conclusions in a mass of writing.

Students of Engineering and others planning to take more advanced work in Physics will find that such adequate preparation will save much valuable time in the University.

The department plans the early publication of a Bulletin of Suggestions for Teachers of Physics, including some hints on the equipment and conduct of the laboratory.

*Chemistry.*—In cases where Chemistry offered is considered by the head of the department of Chemistry to be equivalent to Course 1 (see list of courses in Chemistry), the student will be admitted to Course 2, satisfactory work in which will entitle him to one unit college credit in case the preparatory Chemistry was used to fulfill entrance requirements, or two units college credit in case it was not so used.

*Zoology.*—The minimum time to be devoted to zoology in order to receive credit for admission to the University should be one hour's laboratory work daily for a half year. This should be supplemented by field work and reading under the direction of the teacher.

The following series of animals is recommended: (1) Protozoa (Amœba and Paramœcium or Vorticella); (2) a Cœlenterate (Hydra); (3) an Echinoderm (Sea-urchin or Starfish); (4) an Annelid (Earthworm); (5) a Parasite Worm (Cestode); (6) a Decapod Crustacean (Crayfish); (7) an Orthopterous Insect (Grasshopper, and comparison with other Orthoptera); (8) a Coleopterous Insect; (9) a Lepidopterous Insect, with larva and pupa; (10) a Hymenopterous Insect; (11) a Pelecypod Mollusc (Freshwater Mussel); (12) an Amphibian (Frog, with metamorphosis).

Laboratory work should be directed not merely toward a study of animal structure but as far as practicable toward the study of habits and reactions. It should furnish the basis for the classroom discussion of principles, especially of evolution.

*Physiology.*—For preparation in physiology, the method of study should combine certain work of a practical nature with lessons from the text-book. This practical work should embrace the observation of general physiological phenomena through experiments so simple that the pupil can make most of them, supplemented by demonstrations in anatomy and microscopy carefully prepared by the teacher. Expensive apparatus is not only unnecessary for this work, but it is really out of place. Even the microscope should be used only as an occasional accessory to what the pupil may observe with unaided vision. The keeping of notes and sketches, recording clearly and systematically the more

important observations, should accompany the course throughout.

In every instance, the student should be made familiar with the more important results of recent years in sanitary science. To this end, the teacher is urged to use freely such material as is contained in Part II of Hough and Sedgwick, the Human Mechanism and the Sanitation of Its Surroundings.

The minimum amount of work for which preparatory credit will be given is the equivalent of five recitations and laboratory exercises weekly for half the school year.

*Botany.*—The work required of those who offer botany for admission is expected to include as much as a competent teacher, trained in laboratory methods, can accomplish with his classes in a year. No attempt is here made to indicate the exact extent of the ground to be covered, for the teacher should have large liberty in selecting material and topics as occasion requires; but it is recommended that one-half year be given to the form, structure, and habits of flowering plants, while the other half year may be given to the natural groups of plants, physiology, and the adaptation of form and structure to environment.

The following text-books are recommended as offering numerous and helpful suggestions: Atkinson's Elementary Botany; Bailey's Botany; Barnes' Plant Life; Bergen's Foundations of Botany; Coulter's Plant Relations and Plant Structures; Spalding's Introduction to Botany; Stevens' Introduction to Botany. Ganong's Teaching Botanist is one of the most useful books for the teacher.

*Physical Geography.*—Five recitations a week for either a half year or a full year, using as a text Tarr, Davis, Gilbert & Brigham, Hinman, or any other standard text-book. Laboratory should be taken in connection with the recitation work.

## GENERAL INFORMATION

### PUBLICATIONS.

*The University of Oregon Bulletin* is published monthly, except during the summer vacation. It furnishes information in regard to the current work of the University, and gives the results of special research undertaken by the various departments. The following are the bulletins of the new series issued during the year 1912-13:

#### VOLUME X

1. The Proposed Commonwealth Service of the University of Oregon, F. G. Young. September, 1912.
2. University Extension and Commonwealth Service, Joseph Schafer. October, 1912.
3. Oregon High School Debating League, November, 1912.
4. Bibliography of the Geology, Paleontology, Minerology, Petrology, and Mineral Resources of Oregon. December, 1912.
5. Concrete Roads versus Macadam. E. H. McAlister, January, 1913.
6. Report of the President of the University, with Reports of the Steward and the Registrar. February, 1913.
7. The University of Oregon Summer Session, 1913. March, 1913.
8. Catalogue of the University of Oregon and announcement for 1913-14. April, 1913.

*The Oregon Emerald* is published three times a week during the college year by the student body of the University. The paper is devoted to general college news, and aims to keep the students, faculty and alumni posted concerning the every-day happening at the University and neighboring institutions. The staff consists of an editor, with eight or ten assistants. The various members of the staff are elected during the second semester and hold office for one year.

*The Extension Monitor* is a monthly magazine published by the University for distribution among correspondence students.

Its purpose is to disseminate such directions and items of information as are to be sent to all students alike, and at the same time to bind the correspondence students, so far as possible, into a united corps and create among them a spirit of associated effort such as exists in a high degree on the campus in the famous "Oregon Spirit".

*The Press Bulletin* is a page of news items sent about twice a month to the newspapers of Oregon. The people of Oregon own and support the University, and the effort is made to carry to the people such information about the University as will be of interest.

*The Oregana* is published annually by members of the junior class. It is a book of 400 pages and from 700 to 1,000 copies are issued. Its object is to advertise the University, and to that end it includes stories of University life, cuts of buildings and grounds, drawings, campus scenes, class records, etc.

## SOCIETIES.

### LITERARY.

*The Laurean and Eutaxian Corporation* was organized with a State charter in 1877 to further the literary interests of the societies of the University. Its library was for years the sole library of the University, and it furnished the nucleus for the present library.

*The Laurean Society* was founded in the first year of the University. Its purpose is to give its members "growth and development of mind, together with readiness and fluency of speech," and for this object a debate is held every Saturday evening. Declamations and orations by the members, and addresses by professors and other eminent men are also part of the weekly program. Occasionally joint social meetings are held with the other two societies, and an annual contest with the Philologian Society, held in December, is a part of the debating system.

*The Philologian Society* was organized October 21, 1893. Its object is to discuss questions of general interest, and to secure for its members proficiency in debate and a thorough knowledge of

parliamentary usage. The usual exercises are a short literary program and a debate. The officers are elected for a term of ten weeks, and the meetings are held in the Physical lecture room at 7:30 on Friday evening.

*The Eutaxian Society* is the literary society of the women of the University. It was organized in 1877, and has given valuable training to the numbers of students who from year to year have planned its work and carried out its programs. The society is well organized and has a good, active membership. The program which is varied from time to time, includes prepared and impromptu addresses, reviews and discussions of current events, debates, and parliamentary drills. Resident alumnæ members take an active part in the work of the society, a fact which adds greatly to the strength and value of the organization.

#### ENGINEERING.

*The Engineering Club* was organized November 30, 1906. Engineering students in Sophomore, Junior and Senior classes are eligible for membership. The club holds its meetings on the first and third Fridays of each month. Officers are elected for the whole year.

The purpose of the club is to stimulate an interest among its members in the whole field of engineering, and to encourage original research and observation in practical engineering problems. The programs, which are partly illustrated, consist of papers and addresses by members of the faculty and students.

#### INSTITUTE OF ELECTRICAL ENGINEERS.

*The University of Oregon Branch of the American Institute of Electrical Engineers* was organized November 11, 1910. Meetings are held monthly throughout the school year. At these meetings papers are read by members of the faculty, students, and practicing engineers. The papers presented are open to discussion by the members of the Branch. The facilities of the Department of Electrical Engineering are available for demonstrating the operation of the apparatus under discussion and demonstrations of new

apparatus are given from time to time. All University instructors and students are eligible to membership.

#### DER VEREIN GERMANIA.

*Der Verein Germania* was organized at the University of Oregon by students in the department of German. Meetings are held every two weeks, at which musical and literary programs and discussions are given in German. The purpose of the club is to familiarize its members with German customs and life, and to give them a more fluent command of the language. All students in the department of German are eligible for membership.

#### THE DRAMATIC CLUB.

*The Dramatic Club* is composed of students of the University. All students are eligible who are successful in the try-outs held each fall. The purpose of the organization is to stimulate an interest in dramatic art and to develop latent talent among the members. At least two public rehearsals are given each year in addition to those given only before the club.

#### CHEMISTRY CLUB.

*The Chemistry Club* is an organization meeting at 4 p. m. every Monday for the discussion of matters of current interest in the chemical world. The programs are made out under the supervision of a committee of students selected by the club for the purpose. The discussions are illustrated, where the subject matter will permit, by demonstrations, lantern slides, etc. All meetings are open to whomever may be interested. Announcements are to be found each week in the college papers.

#### RELIGIOUS.

*The Young Men's Christian Association of the University* is on the Campus to unite, promote and develop the religious forces among students and faculty through Bible study classes in club, fraternity and boarding house; religious meetings held once each week in Deady Hall; Mission study courses; and through social

service courses as well as stag parties. The Association's membership this year is 171, and 190 men are enrolled in Bible class with an average total attendance for one month of 162.

The Association's other strong arm of service is its social service work through: Sex Education lectures, "First Aid to the Injured" lectures; its free Employment Bureau, open to all the men of the University, with aid given out this year to date of \$1,684 through regular and odd jobs, thus averaging in cash to the students \$2 per month; also through its department to assist all freshmen at the beginning of the year to find suitable rooms and board as well as secure all needed information regarding the University and the City of Eugene.

The Association is on the Campus for Christian service and may obtain help where needed by writing to the General Secretary Charles W. Koyl, at his home address, 360 E. 11th Street, Eugene or visit him upon arriving in the city at his office in the Men's Dormitory.

*The Young Women's Christian Association* was organized March, 1894. Its purpose is to crystallize the Christian element in the University, and make the influence of that element felt among all the young women. Its social function is an important part of its work. New students are met as they come from the trains, and everything is done to make them welcome. Devotional meetings are held every Monday afternoon at 4 o'clock in the Association rooms. Officers are chosen the first week in January to serve one year. Any young woman wishing information regarding the Association is invited to correspond with the General Secretary of the Association at Eugene.

The Publicity Committee of the Young Women's Christian Association has undertaken the work of an employment bureau to secure employment for girls who wish to take that means of helping themselves through college. A thorough canvass of Eugene is conducted each year and a list made of desirable places of this sort. Work can easily be found in pleasant homes which will enable a young woman to make her own way fully or in part.

## ORATORICAL ASSOCIATIONS.

In addition to the University instruction in Public Speaking, an active and earnest interest in public speaking is fostered and maintained through the agency of voluntary associations of students, which arrange and conduct debates and contests and cooperate with similar organizations in other institutions.

## INTER-COLLEGIATE ORATORICAL ASSOCIATION.

The Inter-Collegiate Oratorical Association is an organization of the following colleges and universities of Oregon: Pacific College, McMinnville College, Albany College, Oregon Agricultural College, Pacific University, Willamette University, and the University of Oregon. An annual contest is held each year in turn at each of the colleges interested.

## INTER-STATE DEBATING LEAGUE.

The Inter-State Debating League was organized in 1906, consisting of the University of Washington, University of Idaho, and University of Oregon. In the fall of 1911, the University of Idaho withdrew from the league, and Stanford University of California entered. Each institution has two teams, which support opposite sides of the question. The affirmative team remains at home and the negative team goes abroad. The contests are held on the last Friday in March of each year.

## UTAH-OREGON DEBATING LEAGUE.

The annual debate is held between the University of Utah and the University of Oregon, the place of meeting alternating between the two universities. Each university is represented by two men.

## OREGON HIGH SCHOOL DEBATING LEAGUE.

The Oregon High School Debating League was organized to promote debating in the high schools of the State, and has been successful much beyond the expectations of the organizers. The

high schools enrolled are divided into five districts—Southern Central, Eastern Oregon, Columbia River, and Coos Bay. The champions of the various districts debate each other, and the final debate for the championship of the State is held each May at the University of Oregon, the winning team being awarded a beautiful silver cup.

#### ATHLETICS.

The *Athletic Council* of the University of Oregon, consisting of three members of the Faculty and the President *ex officio*, three members of the Alumni Association, and three members of the Student Body and the Graduate Treasurer, *ex officio*, exercises control over all athletic interests of the University. The football, track, basketball and tennis teams and baseball nine, are all under its direct supervision.

The members of the Athletic Council for the present year are Dr. H. B. Leonard, Prof. H. C. Howe, and Mr. W. L. Hayward representing the Faculty; Judge L. T. Harris, Mr. G. W. Hug, and Dr. Eberle Kuykendall, representing the Alumni Association; Carl Fenton, Walter McClure, and Dean Walker, representing the Student Body; and Albert R. Tiffany, Graduate Treasurer.

#### INFRA-COLLEGIATE ATHLETICS.

The University emphasizes as far as possible infra-collegiate athletics, with the view that the greatest good may result to the greatest number. Inter-class and inter-club teams in basketball, tennis and baseball, for men, and in basketball and tennis for women, bring to many who would otherwise take little or no exercise a very large benefit in the way of physical relaxation and recreation. Aside from the regular college teams, the 10 or 11 inter-club and the four inter-class teams in basketball during the winter, and the same in baseball and tennis during the fall and spring, bring out approximately 300 to 350 men, and in basketball and tennis 200 to 250 women, who would, under other circumstances, miss the value to brain and body of an hour daily of vigorous, healthful, out-door exercise.

## GIRLS' TENNIS CLUB.

Wishing to provide tennis courts for the use of the women of the University and to encourage as many as possible to participate in tennis as an out-of-door sport, a number of the young women organized in the spring of 1908 The Girls' Tennis Club. They secured by their own subscriptions and a gift from the Board of Regents, the erection of three standard courts on the campus, and hold annually in the spring a tennis tournament, the winner of which receives a silver cup. Membership has now become purely honorary, selection being based upon individual proficiency in playing.

## MUSICAL.

*The University of Oregon Glee Club* is a student organization, open to all students who are successful in the tryout held during the first week of the University year. The Glee Club is composed of about thirty men. Yearly Thanksgiving concerts are given in Eugene and Portland, and a tour of the State is made during the Christmas holidays.

*The Girls' Glee Club*, a musical club for women, was organized during 1900. It consists of sixteen voices, four on each part, and is under the direction of the University School of Music. Regular practice is held throughout the year, and an annual concert is given just before the Easter holidays.

*The University Band* is open to all students who are successful in the tryout. The band furnishes music for games, rallies, and other student affairs. It offers valuable training to those interested in this kind of music.

## STUDENT LOAN FUND.

Through the generosity of Mr. William Ladd, of Portland, Mr. A. S. Roberts, of The Dalles, and the Class of 1904, the University Loan Fund was begun. Although for a number of years the total amount of the fund reached only a little over \$500, yet its benefits were large and through it many students were enabled to complete their college course who otherwise could not have done so. At the

beginning of 1909 Senator R. A. Booth, of Eugene, became interested and through his efforts a number of others, among who were Mr. Theodore B. Wilcox and Mr. J. C. Ainsworth, of Portland, and Mr. John Kelly, of Eugene, made substantial donations. The University now has the following funds:

*The General Loan Fund*, established by Mr. William Ladd, Portland, Mr. A. S. Roberts, of The Dalles, the Class of 1904, Mr. Theodore B. Wilcox, of Portland, Mr. John Kelly, of Eugene, and other donors whose names have not been given, amounts approximately to \$1,300.

*The Booth Loan Fund*, established by Senator R. A. Booth, Eugene, \$1,000.

*The Ainsworth Loan Fund*, established by Mr. J. C. Ainsworth of Portland, \$1,000.

*The D. P. Thompson Loan Fund*, established by the estate of the late D. P. Thompson, \$1,000.

*The Condon Loan Fund*, established by Mrs. Ellen Condon McCormack in memory of her father, the late Dr. Thomas Condon for many years Professor of Geology in the University, \$500.

*The Class of 1911 Loan Fund*. The Class of 1911 established a loan fund which when all paid in will amount to approximately \$650. The interest of this fund is kept separate from the principal, the plan being to use the interest to publish a class history once each three years. The fund at present amounts to \$270.

These very generous donations have made it possible more nearly to meet all of the requests for assistance. Loans are made at a low rate of interest and every precaution is made to safeguard against loss. The matter of loans is in the hands of a committee consisting of the President of the University, the Dean of Liberal Arts, the Dean of Women, the Steward and the Registrar. Applications for loans are made on blanks furnished by the Registrar. At present loans are not made before the beginning of the sophomore year.

#### TEACHERS' BUREAU.

The University maintains a teachers' bureau. It does not guarantee to find positions for all its graduates, but it will assist them

in every way possible to find good locations. During the past few years the demand for well trained university graduates to fill positions as principals and teachers in the high schools of Oregon has been much above what the University has been able to supply. All assistance which the University can give is freely at the command of its students and graduates who are prepared to teach.

#### LECTURES.

A number of the members of the Faculty are available for institutes and lectures. They are glad to deliver addresses or help in institutes at any time that does not conflict too much with their regular University work.

#### GENERAL ASSEMBLY.

A *General Assembly* of the University is held each Wednesday at 10 A. M. Appropriate exercises are held and interesting and important addresses made by invited guests, or by the President or members of the Faculty of the University.

#### MISCELLANEOUS.

*The Faculty Colloquium*, composed of all the members of the Faculty, meets once every two weeks. Papers are read by various members on special subjects of interest.

*Lectures*—Frequent lectures by invited guests from Oregon and other states are given to students upon subjects allied to the courses given in the University. These lectures are by those fitted by training and experience to speak with authority.

*Recitals*—The School of Music gives recitals at stated times during the year, to which all students of the University are invited.

*The Alumni Association* of the University of Oregon was organized in 1879. The membership consists of all the graduates of the University. The objects of the Association are to "Advance the cause of higher education, to promote the interests of the University of Oregon, and to encourage mutual acquaintance and goodfellowship among the alumni." The annual meeting is held at

Eugene during Commencement Week. The dues of the Association are one dollar a year, fifty cents of which goes toward paying the general expenses and fifty cents for the subscription to the Oregon Emerald. The Emerald is sent to each member of the Association.

*The Associated Students* exercise general control over all student affairs within the University. The general management of its affairs is entrusted to an executive committee, consisting of a president, vice-president, secretary, and two members at large. Officers are elected on the second Wednesday in May of each year.

*The Council of Women Students* holds regular meetings every two weeks for the discussion of matters pertaining to the welfare of the University women. Each club, sorority, and dormitory has one representative and an equal number of representatives are chosen by the girls not living in clubs. All members of the Council are seniors.

## UNIVERSITY REGULATIONS CONCERNING UNDER-GRADUATE STUDENTS.

### REGISTRATION.

On the appointed Registration Days, in September and February each student must present himself at the Registrar's office and obtain a *Certificate of Registration*.

At the beginning of the second semester, one day only is given to registration. Matriculated students registering later than that day must pay a late registration fee of two dollars.

### STUDY CARD.

Each student at the time of his registration at the beginning of each semester will receive from the Registrar a blank Study Card for the selection of studies for the semester. This card, properly filled out and signed by the student's major professor, and the instructors with whom work is taken, must be filed with the Registrar within three days of the date of registration. Students failing to file their Study Cards within the time specified shall pay a fee of two dollars before being admitted to classes.

### ENROLLMENT IN CLASSES.

At the beginning of each semester, a student must present his certificate of registration to the instructors of the courses in which he desires to be enrolled, and satisfy the instructor in charge that he has had the prerequisite work.

### CHANGE OF STUDIES.

If because of difficulties with the schedule, or if for any other reason satisfactory to his adviser, any student wishes to make a change in enrollment he may do so by obtaining a "Change of

Enrollment Card" from the Registrar and complying with the requirements indicated upon the card itself, as follows: This card to be effective, must be made out, dated, and signed by the adviser of the student in whose favor it is drawn. The date of use, except after special faculty action, must not be later than ten days from the date upon which the student registered in the University. The Registrar and all instructors are forbidden to honor it under any other conditions.

The instructor from whose course the change is made signs the card as an acknowledgment that he has been duly notified of the change. The instructor in the new course acknowledges by his signature that formal enrollment has been made.

Changes of course later than *ten days* after registration shall not be made until after favorable action by the Committee on Revision of Students' Courses, but petitions for change of course will not be considered by the committee after *November 1st*, for the first semester, and after *March 1st*, for the second semester. Petitions for change of course must be approved and signed by the major professor of the petitioner, and the instructor of the course which the student desires to enter.

#### WITHDRAWAL FROM CLASS.

In case of a student leaving a course without substituting other University work for it the act is to be regarded as a withdrawal upon fulfillment of the following conditions: The act is to be initiated either by the student himself or his adviser; the adviser after consultation with the instructor giving the course from which withdrawal is desired, must approve; the withdrawal is then effective upon filing the withdrawal card, properly executed, with the Registrar. But withdrawal shall not be granted within one month of the final examination period. The mark "W" in semester grade reports is to be held as applying exclusively to the case coming under this paragraph. Withdrawal cards may be obtained from the Registrar.

WITHDRAWAL FROM THE UNIVERSITY.

Students withdrawing from the University shall take either a *leave of absence* or a *card of withdrawal*. Failure to comply with this regulation will lay the student liable to a grade of "F" for all his courses. These cards may be obtained from the Registrar.

DISMISSAL FROM COURSES.

Dismissal from a course may be made at any time by the instructor in charge and shall be effective after consultation upon the part of the instructor with the adviser of the student concerned. Such dismissal shall be considered a failure, and shall be indicated upon the semester grade reports by "F."

AMOUNT OF WORK.

The maximum number of semester hours for students in the first three years is 16, minimum 13; for students in the senior class, maximum 16, minimum 12.

Students having deficiencies resulting from failure shall not be allowed to take any extra hours for graduation on account of such deficiencies.

MINIMUM AMOUNT OF WORK ACCEPTED.

FRESHMEN.

Students in the freshman class shall make not less than eighteen semester hours during their freshman year, of which not less than eight hours shall be made in the first semester and not less than nine in the second. Failure to make the required hours will suspend the student for the following semester; a second failure will permanently sever the student's connection with the University.

REGULAR STUDENTS, ABOVE FRESHMEN.

The failure on the part of a regular student above the freshman class to make nine hours' credit in a semester shall auto-

matically suspend the student from the University for the following semester; a second failure to make nine hours' credit in a semester shall permanently sever the student's connection with the University.

#### SPECIAL STUDENTS.

1. Persons, not candidates for a degree, who have met all the requirements for entrance to the freshman year, are known as Collegiate Special Students. They may be permitted to take one or more college courses for which they are fitted and shall be subject to the nine-hour rule, except that when registered for fewer than nine hours they must secure credit in them all.

2. Persons of maturity, twenty years of age or over, and who are teachers in public or private schools, who present satisfactory credentials and testimonials, are known as Irregular Special Students. They may be permitted to take one or more college courses for which they are fitted, subject to the condition that they must complete satisfactorily 60 per cent of the work undertaken.

All applications for special student standing must be passed upon by the Committee on Special Students, who reserve the right to discuss and change any proposed program of studies. Students other than those of mature years, must give evidence of a definite object to be attained by the courses sought.

Students who have met all the requirements for entrance to the freshman year and are candidates for a degree are considered regular students, even though for sufficient reasons they may be permitted to take less than the minimum number of hours. They are subject to the nine-hour rule, except that when registered for fewer than nine hours they must secure credit in them all.

#### ATTENDANCE AT CLASSES.

All students are expected to attend classes regularly. Daily reports are sent to the Registrar by all instructors. Any student not present at at least 80 per cent of the recitations in any subject will be debarred from examination in that subject. One-sixteenth of a semester hour will be deducted for each absence from class *provided, however*, that when a student is refused examination

a subject on account of absences no extra credit shall be deducted from other courses for such absences. Excuses for absences on account of sickness may be granted at the discretion of the Dean, provided that the instructor shall first have certified that the work lost by absences has been satisfactorily made up.

#### LEAVING TOWN.

Every student before leaving town during the session of the University is expected, as a matter of courtesy, to obtain a *leave of absence* card. These cards may be obtained by the women from the Dean of Women, and by the men from the Dean of Liberal Arts.

#### CONDITIONS AND INCOMPLETES.

All conditions and incompletes in college subjects must be made up within one year.

Examinations for the removal of conditions will be held on the first Monday and the following Tuesday in December, and on the Monday and Tuesday preceding the regular examination period in the second semester. Conditions may also be made up at the regular examination time.

#### MATRICULATION DEFICIENCIES.

Students admitted as freshmen, but having entrance conditions, may be allowed to make up during the first two years of their course, either in the University or elsewhere, a total equivalent of two preparatory units; but the total number of hours, including college and preparatory work, for any one semester, shall not exceed 18 hours.

All matriculation deficiencies must be cleared up by the beginning of the junior year; but in cases where there is only one unit of entrance deficiency, it must be made up during the freshman year. Such deficiencies may be made up either at the high school or under an approved tutor.

## ADVANCED STANDING.

Advanced standing will be given students coming from institutions of collegiate rank, who can satisfy the Committee on Advanced Credits that the courses offered are the equivalent of those given by the University. All applications for advanced standing, if made before the opening of college, should be made as soon as possible after registration in the University, on blanks furnished by the Registrar.

## CHANGE OF MAJOR.

A student may change majors at the beginning of any academic year, except the senior, by filing a petition, indicating the proposed change, with the Registrar. Change of major at any other time shall be made only with the consent of the departments concerned and after action by the University Faculty.

## SCHEDULE OF MARKS.

The system of grading by percentages of an undefined base has been discontinued, and in lieu thereof the system of grading by rank has been adopted for the purpose of assigning grade marks.

The students in each class, having been arranged by rank in the order of the merit of their respective achievements, the upper and lower quartiles are cut off from the whole group, and the two remaining quartiles are considered as composing a normal or medium group, and the students therein are each given the grade mark "M." The upper quartile is considered as composing a superior group, and each student therein is given the grade mark "S," except that a few of the highest ranking students, not exceeding one-fifth of the number in this group, may be given a higher grade mark "H," signifying that in the opinion of the instructor these students have excelled their fellows in the superior group so markedly that they are clearly entitled to be placed in a group by themselves. The lower quartile is considered as composing a passing group, and each student therein is given the grade mark "P," except that the lowest ranking students, who

achievements are not, in the opinion of the instructor, sufficient to entitle them to pass, shall be given a grade mark "F," signifying failure.

Cond., conditioned. Quality of work unsatisfactory, and probably re-examination required. The mark "Cond." is counted the same as "F," failure, in estimating the number of hours a student has made (under the nine-hour rule) for the semester.

Inc., incomplete. Quality of work satisfactory, but unfinished for reasons acceptable to instructor, and additional time granted.

W., withdrawal from class at least one month before the beginning of the final examination period.

Both incomplete and conditioned work must be made up within one year. Failure means that the student cannot receive credits until the work is regularly re-registered and taken over again.

#### HONORS.

Honors will be assigned as follows:

Students shall graduate *summa cum laude* when at least half their credits rank H, and not more than three credits M, none below; *magna cum laude* when not more than three credits rank below S, and none below M; *cum laude* when not more than three credits rank below M; when a student's credit ranks lower than any of the above, he graduates *rite*.

#### SPECIAL HONORS TO SENIORS.

Under the following rule special honors will be given to seniors:

On or before the Saturday preceding Commencement Week, each head of department shall place in the hands of the Senior Credit Committee the titles of all major theses which are in his opinion of unusual excellence, the writers of such theses being thereby recommended to the faculty for special honors which shall be indicated on the Commencement program and elsewhere as the committee shall determine.

**PRIZES AND SCHOLARSHIPS.****PRIZES.****THE FAILING PRIZE.**

The Failing prize, not to exceed one hundred and fifty dollars, is the income from a gift of twenty-five hundred dollars made to the University by Hon. Henry Failing, of Portland. It is awarded "To that member of the Senior Class in the Classical, Scientific or the Literary Course prescribed by the University, or such course as may, at the time, be substituted for either of said courses who shall pronounce the best original oration at the time of his or her graduation."

**THE BEEKMAN PRIZE.**

The Beekman prize, not to exceed one hundred dollars, is the income of a gift of sixteen hundred dollars made to the University by Hon. C. C. Beekman, of Jacksonville. It is awarded under the same conditions as the Failing prize, for the second-best oration.

Subjects for the Failing and Beekman prize orations must be handed to the Registrar by January 10. The preliminary contest to choose the six best orators to compete in the final contest will be held Saturday morning, May 3. The Failing-Beekman contest will be held on the evening of Tuesday of Commencement Week.

**AWARDS OF THE FAILING PRIZE.**

- 1890 Edward H. McAlister, Eugene.
- 1891 E. Etta Levis, Harrisburg.
- 1892 Lenn Stevens, Eugene.
- 1893 Carey F. Martin, Eugene.
- 1894 Irving M. Glen, Dayton.

- 1895 Julia G. Veazie, Dallas.  
1896 H. S. Templeton, Halsey.  
1897 Clinton E. Woodson, Currinsville.  
1898 H. S. Church, Coburg.  
1899 Lawrence A. Read, Portland.  
1900 Homer D. Angell, The Dalles.  
1901 B. C. Jakway, Portland.  
1902 Elizabeth Logan, Eugene.  
1903 Ella F. Travis, Eugene.  
1904 Pearl Luckey, Portland.  
1905 V. W. Tomlinson, Woodburn.  
1906 Norma L. Hendricks, Eugene.  
1907 Nettie Burdick, Cottage Grove.  
1908 Robert W. Prescott, Baker City.  
1909 Jesse H. Bond, Florence.  
1910 Harold J. Rounds, Portland.  
1911 Charles W. Robison, Portland.  
1912 Birdie Wise, Astoria.

## AWARDS OF THE BEEKMAN PRIZE.

- 1890 Agnes M. Green, Seattle.  
1891 Veina E. Adair, Eugene.  
1892 Fred S. Dunn, Eugene.  
1893 Thomas M. Roberts, The Dalles.  
1894 Elias M. Underwood, McMinnville.  
1895 Benetta Dorris, Eugene.  
1896 V. V. Johnson, Eugene.  
1897 Ida Noffsinger, McCoy.  
1898 Clyde V. Fogle, Eugene.  
1899 Bertha Slater, La Grande.  
1900 Mary McAlister, Eugene.  
1901 R. S. Smith, Klamath Falls.  
1902 J. A. Gamber, Lacombe.  
1903 J. H. Gilbert, Watsonville.  
1904 Rosa Dodge, Ashland.  
1905 Cora Shaver, Portland.  
Joseph Templeton, Halsey.

- 1906 Loris M. Johnson, Eugene.
- 1907 Max Sylvius Handman, Portland.
- 1908 Miriam Van Waters, Portland.
- 1909 Earl Kilpatrick, La Grande.
- 1910 Arthur M. Geary, Portland.
- 1911 Percy M. Collier, Eugene.
- 1912 Alberta Campbell, Eugene.

#### THE BENNETT PRIZE.

The Bennett prize is the income from a gift of four hundred dollars made to the University by Hon. Philo Sherman Bennett, of New Haven, Connecticut. It is given for the best student paper on the principles of free government. The annual income is about \$16.

#### ALUMNI MEDAL.

The Alumni medal is presented annually by the Alumni Association of the University to the best individual student debater. The medal for 1913 was won by Howard Zimmerman, of the class of 1913.

#### SCHOLARSHIPS.

##### MEDICINE.

The University of Oregon School of Medicine offers annually one full scholarship and two half scholarships. The holder of the full scholarship is exempt from all fees except some incidentals, the total reduction from the regular fees of the session being \$120 for the first and second years of attendance. The half scholarship carries a reduction of \$60 for each session in the same way. Two half scholarships cannot be united to make one full scholarship. The scholarships are awarded to graduates of the University of Oregon having a bachelor's degree of not more than three years' standing at entrance to the Medical School. The awards are made by the faculty of the University, subject to approval of the Medical faculty.

COLLEGIATE ALUMNAE SCHOLARSHIP.

The Oregon Branch of Collegiate Alumnae offers to the young women of Oregon a scholarship of \$200 at the University of Oregon for 1913-14.

Application for this scholarship should be in the form of an informal letter stating fully the work done in the preparatory school and the course desired in the University, with whatever further information the candidate may consider desirable. The candidate who, in the judgment of the committee, is the best fitted to do excellent work will be appointed. Applications may be addressed to the chairman of the committee, Miss Laura Northrup, Lincoln High School, or 261 Fourteenth Street, Portland, Oregon.

THE MARY SPILLER SCHOLARSHIP.

The Mary Spiller Scholarship is given by the State Association of the University of Oregon Alumnae. It consists in the payment of board and room rent at Mary Spiller Hall, situated on the University campus, for one school year.

Any girl graduate of an accredited high school of Oregon is eligible to this scholarship and it may be given to the same person more than one year, if the committee think it wise to so award it.

Applicants for this scholarship for the year 1913-14, should send their application, with any recommendations, or information which they may wish to include, to the Corresponding Secretary of the Association, Mrs. Edith V. Bryson, 532 Lincoln Street, Eugene, Oregon.

RHODES SCHOLARSHIP.

The next qualifying examination for scholars in Oregon under the Rhodes bequest will be held in October, 1913; the selection of scholars will be completed before the end of January, 1914, and the elected scholar will begin residence at Oxford in October of the same year.

Scholarships will also be open in 1914; and again in 1916 and 1917, omitting every third year.

The scholarships are of the value of £500 a year, and are tenable for three years.

The examination for Oregon will be held at a center to be fixed by the local Committee of Selection. It should be clearly understood that this examination is not competitive, but simply qualifying, and is merely intended to give assurance that every elected scholar is up to the standard of the first examination (responsions) which the University demands of all candidates for the B. A. degree.

The Rhodes scholars will be selected from candidates who have successfully passed this qualifying examination. One scholar will be chosen.

Candidates must be unmarried, and must be citizens of the United States. Candidates are eligible who have passed their nineteenth birthday, but have not passed their twenty-fifth birthday on October 1st of the year for which they are elected.

It has been decided that all scholars shall have reached, before going into residence at Oxford, at least the end of their sophomore or second-year work at some recognized degree granting university or college.

## STUDENT EXPENSES.

## INCIDENTAL FEE.

There is no tuition at the University of Oregon. The incidental fee, payable each year by students in all departments of the University, is \$10. There is also a student-body tax of \$8.00 per year for the support of student enterprises, all games, contests, and concerts given. Graduate students are not required to pay the student-body tax. The fees in the School of Music vary with the instruction.

A diploma fee of \$10 is charged for the first degree taken, and \$10 for each succeeding degree. The rules prescribe that no person shall be recommended for a degree until he has paid all dues, including the diploma fee.

## GENERAL EXPENSES.

Comparative statement of student's expenses for the academic year, from September to June:

	LOW.	AVERAGE.	LIBERAL.
Incidental Fee .....	\$ 10.00	\$ 10.00	\$ 10.00
Student Body Tax .....	8.00	8.00	8.00
Board and Room .....	162.00	225.00	315.00
Sundries .....	120.00	157.00	217.00
	<hr/>	<hr/>	<hr/>
	\$300.00	\$400.00	\$550.00

The expenses of one person for a year vary according to the circumstances of the case, but, as will be seen from the above statement, are in general very low. The following estimate is probably substantially correct: Room from \$0.75 to \$3.00 per week; board from \$3.50 to \$6.00 per week; books from \$5.00 to \$20 per year. Students often rent rooms and do light house-keeping, thus reducing the cost of living much lower than the figure given above.

## MEN'S DORMITORY.

The Men's Dormitory is a three-story brick building located on the campus. The men living in the Dormitory have a club organization, which is thoroughly democratic, by means of which, aided by the natural advantages of the location, a pleasant home is secured. The home and social life is cared for in a large, pleasant reading and reception room on the ground floor. The rooms are furnished throughout, with the exception of a mattress, bedding and towel linen, which are supplied by the occupants. The building is steam heated, and an abundance of hot and cold water is on each floor, with shower baths, lavatories, etc. There are about 50 rooms, which furnish accommodations for 60 to 70 men. The double rooms, or suites, easily accommodate three men, and some of the single rooms accommodate two men. The rooms and building are cared for by the Dormitory management, under the direction of the University. Excellent board is furnished in the dining room for \$3.50 per week. The rate for the room rent is about fifty cents per week. The dining room accommodates 90 men. The Dormitory is run at cost, with only a small margin at the end of each school year for replacement and repairs, so that the students patronizing it are enabled practically to live for cost. All possible savings and economy are effected by the management, in the way of buying and serving, so that the service in the Dormitory is much better for the amount paid than can possibly be secured in private homes.

Following is a table of the expenses:

Room rent per semester, payable at beginning of each semester, per room .....	\$10.00
Board per week, payable monthly in advance .....	3.50
Room deposit, returnable at end of year .....	5.00

Applications for rooms should be addressed to the President's Secretary, University of Oregon, Eugene. If rooms are available at the time of the application, an assignment will be made at once; otherwise the names will be kept on file, the rooms to be assigned in order of the application as vacancies may occur. The room deposits should either be sent in with the application, or when the assignment is made.

## MARY SPILLER HALL.

Mary Spiller Hall, the girl's dormitory, will accommodate 20 girls. Each room is nicely furnished with bed and springs, rug, dresser, washstand, study table, chairs, and rocking chair. Each girl furnishes her own mattress, bedding, and linen. The following scale of prices will be in effect for 1913-14:

Room rent per semester, payable at beginning of each semester, per room .....	\$7.50 to \$15.00
Board per week, payable monthly in advance.....	3.50
Room deposit, returnable at end of year .....	5.00
Room deposit, returnable at end of year .....	5.00

The hall is located on the campus, near the President's house, and is a very pleasant place to live. Applications for rooms should be addressed to the Matron, Mary Spiller Hall, University of Oregon, Eugene.

## ROOMS IN PRIVATE FAMILIES.

The University publishes about September 1st of each year a directory of approved rooming and boarding places. The directory is sent free of charge, and copies may be secured by addressing the Registrar. The number of rooming and boarding places each year is large, and students will have no trouble in finding good locations. Ordinarily, it is not advisable to engage a room before reaching Eugene. The price of rooms varies from \$0.75 to \$3.00 per week, and board from \$3.50 to \$6.00 per week.

## SELF-SUPPORT.

Seventy per cent of the men attending the University are either wholly or in large part earning their own way by work in the summers and work done during the college year. Eugene is a rapidly growing town of 12,000 inhabitants, whose citizens are friendly to the University and take pleasure in affording to students the opportunity to earn their necessary expenses. The work available during the session consists of janitor work, type-writing, reporting, tutoring, waiting on table, clerking, clothes pressing, odd jobs, etc. The Y. M. C. A. conducts a free labor

bureau, which is at the service of the students. The demand for student help is usually larger than the supply. The University is glad to be of all possible assistance to those desiring to find work.

#### LABORATORY FEES.

In all laboratory courses a charge is made for the use of the laboratory and its equipment, for supplies used, and for breakage. At the end of the semester or year, depending on the course taken, any cash balances are returned or collected as the case may be. Payment of the fee must be made before enrollment in any laboratory course.

#### BOTANY.

A deposit of \$5.00 is required for each laboratory course, with the exception of Botany I, Botany II, and Botany VIII, which are \$2.00 each and Botany VII, which is \$2.50. Additional expense for supplies, if any, is met by the purchase of coupons. The usual expense to the student in advanced courses is from \$2.00 to \$4.00.

#### CHEMISTRY.

The deposit for each course is \$10. Additional expense for supplies, if any, is met by the purchase of coupons. All returnable materials, as well as unused portions of coupons, are redeemed at the close of the laboratory work in any course at their cash value. The usual cost to the student is as follows:

- General Chemistry, \$10.
- Analytical Chemistry, \$15 to \$20.
- Organic Chemistry, \$15 to \$20.

#### CIVIL ENGINEERING.

21. Elementary Surveying .....	\$ 1.00
22. Topographic Surveying, each semester .....	1.00
42. Testing Laboratory .....	2.50
44. Masonry Laboratory .....	2.50
81. Railway Engineering .....	2.50
Key deposit for Mechanical Drawing, \$1.00; refunded at the end of the course on the return of the key.	

ELECTRICAL ENGINEERING.

Deposit, \$3.00 a semester for each course in shops and laboratories.

GEOLOGY.

A laboratory deposit of \$5.00 is required for Course 4, Crystallography and Mineralogy.

GYMNASIUMS.

Locker fee, \$3.00.

PHYSICS.

A deposit of \$5.00 is required for each course each semester. The usual expense for Courses 1, 3, 12, and 13 is \$2.50 per semester.

PSYCHOLOGY.

A laboratory fee of \$2.00 is charged for Course 2.

ZOOLOGY.

A deposit fee is required in all courses in this department, with the exception of Zoology 9, 11, and 15. In the courses requiring laboratory deposits, the fee in Zoology 1, 2, 12, and 17 is \$2.00; the remainder, \$5.00.

The apparatus loaned out to the student is expensive, and the fee is not intended to meet this in any measure, but to cover the cost of materials used and the apparatus not returnable. A certain portion of the fee is returned to the student in all courses except Zoology 1, 2, 12, and 17, if there has been no breakage, or in case the money has not been used to buy additional materials. The usual expense to the student in the advanced courses is from \$2.50 to \$4.00.

**ORGANIZATION OF THE UNIVERSITY.****GRADUATE SCHOOL.****COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS.**

General Courses in Liberal Arts.

Special Courses, including—

Course Preparatory to Medicine.

Course Preparatory to Law.

Course Preparatory to Commerce.

**COLLEGE OF ENGINEERING.**

Civil Engineering.

Electrical Engineering.

Railway Engineering.

Chemical Engineering.

**SCHOOL OF EDUCATION.**

A four years' course.

**SUMMER SCHOOL.**

A six weeks' course.

**SCHOOL OF CORRESPONDENCE-STUDY.****SCHOOL OF MUSIC.**

Theory, Harmony, and Musical History.

Piano.

Voice.

Violin.

**SCHOOL OF MEDICINE.**

A four years' course.

**SCHOOL OF LAW.**

A three years' course.

## THE GRADUATE SCHOOL.

### FACULTY.

The faculty of each college consists of the President of the University and the professors, assistant professors, and instructors giving instruction in the college.

### ORGANIZATION.

The administration of the Graduate School is entrusted to a committee of the University Faculty called the Graduate Council.

### AIM.

The Graduate School in the different departments adapts its work to the needs:

1. Of those desiring to fit themselves for higher positions in the work of education and who as preparation for this work seek to specialize along definite lines;

2. Of those desiring to utilize the opportunities offered by the University to gain greater proficiency in other lines of professional activity or public service;

3. Of those competent to undertake research problems in any department of study and to be of service in the advancement of knowledge. Provision has been made for the publication under the auspices of the University of the results of especially meritorious work of this kind.

### ADMISSION AND REGISTRATION.

Students holding the Bachelor's degree from this University or other institutions whose requirements for the degree are equivalent, and who desire to do graduate work, whether for an advanced degree or for no degree, are admitted to the Graduate School. Students holding a Bachelor's degree, but desiring to

obtain a first degree in some other line, will register in the undergraduate department. Candidates for admission to the Graduate School must make formal application upon blanks, furnished for that purpose, to the Graduate Council, submitting diplomas or other evidence of the requisite standing.

When approved by the Graduate Council, the applicant pays the required fee at the Steward's office, and receives from the Registrar, each semester, a study card to be filled out by his major professor. In case of a candidate for an advanced degree, the major professor must be the head of some department in which, either here or in the university from which he comes, the student has taken a sufficient amount of work to fit him for graduate study. The minor may be taken in undergraduate work. When made out the study card whether the student be a candidate for an advanced degree or not, must be submitted to the Graduate Council for formal approval. Otherwise, graduate students not seeking a degree are subject to the same regulations as undergraduates.

#### ASSIGNMENT OF STUDIES.

The heads of departments in which the student takes work constitute his Special Committee, which determines his course, conducts his examinations, and upon completion of all requirements, certifies to the Graduate Council his having earned the degree. The head of a department in which the candidate for an advanced degree takes his major work shall be his adviser, and chairman of his Special Committee.

#### DEGREES GRANTED.

The University now offers the following advanced degrees: Master of Arts, Master of Science, Civil Engineer, Electrical Engineer, Chemical Engineer.

#### THE MASTER'S DEGREE.

Candidates for the degree Master of Arts or Master of Science must complete at least one regular semester of study in residence, with the condition that all work *in absentia* for the Master's degree shall be done in regularly organized courses in the University Correspondence-Study Department. The work to be counted

toward an advanced degree must be divided between a major subject and a minor, the former receiving approximately twenty semester hours and the latter ten. Six of the thirty hours may, at the option of the candidate's Special Committee, be assigned to the thesis. All candidates must, on or before Monday of the third week before the last of the University year in which the degree is to be conferred, file with the Registrar for the Graduate Council a thesis approved by the chairman of his Special Committee having charge. Within the week in which the thesis is filed the candidate shall sustain an oral examination by a committee of three appointed by the President of the University, two of which shall be the heads of departments in which the student takes his work.

Students who during their candidacy for the Master's degree are engaged in teaching or other gainful employment, will be required to devote to their studies such longer period than one year as may be designated by the Graduate Council.

#### ENGINEERING DEGREES.

Bachelors of Science in Engineering of this University, or of other colleges or universities of equal rank, may receive at the expiration of one additional year of study the professional degree of Civil Engineer, Electrical Engineer, or Chemical Engineer, appropriate to the undergraduate course taken, in accordance with the requirements prescribed in the College of Engineering.

Bachelors of Science in Engineering may receive the professional degree named above without the additional year of study at the University, who have spent at least three years' actual time in professional practice in positions of responsibility, in the designing, construction, or operation of engineering work, and who shall furnish details of satisfactory evidence as to the nature and extent of this practice.

They must submit an engineering thesis accompanied by detailed explanations, drawing, specifications, estimates, etc., embodying the results of their work or observations. If approved, the thesis and all accompanying material shall be the property of the University. All theses for any degree must be delivered to the Dean of the College of Engineering on or before the 15th day of May.

**COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS.****THE FACULTY.**

P. L. CAMPBELL, B. A., President.

JOHN STRAUB, M. A., Dean of the College of Literature, Science, and the Arts, and Professor of Greek Language and Literature.

ERIC W. ALLEN, B. A., Professor of Journalism.

FRED CARLETON AYER, M. A., Professor of Education.

FRANKLIN L. BARKER, E. M., Professor of Geography.

JAMES D. BARNETT, Ph. D., Professor of Political Science.

JOHN FREEMAN BOVARD, M. S., Professor of Zoology.

WILLIAM PINGRY BOYNTON, Ph. D., Professor of Physics.

ROBERT CARLTON CLARK, Ph. D., Professor of History.

TIMOTHY CLORAN, Ph. D., Professor of Romance Languages.

ARTHUR J. COLLIER, M. A., Professor of Geology.

EDMUND S. CONKLIN, Ph. D., Assistant Professor of Psychology.

EDGAR EZEKIEL DECOU, M. S., Professor of Mathematics.

FREDERIC STANLEY DUNN, M. A., Professor of Latin Language and Literature.

JAMES HENRY GILBERT, Ph. D., Assistant Professor of Economics.

MONTANA HASTINGS, B. A., Assistant Professor of Education.

WILLIAM L. HAYWARD, Director Men's Gymnasium.

HERBERT CROMBIE HOWE, B. A., Professor of Modern English Literature.

GEORGE REBEC, Ph. D., Professor of Education.

ROBERT W. PRESCOTT, B. A., Assistant Professor of Public Speaking.

ARCHIBALD F. REDDIE, B. A., Professor of Public Speaking.

JOSEPH SCHAFER, Ph. D., Professor of History.

FRIEDRICH GEORG G. SCHMIDT, Ph. D., Professor of the German Language and Literature.

FREDERICK LAFAYETTE SHINN, Ph. D., Assistant Professor of Chemistry.

WILLIAM MACKEY SMITH, Ph. D., Assistant Professor of Mathematics.

ORIN FLETCHER STAFFORD, M. A., Professor of Chemistry.

BERTHA STUART, B. A., M. D., Director Women's Gymnasium.

ALBERT RADDIN SWEETSER, M. A., Professor of Botany.

EDWARD ALLEN THURBER, M. A., Professor of Rhetoric and American Literature.

FREDERICK GEORGE YOUNG, B. A., Professor of Economics and Sociology.

ETHEL BARNARD, B. A., Assistant Instructor in English Literature.

CECILIA SMITH BELL, B. A., Assistant Instructor in English Literature.

JULIA BURGESS, M. A., Instructor in English.

ALBERTA W. CAMPBELL, B. A., Assistant Instructor in English Literature.

GERTRUDE DENHART, B. A., Assistant in German.

WILLIAM B. KEMPTHORNE, Ph. B., Instructor in Mathematics.

HUGO W. KOEHLER, B. A., Instructor in German.

MABEL HOLMES PARSONS, M. A., Instructor in English.

ELLEN M. PENNELL, Instructor in English.

MARY H. PERKINS, M. A., Instructor in English.

HARRIET THOMSON, B. S., Assistant Director Women's Gymnasium.

MARY WATSON, B. A., Instructor in English Literature.

#### ORGANIZATION.

The College of Literature, Science, and the Arts includes the following departments:

Botany, Chemistry, Rhetoric and American Literature, English Language and Early English Literature, Modern English Literature, Economics and Sociology, Political Science, Education, Geography, Geology, German, Greek, History, Journalism, Latin, Mathematics, Philosophy, Psychology, Physics, Romance Languages, and Zoology.

## ADMISSION.

For full entrance to the freshman class fifteen units are required. Graduates of high schools who for any reason do not have fifteen units may enter as conditioned freshman if they have satisfactorily completed at least thirteen units. All conditions must be made up as soon as possible after entrance, one unit during the freshman year and one unit during the sophomore year.

The subjects required of all freshmen entering the College of Literature, Science, and the Arts are as follows:

English .....	3	units
Algebra .....	1½	units
Plane Geometry .....	1	unit
One Foreign Language .....	2	units
History .....	1	unit
Science .....	1	unit
Elective .....	5½	units
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Total .....	15	units

## SPECIAL COURSES.

A number of courses specially preparatory to professional work are outlined by the various departments.

## COURSE PREPARATORY TO MEDICINE.

Students expecting to study medicine should make Zoology their major subject. The pre-medical studies offered by the department prepare the student to anticipate one year in the Medical School of the University of Oregon, and are also accepted by many of the standard Medical Colleges as the equivalent of one year's work of the regular four years' course. See announcement of courses, department of Zoology.

## COURSE PREPARATORY TO LAW.

Not only does any course leading to an A. B. degree give a great advantage to the student of law, as the requirements for

admission to the best law schools indicate, but a college course arranged especially with the study of law in view can be made of great additional value. The student familiar with the political, economic, and social conditions and institutions that have determined the development of law will have a grasp of the principles of law, and will naturally pursue a method in future study that will make possible much higher efficiency in his profession. The departments of Economics and History offer the courses which constitute this basic study in preparation for law. The department of English offers the opportunity to gain a mastery of clear analytical expression of thought, peculiarly valuable to the lawyer.

#### SCHOOL OF COMMERCE.

The different branches of the public service like the civil and consular service, and the various lines of industrial and commercial pursuits, like banking, transportation, domestic and foreign commerce, are rapidly approximating the character of professions. To achieve the largest measure of success in these and meet the requirements of highest citizenship the principles of the social, physical, and mathematical sciences concerned must be possessed and applied. Modern industrial processes, methods, and organization are changing rapidly in magnitude, complexion, and social character in relation to public good. The historical, social, economic, political, and scientific studies and improvements in educational methods are fortunately keeping pace in their development with the requirements of the business world.

The courses in economics, politics, and sociology apply to the actual business conditions and methods of today. They give just the preparation necessary for the mastery of the larger problems of the business man and go as far into matters of detail as can be done to advantage outside of actual business dealings. They give the young man the standpoint of the promoter of the public interest at the same time that he is securing the best insight into commercial and industrial affairs. He thus secures real cultural training as he is getting his bearings for his vocation.

The student wishing to take of the School of Commerce will make his major in Economics. The head of the department of

Economics will outline his course as suited to his individual needs, and give him full information and advice.

#### GRADUATION.

The degree of Bachelor of Arts is conferred upon students of the College of Literature, Science, and the Arts who have been in residence at least one academic year, and who have secured one hundred and twenty semester hours of credit, exclusive of physical training; but the degree of Bachelor of Science may be conferred upon students conforming to the requirements enumerated above and electing majors in Natural Science or Mathematics, provided that written request for this degree be filed with the Registrar of the University at least thirty days before the date upon which the degree is to be granted.

#### REQUIRED WORK.

A semester hour is the credit given for a course consisting of one recitation, lecture, or laboratory period a week for one semester of twenty weeks. Three hours shall constitute a laboratory period.

*Major*—Every student on entering the University must choose a major subject. The work required in the major subject (including thesis) shall not be less than twenty nor more than forty semester hours, but a student may, if he desires, take extra hours in any one department up to a total of five, making the total hours in that department forty-five.

*Thesis*—Each candidate for the Baccalaureate degree shall present at the option of his major professor an approved graduating thesis in his major subject. Credit not to exceed four semester hours may be allowed for the preparation of the thesis.

*Physical Training*—In addition to the one hundred and twenty semester hours required for graduation, four semester hours shall be earned in physical training, two in the Freshman year and two in the Sophomore. In case students are for valid reasons excused from physical training, such students shall earn an equivalent amount of credit in other departments, *i. e.*, students excused from gymnasium shall complete 124 semester hours of university work

for graduation. Two hours in the gymnasium shall be equivalent to one semester hour. A physician's certificate only shall count as a valid excuse from gymnasium work.

*Language*—Every candidate for the degree of Bachelor of Arts, or Bachelor of Science in the College of Literature, Science, and the Arts, shall secure during his Freshman and Sophomore years credit in languages other than English to the extent of 14, 16, 18, or 20 semester hours, which shall be taken in two year-courses.

*Freshman Studies*—The studies of the Freshman year, except as heretofore provided, shall be chosen from the following list of subjects, consisting of the courses offered by the several departments as Freshman work: Botany 1, 2, 11; Chemistry 1; Economics 1; English Composition 1, 1e, 2, 3, 4, and 5; English Literature 32, 37 and 38; Public Speaking 1; Geology 1; Geography 1, 4, 8; German 1; German 2 and 3 if prepared; French 1; French 2 and 3 if prepared; Greek 1; Greek 2 if prepared; Spanish 1; Spanish 2 if prepared; History 1; Journalism 1; Latin 1 and 2; Latin 3, 4, 5, and 6 if prepared; Mathematics 1, 2, 3; Personal Hygiene 7; Physics 1, 2, 3; Zoology 1, 2, 11; Civil Engineering 1, 2, 3; Electrical Engineering 1, 2, 3, 5, 6, 7, 8.

## DEPARTMENTS OF INSTRUCTION.\*

## ANNOUNCEMENT OF COURSES FOR 1912-13.

## BOTANY.

Professor Sweetser.

(a) Introductory courses as a foundation for study in Botany and Zoology; (1) for students preparing for the study of Applied Science; (2) for students seeking general culture; (3) for those preparing to teach Science in secondary schools; (4) for students preparing for the study of Medicine.

(b) Intermediate courses for those planning for more extended study along the lines of Biology or Geology.

(c) Advanced courses for students in the Graduate School and for those seeking specialized study and research as far as the resources of the department will permit.

Students taking work preparatory to Medicine, Dentistry, and Pharmacy should elect the following courses in this department: 1, 2, 3, 5, 6, and 11.

1. *Phenogamic Botany*. Three lectures and one laboratory period. An introductory study of the Morphology, Physiology, and Ecology of the flowering plants, both Angiosperms and Gymnosperms. It is intended for beginners or for those who wish to get a comprehensive view of the subject. Open to all Freshmen. Lectures on Monday, Wednesday, and Friday at 8; laboratory periods Tuesday or Wednesday afternoon.

*Four hours, first semester.*

2. *Cryptogamic Botany and Taxonomy of Phenogams*. Three lectures and one laboratory period. Morphology, Physiology, and Ecology of the flowerless plants and classification of Phenogams and Cryptogams. This may be taken in sequence with Course 1,

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\*Alphabetically arranged.

by those who have had Botany in high schools or independently. Open to Freshmen. Lectures on Monday, Wednesday, and Friday at 8; laboratory periods Tuesday or Wednesday afternoon.

*Four hours, second semester.*

3. *Structural Botany and Plant Histology.* One lecture and two laboratory periods. Prerequisites, Courses 1 and 2. Must precede Course 5.

*Three hours, first semester.*

4. *Plant Physiology and Morphology.* One lecture, two laboratory periods. An advance course, and will include a more or less extended study of plant organs and vegetal functions. Prerequisites, Courses 1 and 2.

*Three hours, second semester.*

5. *Medical Botany.* One lecture, two laboratory periods. A study of some of the typical medicinal plants, their structure, habitat and medicinal properties. Also a few powdered drugs and their adulterants. Prerequisites, Courses 1, 2, and 3.

*Three hours, second semester.*

6. *Bacteriology.* One lecture, two laboratory periods. Laboratory technique and lectures, methods of staining, examining, and cultivating bacteria. Advised for pre-medical students, both semesters. In connection with Physical Culture and in preparation for Domestic Science, first semester. Not given 1913-14.

*Three hours, first semester.*

7. *Economic Botany.* Biological examination of water, bacteriology of milk, foods, etc. Vegetal food stuffs, dietetics, pure foods and adulterated. One lecture, one laboratory period.

*Two hours, one semester.*

8. *Systematic Botany.* (a) Taxonomy of Cryptogams, Mycology, and Algology. (b) Higher Cryptogams and Phenogams. (c) Native shrubs and trees.

*Hours to be arranged.*

9. *General Biology.* Two lectures. Devoted to the study of plant and animal structure and some of the fundamental principles of life. Discussion of evolution from biological standpoint, the theories of Lamarck, Darwin, Weismann, DeVries, Mendelism, heredity and environment; open only to Juniors and Seniors. Tuesday and Thursday at 11.

*Two hours, first semester.*

9a. *Biology Demonstration.* Intended for those electing Course 9 and desiring in addition a laboratory study of some simple life problem. *One hour, each semester.*

10. *Research.* Thesis and other investigations.

11. *Sanitary Hygiene.* The economy of the microbes, pure water, pure air, pure milk, and pure food. Lectures. Open to all. Not given 1913-14. *Two hours, second semester.*

12. *Pedagogical Colloquium.* Suggestions in methodology for those intending to teach. *One hour, each semester.*

#### EQUIPMENT.

Mr. Thomas Howell has donated his large herbarium, containing many types species, to the University. This collection will be available for students in Systematic Botany.

The Leiberg collection of 15,000 sheets of specimens, mostly from Oregon and Idaho, has just been given to the University by Mr. Leiberg. They are for the most part duplicates of specimens filed with the Government, and are extremely valuable.

The collection of Mr. W. C. Cusick of 10,000 sheets has been purchased and Mr. Cusick will make collections for the University Herbarium this coming season.

#### LABORATORY FEES IN BOTANY.

A deposit of \$5.00 is required for each laboratory course, with the exception of Botany 1, Botany 2, and Botany 8, which are \$2.00 each and Botany 7, which is \$2.50. Additional expense for supplies, if any, is met by the purchase of coupons. The usual expense to the student in advanced courses is from \$2.00 to \$4.00.

## CHEMISTRY.

Professor Stafford.

Assistant Professor Shinn.

In the courses outlined below especial attention is given to the matter of making the preparation for teaching and research, chemical technology, medicine, mineralogy, metallurgy, and chemical engineering as complete and practical as possible. The arrangement is such that progress in chemical training for any of these lines of work shall be logical and continuous from the very first. At the same time the value of chemistry as a purely educational factor is kept in view, and no effort is spared to make this study conform to the requirements of such. For training in habits of exactitude, for gaining a helpful insight into the methods of scientific thought and procedure, and for practice in the interpretation of evidence, chemistry holds a high position among the studies offered in college or university.

Students electing Chemistry as a major will in general be expected to take Course 1 during the Freshman year, Courses 3 and 4 in the Sophomore year, and Courses 5 and 10 during the Junior year. The Senior year may be devoted to whatever courses the department may offer during that year which will most nearly meet the demands of the special line of work to be taken up after graduation. Prerequisites and closely allied work during the college course include German, French, Mathematics, Physics, Mineralogy, Biology, etc., depending again upon the work for which the student is making preparation.

1. *General Chemistry.* This course or a satisfactory equivalent is prerequisite for all other work in this department. Its purpose is to give a general introduction to the science, emphasizing, incidentally, many practical applications of Chemistry in the affairs of every-day life, manufactures, metallurgy, etc. Three lectures are given each week for the year in which the subject material to the course is illustrated by elaborate lecture experiments, while numerous specimens, models, charts, lantern slides, etc., serve to give the subject a living interest by bringing the

students as nearly as possible into contact with its practical aspects. Three hours of laboratory work per week for the year, with the ample facilities for laboratory work that this department now offers, affords a good opportunity for first-hand contact with the experimental truths of chemistry and for training in laboratory methods. Lectures on Monday, Tuesday, and Wednesday at 11; laboratory periods 1 to 4, Thursday or Friday.

*Four hours, both semesters.*

3. *Analytical Chemistry.* A course in qualitative analysis embracing the systematic separation and detection of the common inorganic radicals, followed by a course in quantitative analysis consisting of exercises illustrating the important methods of gravimetric and volumetric determinations. One lecture or recitation per week at an hour to be arranged. Laboratory open to students in this course 1 to 5, Monday, Tuesday, and Wednesday.

*Three or four hours, either semester.*

4. *Analytical Chemistry.* Continuation of Course 3. Devoted to quantitative analysis.

*Either semester.*

5. *Organic Chemistry.* An introduction to the chemistry of the hydrocarbons and their derivatives. The subject-matter of this course is a necessity to the advanced student of chemistry, and to students of medicine, pharmacy, biology, and kindred subjects. The work is based largely upon "Organic Chemistry"—Perkin and Kipping. Three lectures a week for the year. Laboratory requirements are the satisfactory completion of 25 preparations to be assigned by the instructor.

*Four hours, both semesters.*

8. *Physiological Chemistry.* A brief study of the chemical constitution of the body, of foods and of excretion and of the chemical changes accompanying metabolism. The laboratory work will be selected from the following subjects: A study of fats, carbohydrates, and proteins; the products of salivary, gastric and pancreatic digestion; milk, egg, bile and blood; the chemical and microscopic examination of normal and pathological urine.

Lectures twice a week and one three-hour laboratory period per week. Must be preceded or accompanied by Course 5.

*Three hours, second semester.*

10. *Advanced Inorganic Chemistry.* A lecture course in which an introductory study of the law of mass action, the phase rule, the theory of electrolytic dissociation, Avogadro's hypothesis, and similar helpful conceptions is made in connection with their practical applications. The work is based upon "The Principles of Inorganic Chemistry"—Ostwald. Three lectures per week.

*Four hours, second semester.*

12. *Advanced Analytical Chemistry.* Laboratory practice in gravimetric, volumetric and electro analysis. The following subjects are covered, from which the student may select to suit his own particular needs: Ores and alloys of copper, zinc, chromium, manganese, arsenic, antimony, lead, etc.; clay, rock, and cement; iron and steel; paints; fertilizers; gas, in which the student acquires familiarity with the apparatus through analysis of air, gaseous mixtures, and illuminating gas; fuel, including proximate and ultimate analysis of wood, coal, and oil, and the determination of their heating values by the Parr and Mahler calorimeters. Fortnightly lectures in which is taken up the theory, calculation, and interpretation of data. Prerequisite, Course 3.

*Two hours or more, either semester.*

14. *Industrial Chemistry.* Typical industries are studied for the purpose of bringing out the technique of applied chemistry as well as to give specific information regarding the cases discussed. Subjects usually discussed are: Fuels, cements, lime, plaster, alkalis, acids, coal gas, producer gas, ammonia, electric furnaces and their products, and electro-metallurgy. Lectures, collateral reading, and reports.

*Two hours, both semesters.*

16. *Physical Chemistry.* The elements of this subject. Two lectures and one three-hour period for laboratory work or calculations.

*Three hours, both semesters.*

18. *Electro Chemistry.* One lecture and three hours of laboratory or computation per week.

*Two hours, second semester.*

19. *Chemical Engineering.* A systematic study of the appliances used in industrial chemical processes.

*Two hours, first semester.*

21. *Sanitary Chemistry.* The chemistry of water purification, sewage treatment, food preservation and adulteration, etc.

*Two hours, first semester.*

23. *Analysis for Engineers.* A short course in Analytical Chemistry for engineers who may be unable to find time for the regular course. One laboratory period of three hours each week for the semester is devoted to the acquisition of analytical technique and the analysis of a fuel, gas, cement, water or other substance of interest to the engineer.

*One hour, first semester.*

#### LABORATORY FEES AND PURCHASE OF MATERIAL.

The efficiency of a laboratory course depends to a very great extent upon having at hand a sufficient supply of the proper materials for the work outlined by the instructor. These materials correspond in a way to the pencils, paper, text-books, etc., required in other courses to facilitate the work of instruction.

The selection of materials is itself a task demanding considerable experience if the best are to be secured, and since, moreover, the remoteness of the University from adequate sources of such supplies make their purchase in a small way a matter entirely out of the question, it becomes a necessity for the department to carry in addition to its own assortment of chemicals and apparatus for general and lecture purposes an amount sufficient for the use of its students in all of the courses offered.

In conducting this phase of departmental affairs, the aim is to make it strictly a business proposition, the carrying out of which demands a rigid adherence to the following details:

A deposit of \$10 for each laboratory course in which enrollment is made must be placed with the University Steward to stand as a security for the *unreturnable* portions of the outfits loaned at the beginning of laboratory work, and as a fund from which may be deducted a proportionate share of the cost of material supplied to the course in a general way. This deposit, as a rule, does not nearly cover the entire cost of the outfits, and the transaction is made with the understanding that where the breakage and other losses are excessive the student is to make good

whatever the amount may be over and above the deposit. The University reserves the right in all cases to withhold credit for work done until laboratory accounts are fully settled.

Loans of additional material are made from time to time as may be necessary, the charges for which are punched from coupons issued in sums of one dollar by the University Steward. Such additional material need not necessarily be obtained from the store room, however, but from wherever it may be desired so long as it is available when needed, and is adapted in all respects to the course requirements both as to quality and quantity; but in order to avoid the accumulation of heterogeneous material in the store room, the department will not receive any article for credit at the end of a course that was not originally dispensed from the regular stock. Since a large part of the apparatus carried in the store room is imported free of duty for use in the University laboratories only, the department does not relinquish title to the material taken out, but considers the transaction as a loan, with the understanding that unused material is to be returned for credit in all cases.

All returnable material, as well as unused portions of coupons, are redeemable at the close of the laboratory work in any course at their charged value, and cash balances are collected or returned as the case may be.

The approximate cost of the laboratory courses outlined above is as follows: General Chemistry, \$10; Analytical Chemistry, \$15 to \$20; Organic Chemistry, \$15 to \$20. In addition to the \$10 deposit each student is required to purchase one or more of the one dollar coupons at the time enrollment is made.

It is especially to be noted that these deposits are to be made preliminary to enrollment in laboratory courses. There should therefore be due provision on the part of the student for the prompt payment of the amounts in order that no hardship may be incurred by the delay that otherwise must follow.

## ECONOMICS, SOCIOLOGY, AND POLITICAL SCIENCE.

Professor Young.  
Professor Barnett.  
Assistant Professor Gilbert.

The courses offered by this department are designed to meet the needs of students who intend to enter the public service, business, the professions of law, journalism, the ministry, or who are preparing to teach in this field or in that of history or literature. Students planning to follow engineering or other practical pursuits who wish to round out their preparation for life on the business, social, and civic sides, will find courses especially adapted to their needs. Preparation for those higher and wider responsibilities of citizenship that should be assumed by every university man or woman is provided for in special courses. (See Courses Nos. 3 and 4.)

Regular field work in special lines of commonwealth service will be undertaken. The scope of the department's activities will be extended through services of members of the teaching staff offered as consulting aids to municipalities and to counties in securing higher efficiency in public affairs. The development of co-operative business organizations will also be fostered through the tendering of expert aid.

The work of this department has thus the following distinct but related aims:

1. To provide in co-operation with other departments the regular preliminary university instruction for several practical and professional pursuits.
2. To supplement the work of other departments in providing the lines of study necessary in the training for efficient citizenship.
3. To assist and encourage the development of these sciences and to stimulate a larger utilization of their principles in the organization and in the affairs of this commonwealth. (See "Research of Theses Course," No. 19.)

5. To furnish direct expert aid toward the attaining of a higher economic and social order for the people in their communities throughout the State and for the State at large.

Special attention is called to the courses of the department of History, which are naturally preliminary to thorough work in this department; to the general course in biology for concepts helpful in the study of sociology; and to related courses in philosophy and ethics.

Open to Freshmen at the beginning of the University year.

Economics: Courses 1 and 2, and if student has had requisite preparation, Course 3:

Political Science: Courses 1 and 2.

## ECONOMICS AND SOCIOLOGY.

### I. PRIMARILY FOR UNDERGRADUATES

1. *Economic and Social History of England.* This course is introduced with a sketch of the social and industrial evolution of mankind to the stage represented by the inhabitants of England at the time of the Saxon invasion. The nature of the social and industrial organization of the English people is traced through its successive modifications down to the present time, and the influences affecting it identified. Industrial development on the continent is at each stage brought into comparison with that of the English people. Text-book, assigned readings, and exercises. Tuesday and Thursday at 11 and 2. *Two hours, first semester.*

2. *The Economic and Social History of the United States.* The development of the characteristic lines of agriculture, industry, and commerce in the United States is studied and the interaction between this economic development and the political and social institutions noted. Tuesday and Thursday at 11. *Two hours, second semester.*

3. *The Principles of Economics.* The principles that underlie the different economic relations and institutions are developed and applied. The elements in the more important economic problems

are pointed out. Text-book, assigned readings, and exercises. Monday, Wednesday, and Friday at 8; and Monday, Tuesday, and Friday at 10.

*Three hours, both semesters.*

4. *The Elements of Sociology.* The influences and factors determining human life in association are studied. A comprehensive view of the social process is developed. The relations and the organization characterizing progressive society are identified and their reactions on the mental life of the individual are investigated. Tuesday and Thursday at 9.

*Two hours, both semesters.*

## II. FOR UNDERGRADUATES AND GRADUATES.

5. *The Labor Problem.* Topics considered are: The rise of the factory system, factory legislation, the growth of trade unions, and changes in the law in respect to them, the policies of trade unions, strikes, lockouts, arbitration and conciliation, proposed solutions of the labor problem, and the future of labor in the United States. Tuesday and Thursday at 11.

*Two hours, first semester.*

11. *Public Finance.* It is the aim of this course to ascertain principles of public expenditure, public revenue, budgetary legislation, financial organization, and public indebtedness. These principles will then be applied to concrete problems connected with corporation, railway, mortgage, and insurance taxation, and double taxation, and the income, the personal property and inheritance taxes. Monday, Wednesday, and Friday at 11.

*Three hours, both semesters.*

13. *Money, Banking, and Economic Crises.* The principles of Economics are applied to modern monetary systems with the view of developing policies of improvement. The conditions attending the development of industrial and monetary crises are analyzed. Tuesday and Thursday at 2.

*Two hours, both semesters.*

15. *History of Economic Thought.* The interactions between the ideas pertaining to economic interests and the conditions of economic life, also the relations between the economic thought and

the philosophical speculations of successive epochs are traced. The existing schools of economic thought are defined. Monday, Wednesday, and Friday at 9. *Three hours, first semester.*

16. *Distribution of Wealth.* An historical and comparative study of the theories of leading economists. Monday, Wednesday, and Friday at 9. (Not given in 1913-14.)

*Three hours, second semester,*

17. *Railway Transportation.* A study of the economic, social, and political problems connected with the railroad as a factor in modern life. Monday, Tuesday, Thursday, and Friday at 10.

*Four hours, first semester.*

18. *Pools, Trusts, and Combinations.* An inductive study of the tendencies and forces in modern industrial development. Monday, Tuesday, Thursday, and Friday at 10.

*Four hours, second semester.*

19. *Conservation and Commonwealth Research and Senior Theses.* Problems of conservation affecting human interests in the Pacific Northwest will be outlined. The essentials of a commonwealth course will be developed. All seniors taking majors in this department will be guided in the preparation of their theses. Monday at 11. Library hours for thesis work fixed by special arrangement.

*Two hours, both semesters.*

20. *Modern Sociological Thought.* A survey of the works of leading sociological writers, and a synthesis of their systems. Monday, Wednesday, and Friday at 11.

*Three hours, both semesters.*

21. *Socialism and Social Reform.* An accounting of the pathological conditions in our present social order. A critical examination of Socialism as a program of social reform. Prime conditions of social betterment. Monday, Wednesday, and Friday at 9.

*Three hours, second semester.*

23. *Railway Organization and Operation.* A study will be made of the development of our railway system and the railway corporation; of the functions of officers and administrative depart-

ments, and the management of the different classes of traffic. Designed for engineering students. Thursday at 8.

*One hour, second semester.*

24. *The Economics of Co-Operative Organization* for main lines of Oregon business enterprise. *Two hours, first semester.*

25. *The Principles of Efficiency* in the affairs of the school district, the county, the municipality and the State governments. *Two hours, second semester.*

## EDUCATION

Professor Ayer.

Assistant Professor Hastings.

It is the aim of this department to offer a group of courses which will acquaint the student with the results and methods of work in all the important departments of modern pedagogy. In order to accomplish this result, the courses will be given in a two-year cycle, as outlined below. Owing to the advanced nature of the courses, with the exception of Course 1, students will not ordinarily be admitted to the classes in pedagogy until the beginning of their junior year. Students should consult with the department of education before planning courses leading into the teaching profession.

1. *Principles of Education.* An introduction to the general field of education. This course should precede all other courses in education and is open to students prior to their junior year. Prof. Ayer. Tuesdays and Thursdays at 10.

*Two hours, each semester.*

2. *History of Education.* Ancient and Mediæval History of Education will be considered the first semester, and Modern History of Education the second semester. This course includes a study of the world's chief educational systems with special emphasis on the methods and principles which have evolved into modern educational practice. Prof. Ayer. Mondays, Wednesdays, and Fridays at 9.

*Three hours, both semesters.*

3. *Pedagogical Psychology*. Application of the fundamental principles of adult psychology to educational problems. Assistant Professor Hastings. Prerequisites: Education 1 and Psychological Problems. Monday, Wednesday, and Friday at 8.

*Three hours, first semester.*

4. *Genetic Psychology*. Growth of the individual mind through childhood and adolescence to maturity, with reference to pedagogy. Assistant Prof. Hastings. Monday, Wednesday, and Friday at 8.

*Three hours, second semester.*

5. *School Administration*. Structure of State and city systems of education, school finance, the school house, the teaching staff, administration of normal schools, vocational education, physical education, correctional education, schools for defective and sub-normal children, evening and continuation schools, child labor laws and educational statistics. Prof. Ayer. Monday, Wednesday, and Friday at 11.

*Three hours, first semester.*

6. *Organization of Common School Curricula*. History of common school course of study in America, comparative study of city and State courses of study, grading and promotion, and allied topics. Professor Ayer. Monday, Wednesday, and Friday at 11.

*Three hours, second semester.*

7. *Scientific Methods of Study*. How pupils of the high school may be taught to study more independently and effectively is the question that dominates the course. This includes a systematic consideration of the whole question of study in the light of modern psychology and modern pedagogy. Demonstration lessons are given by some of the best teachers of the high schools. Investigations as to what is being accomplished by other schools in securing more efficient study; a careful study of the best literature upon the subject. Texts, McMurry, *How to Study*; Dewey, *How We Think*. Assistant Prof. Hastings. Tuesday and Thursdays at 2.

*Two hours, both semesters.*

8. *Philosophy of Education*. Advanced aim and purpose of education, criticism of fundamental characteristics of present-day systems, consideration of the moral education movement, education

from the standpoint of the individual, society and the species. Pre-requisite: Education 1 and 2. Prof. Ayer.

*Two hours, both semesters.*

9. *Education Club.* An introduction to the literature of education, including a survey of the leading educational journals, the reports of the chief educational societies, and the publications of various foundations and institutions, and concluding with a study of the preparation of a bibliography and thesis upon a selected pedagogical topic. Thursdays at 3. Prof. Ayer.

*One hour, each semester.*

10. *Secondary Education.* History, organization, and administration of secondary education in America; training of secondary teachers. School management applied to secondary schools. Observation work in high schools eighteen hours. In addition to the regular work of the course, the librarian of the University will present the topic of the high school library, the department of physical training will present the hygienic problems of the high school, and outside lecturers will discuss the athletic and social problems of the high school. Miss Hastings. Tuesdays, Thursdays at 9 and one other hour.

*Three hours, each semester.*

12. *Practice Teaching.* In University practice school and in high schools. This work is under the direction of the department. Students should apply through the Registrar for this course during the preceding semester. Directions for the conduct of practice teaching and general announcements will be posted on the library bulletin board. Repeated each semester, student to register for one semester only. Alternates with 10. Prerequisites: Education 6 hours and senior standing.

*Five hours, each semester.*

#### FOR GRADUATES AND ADVANCED STUDENTS.

15. *Experimental Education.* A survey of experimental and statistical investigations of school problems. This course is intended for advanced students who are qualified to carry on special studies. Each member of the class will select a particular subject for special investigation which is to be mastered and embodied in

a report or monograph at the end of the semester's work. Prof. Ayer. Alternate years with Education 8.

*Three hours, both semesters.*

## ENGLISH.

PROFESSOR HOWE, Modern English Literature.

PROFESSOR THURBER, Rhetoric and American Literature.

MISS BURGESS

MRS. PARSONS

MISS PERKINS

MISS BARNARD

MRS. PENNELL

MISS BELL

MISS WATSON

MISS CAMPBELL

Five objects are contemplated in the following courses:

1. An ability to appreciate, enjoy, and criticise justly, the best in English literature.
2. A scientific knowledge of the origin and development of English literature in general, and of special periods in particular.
3. Proficiency in English composition, including skill in organization of material.
4. A scientific knowledge of the laws of written and spoken discourse.
5. Ability to apply the methods of philological science to the English language.

All students, regular and special, who take up the work in these courses, must present fifteen hours of entrance English. The entrance English requirements will conform to the State high school course.

Every student in the College of Literature, Science, and the Arts, at the beginning of his freshman year, shall elect either (1) to take an examination, or (2) to take six semester hours in Rhetoric, for which college credit will be given. Engineering students must take either (1) the examination, or (2) three semester hours in Rhetoric.

The examination will be held during registration week at an hour and place announced on the bulletin boards. It will consist (1) of exercises to test the student's knowledge of punctuation

and sentence structure, and (2) of a number of assigned topics to bring out the student's facility and accuracy in the use of English. A student who attains a high degree of excellence in the examination is released from further requirements in Rhetoric unless the student is majoring in that subject or intends to teach it. Students who give evidence in the examination of a notable degree of efficiency in the use of English but who do not attain high excellence shall be required, according to the worth of their papers, to take in freshman year either (1) two semester hours or (2) four semester hours in Rhetoric. Those students who fail to show a satisfactory degree of efficiency in the examination will be required to take the regular freshman six semester hours' course.

All students entering advanced college classes must be accredited with English done elsewhere or comply with entrance requirements here, through examination or work in class.

Students who wish to make Rhetoric or English Language or English Literature their major subject are required to take courses 1, 31, 32, 33, and 37, or satisfy their instructors of equivalent work done elsewhere. For their further study in any of these departments to fulfill their major requirement, they will consult with their advisers.

Those who expect to teach English will be subject to the approval of the heads of the department of English, and will be required to take, in addition to the courses named above, courses 6, 34, 38, and 63. Other courses will be added by the professors under whom they may do their major work.

#### RHETORIC.

Students who elect their major in the department of Rhetoric will take as a basis for their work the courses mentioned above, to which will be added in their senior year course 8. Other courses will be chosen under the advice of the department.

Before taking the advanced courses of this department, however, students choosing major work here are recommended to take at least one full year course in each of the following general

groups: I, History-Economics; II, Philosophy-Mathematics (including Psychology, Ethics, and Logic); III, Physical and Biological Sciences; and two full year courses in IV, Language and Literature other than English. The purpose of this requirement is to give breadth to the students' course that their work may be more effectively concentrated in their last two years. The requirement will also enable students to shift their major in their junior year, if they find that their interests lie outside this department.

1. *English Composition.* A study of the elements of effective prose with analysis of selected masterpieces; constant training in writing and frequent consultations. A text-book will be used. Open to all freshmen. Professor Thurber, Miss Burgess, Miss Perkins, Mrs. Pennell, Mrs. Parsons. Tuesday, Thursday and Friday at 8; Monday, Wednesday and Friday at 9; Monday, Tuesday and Friday at 10; Tuesday, Thursday and Friday at 10; Monday, Wednesday and Friday at 11. *Three hours, both semesters.*

1e. *English Composition.* A course in composition primarily for engineering students. It may be elected as a substitute for English 1. The course offers a thorough training in sentence paragraph and theme structure, and the writing of business letters, reports and technical articles. Text: Sypherd's English for Engineering students. Monday, Wednesday and Friday at 9. Miss Perkins. *Three hours, first semester.*

2. *English Composition.* A repetition of course 1 in alternate semesters. *Three hours, both semesters.*

3. *English Composition.* Same in general scope as course 1. Open to freshmen who have passed off an hour of their required Rhetoric. *Two hours, both semesters.*

4. *English Composition.* Open to freshmen who have passed off two hours of their required Rhetoric. *One hour, both semesters.*

One of the above courses is prerequisite to courses 6-10.

5. *English Composition.* Open only to engineers who are not in courses 1 and 2, and have not met the requirements of courses 3 and 4. *One hour, both semesters.*

6. *Rhetoric*. Open to students who have passed in a freshman course or who have passed off their Rhetoric requirement. The Atlantic Monthly is used in this course. It is prerequisite to the later courses in Rhetoric. Monday, Wednesday and Friday at 9. Professor Thurber. *Three hours, both semesters.*

7. *Daily Themes*. Daily short papers, and longer fortnightlies. In the second semester an extended paper of several chapters will be required. An opportunity for practice in verse forms. This course is open to a limited number of students who have attained an H grade in their freshman work or S in Rhetoric 6. Tuesday and Thursday at 11. Professor Thurber. *Three hours, both semesters.*

8. *Essay Writing*. An advanced course in composition, especial attention being given to the essay. Tuesday and Thursday at 9. Miss Burgess. *Two hours, first semesters.*

9. *Short Story*. For those who in previous courses have shown an aptitude for story writing. Typical short stories will be analyzed and exercises given in the development of motive, character, plot, and environment. Professor Thurber. Tuesday and Thursday at 9. *Two hours, second semester.*

10. *Verse Composition*. A study of verse forms in English poetry, with exercises in writing verse. In the second semester a more detailed study of one or two poets. Friday at 10. Professor Thurber. *One hour, both semesters.*

#### ENGLISH LANGUAGE.

Students choosing major work in this department will usually be required to pursue the following courses in the order stated: Freshman year, courses 1, 31, and 32; sophomore year, courses 33, 23, and 24; junior year, course 34; senior year, course 21. Additional work will be prescribed as the needs of the individual student may demand.

21. *Anglo-Saxon*. Grammar and translation of select passages in prose and poetry. The relationship between Anglo-Saxon and

cognate continental languages will be carefully studied and traced. A knowledge of German will be extremely helpful.

*Three hours, both semesters.*

22. *Anglo-Saxon. Beowulf.* A textual and critical study of the great epic. Theories of composition and authorship. Historical and literary value. Christian and heathen elements.

*Three hours, both semesters.*

23. *History of the English Language.* A lecture course in the growth and development of the language, including discussions of the different language families, characteristics, and relationship. Consonant shifts. Teutonic group characteristics. Native and foreign linguistic elements.

*Two hours, first semester.*

24. *English Phonology.* Principles of Phonetics. Development of English vowel and consonant systems.

*Two hours, second semester.*

25. *Anglo-Saxon.* Reading from Cynewulf, signed poems and attributed poems. Alfred, Saxon Chronicles, Aelfric, alliterative and prose homilies.

*Two hours, both semesters.*

#### ENGLISH LITERATURE.

More courses are given in the department than any one student is permitted to take, and opportunity is offered to map out work in more than one field. All students wishing to make modern English Literature a major are therefore requested to consult the head of that department.

31. *Outlines of English Literature.* Anglo-Saxon literary development, characteristics of the heathen, transitional and Christian epochs. The influence of the Norman Conquest, the subsequent revival of literature and its later growth. The entrance of different literary elements and forms. The work will consist of lectures, recitations, and reports. Monday, Wednesday and Friday at 2.

*Three hours, one semester.*

32. *Outlines of English Literature.* From Edmund Spenser to the present. A laboratory course, in which the student will read

the literature, instead of reading about it. The aim is to lead the student, as far as possible, to gain his knowledge of each epoch from his own reading of selected works of representative authors. This work is supplemented by lectures and interpretative readings. Monday, Wednesday and Friday at 2. Professor Howe.

*Three hours, one semester.*

Courses 31 and 32 are intended as a survey of the entire field of English Literature and will be given each semester.

33. *Chaucer*. A reading course in Chaucer's Tales and poems, with attention to his pronunciation, his language and the interests of his time. May be taken by any who have had prerequisite courses 31 and 32. Tuesday and Thursday at 9. Professor Thurber.

*Two hours, first semester.*

34. *Scottish Poets*. A study of early Scottish poetry. Poems of Bruce, Barbour, Henryson, and The Tail of Rauf Coilyear will be read and discussed as representative of the later expression of Northumbrian poetry. Southern Chaucerian imitators. Not given in 1913-14.

*Two hours, one semester.*

35. *History of English Epic and Lyric Poetry*. This course is intended to serve as an introduction to the field of epic and lyric poetry. With course 36 it aims to cover the three great lines of development in the English verse. Not given in 1913-14.

*Two hours, first semester.*

36. *History of English Drama*. This course will be introduced by a survey of the greater epochs of the drama in literary history, after which it will proceed to the discussion of the beginnings and subsequent development of the drama in English. Not given in 1913-14.

*Two hours, second semester.*

37. *Wordsworth*. A study of the best known poems of the author, in such order as to illustrate the power, scope, and characteristic beauty of the author. Professor Howe. Tuesday and Thursday at 11.

*Two hours, first semester.*

38. *William Morris*. A study of the life and writings, both prose and verse, sufficient to give the student a fair comprehension of the meaning and importance of Morris. Professor Howe. Tuesday and Thursday at 11.

*Two hours, second semester.*

(Courses 37 and 38 are given in natural sequence, but may be taken separately. They are open to freshmen, and required in sophomore year of such students taking a major in the department as did not take them in freshman year.)

39. *Shelley*. A study of the more important works in their order as written, and elucidated by some study of Shelley's life, illustrative of his system of thought and significance in the literature. Monday, Wednesday and Friday at 8. Professor Howe.

*Three hours, first semester.*

40. *Browning*. A study of the Ring and the Book, followed by systematic examination of a number of the important short poems. The aim is first, to give the student facility in reading Browning understandingly, and secondly, to acquaint him with the range of the author's thought and sympathies. Miss Bell. Monday, Wednesday and Friday at 8.

*Three hours, second semester.*

(Courses 39 and 40 will be taken in sophomore year by students with a major in the department. In conjunction with courses 37 and 38 they lay a solid basis of knowledge prerequisite to courses 41 and 42, which may be taken at any time after completing the four courses last preceding, but are properly senior courses.)

41. *The Georgian Poets*. Wordsworth, Coleridge, Southey, Scott, Byron, Shelley, Keats, Hunt, Hood, Landor. Monday, Tuesday and Friday at 10.

*Three hours, first semester.*

42. *The Victorian Poets*. Browning, Barrett-Browning, Tennyson, Rossetti, William Morris, Swinburne, Matthew Arnold, DeVere. Monday, Tuesday and Friday at 10.

*Three hours, second semester.*

43. *Edmund Spenser*. A study of the Shepherd's Calendar and the later books of the Færie Queen. (Not given in 1912-13.) Professor Howe.

*Two hours, first semester.*

44. *Milton*. Paradise Lost entire, Paradise Regained, and Samson Agonistes. Tuesday and Thursday at 9. Miss Watson.

*Two hours, first semester.*

45. *Shakespeare*. The comedies and historical plays. Two sections: Monday, Wednesday and Friday at 9 and 2. Miss Watson.

*Three hours, first semester.*

46. *Shakespeare*. The tragedies. Two sections: Monday, Wednesday and Friday at 9 and 2. Miss Watson.

*Three hours, second semester.*

(Courses 45 and 46 will hereafter constitute a prerequisite to course 57, in the critical study of Shakespeare.)

47. *The Contemporaries of Shakespeare*. The important Elizabethan and Jacobean dramatists. Tuesday and Thursday at 9. Miss Watson.

*Two hours, both semesters.*

48. *English Prose Writers* (not novelists), of the nineteenth century. Ruskin will be read in class, with Matthew Arnold, Newman, etc., as collateral reading. Monday, Wednesday and Friday at 1. Professor Howe.

*Three hours, first semester.*

49. *English Prose Writers* (not novelists), of the nineteenth century. Carlyle will furnish the class text, but De Quincey, Macaulay, and Landor will also be studied. Monday, Wednesday and Friday at 1. Professor Howe.

*Three hours, second semester.*

50. *English Prose Writers of the Eighteenth Century*. Gibbon, Burke, Samuel Johnson, Boswell, Hume, Smollett, Goldsmith, Fielding. Professor Howe. (Not given in 1913-14.)

*Two hours, both semesters.*

51. *Social Problems in the English Novel*. The attempt to use the novel in the cause of various reforms. Dickens, Charles Reade, Charles Kingsley, Macdonald, and other nineteenth century writers will be considered, also existing tendencies in the work of John Galsworthy, Mary E. Mann, Arnold Bennett, Mrs. Humphrey Ward, etc. Monday, Wednesday and Friday at 11. Miss Watson.

*Three hours, both semesters.*

52. *Living English Writers*. The Poets. Kipling, Meredith, Watson, Yeats, Stephen Phillips, Davidson, and others. Tuesday and Thursday at 8. Professor Howe.

*Two hours, first semester.*

53. *Living English Writers*. Prose. The essay, drama, and novel will be examined. Tuesday and Thursday at 8. Professor Howe.

*Two hours, second semester.*

54. *The Relation of English to Contemporary European Literature, during the last twenty-five years*. The Drama. Professor Howe. (Not given in 1913-14.)

*Two hours, first semester.*

55. *The Relation of English to Contemporary European Literature, during the last twenty-five years.* The Novel. Professor Howe. (Not given in 1913-14.) *Two hours, second semester.*

(Courses 52-53, and 54-55 are given in alternate years. During 1913-14 the courses given will be 52-53.)

56. *Seminar in English Literature.* The course is preparatory to the writing of the thesis, and is required of all seniors and graduates taking a major in English Literature and intending to teach. Professor Howe. *Two hours, both semesters.*

57. *A Critical Study of Shakespeare and of His Critics.* A limited number of plays will be examined in the light of the critics. Courses 45 and 46 are prerequisite to this course. Professor Howe. *Three hours, both semesters.*

58. *Survey of English Critics.* A course intended to familiarize teachers with the epoch-making critical work in the literature. Open only to graduate students. Professor Howe. *Three hours, both semesters.*

59. *American Literature.* A study of American literary history up to about the year 1830. The Colonial, Revolutionary, and early Republican periods will be covered, and among the writers read and discussed, Franklin, Freneau, Brockden-Brown, Irving, Cooper, and Bryant. Open to freshmen. Tuesday and Thursday at 9. Miss Perkins. *Two hours, first semester.*

60. *American Literature.* From 1830 to the present time, Emerson, Whitman, Poe, Hawthorne, Lamier, and the New England poets, together with an historical and critical study of the different poetical and prose forms as they have appeared in American Literature. Tuesday and Thursday at 9. Miss Perkins. *Two hours, second semester.*

61. *The American Short Story.* A study of the development of the short story, as exemplified in Irving, Poe, Hawthorne, Bret Harte, Mark Twain, Howells, James, Joel Chandler Harris, Mary Wilkins Freeman and others. Not open to freshmen. Tuesday and Thursday at 10. Miss Perkins. *Two hours, second semester.*

62. *Essays in Literary Criticism.* A study of selected essays from modern English and American literary critics, including Wordsworth, Coleridge, Hazlitt, Lamb, Arnold, Pater, Lowell, Woodberry, and Paul Elmer More. Miss Burgess. *Two hours*

63. *The Teaching of English.* Lectures and papers. Required of all seniors who expect to teach English. Professors Howe and Thurber. *One hour, both semesters*

64. *Readings from English Literature.* A course in which the finest parts of the literature are read aloud by the instructor. The class meets three hours per week for one hour's credit, no outside preparation being required of the students. (Not given in 1913-14.) Professor Howe. *One hour, both semesters*

65. (a) *The English Novel.* Its evolution and scope, from the Morte D'Arthur to the present, including a study (a) of the Elizabethan novelists Greene, Lodge, Nash, etc.; (b) of the Augustan novelists, Richardson, Fielding, etc.; (c) of the Georgian novelists, Scott, Jane Austen, The Tale of Terror, etc., and (d) of the Victorian novelists, Dickens, Thackeray, etc. A lecture course with collateral reading and papers by the class. Monday, Tuesday and Friday at 10. Professor Howe. *Three hours, both semesters*

65. (b) *The English Novel in the Nineteenth Century.* Typical works of Jane Austen, Scott, Dickens, Thackeray, Meredith, and Thomas Hardy are read in class, and an equal amount of outside reading assigned for report and examination. The course is accompanied by expository lectures. (Not given in 1913-14.) *Three hours, both semesters*

66. *Emerson.* The influence of Plato, Goethe, Coleridge, Carlyle and others upon Emerson; parallels with Marcus Aurelius, Epictetus; the effect of Emerson on modern thought. Reading from *Essays, Representative Men and English Traits.* Tuesday and Thursday at 1. Miss Burgess. *Two hours, first semester*

67. *Representative Essays in Modern Thought.* The social theories of John Stuart Mill; the nineteenth century scientific writers: Darwin, Huxley, Spencer; also Arnold, Frederic Har

risson, William James and others. Tuesday and Thursday at 1.  
Miss Burgess. *Two hours, second semester.*

68. *The West in American Literature.* Beginning with Cooper's Pioneer, Irving's Astoria, and Parkman's Oregon Trail, a tracing of the westward movement as recorded in literature. Eggleston, Riley, Mark Twain, Bret Harte, Joaquin Miller. Thursday at 10. Miss Burgess. *One hour, second semester.*

69. *Principles of Appreciation.* This course will be devoted to a consideration of the best examples of literature and art, and will include practice in critical writing. Tuesday and Thursday at 2. Mrs. Parsons. *Two hours, both semesters.*

## GEOGRAPHY.

Professor Barker.

1. *Physiography.* The earth's features treated with special reference to their origin and development. Agencies of nature producing physiographic forms. Three lectures, Monday, Tuesday and Thursday at 10 A. M. *Three hours, first semester.*

2. *Physiography of the United States.* An advanced course in Physiography with special reference to the features of the United States. Two lectures. Prerequisites, Geography 1 and 4, Tuesday and Thursday at 11 A. M. *Two hours, first semester.*

3. *Field Geography.* A study of land forms as developed around Eugene. Field work with a report and maps.

Determination of latitude and longitude by means of the sextant. Prerequisite, 1 and 4. Two afternoons.

*Two hours, first semester.*

4. *Principles of Geography.* Meaning and scope of Geography. Relations of Geography to other sciences. Distribution, development and characteristics of land forms with special references to their natural resources such as soils, and products of the soil, minerals and animals. Three lectures, Monday, Tuesday and Thursday, at 10 A. M. *Three hours, second semester.*

6. *History and Geographic Influences.* A study of geographic conditions which have influenced history, both ancient and modern. Three lectures, Monday, Wednesday, and Friday at 11 A. M.

*Three hours, first semester*

7. *Meteorology.* A study of the principles of Meteorology with especial reference to the demands of those entering the service of the U. S. Weather Bureau. Prerequisite: Entrance Physics or Physics 1. Lectures, Tuesday and Thursday at 11 A. M.

*Two hours, second semester*

8. *Economic Geography.* A study of the economic resources of the world. The geographic factors determining the location and utilization of natural resources. Three lectures, Monday, Wednesday and Friday, at 9 A. M.

*Three hours, both semesters*

9. *Teachers' Materials.* A course dealing with the literature and equipment for teaching Physical Geography. Friday at 10.

*One hour, second semester*

10. *American History and Geographic Influences.* A continuation of Course 6, with a special reference to America. References: Brigham, A. P. *Geographical Influences in American History.* Semple, E. C. *American History and its Geographic Conditions.* Three lectures, Monday, Wednesday, Friday, at 11.

*Three hours, second semester*

## GEOLOGY.

Professor Collier.

1. *Geology.* This course gives a general knowledge of Geology and is designed either for those in other courses who desire an outline of the subject, or as a basis for more advanced work by those who would specialize in Geology. Lectures, collateral reading and field excursions. Monday, Wednesday and Friday at 11.

*Three hours, both semesters*

3. *Economic Geology.* The geology of the valuable mineral deposits, including their occurrence, associations and genesis. The course also considers the methods employed in prospecting and

in the development of ore bodies, as well as the annual production and possible need of conservation of the various mineral resources. Prerequisites, Geology 1 and Chemistry 1. Monday, Wednesday and Friday at 8. *Three hours, both semesters.*

4. *Crystallography and Mineralogy.* A general study of minerals with a view to their identification and determination. The course first takes up the study of the crystal forms of the different systems; then the methods of identifying minerals by their physical properties, as presented in either Frazer's or Eakle's Tables for the determination of minerals; and lastly, the blowpipe and other chemical tests. Prerequisites Geology 1 and Chemistry 1. Tuesday and Thursday at 1. *Two hours, both semesters.*

5. *Petrology.* An introduction to the study of rocks, both by means of hand specimens and thin sections, following Pirsson's "Rocks and Rock Minerals." Prerequisite, Geology 4. One laboratory period and one lecture. Tuesday and Thursday at 2. *Two hours, first semester.*

6. *Field Geology.* The geological mapping of an assigned area. Prerequisite, Geology 1. Two laboratory periods. Saturday, 8 to 12. *Two hours, second semester.*

7. *Paleontology.* A brief preliminary course. The University is fortunate in having the collection of fossils made by the late Professor Thomas Condon, which is especially rich in Mesozoic and Cenozoic materials. A more extended course is to be given later. Prerequisites, Geology 1, and Biology. *One hour, both semesters.*

8. *Advanced Geology.* A more thorough investigation of the principles of Geology than is possible in Geology 1, together with a study of the folios of the Geologic Atlas of the United States and other literature. Monday and Friday at 10. *Three hours, both semesters.*

10. *Mineral and Rock Identification.* A brief study of minerals and rocks designed primarily for those expecting to teach. It prepares the student to identify the more common constituents

of the earth's crust. Prerequisite, Geology 1. Tuesday and Thursday at 3. *Two hours, first semester.*

11. *Materials for Teaching Geology and Geography.* A course designed to give familiarity with the literature and laboratory equipment available for teaching these subjects in secondary schools. *One hour, second semester.*

#### EQUIPMENT.

In the department of Geology the University of Oregon has a fine collection of illustrative material contained in the famous Condon "cabinet", which is well known to the older residents of the State. This cabinet is especially rich in fossil remains and represents the fruits of over forty years of continuous exploration in the Oregon country by its pioneer geologist. The remains of many extinct animals such as the mammoth, the mastodon and the three-toed horse, as well as the implements of prehistoric man, make this collection strictly characteristic of Oregon's own geological record.

The University is also well supplied with characteristic mineral and rock specimens, part of which were collected by Professor Condon and part acquired from other sources. For example, the plaster cast of the Willamette Meteorite was presented by Mr. A. S. Pattullo, of Portland, Oregon, and the Educational Series of Rocks was prepared by the United States Geological Survey. The museum is open to receive other specimens as gifts or loans, the University believing that such material is made of great service to the world at large if placed with some institution.

A large, light, fire-proof room especially designed for housing and displaying the valuable and steadily growing collection of specimens is one of the pressing needs of the University.

## GERMANIC LANGUAGES AND LITERATURE.

Professor Schmidt.

Mr. Koehler.

Miss Denhart.

Miss Rohse.

The aim of the instruction in the department is primarily to enable students to use modern German with facility in reading, writing, and, as far as practicable, in speaking, and to acquaint them with the masterpieces in German literature. A number of courses are conducted entirely in German and students are encouraged to use German as the language of the classroom as much as possible.

Opportunity is also given for graduate courses in Germanic languages. These are intended especially for students who desire to make the teaching of these languages their profession, or who expect to take an advanced degree in them. Careful attention is given to the linguistic as well as to the literary training of the student, aiming at a comprehensive insight into the historical growth of the Germanic languages and literatures.

The German Club (Verein Germania) is intended for students who are interested in conversation and lectures on German life and customs. From time to time programs are arranged to give students an insight into the musical and dramatic life of Germany. Students must have had several years of German before they are eligible to membership. Meetings take place twice a month.

Any of the following courses, German 1 to 12, are open to freshmen who have had the prerequisite courses:

## GERMAN LANGUAGE AND LITERATURE.

1. *Elementary German.* The elementary course comprises: Vos's Essentials of German (Henry Holt), and Beginners' German by Dr. Max Walter and Dr. C. A. Krause (Charles Scribner's Sons); German Composition, Translation of Easy Prose and Poetry. Special attention is paid to systematic training in pronunciation. The reading of about one hundred and seventy-

five pages of graduated texts from a reader is required. *Haus* German Reader is used. In addition to this three or four of the following selections will be read: Storm's *Immensee*, Heyse's *L'Arrabiatta*, Volkmann's *Kleine Geschichten*, *Märchen* and *Erzählungen*, Seidel's *Märchen*, Zschokke's *Der Zerbrochene Krug*. Daily at 8 and daily at 9. *Five hours, both semesters.*

2. *Advanced German.* During the second year the work comprises advanced German Grammar and Composition, Syntax. German conversation (based upon Von's *Material*, Manley's *Ein Sommer in Deutschland*; Bacon's *Ein Vaterland* or some other method) throughout the year. Material to be read is selected from the following list: Heyse's *Das Mägdchen von Treppi*; Baumbach's *Die Nonna*; Wildenbruch's *Das edle Blut*; Hillern's *Höher als die Kirche*; Seidel's *Leberecht Hühnchen*; Hauff's *Das Kalte Herz*; Leander's *Träumereien*; Freitag's *Die Journalisten*; Lessing's *Minna von Barnhelm*; Schiller's *Wilhelm Tell*, Goethe's *Hermann und Dorothea*. The class is expected to read two or three stories and two or three plays during the year. Two divisions, Monday, Tuesday, Thursday and Friday at 10 and at 11.

*Four hours, both semesters.*

3. *Classical Drama.* (a) Goethe's *Egmont*, Torquato Tasso's *Iphigenie auf Tauris*; (b) Schiller's *Maria Stuart*, *Jungfrau von Orleans*, *Wallenstein*; (c) Lessing's *Minna von Barnhelm*, *Emilia Galotti*, *Nathan der Weise*; (d) Grillparzer's *Sappho*; (e) Kleist's *Prinz Friedrich von Homburg*. Writing of essays in German. Practice in writing German is afforded by means of dictation and similar exercises. Robert's *Outlines of the History of German Literature* (Putnam) will be used in connection with this course. Brief lectures in German based upon the above texts, are given once or twice a week in this course. Monday, Wednesday and Friday, at 11.

*Three hours, both semesters.*

4. *German Fiction and Contemporary Literature.* During the year some of the following works will be read: Ebner-Eschenbach's *Die Freiherren von Gemperlein*, Keller's *Dietegen*, or *Klein*, *Machen Leute*; Riehl's *Novellen*, for example, *Burg Neideck*, *Der Fluch der Schöenheit*; *Der Stumme Ratsherr*, *Das Spielmannskind*.

Scheffel's Ekkehard; Wildenbruch's Der Letzte; Dahn's Sigwalt und Sigrith, Meyer's Gustav Adolph's Page; Sudermann's Der Katzensteg or Frau Sorge; and Auerbach's Brigitta, Frenssen's Jörn Uhl, etc. Tuesday and Thursday at 11 and Monday at 2.

*Three hours, both semesters.*

This course alternates with course 18.

5. *Modern German Drama.* The following dramas will be read: Wildenbruch's Harold, Hauptmann's Die Versunkene Glocke; Sudermann's Johannes, or Heimat; Fulda's Der Tailsman or Das verlorene Paradies; Hebbel's Agnes Bernauer or Herodes und Mariamne; Gutzkow's Zopf und Schwert, Uriel Acosta, etc. Tuesday and Thursday at 11 and Monday at 2.

*Three hours, both semesters.*

6. *German Poetry.* Goethe's Poems; Schiller's Ballads; Uhland's Poems; White's Heine's Poems; Klenze's Deutsche Gedichte; Hatfield German Lyrics and Ballads, or Kluge's Auswahl Deutscher Gedichte, will be used as text-book. *One hour, one semester.*

*Poems and Epics.* Scheffel's Trompeter von Saeckkingen, Thomas Anthology, etc. *One hour, one semester.*

7. (a) *Goethe's Faust.* Part I, with commentary. Monday at 3 and Tuesday at 2. *Two hours, first semester.*

(c) *Goethe's Faust.* Part II, with commentary. *Two hours, one semester.*

8. *Heine's Prose.* Die Harzreise; Die Romantische Schule and other selections will be read. Monday at 3 and Tuesday at 2.

*Two hours, second semester.*

9. *Historical German.* This course consists of the rapid translation of modern historical and economic German. It is especially designed for those students who wish to acquire a sufficient knowledge of the language to enable them to read German books on history, philosophy, etc. The matter to be read is selected from such works as Riehl's Kulturgeschichtliche Novellen; von Sybel's Kleine Historische Schriften; Freytag's Bilder aus der deutschen Vergangenheit Seiler, die Heimat der Indogermanen, Schiller's Geschichte des dreissigjährigen Krieges, etc. (Not given in 1913-14.)

*Two hours, one semester.*

10. *Scientific German.* This course is recommended to students who are taking or who plan to take special courses in Natural Science or in Medicine. Gore's Dippold's German Science Reader will be used as an introduction, and is followed by monographs on various subjects in order to give the student as large a vocabulary as possible. Among the books to be read are: Lassar-Cohn's *Die Chemie im tæglichen Leben*; Brewer's *Naturlehre*; Mueller's *die Electricischen Maschinen*; Helmholtz's *Ueber Gæthe's Naturwissenschaftliche Arbeiten*. No student is allowed to take this course who has not had at least two years of thorough preparation in literary German. Hours to be arranged. *Two hours, one semester.*

11. *Teaching of Modern Languages, Especially German.* Discussion of methods and bibliographical questions, examination of texts. Open to seniors and special students who have not less than 20 hours' credit in German or French. Required of students who wish to be recommended as teachers of German or French in the high schools of the State. Monday at 3 and Tuesday at 2. *Two hours, second semester.*

12. *Advanced German Composition.* Poll's or Jagemann's *Materials for Prose Composition*. Tuesday and Thursday at 11. *Two hours, both semesters.*

13. *German Conversation.* Open to all students who have had courses 1 and 2, and required of students who wish to teach German. Tuesday and Thursday at 1. *Two hours, both semesters.*

14. *General History of German Literature.* Max Koch's *Deutsche Litteraturgeschichte* is used as a text-book. A limited number of lectures are given. *One hour, both semesters.*

15. *Scandinavian Literature.* Works of Ibsen, Bjoernson, etc., in standard translations will be read and discussed. Hours to be arranged. *Two hours, one semester.*

16. *German Culture and Civilization.* A course of illustrated lectures. The topics discussed deal with the customs, culture, history, geography, etc., of Germany. *One hour, one semester.*

17. *Germanic Mythology.* Texts: F. Kaufmann, Eugen Mogk and Grimm. *One hour, one semester.*

18. *The Nineteenth Century Novel*. Freytag's Soll und Haben or Rittmeister von Alt-Rosen; Meyer's Juerg Jenatsch; Sudermann's Der Katzensteg; Frenssen's Joern Uhl; Storm's Der Schimmelreiter; Riehl's Kulturgeschichtliche Novellen; Paul Heyse's Das Glueck von Rothenburg; Scheffel's Ekkehard; Ludwig's Zwischen Himmel und Erde; Dahn's Ein Kampf um Rom. In addition to this, suitable selections from Ganghofer, Rosegger, Auerbach, Ebner-Eschenbach, Spielhagen and others will be assigned for outside reading. *Three hours, both semesters.*

FOR GRADUATES AND ADVANCED UNDERGRADUATES.

In so far as the demand will justify the formation of classes, the department will offer the following courses:

20. *Middle High German*. Michels, *Mittelhochdeutsche Grammatik*, 1906; Henrici, *Proben der Dichtungen des Mittelalters*, Berlin, 1898; Selections from *Nibelungenlied*; Walter von der Vogelweide; Parzival; Lexer, *Mittelhochdeutsches Taschen-Wörterbuch*. Hours to be arranged. *Two hours, both semesters.*

21. *Old High German*. Braune's *Althochdeutsche Grammatik*, and the same author's *althochdeutsches Lesebuch* (4th edition); Muellenhoff and Scherer's *Denkmäler Deutscher Poesie und Prosa* (3rd edition); Behaghel's *Historical Grammar of the German Language*.

22. *Gothic and the Elements of Comparative German Grammar*. Braune, *Gotische Grammatik*, 4. Auflage, Halle, 1895; Heyne's *Ulfilas*, 9. Auflage, von F. Wrede, Paderborn, 1896; Streitberg's *Urgermanische Grammatik*. This course is required for advanced degrees in English Philology.

23. *History of German Literature to the Nineteenth Century*. With special study of the classic periods of the twelfth and eighteenth centuries. Scherer's *Geschichte der deutschen Literatur*, Franke's *History of German Literature* are used as textbooks. Papers on assigned topics will be required.

24. *Physiological Phonetics*. The sounds of English, German, and French. Grandgent, *German, and English sounds* (Boston,

Ginn & Co., 1892); Ripmann's adaptation of Vietor's *Kleine Phonetik* (London, J. M. Dent & Co., 1899); Sweet, *A Primer of Phonetics* (Oxford, Clarendon Press, 1890); lectures. Each student will make a special study of his English vowels.

*Two hours, both semesters.*

#### SCANDINAVIAN LANGUAGES AND LITERATURE.

Professor .....

These courses are open to students who have had the required amount of German necessary for graduation.

1. *Elementary Swedish.* Principles of the grammar and the reading of easy prose. Hours to be arranged.

*Three hours, both semesters.*

2. *Elementary Norwegian.* Principle of the grammar and the reading of easy prose.

*Three hours, both semesters.*

#### GREEK LANGUAGE AND LITERATURE.

Professor Straub.

Inasmuch as Greek is not taught in the high schools of this State, the University will offer first and second year Greek, which may count as college credits toward graduation.

Students who have had two or three years of Greek may enter the second semester of the third or fourth year respectively. Students may also enter 14 and 16 of the second semester.

1. *Elementary Greek.* Gleason's *Greek Primer*. Daily at 9.

*Five hours, first semester.*

2. *Xenophon's Anabasis.* (Harper and Wallace) Book I; Goodwin's *Greek Grammar*. Daily at 9.

*Five hours, second semester.*

The aim of the first year is quality, not quantity. For this reason, the drill in Greek inflections and the common constructions is made as thorough as possible. In addition, every effort is made

to increase the student's vocabulary. The "Word List" in Harper and Wallace's *Anabasis* is an excellent help in this direction.

3. *Anabasis, continued*. Books I, III, and IV. Greek Grammar reviewed. Critical study of Greek prepositions. Daily translations from English to Greek. Text-books, in addition to those used in course 2; Pearson's Greek Prose Composition, and Adam's Greek Prepositions. 10 a. m.—Monday, Tuesday, Thursday and Friday. *Four hours, first semester.*

4. *Homer's Iliad*. (Seymour) Books I to IV. Homeric language and verse (Seymour). Jebb's Homer. Study of "The Homeric Palace" (Isham). Daily exercises in Greek prose continued. Special attention will be given to Homeric forms. The customs of the Homeric Greeks will be carefully studied. 10 a. m.—Monday, Tuesday, Thursday and Friday. *Four hours, second semester.*

5. *Hellenistic Greek*. One or two of the Gospels will be studied and the general principles of Hellenistic Greek noted. 11 a. m.—Monday, Tuesday, Wednesday and Thursday. *Four hours, first semester.*

6. *Hellenistic Greek, continued*. Selected portions of the New Testament. Selections from Septuagint will also be offered. 11 a. m.—Monday, Tuesday, Wednesday and Thursday. *Four hours, second semester.*

(Courses 5 and 6 are intended chiefly for students who expect to prepare for the ministry, and are elective to other Greek students. Prerequisites: Courses 1 to 4, inclusive. Text-books: Wescott and Hort's Greek New Testament recommended. Conybeare and Stock's selections from the Septuagint [Ginn & Co.]

7. *Xenophon's Memorabilia*. Demosthenes' Phillippics. (Students will be required to read up the appropriate portions of the history of Greece, in order to study the above in their proper setting.) *Four hours, first semester.*

8. *Lysias' Orations*. (Morgan's or Adam's.) Selections from Herodotus. Advanced Greek prose composition. Study of Sanford's Three Thousand Classic Greek Word list. *Four hours, second semester.*

9. *Selections from the Plays of Euripides.* Study of the Attic Theater (Haigh). *Three hours, first semester.*
10. *Plato's Apology and Crito.* Croiset's Greek Literature. *Three hours, second semester.*
11. *Selections from the Comedies of Aristophanes.* Study of the influence of comedy on Greek thought and temperament. *Three hours, first semester.*
12. *Demosthenes' De Corona.* (Goodwin.) Also suitable extracts from Aeschines' "Against Cteseophon." Study of Bredif's Life of Demosthenes. *Three hours, second semester.*

## GREEK-ENGLISH COURSE.

No Greek required. Open to all students.

The following four courses are offered to students who have not taken Greek. They will give a fairly good insight into the religion, habits, and life of that wonderful people, whose institutions and civilization still make themselves felt at the present time and whose influence still prevails strongly in modern thought.

13. *Greek Mythology.* Text-book: Gurber. Collateral reading: Bullfinche's Age of Fable. Informal talks. 2 p. m. Mondays. *One hour, first semester.*
14. *History of Greek Art.* (Tarbell.) Greek Sculpture (Gardner). 2 p. m. Mondays. *One hour, second semester.*
15. *History of Greek Literature.* From Homer to Theocritus (Edward Capps). Homeric Society (Keller). *One or two hours, first semester.*
16. *The Life of the Ancient Greeks.* (Gulick). The Ancient City (Coulages). The Attic Theater (Haigh). *One or two hours, second semester.*

## FOR GRADUATES AND ADVANCED UNDERGRADUATES.

17. *Pindar's Odes and Fragments.* Thucydides, Books II to VI. *Two hours, first semester.*
18. *Selections from Aristotle.* *Two hours, first semester.*

19. *Homer's Iliad*. Books VI to XXIV, read with a view to the study of the civilization and customs of the Homeric Tribes.  
*One hour, both semesters.*
20. *Greek Epigraphy*. Text-book: Roberts'.  
*One hour, first semester.*
21. *Greek Inscriptions*. Text-book: Hick's Manual of Greek Historical Inscriptions.  
*One hour, second semester.*

## HISTORY.

Professor Schafer.

Professor Clark.

## FUNCTIONS OF THE DEPARTMENT.

The Department of History, in its relations to the University, has two main functions: To train historians, and to provide the necessary historical basis in the training of those whose major interest lies in other departments like literature, law, politics, economics, and education. A third but subordinate function is to furnish what are usually called "cultural courses" for a considerable number of students majoring in scientific departments who nevertheless desire to secure the benefit of some contact in a broad way with the humanites.

## COURSES OFFERED.

For all purposes, the department offers in the year 1912-13 a schedule embracing eleven courses, three of three hours per week, and eight others of two hours per week each. Additional courses will be undertaken from year to year as the teaching force available in the department may allow. Students may begin work in the history courses at the beginning of either semester, and credit will be granted on the satisfactory completion of the work of either semester.

## THE CONFERENCE METHOD OF INSTRUCTION.

The limited number of courses, as against some former years, is not due to a decrease in the teaching force but to the adoption

by the department of the conference method of history study. This means that the body of students reporting for History 1 or History 2 will be treated as a class for only certain purposes, especially for receiving lectures and for discussing those main topics that constitute the landmarks of the course. But for outlining supplementary reading, for discussing significant points involved in it, for clearing up misconceptions concerning any portion of the work, and for deepening by special emphasis the impressions made upon the student's mind by facts and principles which should be held as fundamental, the class in some courses will be broken up into small groups each containing five or six students. These groups will confer with the professors once a week to the end that they may study the special needs of individual students, prescribe matter for reading and modes of study adapted to each special case, and thus secure the best mental development of which the student may be capable.

#### CONFERENCE GROUPS TO REPRESENT LIFE INTERESTS.

The conference method makes possible the grouping of students according to their special interests and therefore the shaping of each student's supplementary reading to meet his peculiar needs. Thus a student preparing to teach history in high schools can read, with a few of his fellows, such matter connected with the course as may best serve to fit for his prospective work as teacher. Those preparing for law or other life callings may likewise adapt their conference work to meet the requirements imposed by their special interests. Looked at from this viewpoint, and considering that it will be necessary for each professor to direct the work of a large number of conference groups, it will be seen that despite the reduction in the number of formal courses the range of subject-matter covered will probably be greater than under the old system.

1. *Europe*, from the earliest times to the outbreak of the French Revolution. This course is designed for such students as have had no European history and wish to become familiar with the sources of western civilization and of the great movements and

men of history. Monday, Wednesday and Friday at 8. Prof. Clark. *Three hours, both semesters.*

2. *World Movements of Past Century. America.* Problems and tendencies of American History. Will emphasize institutional origins, rise and progress of American democracy, the historical significance of the frontier, the slavery problem, industrialism, and the new internationalism. Two lectures and one conference. Monday, Wednesday and Friday at 11. Professor Schafer.

*Three hours, both semesters.*

3. *World Movements of Past Century. Europe.* Social and political development of leading states of Europe, their international relations and colonial expansion. The passing of Turkey, the awakening of Japan and China, are some of the movements that will be considered. This course and Course 2 are intended for freshmen of proper qualifications. Monday, Wednesday and Friday, in two divisions at 11 and at 1. Prof. Clark.

*Three hours, both semesters.*

4. *The Great Historians.* (Not given in 1913-14).

5. *Renaissance and Reformation.* The intellectual awakening in Western Europe during the fourteenth and fifteenth centuries, the religious reformation of the sixteenth century and religious wars that followed it, together with social and political changes accompanying these movements. Tuesday and Thursday at 11. Prof. Clark.

*Two hours, first semester.*

6. *England Since Beginning of Seventeenth Century.* Social, political, institutional and industrial progress will be traced. Tuesday and Thursday at 11. Prof. Clark.

*Two hours, second semester.*

7. *Political and Constitutional History of the United States.* Tuesday and Thursday at 8. Prof. Schafer.

*Two hours, both semesters.*

8. *American Statesmanship and Statesmen.* (Not given in 1913-14).

9. *Middle Ages*, from barbarian invasions of fourth century to Italian renaissance, with emphasis upon growth of civilization. Tuesday and Thursday at 11. (Not given in 1913-14).

*Two hours, both semesters.*

10. *American Revolution*. An intensive study designed to familiarize students with the intellectual and social forces which precipitated the Revolution and worked out a national destiny for the American Colonies. Tuesday and Thursday at 10. Prof. Schafer.

*Two hours, both semesters.*

11. *Contemporary World Politics*. A study of the great movements of world wide interest at the present day. Tuesday and Thursday at 8. Prof. Clark.

*Two hours, first semester.*

12. *Recent American History*. Tuesday and Thursday at 1. Prof. Clark.

*Two hours, second semester.*

13. *French Revolution and Napoleon*. (Not given 1913-14).

14. *Seminary in Western History*. A detailed study, largely from the sources of the building of civilization in the western portions of the United States, particularly the region west of the Rocky Mountains. For seniors and graduate students. Monday and Wednesday at 2; third hour to be arranged. Prof. Schafer.

*Three hours, both semesters.*

## HISTORY OF ART.

Mrs. Pennell.

It is the purpose to make the work more complete from year to year. At present, two courses are offered, each course continuing through both semesters. The first will cover Ancient and Mediæval Art; the second, Modern Art. Somewhat of Domestic Art will be introduced during the last term of the year. The University already has a useful collection of works of Art, together with portfolios of prints, and from time to time important additions are made to the department. (The instructor reserves the right to vary the courses).

1. *Ancient and Mediaeval Art*. Monday, Wednesday and Friday at 9.

*Three hours, both semesters.*

2. *Modern Art*. Monday, Wednesday and Friday at 11.

*Three hours, both semesters.*

## JOURNALISM.

Professor Allen.

Mrs. Parsons.

Mr. Geary.

1. *News Gathering and Newswriting.* Practice in actual gathering of news, discrimination as to reliability of news sources, judgment as to news values and training in accuracy. In writing, the style sought is terse, clear and picturesque, and the articles are required to be free from expression of the writer's personal opinions. "Copy" is written on typewriters furnished by the university. The course includes two hours of recitation each week and one hour devoted to a lecture by a practical newspaper man. Metropolitan and rural journalism are represented by the speakers of alternate weeks. These lectures are "reported" by the students. Monday, Wednesday and Friday at 1. Mr. Allen.

*Three hours, both semesters.*

2. *Newspaper Editing and Organization.* Treats of the means of "covering" completely a news field. A study of news sources. Typography and printing. The organization and methods of a large city paper. The financing and business side of a small country paper. Methods of news distribution, news agencies, sale of news, pictures, etc. Brief survey of photoengraving process. Advertising. Circulation. For semester examinations, Class 2 is placed in command of Class 1, and they edit and publish one of the Eugene daily papers, without assistance from either the regular staff or from the Department of Journalism. Monday, Wednesday and Friday at 9. Mr. Allen.

*Three hours, both semesters.*

3. *Newspaper Policy, Ethics, Editorial Writing,* on the basis of a study of *Group Psychology.* Advanced course, not open to underclassmen. A study is made of the leading papers of the United States and Europe, of which the department receives all the most important. Censorship, suppression, political support, bias and color, sensation, industrial and financial entanglements, the advertiser and the news, and social and economic reform are considered under "policy and ethics" while editorial writing includes

the upbuilding and the use of newspaper prestige and personality; the principles of persuasion, the effect of assertion, repetition, prestige, contagion, etc., besides logical force. History of selected great newspapers and biographies of great editors. Study of the changes that follow any conspicuous transfer of ownership and control of any contemporary publication. Monday, Tuesday and Friday at 10. Mr. Allen. *Three hours, both semesters.*

4. *Journalism for Teachers.* A class that meets at 7 p. m. once a week composed of high school teachers interested in journalistic principles applicable to the teaching of English in High Schools. Mr. Allen.

5. *Journalism Laboratory.* The first course in journalism introduced into any University in the United States, and probably first in the world is the University of Oregon's *Journalism Laboratory* which graduated its first class in 1902 under the guidance of Dr. Luella Clay Carson, now president of Mills College. The first graduate is Mr. E. N. Blythe, assistant news editor of the *Portland Oregonian*.

One hour's credit is given for work on the *Oregon Emerald* published three times a week, or as correspondent for outside newspapers or magazines, if this is done under the close supervision of the department. Mr. Allen and Mr. Geary.

*One hour, both semesters.*

## LATIN LANGUAGE AND LITERATURE.

Professor Dunn.

Mr. ....

### COURSES PRIMARILY FOR UNDERGRADUATES.

(Courses 1-6 are designed for students who offer at entrance two and three years of Latin respectively. They are therefore essentially preliminary to courses 11-18, which are based upon titles more generally recognized as College Latin.)

1. *Selected Orations of Cicero.* Sallust's *Catilina.* Monday, Tuesday, Wednesday and Friday at 10.

*Four hours, first semester.*

2. *Further Selections from Cicero*. Lives of Nepos. Monday, Tuesday, Wednesday and Friday at 10.

*Four hours, second semester.*

Courses 1 and 2 combined may be termed third-year Latin, pre-supposing two years of previous study in the language. Three-fourths of the year's work is given to Cicero's Orations. The *Catilina* of Sallust and the Lives of Nepos are employed as supplementary reading in their respective semesters.

3. *Vergil's Aeneid*, Ovid's *Metamorphoses*. Monday, Tuesday, Wednesday and Thursday at 1. *Four hours, first semester.*

4. *Vergil's Aeneid Continued*, Fables of Phædrus. Monday, Tuesday, Wednesday and Thursday at 1.

*Four hours, second semester.*

11. *Cicero's De Amicitia*. Virgil's *Eclogues*; the *Captivi* of Plautus; selections from Catullus. Monday, Wednesday and Friday at 8. *Three hours, first semester.*

12. *Selections from Horace's Odes and Epodes*. Sallust's *Jugurtha*; selections from Tibullus and Propertius. Monday, Wednesday and Friday at 8. *Three hours, second semester.*

13. *Selections from Horace's Satires and Epistles*. Livy, Book V; Ovid's *Tristia*, Books I and III. Monday, Wednesday and Friday at 2. *Three hours, first semester.*

14. *Terence's Andria*; Tacitus' *Agricola*; selections from Pliny's *Letters*; selections from Martial's *Epigrams*. Monday, Wednesday and Friday at 2. *Three hours, second semester.*

15. *Roman Law and Public Life*. Tuesday and Thursday at 9. *Two hours, first semester.*

This course will be based upon the text of selected orations of Cicero as a point of departure for the discussion of Roman political life and the investigation of certain periods in Roman history at first hand.

16. *The Roman Historians*. Tuesday and Thursday at 9.

*Two hours, second semester.*

Selected epochs in Livy and Tacitus will be read for purposes of comparison and will serve as a nucleus around which to group

a discussion of the methods of Roman historians and a running review of the historians themselves from the annalists to the *Scriptores Historiæ Augustæ*.

17. *Roman Literary Criticism*. Tuesday and Thursday at 11.  
*Two hours, first semester.*

This course provides a rapid comparison of four of the great classic treatises on literary criticism—Cicero's *Brutus*, Horace's *De Arte Poetica*, Quintilian's Book X of the *Institutiones*, and Tacitus' *Dialogus*.

18. *Roman Philosophy*. Tuesday and Thursday at 11.  
*Two hours, second semester.*

Lectures covering the chief systems of doctrine prevailing among the Romans of the Classic Period will alternate with readings from Cicero's *De Officiis* and the best portions of Lucretius.

#### COURSES PRIMARILY FOR GRADUATES.

The courses following herewith are designed for advanced students, but are open to undergraduates who, after due conference with the instructor, can give evidence of their fitness to satisfy the requirements of the courses. These courses are given usually in alternate years.

21. *History of Latin Literature*. Part I (poetry). Lectures and reading.  
*Three hours, both semesters.*

22. *History of Latin Literature*. Part II (prose). Lectures and reading.  
*Three hours, both semesters.*

27. *Ovid*. The *Fasti*, Roman Religion, and Religious Archaeology of Rome.  
*Two hours, first semester.*

28. *Ovid*. The *Metamorphoses* and Classic Mythology.  
*Two hours, second semester.*

31. *The Corpus Caesarianum*. The Gallic War. Lectures and reading.  
*Two hours, first semester.*

32. *The Corpus Caesarianum*. The Civil War and *Libri Imperatorum Auctorum*. Lectures and reading.  
*Two hours, second semester.*

35. *Topography of Rome.* Lectures and Investigation.  
*Two hours, both semesters.*

Lectures, assisted by maps, pictures and other available material, will illustrate in chronological order the monumental growth of Rome from prehistoric times to the fall of the Western Empire. Theses on suggested topics will be required at stated intervals.

36. *The Reign of Trajan.* *Two hours, first semester.*

Trajan's reign will be studied from every possible standpoint—from Pliny's Letters, from inscriptions and from monumental remains.

37. *Latin Composition.* *One hour, both semesters.*

Course 37 provides advanced composition drill, particularly for those who have had four years of Latin. Sustained narrative and occasional unseen passages form the basis of translation.

## MATHEMATICS.

Professor DeCou.

Assistant Professor Smith.

Mr. Kempthorne.

The instruction in Mathematics is designed to secure three objects: First, high mental discipline for the general student through the study of an exact science; second, a thorough understanding of those subjects which form the foundation of most of the natural and applied sciences, such as physics, astronomy, and the engineering sciences; third, the thorough preparation of teachers of high school mathematics.

Courses 1 and 3 are designed for students in literary courses who desire to secure a good foundation for their work in the sciences, and for those who expect to teach mathematics in conjunction with other high school subjects.

The courses fundamental to engineers are as follows: Freshman year, course 2; sophomore year, course 4; junior year, course 17. These courses are recommended also to students who intend to make mathematics their major.

A number of fundamental elective courses are offered to the advanced student; they are so arranged as to give breadth and symmetry to his knowledge of mathematics and prepare him, if he so desires, to pursue graduate study profitably.

Graduate courses will be arranged to suit the needs of those applying for them.

Freshmen, entering the second semester, may take courses 1, 2, and 6, if sufficiently prepared.

#### GENERAL COURSES.

1. *Advanced Algebra and Plane Trigonometry.* An elementary course. Open to Freshmen. Tuesday, Thursday, and Friday at 10 a. m. *Three hours, both semesters.*

2. *Advanced Algebra, Trigonometry and Analytical Geometry.* An introductory course. Required of Freshmen in Engineering. Open to all freshmen. Daily, at 8, 9, and 11 a. m. *Five hours, both semesters.*

3. *Analytical Geometry and Calculus.* An introductory course for literary and general scientific students. Prerequisite, Course 1. Open to Freshmen who have had the equivalent of Course 1. Tuesday, Thursday, and Friday at 10 a. m. *Three hours, both semesters.*

4. *Differential and Integral Calculus.* This course includes the development of the fundamental principles and formulas of Differential and Integral Calculus; their applications to expansion of functions, indeterminate forms, the determination of the various properties of plane curves, maxima and minima, areas and lengths of curves, areas and volumes of surfaces, hyperbolic functions, etc. Prerequisite, Course 2. Required of Sophomores in Engineering courses. Elective for others. Daily at 9 and 11 a. m. *Five hours, both semesters.*

5. *Graphical Methods.* A course dealing with short graphical methods of curve tracing, integration, differentiation, etc., including the theory and use of the slide rule. Hour to be arranged. *One hour, second semester.*

6. *Advanced Algebra and Spherical Trigonometry.* A continuation of the Advanced Algebra of Courses 1 and 2, together with an introduction to spherical trigonometry. Hours to be arranged.

*Two hours, one semester.*

7. *History of Mathematics.* A brief survey of the most important developments of the subject. Thursday at 8 a. m.

*One hour, second semester.*

8. *Teaching of Mathematics.* Dealing largely with the teaching of mathematics in secondary schools and treated from the historical standpoint. Thursday at 8 a. m.

*One hour, first semester.*

#### ADVANCED AND GRADUATE COURSES.

9. *Differential Equations.* A practical course in the theory of ordinary and partial differential equations and their solutions. Prerequisites, Courses 2 and 4. Textbook: Murray's *Differential Equations*. Tuesday and Thursday at 11 a. m.

*Two hours, both semesters.*

10. *Higher Algebra.* A more advanced and rigorous treatment of the topics of the preceding courses, together with the addition of many new topics. Monday, Wednesday, and Friday at 11 a. m.

*Three hours, one semester.*

11. *Determinants and Theory of Equations.* An elementary but very important course, giving the essential principles required in various advanced studies. Text: Burnside and Panton. Monday, Wednesday, and Friday at 11 a. m.

*Three hours, one semester.*

12. *Solid Analytical Geometry.* An advanced course dealing with surfaces of the second degree and their properties, together with some discussion of surfaces in general. Textbook: Rudio's *Solid Geometry*. Hours to be arranged.

*Three hours, one semester.*

13. *Advanced Integral Calculus.* Including definite integrals, Fourier series, elements of elliptic integrals and functions. Prerequisite, Course 4. Hours to be arranged.

*Three hours, both semesters.*

14. *Theory of Functions of a Complex Variable.* Hours to be arranged. *Three hours, one semester*

15. *Analytical Trigonometry.* Hours to be arranged. *Three hours, one semester*

16. *Projective Geometry.* An introductory course based on Holgate's translation of Reye's *Geometric der Lage*. Hours to be arranged. *Three hours, one semester*

17. *Analytical Mechanics.* An elementary course dealing with the principles and application of statics, kinematics, and kinetics. Prerequisite, Course 4. Required of Juniors in Engineering courses. Tuesday, Thursday, and Friday at 10 a. m. *Three hours, both semesters*

#### GRADUATE COURSES.

On application, courses will be provided for graduates and others of sufficient mathematical maturity and training, in the following subjects: Modern Analytical Geometry, Differential Geometry, Elliptic Functions, Substitution Groups, and the Theory of Numbers.

#### EQUIPMENT.

The department is provided with a well-selected library of the best American and foreign works, in addition to a large collection of elementary texts for pedagogical purposes. It has a complete file of the American mathematical journals and receives regularly the current numbers of these journals and some foreign ones.

A collection of the famous Brill models, made in Germany, is an important adjunct to the work in geometry. Included in this collection are plaster models of ellipsoids, hyperboloids of one and two sheets, elliptic and hyperbolic paraboloids, on which are shown the geodetic lines, lines of curvature, circular, and principal sections, etc.; also wire and thread models, illustrating ruled surfaces and generating lines of coinoids. A spherical blackboard, three feet in diameter, blackboard apparatus for use in geometrical constructions, and numerous models and drawings constructed by the students add materially to the equipment. A complete set of men-

uration blocks and models is used in the study of geometry teaching.

#### ASTRONOMY.

1. *General Astronomy.* A course embracing a brief historical sketch of the science, the fundamental principles, with such problems as yield to elementary methods of treatment, and an exposition of the more important facts known in reference to the bodies of the solar system, the stars, star clusters, and nebulae, tides as cosmogonic agencies, and a comprehensive account of the Nebular Hypothesis. Observatory work will be carried on as the weather permits. Hours to be arranged. *Three hours, first semester.*

2. *Practical Astronomy.* A course embracing the fundamental problems of practical astronomy such as the determination of time, latitude, longitude, and azimuth. Special emphasis is laid upon the determination of these problems with those instruments which an engineer is likely to have in the field. The theory and application of least squares is developed in connection with the computations. Hours to be arranged. *Two hours, second semester.*

#### PHILOSOPHY.

President Campbell.

Assistant Professor Conklin.

1. *Greek and Mediaeval Philosophy.* Prefaced by a sketch of the fundamental problems of philosophy and by the mastery of the technical vocabulary of philosophy. The development of philosophy is traced from the beginnings of Greek speculation down to the sixteenth century with special emphasis on the teachings of Plato and Aristotle. During the semester each student makes a special study of some one of the Greek thinkers and reports upon the same. Monday, Wednesday, and Friday at 9 a. m. *Three hours, first semester.*

2. *Modern Philosophy.* This course consists of the outlines of modern speculative thought from Bacon to the middle of the nineteenth century, familiarizing the student with the principal teachings of Bacon, Hobbes, Descartes, Spinoza, Leibniz, Locke,

Berkeley, Hume, Kant, Fichte, Hegel and Schopenhauer. Monday, Wednesday, and Friday at 9 a. m. *Three hours, second semester.*

3. *Principles of Logic.* Text-book and lectures.

*Two hours, first semester.*

4. *Principles of Ethics.* History of ethical speculation with outlines of chief modern systems. Text-book and lectures.

*Two hours, second semester.*

5. *Kant—Critiques of Pure Reason and of Practical Reason.* Text and lectures. President Campbell.

*Two hours, first semester.*

6. *Herbert Spencer—First Principles and Synthetic Philosophy.* Text and lectures. President Campbell.

*Two hours, second semester.*

#### PHYSICAL EDUCATION—WOMEN.

Dr. Stuart.

Miss Thomson.

Physical education is treated as a part of college work. Two hours a week in the gymnasium classes are required of all girls during the Freshman and Sophomore years.

The department is conducted upon scientific principles. Its aim is hygienic, educative and recreative. It attempts to aid the normal functioning of the organs of the body; to improve muscular development; to correct abnormalities, and to supply recreation.

The Woman's Athletic Association of the University of Oregon is an organization open to all women of the University who have completed one semester's work creditably. Its purpose is to arouse interest in outdoor sports and games that a more physically efficient woman may be developed.

Because of the many requests for assistance in work of this nature from high school teachers throughout the State, it is planned to invite every high school in Oregon to form a Girls' Athletic Association which shall be a branch of the University organization. A mass meeting will be held at Eugene every spring in which

each school shall be given an opportunity to demonstrate the work of the year.

The women's gymnasium is a brick building containing on the first floor, the gymnasium proper with a floor space of 40x85 feet; the office of the director; a small laboratory with all apparatus necessary for making blood, sputum, and bacteriological examinations; and a room equipped with apparatus for corrective gymnastic work—work adapted to the individual needs of girls physically unable to undertake the general class work. The basement contains two rooms, the larger of which is fitted up with 200 steel lockers, 35 dressing rooms, and 35 shower baths. The smaller is used for an examining room and anthropometry. Before beginning gymnasium work each girl receives a thorough physical examination by the director, a physician, and work is assigned accordingly. Especial attention is given to the correction of incorrect posture and any abnormal condition which can be benefited by intelligent exercise.

Owing to the necessity of having uniform gymnasium suits, they should not be purchased before entering college. If necessary to do this, communication should first be made with the director in regard to material and style required.

#### PRACTICAL COURSES.

1. *General Gymnastics.* The exercises for the first year are based upon the Swedish system of gymnastics, and have for their object an "all around" development. This necessitates a correct posture; a certain amount of muscular development; power of co-ordination and the proper functioning of the vital organs of respiration, circulation, and nutrition.

In the fall and spring months out-of-door sports, tennis, golf, baseball, and archery are taught.

2. *General Gymnastics.* Continuation of Course 1. Supplemented by drills with light apparatus, wands, dumb bells, clubs, fancy steps, dances, and military marching. Required of all Sophomores.

3. *Special Corrective Exercises.* Individual exercises given to those students who for physical reasons are unable to take the regular class work; or who have defects which can be corrected or improved.

4. *General Gymnastics.* A continuation of Courses 1 and 2; consisting of more advanced work along the same lines. Open to all who have completed Courses 1 and 2.

5. *Gymnastic Dancing.* Beginning work in gymnastic dancing; Gilbert dances; æsthetic dances; folk dances and couple dances. It develops grace and ease of movement and carriage and considerable amount of endurance.

6. *Advanced Gymnastic Dancing.* Advanced class in gymnastic dancing. Open to all who have completed Course 5.

7. *Personal Hygiene.* This course is especially designed for first-year students. It is a study of the means of preserving and improving the health; it takes up dietetics, clothing, breathing, ventilation, prevention of ordinary disease, tuberculosis and typhoid fever, the anatomy, physiology and hygiene of the pelvic organs.

*One hour, two semesters.*

#### THEORETICAL COURSES.

Students majoring in Department of Education may take their major work in the Department of Physical Training. Such students must take courses prescribed below and in addition five hours per week for four years of practical gymnastic work.

Students majoring in other departments may take their minor work in Physical Training. They must complete a minimum of 12 semester hours of theoretical work in the Department of Physical Training, and must take five hours per week for four years of the practical gymnasium work. (Courses 1, 2, 3, 4, 5, 6.)

8. *Theory of Physical Training.* Study of the fundamental principles underlying the various systems of gymnastics; the principles governing the selection and classification of exercises; the physiology of exercises dealing with the causes of muscular over-work, breathlessness, fatigue, exhaustion and chronic muscular

over-work, and the physiology of exercises of strength, speed, endurance, and skill. The various groups of exercises in Swedish Day's Order are analyzed and the progression of exercises studied. Practice lessons for the gymnasium and school room. Prerequisite, Physiology 1. Reference books: LeGrange, Physiology of Exercise, Posse, Special Kinesiology and Educational Gymnastics.

*Two hours, first semester.*

9. *Kinesiology.* The analysis of exercises and the mechanism of movement, to determine the effectiveness of the different forms of gymnastic work in regard to posture and motor education. The joints and muscles of the shoulder, girdle, spine, pelvis, and extremities are discussed and effects of exercises noted. Prerequisites: Course 2 and Applied Anatomy. Text-book: Skarstrom "Gymnastic Kinesiology." *Two hours, second semester.*

10. *Applied Anatomy.* Study of the frame-work of the body; the principal muscle groups; and the muscles in the performance of exercises. Prerequisite, Botany, Zoology.

*Two hours, first semester.*

11. *Human Anatomy.* This course comprises a study of the organs of the body and their structure and function; the principal blood vessels and nerves. Nancrede's Text-Book: Essentials of Anatomy. Lectures and demonstrations. Prerequisites: Botany, Zoology, Applied Anatomy. *Two hours, second semester.*

12. *Anthropometry.* Instruction and practice in taking physical measurements; a study of the vibrations from the normal types of the human body; and the bearing of family and previous personal history upon the present condition of individuals. Prerequisites: Applied Anatomy, Human Anatomy. Text-Book: Seaver—Anthropometry. *Two hours, second semester.*

13. *Emergencies and Bandaging.* Cause, nature and treatment of wounds, bruises, sprains, fractures, faints, shocks, etc., bandaging, dressing, antiseptics and disinfectants. Lectures and demonstrations. Reference book: Wharton's Minor Surgery.

*One hour, first semester.*

14. *Theory of Corrective Gymnastics.* Lectures, demonstrations and assigned readings on the application of exercises and

massage to correct such deformities as lateral curvature of the spine; round shoulders, flat-foot, and all postural deformities, and the effect of special exercises upon digestive troubles; disorders of the circulation; nervous diseases; obesity, etc. Study is made of the technique and effect of massage and practice given in acquiring technique. Prerequisites: Human Anatomy, Applied Anatomy, Bacteriology, Physiology, Anthropometry, Emergencies. Reference books: Wilde's Medical Gymnastics; Mitchell's Mechano Therapy; Kelgren's Manual of Treatment; Posse's Manual of Medical Gymnastics.

*Two hours, second semester.*

15. *Clinic and Corrective Gymnastics.* Students will assist in treating patients. Five hours per week, three hours' credit.

*Three hours, one semester.*

16. *Theory of Play and Playgrounds.* A study of play from the standpoint of its influence as a social and educational force. A history of the playground movement; the organization of playgrounds; equipment, apparatus, supervision, play-leaders, etc. Prerequisites: General Psychology, Sociology, Genetic Psychology.

*Two hours, one semester.*

17. *Methodology of Gymnastics.* Practice work in the University gymnasium and in the grade schools of the city. Prerequisites: Courses 3, 4, 7 in Education, and Courses 8, 9, 14, 16 in Physical Training. Given both semesters.

*Five hours, one semester.*

#### LOCKER FEE.

A locker fee of \$1.50 a year, payable at time of registration, is charged all girls taking the required gymnasium work. Girls who have completed the required gymnasium work may have the use of the baths on the payment of \$1.00 per year.

#### PHYSICAL EDUCATION—MEN.

Mr. Hayward.

Mr. Shockley.

Two hours a week in the gymnasium classes are required of all students during the freshman and sophomore years.

The new gymnasium is fitted with all modern gymnastic apparatus. The main hall is 59x106 feet, with a 26-foot ceiling. On the same floor is the office of the director, a room for anthropometry, and a tube hand-ball court 20x20x50 feet; there is also a gallery for spectators with a seating capacity of 450. Eight feet above the gallery is a 16-lap cork running track nine feet wide. The basement is fitted up with steel lockers, shower baths, and a swimming pool 30x60 feet, with a gradual slope from three and one-half to nine feet in depth.

The department is conducted upon scientific principles. Its aim is both hygienic and educative. It attempts to aid functions and develop form, as well as to correct undeveloped and deformed parts, and supply recreation. It also aims especially to assist the student toward perfect nervous control, and by exercise of precision and skill to train nerve centers and muscles to act quickly and accurately in response to the will; and to produce mental and moral self-control.

Every effort is made to encourage outdoor sports, and the director devotes a considerable time, when the season is suitable to directing outdoor exercises, such as golf, tennis, and athletics of all kinds.

The students maintain an athletic association which promotes outdoor athletics. They are also permitted by the faculty to participate in intercollegiate sports. In these games the University is represented by a football eleven, a baseball nine, a track athletic team, a tennis club, a golf club, and a basketball team. Secondary class and interfraternity teams are formed to give the University teams practice, and in order to touch as many students as possible.

Physical examinations are made, and the director will be ready to examine students at any convenient time. Students may take the physical examination and have their exercises prescribed or may enter one of the regular classes.

## POLITICAL SCIENCE.

Professor Barnett.

## I. FOR UNDERGRADUATES.

1. *American Government.* The government of the United States, federal, state, and local, with special attention to the operation of the federal government. Prerequisite to all other courses in Political Science. Monday, Tuesday, and Friday at 10.  
*Three hours, first semester.*

2. *European Governments.* The organization and operation of the governments of England, France, Germany, and Switzerland, with special attention to the government of England. Monday, Tuesday, and Friday at 10. *Three hours, second semester.*

3. *Elementary Law.* A very brief introduction to the theory of law and to the history of English and American law, followed by a general consideration of the principal branches of the common law. Practice in the use of cases. Monday, Wednesday, and Friday at 9. *Three hours, first semester.*

## II. FOR UNDERGRADUATES AND GRADUATES.

4. *Constitutional Law.* A study of the federal constitution as interpreted by the courts. Chiefly a discussion of leading cases. It is desirable that this course be preceded by Political Science 3. Monday, Wednesday and Friday at 9.  
*Three hours, second semester.*

5. *International Law.* The general principles of international law. It is desirable that this course be preceded by Political Science 3. Monday, Wednesday and Friday at 8.  
*Three hours, first semester.*

6. *Law of Officers.* The law of public officers. Chiefly a discussion of leading cases. Open to students credited with at least one course in law. Monday, Wednesday and Friday at 8.  
*Three hours, second semester.*

7. *Political Internationalism.* The peace movement; the causes and consequences of war, and the means of preserving peace; the history and present status of international political organization through international legislation, international jurisdiction and international administration; ideals of international political organization; the social basis of international political organization; nationalism and cosmopolitanism. Open to qualified Juniors and Seniors. Tuesday and Thursday at 9. (Omitted 1913-14.)

*Two hours, first semester.*

8. *Municipal Government.* The organization and operation of municipal government in France, Prussia, England, and the United States, with special attention to contemporary reforms in the United States. Open to qualified Juniors and Seniors. Tuesday and Thursday at 9.

*Two hours, second semester.*

9. *Government of Oregon.* The State and local government of Oregon. Open to qualified Juniors and Seniors. Tuesday and Thursday at 9.

*Two hours, first semester.*

10. *Practical Legislation.* The legislative methods of constitutional conventions, legislatures, and municipal councils, and the methods of initiative and referendum; the interpretation of written law; the drafting of constitutions, charters, statutes, and ordinances. Open only to students credited with Political Science 3, Political Science 4, and Political Science 8. Tuesday and Thursday at 9. (Omitted 1913-14.)

*Two hours, second semester.*

11. *Political Theory.* A very brief study of the history of political theory, and a more extensive study of modern political theory. Open to qualified Juniors and Seniors. Tuesday and Thursday at 9.

*Two hours, second semester.*

## PHYSICS.

Professor Boynton.

Mr. Caro.

Course 1 is a new course not previously offered, open to all students whether they have had a previous course in Physics in the high school or not. It can be taken either for college credit or to remove a matriculation deficiency.

Courses 2 and 3 presuppose a year of high school Physics, and are most advantageously taken together. They are commonly taken by engineering and pre-medical students, and those preparing to teach Physics. Additional laboratory can be elected as course 18.

Lecture courses supplementary to courses 1 and 2 will be announced from time to time under the numbers 4-7.

Prospective teachers of high school physics wishing the recommendation of the department should take at least 10 semester hours of work in the department, including courses 2, 3, 8 and 9.

No credit is given for less than the full work of a course. Records given for the first half of a course continued through the year are understood to be provisional only, and conditioned upon the completion of the course.

Credits toward a degree are given only for work actually done at the University or at some other institution of like rank, or upon examination.

A deposit of \$5.00 is required for each laboratory course each semester. The usual expense for courses 1, 3, 12, and 13 is \$2.50 per semester.

#### GENERAL COURSES.

1. *Essentials of Physics.* A general non-mathematical course, open to all students at the beginning of each semester. This course includes lectures, recitations and one laboratory period per week. Tuesday and Thursday at 10. Laboratory one afternoon, 1 to 4. *Three hours, both semesters.*

2. *General Physics.* A course given especially to meet the needs of Engineering students. This course should be taken either in freshman or sophomore year, and accompanied by course 3. Two sections: Monday, Wednesday and Friday at 8 and 11. *Three hours, both semesters.*

3. *Physical Measurements.* A general laboratory course designed to accompany course 2. 1 to 4 one afternoon. *One hour, both semesters.*

4, 5, 6, 7. *Selected Topics.* A series of experimental lectures on topics of interest, such as sound and its applications to the

study of music, the gyroscope, wireless telegraphy, radio-activity, diffraction and polarization of light, etc. The hours and special topics will be announced at the opening of each semester.

8. *History of Physics.* A brief survey of the most important developments of the subject. Thursday at 8.

*One hour, one semester.*

9. *Teaching of Physics.* Dealing largely with the teaching of Physics in secondary schools, and treated from the historical standpoint. Thursday at 8.

*One hour, one semester.*

#### ADVANCED COURSES.

11. *Analytical Mechanics.* Also announced as Mathematics 17. Prerequisite, Differential and Integral Calculus. Required of juniors in the Engineering courses. *Three hours, both semesters.*

12. *Electrical Measurements.* Prerequisite, Physics 1 or 2 and 3, and Mathematics 2 or 3. Laboratory and lectures, mainly on direct currents, including a study of standards, the calibration of commercial instruments by the potentiometer, etc. Required of sophomores in the course in Electrical Engineering. Lecture Thursday at 11, Laboratory Tuesday, 1 to 4.

*Two hours, first semester.*

13. *Electrical Measurements.* A continuation of course 12, taking up the measurement of capacities, inductances, and an introduction to alternating current measurements. Required of sophomores in the course in Electrical Engineering.

*Two hours, second semester.*

14. *Thermodynamics.* Prerequisites, Physics 1 or 2, and Differential and Integral Calculus. A course on the theory of heat as applied to ideal gases, saturated vapors, and other simple types of substances, introductory to the study of the steam engine. Especially recommended to students specializing in Physics or Physical Chemistry.

*Three hours, first semester.*

15. *Molecular Physics.* A continuation of course 14, including the Kinetic theory of gases and liquids; the deduction and further

discussion of van der Waal's equation, and the theoretical aspects of the theory of solutions. *Three hours, second semester.*

16. *Theory of Light.* Lectures with experimental illustration. Problems relating to the theory of optical instruments, treated by the methods of Geometrical Optics, and of the wave theory. Prerequisites, Physics 1 or 2, and Differential and Integral Calculus.

*Three hours, either semester.*

17. *Harmonic Motion.* The analytical treatment of wave motions, with applications to sound, light, and electricity. Prerequisites, Physics 1 or 2, and Differential and Integral Calculus, and at least one semester of Analytical Mechanics.

*Three hours, either semester.*

18. *Advanced Undergraduate Laboratory Work.* Open only to those who have completed at least the first half of course 3. Work and credits to be arranged with the instructor.

#### COURSES PRIMARILY FOR GRADUATES.

21. *Advanced Mathematical Physics.* Lectures and assigned readings. The topics treated will be varied from year to year, to suit the needs of students. *Hours to be arranged.*

22. *Advanced Laboratory and Research.* Qualified students will have all the facilities of the laboratories placed at their disposal, and will receive the advice and assistance of the department. *Hours to be arranged.*

23. *Seminary.* Conferences at stated times on assigned topics and current periodical literature.

#### EQUIPMENT.

The physical lecture room has a seating capacity of about 60 students. The lecture table is supplied with gas and water cocks, and electrodes connected at will with the University electric light plant or with the storage battery. An arc light stereopticon is used for projection and demonstrations in light.

The general Physical Laboratory consists of three rooms on the same floor. These rooms are supplied with gas and water

connections, and with electrodes capable of furnishing as high as 75 amperes. A basement room provided with substantial masonry piers is used for advanced work and for experiments requiring great stability.

The equipment of the department includes cases for apparatus; a considerable equipment for the elementary laboratory; apparatus for the determination of the Mechanical Equivalent of Heat according to Puluji; standard thermometers with certificates from the German Reichsanstalt; photometers, a Michelson interferometer, and other important optical instruments for the advanced laboratory; a large balance, and an equipment of modern steel rod supports for the lecture room; and a notable equipment for electrical measurements, including resistances, standard capacities and inductances, a potentiometer and galvanometers from the Leeds and Northrup Co.; ammeters and voltmeters from the American Instrument Co., and from the Weston Electrical Instrument Co., wattmeters and dynamometers, and a standard Ohm by Otto Wolff, and Weston Standard cells including some which have been compared with those of the National Bureau of Standards.

## PSYCHOLOGY

Assistant Professor Conklin.

Courses in this department are not open to freshmen except in special cases.

1. *Elementary General Psychology.* Lectures, discussions and classroom demonstrations covering in a general way the elements of consciousness, their physical substrate, and the phenomena of habit, attention, association, perception, imagination, memory, judgment, reasoning, instinct, emotion and will from both the structural and functional view points. Prerequisite to all other courses in psychology. Monday, Wednesday and Friday at 11 A. M.  
*Three hours, both semesters.*

2. *Experimental and Physiological Psychology.* Designed for advanced students who desire the methods and results of experi-

mentally controlled introspective work. Practice experimental work will be done by each student. During a large part of the year an afternoon laboratory period will take the place of one of the announced lecture hours. Tuesday and Thursday at 8 A. M.

*Two hours, both semesters.*

3. *Abnormal Psychology.* Designed especially for pre-medical students and for majors in physical training. Aphasias, amnesias, hysteria, dual personality, trance states, telepathy, theories of the subconscious, sleep, dreams, hypnosis, dissociations, fixed ideas, psychotherapy, and the common types of insanity will be presented by means of lectures, discussions and text-book work. Tuesday and Thursday at 9 A. M.

*Two hours, first semester.*

4. *Mental Hygiene.* This course is the complement of No. 1. It covers the conditions of efficient mental activity so far as they have been determined, the methods and results of the studies of mental fatigue, causes of mental retardation, the hygiene of the emotions and of the intellectual processes. Some attention is given to the psychology, examination and treatment of sub-normal and backward children. Tuesday and Thursday at 9 A. M.

*Two hours, second semester.*

5. *Psychology of Feeling and Emotion.* Studies of the genesis of emotions, characteristics of the different emotions, experimental studies of emotion, theories of emotion and the affective element, and the relation of emotion to the higher thought processes. (Not given 1912-13. Will be given 1913-14 if conditions permit, with a co-ordinate course in the second semester.)

*Two hours, first semester.*

6. *Psychological Problems.* Designed for juniors and seniors who are unable to take course 1. The effort made in this course is to present the most important facts and theories of contemporary psychology and to orient the student for independent reading and study. (Given in 1912-13. Will probably be omitted in 1913-14.)

*Two hours, second semester.*

For courses in genetic psychology and in the pedagogical applications of psychology see the announcement of the department of education.

LABORATORY FEES.

A laboratory fee of two dollars (\$2.00) is charged for course 2. This is to cover the cost of supplies consumed. The apparatus used is provided by the university and no charge is made for its use.

LABORATORY EQUIPMENT.

The Psychological Laboratory consists of three rooms in McClure Hall adjoining the Psychology Lecture Room and is equipped for a limited number of students. It has a considerable store of the more simple apparatus and each year additions are made of the best modern construction. For demonstrational work in connection with the courses in general psychology and mental hygiene and for laboratory practice the equipment is already good, making it possible to illustrate and reproduce the principal methods of experimental study of the sensations, attention, emotional expression, fatigue, reaction times, etc. These facilities will be enlarged as rapidly as conditions permit and an increasing emphasis will be placed upon laboratory work.

PUBLIC SPEAKING.

Professor Reddie.

Assistant Professor Prescott.

1. *Public Speaking*. Vocal culture and platform deportment. Delivery of short selections and impromptu speaking. This course will be divided into sections of twelve. Professor Reddie.  
*One hour, both semesters.*
2. *Public Speaking*. Advanced vocal culture, with special stress on the study of the anatomy of the vocal organs, and the development of tone quality. Interpretation of standard literature and impromptu speaking. Open only to those who have taken course 1. Professor Reddie.  
*One hour, both semesters.*
3. *Public Speaking*. Advanced vocal culture, including further development along the line of the work taken in course 2, with special reference to tone, color and analysis. The interpretation of classic and standard literature and prepared talks on subjects

of special interest to the students forming the class. Professor Reddie. *One hour, both semesters.*

4. *Public Speaking.* A continuation of course 3. Studies in analysis. Interpretation of Shakespeare. Prepared talks. Professor Reddie. *One hour, both semesters.*

5. *Extempore Speaking.* Practice in the preparation and delivery of short speeches taken from history, economics, education, and literature, and on the topics of the day. Two hours of recitation, one hour of credit. Open only to those who have had or are taking course 1. Professor Reddie and Assistant Professor Prescott. *Two hours, each semester.*

6. *Freshman Debating.* Training in Exposition and Argument. Study of analysis, structure, fallacies, methods of refutation. Practical training in brief drawing and debating. Assistant Professor Prescott. Three o'clock, Monday, Wednesday and Friday. *Three hours, both semesters.*

7. *The Public Speech: Its Composition and Forms.* Study of the principles of structure and style of the public address; also the study of the most important kinds of public addresses, including the eulogy, the after-dinner speech, the sermon, the political speech, and the platform oration. Masterpieces of oratory read and analyzed. The writing and presentation of speeches, with careful attention to both matter and form. Open only to those who have had or are taking Course 1. Assistant Professor Prescott. Three o'clock, Tuesday and Thursday. *Two hours, both semesters.*

8. *Commonwealth Club.* Critical study of social, political, and economic problems which vitally affect the communities and the commonwealth of Oregon. Open discussion of these questions in conference of class. Defense and criticism of measures designed to relieve public evils. From time to time the class will be organized into a committee on public safety, legislative assembly, constitutional convention, commonwealth conference, to consider and dispose appropriate business. Addresses will occasionally be given by public men on subjects in which the class is interested. The purpose of the course is three fold: To keep the student conscious of his relation to the community; in a practical way to interest him

in, and prepare him for, public service; and to give technical and practical experience in public speaking as it confronts the citizen. Not open to Freshmen. Assistant Professor Prescott. Two o'clock, Monday, Wednesday and Friday. *Three hours, both semesters.*

9. *Practical Public Speaking.* Practice in the presentation of the various forms of the public address. Half hour speeches required. As far as possible the conditions under which the student speaks are made those which confront the public speaker in business, professional, and political life: Open only to advanced students. Assistant Professor Prescott. Two o'clock Tuesday and Thursday. *Two hours, second semester.*

10. *Parliamentary Procedure.* Study of the principles of parliamentary law. Practical experience in organizing societies, conducting public meetings, etc. Assistant Professor Prescott. Two o'clock, Tuesday and Thursday. *Two hours, first semester.*

## ROMANCE LANGUAGES AND LITERATURES.

Professor Cloran.

Miss Baker.

### FRENCH.

1. *Elementary French.* Fraser and Squair's French Grammar, Part I, with written exercises and systematic training in French pronunciation. The reading of several hundred pages of graduated texts is required. Super's French Reader or some similar textbook is used. Translation at hearing. French conversation. Daily at 9. *Five hours, both semesters.*

2. *Advanced French.* Composition and syntax on the basis of Fraser and Squair's French Grammar, Part II. Reading of prose and verse. Selections will be read from the following authors: Bazin, Loti, Hugo, Gautier, Balzac, De Vigny, About. French conversation. Monday, Tuesday, Thursday and Friday at 10. *Four hours, both semesters.*

3. *History of French Literature in the Seventeenth Century.* Selections will be read from Racine, Moliere, Corneille, Bossuet,

Pascal and Boileau. This course is open to students who have completed course 2 or its equivalent. Monday, Wednesday and Friday at 11. *Three hours, both semesters.*

4. *History of French Literature in the Eighteenth and Nineteenth Centuries.* The following texts will be read: Selections from the works of Rousseau, Voltaire, Beaumarchais, Chateaubriand, Beranger, Alfred de Musset, Alfred de Vigny, Lamartine, Gautier, and Victor Hugo. Course 4 alternates with course 3.

*Three hours, both semesters.*

5. *Scientific French.* The purpose of this course is to acquaint the student with technical terms, to familiarize him with scientific forms of expression and style, and to enable him to read with profit the scientific and technological contributions to French magazines. Bowen's Scientific French Reader will be used, and a number of magazine articles will be assigned to each student for outside reading. Open to students who have had two years of French.

*Two hours, both semesters.*

6. *French Conversation.* Open to students who have had one year of French and who are taking courses 2, 3, or 4.

*Two hours, second semester.*

7. *Advanced French Conversation.* *One hour, both semesters.*

8. *History of French Literature and French Civilization.* Open to students who have had two years of French.

*Three hours, both semesters.*

9. *Lectures on French, Spanish, and Italian Literature of today.*

*One hour, both semesters.*

#### FOR GRADUATES AND ADVANCED UNDERGRADUATES.

10. *Old French.* Lectures on old French Phonology and Morphology. Students shall provide themselves in advance with Gaston Paris's *Extraits de la Chanson de Roland*, and Schwab-Behren's *Grammaire de l'ancien francais*, traduction de Bloc (Leipzig, 1900). Other books used are Kœrting, *Lateinisch-romanisches Wœrterbuch*, Paris's edition of *La Vie de St. Alexis* (Paris, 1903).

Open to students who have had at least two years of German, four years of French, and four years of Latin.

*Three hours, both semesters.*

11. *Teaching of French and Spanish.* Methods and text-books.

*Two hours, second semester.*

#### SPANISH.

1. *Elementary Spanish.* Olmsted's Spanish Grammar; Alarcon, El Capitan Veneno; Padre Isla, Gil Blas de Santillana; Spanish conversation. The course is open to students who have had two years of Latin. Monday, Wednesday and Friday at 8.

*Three hours, both semesters.*

2. *Advanced Spanish.* Modern Spanish Literature. Palacio Valdes, Perez Galdos, Alarcon, Valera, Echegaray, Becquer, and Pereda. Spanish conversation. Tuesday and Thursday at 8.

*Two hours, both semesters.*

3. *Classical Spanish.* Cervantes, Don Quixote (selections); selected plays of Lope de Vega, and Calderon.

*Two hours, both semesters.*

#### ITALIAN.

1. *Elementary Italian.* Grandgent's Italian Grammar; Bowen's First Italian Readings; Reading of Modern Prose. This course will be open to students who have had two years of French or four years of Latin. Tuesday and Thursday at 11.

*Two hours, both semesters.*

2. *Advanced Italian.* The classic period of Italian Literature. Readings from Dante, Boccaccio and Petrarch. Courses 1 and 2 are given in alternate years.

*Two hours, both semesters.*

3. *Dante and Tasso.* The works of Dante and Tasso in English translations.

*Two hours, both semesters.*

#### PORTUGUESE.

*Branner's Portuguese Grammar.* Reading of prose and poetry. Open to students who have had two years of Spanish.

*Two hours, second semester.*

## ZOOLOGY.

Professor Bovard.

Miss George.

Mr. Martzloff.

Mr. Manville.

Miss Powell.

(a) *Introductory Courses* in general Zoology and elementary Physiology for students seeking general culture. Zoology 1, 2, 11, and 12.

(b) *Teachers' Courses*, for those who expect to teach science in the high schools, more especially Physiology. Zoology 11 and 12.

(c) *Advanced Courses* in Zoology, Anatomy, and Physiology for students making Zoology their major and for those in the pre-medical department.

(d) *Pre-Medical Department*. Courses for students intending to study Medicine and Dentistry.\* The work is designed to lay as broad a foundation as possible for the work in the Medical College and to give the student some idea of the work he has chosen as his profession.

A pre-medical course should include courses in Zoology and Physiology; Botany and Bacteriology; Chemistry, Inorganic and Organic; at least a year of Physics with laboratory practice; and a reading knowledge of French and German.

Pre-medical courses in this department: Freshman year, Zoology 1 and 2; sophomore year, Zoology 3, 14; junior year, Zoology 4 and 5; senior year, Zoology 6, 7, 8, and 13.

1. *Invertebrate Zoology*. Lecture, Monday, Tuesday and Friday at 10; Laboratory, Wednesday 1 to 4. Three lectures and one laboratory period. The lecture work will cover the General Principles of Zoology, the characteristics of the main groups of the animal kingdom, the life histories of some of the most important forms, and the general principles of physiology as taught by comparative Zoology. Open to all students. *Four hours, first semester.*

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\*Those intending to study Pharmacy should see Botany, under Announcement of Courses.

2. *Vertebrate Zoology*. Lecture, Tuesday and Thursday at 10; Laboratory, Monday and Tuesday 1 to 4. Two lectures and two laboratory periods. A continuation of course 1, using vertebrate types. Prerequisite to all higher courses in this department. Open to all freshmen. *Four hours, second semester.*

3. *Comparative Anatomy*. Lecture, Tuesday and Thursday at 8; Laboratory, Thursday and Friday 1 to 4. Two lectures and two laboratory periods. A general course on the development of the Vertebrate. Lectures on the anatomy and zoology of lower vertebrates, the osteology and evolution of the higher forms. The laboratory work covers the comparative study of selected types of vertebrates. This course should precede Course 14. Open to all students. *Four hours, first semester.*

4. *Histology*. Lecture, Tuesday and Thursday at 8; Laboratory, Monday and Tuesday 1 to 4. Two lectures and two laboratory periods. A detailed study of the tissues and the organs of the body, the preparation of microscopical slides. Open to all students who have had Courses 1 and 2; Prescribed for Premedic Students. (Not given 1913-14.) *Four hours, first semester.*

6. *Vertebrate Embryology*. Lecture, Tuesday and Thursday at 8; Laboratory, Monday and Tuesday 1 to 4. Two lectures and two laboratory periods. The development of the chick and a comparison with some of the other vertebrate types. Prerequisite, courses 1 and 2. (Not given 1913-14.) *Four hours, second semester.*

7. *Physiology*. Lecture, Monday, Wednesday and Friday at 8; Laboratory, Wednesday 1 to 4. Three lectures and one laboratory period. Blood Circulation, Respiration, Muscle, Nerve, Reproduction, and the Nervous System. Prerequisites, courses 3, 4, and 5, Organic Chemistry, and one year of Physics. *Four hours, first semester.*

8. *Physiology*. Lecture, Monday, Wednesday and Friday at 8; Laboratory, Wednesday 1 to 4. Three lectures and one laboratory period. Digestion, Metabolism, Dietetics, Excretion, and Animal Heat. Prerequisites, courses 3, 4, and 5, Organic Chemistry, and at least a year in Physics. *Four hours, second semester.*

9. *Seminar*. Hours to be arranged. One hour each week. Discussion of current literature. Students will be given topics on Zoological Problems and expected to report on the literature and general status of the subject. *One hour, both semesters.*

10. *Research Laboratory*. Hours to be arranged. Original work on some Zoological problem by the student under the guidance of the instructor. Credit to be based on the character of the work. *Hours to be arranged.*

11. *Elementary Physiology*. Lecture, Tuesday and Thursday at 11; Laboratory, Thursday 1 to 4. Two lectures and one laboratory period. A course in the elements of Physiology designed for those who intend to teach science, especially Physiology, in the high schools. The work will be based on Hough and Sedgwick's book "The Human Mechanism," and will consist of recitations, lectures on special topics, and simple experiments adapted for high school use. Open to all. *Three hours, first semester.*

12. *Nature Study*. Lecture, Tuesday and Thursday at 11; Laboratory, Wednesday 1 to 4. Two lectures and one laboratory period. The lectures and the assigned readings cover the History of Zoology, the Distribution of Animals, and the Life History of some of the most important species. The laboratory work consists in the examination of the local fauna, with special emphasis on the Life Histories of these forms. Frequent excursions will be made to study birds and other animals. (Not given 1913-14.)

*Three hours, second semester.*

14. *Mammalian Anatomy*. Lecture, Wednesday at 9; Laboratory, Thursday and Friday 1 to 4, Saturday 8 to 12. One lecture and three laboratory periods. A course in dissection of a typical mammal, intended for those going into medicine, or the advanced work in Physiology. *Four hours, second semester.*

15. *Bionomic Problems*. Lecture, Tuesday and Thursday at 10. Two lectures. Lectures and demonstrations on the Life History of certain forms, their behavior, conditions of existence; the geographical distribution of animals; factors and evidences of evolution, results of modern experimentation on evolution; theories of development and heredity. Open to all students. (Not given 1913-14.)

*Two hours, second semester.*

16. *Marine Zoology.* Work will be carried on at the Marine Biological Laboratory at Puget Sound, Friday Harbor, Washington. The work will be done under the direction of the Department of Zoology of the University of Oregon. Credit will be given on the same basis as the Summer School work at Eugene.

17. *Studies of Birds.* Lecture, Thursday at 1; Laboratory hours to be arranged. One lecture and one laboratory. Lectures and field work devoted to the study of the habits, classification, methods of flight, color, feeding habits, etc.

*Two hours, second semester.*

#### EQUIPMENT.

The Zoological laboratories are equipped with microscopes, models, and other apparatus for all the ordinary work in Zoology, Microscopical Anatomy, and Physiology; and a number of skeletons for work in Comparative Anatomy and Human Osteology. The department will endeavor to furnish special apparatus as the occasion demands.

The Museum contains a fine series of mounted and unmounted birds and mammals, to illustrate different groups; a collection of Oregon reptiles, made by Mr. J. R. Wetherbee; a series of fish, mostly salmonidæ from the Columbia River, donated by the United States Government; a collection of food fishes of the Oregon coast, made by Mr. B. J. Bretherton, of Newport, Oregon, and presented to the University.

#### LABORATORY FEES IN ZOOLOGY.

A deposit fee is required in all courses in this department, with the exception of Zoology 9, 11, 15. In the courses requiring laboratory deposits, the fee for Zoology 1, 2, 12 and 17 is \$2.00; the remainder, \$5.00.

Although the apparatus loaned to the student is expensive, the fee is not intended to meet this in any measure but to cover the cost of the materials used and the apparatus not returnable. A certain portion of the fee is returned to the student in all courses except Zoology 1, 2, 12, and 17, if there has been no breakage, or in case the money has not been used to buy additional materials. The usual expense to the student in the advanced courses is from \$2.50 to \$4.00.

## COLLEGE OF ENGINEERING.

## THE FACULTY.

- P. L. CAMPBELL, B. A., President.
- EDWARD HIRAM MCALISTER, M. A., Dean of the College of Engineering and Professor of Civil Engineering.
- PERCY PAGET ADAMS, B. S., Assistant Professor of Civil Engineering.
- FRANKLIN L. BARKER, E. M., Professor of Geography.
- JAMES D. BARNETT, Ph. D., Professor of Political Science.
- JOHN FREEMAN BOVARD, M. S., Professor of Zoology.
- WILLIAM PINGRY BOYNTON, Ph. D., Professor of Physics.
- TIMOTHY CLORAN, Ph. D., Professor of Romance Languages.
- CHARLES W. CONVERSE, M. A., Instructor in Electrical Engineering.
- RICHARD HAROLD DEARBORN, M. E., Professor of Electrical Engineering.
- EDGAR EZEKIEL DECOU, M. S., Professor of Mathematics.
- JAMES HENRY GILBERT, Ph. D., Assistant Professor of Economics.
- WILLIAM L. HAYWARD, Director of Men's Gymnasium.
- HEMAN BURR LEONARD, Ph. D., Professor of Railway Engineering.
- CARL A. MCCLAIN, M. S., Assistant Professor of Civil Engineering.
- JOSEPH SCHAFER, Ph. D., Professor of History.
- FRIEDRICH GEORG G. SCHMIDT, Ph. D., Professor of German.
- FREDERICK LAFAYETTE SHINN, Ph. D., Assistant Professor of Chemistry.
- WILLIAM MACKEY SMITH, Ph. D., Assistant Professor of Mathematics.
- ORIN FLETCHER STAFFORD, M. A., Professor of Chemistry.
- ALBERT RADDIN SWEETSER, M. A., Professor of Botany.
- EDWARD ALLEN THURBER, M. A., Professor of Rhetoric.
- FREDERICK GEORGE YOUNG, B. A., Professor of Economics.
- JULIA BURGESS, M. A., Instructor in English.

WILLIAM B. KEMPTHORNE, Ph. B., Instructor in Mathematics.  
 HUGO W. KOEHLER, B. A., Instructor in German.  
 ELLEN M. PENNELL, Instructor in English.  
 MARY A. PERKINS, M. A., Instructor in English.  
 CHARLES ROY REID, B. S., Instructor in Electrical Engineering.  
 J. ALBERT BAKER, Assistant in Wood Shop.  
 IRA STAGGS, Assistant in Machine Shop.

### ADMISSION.

For full entrance to the freshman class of the College of Engineering, fifteen units are necessary, of which ten are in required and five in elective subjects. Graduates of high schools who for any reason do not have fifteen units may enter as conditioned freshmen if they have satisfactorily completed at least thirteen units. All conditions must be made up as soon as possible.

The subjects required of all freshmen entering the College of Engineering are as follows:

English .....	3	units
Algebra .....	1½	units
Plane and Solid Geometry .....	1½	units
One Foreign Language .....	2	units
History .....	1	unit
Physics .....	1	unit
Elective .....	5	units
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Total.....	15	units

### GRADUATION.

The degree of Bachelor of Science is conferred upon students of the College of Engineering who have secured 120 semester hours of credit, exclusive of eight semester hours of required physical training, and including the work required in their major subject.

## DEGREE OF ENGINEER.

The professional degree of Engineer is conferred upon graduates of the University, or of other institutions of like rank, who complete a year of professional study beyond the baccalaureate requirements of the department in which the degree is sought, and who present an approved thesis showing ability to do independent work.

## EQUIPMENT.

The laboratories, cabinets, workshops, drafting rooms, and the large assortment of instruments for field work in surveying, hydrography, and practical astronomy, offer excellent opportunities for effective work in the courses given.

The Testing Laboratory is equipped with the necessary machines and appliances for testing the strength of timber, stone, cement, and metals, the largest machine being a 200,000-pound universal testing machine.

## COURSES OFFERED.

Courses are offered in Civil Engineering, including Railway and Sanitary Engineering, Electrical Engineering, Hydro-electric Engineering (combining work in Civil and Electrical Engineering), and Chemical Engineering. The work of the first two years necessarily consists largely of courses in Mathematics, Physics, Chemistry, shopwork, and drawing, which are prerequisite to the technical courses proper. Changes from one course to another are permitted in accordance with the general regulations.

Students whose time and means permit are advised to spend two years or more in the College of Arts, taking courses in Mathematics, Physics, Chemistry, French, German, Economics, History, English, and such other subjects as they may desire. In this way they will secure a broader preparation, and by a proper selection of subjects will be able to complete the Engineering course in three additional years.

## CIVIL ENGINEERING.

For description of the courses offered in the department of Civil Engineering, see Civil Engineering under Announcement of

Courses. The courses embrace Drawing and Descriptive Geometry, Surveying and Geodesy, Mechanics, Highway and Railway Engineering, Hydraulic and Municipal Engineering, and Structural Engineering.

#### ELECTRICAL ENGINEERING.

For work offered and description of equipment in detail, see Electrical Engineering under Announcement of Courses.

#### RAILWAY ENGINEERING.

This course corresponds closely with the Civil Engineering course during the first two years, the difference during that period consisting mainly in the introduction of work as prerequisite for the subsequent railway courses, thus decreasing the number of elective courses. During the junior year the work is arranged as follows: First semester—Analytical Mechanics, Railway Surveying, Topographic Surveying, Economics for Engineers, and elective two hours; second semester—Analytical Mechanics, Strength of Materials, Topographic Surveying, Stresses, Economics, and Maintenance of Way. Senior year, first semester—Structural Design, Masonry, Hydraulics, Railway Operation, Contracts and Specifications; second semester—Reinforced Concrete, Roads and Pavements, Economic Location, Railway Design, and elective six hours.

#### SANITARY ENGINEERING.

The course in Sanitary Engineering is the same for the first two years as the course in Civil Engineering. In the junior and senior years the emphasis is placed on the question of water supply, sewerage and drainage systems; lighting, heating, and ventilation of buildings, etc., and includes the following courses: Applied Mechanics, Topographic Surveying, Bacteriology, Geology, Organic Chemistry, Water Analysis, Microscopic Examination of Water, Plain and Reinforced Concrete, Hydraulics, Heating, Plumbing and Ventilation, Steam Boilers, Lighting of Buildings, Contracts

and Specifications, Water Supply Systems, Sewerage and Drainage Systems, Sanitary Building Design, Air Analysis, and Methods of Garbage Disposal.

#### CHEMICAL ENGINEERING.

For description of the course in Chemical Engineering, see outline under Chemical Engineering and Chemistry.

## DEPARTMENTS OF INSTRUCTION.

Announcement of Courses for 1913-14.

## CIVIL ENGINEERING.

Professor McAlister.

Professor Leonard.

Assistant Professor Adams.

Assistant Professor McClain.

Students taking their major in Civil Engineering will find the proper sequence of their courses outlined below:

## FRESHMAN YEAR.

First Semester.	Hours or periods per week.
Mathematics 2 (Advanced Algebra, Trigonometry).....	5
Chemistry 1 .....	4
Drawing 1 .....	2
Shopwork 1 (Woodworking) .....	1
Shopwork 5 (Machine Shop) .....	1
English 1, 3, 4, or 5 .....	3, 2, or 1
Elective (one or two hours, depending on English).	

## Second Semester.

Mathematics 2 (Analytical Geometry) .....	5
Chemistry 1 .....	4
Drawing 1 .....	2
Shopwork 2 (Pattern Making) .....	1
Shopwork 6 (Machine Shop) .....	1
English 1, 3, 4, or 5 .....	3, 2, or 1
Elective (one or two hours, depending on English).	

## SOPHOMORE YEAR.

## First Semester.

Mathematics 4 (Calculus) .....	5
Surveying 21 .....	3
Drawing 5 (Descriptive Geometry) .....	2
Physics 2 and 3 .....	4
Elective .....	1 or 2

## Second Semester.

Mathematics 4 (Calculus) .....	5
Surveying 21 .....	3
Structural Engineering 41 (Graphic Statics) .....	2
Physics 2 and 3 .....	4
Elective .....	1 or 2

## JUNIOR YEAR.

## First Semester.

Mathematics 17 (Analytical Mechanics) .....	3
Surveying 22 (Topographic Surveying) .....	3
Railway Engineering 81 (Railroad Surveying) .....	5
Elective .....	4 or 5

\*Industrial Electricity 12 or \*Economics 3.

## Second Semester.

Mathematics 17 (Analytical Mechanics) .....	3
Surveying 22 (Topographic Surveying) .....	3
Structural Engineering 42 (Strength of Materials).....	4
Structural Engineering 43 (Stresses in Framed Structures)	3
Elective .....	2 or 3

\*Industrial Electricity 12 or \*Economics 3.

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\*Courses marked thus are suggested as electives.

## SENIOR YEAR.

## First Semester.

Structural Engineering 44 (Masonry) .....	3
Structural Engineering 46 (Bridge Design) .....	3
Hydraulic Engineering 61 (Hydraulics) .....	4
Contracts and Specifications .....	2
Elective .....	3 or 4

## Second Semester.

*Elective .....	15
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## OUTLINE OF COURSES.

## DRAWING AND ARCHITECTURE.

1. *Mechanical Drawing.* Use and care of instruments; plain lettering; elementary projections of points, lines, surfaces and solids, isometric projections; simple working drawings; shading; section lining; blue prints. Six hours in drafting room. Freshman year. Prerequisite for Engineering students. Division A. Monday and Friday 1 to 4. Division B. Tuesday and Wednesday 1 to 4. *Two hours, both semesters.*

2. *Lettering.* Extended practice in various styles of lettering commonly used on working drawings. Three or six hours in drafting room. Hours to be arranged.

*One hour, both semesters, or two hours, one semester.*

3. *Freehand Drawing.* Outline drawing, in ink and pencil, of architectural ornaments and conventionalized plant forms. Hours to be arranged. *Two hours, first semester.*

4. *History of Architecture.* A review of the conditions and motives that have given rise to the different types of architecture. Monday, Wednesday and Friday at 8. *Three hours, both semesters.*

5. *Descriptive Geometry.* Orthographic projections of points, lines and solids; traces of lines, planes, and single-curved sur-

\*Advanced courses in Structural Engineering, such as Reinforced Concrete, Advanced Bridge Design, Masonry Arches, or in Hydraulic Engineering, such as Irrigation, Water Supply, or Sewerage and Drainage; or in Railway Engineering; or in Architecture; or in Electrical and Mechanical Engineering; or work in any of the scientific or literary departments of the University, for which the student has the prerequisites.

faces; cylinder, cone, and double-curved surfaces of revolution; intersection of solids by planes and development of surfaces; intersection of solids by solids; applications. Open to students who have had course 1. Prerequisite for all Engineering students. Drafting room and lectures, six hours per week. Monday and Friday at 10. *Two hours, first semester.*

6. *Shades and Shadows.* Practical methods of finding shadows with special reference to architectural problems. Open to those who have had courses 1 and 5. Hours to be arranged.

*Two hours, second semester.*

7. *Perspective.* Analytical study of the theory and practice of perspective principles. Practical methods of application. Open to those who have had courses 1 and 5. Hours to be arranged.

*Two hours, second semester.*

8. *Orders of Architecture.* A study of the character and proportions of the five orders of architecture. Open to those who have had courses 1 and 5. Hours to be arranged.

*Two hours, both semesters.*

9. *Machine Drawing.* Form and proportions of machine details as determined by custom and empirical formulæ, rather than by considerations of theoretical design. Open to those who have had course 1. Friday at 10. *Two hours, second semester.*

10. *Details of Construction.* Scale and full-size drawings showing the methods of building construction. Details of windows, doors, exterior and interior finish, etc. Open to those who have had course 1. Thursday at 1 to 4. *Two hours, first semester.*

11. *Dwelling Design.* This course is designed to follow course 10 and comprises the drawing of plans and elevations, with a study of the arrangement and architectural effects. Writing of specifications. Thursday at 1 to 4. *Two hours, second semester.*

#### SURVEYING.

21. *Elementary Surveying.* Adjustment and use of instruments; land survey computations; reduction and platting of field notes; simple earthwork computations; mapping; differential and

profile leveling; compass surveys; azimuth traverses; stadia measurements; simple triangulation, etc. Recitations, one hour per week; field and office work, six hours per week. Open to students who have had Freshman Mathematics and course 1. Required of all Engineering students. Laboratory fee \$1.00 for course. Recitation at 3 to 4 Monday. Office practice at 1 to 3 Monday. Field practice 1 to 5 Tuesday. *Three hours, both semesters.*

22. *Topographic Surveying.* Horizontal and vertical location of points; representation of relief by contours; determination of latitude, time, azimuth and longitude; triangulation; precise leveling; reduction formulas for surveys and map projections; adjustment of errors; details of field work; map drawing. Lectures and recitations, one hour; field work, six hours per week. Open to students who have had course 21 and Calculus. Required of students in Civil Engineering. Laboratory fee \$2.00 for course. 9 to 10 Tuesday, 1 to 4 Wednesday and Friday.

*Three hours, both semesters.*

23. *Astronomical Practice.* More extended practice than can be given in course 22, in determining time, latitude, longitude, and azimuth. Additional methods are also developed. Three hours field practice. Open to those who have had course 22. 7 to 10 p. m. on day to be arranged.

*One hour, either or both semesters.*

#### STRUCTURAL ENGINEERING.

41. *Graphic Statics.* Graphic methods for solving problems in the equilibrium of rigid bodies; direct applications of the general principles are made to the determination of stresses in framed structures subject to fixed loads; of shear and bending moment in beams; and of the centroid and moment of inertia of plane areas. Open to students who have had 1 and 5. Prerequisite for all Engineering students. Monday and Friday at 10.

*Two hours, second semester.*

42. *Strength of Materials.* (a) Elements of the mathematical theory of elasticity, with applications to beams, columns, shafts, etc. Lectures and recitations, three hours per week.

(b) Testing Laboratory. Each student is required to make a series of tests of timber, wrought iron, cast iron and steel, in tension, compression, cross-bending and shear. Laboratory, three hours per week. Open to students who have had Calculus, Analytical Mechanics, and shopwork. Required of all Engineering students. Laboratory fee \$2.50. Monday, Wednesday and Thursday at 11, Tuesday at 1 to 4. *Four hours, second semester.*

43. *Stresses in Framed Structures.* Determination by graphic and analytical methods of stresses in trusses and other framed structures, including structural details. Open to students who have had Calculus and course 41, and who have had or are taking Analytical Mechanics. Required of Civil Engineering students. Monday and Thursday at 1 to 4, Friday at 11. *Three hours, second semester.*

44. *Masonry.* Materials, foundations, piers, and abutments, retaining walls, culverts, and dams. Lectures, computations, and drafting, and laboratory work in testing stone, brick, cement, etc. Open to students who have had Calculus, Analytical Mechanics, Elementary Chemistry, and courses 1, 5, and 42. Required of Civil Engineering students. Laboratory fee \$2.50. Monday at 10, Tuesday and Thursday 1 to 4. *Three hours, first semester.*

45. *Reinforced Concrete.* Theory, computation, and design of reinforced concrete beams, columns, slabs, arches, retaining walls, etc. Open to students who have had course 44. Monday, Tuesday and Thursday at 9. *Three hours, second semester.*

46. *Structural Design.* Designs, drawings, bills of materials, and estimates of cost of girders and trusses of wood and steel. Open to students who have had courses 42 and 43 and shopwork. Required of Civil Engineering students. Wednesday at 11, Wednesday and Friday at 1 to 4. *Three hours, first semester.*

47. *Advanced Bridge Design.* Courses 43 and 46 are extended to include the more complex forms of trusses, cantilever, and swing bridges for railways. Drafting and computations, lectures, and assigned reading; in all, fifteen hours per week. Open to students who have had courses 43 and 46. *Five hours, second semester.*

48. *Masonry Arches.* Computation of stresses, designs, and drawings for arches of stone, brick or concrete. Drafting room, six hours per week. Open to students who have had courses 42 and 44.

*Two hours, second semester.*

49. *Elements of Concrete Construction.* A general course in cement testing, plain and reinforced concrete, arranged especially for students who cannot take courses 44 and 45. About one-third laboratory. Open to engineering students of junior standing. Laboratory fee \$1.00. Monday at 8 to 9, Friday at 8 to 11.

*Two hours, second semester.*

#### HYDRAULIC AND MUNICIPAL ENGINEERING.

61. *Hydraulics.* Hydrostatic pressure in pipes, tanks, reservoirs, etc.; fluid motion; dynamic pressure, theoretical and empirical formulas for flow of water through orifices, over weirs; through tubes, in pipes, conduits, canals and rivers; measurements of water power, with brief reference to common waterwheels and turbines. Open to students who have had Calculus, Analytical Mechanics, and course 21. Required of Civil Engineering students. Monday, Tuesday, Thursday and Friday at 11.

*Four hours, first semester.*

62. *Hydraulic Motors.* The mathematical theory and design of modern types of reaction turbines and impulse wheels, with a brief study of centrifugal pumps. Must be preceded by course 61.

*Three hours, second semester.*

63. *Water Supply Systems.* Amount of water required; available sources of supply; storage reservoirs and dams; purification works; supply pipes and conduits; city mains and branches; pumping machinery, operation and maintenance. Lectures and recitations, two hours per week; drafting and computations, nine hours per week. Open to students who have had course 61.

*Five hours, second semester.*

64. *Elements of Water Supply Design.* Course 63 abbreviated for students who desire a general knowledge of the subject, but do not care to make a specialty of it. Lectures, drafting and

computation; in all six hours per week. Open to students who have had course 61. *Two hours, second semester.*

65. *Sewerage and Drainage Systems.* Detailed designs of systems; disposal works and drains; separate and combined systems; rainfall and run-off; estimating increase of population, sewerage per capita; ground water; grades and self cleansing velocities; use of formulas and diagrams; outfalls; disposal works. Lectures and recitations, two hours per week; computation and drafting, nine hours per week. Open to students who have had course 61.

*Five hours, second semester.*

66. *Elements of Sewer Design.* Course 65 abbreviated. Lectures, drafting and computations; in all, six hours per week. Open to students who have had Course 61. *Two hours, second semester.*

67. *Irrigation Engineering.* Hydrography, including stream measurements; rainfall and run-off; evaporation, absorption, and seepage; duty of water; sub-surface water sources, artesian wells. Canals and canal works; surveys, alignment, slope and cross sections of canals; headworks and diversion weirs; distributary canals or ditches. Storage reservoirs, location, capacity and construction; earth, loose rock and masonry dams, waste ways and outlet sluices. Pumping water for irrigation. Recitations, three hours; field work and drafting, six hours per week. Open to students who have had courses 61, 22, 42, and 44. Monday, Tuesday and Thursday at 10, Monday and Wednesday at 1 to 4.

*Five hours, second semester.*

#### RAILWAY ENGINEERING.

81. *Railway Surveying.* Reconnaissance, preliminary survey, location survey; simple curves; compound curves, transition curves; vertical curves; earthwork; switches and crossings. Recitations, two hours; field and office work, nine hours per week. Open to students who have had course 21. Required of Civil Engineering and Railway Engineering students. Monday, 8 to 5.

*Five hours, first semester.*

82. *Maintenance of Way.* Construction and maintenance of track details and minor structures. Organization and methods. Laboratory fee, \$2.50. Wednesday and Friday at 8.

*Two hours, second semester.*

83. *Railway Operation.* Yards and terminals, signals, working and wrecking trains. Relation between operating and engineering departments. *Four hours, first semester.*

84. *Economic Railway Location.* A study of the sources of income; operating expenses; distance, grades and curvature as affecting first cost; maintenance and operation; relative power of locomotives; rolling stock, train resistance, etc. Assigned readings, reports and recitations. Open to seniors or graduates who have had course 81. Monday and Thursday at 9.

*Two hours, second semester.*

85. *Railway Design.* Examination and criticism of existing railways. Inspection trip during Easter vacation. This course is preceded or accompanied by course 84, and is taken in the senior year.

*Three hours, second semester.*

86. *Roads and Pavements.* Survey and location of roads; grades; drainage; foundations; road coverings; crushed rock and gravel. Stone, wood, asphalt, and brick pavements; laying out city streets; footwalks, curbs, gutters, maintenance, repair, cleaning, and watering. The equivalent of two hours of recitations per week will be required. On the basis of three hours for each recitation replaced, outdoor work will be arranged according to the weather (perhaps on Saturdays). Open to students of senior standing.

*Two hours, both semesters.*

87. *Contracts and Specifications.* The law relating to contracts. Forms and details of engineering specifications. Tuesday and Thursday at 9.

*Two hours, first semester.*

#### SANITARY ENGINEERING.

For courses in Sanitary Engineering, see Announcement of Courses, College of Engineering.

#### LABORATORY FEES.

21. Elementary Surveying .....	\$1.00
22. Topographic Surveying, each semester .....	1.00
42. Testing Laboratory .....	2.50
44. Masonry Laboratory .....	2.50
Key deposit for Mechanical Drawing, \$1.00, refunded at the end of the course on the return of the key.	
81. Railway Surveying .....	\$2.50

## ELECTRICAL ENGINEERING.

Professor Dearborn.

Assistant Professor Converse.

Mr. Reid.

Mr. Staggs.

Mr. Baker.

The department of Electrical Engineering offers: (1) A four year course leading to the degree of B. S. in Electrical Engineering, as outlined. (2) A five year course in Hydro-electric Engineering, the extra year being largely devoted to consideration of hydraulics, hydro-electric plants, water storage, concrete construction, and topographic surveying. (3) A five year course leading to the degree of E. E., designed for the training of the professional electrical engineer, the additional work being partly in cultural and partly in advanced engineering work.

All of the above courses are based on the completion of four years of high school work and are planned with the object of meeting the needs of the State of Oregon and the Pacific Northwest, especial attention being given to the development of electricity from water power, with supplemental courses in steam and gas engines as auxiliary sources of power.

It is the object of the department to combine a reasonable amount of specialization in the last years of the course, with a thorough grounding in the fundamentals during the earlier years. In carrying out this plan the department endeavors to make the mathematic and scientific courses strong in the earlier years and to supplement them by courses in drawing and shop practice. Theses are required of all graduates and usually take the form of investigation of engineering problems, design and construction of apparatus, power plant tests, etc.

The following courses in Electrical Engineering are offered.

In connection with these, the student takes courses as follows:

Advanced Algebra, Trigonometry, Analytical Geometry, Calculus in Mathematics; Course 1 in Chemistry; General Physics, Electricity and Magnetism, and Electrical Testing in Physics; Mechanical Drawing, Descriptive Geometry, Surveying, Machine Design, in Civil Engineering. The student is at liberty to elect courses in other departments for which he may be prepared and according to the time at his disposal.

An outline of the courses in Electrical Engineering is given below to indicate a suitable sequence:

FRESHMAN YEAR.

First Semester.

Mathematics 2 .....	5 hours
Physics for Engineers 2.....	3 hours
Physical Measurements 3.....	1 hour
English Composition 1.....	3 hours
Mechanical Drawing, C. E. 1.....	2 hours
Wood Shop 1.....	1 hour
Forge Work 3.....	1 hour

Second Semester.

Mathematics 2 .....	5 hours
Physics for Engineers 2.....	3 hours
Physical Measurements 3.....	1 hour
Mechanical Drawing, C. E. 1.....	2 hours
Pattern Making 2.....	1 hour
Forge Work 3.....	1 hour

SOPHOMORE YEAR.

First Semester.

Mathematics 4 .....	5 hours
Chemistry 1 .....	4 hours
Electrical Engineering 11.....	2 hours
Physics 12 .....	2 hours
Descriptive Geometry, C. E. 5.....	2 hours
Machine Shop 5.....	1 hour

## Second Semester.

Mathematics 4 .....	5 hours
Chemistry 1 .....	4 hours
Electrical Engineering 11 .....	2 hours
Physics 13 .....	2 hours
Machine Drawing, C. E. 9.....	2 hours
Machine Shop 6 .....	1 hour

## JUNIOR YEAR.

## First Semester.

Direct Current Machinery 14.....	4 hours
Steam Engines and Boilers 32.....	2 hours
Mechanics for Electrical Engineers 26.....	4 hours
Elementary Surveying 21 .....	3 hours
Direct Current Laboratory 15.....	1 hour
Steam Laboratory 33 .....	1 hour

## Second Semester.

Alternating Current Machinery 16.....	4 hours
Steam Engines and Boilers 32.....	2 hours
Mechanics for Electrical Engineers 26.....	4 hours
Elementary Surveying, C. E. 21.....	3 hours
Alternating Current Laboratory 17.....	1 hour
Mechanical Laboratory 33.....	1 hour

## SENIOR YEAR.

## First Semester.

Electrical Engineering 18.....	4 hours
Alternating Current Motors 25.....	2 hours
Electric Lighting 21.....	2 hours
Internal Combustion Motors 38.....	2 hours
Alternating Current Laboratory 19.....	1 hour
Optional .....	5 hours

Second Semester.

Electrical Engineering 18.....	4 hours
Electrical Railways 16.....	2 hours
Telegraphy and Telephony 22.....	2 hours
Internal Combustion Motors 38.....	1 hour
Gas Engine Laboratory 39.....	1 hour
Alternating Current Laboratory 19.....	1 hour
Optional .....	5 hours

1. *Woodworking.* Use and care of tools. Mitering, wood-turning. Three hours a week in the shops. Monday, Wednesday or Thursday, 1 to 4. *One hour, one semester.*

2. *Pattern Making.* Selection of woods. Core boxes; draft, shrinkage, etc. Three hours a week in the shops. Monday, Wednesday or Thursday, 1 to 4. *One hour, one semester.*

3. *Forge Work.* Forging, welding, tool-dressing, tempering, annealing. Three hours a week in the shops. Friday, 1 to 4; or Saturday, 8 to 11. *One hour, two semesters.*

5. *Machine Shop.* Bench work, chipping, filing, etc. Three hours a week in the shops. Monday, Tuesday or Friday, 1 to 4. *One hour, one semester.*

6. *Machine Shop.* Exercises on lathes, shaper, planer, milling machine, drill press, etc. Three hours a week in the shops. Monday, Tuesday or Friday, 1 to 4. *One hour, one semester.*

7. *Machine Shop.* Construction and erection of apparatus and machines. Three hours a week in the shops. Prerequisites, Courses 5 and 6. Monday, Tuesday or Friday, 1 to 4. *One hour, both semesters.*

8. *Shop Lectures.* Given at various times in connection with the shop work.

10. *Electricity.* A brief general course for non-engineering students, designed to cover the simpler applications of electricity to lighting, heating, and power. Open to all students. Hour to be arranged. *One hour, one semester.*

11. *Electrical Engineering.* An introductory course for Electrical Engineers designed to lay the foundation for further analytical work. Monday and Tuesday at 10.

*Two hours, both semesters.*

12. *Industrial Electricity.* A general course in direct and alternating currents, with a minimum of theory, designed with especial reference to the application of electricity to industrial operations. Open to students of junior standing. Wednesday and Friday at 9.

*Two hours, second semester.*

13. *Electrical Laboratory.* Industrial. A brief course given in connection with Course 12. Three hours in the laboratory. Hours to be arranged.

*One hour, second semester.*

14. *Direct Current Machinery.* Theory and design of series, shunt, and compound direct current dynamos and motors. Discussion of construction and operation of direct current machinery and its application to electric lighting and power. Prerequisites, Course 4 Mathematics, and Courses 2 and 3 Physics. Monday, Tuesday, Thursday, and Friday at 11.

*Four hours, first semester.*

15. *Electrical Laboratory.* Direct current. A laboratory course for the experimental study of direct current dynamos and motors; their operation, characteristic curves, and efficiencies. Taken in connection with Course 14. Three hours in the laboratory. Wednesday, 1 to 4.

*One hour, first semester.*

16. *Alternating Current Machinery.* The theory of generation of single phase and polyphase alternating currents. Graphic problems, measurement of power, theory of transformers, rotary converters, synchronous and induction motors. Prerequisite, Course 14. Monday, Tuesday, Thursday, and Friday at 11.

*Four hours, second semester.*

17. *Electrical Laboratory.* Alternating current. Laboratory tests of single and polyphase generators, induction and synchronous motors, transformers, frequency changers, etc. Taken in connection with Course 16. Three hours in laboratory. Wednesday, 1 to 4.

*One hour, second semester.*

18. *Electrical Engineering*. Power plants, transmission lines, substations and distribution systems. Prerequisites, Courses 14 and 16. Monday, Tuesday, Thursday, and Friday at 11.

*Four hours, both semesters.*

19. *Electrical Laboratory*. Advanced laboratory work, largely on alternating current machinery. Prerequisite, courses 15 and 17. Three hours in laboratory. Thursday, 1 to 4.

*One hour, both semesters.*

20. *Street Railways*. A course in street railway design, construction, operation, and economics. Prerequisite, Courses 14 and 16. Tuesday and Wednesday at 9.

*Two hours, second semester.*

21. *Electric Lighting*. A study of the various electric illuminants and their adaptations to exterior and interior lighting. Open to students of junior standing. Monday and Thursday at 9.

*Two hours, first semester.*

22. *Telegraphy and Telephony*. Fundamental principles of electric signalling, examples of modern commercial practice and experimental work. Prerequisite, Courses 11, 12, or 14. Monday and Thursday at 9.

*Two hours, second semester.*

24. *Electrical Problems*. Problems in Direct and Alternating Currents. Hour to be arranged.

*One hour, first semester.*

25. *Alternating Current Motors*. A complete discussion of the various types of alternating current motors. Prerequisite, Course 14. Tuesday and Wednesday at 9.

*Two hours, first semester.*

26. *Mechanics for Electrical Engineers*. A course including the principles of Graphic Statics, Mechanics, Materials and the Elements of Hydraulics. Prerequisites, Mathematics 4, and Physics 2 and 3. Monday, Tuesday, Thursday, and Friday at 10.

*Four hours, both semesters.*

28. *Thesis*. Preliminary reading and investigation is done during first semester. Subjects must be chosen and approved before the first Monday in November.

*Two to four hours, second semester.*

29. *Inspection Trip.* A trip to the principal power plants and industrial centers of the Northwest, taken during Easter vacation every other year. Required.

30. *Prime Movers.* A course in the practical adaptations of steam engines, boilers, pumps, gas and gasoline engines, steam turbines, etc., to general engineering work. Open to students of junior standing. Wednesday and Friday at 9.

*Two hours, first semester.*

31. *Mechanical Laboratory.* Prime movers. A brief course given in connection with Course 30. Three hours in laboratory. Tuesday, 1 to 4.

*One hour, first semester.*

32. *Steam Engines and Boilers.* The theory, construction, and operation of the best types of engines and boilers. A study of valve gears, steam distribution, regulation of engines. Fuel determination. Discussion of condensers, mechanical stokers, and chimneys. Prerequisite, Course 4 in Mathematics, and Courses 2 and 3 in Physics. Monday and Wednesday at 8.

*Two hours, both semesters.*

33. *Steam Laboratory.* Experiments chiefly in Steam Engineering. Engine, boiler, and pump tests. Indicators; dynamometers; fuel calorimetry; valve setting; flue gas analysis. Three hours in laboratory. Taken in connection with Course 31. Thursday, 1 to 4.

*One hour, both semesters.*

34. *Steam Turbines.* The theory, construction, operation and comparison of best types. Discussion of fields occupied by steam turbine and engine. Prerequisites, Mathematics 4, Physics 2 and 3, and first semester Course 32. Hours to be arranged.

*Two hours, first semester.*

36. *Steam Power Plants.* Including selection and installation of equipment. Hour to be arranged.

*One hour, first semester.*

38. *Internal Combustion Motors.* Their theory, construction and operation will be considered in detail. Prerequisites, Mathematics 4, and Physics 2 and 3. Tuesday and Thursday at 8.

*Two hours, first semester.*

*One hour, second semester.*

39. *Gas Engine Laboratory.* Experiments on gas and gasoline engines. Taken in connection with Course 38. Three hours in the laboratory. Wednesday, 1 to 4. *One hour, second semester.*

SHOP AND LABORATORY FEES.

Three dollars a semester for each course in shops and laboratories.

HYDRO-ELECTRICAL ENGINEERING.

A five-year course in Hydro-Electrical Engineering is offered in connection with the department of Civil Engineering. The first three years are identical with the regular course in Electrical Engineering. The following schedule is offered for the fourth and fifth years:

FOURTH YEAR.

First Semester.

Hydraulics, C. E. 61.....	4 hours
Topographic Surveying, C. E. 22.....	3 hours
Alternating Current Motors 25.....	2 hours
Alternating Current Laboratory 19.....	1 hour
Internal Combustion Motors 38.....	3 hours
Elective .....	3 hours

Second Semester.

Strength of Materials, C. E. 42.....	4 hours
Topographic Surveying, C. E. 22.....	3 hours
Telegraphy and Telephony 22.....	2 hours
Alternating Current Laboratory 19.....	1 hour
Internal Combustion Motors 38.....	2 hours
Gas Engine Laboratory 39.....	1 hour
Elective .....	3 hours

## FIFTH YEAR.

## First Semester.

Electrical Engineering 18 .....	4 hours
Masonry 44 .....	3 hours
Contracts and Specifications, C. E. 81.....	2 hours
Economics 1 .....	3 hours
Elective .....	3 hours

## Second Semester.

Electrical Engineering .....	4 hours
Reinforced Concrete, C. E. 45.....	3 hours
Economics 1 .....	3 hours
Thesis .....	4 hours
Elective .....	4 hours

## CHEMICAL ENGINEERING.

Professor Stafford.

Assistant Professor Shinn.

With the refined industrial development of late years and its accompanying closer competitive conditions there has arisen the necessity for a scientific control of industrial processes in order that greater economies than heretofore have been attainable may be secured. As a consequence, many industries which since time immemorial have been conducted upon a rule-of-thumb basis are requiring men with scientific training for help in their problems.

The man who can be of most help under such circumstances must be familiar not only with the scientific aspects of the work in question, but must have the ability to see the connection between the process and the material equipment necessary for carrying it on to the best advantage. In the electrical industry, for example, the man who secures results must have a happy combination of theoretical physics, upon the one hand, which will enable him to

picture vividly in his mind all the various manifestations of lines of force, etc., and of mechanical constructive ability, upon the other hand, which will enable him to build a machine capable of utilizing to the utmost possible practical degree the effects which these lines of force are able to produce.

The Chemical Engineer is the outcome of the effort to combine in a single person the functions of chemist and constructing engineer, just as the Electrical Engineer is the combination of specialized physicist and constructing engineer. He should be able to devise and construct machinery for carrying out any process involving chemical action. If he has at the same time administrative ability he is the one best fitted for the superintendency of industrial plants.

The variety of such plants is large, and is continually increasing. It is impossible to enumerate all of the lines requiring chemical control, but below are representative ones, any of which will admit of almost unlimited specialization.

- Acids.
- Alcohol.
- Alkalis.
- Ammonia.
- Bleaching.
- Chemicals.
- Clay Products.
- Coal Tar and its Derivatives.
- Coke.
- Copper.
- Electric Furnace Products.
- Electrometallurgy.
- Explosives.
- Fertilizers.
- Foods.
- Glass.
- Glycerine.
- Illuminating and Heating Gas.
- Iron and Steel.

Lead.  
Leather.  
Lime, Cements, Plasters.  
Oils, Varnishes, etc.  
Paper.  
Petroleum and its Derivatives.  
Pigments and Paints.  
Sewage Disposal.  
Soap.  
Soda.  
Starch.  
Sugar.  
Water Purification.  
Wood Distillation.  
Zinc and other Metals.

The purpose of the course in Chemical Engineering as given at any good school is to impart the necessary academic training which shall then serve as the basis of future practical work. More or less apparatus is at hand, to be sure, which is the same as that used in practical work, and the endeavor is to increase its amount. In the four years available for school work, however, there is scarcely time for the absolutely essential class-room work, so that time for practice upon a technical scale to any very great extent is out of the question, however good the equipment for such work may be. It is the concensus of opinion among men highest in the industrial affairs of this country that the four years in school should be given over almost exclusively to the academic side of the training of the Engineer, and that his real practical training should be secured in the industrial plant itself.

The equipment of the Chemical Laboratories for the regular work in Chemistry is unusually fine. Three well-ventilated and well-lighted laboratories are available for student use, besides a commodious lecture room, weighing rooms, store rooms, etc. All apparatus is chosen with a view to the exemplification of the very latest developments in the subject, and the amount supplied to each student is limited only by his own desires in the matter.

Numerous laboratory conveniences, such as gas, water, steam, compressed air, vacuum, furnaces, balances, electricity, hydrogen sulphide mains, electrically exhausted fume closets, etc., are at the disposal of every one.

In the fourth year of the Chemical Engineering course special courses in Chemistry are offered bearing more directly upon industrial problems. Much of the equipment for these courses is identical with that used upon a technical scale, including bomb calorimeters, apparatus for electro chemical measurements and technical processes, the refining of chemicals, etc.

The equipment in the purely Engineering subjects is described elsewhere. It includes testing laboratories, shops, drafting rooms, and so on, all well supplied with apparatus, which in many instances is to be equaled only in a few of the very largest schools of the country.

#### THE COURSE OF STUDY.

The subjects pursued in the course in Chemical Engineering are grouped around the two main lines which the course contemplates—Chemistry and Engineering.

In Chemistry the work starts with a thorough general survey of the subject as given in Course 1; continues with a year of analytical work, qualitative and quantitative; and then in succession follow Organic Chemistry, Physical Chemistry, Advanced Analysis, Electro-Chemistry, and finally the technical courses.

The beginning of the Engineering work is made in drafting and shop work, which are followed as soon as sufficient mathematical training has been acquired, by the higher technical courses.

As preparatory for, or adjunctive to these main lines of study are Mathematics and Physics, and at the same time there is useful variation from the purely engineering or chemical work in a course or two in Languages and Economics.

Two years in a foreign language, German or French preferred, must be offered to fulfill the language entrance requirement for the course in Chemical Engineering.

The following is the course of study:

FRESHMAN YEAR.

First Semester.

Mathematics 2 .....	5 hours
Chemistry 1 .....	4 hours
German 10, or French 5.....	2 hours
Physics 2 .....	3 hours
Physics 3 .....	1 hour

Second Semester.

Mathematics 2 .....	5 hours
Chemistry 1 .....	4 hours
English Composition 1.....	3 hours
Physics 2 .....	3 hours
Physics 3 .....	1 hour

SOPHOMORE YEAR.

First Semester.

Drawing 1 .....	2 hours
Chemistry 3 .....	4 hours
Mathematics 4 .....	5 hours
Shop 1 .....	1 hour
Economics 6 .....	3 hours

Second Semester.

Drawing 1 .....	2 hours
Chemistry 4 .....	4 hours
Mathematics 4 .....	5 hours
Shop 1 .....	1 hour
To be arranged .....	3 or 4 hours

JUNIOR YEAR.

First Semester.

Organic Chemistry 5.....	4 hours
Physical Chemistry 16.....	4 hours
Analytical Mechanics 7.....	3 hours
Descriptive Geometry 5.....	2 hours
Shop 5 .....	1 hour
Electrical Engineering 11.....	2 hours

Second Semester.

Organic Chemistry 5.....	4 hours
Inorganic Chemistry 10.....	4 hours
Analytical Mechanics 17.....	3 hours
Graphic Statics 41.....	2 hours
Shop 5 .....	1 hour
Electrical Engineering 11.....	2 hours

SENIOR YEAR.

First Semester.

Analytical Chemistry 12.....	3 hours
Industrial Chemistry 14.....	3 hours
Metallurgy .....	3 hours
Chemical Engineering 19 .....	2 hours
Machine Drawing 9 .....	2 hours
Sanitary Chemistry 21.....	2 hours
Thesis.	

Second Semester.

Industrial Chemistry 14.....	3 hours
Electro Chemistry 18.....	2 hours
Business Law .....	2 hours
Machine Drawing 9 .....	2 hours
Strength of Materials 42.....	4 hours
Thesis.	

**SCHOOL OF EDUCATION.****FACULTY**

- P. L. CAMPBELL, B. A., President of the University.  
FRED CARLETON AYER, M. S., M. A., Dean of School of Education  
and Professor of Education.  
FRANKLIN L. BARKER, E. M., Professor of Geography.  
JOHN FREEMAN BOVARD, M. S., Professor of Zoology.  
WILLIAM PINGRY BOYNTON, Ph. D., Professor of Physics.  
ROBERT CARLTON CLARK, Ph. D., Professor of History.  
ARTHUR JAMES COLLIER, M. A., Professor of Geology.  
EDMUND S. CONKLIN, Ph. D., Assistant Professor of Psychology.  
EDGAR EZEKIEL DECOU, M. S., Professor of Mathematics.  
FREDERIC STANLEY DUNN, M. A., Professor of Latin.  
JAMES HENRY GILBERT, Ph. D., Assistant Professor of Economics.  
MONTANA HASTINGS, B. A., Assistant Professor of Education.  
HERBERT CROMBIE HOWE, B. A., Professor of Modern English Literature.  
ARCHIBALD FERGUSON REDDIE, B. A., Professor of Public Speaking.  
JOSEPH SCHAFER, Ph. D., Professor of History.  
FRIEDRICH GEORG G. SCHMIDT, Ph. D., Professor of German.  
FREDERICK LAFAYETTE SHINN, Ph. D., Assistant Professor of  
Chemistry.  
WILLIAM SMITH, Ph. D., Assistant Professor of Mathematics.  
ORIN FLETCHER STAFFORD, B. A., Professor of Chemistry.  
BERTHA STUART, M. D., Director of Women's Gymnasium.  
ALBERT RADDIN SWEETSER, M. A., Professor of Botany.  
EDWARD ALLEN THURBER, M. A., Professor of Rhetoric and American Literature.  
FREDERICK GEORGE YOUNG, B. A., Professor of Economics and  
Sociology.

## ORGANIZATION.

The School of Education of the University of Oregon was authorized by the Board of Regents in February, 1910. The general purpose of the school is to organize and correlate all the forces of the University which have for their ultimate aim the growth of educational efficiency in the State of Oregon. This work is done through the effective grouping of courses for teachers in the regular college curriculum, through the Summer School, the Correspondence School, and through investigation of questions of importance to the State and publication of results in bulletin form.

## COURSES FOR TEACHERS.

The University, by means of the School of Education, is prepared to train teachers for the following classes of positions:

1. High school subjects and departments. For courses see following pages.
2. Superintendencies, principalships, and administrative positions. For courses see following pages.
3. Special teachers of music and physical training. For courses see following pages.

## SUMMER SCHOOL.

Beginning in the latter part of June of each year, the University conducts a summer school of six weeks in length, the chief aim of which is to furnish the superintendents, principals, and high school teachers of the State the courses needful in their work. Special lecturers of eminence are secured to keep the work fully abreast of the times. Bulletins fully describing the work of the summer school will be mailed to all those who apply.

## CORRESPONDENCE COURSES.

For the last three years the University has operated a correspondence school which enables energetic principals and teachers at a distance from the University to carry on studies under the direct

supervision of the University departments. A circular containing the details of this division will be sent on application to the Correspondence-Study Department.

#### BULLETINS ON EDUCATIONAL SUBJECTS.

One of the important functions of the School of Education is the publication of studies on educational conditions and problems. In the last five years, such studies have been made and published on normal school systems in the United States, high school systems in the United States, the county high school fund plan, county normal schools in other states, statistical study of Oregon high schools, and a select bibliography of nature study. These bulletins will be sent from the University to those interested in the subjects upon application.

#### ADMISSION TO SCHOOL OF EDUCATION.

The requirements for admission to the School of Education are the same as those for admission to the College of Literature, Science, and the Arts, viz., fifteen units, representing completion of a four years' high school course. Persons more than twenty years of age and properly qualified may enter the University as special students without complying with the above requirement, but no such student may be a candidate for a degree or University teacher's certificate until all entrance deficiencies are made up.

#### GRADUATION.

The degree Bachelor of Arts is conferred upon students of the School of Education who have secured 120 hours of college credit, exclusive of eight semester hours required in physical training and including the work required by the major professor.

#### CERTIFICATES ON GRADUATION FROM UNIVERSITY.

Certificates shall be issued to graduates from standard colleges or universities who have completed one hundred and twenty

(120) semester hours, including fifteen (15) semester hours in education as follows:

1. One-year State certificates shall be issued without examination, upon application, to such graduates of standard colleges and universities, authorizing them to teach only in the high schools of this State.

2. The holder of a one-year State certificate issued in accordance with the provisions of this section shall, after six months' successful teaching experience in this State and upon the recommendation of the county superintendent of the county in which the applicant last taught, receive, without examination, a five-year State certificate authorizing him to teach only in the high schools of this State.

3. The holder of a five-year State certificate issued in accordance with the provisions of this section shall, after thirty months' successful teaching experience in this State and upon the recommendation of the county superintendent of the county in which the applicant last taught, receive, without examination, a State life certificate authorizing him to teach only in the high schools of this State.

4. The holder of a one-year State certificate, or a five-year State certificate, or a life State certificate, secured in accordance with the provisions of this section is hereby authorized to act as a city superintendent of schools of any city.

Fees are as follows, payable to the State Superintendent of Public Instruction:

One-Year certificate .....	\$2.00
Five-Year certificate (after six months' teaching) ..	4.00

**TEACHERS' EMPLOYMENT BUREAU.**

The School of Education maintains a bureau for the registration of academic and professional records of Oregon alumni and recommends candidates for vacancies. In recent years the bureau has had many positions to fill for which suitable candidates could not be found. This is particularly true of positions calling for men. The bureau aims to assist alumni of the University of Oregon only,

and charges no fee for its services. All principals or school boards desiring teachers are requested to correspond with Dean Fred C. Ayer, chairman of the Committee on Appointments.

#### EQUIPMENT.

The equipment available for students in the School of Education consists of the following:

1. Collection of late eighteenth and early nineteenth century text-books, 100 volumes.
2. Collection of contemporary texts, elementary and high school, 800 volumes.
3. Collection of state, city school reports, college, and other catalogues, 1,200 volumes.
4. Collection of sources of educational history 1815-1850, 200 volumes.

A special club room has been provided where the collections and the contemporary literature will be at the service of the students.

#### REQUIRED COURSES BY DEPARTMENTS, FOR HIGH SCHOOL TEACHERS.

The following list of the courses of study necessary to fully equip teachers in the different high school subjects represents the irreducible minimum which the department in question considers necessary to insure efficient teaching. Under ordinary conditions, no student will be recommended for a position in any fully developed high school who has not carried successfully in his college course all the work outlined. Exceptions may be made of small, newly developed high schools where the candidate must of necessity teach a large variety of subjects. In schools of this class where the faculty is limited to three teachers or less, students will not be recommended unless they have taken successfully at least twelve semester hours in the subject to be taught above the work done in a high school. In foreign languages students to secure recommendations must have taken at least four

years' work of which two years must have been completed in a college or university.

It is quite feasible, however, for students, during the four-year course, to fit themselves for teaching more than one subject. While the demand for teachers in the different subjects fluctuates from year to year, there are certain strong tendencies evident in all the western universities, one of which is toward an over-supply of teachers in English and History, and a scarcity of teachers in Physics and Mathematics. Some suggested combinations are the following:

Latin-German-English.

Mathematics-Physiology and Botany-Geology (physical geography).

German-Latin-History.

#### BOTANY.

Elementary Botany 1 and 2, four hours, both semesters, freshman and sophomore year.

Structural Botany 3 and 4, three hours, both semesters, sophomore or junior year.

General Biology 9, two hours, both semesters, junior or senior year.

#### CHEMISTRY.

General Chemistry 1, four hours, both semesters, freshman year.

Analytical Chemistry 3, four hours, both semesters, sophomore year.

Organic Chemistry 5, three hours, both semesters, junior year.

Teaching of Chemistry, one hour, both semesters, senior year.

#### ENGLISH.

English Composition 1, Prof. Thurber, three hours, both semesters, freshman year.

Outlines of English Literature 1, three hours, both semesters, Prof. Howe, freshman year.

Rhetoric 2, Prof. Thurber, three hours, both semesters, sophomore year.

Additional course in Modern English Literature, Prof. Howe, three hours, both semesters, sophomore or junior year.

Course in methods of teaching English, Professors Thurber and Howe, senior year.

#### GEOLOGY.

Elementary Geology, three hours, both semesters, freshman or sophomore year.

Identification of Minerals, two hours, both semesters, sophomore or junior year.

Methods of teaching Geology and Physical Geography, one hour, second semester, senior year.

#### GERMAN.

Elementary German, five hours, both semesters, freshman year.

Advanced German, four hours, both semesters, sophomore year.

German Classical Drama, three hours, both semesters, junior or senior year.

German Fiction and Contemporary Literature, three hours, both semesters; or

The Nineteenth Century Novel, three hours, both semesters, junior or senior year.

The Teaching of German, two hours, one semester, senior year.

#### HISTORY.

History of England, Prof. Clark, three hours, both semesters, freshman year.

Greek and Roman History, Prof. Clark, three hours, both semesters, sophomore year.

Early American History, Prof. Schafer, three hours, both semesters, sophomore year.

Medieval History, or Modern History, Prof. Clark, three hours, both semesters, junior year.

Later American History, Prof. Schafer, three hours, both semesters, junior year.

Historiography, Prof. Schafer, two hours, both semesters, senior year.

Methods of Teaching History, Professors Schafer and Clark, senior year.

### LATIN.

A minimum of six years' preparation and as much more as can be obtained in the ordinary college course are requisite for teaching Latin. This would, of course, include the usual four years of high school or academy Latin, covering the uniform reading in Cæsar, Cicero, and Vergil, with supplementary work in Ovid and Sallust and composition. Of these first four years the University offers the latter two, *i. e.*, the courses in Cicero and Vergil. Four years more are recommended, and, if not four, at least two. The work in these four years is so arranged that a wide range of reading is offered, the instructor reserving the right to vary the program from year to year.

*Fifth Year*—Cicero's *de Senectute*, Vergil's *Eclogues*, a play of Plautus, Horace's *Odes*, Sallust's *Jugurtha*, selections from Catullus and Tibullus.

*Sixth Year*—Horace's *Satires and Epistles*, a book of Livy, Ovid's *Tristia*, a play of Terence, selections from Pliny and Martial.

*Seventh Year*—Roman life from Cicero's *Letters and Orations*, Roman History from Tacitus and Livy.

*Eighth Year*—Roman literary criticism from Quintilian and other authors, Roman philosophy from Lucretius and Cicero.

### MATHEMATICS.

Advanced Algebra, Trigonometry, Analytical Geometry, five hours, both semesters, freshman year.

Differential and Integral Calculus, three hours, both semesters, sophomore year.

Differential Equations, two hours, both semesters, junior or senior year.

Determinants and Theory of Equations, three hours, one semester, junior or senior year.

History and Teaching of Mathematics, one hour, both semesters, senior year.

### PHYSIOLOGY.

Invertebrate Zoology, three hours, both semesters, freshman or sophomore year.

Elementary Physiology, two hours, first semester.

Nature Study, three hours, second semester.

### PHYSICS.

For teachers of Physics in large high schools a considerable election of fundamental courses in Mathematics and Chemistry.

(a) Courses general and fundamental.

General Physics. A review of the fundamentals of the subject, co-ordinating its various parts as a basis for advanced courses, three hours, both semesters.

Physical Measurements. A general laboratory course accompanying Course 1, one hour, both semesters.

History of Physics, one hour, first semester.

Teaching Physics, one hour, first semester.

(b) Advanced or specialized courses.

Electrical Measurements. Especially intended for electrical engineers, but valuable to teachers both for the new ground covered and the introduction to precise methods. Two hours, both semesters.

Thermodynamics. The theory of heat considered simply as a form of energy. Three hours, first semester.

Molecular Physics. A more detailed study of the relation between heat and energy, and of the constitution of matter. Three hours, second semester.

Theory of Light, three hours, either semester.

Advanced Laboratory, from one to four semester hours.

For a rigorous course, work should be selected from the above advanced courses making a total of not less than 20 semester hours in the department.

For a more descriptive course, some of the lecture courses, 4, 5, 6, 7, may be included in the electives, with partial credit only.

### **COURSE IN EDUCATION FOR HIGH SCHOOL TEACHERS.**

The courses in Education for high school teachers fall into the following groups:

1. Courses in methodology offered by the different departments. Credit in Education as part of the fifteen semester hours required for a teacher's certificate may be gained, to the extent of four semester hours, by registering for any of the following courses:

Botany 12, one hour a week, one semester.

English 62, one hour a week, both semesters.

German 11, two hours a week, one semester.

Geology 11, one hour a week, one semester.

History.

Latin 31-32, two hours a week, both semesters.

Mathematics 7-8, one hour a week, both semesters.

Physics 8-9, one hour a week, both semesters.

2. Courses treating of the principles, history, and fundamental basis of education, as follows:

Education 1, Principles of Education, 2 hours.

Education 2, History of Education, three hours each semester.

Education 3 and 4, Psychology and Education, three hours each semester.

3. Courses dealing with the practical side of high school work other than the methodology of particular subjects:

Education 10, Principles of Secondary Education, Observation Work and School Management as applied to Secondary Schools, three hours, one semester.

Education 12, Practice Teaching, five hours, one semester.

Students expecting to teach in the high school should ordinarily take two or three courses in group 1, at least one year course in group 2, and both courses in group 3.

## COURSE FOR SUPERINTENDENTS, PRINCIPALS, ETC.

*Freshman Year*—English Composition, three hours.

*Sophomore Year*—\*Psychology, three hours. \*Economics, three hours, Early American History, three hours. Education 1, two hours.

*Junior Year*—History of Education, three hours. Educational Psychology and Child Study, three hours. Later American History, three hours.

*Senior Year*—\*School Administration—Organization of Curricula, three hours. Principles of Secondary Education; Practice Teaching, four or five hours. Sociology, two hours. Thesis, one hour.

A student may combine the above course with one or possibly two of the high school groups and thus prepare himself for some specific department in a high school, besides securing a general training in pedagogy which will be essential to him later on in his career.

## SPECIAL COURSE FOR MUSIC TEACHERS.

It is within a comparatively short period that the necessity of special training for teachers of music has been realized, though schools affording such opportunities to teachers in other subjects have long been acknowledged as necessary. In recognition of this need, an opportunity will be given teachers to get such training in the School of Music.

The purpose of a normal department is to give the student of music a mental, musical, and technical education that will equip him for teaching, and which will be at the same time invaluable to musicians who wish to have more than a superficial knowledge of their art.

*First Year*—Music (piano, voice, or violin), two hours. German (Italian for voice), five hours. Literature, three hours. English, three hours. Elocution, one hour. Personal Hygiene, one hour. Physical Training.

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\*The courses starred may be taken by correspondence.

*Second Year*—Music (piano, voice, or violin), two hours. Harmony (preparatory), one hour. German, four hours. English, three hours. Literature, three hours. Elocution, one hour. Physical Training.

*Third Year*—Music (piano, voice, or violin), two hours. Sight Singing, one hour. Harmony, one hour. History of Music, one hour. Psychology, three hours. Physics, one hour. French, five hours. Teaching Music, one hour. Physical Training.

*Fourth*—Music (piano, voice, or violin), two hours. Sight Singing, one hour. Education 3 and 4, three hours. Harmony, one hour. History of Music, one hour. Elocution, one hour. Teaching music, five hours. Physical Training.

#### **SPECIAL COURSE FOR TEACHERS OF GYMNASTICS.**

*Freshman Year*—French or German, five hours. English Composition, three hours. Botany, four hours. Public Speaking, one hour. Personal Hygiene.

*Sophomore Year*—Physics (1), four hours. French or German (2), four hours. Zoology (1 and 2), three hours. Psychology (1), three hours.

*Junior Year*—Histology, three hours. Osteology, two hours. Chemistry, four hours. Education (3 and 4), three hours. Bacteriology, two hours. Theory of Gymnastics and Playground, two hours.

*Senior Year*—First semester: Physiology, four hours. School Hygiene, two hours. Corrective Gymnastics, three hours. Art of Teaching Gymnastics, two hours. Symptomatology, one hour.

Second semester: Physiology, four hours. Sanitary Hygiene, two hours. Special Physiology, three hours. Anthropometry, two hours. Emergencies and Bandages, one hour.

#### **SPECIAL COURSE FOR TEACHERS OF ATHLETICS.**

For men who desire the ability of training athletic teams in connection with high school teaching. Juniors or Seniors, one hour each semester. Mr. Hayward.

## SUMMER SCHOOL

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### FACULTY.

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The faculty of the summer session consists of the President of the University and of the professors and assistant professors giving instruction therein.

The annual summer session of the University of Oregon opens on the Monday following Commencement Week and lasts six weeks, closing about August 1st.

### PURPOSE.

The purpose of the University in offering this six weeks' summer term is to extend to those who are otherwise engaged during the school year the advantages which the University offers for instruction, together with the aid afforded by the library, laboratories, and other facilities for study connected with the University. Special effort is made in all departments to make the work of real, practical benefit to those who are actually engaged in teaching. The greater number of summer school students are teachers. An excellent opportunity is given superintendents, principals, and teachers to meet those from other parts of the State to their mutual benefit. High school teachers are enabled to make special study in lines in which they are most interested and to meet and work with others doing university research along similar lines. The summer session offers a means of keeping abreast of the latest developments in their subjects.

The opportunity for practical laboratory work is also a valuable adjunct to the summer session. Every opportunity is offered for instruction in laboratory methods, and the matter of practical high school equipment is given special attention.

There is also an increasing number of college students who each year take advantage of the summer session. It enables them to take work for which they do not have time during the regular session and to make up work which for any reason they have missed or in which they have deficiencies.

Students who are preparing to enter the freshman class in the fall will find this an excellent opportunity to become acquainted with the methods pursued at the University. Credits to satisfy entrance requirements may be substituted in a number of summer school subjects.

Persons who are hoping to enter the University for regular work at some future time will also find this an excellent opportunity to become acquainted with the institution, its spirit and methods.

#### TERMS OF ADMISSION.

The matriculation requirements for persons who desire University credit are in general the same for the summer session as for other sessions of the University, yet, in view of the special appeal which a summer session makes to the large class of teachers, for many of whom this is the only opportunity to do some college work, the following slight modifications of the rules will be permitted under the conditions stated:

(a) Any person who has taught or is authorized to teach a school in this State for the period of one year, under a regular certificate, is entitled to the privileges of the University Summer Session whether or not he has attained the adult age of 20 years.

(b) The question whether or not work in the Summer Session can be found which will meet a particular person's needs can be best determined in consultation, by correspondence or otherwise, with the University authorities. We suggest that any teacher who is looking forward to a University education (either for the sake of fitting for general high school teaching or for other purposes), and who would like to make a beginning on such a course as soon as possible, write a letter to the Director of the Summer School giving as full and clear an account as possible of his preparation under the following heads:

1. The kind of certificate he holds, when secured, the grade made in each subject, and the amount of teaching experience he has had.

2. What secondary school subjects, aside from those certified, he has studied, in what manner (whether in school or otherwise), and to what extent; always giving grades if possible. Note general reading—literary, historical, scientific, religious, etc.

3. What college subjects he desires to pursue at the Summer School and for what purpose.

The Director will consider the information contained in such letter and will write his opinion as to whether or not the applicant would be likely to find profitable work at the University Summer School. If the applicant seems prepared to take up one or two subjects successfully, he will be welcomed; and if he convinces his instructors that the work done in the session is of satisfactory quality, he will be credited with the courses on the University records. Persons whose summer session work proves successful, will also be given help, by correspondence and otherwise, toward preparing themselves for other University courses during the period which must elapse before they are able to take up work regularly in residence.

It should be noted that the University Summer School offers no formal courses for those intending to do primary teaching. Such courses can be had at the session to be held at the State Normal School, at Monmouth. The distinct field of our Summer Session is, first, college work in the several lines described on the following pages, courses for high school teachers and for superintendents, and special courses in Physical Education and in Music. And it is the desire of the University to reach helpfully through the summer session as large a proportion as possible of the young men and women of the State who may be well qualified to begin work of college grade, but who, for financial or other reasons, have not been able to attend college. Several of the courses offered at the summer session may be used to complete the requirements for entering college, thus affording special help to those who have found themselves obliged to begin teaching or take up other gainful work before fully completing the high school course.

## SPECIAL STUDENTS OTHER THAN TEACHERS.

Persons of mature years are always welcomed at the University and are permitted to pursue any studies from which they can derive benefit, irrespective of the technical qualifications involved in the usual requirement of high school graduation. Ordinarily, only a very small number of special students attend the regular sessions. It is believed, however, that the Summer School offers special inducements to such persons. We are to have this year a variety of special lectures, with conferences upon topics of vital social interest like education, the problems connected with child welfare, with city and town life, and with country life. Those who plan to attend these conferences are invited to register for some of the regular courses and to spend, if possible, the entire six weeks period at the University.

There are also young persons, other than teachers, who may be splendidly fitted to take up college work but who are defective in their high school training. There are bright, eager young men and women on the farms, in offices and stores, as well as in the school room, who ought to be making a beginning toward the college course for which they have cherished an ambition. The Summer School may be found of peculiar service to such persons, for many of them could arrange to secure a vacation from their regular employments during the six weeks and could in that time gain a pretty thorough acquaintance with the conditions of college work. Their presence here will enable the University authorities to study their special needs and to arrange for them correspondence courses and other helps toward profitable private study until such time as they may be prepared to pursue the college work regularly in residence.

## FEES.

The fee for the summer session, irrespective of the number of courses taken, will be ten (10) dollars. The fee in laboratory courses will cover only the cost of materials used.

## BOARD AND ROOM.

The main dormitories of the University will be kept open throughout the summer session for the accommodation of Summer School students. The rooms will be rented only to the women, and the price to each occupant will be 50 cents per week. Each room will accommodate two. Board will be furnished both men and women at \$3.00 per week.

With each room in the Dormitory is furnished table, chairs, bedstead, springs, mattress, light, etc., and it will be necessary for each occupant to furnish only such light bedding as may be required, towels, etc. Applications for rooms should be made as early as possible to the clerk of the Dormitory, Eugene. Rooms will be held not longer than the first day of the session, unless a special deposit is made to secure them.

Men attending the session will have no difficulty in securing rooms in private houses near the campus at prices ranging from \$4.00 to \$10 per month. A full list of rooms will be on file in the Registrar's office.

## REDUCED RAILROAD RATES.

The railroads grant a fare of one and one-third to all persons attending the summer session or any of the special exercises of the session. In order to secure the reduced rates, *each person expecting to attend any of these events should secure a receipt or certificate from the ticket agent at the time of purchasing his railroad ticket to Eugene. If this certificate is not obtained, reduced rates cannot be granted.* This certificate properly signed by the Registrar of the University will entitle the holder to one-third fare returning home.

## REGISTRATION.

Registration must precede entrance upon any part of the work of the session. Students should report at the Registrar's office Monday morning, June 23rd, and pay the registration fee. Lectures will begin at 11 o'clock Monday morning. It is important that students be present on the opening day of the session. Students

who enter late, however, will be given an opportunity to make up a reasonable amount of work, but those entering after the first week will usually find it difficult to take full work for credit.

#### CREDITS FOR SUMMER SESSION WORK.

Candidates for a degree in the University will receive credit for work done in the summer session, provided their work satisfies the department and they pass the examination held at the end of the course in which credit is desired. A total of seven semester hours may be allowed for the work of a session.

#### LOCATION AND CLIMATE.

The University of Oregon is exceptionally well located to afford a pleasant place for summer study. Eugene, a town of 12,000 people, is at the head of the Willamette Valley, so situated that there is hardly a day of the summer that is not made pleasant by a cool northwestern breeze blowing directly from the ocean. The University buildings are situated on a natural rise of ground overlooking the city and surrounded by a beautifully parked campus in which are large numbers of evergreen and deciduous trees, making a delightfully cool and shaded place for summer work. The Willamette River flows along the campus on the north, and the McKenzie River, flowing directly from the snow-capped Three Sisters, is only a short distance away. The Race affords a delightful opportunity for canoeing and picnicking. Numerous tennis courts, the baseball diamonds, and the golf links, all of which are free to students, give ample scope for athletic diversions and for wholesome exercise.

#### GENERAL LECTURES.

The period from 11 A. M. to 12 M. of each day will be reserved for addresses dealing with scientific, literary, philosophical and educational subjects. No regular classes will be in session during this hour and all students of the Summer School are expected to attend.

## COURSES OFFERED.

Courses are offered in the following departments: Botany, Chemistry, Civics, Education, English Literature, English Composition, German, History, Latin, Mathematics, Romance Languages, Physics, Physical Training, Physiology, Zoology.

**SCHOOL OF LAW.**

**FACULTY.**

- P. L. CAMPBELL, B. A., President.
- CALVIN U. GANTENBEIN, LL. B., Dean and Lecturer on Criminal Law and Evidence.
- WILLIAM B. GILBERT, LL. D., Lecturer on Constitutional Law.
- CHARLES E. WOLVERTON, A. B., LL. D., Lecturer on Federal Procedure.
- JOHN B. CLELAND, LL. B., Lecturer on Sales and Non-Contract Law.
- HENRY H. NORTHUP, LL. B., Lecturer on Pleading, Practice, and Probate Law.
- WALTER H. EVANS, B. S., LL. B., Lecturer on Contracts and Negotiable Instruments.
- FRANCIS D. CHAMBERLAIN, A. B., LL. B., Lecturer on Corporations and Partnership.
- ARTHUR L. VEAZIE, A. M., LL. B., Lecturer on Real Property.
- BENJAMIN B. BEEKMAN, A. B., LL. B., Lecturer on Agency.
- THOMAS G. GREENE, LL. B., Lecturer on Bankruptcy.
- OTTO J. KRAEMER, LL. B., Lecturer on Justices' Court Practice.
- CLYDE B. AITCHISON, B. S., Lecturer on Water Rights.
- THOMAS O'DAY, LL. B., Lecturer on Bailments and Carriers.
- RICHARD WARD MONTAGUE, Ph. B., LL. B., Lecturer on Equity.
- EARL C. BRONAUGH, A. M., LL. B., Lecturer on Domestic Relations.
- ROBERT G. MORROW, Ph. B., Lecturer on Brief-Making and Supreme Court Practice.
- T. WALTER GILLARD, Secretary.

**LOCATION.**

The law School is held in the city of Portland, which offers to the student of law many advantages not possessed by other cities. The District and Circuit Courts of the United States, of the

State of Oregon for the Fourth Judicial District, the County Court of Multnomah County, and the Municipal and Justices' Courts are constantly in session, where questions touching every branch of the law are daily heard and determined.

The lectures are delivered in the Central Building in the heart of the City of Portland. Each lecture with the accompanying recitation lasts about one hour. Lectures in the first year are on Mondays, Wednesdays and Fridays at 7:15 P. M.; in the second year, on Tuesdays, Thursdays and Saturdays at 7:15 P. M.; and in the third year on Mondays, Wednesdays and Fridays at 8:30 P. M.

The twenty-eighth session opens Monday, September 16, 1912.

The fact that the lectures and other exercises take place in the evening enables bank and government clerks and other persons engaged during the day to avail themselves of the privileges of the school.

#### REQUIREMENTS FOR ADMISSION.

All persons, irrespective of sex, are allowed to matriculate in the Law School. Applicants for admission to the first year class must be at least eighteen years of age, to the second year class at least nineteen years of age, and to the third year class at least twenty years of age.

Graduates of universities or colleges, and students who have completed an academical or high school course, are admitted to the Department without examination as to preliminary requirements, and may become candidates for the degree of Bachelor of Laws. In order to be entitled to this privilege, however, the applicant should present to the Secretary of the Department evidence that he comes within some one of the classes named, which should be in a form of a diploma or certificate, or a certified copy thereof.

At the close of each year students are examined on the subjects pursued during the year, and are not permitted to enter the next higher class unless they attain a general average of seventy per cent on all subjects included in the year.

## COURSE OF INSTRUCTION.

The course of instruction extends through a period of three years of nine months each.

The aim of this school is to give its students as thorough and practical an education in the principles of the law as the length of the course will permit, and to prepare them for practice in the courts of any state, but particularly in those of Oregon. Recognizing the advantages and disadvantages of the exclusive use of either the lecture or the case method, the faculty endeavors so to combine lectures with the use of text-books, and especially with the careful study of illustrative cases, as most thoroughly to qualify the student for the active work of his profession.

The lectures are delivered in the evening, and, so far as practicable, students who put themselves into timely communication with the secretary are connected with the best law offices of the city, where they may have an opportunity of familiarizing themselves with the conduct of business and the practical duties of the profession.

The thoroughness of the instruction imparted is sufficiently attested by the fact that of the 394 graduates of the Department of Law only three have thus far failed to pass the State Bar examination. The more difficult test of actual practice has been met with almost equal success by the graduates, an unusual number of whom are admitted to be leaders at the junior bar and have held important official positions in various parts of Oregon.

## DEBATES.

Annual debates are held with the other law schools of the Coast. Tryouts are held to select two teams.

## COMMENCEMENT.

Commencement exercises are held in Portland in May of each year. Addresses are given by the President of the University, by invited guests, and by members of graduating class.

## FIRST YEAR.

## FIRST TERM.

*Criminal Law.*—Clark's Criminal Law. Criminal Code of Oregon. Twenty lectures. Dean Gantenbein.

*Domestic Relations.*—Tiffany's Persons and Domestic Relations. Bellinger and Cotton's Codes of Oregon, Title XLII. Ten lectures. Judge Bronaugh.

## SECOND TERM.

*Contracts.*—Clark on Contracts. General Laws of Oregon. Twenty lectures. Mr. Evans.

*Agency.*—Tiffany on Agency. General Laws of Oregon. Ten lectures. Mr. Beekman.

## THIRD TERM.

*Partnership.*—Schumaker on Partnership. General Laws of Oregon. Ten lectures. Mr. Chamberlain.

*Sales.*—Burdick on Sales. General Laws of Oregon. Ten lectures. Judge Cleland.

*Bailments and Carriers.*—Hale on Bailments and Carriers. General Laws of Oregon. Ten lectures. Judge O'Day.

## SECOND YEAR.

## FIRST TERM.

*Real Property.*—Minor and Wurts on Real Property. General Laws of Oregon. Thirty lectures. Mr. Veazie.

## SECOND TERM.

*Torts.*—Cooley on Torts. General Laws of Oregon. Twenty lectures. Judge Cleland.

*Negotiable Instruments.*—Norton on Bills and Notes. Bellinger and Cotton's Codes of Oregon, Sections 4403-4594, inclusive. Ten lectures. Mr. Evans.

## THIRD TERM.

*Equity Jurisprudence.*—Fetter or Bisham on Equity. Bellinger and Cotton's Codes of Oregon, Title VI. Twenty lectures.

Mr. Montague.

*Corporations.*—Clark on Corporations. Bellinger and Cotton's Codes of Oregon, Title XLI. Ten lectures.

Mr. Chamberlain.

## THIRD YEAR.

## FIRST TERM.

*Pleading, Practice and Probate Law.*—Gould on Pleading. Bellinger and Cotton's Codes of Oregon, Titles I-V, inclusive, Titles VII and VIII, and Title XVI. Thirty lectures.

Judge Northrup.

## SECOND TERM.

*Constitutional Law.*—Black's Constitutional Law. Twelve Lectures.

Judge Gilbert.

*Justice's Court Practice.*—Bellinger's and Cotton's Codes of Oregon, Title XX. Five lectures.

Mr. Kraemer.

*Brief Making and Supreme Court Practice.*—Five lectures.

Judge Morrow.

*Bankruptcy.*—Five lectures.

Mr. Greene.

*Water Rights.*—Three lectures.

Mr. Aitchison.

## THIRD TERM.

*Federal Procedure.*—Hughes' Federal Procedure. Ten lectures.

Judge Wolverton.

*Evidence.*—Hughes on Evidence. Bellinger and Cotton's Codes of Oregon, Titles IX-XI, inclusive. Twenty lectures.

Dean Gantenbein.

## LIBRARY.

The only books with which students are required to provide themselves are those used for purposes of text-book instruction, but they are advised to secure a copy of Bellinger and Cotton's Codes of Oregon in two volumes, as frequent reference is made to the Oregon statutes in connection with the instruction on all the subjects of the course.

Students in the Law School are allowed to use the Multnomah Law Library in the County Court House, free of charge. This library contains the reports of every state in the Union, the reports of the federal courts, and numerous English reports, together with an extensive collection of treatises and text-books, both English and American, and copies of the statutes of the several states and of the United States. New reports, as they are issued, are added, as are new text-books and treatises of merit.

## TEXT-BOOKS.

The books required by each student will cost, for new copies of the latest edition, as follows:

## FIRST YEAR.

Clark's Criminal Law, Second Edition.....	\$ 3.50
Tiffany's Persons and Domestic Relations, First Edition.....	3.50
Clark on Contracts, Second Edition .....	3.50
Tiffany an Agency, First Edition .....	3.50
Schumaker on Partnership, First Edition .....	3.50
Burdick on Sales, Second Edition .....	3.50
Hale on Bailments and Carriers, First Edition.....	3.50
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	\$24.50

## SECOND YEAR.

Minor and Wurtz on Real Property .....	\$ 5.00
Cooley on Torts, Students' Edition, 1907.....	5.00
Norton on Bills and Notes, Third Edition.....	3.50
Fetter on Equity, First Edition.....	3.50
Clark on Corporations, Second Edition.....	3.50
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	\$20.50

## THIRD YEAR.

Gould on Pleading, Hamilton's Edition.....	\$ 4.00
Black's Constitutional Law, Second Edition.....	3.50
Hughes' Federal Procedure, First Edition .....	3.50
Hughes on Evidence, Third Impression, 1907.....	4.00
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	\$15.00

The books required by each student may be purchased from Geo. A. Bateson & Company, Commercial Club Bldg., Portland, Oregon.

## DEGREE.

The degree of Bachelor of Laws will be conferred upon such students as pursue the full course of three years and pass the required written examinations. Students who have attended another approved law school for a period equal to one or two years of the course of this school of law will be given due credit for such attendance.

The diploma given to graduates is that of the University of Oregon, signed by the President of the Board of Regents, the President of the University and the Dean of the Law Department.

## FEES.

The tuition fee is sixty dollars for the first, seventy-five dollars for the second, and seventy-five dollars for the third year. The tuition is payable in advance at the office of the Secretary in three equal installments on or before the first day of each term. Admission to membership in the classes is not permitted until the fees are paid. Regular attendance is required, and no deduction will be made on account of absence or failure to begin at the opening of the year. The final examination fee upon completing the whole course of study, is ten dollars, payable on or before May 1, 1913.

For students taking special courses the fee will be at the rate of one dollar per lecture, payable in advance. Special students may, on application to the Secretary, receive an official certificate of attendance, showing the subject or subjects pursued, and the degree of attainment.

The right to change any or all announcements in this catalogue, except as to fees, is hereby reserved.

Applications for admission and requests for further information will be addressed to

T. WALTER GILLARD, Secretary,  
214 Central Bldg.,  
Portland, Oregon.

**SCHOOL OF MEDICINE.**

**FACULTY.**

- P. L. CAMPBELL, B. A., President of the University.
- SIMEON EDWARD JOSEPHI, M. D., Professor of Nervous and Mental Diseases. Head of Department of Mental and Nervous Diseases and Medical Jurisprudence.
- OTTO SALY BINSWANGER, Ph. D., M. D., Professor of Chemistry and Toxicology, Head of Department of Chemistry and Toxicology.
- KENNETH A. J. MACKENZIE, M. D., C. M., L. R. C. P. and L. R. C. S. Edin., Dean, Professor of Operative and Clinical Surgery, Head of Department of Surgery.
- RICHARD NUNN, B. A., B. Ch. M. D., Professor and Head of Department of Diseases of Eye, Ear, Nose and Throat.
- JAMES FRANCIS BELL, M. D., L. R. C. P., London, Professor of Theory and Practice of Medicine, Head of Department of Medicine.
- GEORGE FLANDERS WILSON, M. D., Professor of Principles and Practice of Surgery.
- EARNEST FANNING TUCKER, B. A., M. D., Professor of Gynecology, Head of Department of Gynecology.
- EDMUND JOHN LABBE, M. D., Professor of Pediatrics.
- GEORGE BURNSIDE STORY, M. D., Professor of Obstetrics. Head of Department of Obstetrics.
- ALBERT EDWARD MACKAY, M. D., Professor of Genito-Urinary Diseases.
- JAMES CULLEN ZAN, M. D., Associate Professor of Clinical Surgery.
- ROBERT CLARKE YENNEY, M. D., Professor of Clinical Medicine.
- JOHN DICE MACLAREN, M. S., M. D., Professor of Physiology. Head of Department of Physiology.
- DAVID NATHANIEL ROBERG, M. D., Professor of Pathology, Head of Department of Pathology and Bacteriology.

- FRANKLIN CHAMBERS MCLEAN, B. S., M. D., Professor of *Materia Medica* and Pharmacology, Head of Department of Pharmacology.  
 RICHARD B. DILLEHUNT, M. D., Professor of Anatomy, Head of Department of Anatomy, Assistant Dean.  
 ROBERT L. BENSON, M. D., Acting Associate Professor of Anatomy.  
 JOHN M. CONNOLLY, M. D., Acting Associate Professor of Physiological Chemistry.

#### ASSISTANT PROFESSORS.

- J. ALLEN GILBERT, Ph. D., M. D., Assistant Professor of Medicine.  
 WILLIAM HOUSE, M. D., Assistant Professor of Nervous and Mental Diseases.  
 J. C. ELLIOTT KING, M. D., Assistant Professor of Dermatology and Syphilology.  
 RALPH CHARLES MATSON, M. D., Assistant Professor of Bacteriology.  
 WALTER T. WILLIAMSON, M. D., Assistant Professor of Nervous and Mental Diseases.  
 OTIS BUCKMINSTER WIGHT, A. B., M. D., Assistant Professor of Gynecology.  
 GEORGE SHATTUCK WHITESIDE, M. D., Assistant Professor of Genito-Urinary Diseases.  
 CALVIN S. WHITE, M. D., Assistant Professor of Medicine. (*Hygiene and Sanitation.*)  
 ROBERT H. ELLIS, M. D., Assistant Professor of Obstetrics.

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#### THE MEDICAL DEPARTMENT.

##### HISTORY.

The Medical Department of the University of Oregon was established in 1887 by a charter from the regents of the University. The first building was a small frame structure located at what is now the corner of Marshall and Twenty-second Streets, on the grounds of the Good Samaritan Hospital. It consisted of a single lecture room on the ground floor, and an anatomical laboratory, on

the upper floor. In 1890, the present lot was purchased, and the building was transferred to it and was remodeled. The present building was erected in 1892. It is a three-story structure and contains well equipped laboratories, a convenient dissecting room, two large lecture rooms, a commodious amphitheatre, and the R. B. WILSON library.

#### LOCATION.

The college is located at the corner of Twenty-third and Lovejoy Streets, opposite the Good Samaritan Hospital, and is reached by the Washington and Twenty-third Street cars.

#### ORGANIZATION AND GOVERNMENT.

The Medical Department is governed locally by the faculty, composed of the heads of the various departments; but is responsible to the regents of the University of Oregon, of which it is an integral part, in both scholastic and financial matters.

The teaching body consists of 60 members. There are 18 professors, nine of whom are heads of their respective departments; assistant professors, associates, instructors and assistants. For the session of 1912-1913, there will be six salaried professors, each devoting his time to his department in the fundamental work.

#### BUILDINGS.

The college building is a three-story structure, heated by hot water and lighted by gas and electricity. All didactic and laboratory work is conducted here. Two large lecture halls supplied with charts, blackboards, and a projection lantern, admirably meet the need for lectures, quizzes and demonstrations. A commodious amphitheatre on the first floor is used in demonstrations of anatomy, surgical anatomy and operative surgery on the cadaver.

#### LABORATORIES.

In 1910, a complete reorganization of the various laboratory departments was instituted, and the laboratories were newly equipped, and the facilities were much improved. The laboratories

of chemistry, physiology, histology, bacteriology, pathology, pharmacology and materia medica possess all the modern apparatus for practical instruction in those departments. The apparatus will be further augmented for this session. Under each department will be found a more detailed description of its facilities.

#### CLINICAL ADVANTAGES.

The college has exceptional clinical advantages because of its intimate relation to large general hospitals, in all of which are parts of the work of the clinical years.

Good Samaritan Hospital is located just opposite the college. It accommodates 250 patients and has recently built a new operating room with a convenient amphitheatre.

St. Vincent's Hospital is within five minutes walk of the college. It is modern in every respect and contains 500 beds, and 6 excellent operating rooms, one of which has a large amphitheatre, specially constructed to afford facilities for teaching surgery and medicine in this college.

Multnomah County Hospital is a charitable institution readily accessible by street car, and affords much material for practical clinical work. This institution will soon be enlarged to comply more thoroughly with the needs of Multnomah County.

Members of the faculty conduct clinics daily in these hospitals, and the student is brought into actual contact with methods of diagnosis and treatment.

Portland's geographical position is such that its hospitals receive many patients from a large surrounding territory resulting in great diversity of diseases.

#### DISPENSARY.

The dispensary is located at 4th and Burnside Streets in a district which abounds in the types for which a dispensary is necessary. It is conducted by the college in affiliation with the People's Institute, the Men's Resort, and the Visiting Nurses' Association. The departments of medicine, surgery, gynecology, ophthalmology, otology, laryngology, pediatrics and genito-urinary diseases are represented

here, and the junior and senior classes are assigned to definite hours in actual clinical work with the patient.

#### LIBRARY.

The R. B. Wilson library was established by gift of the medical libraries of the late Drs. R. B. Wilson and Rodney Glisan, two distinguished pioneer physicians of this State. It is housed in the college building. It has been recently added to, and will be further enlarged from time to time. Students may have access to books and periodicals subject to the library rules. Students have access also to the ample library of the Portland City and County Medical Society.

#### REQUIREMENTS FOR ADMISSION.

These comprise as a minimum (a), the successful completion of a four-year high school or academic course, or the equivalent thereof; also (b) one year of successfully completed college or university work in an institution acceptable to the University of Oregon. This latter work must have included one year each of chemistry, physics, biology and a modern foreign language; also (c) a certificate of good moral standing signed by two reputable physicians.

#### A. HIGH SCHOOL WORK REQUIRED.

The high school work imperatively demanded of each student comprises a diploma or other evidence of completion of a four-year course in an accredited high school, requiring for admission thereto an eight-year course in primary and intermediate grades. The high school work must have included 30 credit points\* embracing not less than two years (4 points) of foreign language, one year of which (2 points) must be Latin; two years (4 points) of mathematics; two years (4 points) of English; one year (2 points) of history; two years (4 points) of laboratory science (chemistry, physics, zoology, botany); and six years (12 points) of additional credit in language, literature, history or science.

\*A point is the unit of credit for work, and implies a daily recitation of at least 45 minutes, five days a week, throughout a period of not less than 18 weeks.

## B. COLLEGE WORK REQUIRED.

One year of college work in an institution accredited by the University of Oregon, must have been completed, and this work must have included the following branches: Chemistry (2 points) Physics (2 points) Biology (2 points) and a modern foreign language, preferably German (2 points).

## ADMISSION BY EXAMINATION.

The above credits are accepted upon credential from proper authority without examination. Students from schools not recognized by the University of Oregon, must submit to examination in the required branches. Such examination will be conducted by an examiner who is acceptable to the president of the University of Oregon and in no way connected with the medical department; or by any State Board of Medical Examiners authorized by law. After such examination the student must submit credentials from the examiner, certifying to his successful completion thereof.

## CONDITIONAL ADMISSION.

A student whose preparation is deficient in not more than one subject (2 points), in the required college work, may be admitted to the Freshman class upon the condition that such work will be completed before his entrance upon the second year work. Such condition is subject to the approval of the Dean.

## ADMISSION TO ADVANCED STANDING.

No student will be admitted to advanced standing who has not complied fully with the requirements for admission to this college. Credits will be given to students from other recognized medical institutions, the requirements for admission and standard of work of which are equivalent to those of this college; upon presentation of credentials from proper authority. Such student must submit a certificate of honorable discharge from his previous college, as well as evidence of the exact amount of work he has successfully completed there, both of which are subject to the approval of the

heads of the department involved and of the Dean. In the near future, two years of college work will be required as prerequisite for entrance.

#### PRE--MEDICAL COURSE.

For the required year of college biology, chemistry, physics and modern language, the pre-medical student is advised to complete the following course in the University College of Literature, Science and the Arts at Eugene, or equivalent courses elsewhere: chemistry 1, physics 1 and 3, zoology 1 and 2, and the German for which he is prepared. For further pre-medical study the student is advised to choose work in chemistry, drawing, English, German, history, psychology, sociology and zoology.

In as much as four years of residence in a recognized medical college is required for the degree of Doctor of Medicine, no time credit is granted for work done at Eugene, or in other non-medical schools, but subject credit may be given for satisfactory work if approved by the Dean, and the head of the Medical College department concerned.

#### REQUIREMENTS FOR GRADUATION.

The following are the requirements of the candidate for the degree of Doctor of Medicine:

He must be, at least, twenty-one years of age, and of good moral character.

He must have finished four full medical courses of eight months each, no two of which shall have been taken within the same twelve months, and the last of which must have been taken in this college.

He must have paid all fees due the college.

He must have secured satisfactory standing in all examinations and he must be present at commencement exercise and receive his diploma in person unless excused for good reason by the faculty.

## THE CURRICULUM.

The curriculum consists of four annual sessions of eight months (two semesters) each. The first two years are devoted chiefly to the fundamental branches of anatomy, both gross and minute, physiology, physiological chemistry, neurology, embryology, pathology, pharmacology, bacteriology and materia medica.

The last two years embrace the clinical branches of medicine, surgery, therapeutics, clinical pathology, obstetrics, gynecology, nervous and mental diseases, genito-urinary diseases, and diseases of the eye, ear, nose and throat.

The student approaches the practical subjects of the third year, after completion of those subjects preparatory to practical medicine. The principles of medicine, surgery and obstetrics are taken up in recitations in sections at the dispensary, and in the clinics. Clinics lectures, recitations and demonstrations are conducted in medicine, surgery, nervous diseases, gynecology, eye, ear, nose and throat, genito-urinary diseases, dermatology and pediatrics.

Classes are sufficiently small to allow to each student the advantages of much personal instruction.

## GENERAL INFORMATION.

### ROUTINE OF ENTRANCE.

All applications should be addressed to the Dean, Medical Department, University of Oregon, Twenty-third and Lovejoy Streets, Portland, Oregon.

Students contemplating entrance to this college should submit their credentials of work in previous schools, viz.: high school and college, to the Dean for his approval. This may be done at any time in person or by correspondence, by filling out blanks which will be furnished on application.

### MATRICULATION AND REGISTRATION.

The new student is required to present, on matriculation day (a) his admission credits, if not previously done; (b) his letter of honorable dismissal from previous college; (c) a certificate of good moral character; and (d) must pay the matriculation fee and fees and deposits for the ensuing term.

Any of the above may be done by correspondence or otherwise, but the student must present himself on registration day for approval of credentials and assignment to classes.

Application for admission will not be considered later than October 21st, and an extra charge of Five Dollars (\$5.00) will be made for registration later than October 5th.

Matriculation and registration will be conducted at the office of the Assistant Dean in the college building on October 4th and 5th, from 9 to 12 a. m.

### FEEES AND DEPOSITS.

Matriculation fee—The matriculation fee is Five Dollars (\$5.00), and is required of every student entering the college and is payable but once.

**Tuition**—The tuition for each year is One Hundred and Fifty Dollars (\$150.00) and is payable at the beginning of the school term. Those preferring to pay tuition in two payments may do so by paying Seventy-five Dollars (\$75.00) at the beginning of the first semester and Eighty Dollars (\$80.00) at the beginning of the second. This fee includes the laboratory and special fees formerly required in certain courses in addition to the regular tuition fee.

**Breakage Deposit**—A deposit of Ten Dollars (\$10.00) is required of each student at the beginning of each year for general breakage. The cost of damage done by an individual to college property will be deducted from his deposit; and, in case the identity of the one responsible cannot be established, a pro rata charge will be made against the entire class of which he is a member. The remainder of this deposit will be returned at the end of each school year.

All fees are payable in advance at the time of matriculation. In a limited number of cases some accommodation may be given, but such will be granted in order of matriculation and must be arranged for with the Dean, at the time of matriculation.

The faculty reserves the right to make changes in curriculum, fees, or any other matter at any time.

#### POST GRADUATES.

Graduates of this or other colleges who are visiting the city for a brief time are cordially invited to attend the various clinics and lectures, but those intending taking any definite course must arrange with the Dean.

#### BOARD AND LODGING.

Good rooms with all modern conveniences can be obtained in the vicinity of the college at from \$8.00 to \$15.00 a month. Board may be had at from \$12.00 to \$18.00 a month; and room and board together may be obtained at from \$20.00 to \$30.00 a month.

#### BOOKS AND INSTRUMENTS.

The average annual cost of books, instruments and other supplies varies from \$15.00 to \$25.00.

LOCKERS AND MICROSCOPES.

Lockers will be assigned for the laboratory courses and a deposit of fifty cents must be made when key for same is received. Microscopes are rented at a cost of \$5.00 a session.

SCHOLARSHIPS AND PRIZES.

One full scholarship and two half-scholarships are open to graduates of the University of Oregon with the degree of A. B., or B. S., of not more than two years' standing. The holders of the scholarships will be assigned to special work in the Medical Department subject to the Dean. It is hoped in the near future to establish scholarships in the various departments, carrying a part of tuition as compensation. Particulars may be had by application to the Dean.

THE SAYLOR MEDAL.

The Saylor Medal was founded by the late Professor Saylor. It will be awarded annually to the graduate in highest standing in all departments.

THE ANATOMY MEDAL.

The Anatomy Medal will be awarded annually to the undergraduate who receives the highest grade in Anatomy, including Gross Anatomy, Histology and Osteology. It will be presented at the time of the recipient's graduation.

The average of final grades will be taken as a basis for awarding the above medals; and the candidate must have done all work in some department of the University of Oregon.

SCHOLARSHIPS—1911-1912.

Howard Clayton Moore

Clarence Wesley Ross

RECIPIENTS OF MEDALS—1911-1912.

Clarence Wesley Ross, M. D., Saylor Medal.

.....Anatomy Medal.

## INTERNSHIPS.

Eight appointments as Interns are made from the graduates of this College each year. Five services are available in Good Samaritan Hospital, and three in St. Vincent's. Each service for the one year. Every graduate is advised to secure an internship, and others than the above are open in Portland and neighboring cities.

## RESUME OF WORK.

The following is an outline of the work. The curriculum is largely prescribed and this resume includes only that work required of every student. The hours have been figured on a basis of fifteen weeks to a semester. There will be, however, sixteen weeks of actual work in each semester which will considerably increase the total number of hours.

## FIRST YEAR.

FIRST SEMESTER:	HOURS PER WEEK		HOURS PER SEMESTER	
	Laboratory	Lecture	Laboratory	Lecture
<i>Chemistry</i> —				
(Organic) .....	3	3	45	45
Physiological Chemistry .....	3	2	45	30
<i>Anatomy</i> —				
Gross .....	9	2	135	30
Histology .....	6	2	90	30
Osteology .....	4	..	60	....
 SECOND SEMESTER:				
Physiological Chemistry .....	9	2	135	30
<i>Anatomy</i> —				
Gross .....	9	3	135	45
Neurology .....	4	2	60	30
Embryology .....	4	2	60	30
			765	270
			Total .....1,035 Hours.	

## SECOND YEAR.

FIRST SEMESTER:	HOURS PER WEEK		HOURS PER SEMESTER	
	Laboratory	Lecture	Laboratory	Lecture
Physiology .....	3	2	45	30
<i>Anatomy</i> —				
Gross .....	9	2	135	30
Pathology .....	4	3	60	45
Pharmacology .....	4	3	60	45
Materia Medica .....	3	1	45	15
			345	165

## SECOND SEMESTER:

<i>Chemistry—</i>			
(Toxicology) .....	2	3	.... 45
Physiology .....	6	3	90 45
Pathology .....	4	3	60 45
Bacteriology (1913) .....	9	3	135 45
Physical Diagnosis .....	2	2	30 30
			<hr/>
			315 210
Total.....			1,035 Hours.

## THIRD YEAR.

	HOURS PER WEEK	LABORATORY OR	HOURS PER SEMESTER	LABORATORY OR
FIRST SEMESTER:	CLINIC LECTURE	CLINIC LECTURE	CLINIC LECTURE	CLINIC LECTURE
Pathology .....	3	2	45	30
Bacteriology (1912) .....	9	..	135	....
Physiology .....	2	1	30	15
<i>Medicine—</i>				
Recitation .....	0	3	....	45
Physical Diagnosis .....	0	2	30	....
Clinic .....	1	..	15	....
Laboratory Diagnosis .....	4	..	60	....
Therapeutics .....	0	2	....	30
<i>Surgery—</i>				
Recitation .....	0	2	....	30
Clinic (minor) .....	1	..	15	....
Obstetrics .....	0	3	....	45
			<hr/>	<hr/>
			345	195
<b>SECOND SEMESTER:</b>				
	CLINIC LECTURE		CLINIC LECTURE	
<i>Medicine—</i>				
Recitation .....	0	3	....	45
Nervous Diseases .....	0	2	....	30
Dermatology .....	0	2	....	30
Clinics .....	1	..	15	....
Dispensary .....	2	..	30	....
<i>Surgery—</i>				
Recitation .....	0	2	....	30
Clinic .....	2	..	30	....
Dispensary .....	2	..	30	....
Obstetrics .....	0	3	....	45
Genito-Urinary Diseases .....	1	2	15	30
Gynecology .....	0	2	....	30
Eye, Ear, Nose and Throat.....	0	4	....	60
Surgical Anatomy .....	0	2	30	....
			<hr/>	<hr/>
			150	300
Total.....			990 Hours	

## FOURTH YEAR.

FIRST SEMESTER:	HOURS PER WEEK		HOURS PER SEMESTER	
		CLINIC LECTURE		CLINIC LECTURE
<i>Medicine—</i>				
Clinic (Yenney) .....	3	..	45	....
Clinic (Koehler) .....	1	..	15	....
Clinic (Gilbert) .....	2	..	30	....
Clinic (Bell) .....	1	..	15	....
Nervous Diseases .....	1	2	15	30
Pediatrics .....	0	2	....	30
Dermatology and Syphilis.....	0	1	....	15
Hygiene and Sanitation.....	0	1	....	15
Dispensary .....	2	..	30	....
<i>Surgery—</i>				
Sur. Clinic (Mackenzie) .....	5	..	75	....
Sur. Clinic (Wilson) .....	2	..	30	....
Sur. Clinic (Baird) .....	1	..	15	....
Operative Surgery .....	2	..	30	....
Dispensary .....	2	..	30	....
Obstetrics .....	1	..	15	....
Gynecology .....	1	..	15	....
Eye, Ear, Nose and Throat.....	1	2	15	30
Genito-Urinary Diseases .....	1	2	15	30
			<hr/>	<hr/>
SECOND SEMESTER:			390	150
<i>Medicine—</i>				
Clinic (Bell) .....	1	..	15	....
Clinic (Yenney) .....	3	..	45	....
Clinic (Gilbert) .....	2	..	30	....
Clinic (Koehler) .....	1	..	15	....
Lectures .....	0	3	....	45
Pediatrics .....	0	3	....	45
Dietetics .....	0	1	....	15
Nervous (Clinic) .....	1	..	15	....
Jurisprudence .....	1	..	15	....
Electro Therapy .....	0	2	....	30
<i>Surgery—</i>				
Clinic (Mackenzie) .....	5	..	75	....
Clinic (Wilson) .....	2	..	30	....
Clinic (Baird) .....	1	..	15	....
Clinic (Ziegler) .....	1	..	15	....
Lecture .....	0	2	....	30
Orthopedic .....	0	1	....	15
Gynecology .....	1	..	15	....
Genito-Urinary .....	1	..	15	....
Eye, Ear, Nose and Throat.....	2	..	30	....
			<hr/>	<hr/>
			330	180
			Total.....	1,050 Hours
			Grand Total.....	4,120 Hours

## DEPARTMENTS OF INSTRUCTION.

## I. ANATOMY.

Professor DILLEHUNT, Associate Professor ....., Dr. McCUSKER, Dr. AKIN, Dr. JESSOP, MR. LARSEN.

The Department of Anatomy provides for instruction in Gross Human Anatomy, Histology, Neurology and Embryology. For the former there is a large, light, well-ventilated dissecting room, supplied with stone-top tables. The Department possesses a complete set of Bocks' anatomical models; an excellent articulated skeleton with areas of muscular attachments outlined on all bones; several complete disarticulated skeletons and charts, to all of which the student has access. Dissecting material is abundant.

The Histology Laboratory is thoroughly equipped, each student having a private locker containing apparatus for fixing, cutting and staining specimens; a good microscope, and all other necessary material for use in minute anatomy. Neurology is given in the same laboratory during another term.

Embryology is taught chiefly from a study of the development of lower animals, but the department is equipped with eight of Professor Ziegler's wax models of the human embryo at successive months; and with several preserved specimens of the human embryo and fetus.

1. *Human Dissection.* The student makes a complete dissection of all structures, aided by demonstrations, text-books, atlases and models, under the supervision of members of the Department. The work is supplemented by frequent quiz.

- (a) Dissection of the arm and thorax.
- (b) Dissection of the leg and abdomen.
- (c) Dissection of the head and neck.

11 hours a week, 1st and 2nd semesters, 1st year and 1st semester, second year.

Dissection period—9 to 12, Mondays, Tuesdays, Thursdays.

Quiz—8-9 Tuesday, Thursday. Professor Dillehunt, Dr. McCusker, Dr. Jessop, Dr. Akin.

2. *Osteology*. A systematic study of the human skeleton by lecture, quiz, and drawing of disarticulated bones, joints and ligaments. 4 hours a week; 1st semester, 1st year; 10-12 Wednesday, Friday, Professor Dillehunt, Dr. McCusker.

3. *Topographical Anatomy*. A course of lectures and demonstrations from the cadaver, with attention to surgically important anatomy. 2 hours a week. Second semester, third year, 2-4 Tuesday. Professor Dillehunt.

4. *Histology, Cytology, Splanchnology*. A complete course in minute human anatomy, beginning with a study of the cell and progressing through the structure of elementary tissues, to the anatomy of the various organs and viscera. Eight hours a week. First semester, first year. Lecture and quiz, 9-10 Wednesday, Friday. Laboratory, 1-3 Monday, Tuesday and Thursday. Associate Professor .....

5. *Neurology*. This course involves a gross and microscopic study of the anatomy of the human brain and meninges, the spinal cord, peripheral nerves and their endings, and the organs of special sense. Six hours a week. Second semester, first year. Lecture, 8-9 Wednesday and Saturday. Laboratory, 2-4 Tuesday and Thursday. Associate Professor .....

6. *Embryology*. A study of the development of the human embryo from conception to its separation from the maternal organism. Laboratory work is conducted in the study of sections of chick and pig embryos for the earlier stages; and wax models and preserved specimens of human embryos are used in the lectures and demonstrations. Six hours a week. Second semester, first year. Lecture, 9-10 Wednesday and Friday. Laboratory, 10-12 Wednesday and Friday. Associate Professor .....

7. *Research in Anatomy*. Special work may be done in any of the above, by arrangement with the head of the department. Hours to be arranged.

## II. PHYSIOLOGY.

Professor MacLaren, Associate Professor .....,  
 Dr. Madigan, Dr. Horace Fenton, Mr. Curran.

The Department of Physiology has two student laboratories and an animal room. The main laboratory, on the third floor of the College Building, is arranged for animal experiments and contains the Department Library.

The modern equipment includes several complete sets of the Harvard physiology apparatus with other mechanisms, balances, glassware, reagents, thermometers and repair tools. There is a complete equipment for graphic records with different kymographs and an electric clock.

For mammalian experiments there are tables, animal holders, instruments and anaesthetic apparatus. For experiments on man and the study of the senses there are sets of the most approved physical, microscopical and clinical mechanisms.

The laboratory for physiological chemistry, on the second floor of the College Building, is provided with the purest chemicals, and complete testing outfits, including nitrogen and ammonia apparatus, an electric centrifuge, a polarimeter and a spectroscope.

During the first year the chemical phases of physiology are emphasized, including organic and physiological chemistry, with the physiology of digestion, metabolism and excretion. During the second year the physical and psychological phases are included in a complete study of human physiology. In the third and fourth years the applications of physiology to medicine and surgery and experimental medicine are considered.

1. *Chemical Physiology.* A study of protoplasm and its products in digestion, metabolism and excretion, with analytical chemistry of carbon compounds, including volumetric analysis. Reference texts: Holland, Starling. Eight hours a week first semester, and eleven hours a week second semester of first year. Lecture, 3-4, Tuesday and Thursday. Laboratory, 1-4, Wednesday and Friday, first semester. Lecture, 1-2 Tuesday and Thursday. Laboratory, 1-4 Monday, Wednesday and Friday, second semester. Associate Professor ....., Dr. Madigan.

2. *Human Physiology.* Advanced studies of muscle, nerve, blood, respiration, nutrition, secretion, central and peripheral nervous system, senses, mind and growth. Five hours a week, first semester, and nine hours a week second semester of second year. Reference texts: Howell, Luciana. Lecture, 1-2 Wednesday and Friday; Laboratory, 1-4 Thursday, first semester. Lecture, 1-2 Monday, Wednesday and Friday, with Laboratory, 1-4 Tuesday and Thursday, second semester. Professor MacLaren, Mr. Curran.

3. *Clinical Physiology.* Medical physiology, surgical physiology, and the use of apparatus of precision for the diagnosis of disease. Reference texts: Emerson, Green. Four hours a week, first semester of third year. Lecture, 1-2 Tuesday. Laboratory or clinic, 2-5 Friday. Professor MacLaren, Associate Professor ....., Dr. Horace Fenton.

4. *Research Physiology.* The application of the newer researches to medicine and surgery. Laboratory practice in experimental medicine. Elective for fourth year students. Hours to be arranged. Professor MacLaren, Associate Professor .....

### III. PATHOLOGY AND BACTERIOLOGY.

Professor Roberg, Assistant Professor Ralph C. Matson, Assistant Professor Ray W. Matson, Dr. Marcellus, Dr. Creadick, Dr. Smith, Dr. Cathey.

This department possesses all the necessary facilities for the study of pathology, both microscopical and minute. The museum is abundantly furnished with pathological material.

In the laboratory is furnished for microscopical study a complete set of pathological sections, which are drawn by the student in colored inks, fully described, and the abstracts of literature pertaining to each subject inserted with the same and incorporated as a note book.

Fresh material as it is brought in is studied, and microscopic sections are made for study and diagnosis. The laboratory work is supplemented by lectures, recitations and demonstrations. A thorough and systematic study is made on the technique of post mortem examinations and the knowledge derived therefrom.

The bacteriology laboratory is on the third floor of the College Building, and has a north exposure for microscopic work. Each student is assigned a locker containing all necessary equipment for the study of micro-organisms; and the laboratory contains an excellent incubator, autoclaves, and other modern bacteriologic apparatus.

1. *Pathological Histology and General Pathology.* A laboratory course in general pathology, comprising the study of prepared slides supplemented by experiments; the study of fresh and museum specimens, lectures and recitations. Seven hours a week, first semester, second year. Lecture, 8-9 Monday, Wednesday and Friday. Laboratory, 10-12 Wednesday and Friday. Professor Roberg.

2. *The Diagnosis and Histology of Tumors.* A systematic study of tumors dealing with the microscopic diagnosis and gross characteristics. Seven hours a week, second semester, second year. Lecture, 10-11 Monday; 9-10 Wednesday and Friday. Laboratory, 10-12 Tuesday and Thursday. Professor Roberg.

3. *Special Pathological Anatomy and Histology.* Instruction is given in the methods of post mortem technique. Study of the gross and microscopical appearance of diseased organs and tissues is made with reference to their clinical features. Four hours a week, first semester, third year. Lecture, 8-9 Tuesday and Thursday. Laboratory, 10-12 Monday. Professor Roberg, Drs. Marcellus and Creadick.

4. *The Study of Museum Specimens.* The museum specimens are described and the student studies their characteristics and clinical features from a standpoint of diagnosis. One hour a week, first semester, third year. Lecture or recitation, 11-12 Saturday. Dr. W. E. Smith.

5. *Research in Pathology and Advanced Laboratory Methods.* Open to specially qualified students. Hours to be arranged. Professor Roberg.

6. *Bacteriology.* A thorough study of the classifications of micro-organisms and of the properties of each, with instruction in methods of preparation of culture media. The important pathogenic micro-organisms are studied in detail as regards morphological, cultural, and staining characteristics and motility. The

technique of bacteriologic examinations, and the preparation of vaccines and sera will be covered. Nine hours a week, first semester, third year (1912); second semester, second year (1913) Laboratory, 2-5, Monday, Tuesday and Wednesday (1912), 2-5 Monday, Wednesday and Friday (1913); Lecture, 9-10 Monday, Wednesday and Friday (1913). Assistant Professor Matson, Dr. Cathey.

#### IV. CHEMISTRY AND TOXICOLOGY.

Professor Binswanger, Dr. Fessler.

The chemical laboratory is on the second floor of the College Building and is well lighted and fully supplied with chemical apparatus. The latter will be increased for this session. Chemistry is taken up in lecture, supplemented by demonstrations, and laboratory work.

1. *Organic Chemistry*. Lectures on hydro-carbons, alcohols, aldehydes, ketones, fats, coal-tar compounds, carbo-hydrates, amines, amides, glucosides and alkaloids. Three hours a week, first semester, first year. Lect., 8-9 a. m., Monday, Wednesday and Friday. Professor Binswanger.

2. *Toxicology*. Lectures on the chemistry of drugs and poisons from the medico-legal view. Three hours a week, second semester, second year. Lect., 8-9 a. m., Monday, Wednesday and Friday. Professor Binswanger.

#### V. PHARMACOLOGY, MATERIA MEDICA AND THERAPEUTICS.

Professor McLean and assistant.

The laboratory for work in pharmacology and materia medica was newly equipped throughout in 1911. Modern apparatus and preparations of all potent drugs are on hand for laboratory work on animals. A complete collection of crude drugs is kept in the laboratory and there are ample facilities for the use of students in compounding prescriptions.

1. *Pharmacology*. A thorough lecture and laboratory course in the physiological action of various drugs. The class is divided

into small groups, each of which performs experiments illustrating the influence exerted by various drugs upon the muscular, nervous, respiratory, circulatory, digestive and excretory systems. This work is supplemented by lectures and quizzes, and laboratory work in toxicology. Six hours a week, first semester, second year. Lect., 9-10, Wednesday and Friday. Lab., 2-4, Wednesday and Friday. Professor McLean.

2. *Materia Medica*. This course embraces a series of lectures, quizzes and laboratory periods, treating of the chemistry and physical properties of medicinal drugs, and medical pharmacy. The student is given thorough work in writing and compounding prescriptions. Five hours a week, second semester, second year. Professor McLean.

3. *Therapeutics*. A lecture and recitation course in the practical application of medicinal drugs to pathological conditions, including a review of prescription writing. Two hours a week, first semester, third year; 10-11, Tuesday and Thursday. Professor McLean.

4. *Electro-Therapeutics*. This branch of therapeutics will be presented by lectures, demonstrations and clinics as a part of the course in Electricity and Radiography. Two hours a week, second semester, 4th year; 9-11, Tuesday and Friday. Dr. Walker.

## VI. MEDICINE.

Professor Bell, Professor Yenney, Assistant Professor Gilbert, Assistant Professor White, Dr. Koehler, Dr. Taylor, Dr. Jones, Dr. Walker, Dr. Selling, Dr. Knox.

The Department of Medicine includes Internal Medicine, Pediatrics, Nervous and Mental Diseases, and Dermatology and Syphilology.

### INTERNAL MEDICINE.

Medicine is taught at first didactically by recitation from assignments, by practical work in physical diagnosis, and clinical laboratory work. Later the student is brought more closely in touch with the patient by clinics in hospitals and work in the dispensary.

1. *Medicine Recitation*. A course of quizzes in the principles of medicine from definite assignments in a one-volume medicine. Three hours a week, first semester, third year. Quiz, 8-9, Monday, Wednesday and Friday. Dr. ....

2. *Medicine Recitation*. A continuation of course 1. Three hours a week, second semester, third year. Quiz, 8-9, Monday, Wednesday and Friday. Dr. ....

3. *Physical Diagnosis*. A lecture and practical course in methods of physical examination with demonstrations and practice in percussion, auscultation, etc. Four hours a week, second semester, second year (1913); two hours a week, first semester, third year (1913). 10-12, Wednesday and Friday (1914); 11-12, Wednesday and Friday (1913). Dr. Wiley, Dr. Knox.

4. *Laboratory Diagnosis*. A practical course in the laboratory in which the student is taught the chemical, microscopical, and bacteriologic examination of blood, urine, sputum, gastric contents, feces, secretions, exudates, etc., and their pathologic and clinical significance. Four hours a week, first semester, third year; 9-11, Wednesday and Friday. Dr. Selling, Dr. Rosenfeld.

5. *Medicine Clinic*. A clinic devoted chiefly to instruction in the essentials of theoretical and practical medicine. One hour a week, first semester, third and entire fourth year. 1-2, Wednesday, St. Vincent's Hospital. Professor Bell.

6. *Medicine Clinic*. A clinic in internal medicine confined to the Senior year. Two hours a week, entire fourth year. 1-2, Monday and Friday, St. Vincent's Hospital. Assistant Professor Gilbert.

7. *Medicine Clinic*. A clinic paying especial attention to pathology and diagnosis. Three hours a week, entire fourth year. 10-12, Monday; 11-12, Saturday, second semester. Multnomah Hospital. Professor Yenney.

8. *Medicine Lecture*. A clinic or lecture in medicine with special stress on diseases of the stomach and intestines. One hour a week, second semester third year. 1-2 Tuesday. Dr. Koehler.

9. *Lecture and Conference in Medicine*. A lecture course with frequent quizzes on the more important and more prevalent diseases. Three hours a week, second semester, fourth year. 9-10 Monday, Wednesday and Friday. Professor Bell.

10. *Hygiene and Sanitation.* A course treating of practical hygiene with instruction in municipal sanitation, food control and garbage destruction, and the relation of these to public health. One hour a week, second semester, third year. 2-3 Friday. Assistant Professor White.

11. *Dietetics.* A course involving the values of foods and the methods of variance of foods in certain diseases. One hour a week, second semester, fourth year. 2-3 Tuesday. Dr. Taylor.

12. *Radiology and Actinotherapy.* A course in electricity as applied to medicine and surgery, including the use of the X-Ray in diagnosis and therapy. Two hours a week, second semester, fourth year. 10-11 Tuesday and Friday. Dr. Walker.

13. *Dispensary.* A course in the dispensary in which small groups are assigned to the medical side, and are given practice in writing histories, physical diagnosis, laboratory work, clinical observation and treatment. Four hours a week, second semester, third year. First semester fourth year. 11-1 Monday, Thursday, Tuesday, Friday and Wednesday and Saturday. Dr. Koehler, Dr. Jones, Professor McLean and others.

## VII. NERVOUS AND MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

Professor Joseph, Assistant Professor House, Assistant Professor Williamson.

The work of this department is confined to the third and fourth years, and is conducted didactically and clinically as well as by work in the dispensary.

1. *Introduction to Nervous Diseases.* A course dealing with the applied anatomy, and physiology of the nervous system, and methods of diagnosis in nervous diseases. One hour a week, first semester, third year. 9-10 Monday. Assistant Professor House.

1a. *Nervous Diseases.* A lecture and conference course dealing with the pathology, symptomatology, diagnosis and treatment of the common nervous diseases. Two hours a week, second semester, third year. 9-10 Monday and Friday. Professor Josephi.

2. *Diseases of the Mind, and Nervous System.* A more advanced course in the pathological conditions of the nervous system and in insanity. Two hours a week, first semester, fourth year. 10-11 Wednesday and Friday. Professor Josephi.

3. *Clinic.* A clinic in nervous and mental diseases. One hour a week, entire fourth year. 4-5 Friday. Multnomah Hospital. Assistant Professor House.

4. *Medical Jurisprudence and Medical Ethics.* A course of lectures and recitations in forensic medicine and medical ethics and economics. One hour a week, second semester, fourth year. 4-5 Thursday. Assistant Professor Williamson, Assistant Professor House.

### VIII. PEDIATRICS.

Professor Labbe, Dr. Bilderback, Dr. Rosenfeld.

Instruction in this Department is conducted by means of lectures, conferences and clinical work at the dispensary.

1. *Anatomy, Physiology, and Hygiene of Infancy and Childhood.* Lectures and quizzes are conducted in the anatomy, physiology, and hygiene of infancy and childhood, and principles of infant feeding, and in the disorders of nutrition in infancy. Two hours a week, first semester, fourth year. 8-9 Tuesday and Thursday. Dr. ....

2. *Diseases of Infancy and Childhood.* A conference and lecture course in diseases of infancy and childhood. Three hours a week, second semester, fourth year. 8-9 Monday, Wednesday and Friday. Professor Labbe.

3. *Dispensary Work in Pediatrics.* This branch is treated as a part of the medicine dispensary. Professor Labbe, Dr. Bilderback, Dr. Rosenfeld.

### IX. DERMATOLOGY AND SYPHILOLOGY.

Assistant Professor King, Dr. Payne, Dr. Parker.

Lectures, recitations, demonstrations and clinical work will be conducted in dermatology and syphilis in the clinical years.

1. *Introductory Dermatology.* A lecture and recitation course in the fundamentals of dermatology and in the more prevalent

diseases of the skin. Illustrative cases will be exhibited from time to time. Two hours a week, second semester, third year. 10-11 Monday and Thursday. Assistant Professor King.

2. *Dermatology and Syphilis*. A continuation of Course 1. One hour a week, first semester, fourth year. 2-3 Monday. Assistant Professor King.

3. *Clinic in Venereal Diseases*. A clinic at Multnomah Hospital dealing chiefly with syphilis. One hour a week, entire fourth year. 1-2 Saturday. Assistant Professor Whiteside.

## X. SURGERY.

Professor Mackenzie, Professor Wilson, Associate Professor Zan, Assistant Professor Baird, Dr. Ziegler, Dr. Pease, Dr. Akin.

Surgery is approached didactically in lectures, and in recitations in the principles of surgery, from text assignments throughout the Junior year. Clinical work is conducted in the nearby hospitals in the third and fourth years. Minor surgery is taught clinically and at the dispensary, and operative surgery is presented in the 4th year, during which each student is required to do actual surgical work on the cadaver. Each Senior student is assigned in rotation to take part as assistant in surgical operations and as anæsthetist under proper supervision, in the clinic.

1. *Surgery Recitation*. A course of quizzes in the principles of surgery and surgical pathology from definite assignments in a one-volume text-book of surgery. Two hours a week, first semester, third year. 9-10 Tuesday and Thursday. Associate Professor Zan.

2. *Surgery Recitation*. A continuation of Course 1. Two hours a week, second semester, 3rd year. 8-9 Tuesday and Thursday. Associate Professor Zan.

3. *Surgical Clinic*. Minor surgery is taught clinically by demonstrations of technique in elementary surgery, bandaging, care of the injured, etc. One hour a week, first semester, third year. 11-12 Thursday. St. Vincent's Hospital. Dr. Ziegler.

3a. *Surgical Clinic*. A clinic in general surgery. One hour a week, first semester, third year. 11-12 Wednesday. Dr. Hamilton.

4. *Surgical Clinic*. A clinical course in general surgery, paying special attention to operative technique and after treatment.

Five hours a week, entire fourth year. 9-10 Tuesday, 9-11 Thursday and Saturday. St. Vincent's Hospital. Professor Mackenzie.

5. *Surgical Clinic*. A clinic in general surgery, dealing chiefly with fractures and other lesions of bones. Two hours a week, second semester, third year, and entire fourth year. 1-3 Thursday. Good Samaritan Hospital. Professor Wilson.

6. *Surgical Clinic*. A clinic in general surgery with especial attention to surgical pathology. One hour a week entire fourth year. 12-1 Saturday. Multnomah Hospital. Assistant Professor Baird.

7. *Common Surgical Diseases*. A lectures and conference course involving a discussion of the pathology, diagnosis, and treatment of the more common surgical diseases. Two hours a week, second semester, fourth year. 11-12 Wednesday and Friday. Assistant Professor Baird.

8. *Orthopedic Surgery*. A lecture and clinical course in orthopedic surgery. One hour a week, second semester, fourth year. 10-11 Wednesday. Dr. Akin.

9. *Operative Surgery*. A course in surgery on the cadaver presented by lecture, demonstration and individual work by each student on the cadaver. Two hours a week, first semester, fourth year. 8-9 Tuesday and Friday. Dr. Pease.

10. *Surgical Dispensary*. A practical course in surgery, giving the student opportunity to do individual work in minor surgery at the dispensary. Two hours a week, second semester, third year; first semester, fourth year. 11-12 Monday and Thursday; Tuesday and Friday; Wednesday and Saturday. Assistant Professor Baird, Dr. McCusker, Assistant Professor Whiteside, Dr. Pease and others.

## XI. OBSTETRICS.

Professor Story, Assistant Professor Ellis.

Obstetrics is taught in the third and fourth years in lecture, recitation, and practical courses. Normal and pathological cases are demonstrated in hospital clinics and the out-patient service. Practical work is done by each student on the manikin and in the conduct of labor, under proper supervision in out-patient work.

1. *Introductory Obstetrics.* A lecture and recitation course in the anatomy and physiology of pregnancy, the diagnosis and management of normal pregnancy, and the clinical phenomena of normal labor. Three hours a week, first semester, third year. 1-2 Monday, Thursday and Friday. Professor Story.

2. *Advanced Obstetrics.* A lecture, conference and practical course in the conduct of labor and the diagnosis and treatment of pathologic conditions of pregnancy, labor and the puerperium. Three hours a week, second semester, third year. 1-2 Monday, Wednesday and Friday. Professor .....

3. *Practical Obstetrics.* A conference, and practical course in conduct of labor and management of abnormal presentations and other complications of labor. Each student is required to do practical work with the manikin. One hour a week, first semester, fourth year. 8-9 Wednesday. Dr. Ellis.

4. *Clinical Obstetrics.* Cases of confinement will be demonstrated and Senior students will be allowed to assist in the conduct of labor in the maternity department of the various hospitals and in the out-patient service. Hours to be arranged—entire fourth year. Dr. ...., Dr. ....

## XII. GYNECOLOGY.

Professor Tucker, Assistant Professor Wight.

Gynecology is taught by lectures, recitations, clinics and dispensary work in the third and fourth years.

1. *Gynecology.* Lectures and recitations in the anatomy, physiology and pathology of the female pelvic viscera, methods of gynecological examination, and the diagnosis and treatment of pelvic diseases. Two hours a week, second semester, third year. 9-10 Wednesday and Saturday. Assistant Professor Wight.

2. *Clinical Gynecology.* Lectures and clinics in the clinical diagnosis and medical and surgical treatment of diseases of women. One hour a week, second semester, third year, entire fourth year. 10-11 Tuesday. Professor Tucker.

3. *Practical Gynecology.* Dispensary work will be assigned to Senior students. Hours to be arranged.

**XIII. GENITO-URINARY DISEASES.**

Professor Mackay, Assistant Professor Whiteside.

Diseases of the genito-urinary tract will be considered didactically and clinically in the Junior and Senior years. Practical work will be given at the dispensary in cystoscopy, urethral, catheterization and modern methods of treatment.

1. *Lecture and Conference.* Lecture and conference in anatomy and physiology of the genito-urinary tract and study of the diseases affecting it. Two hours a week, second semester, 3rd year. 9-10 Monday and Thursday. Professor Mackay.

2. *A Continuation of Course.* With presentation of clinical work and accurate methods of diagnosis and treatment. Two hours a week, first semester, fourth year. 9-10 Wednesday and Friday. Professor Mackay.

3. *Dispensary Work in Genito-Urinary Diseases.* Will be assigned as a part of the work in surgical dispensary. Assistant Professor Whiteside and others.

4. *Clinic.* A clinic in the pathology, diagnosis, and treatment of genito-urinary diseases, and the use of the cystoscope and other diagnostic appliances. One hour a week, entire fourth year. 1-2 Saturday. Multnomah Hospital. Assistant Professors Whiteside.

**XIV. OPHTHALMOLOGY, OTOLOGY, RHINOLOGY AND LARYNGOLOGY.**

Professor Nunn, Assistant Professor Coghlan, Dr. Ralph Fenton, Dr. Kiehle, Dr. Ainslie.

These branches will be taught separately in the elementary work by means of lectures, demonstrations and recitation, and minor surgery, in the clinics, during the Junior year. A more advanced course will be given in the Senior year, including major surgery.

1. *Eye.* A lecture and quiz course in the anatomy and physiology of the eye and in its more prevalent diseases. Two hours a week, second semester, third year. 10-11 Wednesday and Friday. Dr. Ainslie.

2. *Ear, Nose, and Throat.* A course of lectures and quizzes in the anatomy and physiology of the ear, nose and throat and the pathology, diagnosis and treatment of their disorders. Two hours a week, second semester, third year. 2-3 Monday and Wednesday. Dr. Kiehle.

3. *Diseases of the Eye.* An advanced course of lectures and clinics in the pathology, diagnosis and treatment of affections of the eye, ear, nose and throat. Two hours a week, first semester, fourth year. 2-3 Wednesday and Friday. Professor Nunn.

4. *Diseases of the Ear, Nose and Throat.* A more advanced course in the diseases of the ear, nose and throat. Two hours a week, second semester, fourth year. 2-3 Monday and Friday. Assistant Professor Coghlan.

5. *Clinic.* A clinical course in diseases of the ear, nose and throat at Multnomah Hospital. One hour a week, entire fourth year. 1-5 Monday. Dr. Ralph Fenton.

6. *Clinic.* A clinic in diseases of the eye. One hour a week, first semester, fourth year. Hours to be arranged. Free dispensary. Dr. Kiehle.

**SCHOOL OF CORRESPONDENCE-STUDY.**

**FACULTY.**

- P. L. CAMPBELL, B. A., President of the University.  
PERCY PAGET ADAMS, B. S., Assistant Professor of Civil Engineering.  
ERIC W. ALLEN, B. A., Professor of Journalism.  
JOHN FREEMAN BOVARD, M. S., Professor of Zoology.  
WILLIAM PINGRY BOYNTON, Ph. D., Professor of Physics.  
JULIA BURGESS, M. A., Instructor in English.  
ROBERT CARLTON CLARK, Ph. D., Professor of History.  
EDGAR EZEKIEL DECOU, M. S., Professor of Mathematics.  
JAMES HENRY GILBERT, Ph. D., Assistant Professor of Economics.  
MOZELLE HAIR, B. A., Secretary Correspondence-Study Department.  
HERBERT CROMBIE HOWE, B. A., Professor of Modern English Literature.  
HEMAN BURR LEONARD, Ph. D., Assistant Professor of Mathematics and Resident Director Correspondence-Study Department.  
CARL A. MCCLAIN, B. S., Instructor in Civil Engineering.  
MARY HALLOWELL PERKINS, M. A., Instructor in English.  
JOSEPH SCHAFER, Ph. D., Professor of History.  
MAUDE E. STINSON, B. A., Instructor in English.  
ALBERT RADDIN SWEETSER, M. A., Professor of Botany.  
EDWARD ALLEN THURBER, M. A., Professor of Rhetoric and English Literature.  
ALBERT R. TIFFANY, B. A., Registrar of the University.  
FREDERICK GEORGE YOUNG, B. A., Professor of Economics and Sociology and Dean of the Graduate School.

**GENERAL INFORMATION.**

The constant aim of the Regents has been to make the University serve the people of the State to the fullest possible extent—

to give every man a chance to get the highest education possible and at the smallest practical cost—to bring the University and the home in close touch. With this purpose in mind, the University has broadened its field as fast as its resources have permitted. The Summer Session was opened for the benefit of those who had not the time nor the means to take the work in residence during the regular session. A step of still greater importance was the establishment in 1907 of the Correspondence-Study Department. To the courses now offered, the University plans to add others as fast as its resources will permit.

FOR WHOM INTENDED.

The correspondence courses are especially intended for:

Teachers.

Students preparing for college or university.

Women's Clubs.

Teacher's Groups.

Granges.

Home makers.

Engineers.

The courses offered by the University are intended for residents of Oregon; but in a few cases those moving out of the State and those planning to come in have been extended the privileges. The broad view has been taken that those preparing for this University should be given every opportunity.

It must constantly be borne in mind that correspondence work is in truth but a substitute for resident work. How satisfactory this substitute may prove to be, depends on many circumstances. Although all subjects cannot be taught efficiently by mail, experience shows that in many subjects correspondence work is very effective. Those subjects in which much written work is required of resident students lend themselves to long distance treatment. But even a poor substitute would be considered better than nothing at all by ambitious students, deprived of the opportunity of going to college. The Correspondence-Study Department enables those that have dropped out of high school or college to continue their

studies. It appeals especially to those who for any reason must content themselves with intermittent attendance at college, to teachers in secondary schools that wish to keep up thier work in their special line or that are required to teach subjects with which they are not very familiar.

#### PREPARATION NECESSARY.

Students may begin correspondence courses at any time. No preliminary examinations are required. Anyone may elect any course that he pleases and ability to carry the work is the sole prerequisite. The University does not guarantee results. It merely offers courses to those that are able to take them. The key to the whole situation lies in the words those that are able to take them." The power to do when assisted is what the department stands for. Courses taken and frogotten after the cerdit was obtained are of little value for subsequent work.

So, few questions are asked unless the student shows himself unable to do the work without an undue amount of assistance. The labor of preparing the written work is sufficient to deter the inefficient from continuing the course. The practical result has been that not more than two-per cent of those registering have persisted in sending in work that was not up to the standard and in requesting explanations of simple matters. And their very persistence was a virtue, for it arose from a desire to prepare for state exmaninations and correspondence showed that they were making the most of what they thought was their last and only chance.

#### EXTENSION MONITOR.

The Extension Monitor is published monthly and is sent to all correspondence students.

#### EXPENSES.

All instructions, including the examinations, is free. The student buys his own text-book and provides the paper for his written work. He also pays the postage both ways. It has been found on the average that one dollar will pay the postage on the matter

sent out for a complete course. So the student at the time of registration gives the department one dollar for each course chosen, to repay the postage on the matter to be sent to him, and one dollar for the Extension Monitor. Of course the requisite stamps must be put on each separate bundle of the work he sends in. The University asks no pay for the instruction. For such work, in addition to the return postage, eastern universities charge at least sixteen dollars. Oregon will probably not give its course free another year and now it makes this offer only to its citizens and in order to build up the department.

The books mentioned in the description of a course are to be bought by the student. If it is not convenient to procure them through a local dealer, send the amount mentioned to the J. K. Gill Company, Portland, Oregon, or to the Correspondence-Study Department.

#### REGISTRATION.

The student who wishes to undertake correspondence study, should inform the Correspondence-Study Department what course or courses he desires, enclosing at the same time the required fees for return postage, and using the blank application form at the end of the bulletin.

The Resident Director extends a cordial invitation to all interested to write to him and tell him what the applicant has done and what he wants to do and then assistance will gladly be given in the selection of suitable courses. Upon the receipt of the application form properly filled out, the instructor concerned is notified.

#### METHOD OF CONDUCTING COURSES.

After the student has registered for a course and has paid the fee for postage, a letter giving general instructions for doing work by correspondence is sent to him, together with the lesson-sheets for the first two lessons. To make the method clear, suppose that the course selected is Course I—Advanced Algebra—based upon the book of Hawkes. The student takes the lesson-sheet for the first lesson, which is part of a rapid review of elementary algebra, reads in the assigned sections the explanations that the book gives, and then does as many of the assigned problems

as he can and mails his work. At the University his work is read, errors are indicated, explanations of difficulties asked for are written out, and helpful suggestions are returned for the working out the problems that should have been done before. Meanwhile the student has been working ahead on the assignment of the second lesson-sheet, so unless his troubles have brought him to a full stop, no time is lost while the written work is on its way back and forth. The written work goes back accompanied by the lesson-sheet for the third lesson. He looks over his errors, studies the examinations that have been written out for him and in the light furnished thereby, tries again the problems he missed before. If there are still tangles not completely unraveled, more help is requested and the work mailed again. And thus the endless round is continued.

#### EXAMINATIONS.

Formal examinations are required only in case that credit is desired, but the written work assigned on a lesson-sheet must be completed to the satisfaction of the instructor before any more lesson-sheets will be sent out. In other words, a student never gets more than a couple of lesson-sheets ahead of what he has prepared properly.

Now some may be curious to learn how examinations can be given in a correspondence course. When the lesson-sheet for the lesson that precedes the test is sent out, it is accompanied by a request to the student, asking him to send in the name and address of someone willing to take the trouble to give him the test. He is urged to select a teacher, a preacher, or a college graduate that understands how such an affair should be conducted. The Department has ways of gaining information that enable it to satisfy itself about the qualifications of the one suggested. If a good selection has been made, the questions are sealed in a separate envelope and sent with a letter of instructions to the examiner. At the time of examination the student himself opens the envelope containing the questions, writes his answers, and ends with a signed statement that he has acted honestly. The examiner returns the papers with a statement that the test has been properly given.

## KIND OF WORK OFFERED.

The courses offered are designed to be as nearly like the work given on the campus as it is possible for them to be. The University offers no shortcuts to knowledge that are not used in teaching resident students in the parallel courses. Most of the courses have some text-book as the backbone, which is more or less in evidence according to the nature of the work.

## PREPARATORY COURSES OFFERED.

In pursuance of the policy of giving all possible aid to those connected with the educational system of the State, certain secondary courses are carried on for the benefit of students who can not take the work in a high school, and for teachers preparing for State examinations. The University does not give these courses to resident students and each is given the credit placed after it in the list below.

Botany .....	1 entrance unit.
Elementary Algebra .....	1½ entrance units.
Elementary Physics .....	1 entrance unit.
English Classics .....	1 entrance unit.
English Composition .....	1 entrance unit.
Oregon History .....	1 entrance unit.
Physiology .....	½ entrance unit.
Plane Geometry .....	1 entrance unit.
Solid Geometry .....	½ entrance unit.

Of these Botany and Oregon History may receive six college semester hours apiece when taken under proper conditons.

## COLLEGE COURSES OFFERED.

The other courses that are now being given by correspondence and the credit that their satisfactory completion will give, are listed below.

A course in Mathematics .....	15 college semester hours.
Advanced Algebra .....	3 college semester hours.
Analytic Geometry .....	4 college semester hours.
Analytical Mechanics .....	6 college semester hours.

Botany .....	6	college semester hours.
British Poets of the Nineteenth Century..	6	college semester hours.
Calculus .....	10	college semester hours.
Child Study .....	3	college semester hours.
Economics .....	6	college semester hours.
Educational Psychology .....	6	college semester hours.
Electricity and Magnetism .....	3	college semester hours.
English Composition .....	2	college semester hours.
History and Teaching of Physics .....	2	college semester hours.
Mechanical Drawing .....	4	college semester hours.
Money and Banking .....	4	college semester hours.
Oregon History .....	6	college semester hours.
Physical Education .....	2	college semester hours.
Plane Trigonometry .....	2	college semester hours.
Psychology .....	6	college semester hours.
Recent European History .....	6	college semester hours.
School Administration .....	6	college semester hours.
School Management and Art of Teaching	3	college semester hours.
Shakespeare .....	6	college semester hours.
Scientific Methods of Study.....	2	college semester hours.
Sociology .....	4	college semester hours.
Sound and Music .....	2	college semester hours.
Teaching of High School Mathematics....	2	college semester hours.

By an entrance unit is meant a subject running one year (36 weeks), five times a week, with recitations not less than forty minutes in length.

A semester hour is the credit given for a course consisting of one recitation, lecture, or laboratory period a week for one semester of twenty weeks.

The degree of Bachelor of Arts is conferred upon students of the College of Literature, Science and the Arts, who have been in residence at least one academic year, and who have secured one hundred and twenty semester hours of credit, exclusive of physical training; but the degree of Bachelor of Science may be conferred upon students conforming to the requirements enumerated above and electing majors in Natural Science or Mathematics, provided that written request for this degree be filed with the

Registrar of the University at least thirty days before the date upon which the degree is to be granted.

A total of forty semester hours of college credit may be earned through the Correspondence-Study Department *i. e.*, one-third of the amount required for the Bachelor's degree.

#### TEACHERS' CERTIFICATES.

The following courses are given that will aid the teacher in preparing for the State or County Teachers' examination: Botany, Physiology, Elementary Algebra, Plane Geometry, Pedagogy, and English Classics supplemented by English and American Literature based on Newcomer.

#### THE MASTER DEGREE.

One-half of the thirty semester hours of graduate work required for the Master's degree may be earned through the Correspondence-Study Department. The balance must be taken in residence in one regular semester of work. Graduate courses are not now given in the summer term.

#### CORRESPONDENCE.

Unless directed to use a private address by an individual instructor, send all communications to The Correspondence-Study Department, University of Oregon, Eugene, Oregon.

## SCHOOL OF MUSIC.

P. L. CAMPBELL, B. A., President.

CARL V. LACHMUND, Acting Dean and Instructor in Piano and Theory.

MARY GOODBAR MORGAN, Instructor in Piano.

EVE I. STINSON, B. Mus., Instructor in Voice.

WINIFRED FORBES, Instructor in Violin.

DAVID CAMPBELL, Instructor in Theory and Harmony and Piano.

AVIS BENTON, Instructor in Piano.

ALBERTA CAMPBELL, Assistant Instructor in Piano.

INA WATKINS, Assistant in Piano.

NELL MURPHEY, B. Mus., Assistant in Piano.

LILA C. PROSSER, B. Mus., Assistant in Voice.

The Department of Music aims to provide adequate instruction to students who desire knowledge of music, and to afford a course of study for those who shall become musicians as teachers or composers. ?

## COURSES.

The work in the department is divided into theoretical and practical. The theoretical consists of courses in harmony, theory, and history of music. Courses 1 and 5 are open to all students without previous musical training. All theoretical courses are given without fees to students registered in the University or School of Music.

1. *Elementary Theory.* Notation; tonality; intervals; study of rhythm; primary and secondary triads of major and minor keys; harmonizing of simple basses and original melodies.

*One hour, two semesters.*

2. *Harmony.* Continued work in the use of triads; inversion of triads; dominant seventh chord, its inversion; harmonizing of basses, given and original.

*One hour, two semesters.*

3. *Harmony.* Secondary sevenths with inversions; chords of the ninth, eleventh and thirteenth; altered chords. Drill in recognizing modulations; suspensions, organ point, passing and changing tones; constant applied work. Careful study of the means of modulation. *One hour, two semesters.*

4. *Harmony.* Composition of numerous chorals; harmonizing of Volks-Lieder; constant practice in modulation; critical harmonic analysis of celebrated classic and modern compositions.

5. *History of Music.* Lectures are given on the development of music from its earliest stages; history of church music from time of Gregory; history of opera and oratorio; biographical sketches of famous composers, with description and analysis of their principal works; history of purely instrumental music, showing growth and development of musical forms.

*One semester hour's credit.*

Candidates for degree of Bachelor of Music must have completed the entrance requirements of the University before beginning the course. The course requires proficiency in theory, two years of German, two years of English, two years of literature, one year of Psychology, one year of Education, two years of French, and one year of Italian. Every student in the School of Music who is a candidate for the degree Bachelor of Music is required to take Physical Training during his freshman and sophomore years.

Practical courses are offered in Voice, Piano and Violin. These courses are elective, and open to any student who wishes to study music, whether a candidate for a degree or not. Candidates for the degree Bachelor of Arts may take music each year. College credit of two semester hours is given. All students in piano are required to take the theoretical course, unless permission to omit such work is given by the Dean of the School of Music.

Candidates for degree of Bachelor of Music must have a one hour lesson a week in the practical subject of the department. Major work in piano requires two years of voice training, also training in teaching under supervision of head of the department, as well as ability to appear as soloist.

Upon entrance to the four years of piano work offered in the University, the candidate for the degree Bachelor of Music should

be able to play major and minor scales, correctly; studies from Czerny op. 299; Cramer, Books I or II; Berens op. 61; easier sonatas of Mozart; Haydn, Reinecke, Sonatinas op. 47; Krause Sonata op. 3; Little Preludes and Fugues of Bach; easier Mendelssohn songs; and pieces by modern writers of same grades.

Candidates for degree of Bachelor of Music with Voice as major subjects are required to complete two years of Piano, one-half hour weekly; and one hour weekly in Voice training, sight singing, and to have the ability to appear as soloist.

In entrance to four years of Voice work offered in the University, the candidate for the degree of Bachelor of Music should have a knowledge of notation, tonality, intervals and rhythm, and should be able to sing studies from Abt, Concone Op. 9, Panofka Op. 85, or their equivalent.

The instructor in Violin for 1912-13 has not been definitely determined upon, but the School of Music is planning on an excellent department and the best possible talent is to be secured. Information may be had in the near future by addressing the Dean of the School of Music.

#### PREPARATORY COURSES.

In Voice, Piano, and Violin courses are offered from the beginning of music study for the benefit of those who have had no work or have had comparatively little.

#### RECITALS.

After January first, practice recitals are given twice a month, giving every student an opportunity to play and incidentally affording him a larger knowledge of musical literature in all grades. Public recitals are given at the close of the first semester, and at the close of the school year.

#### FEEES FOR INSTRUCTION IN MUSIC.

Fees for work in the School of Music must be paid to the Steward of the University in advance. For first semester, on or before October 15th; for second semester, on or before March 15th.

## TUITION.

## SEMESTER OF EIGHTEEN WEEKS.

Two lessons per week—	<i>Half hour</i>	<i>Hour</i>
VOICE.	<i>Lessons</i>	<i>Lessons</i>
Miss Stinson .....	\$45.00	\$90.00
Miss Prosser .....	35.00	70.00

## PIANOFORTE.

Miss Morgan or Mr. Campbell.....	45.00	90.00
Miss Watkins .....	35.00	70.00
Miss Campbell .....	35.00	70.00
Miss Murphey .....	35.00	70.00
Miss Evans .....	35.00	70.00

## VIOLIN.

.....	45.00	90.00
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One lesson per week—	<i>Half hour</i>	<i>Hour</i>
VOICE	<i>Lessons</i>	<i>Lessons</i>
Miss Stinson .....	\$25.00	\$45.00
Miss Prosser .....	18.50	35.00

## PIANOFORTE.

Miss Morgan or Mr. Campbell .....	25.00	45.00
Assistant Instructors .....	18.50	35.00

## VIOLIN.

.....	25.00	45.00
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## ADDITIONAL EXPENSES.

Pianos may be rented at rates of from \$4.00 to \$6.00 per month. A limited number of practice hours are given on pianos in the School at the rate of \$4.00 a semester for one hour's practice daily.

Information in regard to living and incidental expenses may be secured from the Registrar of the University.

**DEGREES CONFERRED**

On Commencement Day, June 21, 1911, degrees were conferred as follows:

**The Degree of Master of Arts Upon**

Charles Roy Reid.

**The Degree of Civil Engineer Upon**

Chester C. Fisher  
Milton B. Germond

Joseph Wilbur McArthur  
Carl Arthur McClain

**The Degree of Electrical Engineer Upon**

Hamilton H. Hoffman  
Ferdinand J. Neubauer

Benjamin Harrison Williams  
Olive Woodward

**The Degree of Bachelor of Arts Upon.**

Grace Marie Adams  
Jean Katherine Allison  
Rachel Emma Applegate  
Mildred Edith Bagley  
Rita Ellen Banfield  
Wendell C. Barbour  
Neta Bartlett  
Maude Joy Beals  
Harold C. Bean  
Ethel Grace Beebe  
Pansy Belle Beebe  
Jessie Merle Bibee  
Hazel Harriet Bradley  
Alberta Winifred Campbell  
Lucia Eugenia Campbell  
Louise Cecil  
Cora Chase  
Earl Childers  
Fay Clark  
Clementine Mabel Cutler  
Edna Prescott Datson  
William Gates Dunlap  
Ethel Lena Evans  
Roy Oroville Fitch  
Eva Frazer  
Harry William Frederickson  
Ellen Beadle Frink  
Jennie Harbord Fry  
Margaret Virginia Fulton  
George Alpha Gabriel  
Louis Raphael Geisler  
Frieda Goldsmith  
Charles Augustus Guerne  
Celia Victoria Hager  
Rubie Hammerstrom  
Ruth Claire Hardie  
Lloyd Ordway Harding  
Ala Evans Houston  
James Hunter Howard  
Ruth Marie Howell

Walter M. Huntington  
Homer B. Jamison  
James Shanard Johns, Jr.  
B. Florence Junkin  
Jane Margaret Webb Knox  
Mabel Joy Lane  
Alice Edith Larsen  
Earle Cornelius Latourette  
Maude A. MacDonald  
Melissa Margaret Martin  
Merle McKelvey  
Edna Clarinda McKnight  
Rebecca Imogene McKown  
Ruth M. Merrick  
Ermel M. Miller  
Chester Alexander Moores  
Ralph Dickinson Moores  
Ella Louisa Moulton  
Nell Murphey  
Olga Eunice Olsen  
Alma Payton  
Robert Burns Powell  
Jessie A. E. Prosser  
Falley G. Rasmussen  
L. Leon Ray  
Henrietta Frieda Rhodes  
Sara S. Riddle  
Dorothy Schoolcraft  
John Wesley Shattuck  
Pansy Shaver  
Matthew Michael Stastny  
Harry Moran Stine  
William Erle St. John  
Rex A. Turner  
Ida Viola Turney  
Emma Jane Waterman  
Hazel Emaline Wightman  
Birdie Wise  
Thomas Marshall Word, Jr.

**The Degree of Bachelor of Science Upon**

Herbert Lloid Barbur  
 Harold B. Cockerline  
 Hugh Perkins Currin  
 Harry E. Devereaux  
 Forrest E. Dunton  
 Raymond Helder  
 Sidney Elliot Henderson  
 Robert Hamilton Hendricks  
 Edward J. Himes  
 Leigh M. Huggins  
 Jonathan Lewis Johnson  
 J. Earl Jones  
 Robert Noel Kellogg

John George Kelly, Jr.  
 William Sangster Main  
 Charles Louis Marshall  
 David Lester McDaniel  
 John Perry McGuire  
 Graham J. Michael  
 Frank Ford Northrop  
 Charles Raymond Oleson  
 John V. Bast  
 George Wence Shantin  
 Raymond V. Thomas  
 Clarence William Wallis

**The Degree of Doctor of Medicine Upon**

Ira Ellis Barrett  
 Earl Bruce Brookbank  
 Lloyd Wesley Brooke  
 Willis Dole Butler  
 Frederick Robert Hunter  
 Charles Franklin Loeding  
 Arthur Clifford McCown  
 George Everett Murphy

Allen Pendleton Noyes  
 Luman Samuel Roach  
 Lafayette Oren Roberts  
 Clarence Wesley Ross, B. A.  
 Thomas Harris Boyle Runnalls  
 William Taylor Stout, B. S.  
 Stanley Leon Wang  
 Arthur Ernest Younie

**The Degree of Bachelor of Laws Upon**

James R. Bain  
 John H. Barbour  
 John Lyman Bozorth  
 Fay L. Brown  
 Daniel D. Bump  
 A. H. Burton  
 Beatrice Martindale Butler  
 Edward James Chapman  
 Herbert Alfred Cooke  
 Eugene A. Dueber  
 Ross Farnham  
 Paul C. Fisher  
 Valentine A. Fryer, Jr.  
 T. Walter Gillard  
 Joseph Leib Gould  
 Christopher Joseph Hayes  
 Karl Herbring  
 Cicero Francis Hogan  
 William Maurice Hudson  
 Frank Carson Hunt  
 J. Berton Killough  
 Frank B. Layman  
 Lee Bon Kew  
 Herman F. Loeding

D. N. Mackey  
 A. E. Mackenzie  
 Paul Mahoney  
 M. John McNulty  
 Mario G. Montrezza  
 William A. Morey  
 Robert Nixon Munly  
 Shirley DeLaney Parker  
 Everett S. Pechin  
 LeRoy Bliss Peckham  
 Francis M. Phelps  
 Clemmer W. Platt  
 George Michael Schaefer  
 Jesse Kimberland Scott  
 William J. Staples  
 Charles D. Takeoka  
 Harry Edward Toleman  
 Eljiro Uo  
 Benjamin F. Wagner  
 Kaname Wakasugi  
 William H. Witt  
 Wong Back Kow  
 Erskine Wood  
 Elbert William Yates

SPECIAL HONORS FOR EXCELLENCE OF THESES.

GRADUATE.

- CHESTER C. FISHER—"Engineering Features of the Minidoka Irrigation Project."  
MILTON B. GERMOND—"Design of a Sewer System for South Roseburg."  
JOSEPH W. MCARTHUR, CARL A. MCLAIN—"Design and Construction of a Masonry Dam on a Permeable Bed."  
BENJAMIN H. WILLIAMS—"Employer's Liability and Workmen's Compensation."

UNDERGRADUATE.

- GRACE M. ADAMS—"The Initiative and Referendum in Oregon."  
ALBERTA W. CAMPBELL—"A Comparison of the Personalities of Tolstoy, Zola, and Mrs. Radcliffe, as Discernible in Their Works."  
MILDRED E. BAGLEY—"The Evolution of the Physical Life of Women as Shown in the English Novel."  
HARRY E. DEVEREAUX—"Physical and Chemical Properties of Certain Commercial Sands of Oregon."  
CHARLES A. GUERNE—"The Teaching of Mathematics in the Higher Schools of Germany."  
RUBY HAMMARSTROM—"The Finnish Settlement in Astoria, Oregon."  
RAYMOND HEIDER, J EARL JONES—"Designs, Specifications, and Estimates for a Sewer System."  
WALTER M. HUNTINGTON—"Portland's System of Municipal Accounting."  
J. LEWIS JOHNSON—"Determination of the Upward Pressure of Water Upon the Base of Dams on Sand Foundations."  
JAMES S. JOHNS—"Oregon's Power Resources on the Farm."  
CHARLES L. MARSHALL, DAVID L. MCDANIEL—"A Report on the Treasure Mine, Blue River District, Lane County, Oregon."  
CHESTER A. MOORES—"Taxation of Unearned Increment."

RALPH D. MOORES—"Taxation of Inheritances in Oregon."

ALMA PAYTON—"Stories and Legends of Ireland." A translation from the French.

WILLIAM E. ST. JOHN—"Mark Twain's Mississippi Valley Stories."

L. LEON RAY—"Suggestions for the Revision of Oregon's Corporation Laws."

IDA V. TURNEY—"The Theme of Ballad Poetry and Its Influence Upon Later Poetry."

THOMAS M. WORD, JR.—"The Utopia in English Literature."

EDNA C. MCKNIGHT—"Country Journalism in Oregon."

HAROLD BEAN, EVA FRAZER—"The Purification of Willamette River Water."

ROY FITCH—"The Use of Hypochlorites in Water Purification."

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## STUDENTS ENROLLED

## GRADUATE SCHOOL.

Baker, Edith A. ....	Eugene
Banfield, Rita Ellen .....	Portland
Barnard, Ethel Frances .....	Eugene
Barrett, Edith F. ....	Eugene
Bell, Cecilia Smith .....	Pioneer
Billington, Frank Edwin .....	Eugene
Cecil, Ollie Louise .....	Portland
Frazer, Eva .....	Eugene
Frink, Ellen B. ....	Eugene
Geary, Arthur M. ....	Medford
Getchell, Myron Warren .....	Eugene
Howell, Ruth M. ....	Portland
Kerr, Alice Winifred .....	Eugene
Kerr, Maude Service .....	Roseburg
McKnight, Edna Clarinda .....	Albany
Paulson, Mark Anthony .....	Silverton
Sanborn, Ethel Ida .....	Eugene
Smedley, Annette H. ....	Bradford, Pa.
Turney, Ida Viola .....	Stanley, Wis.
Wigmore, Ernest C. ....	Eugene

COLLEGE OF LITERATURE, SCIENCE AND THE ARTS, AND  
COLLEGE OF ENGINEERING.

Abrams, Lucile .....	Eugene
Ackerson, Luton .....	Eugene
Adams, Frances .....	Silverton
Adamson, Grace .....	Pocatello, Idaho

— Aitchison, Clyde S. ....	Portland
Allen, Anson G. ....	Astoria
— Allen, Franklin S. ....	Eugene
Allen, Seward Ralph ....	Eugene
Andrew, Norma ....	Eugene
— Anunsen, Fred ....	Portland
— Apperson, Arthur La Verne ....	Eugene
Archambeau, Louretta M. ....	Eugene
Arney, J. Ward ....	Spokane, Wash.
— Ash, Clarence Edward ....	Portland
— Avery, Florence Elizabeth ....	Hood River
Bailey, Edward Flint ....	Eugene
Bailey, Louisa ....	Eugene
— Bach, Bessie Louise ....	Lebanon
— Baker, Amy H. ....	Eugene
— Baker, J. Albert ....	Eugene
Baker, Mary Ethel ....	Eugene
Ball, Faye Elizabeth ....	Astoria
Ball, Leola Danforth ....	Astoria
— Barber, Fred Joseph ....	Portland
Barnett, Ira ....	Wasco
Barnett, Marie A. ....	Wasco
— Barnhart, A. Lester ....	Falls City
— Barta, Hazel ....	Superior, Wis.
— Barzee, Lloyd D. ....	Portland
Basler, Rose M. ....	Portland
Batley, Merlin George ....	Twin Falls, Idaho
— Beach, Ruth ....	Portland
Bean, Grace ....	Salem
— Bean, Hawley J. ....	Salem
Bean, Robert D. ....	Portland
Beckwith, Arvilla Agnes ....	Portland
— Beebe, Francis A. ....	Eugene
Belat, Margaret ....	The Dalles
Benson, Wallace G. ....	Gardiner
— Bigbee, Lyle R. ....	Eugene

*Students Enrolled*

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Bigbee, Morris S. ....	Eugene	
Biles, Alfred F. ....	Portland	—
Billings, Gordon Aldon .....	Olympia, Wash.	
Billington, Mrs. Rilla M. ....	Eugene	
Bingham, Charles S. ....	Sedro Wooley, Wash.	
Black, John A. ....	Portland	—
Black, Verena .....	Eugene	—
Blackaby, Earl .....	Ontario	
Blackman, Abe .....	Portland	—
Blazier, Owen .....	Portland	—
Bond, Lewis Alexander .....	Eugene	—
Bonnell, Florence .....	Portland	—
Boone, William R. ....	Wellsville, Kansas	
Booth, Barbara Wenzora .....	Eugene	
Boydell, Ethelwyn Trevor .....	Nyssa	
Boylen, Tom Jr. ....	Pendleton	—
Bradshaw, Robert C. ....	The Dalles	—
Brant, Hilda M. ....	Portland	
Brenton, Walter .....	Eugene	
Bridges, Katherine Margaret .....	Brownsville	
Briedwell, Paul R. ....	Amity	—
Broadbridge, George W. ....	La Grande	—
Brock, Eva Lenora .....	Hood River	
Bronaugh, Earl Clapp Jr. ....	Milwaukee	—
Brooks, Irwin G. ....	Portland	—
Brooks, Russell .....	Silverton	—
Brotherton, Clarence E. ....	Waitsburg, Wash.	—
Broughton, Harold J. ....	Portland	—
Brown, Eyler .....	Eugene	
Brown, John Prentiss .....	Lebanon	
Brown, Sybil .....	Portland	
Brownell, Austin B. ....	Gardiner	—
Bruckart, Leigh M. ....	Grotto, Wash.	
Bryant, Raymond H. ....	Clatskanie	
Buchanan, Robert Cochran .....	Portland	
Buell, Edith .....	Eugene	
Buell, Gertrude .....	Eugene	

Buoy, Leonard .....	Eugene
Burgard, John Clark .....	Portland
Burgard, William Norman .....	Portland
Burris, Victor Earl .....	Eugene
Busch, Elizabeth .....	Portland
Cake, Helen Marian .....	Portland
Cake, Ralph Harlan .....	Portland
Calkins, Russell D. ....	Eugene
Campbell, Agnes Dorothy .....	Monmouth
Campbell, David Beasley .....	Monmouth
Campbell, Irmalee Alexandra .....	Eugene
Carl, George F. ....	Eugene
Caro, Raymond J. ....	Burke, Idaho
Carrick, Richard Scott .....	Gefle, Sweden
Carson, Catherine Campbell .....	Salem
Cartwright, Constance .....	Salem
Cartwright, Gladys .....	Salem
Casebeer, Chauncey R. ....	Eugene
Casebeer, Lloyd .....	Eugene
Cash, A. Burleigh .....	Hood River
Cash, Harry Leland .....	Hood River
Cass, William Avery .....	Hood River
Caufield, Wallace Burnside .....	Oregon City
Cecil, James Carrol .....	Burns
Cellars, James H. ....	Portland
Chandler, Ben R. ....	Marshfield
Church, Walter E. ....	Eugene
Churchill, Marie .....	Baker
Clements, Edith .....	Roseburg
Cleveland, Florence Ruth .....	Portland
Clubb, Will .....	Eugene
Coe, Pauline .....	Grants Pass
Coffey, Jay Russell .....	Portland
Cogswell, Lucile .....	Portland
Cohn, Harold Albert .....	Heppner
Cole, Effie M. ....	Eugene

Collier, Alfred D. ....	Eugene	—
Collier, Andrew M. ....	Eugene	—
Collier, Charles Haskell .....	Eugene	—
Cook, Samuel .....	Coeur d' Alene, Idaho	—
Cooper, Genevieve .....	Independence	—
Cornell, Anson Black .....	Portland	—
Coshow, John Milton .....	Hood River	—
Cossmann, James K. ....	Creswell	—
Cowan, Marjory .....	Marshfield	—
Cowden, Corina Bess .....	Silverton	—
Cowden, Norton R. ....	Silverton	—
Cowden, Palm May .....	Silverton	—
Cox, Mary E. ....	Corvallis	—
Cox, Nellie .....	Eugene	—
Crain, Harry N. ....	Bandon	—
Crawford, Arthur R. ....	Heppner	—
Crenshaw, Jesse H. ....	Eugene	—
Crockatt, P. Campbell .....	Pendleton	—
Cross, Georgina .....	Oregon City	—
Crowell, Dean Piper .....	Albany	—
Crump, Helen M. ....	Eugene	—
Currey, Roy B. ....	La Grande	—
Cushman, Bess .....	Brownsville	—
Cuyler, Mrs. Roger Irving .....	Eugene	—
Davidson, Frank .....	Shedds	—
Davies, A. H. ....	Portland	—
Davis, Lucile Allen .....	Portland	—
Davis, Paul .....	Eugene	—
Davis, Ruth Evelyn .....	Eugene	—
DeBar, Bryant .....	Eugene	—
Degermark, Carin H. ....	Portland	—
Dellar Isaac .....	Portland	—
Devaney, Lucy Aloysia .....	Eugene	—
Devaney, Marah Elisabeth .....	Eugene	—
Deyoe, Claire E. ....	Eugene	—
Dimm, Walter Robert .....	Eugene	—

Dobie, Norma Belle .....	Eugene
Dobie, Walter Logie .....	Eugene
→ Donaca, Thomas G. ....	Lebanon
— Donald, James Thomson .....	Baker
— Dorris, Ben F. Jr. ....	Eugene
Dorris, Ruth .....	Eugene
→ Dougherty, Mona E. ....	Wallowa
Drew, Nettie V. ....	Portland
— Driver, Helen Frances .....	Tacoma, Wash.
Dunbar, Fred B. ....	Klamath Falls
— Dunham, Flora .....	Portland
— Dyott, Gaven Crane .....	Portland
Eakin, Wallace Clarence .....	Astoria
Eastham, Vera Valene .....	Eugene
Edwards, Ruby Claire .....	Eugene
Edwards, Vera .....	Eugene
Egan, Marguerite .....	Gervais
Elliott, Agnes Elizabeth .....	Prineville
Elliott, Wayne E. ....	Eugene
Ensley, Earl .....	Drain
— Epperly, Albert Marion .....	Lebanon
— Erdmann, Clara Agnes .....	Elmira
— Evans, Carl Clarence .....	Medford
→ Ewbank, Isole Dorothy .....	Eugene
— Ewbank, Leola .....	Eugene
Fagan, M. Howard .....	New Zealand
— Fariss, J. Robert .....	Eugene
— Farnsworth, Alice Good .....	Lindsay, Cal.
— Fee, Chester Anders .....	Pendleton
→ Fenton, Carl B. ....	Dallas
— Fenton, Charlie .....	Portland
Fenton, F. Boyce .....	McMinnville
Fenton, Lucile Margaret .....	Portland
→ Finch, Leland Stanford .....	Baker
Fisher, Walter S. ....	Roseburg

Students Enrolled

Fleming, Raeman T. ....	Portland	—
Fletcher, Marie P. ....	Eugene	
Flynn, Margaret Mary .....	Eugene	
Ford, Edsall P. ....	Portland	
Fortmiller, George Earl .....	Albany	—
Foster, Albert D. ....	Dayton	—
Foster, Clark Braden .....	Dayton	
Foster, Florence .....	Eugene	
Foster, Wilmot Coyne .....	Astoria	
Fowler, Charles A. Jr. ....	Portland	—
Fowler, Henry .....	Portland	—
Fraley, Rita Eleanor .....	Eugene	—
Frazer, Kenneth Francis .....	Portland	
Fulton, Alan Clyde .....	Astoria	
Furuset, Elmer .....	Eugene	—
Galloway, J. F. T. ....	Elgin	—
Gardner, Lillian Lucille .....	Elmira	
Garrabrant, Albert D. ....	Hood River	
Garrett, Lida Oakes .....	Eugene	
Garrett, Vernon George .....	Medford	
Gaston, Ira E. ....	Astoria	—
Gaunt, Walter B. ....	McMinnville	
Geary, Edward A. ....	Portland	—
Geisler, Carlyle Dressler .....	Portland	—
Genn, Vernon C. ....	Eugene	—
George, Helen Blair .....	Portland	
George, Herbert L. ....	Portland	
Gerig, Mildred Leigh .....	Medford	
Giles, Raymond Burl .....	Bellefourche, S. D.	—
Gilkey, Lillian .....	Eugene	
Gilpin, Joseph Henry .....	Portland	—
Gilstrap, Cosby .....	Eugene	
Glass, David Gilbert .....	Myrtle Creek	—
Goldsmith, Meta Marion .....	Eugene	
Good, Eugene N. ....	La Grande	—
Goodwin, Marsh H. ....	Eugene	—

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Gorman, Raymond E. ....	Cathlamet, Wash.
Z Gould, Aaron H. Jr. ....	Portland
Z Grady, Harold Henderson ....	La Grande
Gragg, Emmet A. ....	Roswell, New Mexico
Gram, Myrtle Eveline ....	Portland
Graves, Norma Frances ....	Portland
Gray, Howard ....	Milwaukee
Gray, Lois Elizabeth ....	Eugene
Graybill, Gladys ....	Nampa, Idaho
Grayson, Carl M. ....	Troutdale
Grout, Alva R. ....	North Bend
Gurney, Elsie G. ....	Eugene
Hager, Marie Jeanette ....	Heppner
Hall, Elmer Edwards ....	Baker
Hamilton, Helen Jane ....	Roseburg
Hamilton, Worth ....	Grants Pass
Hampton, Claud ....	Pendleton
Hansen, Lenora ....	Portland
Hardesty, Fred A. ....	Astoria
Harding, Evelyn ....	Oregon City
Harding, Madelene De Walt ....	Silverton
Haroun, Emma L. ....	Eugene
Hart, Earl R. ....	Tacoma, Wash.
Hartley, Albert C. ....	Silverton
Hartley, Grace ....	Eugene
Hartsuck, David G. ....	Olympia, Wash.
Harvey, Edna May ....	Eugene
Hawley, Clark R. ....	Eugene
Healey, Mildred Martha ....	Spokane, Wash.
Heidenrich, Henry Wm. ....	La Grande
Heider, Otto W. ....	Sheridan
Heissler, Clara Betty ....	Portland
Hemenway, Nellie Harriet ....	Cottage Grove
Hendricks, Leland Giesy ....	Salem
Henline, Oala ....	Arkalon, Kansas
Heskett, Lola Maude ....	La Grande

Students Enrolled

Heusner, William Bates .....	Portland	✓
Hidden, Charles Emerson .....	Portland	
Hill, Maurice Benjamin .....	Athena	✓
Hodge, Walton Stanley .....	Coquille	✓
Holbrook, Helen Corey .....	Portland	
Holbrook, Norman Bruce .....	Portland	
Holden, Wm. Forrest.....	Portland	
Holman, Minnie Marie .....	La Grande	✓
Holt, Vesta .....	Eugene	
Holt, William Penn .....	Holland, Texas	✓
Horner, Alicia Pearl .....	Corvallis	
Horton, Ruth Viola .....	Eugene	✓
Housel, Carl Harrison .....	Portland	
Howard, Thornton W. ....	Oregon City	
Huggins, George Chester .....	Silverton	
Huggins, Jennie Frances .....	Portland	
Hughes, Earl Franklin .....	Portland	✓
Humbert, Harold Franklin .....	Eugene	
Husband, Evangeline Augusta .....	Eugene	
Husband, Victor Pierpont .....	Eugene	
Hyde, Maurice H. ....	Portland	
Ingham, Mary De Etta .....	Portland	✓
Jarvis, Opal .....	Eugene	
Jaureguy, Anthony .....	Tacoma, Wash.	✓
Jerard, Bertrand Stuart .....	Pendleton	✓
Johnson, Frank Henry .....	Eugene	
Johnson, Helen M. ....	Eugene	
Johnson, Ida .....	Eugene	
Johnson, Roy .....	Gresham	✓
Jones, J. Buford .....	Portland	✓
Jones, Joseph F. ....	Portland	
Kaiser, Joseph .....	Salem	
Kay, Ercel W. ....	Salem	
Keezel, E. L. ....	Philomath	✓

— Kellems, Jesse Randolph .....	Eugene
— Kem, Myrtle .....	Cottage Grove
— Kendall, Ada Gleason .....	Portland
— Kendall, Florence Oswald .....	Portland
— Kimball, Nathaniel J. ....	Pendleton
— Kimmell, Walter W. ....	Lebanon
— Kincaid, Bertha .....	Ashland
— Kincaid, Maude .....	Ashland
— King, Dalzel M. ....	Myrtle Point
— Kinsey, Beulah Belshaw .....	Eugene
— Kinsey, Georgia .....	Eugene
— Kinsley, Tula French .....	Condon
— Kirk, Walter J. ....	Salem
— Kirkpatrick, Katherine J. ....	Lebanon
— Kleinsmith, Emma Belle .....	Oregon City
— Knapp, Stanley M. ....	Eugene
— Koyl, Carolyn S. ....	Eugene
— Kraus, John R. ....	Aurora
— Kronenberg, Chester Legart .....	Cleone
— Kuck, Harry L. ....	The Dalles
— Kuykendall, Robert B. ....	Eugene
— Lackey William Edward .....	Eugene
— Lamb, Ernest Dolph .....	Eugene
— Lane, Edward Erie .....	Walla Walla, Wash.
— Larwood, Donald Whitman .....	Eugene
— Larwood, Walter W. ....	Eugene
— Lawrence, Milred .....	Portland
— Leach, Fairy Virginia .....	Wedderburn
— Lee, Alfred L. ....	Baker
— Leggett, John Franklin .....	Eugene
— Lewis, Elizabeth .....	Portland
— Lewis, Frank M. ....	Portland
— Lieser, Jessie Hollingsworth .....	Vancouver, Wash.
— Lilly, Beatrice .....	Portland
— Lilly, Grace .....	Portland
— Lindley, Cecil .....	Eugene

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Lindsey, Harvey E. ....	Portland	
Littlefield, Beatrice Harriett .....	Minam	7
Livermore, Lyn H. ....	Pendleton	7
Livingstone, William Kenneth .....	Forest Grove	
Locke, Beatrice May .....	Portland	
Lombard, Herbert W. ....	Eugene	1
Lombard, Nellie .....	Eugene	
Lorence, Mabel .....	Monmouth	
Lorett, Wayne .....	McMinnville	
Loundagin, James Albert .....	Garfield, Wash.	7
Luckey, J. Elwood.....	Eugene	7
Lyons, Stewart H. ....	Portland	7
Mackenzie, Grace Seaforth .....	Portland	
Macklin, Lucia Katherine .....	Portland	
MacLaren, Ruth .....	Portland	1
Maegly, Esther .....	Portland	
Mann, Margaret .....	Springfield	
Manville, Ira Albert .....	Eugene	
Maris, W. Homer .....	Portland	7
Marshall, Eva Lucile .....	Medford	
Martin, Alexander .....	Eugene	
Martin, Edgar E. ....	Eugene	
Martin, Harry L. ....	Cottage Grove	
Martindale, Kenneth Burns.....	Wenatchee, Wash.	11
Martzloff, Karl H. ....	Portland	11
Mastick, Maud .....	Portland	
Matschek, John Norman Jr. ....	Portland	
Matthews, Herbert Hill .....	Mechanicsville, Ia.	
McCallum, James Henry .....	Eugene	
McClaine, S. Eleanor .....	Silverton	
McClelland, James Jr. ....	Salem	11
McClure, Walter Rayburn .....	Eugene	11
McConnel, Graham E. ....	Boise, Idaho	11
McCormick, Edith Vaughn .....	Eugene	
McCornack, Robert DeHuff .....	Spokane, Wash.	
McCown, Earnest Kingsley .....	Vancouver, Wash.	

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McDowell, Mary Louisa .....	Irving
—McFarland, Daniel .....	Grants Pass
McFarland, Mary Alice .....	Grants Pass
—McGilchrist, Millar .....	Salem
—McGuire, John E. ....	Eugene
—McKown, Hazel .....	Goshen
McLaughlan, Agnes A. ....	Portland
McLennan, Millard .....	Portland
McMicken, Anna S. ....	Portland
McMillian, Charles W. ....	Garibaldi
—McShain, Ollive Clarys .....	Elgin
—Meek, Edward Colton .....	Portland
Meredith, Helen E. ....	Portland
—Merrick, Emerson P. ....	Medford
Messenger, Edna May .....	Portland
Meyers, Cyril H. ....	Gresham
—Michael, Sam. ....	Baker
Mickelson, Edith .....	Eugene
—Mickey, Martel Irvin .....	Junction City
Miller, Cecil Olive .....	Portland
Miller, Gertrude C. ....	Moscow, Idaho
Miller, Harry Ulysses.....	Newberg
Miller, Joseph Chester .....	Portland
Miller, Leon H.....	Wenatchee, Wash.
Miller, Mabel Salena.....	Eugene
Miller, Neta M.....	Moscow, Idaho
Miller, Nina.....	Enterprise
Miller, Waldo S.....	Portland
—Milton, Darrell W.....	Eugene
Minturn, Charles H.....	Eugene
Minturn, Elizabeth Leora.....	Eugene
—Moe, Roger Waldo.....	Hood River
—Moffat, Vera .....	Eugene
Moffet, Florence .....	Vale
Montague, Margaret.....	Portland
Moore, Merle.....	Eugene
—Moore, Victor.....	Astoria

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Moorhead, Bishop.....	Junction City
Moorhead, Josephine.....	Junction City
Morden, Parks L.....	Portland
Morris, Victor Pierpont.....	Eugene
Morrison, Bessie.....	Eugene
Morrison, Earl Richard.....	Eugene
Morton, Melville.....	Astoria
Moss, Eva Pluma.....	La Grande
Motschenbacher, Clarence E. ....	Klamath Falls
Motschenbacher, Vernon T.....	Klamath Falls
Mount, Wallace Jr. ....	Olympia, Wash.
Mountjoy, Lee M.....	Harrisburg
Mowe, H. Edgar.....	Cornelious
Moxley, Edith Frances.....	Eugene
Murphy, Will D. ....	Eugene
Myers, Leon L. ....	Silverton
Myers, Walter L. ....	The Dalles
Neill, May .....	La Grande
Neill, Will T. ....	La Grande
Neufeld, Anna .....	Portland
Newland, Nellie I. ....	Eugene
Newton, Lena Bertha .....	Eugene
Noren, Aline Elizabeth .....	Portland
Norcross, W. F. Hull .....	Central Point
Normandin, Herbert .....	Portland
Norris, J. Paul .....	Claremont, Cal.
Northrop, Katherine .....	Eugene
Norton, Mae A. ....	Portland
Oberholtzer, Aldous .....	Spokane, Wash.
Oberteuffer, G. Herman .....	Portland
O'Connell, Allen Wilbur .....	Portland
Ogle, Clairel L. ....	Woodburn
Olsen, Arthur Samuel .....	Portland
Onthank, Donald George .....	Hood River
Onthank, Karl W. ....	Hood River
Osburn, Verneta .....	Roseburg

—	Pack, James A. Jr. ....	Boise, Idaho
—	Pague, Donald Mitchell .....	Portland
	Park, Jeannette Frances .....	Portland
	Parks, Lois C. ....	Junction City
	Parsons, John F. ....	Portland
—	Pattee, Clyde .....	Hood River
—	Pefley, Harlem .....	Boise, Idaho
	Peter, Ruth .....	Baker
	Peterson, S. Dean .....	Portland
	Peterson, Verginia .....	Astoria
	Petzold, Erna Eleanore .....	Oregon City
—	Pickett, David .....	Prineville
—	Poley, Minnie I. ....	Ashland
	Potter, Leo Allen .....	Eugene
	Potter, Pauline .....	Eugene
—	Poulsen, Olga Marion .....	Portland
	Powell, Blanche .....	Cleone
	Powell, Margaret .....	Cleone
	Prather, Georgia .....	Hood River
	Pratt, C. Harlow .....	Eugene
	Pratt, Robert A. ....	Eugene
	Price, Rose Marie .....	Springfield
—	Prosser, Robert H. ....	Eugene
	Provost, Francis L. ....	Bay City
—	Pummill, Lora Belle .....	Grants Pass
	Purdy, Harold Sifton .....	Coeur d' Alene, Idaho
	Purdy, Jessie .....	Medford
	Purington, Helen H. ....	Burns
	Putnam, Ralph Lloyd .....	San Jose, Cal.
—	Quigley, Harold W. ....	Portland
—	Rader, Donald Roger .....	Medford
	Rader, Hazel V. ....	Medford
	Raley, Claire .....	Pendleton
—	Ralston, Rolla E. ....	Albany
	Ramage, Helen .....	Eugene

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Ramage, Mary Frances .....	Eugene	—
Ramsey, George Harvey .....	Crabtree	
Rankin, Marguerite .....	Portland	
Redman, Vera .....	Portland	
Reed, Kenneth S. ....	Portland	—
Reigard, Pearl Marie .....	Marshfield	
Renshaw, Marion .....	Medford	
Reynolds, Charles A. ....	Silverton	
Reynolds, Charles N. ....	Eugene	
Reynolds, Clarence William .....	Buena Vista	
Rhodes, Effie J. ....	Portland	
Rice, Donald Blair .....	Portland	—
Rice, Lyman S. ....	Pendleton	—
Riddle, Mildred .....	La Grande	—
Risley, Ethelind .....	Milwaukie	
Robards, Lucile .....	Portland	
Roberts, Allyn F. ....	The Dalles	—
Roberts, Elliott P. ....	The Dalles	—
Roberts, Mason Henry .....	Portland	
Robinson, Helen .....	Eugene	—
Robinson, J. Kenneth .....	Portland	
Robinson, Hyman B. ....	Portland	
Roche, Eva .....	Portland	—
Rogers, Edythe Alwilda .....	Portland	
Rohse, Marguerite .....	Portland	—
Rolfe, Erwin M. ....	Eugene	—
Ross, Otto H. ....	Wenatchee, Wash.	
Rothchild, Amy Celia .....	Portland	
Ruch, Giles Murrel .....	Eugene	
Runquist, Arthur .....	Portland	—
Runyan, Clarence E. ....	Eugene	
Ryan, J. Herbert .....	Gresham	—
Ryan, William Bernard .....	Portland	
Ryder, Agnes Jane .....	Eugene	
Ryder, James .....	Eugene	

—	Saunders, Claud Everett .....	New Bridge
	Sawyer, Cecile Hardy .....	Brownsville
—	Scholl, August P. ....	Portland
	Schreder, Albert .....	Rolyat
—	Schreder, Emily .....	Bend
	Schwan, William Joseph .....	Portland
	Sears, Charlotte Strong .....	Eugene
	Sears, Ruth Willard .....	Eugene
·	Seaton, Lillian A. (Mrs.) .....	Manila, P. I.
	Segal, Evelyn .....	Portland
—	Sexton, Velma .....	Eugene
—	Shaffner, Grant .....	Eugene
	Shaver, Genevieve .....	Portland
	Shaver, John Willard .....	Hillsdale
	Shults, Robert .....	New Castle, Ind.
	Shearer, E. Ellice .....	Portland
	Sheehy, Marguerite .....	Portland
	Shepherd, Audrey June .....	Eugene
✓	Shepherd, Lucile .....	Portland
—	Sheridan, Lauren Edgar .....	Eugene
	Sherwood, Gretchen .....	Coquille
	Shoudy, Ruth K. ....	Ashland
—	Sidwell, Earnest .....	Bandon
—	Sigglin, Carl Herman .....	Portland
—	Sims, Henry W. ....	Eugene
—	Sims, Clifford M. ....	Eugene
—	Simpkins, Cleveland .....	Salem
	Skei, Alfred H. M. ....	Mt. Angel
	Slater, Anita .....	Portland
	Slusher, Edith Rachael .....	Pendleton
—	Smith, H. Lyle .....	Rossville, Ind.
	Smith, Mary A. ....	Hood River
	Smith, Ruth Gladys .....	Eugene
	Snell, Elizabeth L. ....	Junction City
—	Soden, Lester W. ....	Portland
—	Solve, Melvin T. ....	Rice Lake, Wis.
—	Sommer, Max Herbert .....	Portland

Students Enrolled

Soults, Zella Mae .....	Eugene	
South, Floyd F. ....	Tehama, Cal.	
Speck, Harry Leon .....	Medford	
Spencer, Carlton E. ....	Cottage Grove	—
Spencer, Elmer R. ....	Cotage Grove	
Staggs, Ira D. ....	Spokane Wash.	—
Staiger, Franklin W. ....	Portland	
Stanard Delbert C. ....	Portland	—
Standfield, Katherine May .....	Portland	
Stearns, Abbie Ella S. ....	Eugene	
Stearns Edwin .....	Oakland	—
Stearns Merle .....	Eugene	
Stermer, Noah William .....	Dayton	
Stebno, Beulah A. ....	Eugene	
Steidl, Steven L. ....	Bend	
Steiber, Lyle .....	Jefferson	
Stephens, Roy Thomas .....	St. Johns	
Stevens, Pearl .....	Aberdeen, S. Dak.	
Stevenson, Agnes Stuart .....	Eugene	
Stevenson, George E. ....	Eugene	
Stevenson, Mary Frances .....	Medford	
Stickels, Fred G. ....	Eugene	
Stiles, Frank L. ....	Loveland, Colo.	—
Still, Claude .....	Milton	—
Still, Edith L. ....	Milton	—
Stoehr, Otto .....	Milwaukee	
Stone, Ruth M. ....	Portland	
Storie, Glen Edwin .....	Pendleton	
Strang, Augustus Jessup .....	Salem	—
Street, Andrew Ervin .....	Roseburg	—
Strong, Bert L. ....	Portland	
Stroud, Percy M. ....	Eugene	
Stuller, Everett R. ....	Baker	—
Summerlin, Lester L. ....	Myrtle Point	
Sun, Woo .....	Salem	—
Sweeney, Luella .....	Tell City, Ind.	—
Sweeney, Raymond Joseph .....	Kelso, Wash.	

Tappenden, Mary Alice .....	Portland
Taylor, Anne Marie .....	Portland
— Taylor, Lora Jane .....	Albany
— Terpening, Maurice E. ....	Eugene
Thatcher, Herbert van Keekeren .....	Portland
Thiele, Martina H. ....	Portland
Thielemann, Otto Rudolph .....	Portland
— Thomas, Carl F. ....	Portland
Thrall, Florence .....	Eugene
Tiffany, Grace Isabel .....	Eugene
Tolpolar, Anne Louise.....	Oregon City
— Tominaga, Jokichi .....	Seattle, Wash.
— Tooze, Ethel .....	Falls City
— Tooze, Hazel Mae .....	Oregon City
Tooze, Lamar E. ....	Salem
Tooze, Leslie Orlando .....	Salem
— Tozier, Jewel Maryon .....	Eugene
Trowbridge, Henry .....	Portland
Trowbridge, Mary .....	Medford
Tschanz, Herman C. ....	Eugene
Tuerck, William Paul .....	Portland
Van Dusen, Lloyd .....	Astoria
Van Duyn, Charles Herbert .....	Eugene
Van Duyn, Helen N. ....	Eugene
Van Orsdel, Pauline .....	Dallas
— Vanvolkinburgh, Ellen .....	Clatskanie
— Vawter, Vernon H. ....	Medford
— Vosper, Earnest Edward .....	Portland
Wagner, Carroll Marshall .....	Ashland
Wagner, Elizabeth .....	Ashland
— Waite, Endel Southerlin .....	Sutherlin
— Waite, Mildred .....	Sutherlin
— Walker, Dean H. ....	Independence
Walker, Everard F. ....	Gardner, Mass.
Walker, Eylu Louene .....	Portland

Students Enrolled

Ware, Fletcher Kirkland .....	Medford
Warner, Harold J. ....	Portland
Warner, Lawrence .....	Eugene
Warner, Raymond .....	Eugene
Warner, Veda P. ....	Eugene
Warnock, Hazel Elma .....	Eugene
Warnock, Ida Maude .....	Eugene
Washburne, Claude B. ....	Springfield
Watkins, Muriel .....	Eugene
Watson, H. Clay .....	Eugene
Watson, James L. ....	Eugene
Watson, Katherine .....	Eugene
Watson, Lucile Carmen .....	Spokane, Wash.
Watson, Richard Gwyn .....	Eugene
Watt, Edith Elizabeth .....	Bay City
Weatherson, Agnes Ella .....	Florence
Weatherson, Hazel Lucinda .....	Florence
Weiss Mandell .....	Portland
Welch, John W. ....	Portland
Wells, J. Andre .....	Eugene
Wentworth, Thaddeus H. ....	Portland
Werlein, Helen Clare .....	Portland
Wetzel, Lucille .....	Eugene
Whalley Margaret .....	Portland
Whallon, Owen Delbert .....	Nampa, Idaho
Wheatley, Jeannette .....	La Grande
Wheeler, Glen C. ....	Eugene
White, Gail .....	Eugene
Whitman, J. Laurence .....	Pendleton
Whittlesey, Ludella M. ....	Springfield
Whittlesey, Mildred R. ....	Portland
Wilhelm, John .....	Portland
Williams, Florence Clair .....	Clear Lake, S. Dak.
Williams, Raymond O. ....	La Grande
Williams, Vera .....	Eugene
Windnagle, Linus Vere .....	Portland
Wines, Clara M. ....	Medford

Wise, Sam .....	Astoria
Withers, Mabel .....	Harney
Wood, Grace .....	Eugene
Wood, Iva Belle .....	Eugene
Wooton, Betsy W. ....	Astoria
Wooton, William Barker .....	Astoria
Wray, Frank Vinacke .....	Silverton
Wray, Robert M. ....	Silverton
Wright, Mark F. ....	Forest Grove
Wrightson, Hermes Harry .....	Portland
Yoran, Lucile .....	Eugene
Young, Angeline .....	Bend
Young, Bess May, .....	Portland
Young, Harold .....	Eugene
Young, Janet .....	The Dalles
Young, Ralph G. ....	Portland
Zimmerman, Howard .....	Salem
Zimmerman, Jessie Darl .....	Eugene
Zimmerman, Mabel June .....	Cleone
Zimmerman, Olive H. ....	Cleone

## SUMMER SCHOOL.

Adams, Grace M. ....	Eugene
Ager, G. W. ....	Talent
Ager, H. W. ....	Talent
Andrews, Roy C. ....	Eugene
Archambeau, Louretta .....	Eugene
Ashcraft, Norman B. ....	Ashland
Bailey, Mrs. W. S. ....	Philomath
Baker, Edith A. ....	Eugene
Baker, N. Anderson .....	Eugene
Ball, Cecil .....	Eugene
Ball, Edna .....	Eugene
Ball, Faye E. ....	Astoria

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Barbour, F. ....	Eugene
Barrett, Edith F. ....	Eugene
Barzee, Lloyd D. ....	Portland
Beals, W. M. ....	Eugene
Beck, Callie B. ....	Eugene
Black, Verena ....	Eugene
Bond, Jesse H. ....	Halsey
Bowden, Florence ....	Corvallis
Bradshaw, F. O. ....	Union
Brant, Hilda M. ....	Portland
Bray, A. W. L. ....	New Westminster, B. C.
Bridges, Beulah ....	Brownsville
Briggs, J. A. ....	Nampa, Idaho
Buoy, Beatrice ....	Eugene
Buell, Gertrude ....	Eugene
Burkhart, Zella ....	Eugene
Calkins, Jeannette ....	Eugene
Calkins, Russell D. ....	Eugene
Campbell, Agness Dorthy ....	Eugene
Campbell, Alberta ....	Eugene
Carruth, F. D. ....	Standfield
Chandler, B. R. ....	Marshfield
Chezik, Anastasia B. ....	Hermiston
Cole, Grace M. ....	Wilbur
Copenhaver, V. Myrtle ....	Springfield
Curin, Lula ....	Cottage Grove
Davis, Ruth ....	Eugene
DeBar, Bryant ....	Eugene
Dimick, Lottie M. ....	Oregon City
Dorris, Ruth ....	Eugene
Douglass, Mrs. M. H. ....	Eugene
Dunton, F. E. ....	Molalla
Earl, Virgil D. ....	Portland
Edwards, Ruby ....	Eugene
Elliott, Wayne E. ....	Eugene
Fariss, Jessie ....	Eugene
Ferdine, Blanche ....	Elgin

Fletcher, Marie P. ....	Eugene
Finneran, Mrs. E. J. ....	Eugene
Fisher, Ella A. ....	Eugene
Foster, Florence ....	Eugene
Galloway, Zilpha V. ....	Salem
Geballe, Pauline I. ....	San Francisco, Cal.
George, Florence W. ....	Portland
George, Helen B. ....	Portland
Gibson, Ruth ....	Portland
Giles, Claud H. ....	Myrtle Point
Glass, Florence ....	Myrtle Point
Gray, Edward ....	Eugene
Gray, Howard ....	Milwaukee
Green, Ethel G. ....	Eugene
Griffith, Edna Ethel ....	Lents
Grose, Ethel A. ....	Philomath
Gylland, Elnora ....	Eugene
Haag, Vera ....	Eugene
Hair, Mozelle ....	Eugene
Hammond, Philip ....	Eugene
Hamble, Madge ....	Eugene
Harbert, Mae ....	Eugene
Hartley, Grace ....	Eugene
Hawkins, Melville D. ....	Newberg
Hedrick, E. H. ....	Drain
Heffner, Bertha ....	Snohomish, Wash.
Hewes, Lillian ....	Albany
Hill, Mabel ....	Junction City
Holbrook, Helen Corey ....	Portland
Holman, Minnie ....	La Grande
Howard, J. Hunter ....	Portland
Howell, Ruth M. ....	Portland
Hurd, Conifred ....	Eugene
Johnson, Oscar J. ....	Boring
Jones, O. H. ....	Irving
Kahley, Katherine ....	Portland
Kendall, Ada G. ....	Portland

Kinsey, Beulah B. ....	Eugene
Logan, Mrs. Edna C. ....	Eugene
Loundagen, James A. ....	Eugene
Luckey, J. Elwood ....	Eugene
Marsden, George Byram ....	Burns
Martin, Mrs. Ralph ....	Eugene
McCloskey, Reta M. ....	Myrtle Point
McCormick, E. Vaughn ....	Eugene
McCornack, Robert D. ....	Spokane, Wash.
McCoy, Clarence R. ....	Hood River
McGavern, Sanford A. ....	Goshen
McKown, Hazel ....	Eugene
McLauchlan, Agnes ....	Portland
McLaughlin, J. O. ....	Hood River
McMicken, Ann ....	Portland
McPherson, Lela ....	Springfield
Miller, Agnes ....	Eugene
Miller, Clover B. ....	Salem
Miller, Marjorie ....	Creswell
Moore, Ethel E. ....	Oak Grove
Moore, Merle G. ....	Eugene
Moorhead, Josephine ....	Junction City
Morden, P. L. ....	Portland
Morrison, Rose ....	Eugene
Mosher, Ida A. ....	Spokane, Wash.
Munly, W. C. ....	Portland
Murphey, Nelle ....	Portland
Nail, Maud ....	Eugene
Nervig, Hattie ....	Silverton
Newton, Lena ....	Eugene
Onthank, Karl W. ....	Hood River
Park, A. T. ....	Myrtle Point
Parks, Lois C. ....	Junction City
Parsons, Vernon ....	Eugene
Pate, Merle S. ....	Eugene
Patterson, Minnie ....	The Dalles
Payton, Alma ....	Baker

Perley, M. Elizabeth .....	Fargo, N. Dak.
Peter, Ruth .....	Baker
Pickett, David .....	Eugene
Pike, Minnie .....	Eugene
Porter, Elizabeth .....	Eugene
Potter, Pauline .....	Eugene
Poulsen, Olga M. ....	Portland
Powell, Margaret .....	Cleone
Pratt, Claire .....	Portland
Prosser, Lila .....	Eugene
Ramage, Helen .....	Eugene
Reid, Mrs. Edna M. ....	Eugene
Rice, Lyman G. ....	Pendleton
Richards, Guy .....	Eugene
Robbins, Florence M. ....	Myrtle Point
Robbins, Roxanna D. ....	Myrtle Point
Ross, Blanche H. ....	Portland
Ryder, Agnes .....	Eugene
Schenk, Frances .....	Eugene
Scott, Mary E. ....	Portland
Scullen, H. A. ....	Junction City
Shirk, H. K. ....	Enterprise
Smith, Ruth G. ....	Eugene
Smyth, Sidney H. ....	Eugene
Spencer, Carlton E. ....	Cottage Grove
Stevens, Pearl .....	Aberdeen, S. Dak.
St. John, Winifred W. ....	Eugene
Stroud, Wilfred C. ....	Eugene
Thrall, Florence .....	Eugene
Todd, Donna Josephine .....	Eugene
Tooze, Ethel .....	Salem
Tschanz, H. C. ....	Eugene
Turney, Ida V. ....	Stanley, Wis.
Veit, Louise M. ....	Eugene
Veit, Mathilde .....	Eugene
Walker, Jessie .....	Vida
Wallace, Elizabeth F. ....	Eugene

Walton, Winona .....	Alva, Oklahoma
Wash, Eva F. ....	Eugene
Watkins, Ina .....	Eugene
Watson, Floyd .....	Glide
Wetzel, Lucille .....	Eugene
White, Bertha P. ....	The Dalles
Wigmore, Earnest Charles .....	Eugene
Williamson, Naomi .....	La Grande
Wilson, H. F. ....	McMinnville
Young, Frances .....	Eugene
Young, Wilma .....	Eugene

SCHOOL OF LAW.

FRESHMEN.

Allen, Roy Albert .....	Portland
Anderson, LeRoy C. ....	Portland
Bauer, Henry .....	Portland
Bayless, Edna May .....	Portland
Bernard, Albert F. ....	Portland
Berry, Benjamin Alexander .....	Vancouver, Wash.
Black, Harvey Nicol .....	Portland
Brown, Valentine Jr. ....	Portland
Borleske, R. V. ....	Portland
Bowman, James .....	Portland
Burg, Q. C. ....	Portland
Cabell, Rudolph W. ....	Portland
Chatterton, Charles Owen .....	Portland
Clyde, Ralph C. ....	Portland
Collins, William Frances .....	Portland
Coles, Blaine Birdsley .....	Portland
Davis, Jay Earl .....	Portland
Dickerson, Ashby C. ....	Portland
Dillion, Lee Amos .....	Vancouver, Wash.
Douglas, John .....	Portland
Drougard, Valentine Joseph .....	Portland
Dudley, Frank A. ....	Portland
Dunlap, William Gates .....	Portland

Dwyer, John Phillip .....	Portland
Eastham, Barry C. ....	Portland
Ewen, John H. ....	Portland
Ewer, Byron Francis .....	Portland
Failing, John Conner .....	Portland
Fenn, Kathryn D. ....	Portland
Feyen, Leonard G. ....	Portland
Finnegan, James B. ....	Portland
Fisher, Edward A. ....	Portland
Flegel, Austin Finck Jr.....	Portland
Fleming, Alexander M. ....	Portland
Fogarty, Harry B. ....	Portland
Gay, James Story .....	Portland
Gillis, William H. ....	Portland
Gomyo, Isago .....	Portland
Gram, Arthur J. ....	Portland
Green, B. F. ....	Portland
Hallack, Blaine .....	Portland
Hammond, Philip Liddon .....	Portland
Heaney, Frank P. ....	Portland
Herren, William Melville .....	Portland
Hess, C. Ellis .....	Union
Hess, Henry L. ....	Union
Inlow, Harvey Edgar .....	Portland
Johnson, James George .....	Portland
Johnston, Phillip Raymond .....	Portland
Jones, Howell .....	Portland
Kehoe, Joseph W. ....	Portland
Kelly, Thomas Ralph .....	Portland
Kenefick, John E. ....	Portland
Knispel, Julius W. ....	Portland
Kramer, Edward B. ....	Portland
Krause, L. Leonard .....	Portland
Lagerfeld, Joseph A. ....	Portland
Latourette, E. C. ....	Oregon City
Lehmann, Charles H. ....	Portland
Lincoln, Reginald J. ....	Portland
Lister, Allison C. ....	Portland

*Students Enrolled*

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Mabley, David A. ....	Milwaukee
Mackenzie, W. John .....	Portland
McCoy, H. L. ....	Portland
McElroy, Mrs. Wimetta .....	Portland
McGinn, William James .....	Portland
McGrew, Frederic Emmett .....	Portland
Meyers, John N. ....	Portland
Miller, Lee F. ....	Mountain View
Moore, George Edward .....	Portland
Moulton, Charles Riley .....	Oregon City
Mulligan, Raymond Joseph .....	Portland
Noland, W. A. ....	Portland
Norden, Ben L. ....	Portland
Nordling, Ben .....	Portland
Odell, James M. ....	Portland
Poole, Samuel Walker .....	Portland
Potter, Lester Garfield .....	Portland
Powell, R. B. ....	Portland
Proudfoot, Carl A. ....	Portland
Rasmussen, Falley Gustov .....	Portland
Reed, Merrill A. ....	Portland
Rheude, Joseph B. ....	Portland
Rice, Frank A. ....	St. Johns
Richardson, John L. ....	Portland
Ryan, Edward .....	Portland
Scott, George Flower .....	Portland
Sleight, Richard Riddell .....	Portland
Smith, Frank G. ....	Portland
Springer, Edward .....	Portland
Stoffer, Joseph .....	Portland
Stott, Walter Clare .....	Portland
Summers, Owen, Jr. ....	Portland
Taylor, Roy C. ....	Portland
Taylor, LeRoy L. ....	Portland
Taylor, Max Cedric .....	Portland
Trueblood, Harrison Woody .....	Portland
Uji, Hidetaro .....	Portland

Ulrich, Orin J. ....	Portland
Vejar, Antonio Rafael .....	Portland
Walker, Dow V. ....	Portland
Wallstead, George Thomas .....	Portland
Young, Freeman Oscar .....	Portland

## JUNIORS.

Ackerman, Warner August .....	Portland
Barbare, Nicholas J. ....	Portland
Bartow, Harry S. ....	Vancouver, Wash.
Bayless, Edna May .....	Portland
Boyd, Hugh J. ....	Portland
Braum, Elizabeth .....	Portland
Bristow, Aden .....	Portland
Brown, Alfred T. ....	Portland
Buchmann, Elmer J. ....	Portland
Burns, Thos. Everett .....	Portland
Burt, Edward A. ....	Portland
Cavers, Laura Emily .....	Orengo
Compton, Ray B. ....	Portland
Condon, Clifton French .....	The Dalles
Coston, Charles .....	Portland
Derr, William Samuel Tonis .....	Vancouver, Wash.
Downes, Marie G. ....	Portland
Fitzwater, Hazel .....	Portland
Flegel, Austin F. ....	Portland
Frank, Aaron M. ....	Portland
Frazier, Walter Faries .....	Portland
Ganoe, James .....	Portland
Gillespie, Emmet Joseph .....	Portland
Graden, Charles .....	Portland
Green, B. F. ....	Portland
Harry, DeWitt L. ....	Portland
Hawkins, Martin William.....	Portland
Hobart, H. J. ....	Portland
Hodges, Charles M. ....	Portland
Hoh't, Charles Wesley .....	Portland

Hunkbody, Karl K. L. ....	Portland
Jaqua, Ina .....	Portland
Jensen, Fred .....	Bagley, Minn.
Kane, McKinley .....	Portland
Kauffman, William B. ....	Portland
Kleman, Felix P. ....	Portland
Knox, Leland .....	Portland
Langdon, Edwin H. ....	Portland
Latourette, John R. ....	Portland
Lerner, Benjamin Harrison .....	Portland
Lundberg, Lewis Vance .....	Portland
Manning, Frank Edward .....	Portland
Marioth, Dr. J. ....	Portland
McClure, Frank Earl .....	Portland
McDougal, Clair .....	Portland
McNath, George West .....	Portland
Messehiser, Otto Walter.....	Portland
Miller, Wilson B. ....	Portland
Mullin, George Hiram .....	Vancouver, Wash.
Munly, Raymond Michael .....	Portland
Murphy, W. E. ....	Portland
Murphy, E. J. ....	Portland
Ogden, Melvin Pool .....	Portland
Peters, John William .....	Portland
Pfingston, Henry Frederic .....	Gresham
Pryor, Patrick J. ....	Portland
Powell, Burns .....	Portland
Rankin, Merwin .....	Portland
Rankin, Nettie Mae .....	Portland
Reade, Clyde Nixon .....	Portland
Richmond, William J. ....	Portland
Robbins, Milo Rees .....	Portland
Robinson, Chas. W. ....	Portland
Robinson, Davis .....	Portland
Rosenberg, J. J. ....	Portland
Ryan, Thomas Gough .....	Portland
Schwartz, Leon Richard .....	Portland

Schneider, C. J. ....	Portland
Singletary, William R. ....	Portland
Sleight, Richard Riddell ....	Portland
Smith, Bernard F. ....	Portland
Smith, Newton C. ....	Portland
Smith, Seth Leroy ....	Portland
Sommers, Max ....	Portland
Strahan, Frank ....	Portland
Thompson, Genevieve, Miss ....	
Tine, D. Van ....	Portland
Werlein, John Edward ....	Portland

## SENIORS.

Alexander, James Fuller ....	Portland
Anderson, Lew ....	Portland
Banks, Charles S. J. ....	Portland
Bechtold, C. C. ....	Portland
Bernard, Earl ....	Portland
Bundy, Edward Orril ....	Portland
Burke, James Arthur ....	Hoquiam, Wash.
Campbell, Paul Wortman ....	Portland
Caplinger, Chester Samuel ....	Portland
Clostermann, Robert George ....	Portland
Collins, Thomas Bernard ....	Portland
Cooper, James C. ....	Portland
Dahleen, Harry William ....	Portland
Feldman, Jacob ....	Portland
Frank, A. ....	Portland
Frazier, Walter Faries ....	Portland
Fox, John Clyde ....	Portland
Garland, Netta A. ....	Portland
Garland, Thomas L. ....	Portland
Graham, George Cameron ....	Milwaukie
Graham, Donald Martin ....	Portland
Hickson, John M. ....	Portland
Knight, Albert F. ....	Portland
Lane, John ....	Portland

Latimer, George A. ....	Portland
Martin, Chester Alonzo .....	Portland
May, Lydia Alice .....	Portland
McDuffee, Leroy Marshall .....	Portland
McGuirk, Walter Thomas .....	Portland
Moore, A. J. ....	Portland
Morris, Clyde Martin .....	Portland
Nelson, Emil .....	Portland
Nielsen, Rasmus Anton .....	Portland
O'Brien, Louis T. ....	Portland
Paterson, William Forbes .....	Portland
Recken, Louis Albert .....	Portland
Redman, Wallace .....	Portland
Rosenberg, J. J. ....	Portland
Schroeder, John .....	Portland
Sibbald, W. H. ....	Portland
Suren, Fred .....	Portland
Thompson, Miss G. ....	Portland
Tomihiro, Senichi .....	Portland
Whitney, Edgar H. ....	Portland
Williams, John Daniel .....	Portland

**SCHOOL OF MEDICINE.**

**FRESHMEN.**

Black, Walter Wright .....	Portland
Levy, Morris .....	Portland
Hendershott, Roy Wheeler .....	Portland
Munly, William Charles .....	Portland
Jewett, C. Harvey .....	Canandaigua, N. Y.
Grossman, Albert Allen .....	Portland
Viereck, Harry Christian .....	Tillamook
Gambee, Eric Julian .....	Corvallis
Lewis, Claude Allen .....	Newberg
McColl, Charles Rafferty .....	Gresham
Stenberg, Edwin Severance .....	Ormsby, Minn.
Thompson, Wilbur Hines .....	Gresham

Bean, Harold C. ....	Portland
Spicer, Cecil Van Vleet .....	Portland
Harding, Harry Sweek .....	Tualatin
Trommald, Joseph Alexander .....	Portland
Sherwood, Robert Archie .....	Portland

## SOPHOMORES.

Anderson, Walter Raleigh .....	Portland
Blair, Harry Clyde .....	Elma, Wash.
Collison, Ada Leona .....	Seattle, Wash.
Curran, Oscar Waldo .....	Olympia, Wash.
Emery, Mark Watson .....	Gresham
McNerthney, William Bernard .....	Puyallup, Wash.
Lupton, Irving Martin .....	Portland
Morse, Elsie Jane .....	Seattle, Wash.
Palmer, Dorwin L. ....	Portland
Rinehart, Jackson Carle .....	Portland
Ford, Annistatia Estella .....	Portland

## JUNIORS.

Anderson, Elmer Everett .....	Portland
Palmer-Benbow, Thomas Alexander .....	Victoria, Australia
Bouvy, Harry Matthew .....	Portland
Hampton, Norman Claude .....	Canby
Houser, Charles Dorsey .....	Milwaukie
Larson, Carl Frederick .....	Portland
Moffat, Clinton Charles .....	Prosser, Wash.
Schwartz, Harry .....	Portland
West, Melville Abbott .....	Portland

## SENIORS.

Brous, Cecil Else .....	Portland
Cahill, Roscoe William .....	Portland
Hughes, John .....	Portland
Jacob, Mary Leona .....	Portland
Jonez, Hinton Denny .....	Seattle, Wash.

Leonard, Hubert Francis .....	Portland
Makins, Harry M. ....	Abilene, Kansas
McKenzie, Hugh S. ....	Pueblo, Colo.
Miller, Dwight Franstone .....	Portland
Moore, Harvard Clayton .....	Portland
Neuberger, Julius F. ....	Portland
Nichols, Frederick Graham .....	Seattle, Wash.
Noyes, Edward Allen, Jr. ....	Portland
Rinehart, Harvey Earl .....	Portland
Shannon, Harry Freeborn McKay .....	Lents
Sharkey, Ralph Louis .....	Portland
Thiel, Henry Frederick .....	Seattle, Wash.
Thompson, Alfred W. Z. ....	North Yakima, Wash.
Van Cleve, Archie Clifford .....	Portland

**SPECIAL STUDENTS.**

Graves, Abigail Vanita .....	Gresham
Hall, Ida Aileen .....	Seattle, Wash.
Liddell, Carrie Walker .....	Portland

**SCHOOL OF MUSIC.**

Abrams, Lucile .....	Eugene
Adams, Francis .....	Silverton
Alexander, Virgil .....	Eugene
Allert, Daisy .....	Eugene
Andrews, Norma .....	Eugene
Auld, Lillian .....	Eugene
Avery, Florence .....	Hood River
Bach, Bessie .....	Lebanon
Barnett, Marie .....	Wasco
Bean, Marcel .....	Eugene
Benson, Wallace .....	Gardiner
Black, Anna .....	Eugene
Black, Verena .....	Eugene
Bossen, Grace .....	Eugene
Bristow, Evelyn .....	Eugene

Brunk, Ethel .....	Eugene
Bryson, Lyle .....	Eugene
Bryson, Roy .....	Eugene
Buell, Edith .....	Eugene
Cade, Ed .....	Albany
Calkins, Madge .....	Eugene
Calkins, Jeannette .....	Eugene
Campbell, Agnes .....	Monmouth
Campbell, Alberta .....	Eugene
Campbell, Celeste .....	Eugene
Campbell, Irmalee .....	Eugene
Campbell, Jane .....	Eugene
Campbell, Koyle .....	Eugene
Carroll, Cleone .....	Eugene
Carson, Catherine .....	Salem
Casebeer, Lloyd .....	Eugene
Chaffee, Esther .....	Eugene
Cherry, Irene .....	Eugene
Cleveland, Florence .....	Portland
Cockerline, Kenneth .....	Eugene
Cowden, Palm .....	Silverton
Davis, Ruth .....	Eugene
Day, Helen .....	Eugene
Day, Marion .....	Eugene
DeBar, Mary .....	Eugene
DeCou, Mrs. E. E. ....	Eugene
Dixon, Dorothy .....	Eugene
Dobie, Jessie .....	Eugene
Dobie, Katie .....	Eugene
Dougherty, Mona .....	Wallowa
Dresser, Helen .....	Eugene
Dunbar, Mrs. Lulu Renshaw .....	Eugene
Durkheimer, Rita .....	Eugene
Eastham, Valene .....	Eugene
Ettinger, Alberta .....	Eugene
Everson, Leda .....	Eugene
Fariss, Jessie .....	Eugene

Fariss, Robert .....	Eugene
Forbes, Winifred .....	Eugene
Fraley, Rita .....	Eugene
Frasier, Brownell .....	Eugene
Frasier, Janet .....	Eugene
Frazer, Kenneth .....	Portland
Geddes, Verna .....	Eugene
Gerig, Mildred .....	Medford
Gilbert, Merle .....	Eugene
Gillette, Albert .....	Eugene
Gillette, Mamie .....	Eugene
Gilstrap, Cosby .....	Eugene
Gilstrap, Marion .....	Eugene
Goldsmith, Meta .....	Eugene
Groshong, Alberta .....	Eugene
Gurney, Elsie .....	Eugene
Hager, Marie .....	Heppner
Hales, Elizabeth .....	Eugene
Hampton, Claude .....	Pendleton
Hampton, Gladys .....	Eugene
Haroun, Emma .....	Eugene
Henderson, Kathleen .....	Eugene
Holbrook, Margaret .....	Eugene
Howard, Edra .....	Eugene
Hunt, Thelma .....	Eugene
Hyde, Hattie .....	Portland
Isaicson, Ruth .....	Eugene
Johnson, Cecile .....	Eugene
Johnson, Helen .....	Eugene
Johnson, Mrs. John .....	Eugene
Kays, Warren .....	Eugene
Kays, Willis .....	Eugene
Kem, Myrtle .....	Cottage Grove
King, Nella .....	Eugene
Kirkpatrick, Katherine .....	Lebanon
Lackey, Ana .....	Eugene
Lake, Adelaide .....	Eugene

Linn, Marian .....	Eugene
Livermore, Gertrude .....	Eugene
Lockhart, Eugene .....	Eugene
Lockhart, Stella .....	Eugene
Lyans, Richard .....	Eugene
McClure, Nellie .....	Eugene
McKenzie, Grace .....	Eugene
McMurphey, Ada .....	Eugene
McMurphey, Lois .....	Eugene
Manerud, Mabel .....	Eugene
Mantor, Eunice .....	Eugene
Martin, Alexander .....	Eugene
Martin, Edgar .....	Eugene
Mast, Leta .....	Eugene
Messenger, May .....	Portland
Metcalf, Bernice .....	Eugene
Metcalf, Kathryn .....	Eugene
Miller, Cecile .....	Portland
Miller, Meta .....	Eugene
Milliorn, Evelyn .....	Eugene
Motschenbacher, Vernon .....	Klamath Falls
Morris, Beatrice .....	Eugene
Morris, Winnie .....	Eugene
Murphy, Nell .....	Eugene
Myers, Carl .....	Eugene
Norton, Mae .....	Portland
Parsons, Katherine .....	Eugene
Parsons, Mrs. M. Vernon .....	Eugene
Peterson, Curtis .....	Eugene
Peterson, Mabel .....	Eugene
Peterson, Nancy .....	Eugene
Peterson, Virginia .....	Astoria
Petterson, Della .....	Eugene
Pierce, Frances .....	Eugene
Powell, Lois .....	Portland
Prosser, Lila .....	Eugene
Prosser, Robert .....	Eugene

Purdy, Ethel .....	Eugene
Purdy, Jessie .....	Medford
Ramage, Mary .....	Eugene
Redman, Vera .....	Portland
Riddle, Mildred .....	La Grande
Risley, Ethelind .....	Milwaukee
Rogers, Edythe .....	Portland
Rugh, Irene .....	Eugene
Schafer, Max .....	Eugene
Schenck, Frances .....	Eugene
Schwarzschild, Minnie .....	Eugene
Seitz, Mrs. C. R. ....	Eugene
Shelly, Mrs. Frank .....	Eugene
Shoudy, Ruth .....	Eugene
Skipworth, G. F. ....	Eugene
Smith, Mabel .....	Eugene
Smith, Mrs. May Huff .....	Eugene
Stanfield, Katherine .....	Portland
Stansbie, Muriel .....	Eugene
Sternor, Lucile .....	Eugene
Stebno, Beulah .....	Eugene
Steubing, Vivian .....	Eugene
Stevens, Clarence .....	Eugene
Stevenson, Mary .....	Medford
Stowe, Marion .....	Portland
Sundberg, Miss .....	Eugene
Tinker, Miriam .....	Eugene
Travis, Fredericka .....	Eugene
Turner, Harold .....	Eugene
Ward, Glen .....	Eugene
Watkins, Ina .....	Eugene
Weatherson, Hazel .....	Florence
Wellington, Mayme .....	Eugene
Wetzel, Helen .....	Eugene
Wetzel, Lucille .....	Eugene
Wheeler, Dorothy .....	Eugene
White, Gail .....	Eugene

Williams, Florence .....	Clear Lake, S. D.
Williams, Melba .....	Eugene
Wilson, Mildred .....	Eugene
Withers, Mabel .....	Harney
Yoran, Lucille .....	Eugene
Young, Alice .....	Eugene
Young, Janet .....	The Dalles
Young, Grace .....	Eugene

### SUMMARY OF OFFICERS AND INSTRUCTORS.

#### Administration—

Regents .....	14
Other administrative officers .....	12
	— 26

#### Instruction—

##### Academic Colleges and Schools:

Professors and Assistant Professors .....	32
Instructors, Assistant Instructors and Student Assistants .....	23
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	— 108

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Total officers and instructors .....	125
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**SUMMARY OF STUDENTS.**

Graduate School .....	20
College of Literature, Science and the Arts:	
Men .....	290
Women .....	284
	— 574
College of Engineering:	
Civil Engineering .....	60
Electrical Engineering .....	34
Chemical Engineering .....	3
	— 97
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School of Law:	
Freshmen .....	103
Juniors .....	78
Seniors .....	45
	— 226
School of Medicine:	
Freshmen .....	17
Sophomores .....	11
Juniors .....	9
Seniors .....	19
Electives .....	3
	— 59
School of Music .....	171
	—
	1318
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Total students in residence .....	1257
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