

UNIVERSITY OF OREGON
REGULAR SESSION

EUGENE, OREGON

CATALOG ISSUE
1964-65

BULLETIN



OREGON STATE SYSTEM OF HIGHER EDUCATION

UNIVERSITY OF OREGON BULLETIN

NUMBER 120

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1964-65 Fee Schedule

UNIVERSITY OF OREGON

Because of action by the State of Oregon through the State Emergency Board and the State Board of Higher Education, there will be no changes in the tuition and fee charges at the University of Oregon in the 1964-65 academic year. This action supercedes the higher fee schedule published on page 76 of the 1964-65 University Catalog.

Tuition and fee charges for the 1964-65 academic year will be as follows:

	<i>Per Term</i>	<i>Per Year</i>
Resident	\$110.00	\$330.00
Nonresident	300.00	900.00
*Graduate Students	110.00	330.00

**Graduate students pay the resident fee.*

OFFICE OF ADMISSIONS
UNIVERSITY OF OREGON
JUNE 5, 1964

UNIVERSITY
OF OREGON
REGULAR
SESSION

1964-65 CATALOG

EUGENE, OREGON

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Oregon State System of Higher Education

The Oregon State System of Higher Education, as organized in 1932 by the State Board of Higher Education, following a survey of higher education in Oregon by the U. S. Office of Education, includes all the state-supported institutions of higher education. The several institutions are elements of an articulated system, parts of an integrated whole. The educational program is so organized as to distribute as widely as possible throughout the state the opportunities for general education and to center on a particular campus specialized, technical, and professional curricula closely related to one another.

The institutions of the State System of Higher Education are the University of Oregon at Eugene, Oregon State University at Corvallis, Portland State College at Portland, Oregon College of Education at Monmouth, Southern Oregon College at Ashland, Eastern Oregon College at La Grande, and Oregon Technical Institute at Klamath Falls. The University of Oregon Medical School and the University of Oregon Dental School are located in Portland. The Division of Continuing Education, representing all the institutions, has headquarters in Portland and offices in Ashland, Corvallis, Eugene, La Grande, Monmouth, and Salem.

At Oregon College of Education, Southern Oregon College, and Eastern Oregon College, students may complete major work in teacher education or general studies or enroll in a preprofessional program. Southern Oregon College offers a major program in business.

Portland State College offers major work in general studies and selected liberal arts and professional fields as well as certain preprofessional programs.

At the University of Oregon and Oregon State University, major curricula, both liberal and professional, are grouped on either campus in accordance with the distinctive functions of the respective institutions in the unified State System of Higher Education.

Terminal courses in technical and semiprofessional areas are offered at Oregon Technical Institute.

An interinstitutional booklet, *Your Education*, which outlines the curricula of the several institutions and contains other information, is available. For a copy, write to Board of Higher Education, P.O. Box 5175, Eugene, Oregon.

State Board of Higher Education

	Term Expires
RALPH E. PURVINE, Salem.....	1965
RAY T. YASUI, Hood River.....	1965
JOHN MERRIFIELD, Portland.....	1966
CHARLES R. HOLLOWAY, JR., Portland.....	1967
ELIZABETH H. JOHNSON, Redmond.....	1968
J. F. FORRESTER, JR., Pendleton.....	1969
JOHN W. SNIDER, Medford.....	1969
PHILIP A. JOSS, Portland.....	1970
GEORGE LAYMAN, Newberg.....	1970

Officers

CHARLES R. HOLLOWAY, JR.....	President
J. W. FORRESTER, JR.....	Vice-President
RALPH E. PURVINE.....	Member, Executive Committee

ROY E. LIEUALLEN, Chancellor
RICHARD L. COLLINS, Secretary of Board

Office of State Board of Higher Education
Post Office Box 5175
Eugene, Oregon

Board members are appointed to six-year terms by the Governor of Oregon with confirmation by the State Senate.

Oregon State System of Higher Education Officers

ROY E. LIEUALLEN, Ed.D., L.H.D., Chancellor

ARTHUR S. FLEMMING, LL.D. President, University of Oregon	JAMES H. JENSEN, Ph.D. President, Oregon State University
DAVID W. E. BAIRD, M.D., LL.D. Dean, Medical School	ELMO N. STEVENSON, Ed.D. President, Southern Oregon College
HAROLD J. NOYES, D.D.S., M.D. Dean, Dental School	FRANK B. BENNETT, Ed.D. President, Eastern Oregon College
BRANFORD P. MILLAR, Ph.D. President, Portland State College	LEONARD W. RICE, Ph.D. President, Oregon College of Education
WINSTON D. PURVINE, A.B., LL.D. Director, Oregon Technical Institute	

HERBERT A. BORK, M.S., C.P.A.....	Vice-Chancellor for Business Affairs
RICHARD L. COLLINS, M.A., C.P.A.....	Secretary of the Board; Budget Director
MILES C. ROMNEY, Ph.D.....	Vice-Chancellor for Academic Affairs
JAMES W. SHERBURNE, Ph.D.....	Vice-Chancellor for Continuing Education
DONALD R. LARSON, B.A.....	Assistant Chancellor for Public Affairs
WILLIAM M. CARLSON, M.A.....	Director of Libraries

Former Chancellors Oregon State System of Higher Education

WILLIAM J. KERR, D.Sc., LL.D.....	1932-1935
FREDERICK M. HUNTER, Ed.D., LL.D.....	1935-1946
PAUL C. PACKER, Ph.D., LL.D.....	1946-1950
CHARLES D. BYRNE, Ed.D.....	1950-1955
JOHN R. RICHARDS, Ph.D.....	1955-1961

University of Oregon

September 1964

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

October 1964

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

November 1964

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

December 1964

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

January 1965

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

February 1965

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

Fall Term, 1964-65

- August 31, *Monday*.....Last day to apply for fall-term admission without penalty
- September 22-26, *Tuesday to Saturday*.....New Student and Registration Week
- September 28, *Monday*.....Classes begin
- October 1, *Thursday*.....Last day for payment of fees without penalty
- October 9, *Friday*.....Last day for registration or for addition of courses
- October 14, *Wednesday*.....Charter Day
- October 16, *Friday*.....Last day for withdrawal from courses
- November 26-29, *Thursday to Sunday*....Thanks-giving vacation
- December 11, *Friday*.....Fall-term graduation convocation
- December 14-19, *Monday to Saturday*.....Fall-term examinations

Winter Term, 1964-65

- January 4, *Monday*.....Registration
- January 5, *Tuesday*.....Classes begin
- January 8, *Friday*.....Last day for payment of fees without penalty
- January 15, *Friday*.....Last day for registration or for addition of courses
- January 22, *Friday*.....Last day for withdrawal from courses
- March 12, *Friday*.....Winter-term graduation convocation
- March 13, 15-19, *Saturday, Monday to Friday*.....Winter-term examinations

Academic Calendar

March 1965

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

April 1965

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

May 1965

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

June 1965

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

July 1965

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

August 1965

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

Spring Term, 1964-65

- March 29, *Monday*.....Registration
- March 30, *Tuesday*.....Classes begin
- April 2, *Friday*.....Last day for
payment of fees without penalty
- April 9, *Friday*.....Last day for
registration or for addition of courses
- April 16, *Friday*.....Last day for withdrawal
from courses
- May 31, *Monday*.....Memorial Day, holiday
- June 5, 7-11, *Saturday, Monday to
Friday*.....Spring-term examinations
- June 13, *Saturday*.....Alumni Day
- June 13, *Sunday*.....Commencement Day

Summer Sessions, 1965

- June 21, *Monday*.....Registration
- June 22, *Tuesday*.....Classes begin
- June 25, *Friday*.....Last day for payment
of summer-term fees without penalty
- July 2, *Friday*.....Last day for summer-term
registration or addition of courses
- July 5, *Monday*.....Independence Day holiday
- July 9, *Friday*.....Last day for
withdrawal from summer-term courses
- August 13, *Friday*.....Eight-week session ends
- August 14, *Saturday*.....Summer
Commencement Day
- September 3, *Friday*.....Eleven-week session ends

Fall Term, 1965-66

- August 31, *Tuesday*.....Last day to apply
for fall-term admission without penalty
- September 21-25, *Tuesday to Saturday*.....New
Student and Registration Week
- September 27, *Monday*.....Classes begin

University of Oregon

Officers of Administration

ARTHUR S. FLEMMING, LL.D.....President
 WILLIAM C. JONES, Ph.D.....Dean of Administration
 ROBERT D. CLARK, Ph.D.....Dean of Faculties

*HARRY ALPERT, Ph.D.....Dean, Graduate School
 DAVID W. E. BAIRD, M.D., LL.D.....Dean, Medical School
 JEAN E. BOYLE, M.S., R.N.....Director, School of Nursing
 WALTER L. CREESE, Ph.D.....Dean, School of Architecture and Allied Arts
 ARTHUR A. ESSLINGER, Ph.D.....Dean, School of Health, Physical Education,
 and Recreation
 ORLANDO J. HOLLIS, B.S., J.D.....Dean, School of Law
 JOHN L. HULTENG, M.S.....Dean, School of Journalism
 PAUL B. JACOBSON, Ph.D. Dean, School of Education ; Director, Summer Sessions
 CHARLES E. JOHNSON, Ph.D.....Dean, College of Liberal Arts
 RICHARD W. LINDHOLM, Ph.D.....Dean, School of Business Administration
 LUCIAN C. MARQUIS, Ph.D.....Director, Honors College
 HAROLD J. NOYES, D.D.S., M.D.....Dean, Dental School
 CLYDE P. PATTON, Ph.D.....Acting Dean, Graduate School
 ROBERT M. TROTTER, Ph.D.....Dean, School of Music

VERNON L. BARKHURST, M.A.....Director of Admissions
 H. PHILIP BARNHART, B.S.....Director of Dormitories
 GEORGE N. BELKNAP, M.A.....University Editor
 RUSSELL M. BLEMKER, M.D.....Director of Health Service
 *J. SPENCER CARLSON, M.A.....Director of Counseling Center
 CLIFFORD L. CONSTANCE, M.A.....Registrar
 EUGENE W. DILS, Ed.D.....Director of Placement Service
 DONALD M. DUSHANE, M.A.....Dean of Students
 ALFRED L. ELLINGSON, B.S.....Director of Erb Memorial Union
 LEO A. HARRIS, M.A.....Athletic Director
 RAY HAWK, D.Ed.....Associate Dean of Students (Dean of Men)
 CARL W. HINTZ, Ph.D.....Librarian
 J. ORVILLE LINDSTROM, B.S.....Director of Fiscal Affairs
 WALTER N. MCLAUGHLIN, B.S., C.P.A.....Business Manager
 HERBERT L. PENNY, B.S.....Director of Informational Services
 JAMES M. SHEA, M.S.....Director of University Relations
 GOLDA P. WICKHAM, B.S.....Associate Dean of Students (Dean of Women)
 RICHARD C. WILLIAMS, B.S.....Director of Development
 CARRYL WINES.....Superintendent of University Press
 IRWIN I. WRIGHT, B.S.....Director of Physical Plant

* On sabbatical leave 1963-64.

University Faculty*

- DAVID F. ABERLE, Ph.D., Professor of Anthropology.
B.A. (1940), Harvard; Ph.D. (1950), Columbia. At Oregon since 1963.
- MARTIN H. ACKER, Ph.D., Assistant Professor of Education.
B.A. (1943), Brooklyn; M.A. (1953), Ph.D. (1963), New York University. At Oregon since 1961.
- ABBY ADAMS, M.A., Assistant Professor of Education; Head of Foreign Language Department, South Eugene High School.
B.A. (1925), Oregon; M.A. (1932), Washington. At Oregon since 1944.
- NABIL ABOULFADL, M.B.A., Instructor in Business Administration.
B.Comm. (1958), Cairo; M.B.A. (1961), Indiana. At Oregon since 1963.
- JOSEPH J. ADAMS, B.B.A., Assistant Dean for Institutional Relations, Medical School (Associate Professor).
B.B.A. (1949), Gonzaga. At Oregon since 1951.
- RICHARD M. ADAMS, D.M.D., Assistant Professor of Dentistry, Dental School; Director, Cleft Palate Clinic.
D.M.D. (1945), Tufts; B.A. (1947), Denver; M.S. (1962), Oregon.
- ROBERT E. AGGER, Ph.D., Associate Professor of Political Science.
B.A. (1948), Williams; LL.B. (1951), Yale; Ph.D. (1954), Oregon. At Oregon since 1958.
- GARY L. AHO, B.S., Instructor in English.
B.S. (1959), Portland State. At Oregon since 1962.
- FLORENCE D. ALDEN, M.A., Professor Emeritus of Physical Education.
A.B. (1904), Smith; M.A. (1928), Columbia. At Oregon since 1921.
- GUSTAVE ALEF, Ph.D., Associate Professor of History.
B.A. (1949), M.A. (1950), Rutgers; M.A. (1952), Ph.D. (1956), Princeton. At Oregon since 1956.
- ROBERT L. ALLEN, Ph.D., Associate Professor of Economics.
B.A. (1947), Redlands; M.A. (1950), Ph.D. (1953), Harvard. At Oregon since 1959.
- †HARRY ALPERT, Ph.D., Dean of the Graduate School; Professor of Sociology.
A.B. (1932), College of City of New York; Cert. de soc. (1933), Bordeaux; A.M. (1935), Ph.D. (1938), Columbia. At Oregon since 1958.
- ‡BOWER ALY, Ph.D., Professor of Speech.
B.S. (1925), Southeast Missouri State; M.A. (1926), Missouri; Ph.D. (1941), Columbia. At Oregon since 1957.
- LUCILE F. ALY, Ph.D., Instructor in English.
B.S. (1935), Ph.D. (1959), Missouri; M.A. (1942), Columbia. At Oregon since 1960.
- §FOREST W. AMSDEN, B.A., Research Consultant, Bureau of Municipal Research and Service (Associate Professor).
B.A. (1950), Colorado. At Oregon since 1963.
- BARRY F. ANDERSON, Ph.D., Assistant Professor of Psychology.
B.A. (1957), Stanford; Ph.D. (1963), Johns Hopkins. At Oregon since 1963.

* This list provides a record of the University faculty as of Feb. 1, 1964. The principal administrative officials and the heads of departments and divisions of the University of Oregon Medical School, the University of Oregon Dental School, and the University of Oregon School of Nursing in Portland are included; for complete lists of these faculties, see catalogs of these schools.

† On sabbatical leave 1963-64.

‡ On sabbatical leave, fall term, 1963-64.

§ On leave of absence, winter and spring terms, 1963-64.

- CAROLINE O. ANDERSON, B.S., Registrar, Medical School (Assistant Professor).
B.S. (1928), Nebraska. At Oregon since 1943.
- *FRANK W. ANDERSON, Ph.D., Associate Professor of Mathematics.
B.A. (1951), M.S. (1952), Ph.D. (1954), Iowa. At Oregon since 1957.
- *FRED C. ANDREWS, Ph.D., Associate Professor of Mathematics; Director, Statistical Laboratory and Computing Center.
B.S. (1946), M.S. (1948), Washington; Ph.D. (1953), California. At Oregon since 1957.
- GEORGE F. ANDREWS, B.S., N.C.A.R.B., Professor of Architecture.
B.S. (1941), Michigan; N.C.A.R.B. (1954). At Oregon since 1948.
- RAYMOND L. ARTUSY, Ph.D., Instructor in Geography.
A.B. (1937), M.S. (1939), Southern California; B.A. (1952), St. Mary's (San Antonio, Texas); Ph.D. (1960), Louisiana State. At Oregon since 1963.
- ROBERT M. ARTZ, M.S., Instructor in Recreation Management.
B.A. (1953), Montana; M.S. (1957), Indiana. At Oregon 1960-61 and since 1964.
- HELEN C. ATHERLY, M.A., Instructor in English.
B.A. (1956), Washington State; M.A. (1958), Michigan. At Oregon since 1961.
- WALLACE N. ATHERTON, Ph.D., Associate Professor of Economics.
B.A. (1950), Ph.D. (1959), California. At Oregon since 1963.
- FRED ATTNEAVE III, Ph.D., Professor of Psychology.
B.A. (1942), Mississippi; Ph.D. (1950), Stanford. At Oregon since 1958.
- †GEORGE M. AUSTIN, M.D., Professor of Neurosurgery, Medical School; Head of Division.
A.B. (1938), Lafayette; M.D. (1942), Pennsylvania. At Oregon since 1957.
- CURTIS E. AVERY, M.A., Professor of Education.
B.A. (1925), Pomona; M.A. (1928), Yale. At Oregon since 1946.
- RONALD E. BABCOCK, B.S., C.P.A., Instructor in Accounting.
B.S. (1949), Oregon; C.P.A. (1951), State of Oregon. At Oregon since 1954.
- DANIEL M. BACHMAN, M.D., Associate Professor of Medicine, Medical School; Head of Division of Rheumatology.
B.A. (1949), Reed; M.S. (1953), M.D. (1952), Oregon. At Oregon since 1956.
- DAVID A. BAERNCOPE, Ph.D., Associate Professor of Business Statistics; Acting Head of Department of Accounting and Business Statistics.
A.B. (1942), Indiana; M.A. (1956), Ph.D. (1961), Stanford. At Oregon since 1958.
- EXINE A. BAILEY, M.A., Associate Professor of Voice.
B.S. (1944), Minnesota; M.A. (1945), Diploma (1951), Columbia. At Oregon since 1951.
- J. EDWIN BAILEY, B.A., Assistant University Editor (Instructor).
B.A. (1923), Montana. At Oregon since 1938.
- DAVID W. E. BAIRD, M.D., LL.D., Dean of the Medical School; Professor of Medicine.
M.D. (1926), Oregon; LL.D. (1946), Portland. At Oregon since 1927.
- LOIS I. BAKER, M.A., Law Librarian (Associate Professor).
B.A. (1927), M.A. (1932), Oregon; Cert. (1935), California. At Oregon since 1935.
- WALLACE S. BALDINGER, Ph.D., Professor of Art; Director, Museum of Art.
B.A. (1928), M.A. (1932), Oberlin; Ph.D. (1938), Chicago. At Oregon since 1944.
- EWART M. BALDWIN, Ph.D., Professor of Geology.
B.S. (1938), M.S. (1939), Washington State; Ph.D. (1943), Cornell. At Oregon since 1947.
- ROLAND C. BALL, JR., Ph.D., Assistant Professor of English.
B.A. (1939), Swarthmore; M.A. (1941), Cornell; Ph.D. (1953), California. At Oregon since 1952.

* On sabbatical leave 1963-64.

† On leave of absence 1963-64.

- *WESLEY C. BALLAINÉ, Ph.D., Professor of Business Economics ; Director, Bureau of Business Research.
B.A. (1927), M.B.A. (1931), Washington; Ph.D. (1940), Chicago. At Oregon since 1941.
- THOMAS O. BALLINGER, M.A., Associate Professor of Art Education; Head of Department.
B.A. (1949), M.A. (1951), New Mexico. At Oregon since 1952.
- RALPH B. BALLOU, JR., M.S., Instructor in Physical Education.
B.S. (1949), M.S. (1956), Springfield. At Oregon since 1960.
- HAROLD B. BARCLAY, Ph.D., Assistant Professor of Anthropology.
B.A. (1952), Boston; M.A. (1954), Ph.D. (1961), Cornell. At Oregon since 1963.
- BURT BROWN BARKER, LL.D., Vice-President Emeritus.
A.B. (1897), Chicago; LL.B. (1901), Harvard; LL.D. (1935), Linfield. At Oregon since 1928.
- VERNON L. BARKHURST, M.A., Director of Admissions; Assistant Dean of Students (Assistant Professor).
B.A. (1949), M.A. (1950), Oregon. At Oregon since 1959.
- EUGENE B. BARNES, Ph.D., Head Acquisition Librarian (Professor).
B.A. (1941), M.A. (1943), Minnesota; Ph.D. (1947), Chicago. At Oregon since 1947.
- HOMER G. BARNETT, Ph.D., Professor of Anthropology.
A.B. (1927), Stanford; Ph.D. (1938), California. At Oregon since 1939.
- H. PHILIP BARNHART, B.S., Director of Dormitories; Director of Foods, Student Union (Professor).
B.S. (1947), Pennsylvania State. At Oregon since 1949.
- †ROLAND BARTEL, Ph.D., Associate Professor of English; Acting Associate Dean of the College of Liberal Arts.
B.A. (1947), Bethel; Ph.D. (1951), Indiana. At Oregon since 1951.
- WENDELL M. BASYE, A.B., LL.B., Associate Professor of Law.
A.B. (1941), Nebraska; LL.B. (1947), Virginia. At Oregon since 1957.
- EUGENIO BATISTA, M.F.A., Lecturer in Architecture.
Dip. (1924), Havana; M.F.A. (1930), Princeton. At Oregon since 1962.
- EUGENE W. BAUER, B.S., Business Manager, Dental School (Associate Professor).
B.S. (1956), Lewis and Clark. At Oregon since 1947.
- HAROLD BAUMAN, M.A., Visiting Lecturer in History.
B.A. (1950), M.A. (1957), Oregon. At Oregon since 1963.
- EDWIN F. BEAL, Ph.D., Associate Professor of Management.
B.A. (1931), Ohio Wesleyan; M.S. (1951), Ph.D. (1953), Cornell. At Oregon since 1959.
- PHILIP E. BEAL, M.A., Assistant Dean of Men (Instructor).
A.B. (1957), Cornell College; M.A. (1961), Northwestern. At Oregon since 1963.
- CHANDLER B. BEALL, Ph.D., Professor of Romance Languages.
Dip. (1921), Sorbonne; A.B. (1922), Ph.D. (1930), Johns Hopkins. At Oregon since 1929.
- DAVID D. BEATY, M.S., Instructor in Biology.
B.A. (1957), Western Washington; M.S. (1959), Wyoming. At Oregon since 1963.
- ILA M. BEAVER, B.S., Instructor in Business Education.
B.S. (1962), Oregon. At Oregon since 1962.
- CAROL B. BEDWELL, Ph.D., Assistant Professor of Germanic Languages.
B.A. (1952), Wellesley; M.A. (1954), Ph.D. (1962), Indiana. At Oregon since 1962.
- RUDOLPH S. BEHAR, M.A., Instructor in English.
B.A. (1960), Connecticut; M.A. (1961), Hunter. At Oregon since 1961.

* On leave of absence Feb.-Apr. 1964.

† On sabbatical leave spring term, 1963-64.

- PAUL R. BEISTEL, M.A., Visiting Instructor in Recreation.
B.A. (1938), M.A. (1962), Oregon. At Oregon 1963.
- GEORGE N. BELKNAP, M.A., University Editor (Assistant Professor).
B.A. (1926), M.A. (1934), Oregon. At Oregon since 1934.
- STEPHEN BELKO, M.S., Associate Professor of Physical Education; Head Basketball Coach.
B.S. (1939), M.S. (1947), Idaho. At Oregon since 1956.
- JAMES R. BELL, M.R.P., Associate Director, Urban Planning Program, Bureau of Municipal Research and Service.
B.S. (1956), M.R.P. (1957), Cornell. At Oregon since 1963.
- ERWIN T. BENDER, D.D.S., Professor of Dentistry, Dental School; Superintendent of Dental Clinics.
D.D.S. (1924), Iowa. At Oregon since 1943.
- DALE BENEDICT, B.S., Assistant Professor of Architecture.
B.S. (1951), Illinois. At Oregon 1957-61 and since 1962.
- RAYMOND P. BENOIT, B.Ed., Instructor in English.
B.Ed. (1959), Gonzaga. At Oregon since 1963.
- BURTON A. BENSON, B.S., Director of Student Publications.
B.A. (1952), Oregon. At Oregon since 1963.
- GILBERT T. BENSON, Ph.D., Assistant Professor of Geology.
B.S. (1952), M.S. (1953), Stanford; Ph.D. (1963), Yale. At Oregon since 1962.
- JOHN A. BENSON, JR., M.D., Associate Professor of Medicine, Medical School; Head of Division of Gastroenterology.
B.A. (1943), Wesleyan; M.D. (1946), Harvard. At Oregon since 1959.
- RALPH C. BENSON, M.D., Professor of Obstetrics and Gynecology, Medical School; Chairman of Department.
B.A. (1932), Lehigh; M.D. (1936), Johns Hopkins. At Oregon since 1956.
- JAMES M. BERKEY, B.S., B.Arch., Reg. Archt., Planning Consultant, Bureau of Municipal Research and Service (Associate Professor).
B.S. (1931), Washington State; B.Arch. (1932), Washington; B.S. (1944), Oregon State; Reg. Archt. (1939), State of Washington; Dip. (1940), Cranbrook Academy of Art. At Oregon since 1961.
- SIDNEY A. BERNHARD, Ph.D., Associate Professor of Chemistry; Research Associate, Institute of Molecular Biology.
B.S. (1948), Brooklyn; M.S. (1949), Pennsylvania; Ph.D. (1951), Columbia. At Oregon since 1961.
- *JOEL V. BERREMAN, Ph.D., Professor of Sociology.
B.A. (1927), Willamette; M.A. (1933), Oregon; Ph.D. (1940), Stanford. At Oregon since 1946.
- MELVIN B. BERRYHILL, M.D., Assistant Professor of Education.
B.A. (1943), M.D. (1943), Iowa. At Oregon 1960-62 and since 1963.
- ROBERT C. BERSCHINSKI, M.B.A., Instructor in Business Administration.
Ph.B. (1957), Notre Dame; M.B.A. (1959), Indiana. At Oregon since 1963.
- WILLIAM C. BESSEY, M.S., Instructor in Business Administration.
B.S. (1949), M.S. (1951), Oregon. At Oregon since 1963.
- GERALD BIERWAG, Ph.D., Assistant Professor of Economics.
B.A. (1958), Idaho; Ph.D. (1962), Northwestern. At Oregon since 1962.
- EDWIN R. BINGHAM, Ph.D., Associate Professor of History.
B.A. (1941), M.A. (1942), Occidental; Ph.D. (1951), California at Los Angeles. At Oregon since 1949.

* On sabbatical leave 1963-64.

- *RAYMOND F. BIRN, Ph.D., Assistant Professor of History.
A.B. (1956), New York University; M.A. (1957), Ph.D. (1961), Illinois. At Oregon since 1962.
- HERBERT BISNO, M.S.W., R.S.W., Associate Professor of Sociology.
B.A. (1946), Wisconsin; M.S.W. (1951), California; R.S.W. (1951), State of California. At Oregon since 1952.
- FRANCIS W. BITTNER, M.A., Associate Professor of Piano.
B.Mus. (1936), Cincinnati Conservatory of Music; M.A. (1943), New York University. At Oregon since 1946.
- FRANK G. BLACK, Professor of English.
A.B. (1921), Dickinson; A.M. (1923), Ph.D. (1936), Harvard. At Oregon since 1936.
- CHARLENE M. BLACKBURN, B.A., Assistant Dean of Women (Instructor).
B.A. (1956), Washburn. At Oregon since 1960.
- KENNETH R. BLACKMAN, M.U.P., Assistant Planner, Bureau of Municipal Research and Service (Instructor).
B.A. (1959), Whitworth; M.U.P. (1961), Washington. At Oregon since 1961.
- MARGARET D. BLAGO, B.A., Assistant Registrar (Instructor).
B.A. (1951), Linfield. At Oregon since 1960.
- RUSSELL M. BLEMKER, M.D., Director of Health Service; Associate Professor of Health Education.
B.A. (1926), De Pauw; M.D. (1930), Washington University. At Oregon since 1954.
- ALFRED BLOOM, Ph.D., Assistant Professor of Religion.
A.B. (1951), Eastern Baptist Seminary; B.D. (1953), S.T.M. (1953), Andover Newton; Ph.D. (1963), Harvard. At Oregon since 1961.
- STEPHEN F. BOCHKOR, M.L.A., Assistant Professor of Landscape Architecture.
B.S. (1951), Syracuse; M.L.A. (1955), Harvard. At Oregon since 1961.
- VIRGIL C. BOEKELHEIDE, Ph.D., Professor of Chemistry.
A.B. (1939), Ph.D. (1943), Minnesota. At Oregon since 1960.
- GERALD K. BOGEN, D.Ed., Assistant Director of Admissions (Instructor).
B.A. (1959), Western Washington; M.S. (1961), Ph.D. (1963), Oregon. At Oregon since 1961.
- LLOYD M. BOND, B.L.A., Visiting Professor of Landscape Architecture.
B.L.A. (1949), Oregon. At Oregon 1959-60 and since 1961.
- PETER H. BONNELL, Ph.D., Assistant Professor of Slavic Languages.
B.A. (1952), California; Ph.D. (1962), Harvard. At Oregon since 1962.
- JAMES R. BOOTH, M.S., Instructor in Education.
B.S. (1952), Boston University; M.S. (1956), William and Mary. At Oregon since 1962.
- JOHN W. BORCHARDT, M.A., Assistant Professor of Physical Education.
B.S. (1940), LaCrosse Teachers; M.A. (1951), Iowa. At Oregon since 1948.
- CONSTANCE B. BORDWELL, M.A., Senior Instructor in English and Legal Writing.
B.A. (1931), Oregon; M.A. (1932), Washington State. At Oregon 1947-49 and since 1958.
- ROBERT L. BOSWORTH, B.Arch., Assistant Professor of Architecture.
B.Arch. (1956), Oregon. At Oregon since 1962.
- GEORGE G. BOUGHTON, Mus.M., Associate Professor of Violin.
B.F.A. (1940), Mus.M. (1943), South Dakota. At Oregon since 1945.
- ELAINE C. BOWE, M.A., Instructor in English.
B.A. (1962), Mills; M.A. (1963), Indiana. At Oregon since 1963.
- WILLIAM J. BOWERMAN, M.S., Professor of Physical Education; Head Track Coach.
B.S. (1933), M.S. (1951), Oregon. At Oregon since 1948.

* On leave of absence 1963-64.

- CHARLES J. BOWLES, M.S., Instructor in Physical Education.
B.S. (1943), M.S. (1947), Portland. At Oregon since 1962.
- ROBERT L. BOWLIN, M.A., Assistant Dean of Men (Instructor).
B.S. (1953), M.A. (1958), California State Polytechnic. At Oregon since 1961.
- JEAN E. BOYLE, M.S., R.N., Director, School of Nursing; Professor of Nursing.
B.S. (1936), M.S. (1941), Washington; R.N. (1936), State of Washington. At Oregon since 1958.
- QUIRINUS BREEN, Ph.D., Professor of History.
A.B. (1920), Calvin; Ph.D. (1931), Chicago. At Oregon since 1938.
- LOUIS BREGER, Ph.D., Assistant Professor of Psychology.
B.A. (1957), California at Los Angeles; M.A. (1959), Ph.D. (1961), Ohio State. At Oregon since 1961.
- GEORGE J. BRENNER, B.S., Planning Consultant, Bureau of Municipal Research and Service (Associate Professor).
B.S. (1951), Rutgers. At Oregon since 1962.
- WILLIAM A. BRICKER, Ph.D., Assistant Professor of Psychology.
B.S. in Ed. (1958), M.A. (1959), Ph.D. (1962), Ohio State. At Oregon since 1962.
- DAVID BRINKS, Ed.D., Counselor, University Counseling Center (Instructor).
B.S. (1957), Portland State; M.Ed. (1960), Lady of the Lake; Ed.D. (1963), Utah State. At Oregon since 1962.
- JOHN L. BRISCOE, B.Arch. Engr., Reg. Archt., Associate Professor of Architecture.
B.Arch. Engr. (1950), Oklahoma State; N.C.A.R.B. (1955). At Oregon since 1953.
- ANNE BRODZKY, B.A., Instructor in English.
B.A. (1961), Willamette. At Oregon since 1963.
- JAN BROEKHOFF, M.S., Instructor in Physical Education.
B.S. (1958), Amsterdam Academy of Physical Education; M.S. (1962), Oregon. At Oregon since 1963.
- JAMES W. BROOKE, M.D., Visiting Lecturer in Physical Education.
B.A. (1934), M.A. (1938), M.D. (1938), Oregon. At Oregon since 1959.
- JOHN M. BROOKHART, Ph.D., Professor of Physiology, Medical School; Chairman of Department.
B.S. (1935), M.S. (1936), Ph.D. (1939), Michigan. At Oregon since 1949.
- WILFORD A. BROOKSBY, M.D., Assistant University Physician; Psychiatric Consultant, University Counseling Center (Assistant Professor).
B.S. (1940), Brigham Young; M.D. (1943), Northwestern; M.S. (1949), Minnesota. At Oregon since 1955.
- DON BROWN, M.Ed., Instructor in Education.
B.S. (1954), M.Ed. (1957), Oregon. At Oregon since 1963.
- EYLER BROWN, M. Arch., Reg. Archt., Associate Professor Emeritus of Architecture.
B.A. (1916), B.S. in Arch. (1917), Oregon; M.Arch. (1922), Massachusetts Institute of Technology; Reg. Archt. (1924), State of Oregon. At Oregon since 1922.
- ROBERT E. BROWN, M.B.A., Instructor in Business Administration.
B.S. (1953), M.B.A. (1964), Connecticut. At Oregon since 1963.
- SHARON L. BROWN, M.A., Instructor in English.
B.A. (1956), Stanford; M.A. (1957), Oregon. At Oregon since 1961.
- CLYDE E. BROWNING, Ph.D., Assistant Professor of Real Estate.
B.A. (1950), M.A. (1951), Kent State (Ohio); Ph.D. (1958), Washington. At Oregon since 1959.
- WAYNE B. BRUMBACH, Ph.D., Associate Professor of Physical Education.
B.S. (1943), M.S. (1947), Washington; Ph.D. (1959), Oregon. At Oregon since 1956.

- *STANLEY W. BRYAN, M.Arch., Reg. Archt., Associate Professor of Architecture; University Architect.
B.Arch. (1947), Washington; M.Arch. (1948), Massachusetts Institute of Technology; Reg. Archt. (1951), States of Washington and Oregon. At Oregon 1949-50 and since 1955.
- ROBERT E. BUCHANAN, B.A., Assistant Planner, Bureau of Municipal Research and Service (Instructor).
B.A. (1960), Washington. At Oregon since 1962.
- PAUL E. BUCKNER, M.F.A., Assistant Professor of Sculpture.
B.A. (1959), Washington; M.F.A. (1961), Claremont. At Oregon since 1962.
- HOWARD W. BUFORD, B.S.L.A., Visiting Professor of Architecture.
B.S.L.A. (1933), Oregon State. At Oregon since 1955.
- CHESTER S. BUMBARGER, M.Ed., Instructor in Education.
B.S. (1948), Oregon College of Education; M.Ed (1956), Oregon. At Oregon since 1963.
- *JACK W. BURGNER, M.A., Associate Professor of Art.
B.S. in Ed. (1948), Eastern Illinois State; M.A. (1949), Colorado State College of Education. At Oregon since 1954.
- ORIN K. BURRELL, M.A., C.P.A., Professor of Finance.
B.S. (1921), M.A. (1927), Iowa; C.P.A. (1928), State of Oregon. At Oregon since 1927.
- CHARLES D. BYRNE, Ed.D., Professor Emeritus of Education.
B.S. (1921), M.S. (1922), Wisconsin; Ed.D. (1938), Stanford. At Oregon 1955-57 and since 1958.
- WILLIAM E. CADBURY, Ph.D., Assistant Professor of English.
B.A. (1956), Harvard; M.S. (1957), Ph.D. (1961), Wisconsin. At Oregon since 1961.
- ROBERT CAMPBELL, Ph.D., Associate Professor of Economics; Head of Department.
A.B. (1947), Ph.D. (1952), California; B.S. (1950), U.S. Merchant Marine Academy. At Oregon since 1952.
- FREDERICK H. CANDELARIA, Ph.D., Assistant Professor of English; Director of English Composition.
B.A. (1954), Texas Western; Ph.D. (1959), Missouri. At Oregon since 1959.
- DOROTHY N. CANDLAND, Ed.D., Associate Professor of Education.
B.S. (1940), M.S. (1949), Brigham Young; Ed.D. (1956), Stanford. At Oregon since 1961.
- KENNETH A. CANTWELL, D.M.D., Professor of Dentistry, Dental School; Head of Department of Operative Dentistry.
B.S. (1938), Utah State; D.M.D. (1943), North Pacific. At Oregon since 1936.
- HARRY J. CARLSON, Ed.D., Assistant Professor of Education.
B.S. (1952), M.S. (1956), New Mexico Western; Ed.D. (1963), Arizona. At Oregon since 1962.
- *J. SPENCER CARLSON, M.A., Director, University Counseling Center; Associate Dean of Students; Associate Professor of Psychology.
B.S. (1935), Oregon; M.A. (1937), Minnesota. At Oregon since 1947.
- RICHARD O. CARLSON, Ed.D., Associate Professor of Education; Research Associate, Institute for Community Studies.
B.S. (1951), M.S. (1955), Utah; Ed.D. (1957), California. At Oregon since 1963.
- GLADYS S. CARTER, M.A., Instructor in English.
B.A. (1943), Oregon State; M.A. (1949), Michigan. At Oregon since 1963.
- ELLA S. CARRICK, B.A., Senior Catalog Librarian Emeritus (Senior Instructor).
B.A. (1929), Oregon. At Oregon since 1929.
- LEONARD J. CASANOVA, Ph.B., Professor of Physical Education; Head Football Coach.
Ph.B. (1927), Santa Clara. At Oregon since 1951.

* On sabbatical leave 1963-64.

- ALBUREY CASTELL, Ph.D., Professor of Philosophy.
B.A. (1928), M.A. (1929), Toronto; Ph.D. (1931), Chicago. At Oregon since 1949.
- *RICHARD W. CASTENHOLZ, Ph.D., Assistant Professor of Biology.
B.S. (1952), Michigan; Ph.D. (1957), Washington State. At Oregon since 1957.
- FRANK S. CATER, Ph.D., Assistant Professor of Mathematics.
B.A. (1956), M.A. (1957), Ph.D. (1960), Southern California. At Oregon since 1960.
- KENNETH W. CHAMPION, B.S., Captain, U. S. Army; Assistant Professor of Military Science.
B.S. (1954), Michigan State. At Oregon since 1963.
- MICHAEL CHATFIELD, B.A., Instructor in Accounting.
B.A. (1957), Washington. At Oregon since 1963.
- SHANG-YI CH'EN, Ph.D., Professor of Physics.
B.S. (1932), M.S. (1934), Yenching; Ph.D. (1940), California Institute of Technology. At Oregon since 1949.
- HAROLD W. CHILDS, B.A., Director, Athletic News Bureau (Instructor).
B.A. (1956), University of Portland. At Oregon since 1961.
- GABRIEL CHODOS, M.A., Instructor in Piano.
B.A. (1959), M.A. (1963), California at Los Angeles. At Oregon since 1963.
- NED J. CHRISTENSEN, Ph.D., Assistant Professor of Speech.
B.A. (1954), M.A. (1955), Brigham Young; Ph.D. (1959), Pennsylvania State. At Oregon since 1962.
- OSCAR C. CHRISTENSEN, JR., D.Ed., Assistant Professor of Education; Counselor, University Counseling Center.
B.S. (1950), D.Ed. (1963), Oregon; M.Ed. (1957), Oregon State. At Oregon since 1961.
- GEORGE A. CHRISTY, Ph.D., Assistant Professor of Finance.
B.S. (1941), Georgetown; M.A. (1942), Illinois; Ph.D. (1962), Texas. At Oregon since 1962.
- PAUL CIVIN, Ph.D., Professor of Mathematics.
B.A. (1939), Buffalo; M.A. (1941), Ph.D. (1942), Duke. At Oregon since 1946.
- CLARENCE W. CLANCY, Ph.D., Professor of Biology.
B.S. (1930), M.S. (1932), Illinois; Ph.D. (1940), Stanford. At Oregon since 1940.
- CHAPIN D. CLARK, LL.B., LL.M., Associate Professor of Law.
B.A. (1952), LL.B. (1954), Kansas; LL.M. (1959), Columbia. At Oregon since 1962.
- ROBERT D. CLARK, Ph.D., Dean of Faculties; Professor of Speech.
A.B. (1931), Pasadena; M.A. (1935), Ph.D. (1946), Southern California. At Oregon since 1943.
- H. HARRISON CLARKE, Ed.D., Research Professor of Physical Education.
B.S. (1925), Springfield; M.S. (1931), Ed.D. (1940), Syracuse. At Oregon since 1953.
- M. MARKLEY CLARKE, B.S., Acting Curator, Museum of Art (Instructor).
B.S. (1959), Oregon. At Oregon since 1964.
- C. KEITH CLAYCOMB, Ph.D., Professor of Biochemistry, Dental School; Head of Department.
B.S. (1947), M.S. (1948), Ph.D. (1951), Oregon. At Oregon since 1951.
- DOUGLAS L. COCHRAN, M.B.A., Instructor in Management.
B.S. (1938), Ohio State; M.B.A. (1940), Harvard. At Oregon since 1963.
- ARTHUR CODY, Ph.D., Visiting Lecturer in Philosophy.
B.A. (1947), M.A. (1955), Ph.D. (1961), California. At Oregon since 1963.
- ROBERT S. COGGINS, B.Sc., B.A., Visiting Associate Professor of Geography.
B.Sc. (1949), B.A. (1954), Adelaide; Dip. Ed. (1952), Sydney. At Oregon since 1963.
- CATHERINE COHEN, M.A., Instructor in Romance Languages.
B.A. (1952), M.A. (1954), Oregon. At Oregon since 1960.

* On sabbatical leave 1963-64.

- *HERMAN COHEN, Ph.D., Associate Professor of Speech.
B.A. (1948), M.A. (1949), Ph.D. (1954), Iowa. At Oregon since 1949.
- MELVIN J. COHEN, Ph.D., Associate Professor of Biology.
B.A. (1949), M.A. (1952), Ph.D. (1954), California at Los Angeles. At Oregon since 1957.
- DAVID L. COLE, M.S., Curator, Museum of Natural History (Assistant Professor).
B.S. (1952), M.S. (1954), Oregon. At Oregon since 1959.
- MAX B. COLEY, M.A., Assistant Professor of Physical Education; Assistant Football Coach.
B.A. (1951), M.A. (1956), San Jose State. At Oregon since 1959.
- FREDERICK M. COMBELLACK, Ph.D., Professor of Greek Literature.
B.A. (1928), Stanford; Ph.D. (1936), California. At Oregon since 1937.
- NEWEL H. COMISH, Ph.D., Professor Emeritus of Business Administration.
B.S. (1911), Utah State; M.S. (1915), Ph.D. (1928), Wisconsin. At Oregon since 1932.
- HELEN R. CONNOR, M.A., Instructor in Physical Education.
B.S. (1951), Colorado; M.A. (1953), Western State College of Colorado. At Oregon since 1959.
- CLIFFORD L. CONSTANCE, M.A., Registrar (Associate Professor).
B.A. (1925), M.A. (1929), Oregon. At Oregon since 1931.
- JOHN W. COOK, Ph.D., Assistant Professor of Philosophy.
B.A. (1953), Minnesota; Ph.D. (1960), Nebraska. At Oregon since 1963.
- STANTON A. COOK, Ph.D., Assistant Professor of Biology.
A.B. (1951), Harvard; Ph.D. (1960), California. At Oregon since 1960.
- HENRY F. COOPER, M.A., Instructor in Romance Languages.
B.A. (1950), Willamette; M.A. (1956), Middlebury. At Oregon since 1960.
- JAMES A. CORBETT, M.S. in L.S., Humanities Librarian (Instructor).
B.A. (1954), Colgate; M.A. (1955), Harvard; M.S. in L.S. (1963), Southern California. At Oregon since 1963.
- RICHARD V. COTTER, M.S., Instructor in Business Administration.
B.S. (1952), Lewis and Clark; M.S. (1963), Oregon. At Oregon since 1963.
- KEITH M. COX, M.A., Science Librarian (Instructor).
B.A. (1960), Ottawa; M.A. (1962), Oregon. At Oregon since 1962.
- DEREK CRABTREE, B.Sc., Visiting Lecturer in Political Science.
B.Sc. (1953), Leicester. At Oregon since 1963.
- JACKSON T. CRANE, M.D., Professor of Pathology, Medical School; Chairman of Department.
A.B. (1943), M.D. (1945), California. At Oregon since 1960.
- BERND CRISEMAN, Ph.D., Associate Professor of Physics.
A.B. (1948), California at Los Angeles; Ph.D. (1953), California. At Oregon since 1953.
- WALTER L. CREESE, Ph.D., Dean of the School of Architecture and Allied Arts; Professor of Architecture.
B.A. (1941), Brown; M.A. (1950), Ph.D. (1950), Harvard. At Oregon since 1963.
- LUTHER S. CRESSMAN, Ph.D., Professor Emeritus of Anthropology.
A.B. (1918), Pennsylvania State; S.T.B. (1923), General Theological Seminary; M.A. (1923), Ph.D. (1925), Columbia. At Oregon since 1929.
- RICHARD B. CRITTENDEN, M.S., Instructor in Mathematics.
B.A. (1957), Willamette; M.S. (1959), Illinois. At Oregon since 1963.
- HENRY CROES, B.A., Instructor in Germanic Languages.
B.A. (1963), Oregon. At Oregon since 1963.
- HAROLD R. CROSLAND, Ph.D., Associate Professor Emeritus of Psychology.
A.B. (1913), South Carolina; M.A. (1914), Ph.D. (1916), Clark. At Oregon since 1920.

* On sabbatical leave, spring term, 1963-64.

- JOHN A. CROSS, M.S., Assistant Director for Activities, Student Union (Instructor).
B.P.E. (1959), British Columbia; M.S. (1960), Oregon. At Oregon since 1961.
- CALVIN CRUMBAKER, Ph.D., Professor Emeritus of Economics.
B.S. (1911), Whitman; M.A. (1927), Washington; Ph.D. (1930), Wisconsin. At Oregon since 1930.
- *JACK A. CULBERTSON, Ph.D., Associate Professor of Education.
A.B. (1943), Emory and Henry; M.A. (1946), Duke; Ph.D. (1955), California. At Oregon since 1955.
- ROBERT N. CUMMINGS, B.A., Planning Technician, Bureau of Municipal Research and Service (Instructor).
B.A. (1960), California at Santa Barbara. At Oregon since 1962.
- ROBERT G. CUNNINGHAM, Mus.M., Assistant Professor of Woodwind Instruments.
B.M. (1950), Eastman School of Music; Mus.M. (1952), Oregon. At Oregon since 1954.
- *CHARLES W. CURTIS, Ph.D., Professor of Mathematics.
B.A. (1947), Bowdoin; M.A. (1948), Ph.D. (1951), Yale. At Oregon since 1963.
- FRANCIS R. CUSHMAN, M.D., Assistant University Physician; Assistant Professor of Health Education.
B.S. (1956), College of Idaho; M.D. (1960), Western Reserve. At Oregon since 1961.
- FREDERICK A. CUTHBERT, M.L.D., Professor of Landscape Architecture and Urban Planning; Head of Department.
A.B. (1926), M.L.D. (1928), Michigan. At Oregon since 1932.
- JEAN V. CUTLER, Ph.D., Instructor in Speech.
B.A. (1955), Lynchburg; M.A. (1959), Ph.D. (1962), Illinois. At Oregon since 1962.
- EDMUND CYKLER, Ph.D., Professor of Music.
B.A. (1926), California; Ph.D. (1928), Charles (Czechoslovakia). At Oregon since 1947.
- WALFRED A. DAHLBERG, M.A., Associate Professor of Speech.
A.B. (1925), Michigan; M.A. (1930), Northwestern. At Oregon since 1932.
- FRANCIS E. DART, Ph.D., Associate Professor of Physics.
A.B. (1937), Oberlin; M.S. (1939), Notre Dame; Ph.D. (1947), Cornell. At Oregon since 1949.
- NORMAN A. DAVID, M.D., Professor of Pharmacology, Medical School; Chairman of Department.
A.B. (1925), M.D. (1931), California. At Oregon since 1937.
- JAMES C. DAVIES, Ph.D., Professor of Political Science.
A.B. (1939), Oberlin; Ph.D. (1952), California. At Oregon since 1963.
- RICHARD M. DAVIS, Ph.D., Professor of Economics.
A.B. (1939), Colgate; M.A. (1941), Ph.D. (1949), Cornell. At Oregon since 1954.
- ROGER T. DAVIS, Ph.D., Visiting Professor of Psychology.
B.S. (1947), M.S. (1949), Ph. D. (1953), Wisconsin. At Oregon 1962-63.
- †WILBUR A. DAVIS, Ph.D., Assistant Curator of Anthropology, Museum of Natural History (Assistant Professor).
B.A. (1950), Reed; M.A. (1956), Ph.D. (1962), Oregon. At Oregon since 1962.
- LESLIE A. DAVISON, Ph.D., Assistant Professor of Psychology.
A.B. (1954), Ph.D. (1963), California. At Oregon since 1963.
- JEROME H. DAYTON, M.D., Assistant University Physician; Assistant Professor of Health Education.
B.A. (1954), St. Olaf; M.D. (1958), Minnesota. At Oregon since 1963.
- JOHN E. S. DE JUNG, Ed.D., Associate Professor of Education.
B.A. (1951), Montana; M.A. (1954), Ph.D. (1957), Syracuse. At Oregon since 1964.

* On leave of absence 1963-64.

† On leave of absence, winter and spring terms, 1963-64.

- RICHARD H. DESROCHES, Ph.D., Assistant Professor of Romance Languages.
A.B. (1947), Clark; Ph.D. (1962), Yale. At Oregon since 1957.
- LEROY E. DETLING, Ph.D., Associate Professor of Biology; Curator of Herbarium.
A.B. (1921), Oregon; A.M. (French) (1923), A.M. (Botany) (1933), Ph.D. (1936), Stanford. At Oregon 1927-30 and since 1936.
- DAVID D. DEWEESE, M.D., Professor of Otolaryngology, Medical School; Chairman of Department of Otolaryngology, Rhinology, and Laryngology.
A.B. (1934), M.D. (1938), Michigan. At Oregon since 1944.
- GERRIT DE WILDE, Instructor in Chemistry.
Cert. (1946), Leiden. At Oregon since 1962.
- SAMUEL N. DICKEN, Ph.D., Professor of Geography.
B.A. (1924), Marietta; Ph.D. (1930), California. At Oregon since 1947.
- HAROLD R. DICKMAN, Ph.D., Associate Professor of Psychology.
B.A. (1951), Linfield; M.A. (1954), Ph.D. (1956), Kansas. At Oregon 1956-57 and since 1963.
- MILTON DIETERICH, M.Mus., Assistant Professor of Music.
B.Mus. (1923), Grinnell; M.Mus. (1941), Eastman School of Music. At Oregon since 1946.
- ROBERT S. DILL, M.A., Instructor in History.
B.A. (1956), Kent; M.A. (1958), Michigan. At Oregon since 1963.
- EUGENE W. DILS, Ed.D., Director of Placement; Associate Dean of Students (Associate Professor).
B.A. (1928), Washington State; M.A. (1945), Washington; Ed.D. (1952), Stanford. At Oregon since 1958.
- EDITH M. DODDS-BELANGER, M.S., Assistant Professor of Physical Education.
B.A. (1954), Washington; M.S. (1957), Wisconsin. At Oregon since 1963.
- LLOYD J. DOLBY, Ph.D., Assistant Professor of Chemistry.
B.S. (1956), Illinois; Ph.D. (1959), California. At Oregon since 1960.
- *PHILIP H. DOLE, M.S., Reg. Archt., Assistant Professor of Architecture.
B.Arch. (1949), Harvard; M.S. (1954), Columbia; Reg. Archt. (1958), State of New York. At Oregon since 1956.
- JOSEPH M. DOLPH, M.S., Instructor in Speech.
B.A. (1950), Linfield; M.S. (1958), Oregon. At Oregon since 1961.
- VERNON R. DORJAHN, Ph.D., Associate Professor of Anthropology.
B.S. (1950), Ph.D. (1954), Northwestern; M.A. (1951), Wisconsin. At Oregon since 1956.
- CHARLES T. DOTTER, M.D., Professor of Radiology, Medical School; Chairman of Department.
B.A. (1941), Duke; M.D. (1944), Cornell. At Oregon since 1952.
- DAVID M. DOUGHERTY, Ph.D., Professor of Romance Languages; Head of Department of Foreign Languages.
A.B. (1925), Delaware; A.M. (1927), Ph.D. (1932), Harvard. At Oregon since 1947.
- M. FRANCES DOUGHERTY, Ph.D., Professor of Physical Education.
B.A. (1935), M.A. (1940), Colorado State College; Ph.D. (1959), New York University. At Oregon since 1959.
- ROBERT R. DOZIER, M.A., Instructor in History.
B.A. (1960), M.A. (1961), California. At Oregon since 1963.
- THEODORE M. DRANGE, Ph.D., Assistant Professor of Philosophy.
B.A. (1955), Brooklyn; Ph.D. (1963), Cornell. At Oregon since 1962.
- JOHN T. DREIER, Ph.D., Visiting Associate Professor of Speech.
B.F.A. (1948), M.F.A. (1949), Carnegie Institute of Technology; Ph.D. (1959), Denver, At Oregon since 1963.

* On sabbatical leave 1963-64.

- WILL DRUM, J.D., Associate Professor of Sociology and Social Work.
J.D. (1921), Freiburg; M.A. (1943), Washington. At Oregon since 1952.
- *ROBERT DUBIN, Ph.D., Research Professor of Sociology.
A.B. (1936), A.M. (1940), Ph.D. (1947), Chicago. At Oregon since 1954.
- †PAUL S. DULL, Ph.D., Professor of History.
B.A. (1935), Ph.D. (1940), Washington. At Oregon since 1946.
- DON E. DUMOND, Ph.D., Assistant Professor of Anthropology.
B.A. (1949), New Mexico; M.A. (1957), Mexico City College; Ph.D. (1962), Oregon.
At Oregon since 1962.
- J. ENGLEBERT DUNPHY, M.D., Kenneth A. J. MacKenzie Professor of Surgery,
Medical School; Chairman of Department.
B.A. (1929), Holy Cross; M.D. (1933), Harvard. At Oregon since 1959.
- DONALD M. DUSHANE, M.A., Dean of Students; Lecturer in Political Science
(Professor).
B.A. (1927), Wabash; M.A. (1937), Columbia. At Oregon since 1948.
- PAUL H. EARLS, Ph.D., Assistant Professor of Music Theory.
B.M. (1955), M.M. (1956), Ph.D. (1959), Rochester. At Oregon since 1962
- JAMES O. EATON, Ph.D., Visiting Professor of Accounting.
B.S. (1937), M.S. (1947), Ph.D. (1950), Illinois. At Oregon since 1963.
- EDWIN G. EBBIGHAUSEN, Ph.D., Professor of Physics.
B.S. (1936), Minnesota; Ph.D. (1940), Chicago. At Oregon since 1946.
- FRANK B. EBERSOLE, Ph.D., Associate Professor of Philosophy; Head of Department.
A.B. (1941), Heidelberg, Ohio; Ph.D. (1947), Chicago. At Oregon since 1961.
- CORWIN D. EDWARDS, Ph.D., Professor of Economics.
A.B. (1920), B.J. (1921), Missouri; B.Litt. (1924), Oxford; Ph.D. (1928), Cornell.
At Oregon since 1963.
- OWEN D. EDWARDS, B.A., Visiting Lecturer in History.
B.A. (1958), University College, Dublin. At Oregon since 1963.
- EDWARD D. EHLERS, B.A., Associate Planner, Bureau of Municipal Research and
Service (Assistant Professor).
B.A. (1955), Fresno State. At Oregon since 1961.
- MOHAMED F. EL HITAMI, M.B.A., Instructor in Business Administration.
B.Sc. (1957), Ain-Shams (Egypt); M.B.A. (1960), Washington. At Oregon since 1962.
- RAYMOND T. ELLICKSON, Ph.D., Professor of Physics.
B.A. (1935), Reed; M.A. (1936), Oregon State; Ph.D. (1938), Chicago. At Oregon since
1948.
- ALFRED L. ELLINGSON, B.S., Director, Student Union (Associate Professor).
B.S. (1948), Oregon. At Oregon since 1951.
- ROBERT A. ELLIS, Ph.D., Associate Professor of Sociology.
B.A. (1952), M.A. (1953), Ph.D. (1956), Yale. At Oregon since 1960.
- LEONARD H. ELWELL, Ph.D., Professor of Physiology, Dental School; Head of
Department.
A.B. (1935), Kalamazoo; M.S. (Zoology) (1937), Kansas State; M.S. (Physiology)
(1941), Ph.D. (1951), Michigan. At Oregon since 1959.
- WILLIAM R. ELWOOD, M.A., Instructor in Speech.
B.A. (1957), Western Washington State; M.A. (1961), Iowa. At Oregon since 1963.
- ALICE H. ERNST, M.A., Associate Professor Emeritus of English.
B.A. (1912), M.A. (1913), Washington. At Oregon since 1924.

* On sabbatical leave 1963-64.

† On leave of absence 1963-64.

- GEORGE ESSAYIAN, M.F.A., Instructor in Art.
B.F.A. (1961), Philadelphia Museum College of Art; M.F.A. (1963), Yale. At Oregon since 1963.
- ARTHUR A. ESSLINGER, Ph.D., Dean of the School of Health, Physical Education, and Recreation; Professor of Physical Education.
B.S. (1931), M.S. (1932), Illinois; Ph.D. (1938), Iowa. At Oregon since 1953.
- ORVAL ETTER, J.D., Research Attorney, Bureau of Municipal Research and Service (Associate Professor).
B.S. (1937), J.D. (1939), Oregon. At Oregon 1939-45 and since 1960.
- GEORGE G. EVANS, M.A., Instructor in English.
B.A. (1956), Beloit; M.A. (1957), Northwestern. At Oregon since 1963.
- ROBERT F. FAGOT, Ph.D., Associate Professor of Psychology.
B.S. (1946), Massachusetts Institute of Technology; Ph.D. (1956), Stanford. At Oregon since 1956.
- GENNARO FALCONERI, M.A., Visiting Lecturer in History.
B.A. (1949), Nevada; M.A. (1958), Michigan. At Oregon since 1963.
- FRANK FARNER, Ph.D., Associate Professor of Education.
B.A. (1949), Pomona; M.A. (1957), Ph.D. (1960), Claremont. At Oregon since 1963.
- ROBERT R. FERENS, M.Arch., Professor of Architecture.
Dip. (1941), B.Arch. (1942), Pratt Institute; M.Arch. (1948), Massachusetts Institute of Technology. At Oregon since 1948.
- SHARON R. FINBERG, M.A.L.S., Reference Librarian (Instructor).
B.A. (1960), Luther; M.A.L.S. (1962), Michigan. At Oregon since 1962.
- ELIZABETH FINDLY, A.M.L.S., Head Reference and Documents Librarian; Associate Professor of Librarianship.
A.B. (1929), Drake; B.S. in L.S. (1934), Illinois; A.M.L.S. (1945), Michigan. At Oregon since 1934.
- ALEXANDER FISCHLER, Ph.D., Assistant Professor of Romance Languages.
B.A. (1954), Ph.D. (1961), Washington. At Oregon since 1962.
- JOSEPH R. FIZSMAN, M.A., Instructor in Political Science.
B.A. (1948), St. John's (Shanghai); M.A. (1956), Emory. At Oregon since 1959.
- MARSHALL FIXMAN, Ph.D., Professor of Chemistry; Director, Institute of Theoretical Science.
A.B. (1950), Washington University; Ph.D. (1954), Massachusetts Institute of Technology. At Oregon since 1961.
- H. CLINE FIXOTT, D.M.D., Professor of Dentistry, Dental School; Head of Department of Oral Roentgenology.
D.M.D. (1938), North Pacific. At Oregon since 1947.
- ARTHUR S. FLEMMING, A.M., LL.B., LL.D., President; Professor of Political Science.
A.B. (1927), Ohio Wesleyan; A.M. (1928), American University; LL.B. (1933), George Washington; honorary degrees conferred by a number of colleges and universities. At Oregon since 1961.
- PHYLLIS M. FORD, Re.D., Assistant Professor of Recreation Management.
B.S. (1949), Massachusetts; M.A. (1955), Arizona State; Re.D. (1962), Indiana. At Oregon since 1961.
- JOHN M. FOSKETT, Ph.D., Professor of Sociology; Deputy Director, Institute for Community Studies.
A.B. (1932), M.A. (1935), Ph.D. (1939), California. At Oregon since 1946.
- FREDERICK R. FOSMIRE, Ph.D., Associate Professor of Psychology.
B.A. (1948), M.A. (1949), Ph.D. (1952), Texas. At Oregon since 1958.
- EMBERT A. FOSSUM, B.A., Colonel, U.S. Army; Professor of Military Science; Head of Department of Military and Air Science.
B.A. (1933), Oregon. At Oregon since 1963.

- DAVID G. FOSTER, M.F.A., Assistant Professor of Art.
B.A. (1951), Illinois Institute of Technology; M.F.A. (1957), Oregon. At Oregon since 1957.
- PHILLIP B. FOSTER, M.S., Instructor in Management.
B.S. (1962), M.S. (1964), Oregon. At Oregon since 1963.
- GALEN C. FOX, B.S., Captain, U.S. Air Force; Assistant Professor of Air Science.
B.S. (1950), Southern California. At Oregon since 1960.
- PETER W. FRANK, Ph.D., Associate Professor of Biology; Acting Director, Institute of Marine Biology.
B.A. (1944), Earlham; Ph.D. (1951), Chicago. At Oregon since 1957.
- ROBERT D. FRASER, B.A., Instructor in English.
B.A. (1960), California at Los Angeles. At Oregon since 1961.
- BROWNELL FRASIER, B.A., Associate Professor of Interior Design.
B.A. (1921), Oregon. At Oregon since 1931.
- CALVIN FRAZIER, M.Ed., Instructor in Education.
B.A. (1952), Puget Sound; M.Ed. (1961), Oregon. At Oregon since 1963.
- WALTER FREAUFF, M.A., Assistant Director of Dormitories; Assistant Dean of Students (Assistant Professor).
B.A. (1950), M.A. (1952), Oregon. At Oregon since 1957.
- BERNARD L. FREMESSER, M.S., Assistant Professor of Journalism; University Photographer.
B.A. (1950), San Diego State; M.S. (1952), Oregon. At Oregon since 1955.
- GERALD L. FREI, M.S., Assistant Professor of Physical Education; Freshman Football Coach.
B.S. (1948), M.S. (1950), Wisconsin. At Oregon since 1955.
- ARTHUR W. FRISCH, Ph.D., M.D., Professor of Bacteriology, Medical School; Chairman of Department.
B.A. (1931), M.A. (1933), Ph.D. (1935), M.D. (1937), Wisconsin. At Oregon since 1946.
- ARTHUR E. FRY, D.D.S., Professor of Dentistry, Dental School; Head of Department of Oral Diagnosis.
D.D.S. (1940), Iowa. At Oregon since 1953.
- WILLIAM F. FRYE, B.S., LL.B., Special Lecturer in Law.
B.S. (1953), LL.B. (1956), Oregon. At Oregon 1962.
- EMIL D. FURRER, M.D., Associate Professor of Health Education.
B.A. (1926), M.D. (1929), Oregon. At Oregon since 1947.
- PHYLLIS C. GAGE, M.A., Instructor in English.
B.A. (1960), Minnesota; M.A. (1962), Oregon. At Oregon since 1962.
- JOHN F. GANGE, M.A., Professor of Political Science; Director, Institute of International Studies and Overseas Administration.
B.A. (1932), M.A. (1934), Stanford. At Oregon since 1961.
- FRANK C. GARDINER, JR., M.A., Instructor in English.
B.A. (1949), Oklahoma Southwestern State; M.A. (1959), Oklahoma. At Oregon since 1960.
- SIMONE A. GARRAMON, C.A.P.E.S., Instructor in Romance Languages.
L. ès L. (1951), Dip. (1953), C.A.P.E.S. (1955), Sorbonne. At Oregon since 1962.
- RAYMOND D. GASTIL, Ph.D., Assistant Professor of Anthropology.
A.B. (1953), A.M. (1956), Ph.D. (1958), Harvard. At Oregon since 1959.
- JANE GEHRING, M.S., Assistant Professor of Art.
B.S. (1940), Michigan State Teachers (Ypsilanti); M.S. (1960), Oregon. At Oregon since 1958.
- KENNETH S. GHENT, Ph.D., Professor of Mathematics; Associate Dean of Students.
B.A. (1932), McMaster; S.M. (1933), Ph. D. (1935), Chicago. At Oregon since 1935.

- RALPH J. GIBBS, Lecturer in Architecture.
At Oregon since 1963.
- LARY H. GIBSON, B.S., Instructor in English.
B.S. (1959), Clarkson. At Oregon since 1963.
- JAMES H. GILBERT, Ph.D., Professor Emeritus of Economics.
B.A. (1903), Oregon; Ph.D. (1907), Columbia. At Oregon since 1907.
- DORWIN K. GILLESPIE, Ph.D., Assistant Professor of Health Education.
B.A. (1940), Washington and Jefferson; M.S. (1953), Ph.D. (1959), Oregon. At Oregon since 1960.
- RICHARD M. GILLETTE, Ph.D., Assistant Professor of Mathematics.
B.S. (1957), Nevada; Ph.D. (1962), Utah. At Oregon since 1962.
- PHILIP C. GILMORE, M.F.A., Assistant Professor of Architecture.
B. Arch. (1948), M.F.A. (1956), Oregon. At Oregon since 1960.
- LEWIS R. GOLDBERG, Ph.D., Assistant Professor of Psychology.
A.B. (1953), Harvard; M.A. (1954), Ph.D. (1958), Michigan. At Oregon since 1960.
- KEITH GOLDHAMMER, Ph.D., Professor of Education.
B.A. (1938), Reed; M.A. (1943), Ph.D. (1954), Oregon. At Oregon since 1956.
- DANIEL GOLDRICH, Ph.D., Associate Professor of Political Science; Research Associate, Institute for Community Studies.
B.A. (1955), Antioch; M.A. (1957), Ph.D. (1959), North Carolina. At Oregon since 1963.
- LUCILE M. GOLSON, Ph.D., Assistant Professor of History of Art.
Bacc. et lettres (1939), Sorbonne; B.A. (1941), California at Los Angeles; M.A. (1943), Ph.D. (1959), Radcliffe. At Oregon since 1960.
- PETER B. GONTRUM, Ph.D., Assistant Professor of Germanic Languages.
A.B. (1954), Haverford; M.A. (1956), Princeton; Ph.D. (1958), Munich. At Oregon since 1961.
- WELLINGTON J. GOTSCHALL, B.A., Major, U.S. Army; Assistant Professor of Military Science.
B.A. (1952), Washington. At Oregon since 1961.
- GRACE GRAHAM, Ed.D., Professor of Education.
B.A. (1933), M.A. (1936), South Carolina; Ed.D. (1952), Stanford. At Oregon since 1954.
- CLIFFORD F. GRAY, M.B.A., Instructor in Business Administration.
B.S. (1959), Millikin; M.B.A. (1961), Indiana. At Oregon since 1963.
- JANE GRAY, Ph.D., Curator of Paleobotany, Museum of Natural History (Assistant Professor).
B.A. (1951), Radcliffe; Ph.D. (1958), California. At Oregon since 1963.
- LEROY E. GRAYMER, M.Ed., Instructor in Political Science.
B.S. (1953), M.Ed. (1958), Oregon. At Oregon since 1963.
- MARCEL GRDINIC, Ph.D., Instructor in Chemistry.
M.Sc. (1952), Ph.D. (1959), Zagreb. At Oregon since 1963.
- MARK R. GREENE, Ph.D., Professor of Insurance; Head of Department of Marketing, Insurance, and Transportation.
A.B. (1947), M.B.A. (1949), Stanford; Ph.D. (1955), Ohio State. At Oregon 1949-52 and since 1955.
- STANLEY B. GREENFIELD, Ph.D., Associate Professor of English.
B.A. (1942), Cornell; M.A. (1947), Ph.D. (1950), California. At Oregon since 1959.
- THELMA GREENFIELD, Ph.D., Assistant Professor of English.
B.A. (1944), M.A. (1947), Oregon; Ph.D. (1952), Wisconsin. At Oregon since 1961.
- MONTE A. GREER, M.D., Professor of Medicine, Medical School; Head of Division of Endocrinology.
A.B. (1944), M.D. (1947), Stanford. At Oregon since 1956.
- ELMER R. GREGORY, JR., M.A., Instructor in English.
B.A. (1960), Texas; M.A. (1961), Rice. At Oregon since 1961.

- HERBERT E. GRISWOLD, M.D., Professor of Medicine, Medical School; Head of Division of Cardiovascular Renal Diseases.
B.A. (1939), Reed; M.S. (1943), M.D. (1943), Oregon. At Oregon since 1949.
- MYRON A. GROVE, M.S., Assistant Professor of Economics.
B.S. (1957), M.S. (1959), Oregon. At Oregon since 1963.
- HAROLD E. GRUPE, D.D.S., Professor of Dentistry, Dental School; Head of Department of Periodontology.
D.D.S. (1932), Baylor. At Oregon since 1960.
- JOHN M. GUSTAFSON, Ph.D., Associate Professor of Music Education.
A.B. (1947), Augustana; M.Mus. (1951), Michigan; Ph.D. (1956), Florida State. At Oregon since 1956.
- PETER GYGAX, Reg. Archt., Assistant Professor of Architecture.
Dip. in Arch. (1950), Swiss Federal Institute of Technology; Reg. Archt. Switzerland (1951), State of California (1960). At Oregon since 1962.
- FRANKLIN B. HAAR, Ph.D., Professor of Health Education.
B.P.E. (1928), Springfield; M.A. (1933), Ph.D. (1946), Pittsburgh. At Oregon since 1949.
- DEMETRIOS M. HADJIMARKOS, D.D.S., Professor of Dentistry, Dental School; Head of Department of Public Health Dentistry.
D.D.S. (1931), Athens; M.S.D. (1943), Northwestern; M.P.H. (1946), Harvard. At Oregon since 1953.
- WALTHER L. HAHN, Ph.D., Assistant Professor of Germanic Languages.
Dip. (1949), Teachers College, Berlin; M.A. (1954), Rice; Ph.D. (1956), Texas. At Oregon since 1961.
- JAMES B. HALL, Ph.D., Professor of English.
B.A. (1947), M.A. (1948), Ph.D. (1952), Iowa. At Oregon since 1953.
- ROBERT C. HALL, Associate Professor Emeritus of Journalism.
At Oregon since 1917.
- BERTHA B. HALLAM, B.A., Librarian of the Medical School (Professor).
B.A. (1931), Oregon. At Oregon since 1919.
- C. CORINNE HAMILTON, M.A., Counselor, University Placement Service (Instructor).
B.A. (1948), M.A. (1962), Iowa. At Oregon since 1962.
- JOHN HAMILTON, M.Mus., Assistant Professor of Organ.
A.B. (1946), California; M.Mus (1956), Southern California. At Oregon since 1959.
- ARTHUR M. HANHARDT, JR., Ph.D., Assistant Professor of Political Science.
B.A. (1953), Rochester; M.A. (1958), Colgate; Ph.D. (1963), Northwestern. At Oregon since 1963.
- FREDERICK T. HANNAFORD, B.A., Reg. Archt., Professor of Architecture; Executive Secretary, School of Architecture and Allied Arts.
B.A. (1924), Washington State; Reg. Archt. (1931), State of Florida. At Oregon since 1946.
- EVELYN R. HANNON, B.S., R.N., R.D.H., Associate Professor of Dental Hygiene, Dental School; Head of Department.
R.D.H. (1939), Kansas City; B.S. (1951), Columbia; R.N., State of Kansas (1930), State of California (1937); R.D.H., State of Kansas (1930), State of New York (1948). At Oregon since 1951.
- JANIS T. HANSEN, M.A., Instructor in English.
B.A. (1956), Whitman; M.A. (1960), Washington. At Oregon since 1961.
- JOHN H. HANSEN, Ph.D., Assistant Professor of Education.
B.S. (1959), M.S. (1961), Ph.D. (1964), Wisconsin. At Oregon since 1963.
- JOHN E. HANSON, M.A., Assistant Dean of Men (Instructor).
A.B. (1959), Dartmouth; M.A. (1961), Oregon. At Oregon since 1962.

- EDWARD C. HARMS, JR., B.S., LL.B., Special Lecturer in Law.
B.S. (1947), LL.B. (1949), Oregon. At Oregon since 1958.
- LEO A. HARRIS, M.A., Professor of Physical Education; Athletic Director.
A.B. (1927), M.A. (1929), Stanford. At Oregon since 1947.
- DAVID K. HARRISON, Ph.D., Associate Professor of Mathematics.
B.A. (1953), Williams; Ph.D. (1956), Princeton. At Oregon since 1963.
- JOANN W. HARRISTHAL, Ph.D., Assistant Professor of Physical Education.
B.S. (1950), Northwestern; M.A. (1953), Iowa State; Ph.D. (1962), Oregon. At Oregon since 1961.
- DALE S. HARWOOD, JR., D.B.A., Associate Professor of Accounting.
B.S. (1948), Oregon State; D.B.A. (1957), Washington. At Oregon since 1958.
- ROBERT P. HASTINGS, M.A., Instructor in English.
B.A. (1960), Drew; M.A. (1961), Wisconsin. At Oregon since 1961.
- EMMANUEL S. HATZANTONIS, Ph.D., Assistant Professor of Romance Languages.
B.A. (1952), College of City of New York; M.A. (1953), Columbia; Ph.D. (1958), California. At Oregon 1959-61 and since 1962.
- FREDERICK P. HAUGEN, M.D., Professor of Anesthesiology, Medical School; Head of Division.
B.A. (1933), M.D. (1935), Oregon. At Oregon since 1948.
- RAY HAWK, D.Ed., Associate Dean of Students; Associate Professor of Education.
B.S. (1947), M.S. (1948), D.Ed. (1949), Oregon. At Oregon since 1950.
- WALLACE S. HAYDEN, B.Arch., Reg. Archt., Professor of Architecture; Head of Department.
B.Arch. (1928), Oregon; Reg. Archt. (1935), State of Oregon. At Oregon since 1930.
- RICHARD B. HAYWARD, M.C.P., Planning Consultant, Bureau of Municipal Research and Service (Associate Professor).
B.S. (1941), B.L.A. (1946), Massachusetts; M.C.P. (1959), Massachusetts Institute of Technology. At Oregon since 1961.
- ARTHUR C. HEARN, Ed.D., Professor of Education.
A.B. (1934), M.A. (1937), Ed.D. (1949), Stanford. At Oregon since 1950.
- ALFRED HEILPERN, M.L., Acquisition Librarian (Senior Instructor).
B.A. (1956), M.L. (1957), Washington. At Oregon since 1957.
- JOHN H. HENDRICKSON, M.Mus., Audio-Visual Librarian (Senior Instructor).
B.Mus. (1952), M.Mus. (1957), Oregon. At Oregon since 1957.
- DANIEL M. HERBERT, B.F.A., B.S., Visiting Assistant Professor of Architecture.
B.F.A. (1951), Colorado; B.S. (1954), Illinois. At Oregon since 1960.
- EDWARD HERBERT, Ph.D., Associate Professor of Chemistry.
B.S. (1948), Connecticut; Ph.D. (1953), Pennsylvania. At Oregon since 1963.
- TERRELL L. HILL, Ph.D., Professor of Chemistry.
A.B. (1939), Ph.D. (1942), California. At Oregon since 1957.
- WALTER R. HILL, JR., Ph.D., Associate Professor of Education; Director, Remedial Clinic and Reading Study Laboratory.
B.A. (1949), M.A. (1953), Ph.D. (1958), Iowa. At Oregon since 1959.
- CLARENCE HINES, D.Ed., Professor of Education; Acting Associate Dean of the School of Education.
B.A. (1925), Drury; M.A. (1929), Missouri; D.Ed. (1950), Oregon. At Oregon since 1958.
- CARL W. HINTZ, Ph.D., University Librarian; Professor of Librarianship.
A.B. (1932), De Pauw; A.B.L.S. (1933), A.M.L.S. (1935), Michigan; Ph.D. (1952), Chicago. At Oregon since 1948.
- ERNEST H. HIXON, D.D.S., Professor of Dentistry, Dental School; Head of Department of Orthodontics.
D.D.S. (1945), Iowa State; M.S. (1949), Iowa. At Oregon since 1961.

- JAMES R. HLADKY, A.Mus.D., Associate Professor of Violoncello.
B.Mus. (1950), Oklahoma State; M.Mus. (1952), A.Mus.D. (1959), Eastman School of Music. At Oregon since 1961.
- CLARENCE V. HODGES, M.D., Professor of Urology, Medical School; Head of Division.
B.S. (1937), Iowa State; M.D. (1940), Chicago. At Oregon since 1948.
- ROBERT R. HODGES, Ph.D., Assistant Professor of English.
B.A. (1950), Valparaiso; M.A. (1954), Missouri; Ph.D. (1961), Stanford. At Oregon since 1959.
- HUBERT H. HOELTJE, Ph.D., Professor Emeritus of English.
B.A. (1919), M.A. (1926), Ph.D. (1932), Iowa. At Oregon since 1947.
- PAUL S. HOLBO, Ph.D., Assistant Professor of History.
B.A. (1951), Yale; M.A. (1955), Ph.D. (1961), Chicago. At Oregon since 1959.
- HAZEL E. HOLBOKE, M.Ed., Lecturer in Education.
B.S. (1951), Oregon College of Education; M.Ed. (1957), Oregon. At Oregon since 1962.
- ORLANDO J. HOLLIS, B.S., J.D., Dean of the School of Law; Professor of Law.
B.S. (1926), J.D. (1928), Oregon. At Oregon since 1928.
- EDWARD G. HOLLMAN, M.A., M.S., Social Science Librarian (Instructor).
B.S. (1947), B.A. (1949), M.A. (1951), Missouri; M.S. (1955), Illinois. At Oregon since 1963.
- CHARLES N. HOLMAN, M.D., Associate Dean of the Medical School; Administrator and Medical Director of Hospitals and Clinics; Professor of Medicine.
B.A. (1931), M.D. (1936), Oregon. At Oregon since 1937.
- GEORGE HOPKINS, B.A., Professor of Piano.
Teachers Cert. (1918), Peabody Conservatory; B.A. (1921), Oregon. At Oregon 1919-23 and since 1925.
- ROBERT D. HORN, Ph.D., Professor of English.
B.A. (1922), M.A. (1924), Ph.D. (1930), Michigan. At Oregon since 1925.
- CHARLES G. HOWARD, A.B., J.D., Professor Emeritus of Law.
A.B. (1920), J.D. (1922), Illinois. At Oregon since 1928.
- GRAHAM HOYLE, D.Sc., Professor of Biology.
B.Sc. (Chemistry, Physics) (1944), B.Sc. (Zoology, Botany) (1950), London; D.Sc. (1955), Glasgow. At Oregon since 1962.
- HENRY J. HROSTOWSKI, Ph.D., Associate Professor of Physics.
B.A. (1947), Wesleyan; M.S. (1949), Oregon State; Ph.D. (1953), California. At Oregon since 1961.
- JANE YEN-CHENG HSU, B.A., Catalog Librarian (Senior Instructor).
B.A. (1946), Ginling Girls' College (Nanking). At Oregon since 1956.
- HARLOW E. HUDSON, Assistant Professor of Architecture.
At Oregon 1938-47 and since 1960.
- RALPH R. HUESTIS, Ph.D., Professor Emeritus of Biology.
B.S.A. (1914), McGill; M.S. (1920), Ph.D. (1924), California. At Oregon since 1924.
- CARL L. HUFFAKER, Ph.D., Professor Emeritus of Education.
B.S. (1915), Chicago; M.A. (1922), Ph.D. (1923), Iowa. At Oregon since 1927.
- RUTH M. HULL, M.S., Assistant Professor of Physical Education.
B.S. (1940), Texas; M.S. (1950), Wisconsin. At Oregon since 1963.
- JOHN L. HULTENG, M.S., Dean of the School of Journalism; Professor of Journalism.
Ph.B. (1943), North Dakota; M.S. (1947), Columbia. At Oregon since 1955.
- DWIGHT HUMPHREY, M.A., Catalog Librarian (Instructor).
A.B. (1934), B.S. in L.S. (1939), M.A. (1951), Southern California. At Oregon since 1963.

- EVELYN R. HUMPHREY, B.A., B.S. in L.S., Science Librarian (Instructor).
B.A. (1938), California at Los Angeles; B.S. in L.S. (1939), Southern California. At Oregon since 1960.
- LAWRENCE J. HUNT, M.S., Instructor in Business Administration.
B.B.A. (1946), Oregon; M.S. (1947), New York University. At Oregon since 1962.
- DONALD L. HUNTER, B.S., Head, Audio-Visual Department, Library (Assistant Professor).
B.S. (1945), Nebraska. At Oregon since 1946.
- ERNEST A. HURLEY, D.M.D., Registrar, Dental School; Associate Professor of Dentistry.
D.M.D. (1951), Oregon. At Oregon since 1951.
- ELLEN L. HURT, M.A., Instructor in English.
B.A. (1955), Central State, Oklahoma; M.A. (1958), Oklahoma. At Oregon since 1960.
- TYRA T. HUTCHENS, M.D., Professor of Clinical Pathology, Medical School; Chairman of Department.
B.S. (1943), M.D. (1945), Oregon. At Oregon since 1953.
- RAY HYMAN, Ph.D., Associate Professor of Psychology; Assistant Head of Department.
A.B. (1950), Boston; M.A. (1952), Ph.D. (1953), Johns Hopkins. At Oregon since 1961.
- JOSEPH A. HYNES, JR., Ph.D., Assistant Professor of English.
A.B. (1951), Detroit; A.M. (1952), Ph.D. (1961), Michigan. At Oregon since 1957.
- RICHARD S. IVEY, M.A., Associate Planner, Bureau of Municipal Research and Service (Assistant Professor).
B.A. (1950), Reed; M.A. (1955), California. At Oregon since 1957.
- *JAY M. JACKSON, Ph.D., Professor of Sociology.
B.A. (1948), M.A. (1950), McGill; Ph.D. (1953), Michigan. At Oregon since 1963.
- NAOMI C. JACKSON, M.A., Instructor in English.
B.A. (1960), Augsburg; M.A. (1962), Purdue. At Oregon since 1963.
- RUTH F. JACKSON, M.A., Senior Instructor in English.
B.A. (1929), M.A. (1933), Oregon. At Oregon since 1955.
- THOMAS T. JACKSON, M.A., Instructor in English.
B.A. (1961), East Carolina; M.A. (1963), Purdue. At Oregon since 1963.
- ARTHUR J. JACOBS, Ed.D., Assistant Professor of Speech.
B.S.S. (1938), M.S.Ed (1939), City College of New York; Ed.D. (1952), Columbia. At Oregon since 1959.
- LEONARD D. JACOBSON, M.D., Assistant Professor of Health Education.
B.A. (1937), M.D. (1941), Oregon. At Oregon since 1962.
- PAUL B. JACOBSON, Ph.D., Dean of the School of Education; Director of Summer Sessions; Professor of Education.
B.A. (1922), Luther (Towa); M.A. (1928), Ph.D. (1931), Iowa. At Oregon since 1947.
- ROBERT C. JAMES, M.F.A., Assistant Professor of Art.
A.B. (1952), California at Los Angeles; M.F.A. (1955), Cranbrook Academy. At Oregon since 1955.
- SYDNEY V. JAMES, Ph.D., Assistant Professor of History.
A.B. (1950), A.M. (1951), Ph.D. (1958), Harvard. At Oregon since 1962.
- LUTHER G. JERSTAD, M.A., Instructor in Speech.
B.A. (1958), Pacific Lutheran; M.A. (1962), Washington State. At Oregon since 1962.
- BERTRAM E. JESSUP, Ph.D., Professor of Philosophy.
B.A. (1927), M.A. (1935), Oregon; Ph.D. (1938), California. At Oregon since 1936.
- GEORGE S. JETTE, B.L.A., Professor of Landscape Architecture.
B.L.A. (1940), Oregon. At Oregon since 1941.

* On leave of absence 1963-64.

- TED T. JITODAI, Ph.D., Assistant Professor of Sociology.
B.A. (1952), Washington; M.A. (1954), Washington State; Ph.D. (1963), Michigan. At Oregon since 1960.
- CARL L. JOHANNESSEN, Ph.D., Assistant Professor of Geography.
B.A. (1950), M.A. (1953), Ph.D. (1959), California. At Oregon since 1959.
- THEODORE B. JOHANNIS, JR., Ph.D., Associate Professor of Sociology.
B.A. (1948), M.A. (1948), Washington State; Ph.D. (1955), Florida State. At Oregon since 1953.
- CARL L. JOHNSON, Ph.D., Professor of Romance Languages.
B.A. (1924), M.A. (1925), Iowa; Ph.D. (1933), Harvard. At Oregon since 1935.
- CHARLES E. JOHNSON, Ph.D., C.P.A., Dean of College of Liberal Arts; Professor of Accounting.
B.A. (1942), M.B.A. (1948), Ph.D. (1952), Minnesota; C.P.A. (1949), District of Columbia. At Oregon since 1952.
- DONALD N. JOHNSON, B.A., Associate Director of Planning Assistance, Bureau of Municipal Research and Service (Associate Professor).
B.A. (1946), Reed. At Oregon since 1959.
- G. BENTON JOHNSON, JR., Ph.D., Associate Professor of Sociology.
B.A. (1947), North Carolina; M.A. (1953), Ph.D. (1954), Harvard. At Oregon since 1957.
- GLORIA E. JOHNSON, Ph.D., Instructor in English.
B.A. (1944), Barnard; M.A. (1946), Ph.D. (1954), Columbia. At Oregon since 1959.
- ROBERT O. JOHNSON, M.D., Assistant Professor of Psychology.
B.S. (1946), Nebraska State Teachers (Kearney); M.D. (1950), Nebraska. At Oregon since 1960.
- FAITH E. JOHNSTON, M.S., Assistant Professor of Home Economics.
B.S. (1929), Kansas State Teachers (Pittsburgh); M.S. (1933), Kansas State. At Oregon since 1947.
- KATHERINE H. JOHNSTONE, B.A., Instructor in Journalism.
B.A. (1934), San Jose State. At Oregon since 1962.
- CATHERINE M. JONES, M.S., M.Bus.Ed., Assistant Professor of Business Education.
B.A. (1937), Iowa State Teachers; M.S. (1945), Oregon; M.Bus.Ed. (1952), Colorado. At Oregon since 1946.
- DONALD L. JONES, M.S., Assistant Director, Bureau of Municipal Research and Service (Assistant Professor).
B.S. (1954), M.S. (1962), Colorado. At Oregon since 1963.
- HOLWAY R. JONES, M.A., Head Social Science Librarian (Assistant Professor).
B.A. (1948), B.L.S. (1951), M.A. (1957), California. At Oregon since 1963.
- WILLIAM C. JONES, Ph.D., Dean of Administration; Professor of Higher Education; Director, Institute of College Teaching.
A.B. (1926), Whittier; M.B.A. (1929), Southern California; Ph.D. (1940), Minnesota. At Oregon 1941-44, 1951-53, and since 1954.
- ELLIS B. JUMP, D.M.D., Ph.D., Professor of Anatomy, Dental School; Head of Department.
A.B. (1932), Dartmouth; D.M.D. (1936), Harvard; Ph.D. (1944), Chicago. At Oregon since 1947.
- SIOMA KAGAN, Ph.D., Professor of International Business.
Diplom.-Ingenieur (1931), Technische Hochschule (Berlin); M.A. (1949), American University; Ph.D. (1954), Columbia. At Oregon since 1960.
- PAUL E. KAMBLY, Ph.D., Professor of Education.
B.Ed. (1930), Illinois State Normal; M.S. (1934), Ph.D. (1939), Iowa. At Oregon since 1946.
- HELEN K. KAPS, B.A., Instructor in Romance Languages.
B.A. (1961), Dominican College of San Rafael. At Oregon since 1963.

- *SYLVAN N. KARCHMER, M.F.A., Associate Professor of English.
B.F.A. (1949), M.F.A. (1950), Texas. At Oregon since 1950.
- DON J. KARR, B.A., Instructor in Biology.
B.A. (1963), Oregon. At Oregon since 1963.
- STEPHEN A. KAYE, M.A., Instructor in Speech.
B.A. (1961), Washington; M.A. (1963), Illinois. At Oregon since 1963.
- M. ALLAN KAYS, Ph.D., Assistant Professor of Geology.
B.A. (1956), Southern Illinois; M.A. (1958), Ph.D. (1960), Washington University. At Oregon since 1961.
- HERMAN KEHRLI, M.A., Director, Bureau of Municipal Research and Service; Associate Professor of Political Science.
B.A. (1923), Reed; M.A. (1933), Minnesota. At Oregon since 1933.
- ROBERT E. KEITH, M.Arch., Associate Director of Urban Planning Program, Bureau of Municipal Research and Service (Associate Professor).
B.S. (1944), Kansas State; M.Arch. (1951), Oregon. At Oregon since 1963.
- HOMER T. KELLER, M.M., Associate Professor of Music Theory and Composition.
B.M. (1937), M.M. (1938), Eastman School of Music. At Oregon since 1958.
- RICHARD S. KELLEY, LL.M., Associate Professor of Law.
A.B. (1942), LL.B. (1948), Michigan; LL.M. (1952), California. At Oregon since 1958.
- CARDINAL L. KELLY, M.A., C.P.A., Professor Emeritus of Business Administration.
Ph.B. (1911), Chicago; M.A. (1923), Ohio State; C.P.A., State of Nebraska (1922), State of Oregon (1945). At Oregon since 1922.
- ROBERT L. KELLY, M.A., Instructor in English.
B.A. (1959), St. Benedict's; M.A. (1962), Kansas. At Oregon since 1963.
- EDWARD C. KEMP, JR., M.L.S., Acquisition Librarian (Senior Instructor).
A.B. (1951), Harvard; M.L.S. (1955), California. At Oregon since 1955.
- JAMES C. KEMP, Ph.D., Assistant Professor of Physics.
A.B. (1955), Ph.D. (1960), California. At Oregon since 1961.
- JON KEMP, B.Arch., Assistant Professor of Architecture.
B.Arch. (1949), Oregon. At Oregon since 1961.
- JUDSON W. KENNEY, M.A., Captain, U. S. Air Force; Assistant Professor of Air Science.
B.A. (1950), San Diego State; M.A. (1960), Eastern New Mexico. At Oregon since 1963.
- JOHN KENYON, Assistant Professor of Architecture.
Dip. in Arch. (1952), Manchester. At Oregon since 1961.
- MAUDE I. KERNS, B.A., B.S., Associate Professor Emeritus of Art.
B.A. (1899), Oregon; B.S. with Diploma in Fine Arts (1906), Columbia. At Oregon since 1921.
- RICHARD J. A. KERR, M.A., Visiting Professor of Romance Languages.
M.A. (1937), Glasgow. At Oregon since 1963.
- JAMES KEZER, Ph.D., Associate Professor of Biology.
B.A. (1930), Iowa; M.S. (1937), Ph.D. (1948), Cornell. At Oregon since 1954.
- JAROLD A. KIEFFER, Ph.D., Assistant to the President; Associate Professor of Political Science.
B.A. (1947), Ph.D. (1950), Minnesota. At Oregon since 1963.
- PRISCILLA J. KILBOURN, Ph.D., Instructor in Biology.
B.S. (1958), M.S. (1960), Oregon; Ph.D. (1963), Oregon State. At Oregon since 1963.
- HACK C. KIM, Ph.D., Instructor in Classical Languages.
B.A. (1954), Simpson; M.A. (1957), Ph.D. (1964), Washington. At Oregon since 1960.

* On sabbatical leave 1963-64.

- DANIEL P. KIMBLE, Ph.D., Assistant Professor of Psychology.
B.A. (1956), Knox; Ph.D. (1961), Michigan. At Oregon since 1963.
- ROBERT E. KIME, Ph.D., Assistant Professor of Health Education.
B.S. (1954), M.S. (1958), Wisconsin State (La Crosse); Ph.D. (1963), Ohio State. At Oregon since 1963.
- ROBERT J. KING, B.A., Instructor in Psychology.
B.A. (1957), San Francisco State. At Oregon 1963.
- DONALD H. KIRSCH, B.S., Professor of Physical Education; Head Baseball Coach; Assistant Basketball Coach.
B.S. (1943), Oregon. At Oregon since 1947.
- LAURENCE R. KITTLEMAN, JR., Ph.D., Assistant Professor of Geology; Curator of Geology, Museum of Natural History.
B.S. (1953), Colorado College; M.S. (1956), Colorado; Ph.D. (1962), Oregon. At Oregon 1959-60 and since 1962.
- EDWARD D. KITTOE, M.A., Assistant Professor of English.
B.A. (1931), M.A. (1936), Oregon. At Oregon since 1936.
- GLENNIE M. KITTOE, M.A., Instructor in English.
B.A. (1924), Wichita; M.A. (1939), Oregon. At Oregon 1946-49 and since 1957.
- ALBERT R. KITZHABER, Ph.D., Professor of English.
B.A. (1939), Coe; M.A. (1941), Washington State; Ph.D. (1953), Washington. At Oregon since 1962.
- ANNABEL R. KITZHABER, M.A., Instructor in English.
B.A. (1938), Idaho; M.A. (1940), Washington State. At Oregon since 1963.
- JOAN L. KLEINKE, M.S., Instructor in Art Education.
B.S. (1960), M.S. (1963), Oregon. At Oregon since 1963.
- PAUL KLEINSORGE, Ph.D., Professor of Economics.
A.B. (1927), Ph.D. (1939), Stanford; M.B.A. (1929), Harvard. At Oregon since 1948.
- LEROY H. KLEMM, Ph.D., Professor of Chemistry.
B.S. (1941), Illinois; M.S. (1943), Ph.D. (1945), Michigan. At Oregon since 1952.
- JAMES R. KLONOSKI, Ph.D., Assistant Professor of Political Science.
B.S. (1947), M.A. (1948), Minnesota; Ph.D. (1958), Michigan. At Oregon since 1961.
- ERNESTO R. KNOLLIN, M.A., Professor Emeritus of Physical Education.
B.A. (1914), M.A. (1929), Stanford. At Oregon since 1929.
- JOHN F. KNOWLTON, B.A., Instructor in Speech.
B.A. (1953), Lewis and Clark. At Oregon since 1963.
- JOHN W. KOCHER, M. Crim., Lieutenant Colonel, U.S. Air Force; Professor of Air Science.
A.B. (1947), M. Crim. (1951), California. At Oregon since 1960.
- *THOMAS KOENIG, Ph.D., Assistant Professor of Chemistry.
B.S. (1959), Southern Methodist; Ph.D. (1963), Illinois. At Oregon since 1963.
- THOMAS KOPLIN, Ph.D., Associate Professor of Economics.
B.A. (1947), Oberlin; Ph.D. (1952), Cornell. At Oregon since 1950.
- ABRAHAM K. KORMAN, Ph.D., Assistant Professor of Management.
B.A. (1956), Brooklyn; M.A. (1958), Illinois; Ph.D. (1963), Minnesota. At Oregon since 1963.
- EDITH R. KRAMER, M.A., Assistant Professor of History of Art.
B.A. (1956), Michigan; M.A. (1960), Radcliffe. At Oregon since 1962.
- HENRY KRATZ, Ph.D., Associate Professor of Germanic Languages.
B.A. (1942), New York State College for Teachers (Albany); M.A. (1946), Ph.D. (1949), Ohio State. At Oregon since 1960.

* On leave of absence, fall and winter terms, 1963-64.

- SILVY A. KRAUS, Ph.D., Associate Professor of Education.
B.A. (1934), M.A. (1948), Bradley; Ph.D. (1956), Minnesota. At Oregon 1953-61 and since 1963.
- EDMUND P. KREMER, J.U.D., Professor Emeritus of Germanic Languages.
J.U.D. (1924), Frankfort on Main. At Oregon since 1928.
- ELWOOD A. KRETSINGER, Ph.D., Associate Professor of Speech.
B.A. (1939), Southeastern State (Oklahoma); M.A. (1941), Oklahoma; Ph.D. (1951), Southern California. At Oregon since 1952.
- CLARICE KRIEG, A.M., Head Catalog Librarian (Associate Professor).
B.A. (1932), Iowa; B.S. in L.S. (1933), A.M. (1935), Illinois. At Oregon since 1941.
- ADOLF H. KUNZ, Ph.D., Professor Emeritus of Chemistry.
A.B. (1923), William Jewell; M.S. (1926), Ph.D. (1928), Iowa. At Oregon 1930-32 and since 1934.
- DANIEL H. LABBY, M.D., Professor of Medicine, Medical School; Head of Division of Diabetes and Metabolism.
B.A. (1935), Reed; M.D. (1939), Oregon. At Oregon since 1947.
- FRANK R. LACY, J.D., LL.M., Professor of Law.
A.B. (1946), Harvard; J.D. (1948), Iowa; LL.M. (1958), New York. At Oregon 1949-55 and since 1957.
- ROLFE LA FORGE, Ph.D., Associate Professor of Psychology.
A.B. (1942), Ph.D. (1952), California; B.S. (1943), California Institute of Technology. At Oregon since 1962.
- JAMES M. LAING, Ed.D., Associate Professor of Education.
B.S. (1937), M.S. (1939), Idaho; M.A. (1952), Columbia; Ed.D. (1955), Washington. At Oregon since 1962.
- JOHN E. LALLAS, Ed.D., Director, Office of Planning and Institutional Research; Associate Professor of Education.
B.A. (1947), Washington; B.A. (1952), Western Washington; Ed.D. (1956), Stanford. At Oregon since 1957.
- BROMLEIGH S. LAMB, Research Consultant, Bureau of Municipal Research and Service (Associate Professor)
B.A. (1951), M.A. (1953), Kansas. At Oregon since 1962.
- WILLIAM C. LANDERS, B.S., Alumni Secretary (Instructor).
B.S. (1954), Oregon. At Oregon since 1957.
- EDNA LANDROS, Ph.D., Assistant Professor Emeritus of Classical Languages.
A.B. (1913), Kansas; A.M. (1921), Arizona; Ph.D. (1935), Oregon. At Oregon since 1928.
- MARGARET LANE, M.L., Assistant Professor of Librarianship.
B.A. (1957), M.L. (1958), Washington. At Oregon since 1963.
- KENNETH P. LANGTON, M.A., Instructor in Political Science.
B.A. (1956), M.A. (1962), Oregon. At Oregon since 1964.
- KAREN LANSDOWNE, M.Ed., M.A., Instructor in English.
B.A. (1948), M.Ed. (1958), M.A. (1960), Oregon. At Oregon since 1959.
- PAUL L. LARSEN, B.A., LL.B., Associate Professor of Law.
B.A. (1947), LL.B. (1950), California. At Oregon since 1963.
- ROBERT D. LARUE, A.B., Instructor in English.
A.B. (1961), Occidental. At Oregon since 1963.
- M. DEAN LATOURELL, M.Arch., Assistant Professor of Architecture.
B.Arch. (1957), Washington; M.Arch. (1961), Pennsylvania. At Oregon since 1961.
- REED G. LAW, Ph.D., Visiting Lecturer in Romance Languages.
B.A. (1942), Wesleyan; Ph.D. (1950), Yale. At Oregon since 1963.
- PATRICIA A. LAWRENCE, Ph.D., Assistant Professor of History of Art.
B.A. (1956), M.A. (1957), Ph.D. (1962), California. At Oregon since 1962.

- *ROBERT W. LEARY, Ph.D., Associate Professor of Psychology.
A.B. (1944), A.M. (1948), Stanford; Ph.D. (1956), Wisconsin. At Oregon since 1956.
- IRA D. LEE, M.M.E., Associate Professor of Brass Instruments.
B.M.E. (1946), M.M.E. (1947), Colorado. At Oregon since 1950.
- †ROBERT W. LEEPER, Ph.D., Professor of Psychology.
B.A. (1925), Allegheny; M.A. (1928), Ph.D. (1930), Clark. At Oregon since 1937.
- HARLAN W. LEFEVRE, Ph.D., Assistant Professor of Physics.
B.A. (1951), Reed; M.S. (1957), Idaho; Ph.D. (1961), Wisconsin. At Oregon since 1961.
- CHARLEY A. LEISTNER, Ph.D., Associate Professor of Speech.
B.A. (1949), Georgetown College; M.A. (1950), Baylor; Ph.D. (1958), Missouri. At Oregon since 1962.
- JAMES R. LENT, Ed.D., Associate Professor of Education.
B.A. (1952), Denver; M.A. (1955), Ed.D. (1959), Syracuse. At Oregon since 1961.
- WOLFGANG A. LEPPMANN, Ph.D., Professor of Germanic Languages.
B.A. (1948), M.A. (1949), McGill; Ph.D. (1952), Princeton. At Oregon since 1954.
- ALBERT L. LEWIS, M.A., Instructor in Speech.
B.A. (1962), Stanford; M.A. (1963), Oregon. At Oregon since 1963.
- HOWARD P. LEWIS, M.D., Professor of Medicine, Medical School; Chairman of Department.
B.S. (1924), Oregon State; M.D. (1930), Oregon. At Oregon since 1932.
- BRENDAN E. A. LIDDELL, Ph.D., Instructor in Philosophy.
B.A. (1950), St. Vincent; M.A. (1957), Ph.D. (1961), Michigan. At Oregon since 1961.
- ROBERT J. LINDAHL, M.S., Instructor in Mathematics.
B.A. (1959), Minnesota; M.S. (1961), Oregon. At Oregon since 1963.
- HANS A. LINDE, LL.B., Associate Professor of Law.
B.A. (1947), Reed; LL.B. (1950), California. At Oregon 1954 and since 1959.
- RICHARD W. LINDHOLM, Ph.D., Dean of the School of Business Administration; Professor of Finance.
A.B. (1935), Gustavus Adolphus; M.A. (1938), Minnesota. Ph.D. (1942), Texas. At Oregon since 1958.
- J. ORVILLE LINDSTROM, B.S., Director of Fiscal Affairs (Professor).
B.S. (1932), Oregon. At Oregon since 1932.
- ARTHUR P. LITCHMAN, Director of Public Relations and Promotion, Athletic Department (Assistant Professor).
At Oregon since 1956.
- RICHARD A. LITTMAN, Ph.D., Professor of Psychology; Head of Department.
A.B. (1943), George Washington; Ph.D. (1948), Ohio State. At Oregon since 1948.
- WALTER C. LOBITZ, JR., M.D., Professor of Dermatology, Medical School; Head of Division.
B.S. (1939), B.M. (1940), M.D. (1941), Cincinnati. At Oregon since 1959.
- ROBERT R. LOCKARD, M.A., Social Science Librarian (Instructor).
B.A. (1952), Colorado State College of Education; M.A. (1956), Denver. At Oregon since 1961.
- BOBBY R. LOCKE, B.A., Instructor in History.
B.A. (1956), California at Los Angeles; Dip. (1957), Sorbonne. At Oregon since 1963.
- ROBIN B. LODEWICK, M.L.S., Catalog Librarian (Instructor).
B.A. (1959), Brooklyn; M.L.S. (1961), Rutgers. At Oregon since 1961.
- BRUCE D. LOEBS, B.A., Instructor in Speech.
B.A. (1959), California at Santa Barbara. At Oregon since 1963.
- ALFRED L. LOMAX, M.A., Professor Emeritus of Business Administration.
B.B.A. (1923), Oregon; M.A. (1927), Pennsylvania. At Oregon since 1919.

* On leave of absence, fall term, 1963-64.

† On sabbatical leave 1963-64.

- *VAL R. LORWIN, Ph.D., Professor of History.
B.A. (1927), Ph.D. (1953), Cornell; M.A. (1929), Ohio State. At Oregon since 1957.
- JOHN W. LOUGHARY, Ph.D., Associate Professor of Education.
B.S. (1952), Oregon; M.A. (1956), Ph.D. (1958), Iowa State. At Oregon since 1962.
- LOYD L. LOVELL, Ph.D., Assistant Professor of Education.
B.A. (1947), Lawrence; M.S. (1951), Minnesota; Ph.D. (1955), Cornell. At Oregon since 1959.
- RAYMOND N. LOWE, Ed.D., Professor of Education.
B.S.Ed. (1940), Massachusetts State Teachers (Fitchburg); M.A. (1948), Ed.D. (1951), Northwestern. At Oregon since 1955.
- KUO HWA LU, Ph.D., Professor of Biostatistics, Dental School; Head of Department.
B.S. (1945), National Central University, Chungking; M.S. (1948), Ph.D. (1951), Minnesota. At Oregon since 1960.
- CHRIS J. LUNESKI, M.A., Lecturer in Accounting and Business Statistics.
A.B. (1956), Johns Hopkins; M.A. (1959), Minnesota. At Oregon since 1961.
- ERNEST H. LUND, Ph.D., Associate Professor of Geology.
B.S. (1944), Oregon; Ph.D. (1950), Minnesota. At Oregon since 1957.
- WAYNE M. LYNCH, Associate Planner, Bureau of Municipal Research and Service (Assistant Professor).
B.A. (1959), Duke; M.S. (1961), Wisconsin. At Oregon since 1963.
- LAMYRA LYON, M.A., Instructor in English.
B.A. (1959), M.A. (1962), Oklahoma. At Oregon since 1962.
- ALAN MACDONALD, M.B.A., Instructor in Business Administration.
B.S.B. (1961), Minnesota; M.B.A. (1962), South Carolina. At Oregon since 1962.
- DAVID B. MAHLER, Ph.D., Professor of Dental Materials, Dental School; Head of Department.
B.S. (1944), M.S. (1948), Ph.D. (1956), Michigan. At Oregon since 1956.
- EUGENE A. MAIER, Ph.D., Associate Professor of Mathematics.
B.A. (1950), M.A. (1951), Ph.D. (1954), Oregon. At Oregon since 1961.
- JOSEPHINE D. MAILLARD, B.A., Reference Librarian (Instructor).
B.A. (1944), Macalester. At Oregon since 1963.
- STODDARD MALARKEY, M.Ed., Instructor in English.
A.B. (1955), Reed; M.Ed. (1960), Oregon State. At Oregon since 1961.
- SHIRLEY S. MALCOLM, M.A., Instructor in English.
B.A. (1950), M.A. (1954), Washington State. At Oregon since 1962.
- THERESA M. MALUMPHY, M.S., Assistant Professor of Physical Education.
B.S. (1954), State Teachers College (Bridgewater, Mass.); M.S. (1957), Wisconsin. At Oregon since 1959.
- DOROTHY M. MANNING, M.L., Catalog Librarian (Instructor).
B.S. in Ed. (1948), New York College of Education (Buffalo); M.L. (1963), Washington. At Oregon since 1963.
- RAYMOND MARIELS, M.A., Instructor in English.
B.S. (1960), Portland State; M.A. (1963), Oregon. At Oregon since 1963.
- MARGARET MARKLEY, A.B., B.S. in L.S., Senior Catalog Librarian (Assistant Professor).
A.B. (1933), Southwest Missouri State; B.S. in L.S. (1941), Illinois. At Oregon since 1945.
- ELISABETH A. MARLOW, M.A., Instructor in Romance Languages.
Diplôme (1953), Ecole de Hautes Etudes Commerciales (Paris); M.A. (1958), Oregon. At Oregon since 1958.

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- ANNE M. MARNIX, M.S., Instructor in Business Education; Assistant to the Director, Institute of International Studies and Overseas Administration. B.S. (1951), Kansas State; M.S. (1956), Kansas State Teachers (Emporia). At Oregon since 1958.
- LUCIAN C. MARQUIS, Ph.D., Associate Professor of Political Science; Director of the Honors College; Assistant Dean of the College of Liberal Arts. Cert. (1942), Black Mountain; M.A. (1951), Ph.D. (1959), California at Los Angeles. At Oregon since 1954.
- MALCOLM M. MARQUIS, M.D., Assistant University Physician; Assistant Professor of Health Education. B.S. (1953), Oregon State; M.D. (1961), Oregon. At Oregon since 1963.
- THOMAS E. MARSHALL, Ph.D., Assistant Professor of Romance Languages. B.A. (1945), M.A. (1946), Ph.D. (1959), California. At Oregon since 1953.
- ROBERT A. MARSLAND, M.P.H., Instructor in Health Education. B.S. (1959), Seattle Pacific; M.P.H. (1962), California. At Oregon since 1963.
- GENE E. MARTIN, Ph.D., Associate Professor of Geography. B.A. (1949), M.A. (1952), Washington; Ph.D. (1955), Syracuse. At Oregon since 1956.
- WALTER C. MARTIN, JR., B.Mus., Instructor in Voice. B.Mus. (1952), Oregon. At Oregon since 1963.
- WALTER T. MARTIN, Ph.D., Professor of Sociology; Head of Department. B.A. (1943), M.A. (1947), Ph.D. (1949), Washington. At Oregon since 1947.
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- LELA H. MAYES, M.A., Instructor in Physical Education. B.S. (1928), Oregon; M.A. (1938), New York University. At Oregon 1957, 1959, and since 1963.
- ROBERT M. MAZO, Ph.D., Associate Professor of Chemistry; Assistant Director, Institute of Theoretical Science. B.A. (1952), Harvard; M.S. (1953), Ph.D. (1955), Yale. At Oregon since 1962.
- ROBERT L. MCARTHUR, M.D., Assistant University Physician; Assistant Professor of Health Education. B.A. (1920), M.D. (1926), Oregon. At Oregon since 1963.
- JAMES H. MCCALLUM, B.A., Instructor in Physical Education. B.A. (1945), Texas Christian. At Oregon since 1963.

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- JOEL W. McCLURE, JR., Ph.D., Associate Professor of Physics.
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- DAVID J. MCCOSH, Professor of Art.
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B.S. (1957), Oregon. At Oregon since 1958.
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- ADELL McMILLAN, M.S., Program Director, Student Union (Instructor).
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- JAMES R. McWILLIAMS, Ph.D., Instructor in Germanic Languages.
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- PAUL S. MELHUISE, B.S., Instructor in Speech.
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- ROBERT I. MENDELSON, M.A., Instructor in Political Science.
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- *RAYMOND F. MIKESSELL, Ph.D., W.E. Miner Professor of Economics.
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- JOHN B. MINER, Ph.D., Professor of Management.
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* On sabbatical leave, spring term, 1963-64.

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- FRANK B. MUMAW, JR., Visiting Instructor in Physical Education.
At Oregon 1963.
- THOMAS F. MUNDLE, M.A., Assistant Professor Emeritus of English.
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- GORDON J. MURPHY, M.S., Instructor in Biology.
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- ERNEST MUSTER, Instructor in Architecture.
At Oregon since 1961.
- ROBERT E. MYERS, M.A., Assistant Professor of Education.
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- WILLIAM E. NAFF, M.A., Assistant Professor of Oriental Languages.
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B.S. (1945), M.S. (1948), Oregon. At Oregon 1946-55, 1960, and since 1963.
- JOHN R. NELSON, JR., M.A., Instructor in English.
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- LOIS E. NELSON, M.S., Assistant Professor of Home Economics.
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- C. MAX NIXON, B.F.A., Associate Professor of Applied Design.
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- ROLAND J. PELLEGRIN, Ph.D., Professor of Sociology; Director, Institute for Community Studies.
B.S. (1947), M.A. (1949), Louisiana State; Ph.D. (1952), North Carolina. At Oregon since 1961.
- HERBERT L. PENNY, B.S., Director of Informational Services (Assistant Professor).
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- MIRIAM A. PERRY, B.A., Catalog Librarian (Senior Instructor).
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- GEORGE P. PETERSEN, M.Ed., Assistant Professor of Education; Head of Business Education Department, South Eugene High School.
B.A. (1949), M.Ed. 1953, Oregon. At Oregon since 1955.
- ROBERT L. PETERSON, Ph.D., Assistant Professor of History.
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- DONALD L. PETING, M.Arch., Instructor in Architecture.
B.Arch. (1962), Illinois; M.Arch. (1963), California. At Oregon since 1963.
- NILKANTH M. PHATAK, Ph.D., Professor of Pharmacology, Dental School; Head of Department.
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- *IONE F. PIERRON, M.S., Assistant Professor of Librarianship.
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- STANLEY A. PIERSON, Ph.D., Assistant Professor of History.
B.A. (1950), Oregon; A.M. (1951), Ph.D. (1957), Harvard. At Oregon since 1957.
- DONALD M. PITCAIRN, M.D., Associate Professor of Medicine, Medical School; Head of Division of Chest Diseases.
B.A. (1944), Harvard; M.D. (1945), Oregon. At Oregon since 1949.
- FORREST R. PITTS, Ph.D., Associate Professor of Geography.
B.A. (1948), M.A. (1949), Ph.D. (1955), Michigan. At Oregon since 1955.
- IGOR I. W. PLESNER, Ph.D., Visiting Lecturer in Chemistry.
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- †MARGARET S. POLEY, Ph.D., Professor of Physical Education.
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D.D.S. (1951), M.S. (1953), Michigan. At Oregon since 1953.
- KENNETH W. PORTER, Ph.D., Professor of History.
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B.S. (1937), California Institute of Technology; Ph.D. (1950), California. At Oregon since 1963.
- †JAMES L. PRICE, Ph.D., Assistant Professor of Sociology.
B.S. (1950), Ohio State; M.A. (1954), Illinois; Ph.D. (1962), Columbia. At Oregon since 1957.
- WARREN C. PRICE, M.A., Professor of Journalism.
B.A. (1929), M.A. (1938), Wisconsin. At Oregon since 1942.
- ETHEL S. PRINCE, M.A., Instructor in Physical Education.
B.A. (1956), Hiram; M.A. (1958), Western Reserve. At Oregon since 1962.
- JESSIE L. PUCKETT, M.S., Associate Professor of Physical Education.
B.S. (1931), M.S. (1937), Oregon. At Oregon since 1952.
- ELLEN T. PUGH, M.A., Senior Catalog Librarian (Assistant Professor).
B.A. (1943), B.S. in L.S. (1945), Western Reserve; M.A. (1947), Northwestern. At Oregon since 1963.
- WILLIAM B. PURDOM, Ph.D., Visiting Assistant Professor of Geology.
B.S. (1956), Kentucky; Ph.D. (1960), Arizona. At Oregon 1960-62 and since 1963.
- JOHN H. QUINER, B.S., Special Lecturer in Architecture.
B.S. (1923), Oregon State. At Oregon since 1957.
- HOWARD L. RAMEY, M.F.A., Director of Financial Aids; Assistant Dean of Students; Assistant Professor of Speech.
B.A. (1948), Oregon; M.F.A. (1950), Yale. At Oregon since 1951.
- MARJORY RAMEY, B.A., Social Adviser, Dormitories (Instructor).
B.A. (1947), Oregon. At Oregon since 1962.
- KENNETH D. RAMSING, M.B.A., Instructor in Business Administration.
B.S. (1960), Oregon State; M.B.A. (1962), Oregon. At Oregon since 1962.
- FREDERICK O. RANKIN, M.D., Visiting Lecturer in Physical Education.
B.A. (1930), M.D. (1933), Oregon. At Oregon since 1959.
- GALEN R. RARICK, Ph.D., Associate Professor of Journalism; Director of Communications Research.
B.A. (1948), Denver; M.A. (1951), Ph.D. (1963), Stanford. At Oregon since 1962.
- EDWARD W. REED, Ph.D., Professor of Finance; Head of Department of Finance and Business Environment.
B.Ed. (1936), Southern Illinois; M.A. (1937), Ph.D. (1947), Illinois. At Oregon since 1958.
- JULIAN S. REINSCHMIDT, M.D., Assistant University Physician; Assistant Professor of Health Education.
B.A. (1950), M.D. (1953), Vanderbilt. At Oregon since 1963.

* On sabbatical leave, spring term, 1963-64.

† On leave of absence 1963-64.

- FRANCIS J. REITHEL, Ph.D., Professor of Chemistry.
B.A. (1936), Reed; M.A. (1938), Ph.D. (1942), Oregon. At Oregon since 1946.
- JAMES A. REITHER, B.S., Instructor in English.
B.S. (1961), St. Cloud. At Oregon since 1962.
- DANIEL P. REMINGTON, M.A., Lecturer in Marketing.
B.S. (1951), M.A. (1955), Minnesota. At Oregon since 1964.
- ROBERT L. RENTCHLER, Assistant Professor of Architecture.
At Oregon since 1963.
- WILLIAM M. RESCH, B.A., Instructor in Psychology.
B.A. (1959), San Jose State. At Oregon since 1962.
- EDWARD R. REUTER, Ph.D., Assistant Professor of Physical Education; Wrestling Coach.
B.S. (1948), Washington State; M.S. (1949), Ph.D. (1957), Illinois. At Oregon since 1958.
- WILLIAM P. RHODA, D.Ed., Professor of Physical Education.
B.S. (1939), Pennsylvania State; M.S. (1947), D.Ed. (1951), Oregon. At Oregon since 1948.
- CHARLES W. RICE, JR., M.S., Instructor in Business Administration.
B.S. (1962), Illinois Institute of Technology; M.S. (1963), Bucknell. At Oregon since 1963.
- A. MCKAY RICH, M.S., Research Associate, Bureau of Municipal Research and Service (Assistant Professor).
B.S. (1949), M.S. (1957), Utah State. At Oregon since 1962.
- STUART U. RICH, D.B.A., Associate Professor of Industrial Marketing; Director, Forest Industries Management Center.
B.A. (1942), Wabash; M.B.A. (1950), D.B.A. (1960), Harvard. At Oregon since 1963.
- HOWARD RICHARDSON, Ph.D., Visiting Professor of English and Speech.
A.B. (1938), M.A. (1940), North Carolina; Ph.D. (1960), Iowa. At Oregon since 1963.
- W. DWAIN RICHENS, Ph.D., Associate Professor of Business Economics.
B.A. (1936), Brigham Young; M.B.A. (1938), Louisiana State; Ph.D. (1950), Washington. At Oregon since 1949.
- NORMAN H. RICKLES, D.D.S., Professor of Dentistry, Dental School; Head of Department of General and Oral Pathology; Director, Oral Tumor Registry.
D.D.S. (1947), Washington; M.S. (1951), California. At Oregon since 1956.
- BERNICE M. RISE, A.B., B.S. in L.S., Reader's Consultant and Browsing Room Librarian (Assistant Professor).
B.A. (1923), Oregon; B.S. in L.S. (1928), Columbia. At Oregon since 1923.
- MAX D. RISINGER, M.A., Associate Professor of Music; Assistant Dean of the School of Music.
B.Ed. (1935), Western Illinois State; M.A. (1942), Iowa. At Oregon since 1954.
- PAUL L. RISLEY, Ph.D., Professor of Biology.
A.B. (1927), Albion; M.A. (1929), Ph.D. (1931), Michigan. At Oregon since 1945.
- NORVAL J. RITCHEY, M.S., Administrative Assistant, Athletic Department; Assistant Professor of Physical Education.
B.S. (1953), M.S. (1956), Oregon. At Oregon since 1956.
- *WILLIAM J. ROBERT, LL.M., Professor of Law.
B.A. (1939), LL.B. (1941), Oregon; LL.M. (1957), New York University. At Oregon since 1950.
- *HORACE W. ROBINSON, M.A., Professor of Speech.
B.A. (1931), Oklahoma City; M.A. (1932), Iowa. At Oregon since 1933.
- JOHN A. ROBINSON, B.S., Instructor in Physical Education; Assistant Football Coach.
B.S. (1960), Oregon. At Oregon since 1960.

* On sabbatical leave 1963-64.

- WILLIAM S. ROBINSON, Ph.D., Professor of Sociology.
A.B. (1936), California at Los Angeles; A.M. (1937), Ph.D. (1940), Columbia. At Oregon since 1962.
- JACK ROCHE, B.S., Assistant Professor of Physical Education; Assistant Football Coach.
B.S. (1940), Santa Clara. At Oregon since 1951.
- ROY H. RODGERS, Ph.D., Assistant Professor of Sociology.
B.A. (1951), Wheaton; M.A. (1957), North Carolina; Ph.D. (1962), Minnesota. At Oregon since 1963.
- MARY G. RODMAN, M.A., Instructor in Romance Languages.
B.A. (1939), M.A. (1940), Mount Holyoke; Dip. (1938), Sorbonne. At Oregon 1959-62 and since 1964.
- CAROLE J. RODNER, B.A., Instructor in Romance Languages.
B.A. (1961), Michigan State. At Oregon since 1963.
- KIM RODNER, Ph.D., Assistant Professor of Sociology.
B.A. (1956), M.A. (1959), Ph.D. (1962), Michigan State. At Oregon since 1963.
- LYNN S. RODNEY, Ph.D., Professor of Recreation Management.
B.A. (1936), M.A. (1938), Washington State; Ph.D. (1955), Michigan. At Oregon since 1955.
- *ALAN W. ROECKER, Ph.M., Head Science Librarian; Associate Professor of Librarianship.
Ph.B. (1938), B.L.S. (1950), Ph.M. (1943), Wisconsin. At Oregon since 1950.
- DONALD R. ROGERS, B.S., Instructor in Accounting.
B.S. (1957), Lewis and Clark. At Oregon since 1963.
- MANUEL ROJAS, Visiting Lecturer in Romance Languages.
At Oregon since 1963.
- ROLAND C. ROMIG, M.D., Assistant University Physician (Assistant Professor).
B. S. (1919), Idaho; M.D. (1926), Rush. At Oregon 1926-30 and since 1961.
- †MILES C. ROMNEY, Ph.D., Professor of Education.
B.S. (1935), Utah State; Ph.D. (1947), Columbia. At Oregon since 1952.
- LAWRENCE W. ROSS, J.D., Assistant Professor of Business Law.
A.B. (1949), M.A. (1949), Syracuse; J.D. (1952), Chicago. At Oregon since 1963.
- MARION D. ROSS, M.Arch., Reg. Archt.; Professor of Architecture; Head of Department of Art History.
B.S. (1935), Pennsylvania State; M.Arch. (1937), Harvard. Reg. Archt. (1946), State of Louisiana. At Oregon since 1947.
- VICTORIA A. ROSS, M.F.A., Associate Professor of Art.
B.A. (1927), Oregon; M.F.A. (1939), Southern California. At Oregon since 1920.
- WILLIAM J. ROST, M.A., Instructor in Music.
B.S. (1959), M.A. (1962), Ohio State. At Oregon since 1963.
- GEORGE S. ROTHBART, M.A., Instructor in Sociology.
B.A. (1947), Chicago; M.A. (1962), Washington. At Oregon since 1963.
- J. DAVID ROWE, B.A., Planning Consultant, Bureau of Municipal Research and Service (Assistant Professor).
B.A. (1955), Park. At Oregon since 1959.
- JO ANNE E. RUBY, M.S.W., Instructor in Psychology.
B.A. (1947), M.S.W. (1951), Minnesota. At Oregon since 1961.
- WALLACE M. RUFF, M.S., Associate Professor of Landscape Architecture.
B.S. (1934), Florida; M.S. (1950), California. At Oregon since 1952.
- J. FRANCIS RUMMEL, Ph.D., Professor of Education.
B.A. (1933), Iowa State Teachers; M.A. (1947), Ph.D. (1950), Iowa. At Oregon since 1950.

* On sabbatical leave 1963-64.

† On leave of absence 1963-64.

- C. BRYAN RYAN, M.F.A., Associate Professor of Art.
B.S. (1939), M.F.A. (1940), Oregon. At Oregon since 1946.
- GLORIA SAGE, Ph.D., Assistant Professor of Chemistry.
A.B. (1957), Cornell; A.M. (1958), Ph.D. (1962), Radcliffe. At Oregon since 1963.
- MARTIN L. SAGE, Ph.D., Assistant Professor of Chemistry; Research Associate, Institute of Theoretical Science.
A.B. (1955), Cornell; A.M. (1958), Ph.D. (1960), Harvard. At Oregon since 1961.
- SHIN-ICHIRO SAKAI, Ph.D., Visiting Professor of Chemistry.
B.S. (1949), Kyoto College of Pharmacy; Ph.D. (1959), Tokyo. At Oregon since 1963.
- RALPH J. SALISBURY, M.F.A., Assistant Professor of English.
B.A. (1949), M.F.A. (1951), Iowa. At Oregon since 1960.
- ROY J. SAMPSON, Ph.D., Associate Professor of Transportation.
B.S. (1946), Tennessee Polytechnic; M.B.A. (1948), Ph.D. (1951), California. At Oregon since 1959.
- JULIO M. SAN JOSÉ, D.Arch., Assistant Professor of Architecture.
M.Arch. (1958), Oregon; D.Arch. (1959), Madrid. At Oregon since 1963.
- ADOLPH A. SANDIN, Ph.D., Professor of Education.
B.A. (1933), Central Washington College of Education; M.A. (1938), Washington; Ph.D. (1943), Columbia. At Oregon since 1950.
- GEORGE SASLOW, Ph.D., M.D., Professor of Psychiatry, Medical School; Chairman of Department.
Sc.B. (1926), Ph.D. (1931), New York University; M.D. (1940), Harvard. At Oregon since 1957.
- BHIM S. SAVARA, D.M.D., Professor of Dentistry, Dental School; Head of Child Study Clinic.
F.Sc. (1942), Lahore, India; B.D.S. (1946), Punjab; L.D.S. (1947), Royal College of Surgeons; M.S. (1950), Illinois; D.M.S. (1957), Oregon. At Oregon since 1950.
- LUCYANNE SAWYER, M.A., Instructor in English.
B.A. (1960), Massachusetts; M.A. (1963), Nevada. At Oregon since 1963.
- DAVID E. SCANLAN, M.A., Instructor in Speech.
A.B. (1957), California; M.A. (1960), Minnesota. At Oregon since 1962.
- OSCAR F. SCHAAF, Ph.D., Adjunct Associate Professor of Education; Head of Mathematics Department, South Eugene High School.
B.A. (1942), Wichita; A.M. (1946), Chicago; Ph.D. (1954), Ohio State. At Oregon since 1954.
- BRADLEY T. SCHEER, Ph.D., Professor of Biology; Head of Department.
B.S. (1936), California Institute of Technology; Ph.D. (1940), California. At Oregon since 1950.
- DOROTHY E. SCHERER, M.A.L.S., Reference Librarian (Instructor).
B.S. in Ed. (1940), Kansas State Teachers (Emporia); B.A. (1944), Fort Hays Kansas State; M.A.L.S. (1945), Michigan. At Oregon since 1963.
- *JOHN A. SCHELLMAN, Ph.D., Professor of Chemistry.
A.B. (1948), Temple; M.A. (1949), Ph.D. (1951), Princeton. At Oregon since 1958.
- JACK S. SCHENDEL, D.Ed., Instructor in Health Education.
B.A. (1954), M.A. (1960), Fresno State; D.Ed. (1963), Oregon. At Oregon since 1962.
- CHARLES P. SCHLEICHER, Ph.D., Professor of Political Science.
A.B. (1928), College of Pacific; M.A. (1931), Hawaii; Ph.D. (1936), Stanford. At Oregon since 1947.
- CLARENCE W. SCHMINKE, Ph.D., Assistant Professor of Education.
B.A. (1950), M.A. (1954), Iowa State Teachers; Ph.D. (1960), Iowa. At Oregon since 1960.
- MARTIN SCHMITT, B.S., B.S. in L.S., Curator of Special Collections, Library (Professor).
B.S. (1938), B.S. in L.S. (1939), Illinois. At Oregon since 1947.

* On leave of absence 1963-64.

- *PHIL SCHOGGEN, Ph.D., Associate Professor of Psychology.
B.A. (1946), Park; M.A. (1951), Ph.D. (1954), Kansas. At Oregon since 1957.
- MARY B. SCHWALENBERG, B.Ed., Head Resident, Dormitories (Instructor).
B.Ed. (1962), Sacramento State. At Oregon since 1963.
- FRANCES G. SCOTT, Ph.D., Associate Professor of Education and Sociology.
B.A. (1953), M.A. (1954), Texas; Ph.D. (1960), California at Los Angeles. At Oregon since 1962.
- JAMES R. SELIG, M.A., Instructor in English.
B.S. (1957), Georgetown; M.A. (1959), North Carolina. At Oregon since 1963.
- †LESTER G. SELIGMAN, Ph.D., Associate Professor of Political Science.
B.A. (1939), Ph.D. (1947), Chicago. At Oregon since 1953.
- VELLO SERMAT, Ph.D., Assistant Professor of Psychology.
B.A. (1957), Toronto; M.S. (1959), Ph.D. (1961), Yale at Oregon since 1963.
- ROSE M. SERVICE, M.A., Social Science Librarian (Instructor).
A.B. (1944), Michigan State Normal (Ypsilanti); M.A. (1950), M.A. (1955), Minnesota. At Oregon since 1961.
- ‡FREDERICK J. SEUBERT, Ph.D., Associate Professor of Management.
B.A. (1942), Baldwin-Wallace; B.M.E. (1946), Florida; M.B.A. (1947), Pennsylvania; Ph.D. (1954), Cornell. At Oregon since 1957.
- OTILIE T. SEYBOLT, M.A., Associate Professor Emeritus of Speech.
A.B. (1910), Mount Holyoke; M.A. (1915), Wisconsin. At Oregon since 1928.
- WILLIAM O. SHANAHAN, Ph.D., Professor of History.
A.B. (1934), A.M. (1935), California at Los Angeles; Ph.D. (1945), Columbia. At Oregon 1957-58 and since 1960.
- SEYMOUR SHAPIRO, Ph.D., Associate Professor of Biology.
B.S. (1947), Ph.D. (1952), Michigan. At Oregon since 1961.
- VICTOR L. SHAPIRO, Ph.D., Professor of Mathematics.
B.S. (1947), M.S. (1949), Ph.D. (1952), Chicago. At Oregon since 1960.
- VIRGINIA L. SHAW, M.A., Visiting Professor of Physical Education.
B.S. (1923), Washington State; M.A. (1945), Southern California. At Oregon since 1963.
- JAMES M. SHEA, M.S., Director of University Relations (Assistant Professor).
A.B. (1950), Missouri; M.S. (1956), Oregon. At Oregon since 1958.
- JOHN R. SHEPHERD, Ph.D., Associate Professor of Speech; Production Director, University Radio Studios.
B.A. (1946), M.A. (1947), Stanford; Ph.D. (1952), Southern California. At Oregon since 1957.
- PETER R. SHERMAN, M.S., Instructor in Mathematics.
B.S. (1947), M.S. (1949), Oregon; B.D. (1952), Pacific School of Religion. At Oregon since 1960.
- IRMA Z. SHERWOOD, Ph.D., Assistant Professor of English.
B.A. (1940), Barnard; M. A. (1942), Ph. D. (1945), Yale. At Oregon 1946-48, 1954-55, and since 1962.
- JOHN C. SHERWOOD, Ph.D., Professor of English.
B.A. (1941), Lafayette; M.A. (1942), Ph.D. (1945), Yale. At Oregon since 1946.
- J. ARNOLD SHOTWELL, Ph.D., Director, Museum of Natural History; Associate Professor of Biology and Geology.
B.S. (1947), M.S. (1950), Oregon; Ph.D. (1953), California. At Oregon since 1947.
- BARRY N. SIEGEL, Ph.D., Associate Professor of Economics.
B.A. (1951), Ph.D. (1957), California. At Oregon since 1961.

* On sabbatical leave, winter and spring terms, 1963-64.

† On leave of absence 1963-64.

‡ On sabbatical leave 1963-64.

- *PETER O. SIGERSETH, D.Ed., Ph.D., Professor of Physical Education.
B.A. (1928), Minot State Teachers (North Dakota); M.A. (1936), North Dakota; D.Ed. (1944), Oregon; Ph.D. (1955), Iowa. At Oregon 1941-44 and since 1947.
- WILLIAM H. SILLS, Ph.D., Assistant Professor of Mathematics.
B.A. (1956), Ph.D. (1963), California. At Oregon since 1963.
- PAUL E. SIMONDS, Ph.D., Assistant Professor of Anthropology.
B.A. (1954), M.A. (1959), Ph.D. (1963), California. At Oregon since 1962.
- PAUL B. SIMPSON, Ph.D., Professor of Economics.
B.A. (1936), Reed; Ph.D. (1949), Cornell. At Oregon 1949-53 and since 1955.
- FRANK P. SIPE, M.S., Associate Professor Emeritus of Biology.
B.S. (Agri.) (1916), B.S. (Educ.) (1918), Missouri; M.S. (1923), Iowa State. At Oregon since 1932.
- WILLIAM R. SISTROM, Ph.D., Associate Professor of Biology.
A.B. (1950), Harvard; Ph.D. (1954), California. At Oregon since 1963.
- KEITH D. SKELTON, B.S., LL.B., Associate Professor of Business Law.
B.S. (1939), Edinboro State Teachers (Pennsylvania); LL.B. (1949), Washington. At Oregon 1958, 1961-62, and since 1963.
- KORNEL SKOVAJSA, B.A., Instructor in English.
B.A. (1959), St. Thomas (St. Paul, Minn.). At Oregon since 1963.
- DONALD B. SLOCUM, M.D., Visiting Lecturer in Physical Education.
B.S. (1932), Stanford; M.D. (1935), Oregon; M.S. (1939), Tennessee. At Oregon since 1959.
- ALFRED G. SMITH, Ph.D., Associate Professor of Anthropology.
A.B. (1943), Michigan; M.A. (1947), Ph.D. (1956), Wisconsin. At Oregon since 1962.
- DONALD T. SMITH, M.A., M.S., Assistant University Librarian (Associate Professor).
B.A. (1949), M.A. (1950), Wesleyan; M.S. (1951), Columbia. At Oregon since 1963.
- FLOYD H. SMITH, JR., M.S., Assistant Planner, Bureau of Municipal Research and Service (Instructor).
B.S. (1959), M.S. (1961), Oregon State. At Oregon since 1962.
- HAZEL C. SMITH, M.S., Instructor in Mathematics.
B.Ed. (1945), Alberta; M.S. (1958), Michigan State. At Oregon since 1962.
- NORMAN R. SMITH, M.A., Assistant Professor of Marketing.
B.A. (1948), Alberta; M.A. (1957), Michigan State. At Oregon since 1962.
- RICHARD A. SMITH, M.S., Assistant Professor of Architecture.
B.Arch. (1956), Michigan; M.S. (1962), Minnesota. At Oregon since 1962.
- RICHARD J. SMITH, M.Ed., Instructor in Physical Education; Gymnastics Coach.
B.S. (1949), M.Ed. (1953), Springfield. At Oregon since 1962.
- ROBERT E. SMITH, Ph.D., Associate Professor of Economics.
B.A. (1943), Southern California; Ph.D. (1963), California at Los Angeles. At Oregon since 1962.
- ROBERT L. SMITH, M.A., Instructor in Romance Languages.
B.A. (1952), M.A. (1954), California at Los Angeles. At Oregon since 1959.
- ROBERT WAYNE SMITH, Ph.D., Visiting Professor of History.
B.A. (1924), Kansas; M.A. (1932), Idaho; Ph.D. (1937), California. At Oregon since 1963.
- ROBERT WORTHINGTON SMITH, Ph.D., Associate Professor of History; Head of Department.
B.A. (1937), Chicago; M.A. (1940), Ph.D. (1942), California at Los Angeles. At Oregon since 1947.
- RUSSELL J. SMITH, JR., Instructor in Accounting.
B.S. (1949), Bowling Green; M.B.A. (1950), Denver. At Oregon 1960-61 and since 1963.

* On sabbatical leave, fall and winter terms, 1963-64.

- WARREN E. SMITH, Ed.D., Associate Professor of Health Education.
B.S. (1941), Oregon; M.A. (1947), Michigan; Ed.D. (1957), Stanford. At Oregon since 1963.
- WILLIAM E. SNELL, M.D., Associate Professor of Orthopedic Surgery, Medical School; Head of Division.
B.S. (1943), M.D. (1954), Oregon. At Oregon since 1951.
- MARSHALL L. SNYDER, Ph.D., Professor of Bacteriology, Dental School; Head of Department.
Ph.B. (1930), Brown; M.S. (1932), Ph.D. (1935), Colorado. At Oregon since 1946.
- ARNOLD L. SODERWALL, Ph.D., Professor of Biology.
B.A. (1936), Linfield; M.A. (1937), Illinois; Ph.D. (1941), Brown. At Oregon since 1941.
- *JAY V. SOEDER, M.F.A., Assistant Professor of Art.
B.S. (1948), Indiana State Teachers; B.F.A. (1950), M.F.A. (1950), Chicago Art Institute. At Oregon since 1957.
- HELEN L. SOEHREN, M.A., Assistant Professor of English.
B.A. (1935), M.A. (1938), Oregon. At Oregon since 1942.
- †JOHN W. SOHA, M.B.A., C.P.A., Associate Professor of Accounting.
B.B.A. (1936), Puget Sound; M.B.A. (1950), Michigan; C.P.A. (1942), State of Washington. At Oregon since 1951.
- LLOYD R. SORENSON, Ph.D., Associate Professor of History.
B.A. (1938), North Dakota; M.A. (1945), Ph.D. (1947), Illinois. At Oregon since 1947.
- ALBERT C. SPAULDING, Ph.D., Professor of Anthropology; Head of Department.
B.A. (1935), Michigan State; M.A. (1937), Michigan; Ph.D. (1946), Columbia. At Oregon since 1963.
- VERNON S. SPRAGUE, Ph.D., Professor of Physical Education.
B.S. (1937), Oregon; M.A. (1942), Ph.D. (1951), Michigan. At Oregon since 1946.
- †JOHN E. STAFFORD, B.Arch., Visiting Assistant Professor of Architecture.
B.Arch (1940), Oregon. At Oregon since 1960.
- JAMES D. STAFNEY, Ph.D., Instructor in Mathematics.
B.A. (1959), M.A. (1961), Ph.D. (1963), Oregon. At Oregon since 1963.
- FRANKLIN W. STAHL, Ph.D., Professor of Biology; Research Associate, Institute of Molecular Biology.
A.B. (1951), Harvard; Ph.D. (1956), Rochester. At Oregon since 1959.
- ROBERT L. STALLMAN, M.A., Instructor in English.
B.A. (1957), M.A. (1961), New Mexico. At Oregon since 1961.
- BETTY MAE STAMM, B.A., Acquisition Librarian (Senior Instructor).
B.A. (1927), Oregon. At Oregon since 1926.
- LLOYD W. STAPLES, Ph.D., Professor of Geology; Head of Department.
A.B. (1929), Columbia; M.S. (1930), Michigan; Ph.D. (1935), Stanford. At Oregon since 1939.
- JAMES U. STARCK, Instructor in Architecture.
At Oregon since 1961.
- D. GLENN STARLIN, Ph.D., Professor of Speech; Head of Department.
B.A. (1938), Idaho; M.A. (1939), Ph.D. (1951), Iowa. At Oregon since 1947.
- ALBERT STARR, M.D., Associate Professor of Cardiopulmonary Surgery, Medical School; Head of Division.
B.A. (1946), M.D. (1949), Columbia. At Oregon since 1957.
- WENDELL H. STEPHENSON, Ph.D., Litt., LL.D., Professor of History.
A.B. (1923), A.M. (1924), Indiana; Ph.D. (1928), Michigan; Litt.D. (1950), Duke; LL.D. (1953), North Carolina. At Oregon since 1953.

* On sabbatical leave 1963-64.

† On leave of absence, fall term, 1963-64.

- THEODORE STERN, Ph.D., Professor of Anthropology.
B.A. (1939), Bowdoin; A.M. (1941), Ph.D. (1948), Pennsylvania. At Oregon since 1948.
- FRED L. STETSON, M.A., Professor Emeritus of Education.
B.A. (1911); M.A. (1913), Washington. At Oregon since 1913.
- ROBIN E. STEUSSY, Ph.D., Assistant Professor of Slavic Languages.
B.A. (1943), Wisconsin; M.A. (1958), Ph.D. (1959), Harvard. At Oregon since 1959.
- ARTHUR B. STILLMAN, M.B.A., Professor Emeritus of Business Administration.
B.A. (1928), Oregon; M.B.A. (1937), Washington. At Oregon since 1922.
- RUSSELL M. STOCKMAN, M.A., Instructor in Germanic Languages.
B.A. (1960), M.A. (1963), Oregon. At Oregon since 1962.
- CHARLES J. STOUT, D.M.D., Professor of Dentistry, Dental School; Head of Department of Prosthetics.
B.S. (1943), Ouachita; B.A. (1947), D.M.D. (1947), Oregon. At Oregon since 1955.
- JAMES C. STOVALL, M.A., Associate Professor of Geology.
B.S. (1927), M.A. (1929), Oregon. At Oregon since 1934.
- WILLIAM C. STRANGE, Ph.D., Assistant Professor of English.
B.A. (1952), Whitman; M.A. (1953), Montana; Ph.D. (1963), Washington. At Oregon since 1960.
- G. DOUGLAS STRATON, Ph.D., Associate Professor of Religion; Head of Department.
A.B. (1938), Harvard; B.D. (1941), Andover Newton; Ph.D. (1950), Columbia. At Oregon since 1959.
- JAMES H. STRAUGHAN, Ph.D., Assistant Professor of Psychology.
B.A. (1948), Florida; Ph.D. (1954), Indiana. At Oregon since 1959.
- JACOB STRAUS, Ph.D., Associate Professor of Biology.
B.S. (1949), College of City of New York; M.S. (1950), Ph.D. (1954), Michigan. At Oregon since 1955.
- GEORGE STREISINGER, Ph.D., Associate Professor of Biology; Research Associate, Institute of Molecular Biology.
B.S. (1950), Cornell; Ph.D. (1954), Illinois. At Oregon since 1960.
- KARL R. STROMBERG, Ph.D., Assistant Professor of Mathematics.
B.A. (1953), M.A. (1954), Oregon; Ph.D. (1958), Washington. At Oregon since 1960.
- ALICE G. STRONG, B.A., B.S. in L.S., Instructor in Librarianship.
B.A. (1937), Oregon; B.S. in L.S. (1946), Denver. At Oregon since 1963.
- ELSA B. STRUBLE, A.M., Instructor in Mathematics.
A.B. (1953), Swarthmore; A.M. (1954), Harvard. At Oregon since 1963.
- GEORGE W. STRUBLE, Ph.D., Assistant Professor of Mathematics; Research Associate, Statistical Laboratory and Computing Center.
A.B. (1954), Swarthmore; M.S. (1957), Ph.D. (1961), Wisconsin. At Oregon since 1961.
- *JOSEPH M. STUART, M.A., Curator, Museum of Art (Assistant Professor).
B.F.A. (1959), M.A. (1962), New Mexico. At Oregon since 1962.
- †ROBERT S. SUMMERS, B.S., LL.B., Associate Professor of Law.
B.S. (1955), Oregon; LL.B. (1959), Harvard. At Oregon since 1960.
- NORMAN D. SUNDBERG, Ph.D., Professor of Psychology; Associate Dean of Graduate School.
B.A. (1947), Nebraska; M.A. (1949), Ph.D. (1952), Minnesota. At Oregon since 1952.
- RAYMOND R. SUSKIND, M.D., Professor of Environmental Medicine and Dermatology, Medical School; Head of Division of Environmental Medicine.
A.B. (1934), Columbia; M.D. (1943), Long Island. At Oregon since 1962.
- JOHN E. SUTTLE, Ed.D., Associate Professor of Education.
B.S. (1948), Ed.D. (1960), Texas; M.Ed. (1952), Colorado. At Oregon since 1959.

* Resigned Dec. 31, 1964.

† On leave of absence 1963-64.

- KESTER SVENDSEN, Ph.D.**, Professor of English; Head of Department.
B.A. (1934), Charleston; M.A. (1935), Ph.D. (1940), North Carolina. At Oregon since 1959.
- KENNETH C. SWAN, M.D.**, Professor of Ophthalmology, Medical School; Chairman of Department.
B.A. (1933), M.D. (1936), Oregon. At Oregon since 1944.
- ROY L. SWANK, M.D., Ph.D.**, Professor of Medicine, Medical School; Head of Division of Neurology.
B.S. (1930), Washington; Ph.D. (1935), M.D. (1936), Northwestern. At Oregon since 1953.
- DONALD F. SWINEHART, Ph.D.**, Professor of Chemistry.
B.S. (1939), Capital; M.S. (1941), Ph.D. (1943), Ohio State. At Oregon since 1946.
- JOHN TACHIHARA, B.A.**, Instructor in Sociology.
B.A. (1958), Long Beach State. At Oregon since 1963.
- ***JAMES N. TATTERSALL, Ph.D.**, Assistant Professor of Economics.
B.A. (1954), M.A. (1956), Ph.D. (1960), Washington. At Oregon since 1957.
- DIRK P. TEN BRINKE, M.A.**, Assistant Professor of Education; Head of Science Department, South Eugene High School.
B.S. (1943), M.A. (1953), Minnesota. At Oregon since 1956.
- SANFORD S. TEPFER, Ph.D.**, Associate Professor of Biology.
B.S. (1938), College of City of New York; M.S. (1939), Cornell; Ph.D. (1950), California. At Oregon since 1955.
- JOAN TEMPLETON, M.A.**, Instructor in English.
B.A. (1960), Centenary College of Louisiana; M.A. (1962), Oregon. At Oregon since 1963.
- LOUIS G. TERKLA, D.M.D.**, Professor of Dentistry, Dental School; Assistant to the Dean.
D.M.D. (1952), Oregon. At Oregon since 1952.
- PAUL H. TETZNER, B.S.**, Instructor in Art.
B.S. (1952), Illinois Institute of Technology. At Oregon 1959-60 and since 1961.
- JANE THACHER, Professor Emeritus of Piano.**
At Oregon since 1916.
- W. F. GOODWIN THACHER, M.A.**, Professor Emeritus of English.
A.B. (1900), M.A. (1907), Princeton. At Oregon since 1914.
- EDWARD P. THATCHER, M.A.**, Acting Head, Science Librarian (Senior Instructor).
B.A. (1940), Swarthmore; M.A. (1940), B.S. in L.S. (1952), Minnesota. At Oregon since 1952.
- RUBEN C. THIELKE, Ph.D.**, Visiting Professor of Chemistry.
B.S. (1929), M.S. (1931), Oregon State; Ph.D. (1935), Michigan. At Oregon since 1963.
- ARTHUR L. THOMAS, Ph.D.**, Assistant Professor of Accounting.
B.A. (1952), M.B.A. (1956), Cornell; Ph.D. (1963), Michigan. At Oregon since 1963.
- CHARLES W. THOMAS II, Ph.D.**, Assistant Professor of Education.
B.S. (1951), Morgan State; A.M. (1955), John Carroll; Ph.D. (1961), Western Reserve. At Oregon since 1963.
- DONALD L. THOMPSON, M.S.**, Assistant Professor of Marketing.
B.S. (1951), Pennsylvania; M.S. (1958), San Francisco State. At Oregon since 1963.
- HARRIET W. THOMSON, A.B.**, Professor Emeritus of Physical Education.
A.B. (1904), Michigan. At Oregon since 1911.
- JOHN D. THORPE, B.S.**, Director of Married Student Housing (Instructor).
B.S. (1950), Oregon. At Oregon since 1962.
- HAROLD C. TODD, B.A.**, Captain, U.S. Army; Assistant Professor of Military Science.
B.A. (1953), Illinois. At Oregon since 1962.

* On sabbatical leave, spring term, 1963-64.

- J. BARRE TOELKEN, M.A., Instructor in English.
B.S. (1958), Utah State; M.A. (1959), Washington State. At Oregon since 1960.
- VLADIMIR TOLSON, Th.D., Assistant Professor of Slavic Languages.
Th.D. (1939), Greek-Orthodox Academy, Paris. At Oregon since 1961.
- SAUL TOBERT, B.A., Counselor, University Counseling Center (Instructor).
B.A. (1947), California. At Oregon since 1962.
- DAVID S. TOOR, M.A., Instructor in English.
B.A. (1956), Brooklyn; M.A. (1957), New York University. At Oregon since 1962.
- DONALD E. TOPE, Ph.D., Professor of Education.
B.A. (1928), Western State College (Colorado); M.A. (1929), Ph.D. (1934), Iowa. At Oregon since 1951.
- RICHARD TROMBLEY, M.Mus., Instructor in Music.
B.S. (1961), Juilliard; M.Mus. (1962), Manhattan School of Music. At Oregon since 1963.
- ROBERT TROTTER, Ph.D., Dean of the School of Music; Professor of Music.
B.Mus. (1943), Northwestern; M.A. (1947), Chicago; Ph.D. (1957), Southern California. At Oregon since 1963.
- DONALD R. TRUAX, Ph.D., Associate Professor of Mathematics; Acting Director, Statistical Laboratory and Computing Center.
B.S. (1951), M.S. (1953), Washington; Ph.D. (1955), Stanford. At Oregon since 1959.
- MIRIAM L. TUCK, Ed.D., R.N., Associate Professor of Health Education.
B.S. (1954), New York University; M.A. (1956), Ed.D. (1961), Columbia; R.N. (1945), State of New York. At Oregon since 1962.
- GEORGE S. TURNBULL, M.A., Professor Emeritus of Journalism.
A.B. (1915), M.A. (1932), Washington. At Oregon since 1917.
- GENEVIEVE G. TURNIPSEED, M.A., Director Emeritus of Dormitories.
A.M. (1922), B.S. (1922), Iowa; M.A. (1930), Columbia. At Oregon since 1930.
- LEONA E. TYLER, Ph.D., Professor of Psychology; Counselor, University Counseling Center.
B.S. (1925), M.S. (1939), Ph.D. (1941), Minnesota. At Oregon since 1940.
- RICHARD L. UNRUH, M.Arch., Assistant Professor of Architecture; Associate Architect, Office of Planning and Institutional Research.
B.A. (1952), Willamette; B.Arch. (1956), Massachusetts Institute of Technology; M.Arch. (1963), Pennsylvania. At Oregon since 1963.
- ALVIN W. URQUHART, Ph.D., Assistant Professor of Geography.
B.A. (1953), Oregon State; M.A. (1958), Ph.D. (1962), California. At Oregon since 1963.
- JORDAN UTSEY, M.Ed., Assistant Professor of Education.
B.A. (1952), College of Idaho; M.Ed. (1958), Oregon. At Oregon since 1963.
- ROBERT S. VAGNER, M.A., M.Mus., Professor of Music; Director of Bands.
B.A. (1935), M.A. (1938), Colorado State College of Education; M.Mus. (1942), Michigan. At Oregon since 1950.
- EDWARD A. VAN AELSTYN, B.A., Instructor in English.
B.A. (1956), Portland. At Oregon since 1962.
- JAMES M. VAN BUSKIRK, Ph.D., Assistant Professor of Mathematics.
B.S. (1954), Wisconsin State (Superior); M.S. (1955), Ph.D. (1962), Wisconsin. At Oregon since 1962.
- STANLEY C. VANCE, Ph.D., H. T. Miner Professor of Business Administration; Head of Department of Personnel and Industrial Management.
B.A. (1937), St. Charles; M.A. (1944), Ph.D. (1950), Pennsylvania. At Oregon since 1960.
- PRETORIOUS VAN DEN DOOL, B.A., Instructor in Business Administration.
B.A. (1960), Oregon. At Oregon since 1963.

- KARMEN K. D. VAN DYKE, B.S., Head Resident Adviser, Dormitories (Instructor).
B.S. (1961), Oregon. At Oregon since 1963.
- DONALD P. VAN ROSSEN, M.Ed., Assistant Professor of Physical Education; Swimming Coach.
B.S. (1953), M.Ed. (1954), Illinois. At Oregon since 1958.
- FRANCES VAN VOORHIS, M.S., Assistant Professor of Home Economics.
B.S. (1932), Minnesota; M.S. (1949), Iowa State. At Oregon since 1944.
- WILBUR N. VAN ZILE, D.D.S., Professor of Dentistry, Dental School; Head of Department of Oral Surgery.
D.D.S. (1928), California. At Oregon since 1959.
- DENNIS L. VETTRUS, B.A., Assistant Director of Dormitories (Instructor).
B.A. (1961), Denver. At Oregon since 1963.
- ANDREW M. VINCENT, Professor of Art.
Grad. (1929), Chicago Art Institute School. At Oregon since 1929.
- ELISABETH WAECHTER, M.Ed., Instructor in Education.
M.Ed. (1961), Oregon. At Oregon since 1963.
- *MAX WALES, M.A., Professor of Journalism.
B.A. (1933), Washburn; M.A. (1956), Iowa. At Oregon since 1957.
- DWIGHT T. WALLACE, Ph.D., Assistant Professor of Anthropology.
A.B. (1950), Ph.D. (1957), California. At Oregon since 1961.
- PAULINE E. WALTON, M.A., Assistant Reference Librarian Emeritus.
B.A. (1904), Oregon; M.A. (1906), Northwestern. At Oregon since 1927.
- GREGORY H. WANNIER, Ph.D., Professor of Physics.
Ph.D. (1935), Basel. At Oregon 1959 and since 1961.
- LEWIS E. WARD, JR., Ph.D., Associate Professor of Mathematics.
B.A. (1949), California; M.S. (1951), Ph.D. (1953), Tulane. At Oregon since 1959.
- HOYT D. WARNER, M.A., Instructor in Mathematics.
B.A. (1959), Harvard; M.A. (1961), Yale. At Oregon since 1963.
- PAUL R. WASHKE, Ph.D., Professor of Physical Education.
A.B. (1927), Western State Teachers (Michigan); A.M. (1929), Michigan; Ph.D. (1943) New York University. At Oregon since 1930.
- DONALD A. WATSON, Ph.D., Associate Professor of Finance; Associate Director, Bureau of Business Research.
B.A. (1947), M.A. (1948), Ph.D. (1951), Iowa. At Oregon since 1956.
- EDWARD G. WATSON, M.A., Associate Planner, Bureau of Municipal Research and Service (Assistant Professor).
B.A. (1943), Reed; M.A. (1948), Washington. At Oregon since 1962.
- MARSHALL D. WATTLES, Ph.D., Professor of Economics.
B.A. (1938), Southwest Missouri State; M.A. (1941), Missouri; Ph.D. (1950), Ohio State. At Oregon since 1950.
- MARIAN P. WATTS, B.A., B.S. in L.S., Reference Librarian Emeritus.
B.A. (1921), Oregon; B.S. in L.S. (1934), Illinois. At Oregon since 1921.
- RUTH WAUGH, M.S., Instructor in Education.
B.S. (1957), Southern Oregon; M.S. (1963), Oregon. At Oregon since 1963.
- †JEAN M. WEAKLAND, M.A., Assistant Professor of Physical Education.
B.S. (1953), Colorado State University; M.A. (1958), Colorado State College. At Oregon since 1959.

* On leave of absence, fall term, 1963-64.

† On leave of absence 1963-64.

- A. KINGSLEY WEATHERHEAD, Ph.D., Associate Professor of English; Assistant Head of Department.
M.A. (1949), Cambridge; M.A. (1949), Edinburgh; Ph.D. (1958), Washington. At Oregon since 1960.
- CARL C. WEBB, M.A., Associate Professor of Journalism.
B.S. (1932), M.A. (1950), Oregon. At Oregon since 1943.
- VINSON M. WEBER, D.D.S., Professor of Dentistry, Dental School; Head of Department of Postgraduate Education.
A.B. (1936), Oberlin; M.A. (1940), Michigan; D.D.S. (1946), Western Reserve. At Oregon since 1947.
- CHRISTOF A. WEGELIN, Ph.D., Professor of English.
M.A. (1942), North Carolina; Ph.D. (1947), Johns Hopkins. At Oregon since 1952.
- KENNETH W. WEGNER, Ed.D., Assistant Professor of Education; Counselor, University Counseling Center.
B.S. (1953), M.Ed. (1955), Ed.D. (1961), Kansas. At Oregon since 1961.
- ADOLPH WEINZIRL, M.D., Professor of Public Health and Preventive Medicine, Medical School; Chairman of Department.
B.S. (1922), M.D. (1925), Oregon; C.P.H. (1932), M.P.H. (1939), Johns Hopkins. At Oregon since 1937.
- DONALD O. WELLS, Ph.D., Assistant Professor of Physics.
B.S. (1955), M.S. (1956), Ph.D. (1962), Stanford. At Oregon since 1961.
- *EGBERT S. WENGERT, Ph.D., Professor of Political Science; Head of Department.
B.A. (1933), LL.B. (1936), Ph.D. (1936), Wisconsin. At Oregon since 1948.
- EDWARD S. WEST, Ph.D., Professor of Biochemistry, Medical School; Chairman of Department.
A.B. (1917), Randolph-Macon; M.S. (1920), Kansas State; Ph.D. (1923), Chicago. At Oregon since 1934.
- ARNOLD M. WESTLING, B.S., Planning and Public Works Consultant, Bureau of Municipal Research and Service (Associate Professor).
B.S. (1943), Washington. At Oregon since 1947.
- KATHRYN I. WHYTE, M.S., Instructor in Education.
B.A. (1961), M.S. (1963), Oregon. At Oregon since 1961.
- GOLDA P. WICKHAM, B.S., Associate Dean of Students (Associate Professor).
B.S. (1931), Oregon. At Oregon since 1944.
- MARGARET J. WIESE, M.A., Assistant Professor of Home Economics; Head of Department.
B.S. (1941), Iowa State; M.A. (1945), Iowa. At Oregon since 1947.
- DALE W. WILE, B.A., Instructor in Speech.
B.A. (1958), Washington State. At Oregon since 1963.
- JACK WILKINSON, Professor of Art; Head of Department of Fine and Applied Arts.
Grad. (1937), California School of Fine Arts. At Oregon since 1941.
- OLIVER M. WILLARD, Ph.D., Associate Professor of English.
B.A. (1927), Stanford; A.M. (1931), Ph.D. (1936), Harvard. At Oregon since 1946.
- RUTH A. WILLARD, Ed.D., Associate Professor of Education.
B.A. (1943), M.A. (1945), Iowa; Ed.D. (1952), California. At Oregon since 1952.
- ASTRID M. WILLIAMS, Ph.D., Associate Professor of Germanic Languages.
B.A. (1921), M.A. (1932), Oregon; Ph.D. (1934), Marburg. At Oregon since 1935.
- †DANIEL A. WILLIAMS, B.S., Counselor Supervisor, Dormitories (Instructor).
B.S. (1962), Oregon. At Oregon since 1963.
- MILDRED H. WILLIAMS, D.Ed., Adjunct Associate Professor of Education; Head of Social Studies Department, South Eugene High School.
B.A. (1925), M.A. (1930), D.Ed. (1954), Oregon. At Oregon since 1930.

* Deceased Feb. 22, 1964.

† On leave of absence, winter and spring terms, 1963-64.

- RICHARD CAMPBELL WILLIAMS, B.S., Director of Development; Tennis Coach (Assistant Professor).
B.S. (1941), Oregon. At Oregon 1941-54 and since 1961.
- RICHARD CHARLES WILLIAMS, B.S., Instructor in Economics.
B.S. (1960), Oregon. At Oregon since 1964.
- DOROTHY M. WILSON, M.Mus., Instructor in Music Education.
B.A. (1943), M.Mus. (1959), Oregon. At Oregon since 1962.
- NEIL E. WILSON, M.Mus., Assistant Professor of Voice.
B.F.A. (1952), M.Mus. (1955), New Mexico. At Oregon since 1961.
- ROBERT R. WILSON, M.A., Instructor in English.
B.A. (1956), M.A. (1958), Chicago. At Oregon since 1963.
- WYMAN H. WILSON, D.D.S., Professor of Dentistry, Dental School; Head of Department of Crown and Bridge.
D.D.S. (1937), Minnesota. At Oregon since 1951.
- DONALD E. WIMBER, Ph.D., Associate Professor of Biology.
B.A. (1952), San Diego State; M.A. (1954), Ph.D. (1956), Claremont. At Oregon since 1963.
- CARRYL H. WINES, Superintendent of University Press (Instructor).
At Oregon since 1962.
- *RAYMOND G. WOLFE, JR., Ph.D., Associate Professor of Chemistry.
A.B. (1942), M.A. (1948), Ph.D. (1955), California. At Oregon since 1956.
- HUGH B. WOOD, Ed.D., Professor of Education.
B.S. (1931), Toledo; M.A. (1935), Colorado; Ed.D. (1937), Columbia. At Oregon since 1939.
- KENNETH S. WOOD, Ph.D., Professor of Speech; Director, Speech and Hearing Clinic.
B.S. (1935), Oregon State; M.A. (1938), Michigan; Ph.D. (1946), Southern California. At Oregon since 1942.
- MABEL A. WOOD, M.S., Professor of Home Economics.
B.S. (1925), Oregon State; M.S. (1930), Columbia. At Oregon since 1932.
- JANET G. WOODRUFF, M.A., Professor of Physical Education.
B.S. (1926), M.A. (1929), Columbia. At Oregon since 1929.
- ARDEN WOODS, B.A., Instructor in Romance Languages.
B.A. (1957), Oregon. At Oregon since 1963.
- WILLIAM C. WOODS, M.M., Assistant Professor of Piano.
B.M. (1948), M.M. (1949), Southern California. At Oregon since 1950.
- RICHARD K. WOODWARD, M.D., Assistant University Physician; Assistant Professor of Health Education.
B.S. (1955), M.D. (1960), Oregon. At Oregon since 1961.
- DAVID F. WRENCH, Ph.D., Assistant Professor of Psychology.
B.A. (1954), Reed; M.A. (1958), Oregon; Ph.D. (1961), North Carolina. At Oregon since 1961.
- CHARLES R. B. WRIGHT, Ph.D., Assistant Professor of Mathematics.
B.A. (1956), M.A. (1957), Nebraska; Ph.D. (1959), Wisconsin. At Oregon since 1961.
- EMMA G. WRIGHT, A.B., B.S. in L.S., Senior Acquisition Librarian (Assistant Professor).
A.B. (1925), Miami (Ohio); B.S. in L.S. (1939), Illinois. At Oregon since 1946.
- IRWIN I. WRIGHT, B.S., Director of Physical Plant (Associate Professor).
B.S. (1926), Kansas State. At Oregon since 1947.
- LEAVITT O. WRIGHT, Ph.D., Professor Emeritus of Romance Languages.
A.B. (1914) Harvard; B.D. (1917), Union Theological Seminary; M.A. (1925), Ph.D. (1928), California. At Oregon since 1926.

* On sabbatical leave 1963-64.

JOAN YEATMANN, B.A., Instructor in English.

B.A. (1961), Southwestern Louisiana. At Oregon since 1963.

HILDA S. F. YEE, M.Ed., Head Resident, Adviser, Dormitories (Instructor).

B.Ed. (1958), M.Ed. (1960), Hawaii. At Oregon since 1962.

BERTRAM YOOD, Ph.D., Professor of Mathematics.

B.S. (1938), Ph.D. (1947), Yale; M.S. (1939), California Institute of Technology. At Oregon since 1953.

LOIS J. YOUNGEN, M.A., Assistant Professor of Physical Education.

B.S. (1955), Kent; M.A. (1957), Michigan State. At Oregon since 1960.

*WALTER L. YOUNGQUIST, Ph.D., Professor of Geology.

A.B. (1942), Gustavus Adolphus; M.S. (1943), Ph.D. (1948), Iowa. At Oregon since 1957.

JAN ZACH, Associate Professor of Art.

At Oregon since 1958.

CHARLES F. ZIEBARTH, Ph.D., Associate Professor of Transportation.

B.A. (1931), M.A. (1932), Washington State; Ph.D. (1952), Chicago. At Oregon since 1946.

WILLIAM A. ZIMMERMAN, B.S., Assistant Dean for Business Affairs, Medical School (Professor).

B.S. (1939), Oregon. At Oregon since 1940.

ARNULF ZWEIG, Ph.D., Assistant Professor of Philosophy.

B.A. (1952), Rochester; Ph.D. (1960), Stanford. At Oregon since 1956.

* On sabbatical leave 1963-64.

General Information

History of the University

THE UNIVERSITY OF OREGON was established by an act of the Oregon Legislature in 1872, but did not open its doors to students until four years later, in 1876. The founding of the University grew out of a Federal grant, authorized in the Donation Act of September 27, 1850, of two townships of land "to aid in the establishment of a university in the territory of Oregon." The territory then included the entire Oregon Country; it was specified that one of the townships was to be located north of the Columbia.

On July 17, 1854, the grant was changed by an act reserving two townships each for the newly separated Washington and Oregon territories. This grant was confirmed on February 14, 1859, when the Act of Congress admitting Oregon into the Union provided for a grant of seventy-two sections of land for the establishment and support of a state university. The Legislature, by an act of June 3, 1859, committed the people of Oregon to the application of the proceeds from this grant "to the use and support of a state university."

The settlement of Oregon and the accumulation of funds from the sale of these University lands progressed slowly. In 1850 the population of the entire Oregon Country was only 13,294. In 1860 the population of the state was 52,465, and in 1870, 90,993. There were already five denominational colleges in the state in 1860, and the United States census of 1870 reported that there were twenty "classical, professional and technical" institutions ("not public") in Oregon. The creation of a state university was deferred.

However, after a fund of \$31,635 had accumulated from the sale of University lands, the Legislature on October 19, 1872 passed an act "to create, organize and locate the University of the State of Oregon." Eugene was chosen as a site after the Lane County delegation in the Legislature had offered to provide a building and campus worth \$50,000. The Union University Association of Eugene, the organization promoting the institution, was given two years in which to construct this building.

Construction of the building, Deady Hall, began in May 1873. However, the genesis of the University and the economic troubles of 1873 coincided, and it was only after an intense struggle to keep the enterprise alive and a two-year extension of time for completion that the conditions specified in the act creating the University were declared fulfilled. The site and building were accepted by the state on July 28, 1876, and the University opened its first session on October 16, 1876. The first class was graduated in June 1878.

Deady Hall was the nucleus around which other University buildings later arose; Villard Hall, the second campus structure, was built in 1885.

The first University courses were limited almost entirely to classical and literary subjects; the demand for a broader curriculum was, however, gradually met by the addition of scientific and professional instruction. Around the original liberal arts college were organized the professional schools, beginning with the School of Law, established as a night law school in Portland in 1884 (in 1915 the School of Law was moved to Eugene and reorganized as a regular division of the University). The Medical School was established in Portland in 1887. The Graduate School was organized in 1900, the School of Music in 1902, the School of Education in 1910, the School of Architecture and Allied Arts and the School of

Business Administration in 1914, the School of Journalism in 1916, and the School of Health, Physical Education, and Recreation in 1920. The Dental School, located in Portland, became a part of the University in 1945; its previous history as a privately supported institution dates from 1893. The School of Nursing, located on the Medical School campus in Portland, was organized in 1960 (a degree curriculum in nursing has been offered by the University since 1926; from 1932 to 1960 the program was administered through the Department of Nursing Education of the Medical School). The Honors College was established in 1960.

Since its founding, the following men have served the University as president: John Wesley Johnson, 1876-1893; Charles H. Chapman, 1893-1899; Frank Strong, 1899-1902; Prince Lucien Campbell, 1902-1925; Arnold Bennett Hall, 1926-1932; Clarence Valentine Boyer, 1934-1938; Donald Milton Erb, 1938-1943; Orlando John Hollis, acting president, 1944-1945; Harry K. Newburn, 1945-1953; Victor Pierpont Morris, acting president, 1953-1954; O. Meredith Wilson, 1954-1960; William C. Jones, acting president, 1960-1961; Arthur S. Flemming, since 1961.

Income

THE STATE LAW creating the Board of Higher Education specified that this body was to "have and exercise control of the use, distribution and disbursement of all funds, appropriations and taxes, now or hereafter in possession, levied and collected, received or appropriated for the use, benefit, support and maintenance of institutions of higher education." Under this act, effective July 1, 1931, the Board administers all funds for all state-supported higher-educational activities, including the University of Oregon, on the basis of a unified budget.

Funds for the support of higher education in Oregon are derived primarily from the following sources: state appropriations for the operation of the institutions; specified sums from the national government assigned for definite purposes by Congressional acts; income from student tuition and fees; and other sources such as gifts, grants, sales, service charges, etc.

Campuses

THE MAIN CAMPUS of the University of Oregon is located in Eugene (population 51,000), 109 miles south of Portland, at the head of the Willamette Valley. Eugene is a progressive city with excellent schools, numerous churches, and strong civic and social organizations. The climate is mild, with moderate winters and cool summers. The average annual rainfall is 38½ inches, with the heaviest rainfall in the winter months, November, December, and January.

The Eugene campus occupies about 187 acres of land in the eastern part of the city. The campus is bisected by Thirteenth Avenue. The first University buildings were erected north of Thirteenth, on what is known as the "old campus." Later expansions have been principally to the south and east.

Most of the buildings on the old campus are arranged in a quadrangle: Fenton Hall, Deady Hall, Villard Hall, Lawrence Hall, Allen Hall, and Friendly Hall. Johnson Hall (the Administration Building) is located across Thirteenth Avenue, facing the north quadrangle. South of Johnson Hall is an integrated group of buildings, including Gerlinger Hall (the women's gymnasium) and two dormitories, Hendricks Hall and Susan Campbell Hall.

A new quadrangle being developed to the west includes Commonwealth Hall, north of Thirteenth Avenue, and, to the south, Condon Hall, Chapman Hall, the Museum of Art, Prince L. Campbell Hall, and the University Library. The Education Building and the Music Building are located south of this quadrangle.

Until the 1920s the east boundary of the campus was, roughly, University Street. Significant expansion beyond this boundary began with the erection of McArthur Court (the student athletic center) and the John Straub Memorial Building (a men's dormitory), and continued in the 1930s with the erection of the Physical Education Building and the Student Health Service Building. Recent additions in this area are the Science Building, the Anthropology Building, Emerald Hall (a temporary structure housing administrative and student-counseling offices), the Donald M. Erb Memorial Union, and several dormitories.

Since the end of World War II, extensive temporary housing facilities for married students have been erected on or near the campus. These facilities include houses and apartments east of the main campus and row-house apartments occupying a 30-acre tract about six blocks southwest of the campus. A permanent housing project for married students is being developed on the west side of Eugene.

There are three notable works of sculpture on the campus. "The Pioneer," by Alexander Phimister Proctor, stands on the old campus, facing Johnson Hall; it was given to the University in 1919 by Joseph N. Teal. "The Pioneer Mother," also by Proctor, is located in the women's quadrangle; it was given to the University in 1932 by Vice-President Emeritus Burt Brown Barker, in memory of his mother. "Prometheus" (1958), by Jan Zach, north of the Museum of Art, is the gift of alumnae and student members of Gamma Phi Beta.

The Medical School, the Dental School, and the School of Nursing are located on an 101-acre campus in Portland's southwest hills, overlooking the city. For further information see the Medical School, Dental School, and School of Nursing catalogs.

Libraries

CARL W. HINTZ, Ph.D.	University Librarian
DONALD T. SMITH, M.A., M.S.	Assistant University Librarian
EUGENE B. BARNES, Ph.D.	Head Acquisition Librarian
ELIZABETH FINDLY, A.M.L.S.	Head Reference and Documents Librarian
DON L. HUNTER, B.S.	Head of Audio-Visual Department
HOLWAY R. JONES, B.L.S., M.A.	Head Social Science Librarian
CLARICE E. KRIEG, B.S. in L.S., A.M.	Head Catalog Librarian
ROBERT R. MCCOLLOUGH, M.S., M.A.	Head Humanities Librarian
MARY CLAIRE MEYER, M.A.	Acting Head Circulation Librarian
BERNICE RISE, A.B., B.S. in L.S.	Readers' Consultant and Browsing Room Librarian
*ALAN W. ROECKER, B.L.S., Ph.M.	Head Science Librarian
EDWARD P. THATCHER, M.A.	Acting Head Science Librarian
MARTIN SCHMITT, B.S., B.S. in L.S.	Curator of Special Collections
MARGARET MARKLEY, A.B., B.S. in L.S.	Senior Catalog Librarian
ELLEN T. PUGH, B.A. in L.S., M.A.	Senior Catalog Librarian
EMMA G. WRIGHT, A.B., B.S. in L.S.	Senior Acquisition Librarian
ROBIN BRANT, M.L.S.	Catalog Librarian
JAMES A. CORBETT, M.A., M.S. in L.S.	Humanities Librarian
SHARON FINBERG, M.A. in L.S.	Reference Librarian
ALFRED HEILPERN, M.L.	Acquisition Librarian
JOHN H. HENDRICKSON, M.Mus.	Audio-Visual Librarian
EDWARD G. HOLLMAN, M.A., M.S. in L.S.	Social Science Librarian
JANE Y. C. HSU, B.A.	Catalog Librarian
DWIGHT H. HUMPHREY, A.B., B.S. in L.S., M.A.	Catalog Librarian
EDWARD C. KEMP, M.L.S.	Acquisition Librarian
ROBERT R. LOCKARD, M.A.	Social Science Librarian
JUANITA McCLAIN, M.A.	Acquisition Librarian
R. R. McCREADY, M.A.	Reference Librarian
CORINNE McNEIR, M.S. in L.S.	Documents Librarian
JOSEPHINE MAILLARD, M.L.S.	Reference Librarian

* On leave of absence 1963-64.

DOROTHY M. MANNING, M.L.....	Catalog Librarian
ALICE NOLTE, M.S.....	Science Librarian
GUIDO PALANDRI, B.A., B.L.S.....	Catalog Librarian
MIRIAM A. PERRY, B.A., Lib. Cert.....	Catalog Librarian
DOROTHY SCHERER, M.A. in L.S.....	Reference Librarian
ROSE MARIE SERVICE, M.A.....	Social Science Librarian
BETTY MAE STAMM, B.A.....	Acquisition Librarian
LOIS BAKER, M.A.....	Law Librarian
THOMAS H. CAHALAN, M.S. in L.S.....	Dental School Librarian
BERTHA HALLAM, B.A.....	Medical School Librarian
FRANCES NEWSOM, M.A.....	Architecture and Allied Arts Librarian

THE SERVICES of the University of Oregon Library are organized in broad subject divisions: Social Science, Science, Humanities, and General Reference and Documents. Each of the divisions has its own reading rooms, conveniently integrated with its book collections. All University students have free access to the book stacks.

The services of the subject divisions are supplemented by the Audio-Visual Department, which provides facilities for the production, preservation, and use of recordings, slides, films, and similar materials, and by the Special Collections Department, which is responsible for the development and care of collections of Pacific Northwest historical materials, rare books, manuscripts, and University archives.

The University Library was founded in 1882 through a gift of books, worth \$1,000, selected and purchased by Henry Villard of New York City. Before 1882 the only library available to students was a collection of about 1,000 volumes owned by the Laurean and Eutaxian student literary societies; this collection was made a part of the University Library in 1900. In 1881 Mr. Villard gave the University \$50,000 as a permanent endowment; a provision of the gift was that at least \$400 of the income should be used for the purchase of nontechnical books for the Library.

In addition to the general Library collections, the University has a number of specialized libraries with permanent collections. The holdings of the several libraries are shown below:

General Library	772,137
Law Library	57,066
Gertrude Bass Warner Memorial Library	984
Municipal Reference Library	20,882
Medical School Library	84,259
Dental School Library	8,811
Total	944,139

Other materials in the University Library include: 67,037 maps; 104,584 photos, pictures, and prints; 11,076 sound recordings; 69,794 slides; 529 film strips; 367 motion picture films; 88,513 uncataloged pamphlets; and 747,784 manuscripts.

The Library's facilities for undergraduate work are excellent, and strong collections for advanced study and research are being built in the various fields of liberal and professional scholarship. All of the books in the libraries of the institutions of the Oregon State System of Higher Education are available to the students and faculty of the University.

Some of the Library's resources of particular value for advanced study are: a collection of source materials on English life and letters in the seventeenth century; a collection of books, reports, and periodicals on English opinion and politics of the nineteenth century, including considerable material on English liberalism in its relation to public education; materials on the history of American education in the nineteenth century; a collection of pamphlets on the English corn laws; the Overmeyer Collection of published works on the Civil War; a collection of Balzaciana; unusually extensive and complete files of psychological periodicals; an

extensive collection of Oregon and Pacific Northwest manuscripts, photographs, maps, pamphlets, books, and newspapers. The noncurrent records of the University of Oregon are deposited with the Library as University archives.

The Burgess Collection of manuscripts, incunabula, and rare books is the gift of Miss Julia Burgess, late professor of English at the University, and of friends of the institution.

The Ernest Haycox Memorial Library, housed in a special room in the Library, consists of books and other materials accumulated by the late Mr. Ernest Haycox, '23, for background and reference use during his twenty-five-year career as a writer.

The Douglass Room, established through a bequest from the late Matthew Hale Douglass, former librarian of the University, contains record collections, collections of music scores, and reference books in the fields of music. The room is equipped with phonographs with earphone attachments for individual listening.

The Philip Brooks Memorial Library, the gift of Mrs. Lester Brooks, is a reference collection of standard sets of American and English authors; it is housed in a special room on the third floor of the Library building.

The Adelaid Church Memorial Room, a "browsing room" for recreational reading in the Student Union, is operated as a department of the University Library. Collections maintained in this room include the Pauline Potter Homer Collection of fine editions, illustrated books, books with fine bindings, and examples of the work of private presses.

The Municipal Reference Library, housed in the office of the Bureau of Municipal Research and Service in Commonwealth Hall, contains books, pamphlets, and other materials dealing with problems of local government.

The Law Library, housed in Fenton Hall, contains complete case reports of the National Reporter System, complete state reports from Colonial times to the establishment of the Reporter System, a substantial collection of English and Canadian case law, compilations of state and Federal statute law, standard legal digests and encyclopaedias, etc. Its periodical collection includes about 300 titles. An excellent collection of publications relating to Oregon territorial and state laws includes an extensive file of Oregon Supreme Court briefs.

The Gertrude Bass Warner Memorial Library of books on the history, literature, life, and particularly the art of Oriental countries is the gift of Mrs. Warner.

The School of Architecture and Allied Arts has a reference collection in Lawrence Hall. The collection includes the architecture library of the late Ion Lewis, Portland architect, given in 1929 by Mr. Lewis, and the library of William Whidden, given by his heirs.

The University Library issues a semiannual periodical, the *CALL NUMBER*, containing articles and notes of a broadly bibliographical nature, with special reference to its own collections.

Service. During the regular sessions the main Library is open on Mondays, Tuesdays, Wednesdays, and Thursdays from 8:00 a.m. to 11:00 p.m.; on Fridays from 8:00 a.m. to 10:00 p.m.; on Saturdays from 8:00 a.m. to 5:00 p.m.; and on Sundays from 2:00 to 10:00 p.m. During vacation periods the Library is open from 9:00 a.m. to 5:00 p.m. Books other than reference books and those especially reserved for use in the Library may be borrowed for a period of two weeks, with the privilege of renewal if there is no other demand. Library privileges are extended to all University students and staff members, and may be granted to other persons upon application.

Library Fines and Charges. The following regulations govern Library fines and charges:

(1) A fine of 5 cents per day is charged for all overdue books other than reserve books and material circulated by special permission.

(2) The following fines are charged for violation of rules governing reserve books and

material circulated by special permission: (a) for overdue books, 25 cents for the first hour and 5 cents for each succeeding hour, or fraction thereof, until the book is returned or reported lost (a maximum charge of \$1.00 an hour may be made in case of flagrant violation of the rules); (b) for failure to return books to proper department desk, 25 cents.

(3) Books needed for use in the Library are subject to recall at any time. A maximum fine of \$1.00 a day may be imposed for failure to return promptly.

(4) A service charge of 10 cents is added to all fines reported to the Business Office for collection.

(5) Borrowers losing books are charged: (a) the replacement cost of the book, (b) the amount of fine incurred up to the time the book is reported missing, and (c) a service charge of \$3.00.

(6) When a lost book, for which the borrower has been billed, is returned before a replacement has been ordered, a refund not exceeding the replacement cost plus the \$3.00 service charge may be made. In cases where a replacement has been ordered, any refunds to the borrower are at the discretion of the librarian.

Instruction. A program of study in library science is offered through the Department of Librarianship of the School of Education to prepare students for positions as school librarians and for intermediate positions in public libraries. The program includes a graduate major leading to the master's degree.

The department also offers a service course to acquaint students with the resources of the University Library and to aid them in the use of these resources.

Unified Facilities. The library collections at the state institutions of higher education in Oregon have been developed to meet special needs on each campus; but the book stock of the libraries, as property of the state, circulates freely to permit the fullest use of all books. The library facilities of the several institutions are coordinated through a State System director of libraries. The director is also librarian of Oregon State University, Corvallis, where the central offices of the library system are located. An author list of books in the Oregon State University Library is maintained in the University of Oregon Library.

Museums and Collections

MUSEUMS AND COLLECTIONS maintained at the University include the Museum of Art and the Museum of Natural History. Art exhibits are also shown in the gallery on the second floor of the Student Union.

Museum of Art

WALLACE S. BALDINGER, Ph.D.....Director
MARK CLARKE, B.S.....Curator

The Museum of Art, housing the Murray Warner Collection of Oriental Art and other University art collections, was erected in 1930. The building and the garden court adjoining it, both dedicated to the memory of Prince Lucien Campbell, fourth president of the University, were financed through gifts.

The Warner Collection was given to the University in 1921 by Mrs. Gertrude Bass Warner as a memorial to her husband, Major Murray Warner, with whom she had been collecting works of Oriental art from the time of their marriage in China in 1904 until his death in 1920. Mrs. Warner continued until her death in 1951 to augment and improve the collection and direct its exhibition. She also established a museum reference library for studies in Oriental art; the collection is now known as the Gertrude Bass Warner Memorial Library.

The Murray Warner Collection includes 3,196 accessioned objects, representing principally the cultures of China and Japan, but including some works of art from Korea, Cambodia, Mongolia, and Russia.

The first-floor galleries of the Museum of Art are reserved for the showing of traveling exhibitions, the display of special study material, and exhibitions of

the work of local and Northwest artists. Exhibitions and acquisitions for the permanent collections are financed principally through a Friends of the Museum organization; membership is open to the public.

Museum of Natural History

J. ARNOLD SHOTWELL, Ph.D.....	Director; Curator of Fossil Vertebrates
DAVID L. COLE, M.S.....	Curator of Anthropology
WILBUR A. DAVIS, Ph.D.....	Assistant Curator of Anthropology
LEROY DETLING, Ph.D.....	Curator of the Herbarium
JANE GRAY, Ph.D.....	Curator of Palaeobotany
LAURENCE R. KITTLEMAN, Ph.D.....	Curator of Geology

The Museum of Natural History is primarily a research department devoted to studies of the history of the earth, plants, animals, and man as found in Oregon. The knowledge gained in these studies is made available to the public through displays, publications, a public-school loan program, a museum information service, and loans to other institutions. As a repository, the Museum of Natural History maintains large collections of fossils, plants, animals, rocks, and the objects used by primitive man.

In addition to storage and display areas, the Museum of Natural History has a preparation laboratory and shop, an archaeology laboratory, palaeoecology laboratories including facilities for the study of sedimentation and pollen, and drafting, illustration, and darkroom areas, for staff and graduate-student research.

The former Condon Museum of Geology and the Museum of Vertebrate Zoology are integrated into the Museum of Natural History. The anthropological collections are designated by state law as the Oregon State Museum of Anthropology.

The Herbarium of the Museum of Natural History maintains a large collection of plants of Oregon and the Northwest, including the Howell, Leiberg, and Cusick collections. The palaeobotanical collections include fossil leaves and pollen from many localities. Tertiary fossil vertebrates represent all stages of the history of the fauna of Oregon. Skins and skeletons of mammals and birds are available for study. The artifacts of primitive man in Oregon are well represented in the large archaeological collections. The collections also include specimens illustrating the material culture of primitive peoples of many parts of the world. The collections are continually augmented through an intensive field program and gifts.

The displays of the museum are open daily. Large groups should make appointments in advance to avoid congestion. During the academic year the museum is open Monday through Friday from 8:00 a.m. to 5:00 p.m. and on Saturday and Sunday from 1:30 p.m. to 5:00 p.m. The museum is not open on week ends in the summer.

Official Publications

THE 1932 LEGISLATIVE ACT placing all the Oregon state institutions of higher education under the control of one Board provided that all public announcements pertaining to the several institutions "shall emanate from and bear the name of the Department of Higher Education and shall be conducted in such a way as to present to the citizens of the state and prospective students a fair and impartial view of the higher educational facilities provided by the state and the prospects for useful employment in the various fields for which those facilities afford preparation." Official publications of the University of Oregon include:

University of Oregon Bulletin. The UNIVERSITY OF OREGON BULLETIN is published nine times a year by the State Board of Higher Education. Included in the BULLETIN are the official catalogs of the University and its several divisions.

University of Oregon Books. Scholarly studies published by the University appear under the imprint, UNIVERSITY OF OREGON BOOKS. Some studies also carry a serial designation, UNIVERSITY OF OREGON MONOGRAPHS.

Comparative Literature. COMPARATIVE LITERATURE, a quarterly journal, is published by the University of Oregon in cooperation with the Comparative Literature Section of the Modern Language Association of America.

Oregon Law Review. The OREGON LAW REVIEW is published quarterly under the editorship of the faculty of the School of Law as a service to the members of the Oregon bar and as a stimulus to legal research and productive scholarship on the part of students.

Oregon Business Review. The OREGON BUSINESS REVIEW is published monthly by the Bureau of Business Research. Its primary purpose is to report and interpret current business and economic conditions in Oregon and the Pacific Northwest.

Call Number. The CALL NUMBER is published semiannually by the University of Oregon Library. It contains articles and notes of a broadly bibliographical nature, with special reference to the Library's own collections.

Curriculum Bulletin. The Curriculum Bulletin is published ten times a year by the School of Education. Each issue presents a single topic of interest to school teachers and administrators.

Physical-Education Microcards. The University issues, through the School of Health, Physical Education, and Recreation, several microcard series in the fields of health, physical education, recreation, and related subjects. The series include dissertations, theses, and other unpublished research materials, and out-of-print scholarly books and periodicals.

Municipal Research Bulletins. The publications of the Bureau of Municipal Research and Service, intended primarily as a service to city officials in the state of Oregon, are issued in four series, INFORMATION BULLETINS, LEGAL BULLETINS, FINANCE BULLETINS, and SPECIAL BULLETINS, published for the most part in mimeographed form.

Academic Regulations

Admission

TO BE ADMITTED to the University of Oregon a student must be of good moral character and must present evidence of acceptable preparation for work at the college level. Every person wishing to earn credit in the regular sessions of the University must file with the Director of Admissions: (1) an application on an official University form; (2) official transcripts of all high-school and college records.

Application and transcripts of records should be filed well before the applicant intends to enter the University; late filing may delay or prevent registration. If a student fails to submit the required documents in complete and satisfactory form, his admission and registration may be canceled. All records submitted become the property of the University.

Students planning to enter the University in the fall term should file their applications for admission with the Director of Admissions not later than August 31. A late-filing fee of \$10.00 is charged if applications are filed later than this date.

Deferred Enrollment. If it is determined, before the opening of the 1964-65 session, that the University enrollment will otherwise exceed the total on which the 1964-65 budget is based, a plan of deferred enrollment may be put into effect. Under this plan, the qualitative requirements for admission will remain unchanged. But, in the case of students whose records are submitted after the effective date of the plan, permission to enroll *in the fall term* will be given on the basis of more restrictive qualitative standards; students who do not meet these more restrictive standards but do meet general standards stated below will be officially admitted to the University with enrollment deferred until the winter or spring term. Early submission of applications may, therefore, be of great advantage for students planning to enter the University in the fall term.

Admission to Freshman Standing

To be admitted to freshman standing in the University, a student must be a graduate of a standard or accredited high school and, in addition, meet certain qualitative educational standards. The qualitative requirements for residents of Oregon differ from those for nonresident students:

Resident Students. To be eligible for admission with freshman standing in the *fall term*, a student who is a resident of Oregon must: (1) have a 2.25 grade-point average in all high-school subjects taken for graduation; *or* (2) attain a satisfactory score on the College Entrance Examination Board Scholastic Aptitude Test; *or* (3) achieve a GPA of 2.00 on a full load of studies (at least 9 term hours) in a regular collegiate summer session, including a course in English composition and two or more courses from the fields of literature, social science, or science.

To be eligible for admission on the basis of high-school grades in the winter or spring terms, a resident student must have a high-school GPA of 2.00.

Nonresident Students. To be eligible for admission with freshman standing, a student who is not a resident of Oregon must: (1) have a 2.75 grade-point average in all high-school subjects taken for graduation; *or* (2) have a 2.25 high-school GPA combined with a satisfactory score on the Scholastic Aptitude Test;

or (3) achieve a GPA of 2.25 on 12 term hours of work in a regular collegiate summer session, including a course in English composition and two or more courses from the fields of literature, social science, or science.*

Early Admission. A high-school student who is a resident of Oregon, has a cumulative GPA of 2.50 or a Scholastic Aptitude Test score of 950 at the end of the first half of his senior year, and is recommended by his high-school principal will be granted admission to the University before graduation. On application to the Director of Admissions a nonresident high-school student will be granted admission before graduation on the basis of a 3.00 GPA or a 2.50 GPA and a Scholastic Aptitude Test score of 1,000 at the end of the first half of his senior year and recommendation of his principal. Enrollment in the University after early admission is contingent on graduation from high school and submission of a complete high-school transcript.

Credentials. A student applying for admission to freshman standing must submit to the Office of Admissions: (1) records of all school work taken beyond the eighth grade, certified by the proper school official on the official form used by his high school for this purpose; and (2) certified results of the following College Entrance Examination Board tests: (a) Scholastic Aptitude Test, (b) achievement test in English composition, (c) achievement test in intermediate mathematics, and (d) achievement test in a foreign language, if he has studied a foreign language for two years in high school.† See also ENTRANCE EXAMINATIONS, page 67.

Scores on the College Entrance Examination Board tests are used primarily as a basis for advising and placement. As indicated above, however, students may satisfy the University's qualitative standards for admission through a satisfactory score on the Scholastic Aptitude Test.

Advanced Placement Program. Students who have completed college-level studies in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board, and who have received satisfactory grades in examinations administered by the Board, may be granted credit toward a bachelor's degree in comparable University courses on admission to freshman standing. For further information, see page 123.

Admission of Transfer Students

Transfer students are persons admitted to the University of Oregon after having been registered in any other institution of collegiate grade or in a department or center of extension work, including the Division of Continuing Education of the Oregon State System of Higher Education.

A transfer student must present evidence that he was in good standing when he left the college or university previously attended, and must meet certain qualitative standards of scholastic attainment. The qualitative requirements for residents of Oregon differ from the requirements for nonresidents: resident students—a grade-point average of 2.00 covering all previous college work; nonresident students—a GPA of 2.25.* Transfer students who present fewer than 12 term hours of collegiate credit must also meet the requirements for freshman standing.

The amount of transferred credit granted depends upon the nature and quality of the applicant's previous work, evaluated according to the academic requirements of the University. Records from fully accredited institutions are evaluated before admission is granted.

* A nonresident student who is not eligible for admission under the stated conditions may be admitted if a faculty committee determines that he can probably pursue University studies with profit.

† Information concerning scheduled test dates and the location of testing centers may be obtained from high-school counselors or from the College Entrance Examination Board, Box 592, Princeton, N.J., or 1947 Center St., Berkeley, Calif.

Credit transferred from an accredited junior college may be counted only as a part of the first 93 term hours earned toward a baccalaureate degree.

No advanced standing is granted at entrance for work done in nonaccredited collegiate institutions. However, after three terms of satisfactory work in the University, an undergraduate student transferring from a nonaccredited institution may, on petition, receive credit in University of Oregon courses to which courses taken at the unaccredited institution are approximately equivalent; validating examinations may be required. Petitions for such credit may be based only on regularly organized college-level courses.

Transfer students are required to file with the Office of Admissions: (1) complete official records of all school work beyond the eighth grade; and (2) a certified score on the College Entrance Examination Board Scholastic Aptitude Test. College records must be certified by the registrar of the institution providing the record; if the student's high-school record is adequately shown on his college transcript, he need not obtain another record direct from his high school. If a student has taken the Scholastic Aptitude Test on a previous occasion, he need not take it again, but may obtain and submit a transcript of his score from the College Entrance Examination Board.

Admission to Major Programs. Several University schools and departments have special requirements for the admission of transfer students as majors and for the granting of transfer major credit—in addition to the general requirements of the University. These requirements are frequently set in accordance with the standards of national professional accrediting organizations. Where there are such special requirements, they are stated in school and department sections in this Catalog.

Admission of Special Students

Students qualified by maturity and ability to do satisfactory University work, but who fail in some respect to meet the requirements for regular standing, may apply for admission as special students. Requirements for special-student admission include a satisfactory score in the College Entrance Examination Board Scholastic Aptitude Test and the joint approval of the Director of Admissions and the dean of the college or school in which the applicant wishes to study. Special-student status is not granted to upper-division students with less than a 2.00 GPA.

A special student should qualify for regular standing as soon as possible, by satisfactory University work and by the removal of any entrance deficiencies; if his grades when admitted were below a C average, he must raise his cumulative average to that level before being granted regular standing. A student may not continue for more than 45 term hours of University work under special-student classification without explicit permission (which is seldom granted). A special student may earn credits toward a degree; to qualify for a degree, however, he must complete at least 45 term hours of work after he has been granted regular standing. (In case a regular student changes to special status, work done while a special student will not apply toward a degree.)

Admission to Graduate Standing

For requirements and procedures for admission to graduate study see GRADUATE SCHOOL, pages 105 ff.

Entrance Examinations

TO PROVIDE THE FACULTY with a basis for reliable advice and assistance to students in planning their programs and, in certain cases, for determi-

nation of eligibility for enrollment, the University requires all entering undergraduate students to submit certified scores on the College Entrance Examination Board Scholastic Aptitude Test; freshman students are required to submit, in addition, scores on the College Board achievement tests in the following fields: English composition, intermediate mathematics, a foreign language (if the student has studied a foreign language for two years in high school).

It is important that students whose eligibility for enrollment may be determined in part by test scores take these examinations no later than the College Board's March or May test dates. All entering students are expected to take the tests before they arrive on the campus; however, students whose scores will be used for counseling purposes only may apply to the University Counseling Center for permission to take the tests at a special campus administration.

All entering students, undergraduate and graduate, are also required to take a physical examination and provide evidence of immunization to certain contagious diseases (see pages 85-86). The physical examination is given by a physician chosen by the student, who provides an examination report to the University Student Health Service.

Degrees

WHEN REQUIREMENTS for degrees are changed, special arrangements may be made for students who have taken work under the old requirements. In general, however, a student will be expected to meet the requirements in force at the time he plans to receive a degree. The University grants the following degrees:

Honors College—B.A. (Honors College).

Liberal Arts—B.A., B.S., M.A., M.S., M.F.A., Ph.D.

Architecture and Allied Arts—B.A., B.S., B.Arch., B.I.Arch., B.L.A., M.A., M.S., M.Arch., M.F.A., M.L.A., M.U.P.

Business Administration—B.A., B.S., B.B.A., M.A., M.S., M.B.A., D.B.A.

Dentistry—M.S., D.M.D.

Education—B.A., B.S., B.Ed., M.A., M.S., M.Ed., D.Ed., Ph.D.

Health, Physical Education, and Recreation—B.A., B.S., B.P.E., M.A., M.S., D.Ed., Ph.D.

Journalism—B.A., B.S., M.A., M.S.

Law—B.A., B.S., LL.B., J.D.

Medicine—M.A., M.S., Ph.D., M.D.

Music—B.A., B.S., B.Mus., M.A., M.S., M.Mus.

Nursing—B.A., B.S., M.S.

The M.A. and M.S. degrees are also granted on the completion of programs of interdisciplinary studies.

Requirements for Bachelor's Degree

Requirements for a bachelor's degree include (a) lower-division requirements (which the student is expected to satisfy during his freshman and sophomore years) and (b) general requirements which must be satisfied before the degree is conferred.

Lower-Division Requirements. The lower-division requirements for a bachelor's degree are as follows:

- (1) Written English :
 - (a) For freshmen who receive low ratings on a placement examination given to all entering students : Corrective English (Wr 10), offered on the campus through the Division of Continuing Education of the Oregon State System of Higher Education (students pay a special fee for this remedial instruction).
 - (b) For all students : English Composition (Wr 121, 122, 123), 9 term hours. (With the consent of the head of the Department of English, all or part of this requirement may be waived for students who demonstrate superior ability in writing.)
- (2) Physical education : 5 terms in activity courses unless excused.* (One or more terms of this requirement may be waived on the basis of proficiency examinations.)
- (3) Health education : HE 150 or HE 250 for men ; HE 250 for women. (This requirement may be waived on the basis of a proficiency examination.)
- (4) Group requirement : four sequences in liberal arts courses numbered from 100 to 120 or 200 to 220, including one sequence in each of three groups (arts and letters, social science, science), and a second sequence in any one of the three groups ; for liberal arts majors, two additional sequences—see General Requirements, below, (3) (b). (The sequences satisfying the group requirements are listed on pages 71-72).
 - (a) Each of the group sequences must total at least 9 term hours ; each sequence in the science group must include laboratory work or total 12 term hours.
 - (b) At least one of the sequences must be numbered from 200 to 220.
 - (c) At least one sequence in arts and letters must be in literature.
 - (d) When two sequences are taken in social science or in science to satisfy the requirement, the sequences must be in different departments.
- (5) Grade-point average on completion of 93 hours of work : minimum, 2.00.

General Requirements. The general requirements for a bachelor's degree are as follows :

- (1) Total credit :
 - (a) For B.A., B.S., B.B.A., B.Ed., B.P.E., or B.Mus. degree : minimum, 186 term hours.
 - (b) For B.Arch., B.I.Arch., or B.L.A. degree : minimum, 220 term hours.
 - (c) For LL.B. degree : minimum, 263 term hours.
- (2) Work in upper-division courses : minimum, 62 term hours.
- (3) Work in the major :
 - (a) Minimum : 36 term hours, including at least 24 hours in upper-division courses.
 - (b) For majors in the College of Liberal Arts : two sequences numbered from 100 to 120, 200 to 220, or 300 to 310, in addition to the four sequences completed in satisfaction of the general lower-division group

* Students who have completed six months of active military service in the Armed Forces of the United States are exempt from 3 terms of the physical-education requirement ; to qualify for exemption, such students must file official documentary evidence of their service.

requirement. Of the total of six sequences, two must be chosen from each of the three groups (arts and letters, social science, science); the two sequences in science and the two sequences in social science must be in different departments.

- (c) Any additional requirements of the major school or department (satisfaction must be certified by the dean or department head).
- (4) Work in residence: minimum, 45 term hours of the last 60 presented for the degree.*
- (5) For the B.A. degree, work in language and literature: 36 term hours,† including attainment of proficiency in a foreign language equivalent to that attained at the end of two years of college study of the language.‡
- (6) For the B.S. degree, work in science or in social science: 36 term hours.†
- (7) Restrictions:
 - (a) Correspondence study: maximum, 60 term hours.
 - (b) Law, medicine, dentistry: maximum, 48 term hours in professional courses toward any degree other than a professional degree.
 - (c) Applied music: maximum for all students except music majors, 12 term hours; maximum for music majors toward the B.A. or B.S. degree, 24 term hours—of which not more than 12 hours may be taken in the student's freshman and sophomore years.
 - (d) No-grade courses: minimum of 150 term hours in graded courses.
- (8) Grade-point average:
 - (a) Covering all graded college work: minimum, 2.00.
 - (b) Covering all graded work taken at the University of Oregon: minimum, 2.00.

The occasional student who wishes to earn a second bachelor's degree must satisfy the requirements listed above and, in addition, must earn at least 36 term hours in courses on the Eugene campus after meeting all requirements for the first degree (45 hours if his first degree was not granted by the University of Oregon).

Advanced Degrees

The requirements for graduate degrees are listed under GRADUATE SCHOOL. The requirements for the degree of Doctor of Jurisprudence are listed under SCHOOL OF LAW. The requirements for the degree of Doctor of Medicine are listed in the Medical School Catalog, the requirements for the degree of Doctor of Dental Medicine in the Dental School Catalog.

* Only University of Oregon work completed on the Eugene campus of the University or at the Medical School, the Dental School, or the School of Nursing in Portland may be counted for the satisfaction of this requirement.

† For the purpose of determining distribution of hours for the B.A. or B.S. degree, the instructional fields of the College of Liberal Arts are classified as follows:

Language and Literature: General Arts and Letters, English, Foreign Languages, Speech.
Social Science: General Social Science, Anthropology, Economics, Geography, Home Economics, History, Philosophy, Political Science, Psychology, Religion, Sociology.

Science: General Science, Biology, Chemistry, Geology, Mathematics, Nursing, Physics.

‡ The language requirement for the B.A. degree may be met in any one of the following ways: (1) two years (normally 24 term hours) of college work in a foreign language; (2) one year of college work at the second-year or higher level; or (3) examination, administered by the Department of Foreign Languages, showing language competence equivalent to that attained at the end of two years of college study. The requirement may not be met by examination after the completion of a student's junior year.

Application for Degree

All students who intend to receive a degree from the University must make application by filing the proper form in the Registrar's Office. This should be done several months in advance of the expected commencement date; late application may delay graduation. All University academic and financial obligations must be satisfied before any degree will be conferred.

Group Requirement

ALL CANDIDATES for a bachelor's degree are required to complete work in general education through selected lower-division courses from an approved list (numbered 100-120, 200-220). The regulations governing the group requirement are stated on page 69. The courses approved for satisfaction of the four-sequence group requirement are listed below. Enrollment in courses designated "H.C." is restricted to students in the Honors College. Liberal arts majors may elect courses from an additional list of upper-division courses (numbered 300-310) for the satisfaction of the College requirement of two additional group sequences for its majors; these courses are listed on page 125.

Arts and Letters Group

General Arts and Letters

Literature (H.C.) (AL 101, 102, 103)

Art

†*Survey of Visual Arts (AA 201, 202, 203)

†*Intro. to Hist. of Art (AA 204, 205, 206)

English

‡Survey of Eng. Lit. (Eng 101, 102, 103)

‡Intro. to Lit. (Eng 104, 105, 106)

‡World Literature (Eng 107, 108, 109)

Shakespeare (Eng 201, 202, 203)

Foreign Languages

*Intro. to Homer (CL 101, 102)

*Intro. to Plato (CL 103)

*Cicero's Orations (CL 104)

*Virgil's Aeneid (CL 105)

*Terence (CL 106)

Foreign Languages (continued)

*2nd Yr. German (GL 101, 102, 103)

*2nd Yr. Norwegian (GL 104, 105, 106)

*2nd Yr. Swedish (GL 107, 108, 109)

*2nd Yr. French (RL 101, 102, 103)

*2nd Yr. Italian (RL 104, 105, 106)

*2nd Yr. Spanish (RL 107, 108, 109)

*2nd Yr. Russian (SL 101, 102, 103)

Read. in Russian Lit. (SL 201, 202, 203)

Music

‡*Intro. to Music & Its Lit. (Mus 201, 202, 203)

‡*History of Music (Mus 204, 205, 206)

Social Science Group

General Social Science

Soc. Sc. & Soc. Policy. (SSc 104, 105, 106)

Intro. to Soc. Sc. (H.C.) (SSc 201, 202, 203)

Anthropology

Gen. Anthropology (Anth 101, 102, 103)

Intro. to Cult. Anth. (Anth 207, 208, 209)

History

Hist. of West. Civ. (Hst 101, 102, 103)

History (H.C.) (Hst 107, 108, 109)

Hist. of U. S. (Hst 201, 202, 203)

Economics

Principles of Econ. (Ec 201, 202, 203)

Geography

Intro. Geography (Geog 105, 106, 107)

Geog. of Europe (Geog 201)

Geog. of Latin Amer. (Geog 202)

Geog. of Asia (Geog 203)

Political Science

American Govts. (PS 201, 202, 203)

International Relations (PS 205)

Intro. to Pol. Sc. (PS 206, 207, 208)

* A sequence marked with an asterisk (*) does not qualify as a sequence in "literature"; it may, however, be offered as a second sequence in the arts and letters group.

† A student may not enroll for both AA 201, 202, 203 and AA 204, 205, 206.

‡ A student may enroll for only one of the three sequences: Eng 101, 102, 103; Eng 104, 105, 106; Eng 107, 108, 109.

§ A student may not enroll for both Mus 201, 202, 203 and Mus 204, 205, 206.

Philosophy

- Problems of Philosophy (Phl 201)
- Elementary Ethics (Phl 202)
- Elementary Logic (Phl 203)
- Elementary Aesthetics (Phl 204)
- Intro. to Phil. (H.C.) (Phl 207, 208, 209)

Psychology

- General Psychology (Psy 201, 202)
- Psych. of Adjustment (Psy 204)
- Applied Psychology (Psy 205)

Religion

- Great Religions (R 201, 202, 203)

Sociology

- Gen. Sociology (Soc 204, 205, 206)

Science Group**General Science**

- Physical-Sc. Survey (GS 104, 105, 106)
- Physical-Sc. (H.C.) (GS 204, 205, 206)

Biology

- Gen. Biology (Bi 101, 102, 103)
- Biological Sc. (H.C.) (Bi 104, 105, 106)

Chemistry

- Elementary Chemistry (Ch 101, 102, 103)
- *Gen. Chemistry (Ch 104, 105, 106)
- *Inorganic Qual. Analysis (Ch 108)
- *Intro. Volumetric Analysis (Ch 109)
- *Gen. Chemistry (Ch 204, 205, 206)
- *Inorganic Qual. Analysis (Ch 207)
- *Intro. Gravimetric Analysis (Ch 208)
- *Intro. Volumetric Analysis (Ch 209)

Geology

- Gen. Geology (Geol 101, 102, 103)

Mathematics

- Intermediate Algebra (Mth 100)
- Intro. College Math. (Mth 104, 105, 106)
- Fund. of Math (H.C.) (Mth 107, 108, 109)
- Diff. & Int. Calculus (Mth 201, 202, 203)
- Analytic Geometry & Calculus (Mth 204, 205, 206)

Physics

- †Essentials of Physics (Ph 101, 102, 103)
- Des. Astronomy: Solar System (Ph 104)
- Elementary Meteorology (Ph 105)
- Des. Astronomy: Stellar System (Ph 106)
- General Physics (Ph 201, 202, 203)
- General Physics Lab. (Ph 204, 205, 206)

Psychology

- ‡Gen. Psychology (Psy 201, 202)
- ‡Psych. of Adjustment (Psy 204)
- ‡Applied Psychology (Psy 205)
- ‡Gen. Psych. Lab. (Psy 208, 209, 210)

Honors

THE UNIVERSITY OF OREGON offers special programs of study as a challenge to students of superior scholastic ability, and provides official recognition for students completing regular degree programs with outstanding scholastic records. Recognition of outstanding scholarship is also provided through election to membership in several honor societies.

Honors College. The University of Oregon Honors College offers a four-year program of study leading to the degree of Bachelor of Arts (Honors College). For further information, see pages 120-123.

Recognition for High Scholarship. Candidates for the bachelor's degree who achieved a cumulative grade-point average of 3.75-4.00 receive the award of "Recognition for Highest Scholarship"; candidates who achieve a cumulative grade-point average of 3.50-3.74 receive the award of "Recognition for High Scholarship."

Master's Degree with Honors. Candidates for the master's degree who pass a final examination with exceptional merit may, by vote of the examining committee, be awarded the degree with honors.

* Ch 104, 105, 106 or Ch 204, 205, 206 must be taken with laboratory (Ch 108, Ch 109, Ch 207, Ch 208, Ch 209) to satisfy the science group requirement.

† Ph 204, 205, 206 must be taken with Ph 101, 102, 103 to satisfy the science group requirement.

‡ Psy 208, 209, 210 must be taken with Psy 201, 202, 204 or Psy 201, 202, 205 to satisfy the science group requirement.

Honor Societies. University of Oregon chapters of several national scholastic honor societies recognize exceptional distinction in scholarship through election to membership. Among these societies are: Phi Beta Kappa (liberal arts), Sigma Xi (science), Order of the Coif (law), Kappa Tau Alpha (journalism), Beta Gamma Sigma (business administration), Alpha Lambda Delta (freshman women), Phi Eta Sigma (freshman men).

Academic Procedure

THE REGULAR ACADEMIC YEAR throughout the Oregon State System of Higher Education is divided into three terms of approximately twelve weeks each. The summer session supplements the work of the regular year (see special announcements). Students may enter at the beginning of any term. It is important that freshmen and transferring students entering in the fall term be present for New Student Week (see page 80). A detailed calendar for the current year will be found on pages 8-9.

Students are held responsible for familiarity with University requirements governing such matters as routine of registration, academic standards, student activities, organizations, etc. Complete academic regulations are included each year in the separately published Time Schedule of Classes, a copy of which is furnished each student at registration.

When regulations are changed, the changed regulations are effective on the date of their publication, unless a later date is indicated on publication.

Registration Procedure

A registration period is set aside, with published dates, preceding the beginning of classes in each term or session. Complete registration instructions are contained in the Time Schedule. Students are officially registered and entitled to attend classes only when they have completed the prescribed procedures, including the payment of term fees.

Students are advised to register in person if possible. However, registration in absentia may be arranged through faculty advisers or department representatives, in cases where the student's presence is judged to be unreasonable or unnecessary.

Students planning to return to the campus after absence of a term or more or after earning a degree should notify the Registrar's Office at least three weeks before registration, in order to allow time for the preparation of registration materials. If notice is not given, registration will be delayed, and the student may become subject to penalties.

All regular students are required to file official transcripts of any academic work taken at other institutions since their first enrollment in the University. The official records must be kept complete at all times; the withholding of any part of a student's academic record is considered a breach of ethics, and may result in the cancellation of registration and credits.

Academic Advising

Each student is assigned a faculty adviser, who assists him in planning his study program. Students should consult their advisers whenever they need help with academic problems. Adviser assignments for freshmen and sophomores are made from a University-wide group of lower-division advisers. Upper-division and graduate advisers are assigned by major schools and departments.

Definitions

A **TERM HOUR** represents three hours of the student's time each week for one term. This time may be assigned to work in classroom or laboratory or to outside preparation. The number of lecture, recitation, laboratory, or other periods required per week for any course may be found in the Time Schedule of Classes published each term.

A **COURSE** is a subject, or an instructional subdivision of a subject, offered through a single term.

A **YEAR SEQUENCE** consists of three closely articulated courses extending through the three terms of the academic year.

A **CURRICULUM** is an organized program of study arranged to provide integrated cultural or professional education.

Course Numbering System

Courses in University of Oregon catalogs are numbered in accordance with the course numbering plan of the Oregon State System of Higher Education. The plan, as it applies to University courses, is as follows:

- 1- 49. Remedial courses which carry no credit toward a degree.
- 50- 99. Beginning courses in subjects taught in high school which carry credit toward a bachelor's degree.
- 100-299. Lower-division courses.
 - 100-120, 200-220. Survey or foundation courses which satisfy the lower-division group requirement.
- 300-499. Upper-division courses.
 - 300-310. Upper-division courses which satisfy an additional group requirement in the College of Liberal Arts.
 - 400-410. Upper-division courses which may be taken through successive terms under the same number, credit being granted according to the amount of work done. Certain numbers in this bracket are reserved for special types of work: 401, Research or other supervised original work; 403, Thesis; 405, Reading and Conference;* 407, Seminar.
 - 400-499, with designation (G) or (g). Upper-division courses which may be taken for graduate credit. Courses which may be taken for graduate *major* credit are designated (G); courses which may be taken for graduate *minor* credit only are designated (g).
- 500-599. Graduate courses. Seniors of superior scholastic achievement may be admitted to 500 courses on the approval of the instructor.
 - 500-510. Graduate courses which may be taken through successive terms under the same number, credit being granted according to the amount of work done. Certain numbers in this bracket are reserved for special types of work: 501, Research or other supervised original work;† 503, Thesis;† 505, Reading and Conference; 507, Seminar
 - 500-599, with designation (p). Courses in a professional field offered at a level of intellectual maturity suitable for graduate students who have earned a bachelor's degree in a field other than their graduate professional field.
- 600-699. Courses of a highly professional or technical nature, which count toward a professional degree only (not toward advanced academic degrees such as M.A., M.S., Ph.D.).

Grading System

The quality of student work is measured by a system of grades, points, and grade-point averages.

* Only students eligible for honors work may register for Reading and Conference (405).

† In all divisions except the School of Law, Research (501) and Thesis (503) are classified as no-grade courses (see below).

Grades. Student work is graded as follows: A, exceptional; B, superior; C, average; D, inferior; F, failed; INC, incomplete; W, withdrawn. Students ordinarily receive one of the four passing grades or F. When the quality of the work is satisfactory, but some minor yet essential requirement of the course has not been completed, for reasons acceptable to the instructor, a report of INC may be made and additional time (normally not more than three terms) granted for completion of the work. Students may withdraw from a course by filing the proper forms in the Registrar's Office in accordance with University regulations.

No-Grade Courses. Certain University courses are designated no-grade courses. Students in these courses receive marks of "pass" (P) or "not pass" (NP). For a bachelor's degree from the University, a student must receive at least 150 term hours of credit in courses for which grades are given.

Grade-Point Average. Grade points are assigned in relation to the level of the grade given, as follows: A, 4 points per term hour; B, 3 points per term hour; C, 2 points per term hour; D, 1 point per term hour; F, 0 points per term hour. The grade-point average (GPA) is the quotient of total points divided by total term hours for which grades are received. Marks of INC, W, P, and NP are disregarded in the computation of the grade-point average.

Scholarship Regulations

The administration of the regulations governing scholarship requirements is vested in the Committee on Scholastic Deficiency of the faculty. This committee may disqualify a student from attending the University when it appears that his work is of such character that he cannot continue with profit to himself and with credit to the institution. In general, profitable and creditable work means substantial progress toward meeting graduation requirements. Any term or cumulative grade-point average below 2.00 is considered unsatisfactory, and may bring the student's record under review by the committee. Further details on committee procedures are published each year in the Time Schedule of Classes.

Fees and Deposits

STUDENTS AT THE UNIVERSITY OF OREGON,* Oregon State University, and Portland State College pay the same fees. In the fee schedule printed below, regular fees are those paid by all students under the usual conditions of undergraduate or graduate study; regular fees are payable in full at the time of registration. Special fees are paid under the special conditions indicated.

The Board of Higher Education reserves the right to make changes in the fee schedule without notice.

Payment of the stipulated fees entitles all students enrolled for academic credit (undergraduate and graduate, full-time and part-time) to all services maintained by the University for the benefit of students. These services include: instruction in University courses; † use of the University Library; use of laboratory and course equipment and materials in connection with courses for which the student is registered; medical attention at the Student Health Service; use of gymnasium equipment (including gymnasium suits and laundry service); a subscription to the student daily newspaper; admission to athletic events; admission to concert and lecture series sponsored by the University. No reduction in fees is made to students who may not desire to take advantage of some of these privileges.

* Except students at the Medical School, the Dental School, and the School of Nursing. The fee schedules for these students are published in the separate catalogs of these schools.

† Special fees, in addition to regular fees, are charged for instruction in applied music. See SCHOOL OF MUSIC.

Regular Fees*

Undergraduate Students. Undergraduate students who are residents of Oregon and who are enrolled for a total of 8 term hours of work or more during the regular academic year pay tuition and fees totaling \$142.00 a term or \$426.00 for the three-term academic year.

Undergraduate students who are not residents of Oregon and who are enrolled for a total of 8 term hours of work or more during the regular academic year pay, in addition, a nonresident fee of \$190.00 a term, or a total of \$332.00 a term or \$996.00 for the three-term academic year. For regulations governing the assessment of the nonresident fee, see pages 77-78.

Graduate Students. Graduate students enrolled for a total of 8 term hours of work or more pay tuition and fees totaling \$142.00 a term; students employed as graduate or research assistants or fellows pay a reduced fee of \$32.00 a term. Graduate students do not pay a nonresident fee.

Fee-Remission Scholarships. A limited number of fee-remission scholarships covering a portion of regular fees are available for resident and nonresident students. See pages 88-89.

Part-Time Students. Undergraduate or graduate students who enroll for 7 term hours of work or less pay a special part-time fee (see SPECIAL FEES, below).

Deposits

All persons who enroll for academic credit (except staff members) must make a deposit of \$15.00, payable once each year at the time of first registration. The deposit is required for protection of the University against loss or damage of institutional property such as dormitory and laboratory equipment, military uniforms, Library books, and locker keys, and against failure to pay promptly nominal fines and assessments, such as Library fines, campus traffic fines, and Health Service charges. If at any time charges against this deposit become excessive, the student may be called upon to re-establish the original amount.

Special Fees

The following special fees are paid by University students under the conditions indicated:

Part-Time Fee.....per term \$35.50 to \$124.25

Students (undergraduate or graduate) who enroll for 7 term hours of work or less pay, instead of regular registration fees, a part-time fee in accordance with the following scale: 1-2 term hours, \$35.50; 3 term hours, \$53.25; 4 term hours, \$71.00; 5 term hours, \$88.75; 6 term hours, \$106.50; 7 term hours, \$124.25. Students enrolled for 7 term hours or less do not pay the nonresident fee. Payment of the part-time fee entitles the student to all services maintained by the University for the benefit of students.

Staff Fee.....per term hour, \$3.00

With the approval of the President's Office, staff members enrolled in University courses pay a special staff fee of \$3.00 per term hour. Full-time staff members (academic or civil service) may enroll under this fee for a limited amount of work for credit, generally for not more than 3 term hours of work in any term; staff members employed half-time or more, but less than full-time, may enroll under this fee for a maximum of 10 term hours of work.

Auditor's Fee.....per term, \$35.50 to \$142.00

An auditor is a person who has obtained permission to attend classes without receiving academic credit; such a person is not considered an enrolled student. Auditors attend-

* The Board of Higher Education will adjust regular fees downward prior to the registration period of fall term, 1964-65, if sufficient additional state revenue becomes available for operation of the institutions of the State System.

ing classes carrying a total credit of 8 term hours or more pay a fee of \$90.00 a term; auditors attending classes carrying a total credit of 7 term hours or less pay fees in accordance with the part-time fee scale (see above).

Late-Registration Fee.....	minimum, \$5.00
A full-time student who registers after the scheduled registration dates of any term pays a late-registration fee of \$5.00 for the first late day plus \$1.00 for each late day thereafter.	
Change-of-Program Fee.....	\$1.00
A student may be required to pay this fee for each change in his official program after the scheduled last day for adding courses.	
Reinstatement Fee.....	\$2.00
If for any reason a student has his registration canceled during a term for failure to comply with the regulations of the institution, but is later allowed to continue his work, he must pay the reinstatement fee.	
Special Examination Fee.....	per term hour, \$1.00
A student pays a fee of \$1.00 per term hour for the privilege of taking an examination for advanced credit, or other special examinations.	
Graduate Qualifying Examination Fee.....	\$1.00 to \$15.00
Paid by students taking the Graduate Record Examination or other standard tests of ability to do graduate work.	
Transcript Fee.....	\$1.00
For a transcript of his University academic record, a student pays a fee of \$1.00 for the first copy and 50 cents each for additional copies furnished at the same time.	
Late-Application Fee.....	See page 65.
Placement Service Fee.....	See page 80.
Music Course Fees.....	SCHOOL OF MUSIC.
Library Fines and Charges.....	See pages 61-62.

Refunds

Fee Refunds. Students who withdraw from the University and who have complied with the regulations governing withdrawals are entitled to certain refunds of fees paid, depending on the time of withdrawal. The refund schedule has been established by the State Board of Higher Education, and is on file in the University Business Office. All refunds are subject to the following regulations:

- (1) Any claim for refund must be made in writing before the close of the term in which the claim originated.
- (2) Refunds in all cases are calculated from the date the student officially withdraws from the University, not from the date when the student ceased attending classes, except in unusual cases when formal withdrawal has been delayed through causes largely beyond the control of the student.

Deposit Refunds. The \$15.00 deposit, less any deductions which may have been made, is refunded about six weeks after the close of the academic year. Students who discontinue their work at the University before the end of the year may receive refunds, upon petition to the Business Office, about six weeks after the close of the fall or winter terms.

Regulations Governing Nonresident Fee

Under the regulations of the Oregon State Board of Higher Education, a minor student whose parent or guardian is a bona fide resident of Oregon qualifies for enrollment under the resident fee; a student whose domicile is independent

of his parent or guardian qualifies for enrollment under the resident fee if he presents convincing evidence that he established his domicile in Oregon six months prior to his first registration.

All other students are required to pay the nonresident fee, with the following exceptions: (1) a student who holds a degree from an accredited college or university (however, a nonresident student with a bachelor's degree enrolled in a curriculum at the University of Oregon Medical or Dental School leading to the degree of Doctor of Medicine or Doctor of Dental Medicine is required to pay the nonresident fee); (2) a student attending a summer session; (3) a student paying part-time fees.

A student who has been classified as a nonresident may be reclassified as a resident:

(1) In the case of a minor, if his parent or guardian has moved to Oregon and has established a bona fide residence in the state, or

(2) In the case of a student whose domicile is independent of that of his parent or guardian, if the student presents convincing evidence that he has established his domicile in Oregon and that he has resided in the state for at least twelve consecutive months immediately prior to the term for which reclassification is sought, and that he has no intention of moving out of the state after completion of his school work.

A student whose official record shows a domicile outside of Oregon is prima facie a nonresident and the burden is upon the student to prove that he is a resident of Oregon. If his scholastic record shows attendance at a school outside of Oregon, he may be required to furnish further proof of Oregon domicile.

If any applicant has questions concerning the rules governing the administration of these policies, he should consult the Office of Admissions.

Student Life and Welfare

Office of Student Affairs

DONALD M. DUSHANE, M.A.	Dean of Students
*J. SPENCER CARLSON, M.A.	Director of Counseling Center; Associate Dean of Students
CLIFFORD L. CONSTANCE, M.A.	Registrar
EUGENE W. DILS, Ed.D.	Director of Placement Service; Associate Dean of Students
KENNETH S. GHENT, Ph.D.	Associate Dean of Students; International Students
RAY HAWK, D.Ed.	Associate Dean of Students (Dean of Men)
FRANCIS B. NICKERSON, D.Ed.	Associate Dean of Students; Student Relations Officer
KARL W. ONTHANK, M.A.	Counselor, University Mothers and Dads
GOLDA P. WICKHAM, B.S.	Associate Dean of Students (Dean of Women)
VERNON L. BARKHURST, M.A.	Director of Admissions; Assistant Dean of Students
WALTER FREAUFF, M.A.	Assistant Dean of Students
HOWARD L. RAMEY, M.F.A.	Assistant Dean of Students; Director of Financial Aids
KENNETH W. WEGNER, Ed.D.	Acting Director of Counseling Center
W. A. BROOKSBY, M.D.	Psychiatric Consultant, Counseling Center
WALTER R. HILL, JR., Ph.D.	Director of Remedial Clinic
ERNEST A. LUND, Ph.D.	Chairman Lower-Division Advisers
KENNETH S. WOOD, Ph.D.	Director of Speech and Hearing Clinic
DAVID BRINKS, M.Ed.	Counselor, Counseling Center
OSCAR C. CHRISTENSEN, Ed.D.	Counselor, Counseling Center
SAUL TOOBERT, M.A.	Counselor, Counseling Center
LEONA E. TYLER, Ph.D.	Counselor, Counseling Center
PHILIP E. BEAL, M.A.	Assistant Dean of Men
CHARLENE M. BLACKBURN, B.A.	Assistant Dean of Women
MARGARET BLAGO, B.A.	Assistant Registrar
GERALD K. BOGEN, M.S.	Assistant Director of Admissions
ROBERT L. BOWLIN, M.A.	Assistant Dean of Men
C. CORINNE HAMILTON, M.A.	Placement Counselor
MARTHA MAE NEWELL, M.P.S., B.D.	Counselor, Student Affairs
JOHN E. HANSON, M.A.	Assistant Dean of Men
WALLIS CLAIRE NOSLER, B.B.A.	Assistant Dean of Women
BENJAMIN DEAN OWENS, B.S.	Placement Counselor
CHARLES S. PALMERLEE, A.B., B.D.	Counselor, Student Affairs

AT THE UNIVERSITY OF OREGON, an integrated program of student counseling and supervision of student life and group activities is administered through the Office of Student Affairs. The Dean of Students is assisted by associate deans with special responsibilities for: women's affairs, men's affairs, the University Counseling Center, and graduate placement. The Office of Admissions and the Registrar's Office also operate under the general direction of the Dean of Students.

The dean and his associates maintain close personal contacts with individual students and with student organizations, and are available at all times for advice and help on all matters pertaining to their welfare.

University Counseling Center. The University Counseling Center provides facilities for testing and counseling University students, to help them in making

* On sabbatical leave 1963-64.

wise choices in their studies and in solving academic and personal problems. A special fee of \$5.00 is charged for the full educational and vocational testing service of the Counseling Center.

Speech and Hearing Clinic. The Speech and Hearing Clinic, operating in conjunction with the Counseling Center, provides diagnosis, consultation, and treatment in connection with speech and hearing problems of University students. Students are referred to the clinic either by the Counseling Center or by faculty advisers.

Reading Clinic. Some students, although they may not clearly recognize their disability, fail to get the most from their University work because of difficulties in reading. Frequently these difficulties are correctable. The Reading Clinic, operating in conjunction with the Counseling Center, provides an opportunity for scientific diagnosis and correction of student reading difficulties.

Corrective Physical Education Clinic. The Corrective Physical Education Clinic provides individual help to students in connection with training for relaxation, foot and posture difficulties, functional back strain, and similar problems.

International Student Adviser. A member of the staff of the Office of Student Affairs serves as a special adviser to students from abroad who are attending the University, to assist them with personal problems and with adjustments to the customs and procedures of American educational systems. The international student adviser is prepared to give advice and help in connection with visas, government regulations, scholarships, employment, and general orientation to American life. He is also prepared to advise American students planning study abroad.

University Placement Service. The University maintains a central Placement Service for the assistance of graduating students and alumni seeking new or better positions. The Placement Service serves students in all schools and departments in the University, including those trained in business and technical fields as well as in education and the liberal arts.

Students who have taken, or are currently enrolled for, at least 12 term hours of University work, and who are completing degree requirements, are provided initial placement service without charge. Alumni and former registrants who desire to use this service are charged a fee of \$5.00 per year. Registration forms may be obtained upon request.

New Student Week

NEW STUDENT WEEK, a program of orientation for entering undergraduate students, is held annually the week before classes begin. During this period, new students are made familiar with the aims of higher education, the principles governing the wise use of time and effort, methods of study, and the ideals and traditions of the institution. Every effort is made to assist new students in getting the best possible start in their work. Full directions concerning New Student Week and registration procedure are sent to each student who is accepted for admission.

The University, recognizing that fraternities and sororities form a part of University life and provide living quarters for a substantial part of the student body, has, with the cooperation of these organizations, made provisions by which they may choose their members in an orderly fashion, with a minimum of interference with the beginning of University work.

A "welcome book," the *ORIENTER*, is published annually in August and is sent to all new students who have been admitted to the University.

Student Living

COMFORTABLE, healthful, and congenial living conditions contribute much to the success of University life and work. Living conditions of the right kind aid students to do their best in their studies and contribute, through the experiences of group life, to the building of character and personality. Hence the University is vitally concerned with student housing. Halls of residence are maintained on the campus by the institution, and the living conditions of students residing outside the dormitories are closely supervised.

Many students live in fraternity and sorority houses accommodating groups of from twenty to sixty persons. Admission to these groups is by invitation only. Students also live in private homes and rooming houses near the campus. In several cooperative houses, groups of students enjoy the benefits of group living while keeping expenses at a minimum.

University Dormitories

The University maintains six dormitories, accommodating 3,143 students. Living conditions are comfortable and conducive to successful academic accomplishment and to participation in the wholesome activities of campus life.

Robert S. Bean Hall houses 736 students in eight units: Caswell, DeBusk, Ganoë, Henderson, Moore, Parsons, Thornton, and Willcox. Each unit has its own lounge and dining room.

Carson Hall houses 320 women students, principally in rooms accommodating two occupants. Most of the furniture is of built-in construction.

Virgil D. Earl Hall houses 327 men students in five units: McClure, Morton, Sheldon, Stafford, and Young. Each unit has its own lounge, dining hall, and recreational area.

James W. Hamilton houses 832 students in ten units, each assigned to men or to women students: Boynton, Burgess, Cloran, Collier, Dunn, McClain, Robbins, Spiller, Tingle, and Watson. Each unit has its own lounge, dining hall, and recreation area.

John Straub Hall houses 278 men students in six units: Alpha, Gamma, Hale Kane, Barrister Inn, Omega, and Sherry Ross. Each unit has its own club room. Sleeping porches accommodate four students each.

Joshua J. Walton Hall houses 650 students in ten units, each assigned to men or to women students: Adams, Clark, DeCou, Douglass, Dymont, Hawthorne, McAlister, Schafer, Smith, and Sweetser. Each unit has its own lounge, dining hall, and recreational area.

Linen (blankets, sheets, pillows, pillow cases), water glasses, ashtrays, study lamps, wastebaskets, wardrobe, and laundry facilities are provided in all dormitories. Student occupants must furnish towels and irons.

University Dining Halls. The University maintains dining halls for students in Straub Hall, Earl Hall, Walton Hall, Carson Hall, Hamilton Hall, and Bean Hall. Students living in dormitories take their meals in assigned dining halls. Men and women dine together in all dining rooms. Students in the dormitories are expected to dress for Sunday dinners.

Room Reservations. Students who plan to live in the dormitories should make room reservations as early as possible before the opening of the school year.

Contracts for dormitory accommodations are for room and board for the entire school year. Application must be made on an official form, and must be accompanied by a room deposit of \$50.00, which will be applied to the first term's room and board payment.

Dormitory Living Expenses. Board and room costs in University dormitories are approximately \$268 for the fall term, \$237 for the winter term, and \$216 for the spring term—a total of approximately \$721 for the academic year. The charges are based on the following rates:

Board, per month	\$ 59.00
Room, multiple occupancy, per term:	
Fall term	100.00
Winter term	85.00
Spring term	70.00
Room, single occupancy, per term:	
Fall term	150.00
Winter term	127.50
Spring term	105.00

Board and room charges are payable at the beginning of each term. If a student is unable to make the total payment at the beginning of the term, arrangement may be made for payment in two installments, the first at the beginning of the term and the second on a fixed date later in the term.

Students who do not pay board and room charges within ten days after payment is due are assessed a late-penalty fee of \$1.00 for the first day (after ten) and \$1.00 for each additional day until a maximum charge of \$5.00 is reached. If dormitory charges are not paid within ten days after they are due, the student's registration may be canceled.

Dormitory Deposit Refund. If dormitory reservations are canceled, the \$50.00 room deposit will be refunded only if the cancellation is made by August 1 if dormitory reservations are made for the fall term, or, if reservations are made for the winter or spring term, at least two weeks before the opening of the term.

Fraternities and Sororities

Fraternities and sororities provide comfortable living accommodations under University supervision. Members are chosen during stated rushing periods. Board and room costs are approximately the same as for students living in University dormitories.

In the summer, after formal notice of admission has been received, new students who are interested in fraternity or sorority membership should write to the Office of Student Affairs for full information, instructions, and a copy of rushing rules.

Fraternities on the Oregon campus are organized into the Interfraternity Council, which is a member of the National Interfraternity Conference. Sororities are organized into the Panhellenic Council, which is a member of the National Panhellenic Congress.

Sororities at the University are: Alpha Chi Omega, Alpha Delta Pi, Alpha Gamma Delta, Alpha Omicron Pi, Alpha Phi, Alpha Xi Delta, Chi Omega, Delta Delta Delta, Delta Gamma, Delta Zeta, Gamma Phi Beta, Kappa Alpha Theta, Kappa Kappa Gamma, Pi Beta Phi, Sigma Kappa, Zeta Tau Alpha.

Fraternities at the University are: Alpha Tau Omega, Beta Theta Pi, Chi Phi, Chi Psi, Delta Chi, Delta Tau Delta, Delta Upsilon, Kappa Sigma, Lambda Chi Alpha, Phi Delta Theta, Phi Gamma Delta, Phi Kappa Psi, Phi Kappa Sigma, Phi Sigma Kappa, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Alpha Mu, Sigma Chi, Sigma Nu, Sigma Phi Epsilon, Tau Kappa Epsilon, Theta Chi.

Cooperative Houses

Students with urgent financial problems, excellent character, and superior scholarship may apply for membership in cooperative houses, where, by sharing housekeeping responsibilities, they are able to save about \$15.00 a month on board and room costs. There are four cooperative houses for women, Highland, Laurel, Rebec, and University; and two for men, Campbell Club and Philadelphia House. Applications for memberships must be made through the Office of Student Affairs; applications are subject to approval by the undergraduate membership of the house.

Although, under general University housing regulations, freshman students are required to live in the dormitories, permission to live in cooperative houses will be granted to freshmen if, for financial reasons, they would otherwise be unable to enter the University.

Ann Judson House, maintained by the Baptist Church but with membership open to young women of all religions, is operated as an independent dormitory, under University supervision. Applications for membership should be addressed to the Dean of Women.

Off-Campus Housing

The University Housing Office, Carson Hall, maintains a list of approved rooms, apartments, and houses available for rent. The list is not published for mail distribution. Students eligible to live off campus (see Housing Regulations, below) are advised to engage quarters personally after inspection and conference with the householder.

Housing for Married Students

Housing for married students is provided in more than 700 furnished and unfurnished family-dwelling units owned and operated by the University. The units include a wide variety of accommodations. The rents range from \$42.50 to \$76.00 per month. Application should be made to the University Housing Office, Carson Hall.

The married-student housing program is intended primarily to accommodate married graduate students working toward advanced degrees. Priority in housing assignment is given to graduate assistants, other graduate students, seniors, juniors, sophomores, and freshmen, in descending order, with date of application determining priority within each group. To be eligible for housing, graduate assistants must be enrolled for 9 term hours of work, other students for 12 hours of work.

Social Activities

Rules governing the social activities of the various living organizations are established by the Student Activities Committee, composed of faculty and student members. The rules are published in the student handbook, the ORE-NTER, copies of which are available in the administrative office of the Student Union and in the office of the Dean of Students.

Housing Regulations

(1) Freshmen students are required to live in University dormitories (see, however, under COOPERATIVE HOUSES, above.)

(2) Other undergraduate students under 21 years of age are required to live either in the dormitories or in houses maintained by organized University living groups (fraternities, sororities, cooperatives), unless their parents request that they be permitted to live off campus.

(3) Married students and students living with relatives in the Eugene community are excepted from rules (1) and (2); other exceptions are rare, and are made only for students working for room and board, or for whom rooms are not available in campus quarters.

(4) Students who rent off-campus quarters are expected to remain in these quarters for at least one term. If the student does not plan to stay for a full term, he should make certain that this is understood by his landlord before a rental agreement is made. Oregon law provides that a tenant or landlord wishing to terminate a rental agreement must give a 30-day written notice (unless otherwise agreed).

(5) All students living in the dormitories must take their meals in the dormitory dining rooms.

(6) All dormitory housing is taken on a year basis; all other campus housing (fraternity, sorority, and cooperative) is taken on a term basis. Students may not move during a term without special permission from the Dean of Men or the Dean of Women.

(7) All students enrolled in the University (with the exceptions noted above) are subject to University housing regulations, including students enrolled for part-time study.

Student Expenses

The average expenses incurred by students at the University during an academic year are shown in the table below. Some students with ample means spend more; but many students find it possible to attend the University at a lower cost. Board and room estimates are based on charges in the halls of residence. The incidental item will vary greatly with the individual. The expenses of the fall term are listed also, since there are expenses during this term not incurred during the winter and spring terms.

	Fall Term	Academic Year
Institutional fees (for Oregon residents)	\$142.00	\$ 426.00
Books, supplies, etc.	45.00	100.00
Board and room	268.00	721.00
Incidentals	50.00	150.00
Total	\$505.00	\$1,397.00

It should be remembered that, in making an estimate of the cost of a year at the University, a student usually has in mind the amount he will spend from the time he leaves home until he returns at the close of the year. Such an estimate would include travel, clothing, and amusements—items which vary according to the thrift, discrimination, and habits of the individual. These items are not included in the table.

Student Health Service

RUSSELL M. BLEMKER, M.D.....	Director of Health Service
MARIAN H. MILLER, M.D.....	Assistant Physician
JULIAN S. REINSCHMIDT, M.D.....	Assistant Physician
FRANCIS R. CUSHMAN, M.D.....	Assistant Physician

RICHARD K. WOODWARD, M.D.....	Assistant Physician
ROBERT L. McARTHUR, M.D.....	Assistant Physician
WILFORD A. BROOKSBY, M.D.....	Assistant Physician
RONALD C. ROMIG, M.D.....	Assistant Physician
MALCOLM M. MARQUIS, M.D.....	Assistant Physician
JEROME H. DAYTON, M.D.....	Assistant Physician
LEOTA B. BOYINGTON, R.N.....	Superintendent of Nurses
LILLIE SOASEY, R.N.....	Hospital Supervisor
RUTH SHREVE.....	Laboratory Technician
NORENE FRONABARGER.....	Laboratory Technician
FRANCES TURNER.....	X-Ray Technician
VERA ANDERSON, R.N.....	Nurse
ERMA UPSHAW, R.N.....	Nurse
EDNA D. EKLOF, R.N.....	Nurse
MARIAN McLAUGHLIN, R.N.....	Nurse
CALOMA A. DODGE, R.N.....	Nurse
MARY WILEY, R.N.....	Nurse
RUTH ALTLAND, R.N.....	Nurse
PEARL HALL, R.N.....	Nurse
ELIZABETH OVERGARD, R.N.....	Nurse
MARGARET PROCTER, R.N.....	Nurse
GEORGIA CROSS, R.N.....	Nurse
JEAN WONSER, R.N.....	Nurse
GLADYS ANDERSON, R.N.....	Nurse
DIANE CRABTREE, R.N.....	Nurse

THROUGH THE STUDENT HEALTH SERVICE the University does all in its power to safeguard the health of its students. The Health Service accomplishes its ends through health education, complete medical examinations for the detection of remedial defects, constant vigilance against incipient disease, medical treatment of acute diseases, and the maintenance of hygienic student living conditions.

The student health services in the institutions in the Oregon State System of Higher Education are supported by student registration fees. Every student registered for credit may receive general medical attention and advice at the Student Health Service during office hours. Limited hospital facilities are maintained for students whose condition requires hospitalization for general medical attention. Patients are admitted only upon the advice of the Health Service physician. Fifteen days is the maximum period of hospital service during any one academic year. When a special nurse is necessary, the expenses must be borne by the student. All expenses of, or connected with, surgical operations or specialized service must be borne by the student. Under no circumstances will the Health Service pay or be responsible for bills from private physicians or private hospitals. The privileges of the Health Services are not available to members of the faculty.

On the first floor of the Student Health Service building are modern clinical facilities, including examining room, physiotherapy department, minor surgery, laboratory, and X-ray department. On the second floor are two-bed and four-bed wards for hospital service. Limited emergency (night and holiday) service is also available on this floor.

Physical Examination and Immunizations. For protection of the public health, the Board of Higher Education requires of all students, as a condition for admission to the University: (1) a physical examination by a licensed M.D. or D.O. chosen by the student, and presentation of a record of this examination on an official form provided by the University; (2) an intradermal tuberculin test at the time of the physical examination; and (3) proof, to the satisfaction of the University physician, of (a) immunization against smallpox within five years

and (b) diphtheria-tetanus immunization within four years. (In addition, poliomyelitis immunization within one year is recommended.)

If the student is enrolled in the University at the close of a five-year period following the first physical examination, a second examination is required; a second examination may be required after a shorter interval, at the discretion of the University physician.

Students who decline immunizations because of religious conviction may be admitted, but only on the condition that they or (in the case of minor students) their parents or guardians agree in writing to assume all expenses incident to their care or quarantine, should they acquire smallpox, diphtheria, or tetanus while students in the University.

Financial Aid

FOR STUDENTS who need financial aid, the University provides assistance in finding part-time and summer employment, loans from special funds supported by private donors, and scholarships and fellowships supported both by state funds and by private endowment. Federal and state educational aid is available for veterans of the Korean conflict; under certain conditions, children of deceased veterans of the two world wars and the Korean conflict may qualify for Federal educational grants.

Student Employment

Many students earn a large part of their University expenses by work in the summers and during the academic year; some students are entirely self-supporting. The University assists those seeking part-time and vacation jobs through the Student Employment Service. Students wishing part-time jobs on the campus or in the Eugene community are advised to write to the Employment Service a few weeks before the opening of the fall term; in most cases, however, definite commitments for employment are made only after personal interviews with prospective employers.

Loan Funds

The University of Oregon administers student loan funds totaling more than \$404,000. These funds are available for two types of loans: regular loans for a period of six months to two years, and emergency loans of small amounts for a period of ninety days or less.

The loan funds held in trust by the University are governed by uniform principles and policies, administered by a Student Loan Committee. Applications for loans are made through the Office of Student Affairs. The following regulations govern student loans:

(1) Any student who has been enrolled in the University for at least one term and has a cumulative GPA of at least 2.00 may obtain an emergency loan for a period of three months or less; to be eligible for a long-term loan a student must have a GPA of 2.25.

(2) The service charge for emergency loans of \$10.00 or less is 50 cents for one month, 75 cents for two months, and \$1.00 for three months. The service charge for emergency loans of more than \$10.00 is \$1.00 for one month, \$1.25 for two months, and \$1.50 for three months. The service charge for all overdue emergency loans is 50 cents a month until paid in full.

(3) The interest rate for long-term loans is 4 per cent per year.

(4) No more than \$600 will be lent to any individual from University long-term loan funds.

(5) It is the policy of the University to encourage repayment of loans as soon as the borrower is able to pay. The maximum loan period is two years, with the privilege of renewal if the borrower has in every way proved himself worthy of this consideration. Payment of loans

in monthly installments as soon as possible after graduation is encouraged. The interest on renewed loans is 4 per cent a year if the borrower is still a student at the University; the rate of interest on renewals made after the student leaves the University is 6 per cent.

(6) The University does not accept various forms of collateral which most money lenders require for the security of loans. The only security accepted for long-term loans is the signature of two responsible property owners, in addition to that of the student borrower. The cosigners must submit evidence of their ability to pay the note—by filing a financial statement or by giving bank references. One cosigner must qualify by bank reference. It is desirable that one of the cosigners be the parent or guardian of the borrower. If a student is married, his or her spouse must sign the loan application.

(7) The signature of the borrower is the only security required for an emergency loan. Foreign students must also obtain the signature of the international student adviser.

(8) In considering applications, the members of the Student Loan Committee give weight to the following considerations: (a) the student's scholastic record; (b) his reputation for reliability, honesty, and industry; (c) need for aid and probability of wise expenditure; (d) amount of present indebtedness; (e) ability to repay; (f) effort which the student has made to assist himself.

(9) Except in the case of a few funds which are specifically restricted to University students at Eugene, students at the Medical School, the Dental School, and the School of Nursing are eligible for loans from University student loan funds on the same basis as students on the campus at Eugene.

The first University loan fund was founded in 1901 through the generosity of William M. Ladd of Portland. Other early contributors were A. S. Roberts of The Dalles and the Class of 1904. Although for a number of years the total amount of the fund was only a little over \$500, its benefits were large. Through it many students were enabled to complete their University work who otherwise could not have done so. In 1909 Senator R. A. Booth of Eugene became interested in the loan fund and through his efforts a number of others made substantial donations. Among these early donors were: Theodore B. Wilcox and J. C. Ainsworth of Portland, John Kelly of Eugene, W. B. Ayer of Portland, the classes of 1911 and 1913, Mrs. Ellen Condon McCornack, Ben Selling of Portland, and the estate of the late D. P. Thompson of Portland. In recent years the University student loan funds have grown very rapidly through gifts, bequests, and accumulated interest.

Loans are also available to University of Oregon students and students in other institutions from funds administered through agencies outside the University. Information concerning these funds may be obtained in the Office of Student Affairs.

Special University loan funds administered under conditions differing from those stated above include the following:

American Bankers' Association Loan Scholarship. The American Bankers' Association awards annually a \$250 loan scholarship to a senior student in business administration. The award is made by a faculty committee of the School of Business Administration.

Jackson Journalism Loan Fund. The interest from a \$15,000 endowment fund, bequeathed to the University by the late Mrs. C. S. Jackson, widow of the founder of the *Oregon Journal*, provides no-interest loans to men students majoring in journalism.

National Defense Loan Fund. Under the National Defense Education Act of 1958 funds have been provided for national defense loans for students at the University. The act allows a maximum loan of \$1,000 per year and a maximum of \$5,000 to a student. Special consideration is given, first, to superior students who plan to enter primary or secondary teaching in public schools and, second, to students who plan to enter the fields of science, mathematics, and modern foreign languages. For students who enter the teaching profession on the primary or secondary level, one-tenth of the total indebtedness will be forgiven for each full year of teaching up to a maximum of 50 per cent of the loan. Further information may be obtained in the Office of Student Affairs.

Mary Spiller Scholarship Loan Fund. The Mary Spiller Scholarship Loan Fund of \$5,000 has been established by the State Association of University of Oregon Women in honor of Mrs. Mary P. Spiller, the first woman member of the faculty. The income from the fund is available for scholarship loans.

United Student Aid Funds. United Student Aid Funds has developed a new "college reserve program" designed to provide low-cost, long-term bank credit to needy students through their hometown banks. The University is participating in this program on a limited basis. A student may borrow a maximum of \$1,000 a year up to a total of \$4,000; the interest rate is 6 per cent a year simple interest. The borrower is responsible to his hometown bank for repayment of the loan. Repayment starts four months after graduation and the student borrower may take up to thirty-six months to pay. Further information and application forms may be obtained from the Director of Financial Aids, Office of Student Affairs.

Scholarships and Fellowships

Scholarships and fellowships are available to University students of ability and promise. Most of these awards have been established through the generosity of private donors. Most of the scholarships listed below have a value at least equal to the Oregon state fee scholarships, and are open to competition by all students or by specified groups of students. A number of partial scholarships and special funds for the assistance of needy students are also available; information concerning these funds may be obtained from the Office of Student Affairs.

Scholarship and fellowship awards are administered through a faculty Committee on Scholarships and Financial Aid. A student applying for a particular scholarship is given consideration for all scholarships for which he may be eligible.

Application for any scholarship administered by the University of Oregon may be made on a form furnished by the Oregon State System of Higher Education; copies of the form may be obtained from high-school principals. Applications should be addressed to Dr. Kenneth S. Ghent, chairman of the Committee on Scholarships and Financial Aid, and should be filed not later than March 1.

Fellowships and scholarships offered to students at the University of Oregon Medical School, Dental School, and School of Nursing are listed in the separate catalogs of these schools.

General

State Fee Scholarships for Oregon Residents. The Oregon State Scholarship Commission awards annually a limited number of scholarships to residents of Oregon for study in the institutions of the Oregon State System of Higher Education. These scholarships cover a portion of the regular fees charged by the institutions—at the University, \$110 a term or \$330 an academic year. To be eligible, an entering freshman must rank in the upper half of his high-school graduating class; a student who has been previously enrolled in an institution of higher education must have a grade-point average of 2.50; all applicants, to be eligible, must be in need of financial assistance. Application should be made on forms available in the offices of high-school principals and of scholarship officers of the institutions of the State System, and should be submitted to the scholarship committee of the institution in which the student wishes to enroll. The scholarships include: (1) scholarships open to state-wide competition and (2) scholarships awarded to students residing in each of the counties and legislative districts of the state. The state-wide scholarships are apportioned to the several institutions of the State System, and are equal in number to 2.5 per cent of the enrollment of the institution; at least 50 per cent are awarded to freshmen; the scholarships are awarded for a period of one year, but may be canceled at the end

of any term in which the recipient fails to make a GPA of 2.50. The county and legislative district scholarships are four-year awards for study in any State System institution chosen by the student, but may be canceled if the student fails to maintain a 2.50 GPA; they are transferable to any other institution of the State System after one year at the initially chosen institution. One new county scholarship is awarded annually in each county of the state; the number of new legislative district scholarships in each district is equal to the number of legislative seats in the district.

State Fee Scholarships for Nonresident Students. A limited number of state scholarships are awarded annually to residents of the United States who are not residents of Oregon, for study in the institutions of the Oregon State System of Higher Education. These scholarships cover a portion of the regular fees charged by the institutions—at the University, \$100, \$150, or \$190 a term.

State Fee Scholarships for Foreign Students. A limited number of state scholarships are awarded annually to students from foreign countries attending the institutions of the Oregon State System of Higher Education. These scholarships cover a portion of the regular fees charged by the institutions—at the University, \$190 or \$300 a term for undergraduates, \$110 a term for graduate students.

State Cash Scholarships. A limited number of cash scholarships, with a maximum value of \$500, are awarded annually by the Oregon State Scholarship Commission to especially able graduates of Oregon high schools who are in need of financial assistance; the scholarships may be used in any accredited institution of higher education in the state of Oregon. A student may hold both a state cash scholarship and a state fee scholarship. Application forms may be obtained only from Oregon high-school principals; applications are transmitted by high-school principals to the State Scholarship Commission.

University Assistantships. Teaching and research assistantships are awarded annually by the University to qualified graduate students. For stipends and application procedure, see GRADUATE SCHOOL.

Associated Women Students Scholarships. The Associated Women Students of the University award scholarships ranging in value from \$150 to \$250 to women students. Funds for the support of the scholarships are provided through the service projects of Kwama, Phi Theta Upsilon, Heads of Houses, and the Associated Women Students.

Bend Alumni Scholarship. Several \$300 scholarships are awarded annually to freshman students who are graduates of Bend High School. The scholarships are supported by alumni and friends of the University residing in Bend, Oregon.

Robert A. Booth Fellowship in Public Service. This fellowship, supported by a bequest from the late Robert A. Booth of Eugene, Oregon, is awarded annually to an outstanding graduate of an accredited college or university. The award, between \$250 and \$500, is made on the basis of scholarship, character, personality, and interest in public service as a career.

Coca Cola Scholarship. This scholarship, at present approximately \$400, is awarded biennially to a graduating senior of the University of Oregon, as an aid to postgraduate study at the University. In choosing a Coca Cola scholar, a faculty committee gives consideration to scholastic record, character, good citizenship, and promise as a graduate student. The scholarship is endowed through a gift from John G. Foster of Eugene, Oregon.

Coed Housing Alumnae Scholarships. One or more fee scholarships, supported by Portland alumnae of the women's cooperative houses, are awarded annually to freshman women students who live in cooperative houses.

Coop Housing-Janet Smith Scholarships. Three \$75 scholarships are awarded annually to members of women's cooperative houses on the University campus. The scholarships are named in memory of the late Miss Janet Smith, adviser to the cooperative houses.

Cowden Scholarship. A \$200 scholarship, supported through an endowment provided by Norton Cowden, Class of '14, is awarded annually to a worthy student who is in need of financial assistance.

Bernard Daly Scholarships. Under terms of the will of the late Dr. Bernard Daly of Lakeview, Oregon, worthy young men and women of Lake County, Oregon may receive a portion of their college expenses from the Bernard Daly Educational Fund. The fund is administered by a board of trustees, including a representative of the University of Oregon; the board selects the scholars annually after a qualifying examination held in Lake County.

Delta Delta Delta Scholarships. Two scholarships are awarded annually by the Delta Delta Delta sorority to University women students; a \$150 scholarship to provide financial assistance to a student during her junior year; and a \$250 scholarship to assist a student during her senior year. The awards are made on the basis of need, scholarship, and record of student activities. The scholarships are financed by the local Delta Delta Delta chapter and by alumnae groups.

Development Fund Scholarships. A number of \$500 to \$1,000 scholarships are awarded annually by the University of Oregon Development Fund. Approximately 60 per cent of the scholarships are awarded on the basis of merit and 40 per cent on the basis of need. These scholarships are available to both in-state and out-of-state students.

William Frager-Skull and Dagger Scholarship. A \$150 scholarship is offered jointly by Samuel Frager of Albany, Oregon, and Skull and Dagger, sophomore service organization, to a University man for financial assistance during his junior year. The scholarship is a memorial to William Frager, Class of '39, who died in service in World War II.

Gamma Delta Scholarships. Three \$100 scholarships are awarded annually to active members of the Alpha Beta (Eugene) chapter of Gamma Delta, an international association of Lutheran college and university students. Awards are based on scholastic record, participation in the activities of the church, and need. Funds for the support of the scholarships are provided by Dr. Albert J. Brauer of Florence, Oregon.

General Motors Scholarship. Each year the General Motors Corporation provides funds for one scholarship to be awarded to a University of Oregon freshman of outstanding merit, chosen by the University Scholarship Committee. Consideration is given to academic record, participation in extracurricular activities, and evidence of responsibility and leadership. The scholarships vary in amount from \$200 to \$2,000, depending on the need of the recipient, and are renewable through the student's undergraduate years, provided he maintains an outstanding scholastic record.

Jennie Beattie Harris Scholarship. Two \$250 scholarships are awarded annually to full-time women students on the basis of scholastic record, character, good citizenship, and financial need. The scholarships are supported by income from the Jennie Beattie Harris Loan Fund established by the State Association of University of Oregon Women.

Holmes Scholarship. A \$250 scholarship, supported by Harry and David Holmes of Medford, is awarded annually to a graduate of a Jackson County, Oregon high school who is in financial need and shows high scholastic promise.

Herbert Crombie Howe Scholarship. This scholarship is endowed through a gift from Mrs. Herbert Crombie Howe in memory of her husband, a member of the faculty of the Department of English from 1901 until his death in 1940, and for many years faculty representative to the Pacific Coast Intercollegiate Athletic Conference. It is awarded to students injured in athletic competition, to help them continue their education.

Maurice Harold Hunter Scholarship. The Maurice Harold Hunter Leadership Scholarship, covering full tuition (\$300), is awarded annually to the junior man in the University, a resident of the state of Oregon, who is judged to have made the most notable contribution, through his own achievements and good example, toward the development of qualities of leadership among his fellow students. The names of the recipients are engraved on a permanent plaque, which is displayed in the Browsing Room in the Student Union. The scholarship is supported through gifts to the University by Honorary Chancellor and Mrs. Frederick Maurice Hunter and Dr. and Mrs. Arthur Francis Hunter, in honor of their son and brother, Captain Maurice Harold Hunter, Class of '41. Captain Hunter was killed in action in Burma on January 31, 1945.

Lowe Scholarships. Two \$150 scholarships, supported by Mr. and Mrs. George K. Lowe of Eugene, Oregon, are awarded annually to University men students on the basis of scholastic ability and performance, character, citizenship, interest and proficiency in sports, and need of financial assistance.

Karl W. Onthank Scholarships. Three \$500 scholarships are awarded annually to out-of-state students and five \$300 scholarships to in-state students, in honor of Karl W. Onthank, Class of '16 and member of the University faculty since 1916.

Order of the O Scholarship. A \$1,000 scholarship is awarded annually to the outstanding high-school athlete from the state of Oregon who enters the University of Oregon. The award is supported through work projects undertaken by the Order of the O, a campus varsity lettermen's organization.

Oregon Dads Scholarships. The Oregon Dads organization awards annually the \$500 Donald M. Erb Memorial Scholarship and twenty-five or more scholarships ranging in value from \$100 to \$300 to freshman students graduating from Oregon high schools. Recipients of the scholarships are chosen on the basis of academic record, financial need, and promise of successful University work. High-school students may apply for Oregon Dads scholarships during their senior year or during the two years following their graduation.

Oregon Mothers Scholarships. The Oregon Mothers organization awards annually five \$500 scholarships and twenty or more fee scholarships to freshman students graduating from Oregon high schools. Recipients of the scholarships are chosen on the basis of academic record, financial need, and promise of successful University work. High-school students may apply for Oregon Mothers scholarships during their senior year or during the two years following their graduation.

Orides Mothers-Janet Smith Scholarships. Two fee scholarships are awarded each year to senior Orides girls. Funds for the scholarships are given by the Orides Mothers Club and friends of the late Miss Janet Smith.

Phi Gamma Delta Scholarship. The Phi Gamma Delta Scholarship, a memorial to Robert C. Jones, is a \$135 award given annually to a junior student who is outstanding in scholarship, leadership, and prospects for future service. Mr.

Jones, Class of '43, was killed on December 26, 1944 in the Battle of the Bulge. The scholarship has been endowed by Mrs. Eleanor Jones Mumm and Mr. and Mrs. Frank C. Jones.

Quota International Scholarship. The Eugene, Oregon chapter of Quota International awards a fee scholarship to a junior woman.

Marjorie Thompson Reynolds Scholarship. A scholarship covering tuition and fees is awarded annually to an upper-division member of a University sorority. The scholarship, supported by Eugene City Panhellenic, is a memorial to the late Mrs. Marjorie Reynolds.

Rockwell Scholarships. Several \$165 scholarships, endowed through a bequest from the late Mrs. Mary E. Rockwell, are awarded annually "to assist worthy, ambitious, and needy young men and women to acquire an education" at the University of Oregon, "so that they may be better fitted and qualified to appreciate and help to preserve the laws and institutions of this country."

Loretta Showers Rossman Scholarships. One or two scholarships, varying from \$250 to \$500, are awarded annually to worthy students in memory of Loretta Showers Rossman, a graduate of the University of Oregon in the Class of '10.

Rotary Club Scholarships. Four scholarships covering tuition and fees are awarded annually to freshmen from the Eugene, Oregon area, on the basis of scholarship, character, and need. The scholarships are supported by the Rotary Club of Eugene.

Hazel P. Schwering Memorial Scholarship. A \$300 scholarship, named in honor of the late Mrs. Hazel P. Schwering, is awarded annually to an outstanding junior woman. Funds for the scholarship are raised by the Heads of Houses and friends of Mrs. Schwering.

Silva Scholarship. A \$300 scholarship, endowed by Julio W. Silva of Eugene, is awarded annually to a graduate of a Lane County, Oregon high school, preferably a student from the Eugene-Springfield area. The award is made on the basis of scholarship, leadership, character, and need.

Richard Shore Smith Memorial Scholarship. A \$600 scholarship is awarded annually to a University man on the basis of scholastic performance, character, leadership, interest and proficiency in sports, and need. The scholarship is supported by the income from an endowment given to the University by Dr. and Mrs. Donald B. Slocum of Eugene, Oregon as a memorial to Mrs. Slocum's father, the late Richard Shore Smith, Class of '01.

Mary Spiller Scholarship. A scholarship of approximately \$250 is awarded annually to a woman student who has been enrolled in the University for three full terms; the award is on the basis of scholastic record, character, good citizenship, and financial need. The scholarship is supported by income from the Mary Spiller Endowment Fund and the Mary Spiller Loan Fund, memorials to the first woman teacher in the University.

Joseph Kinsman Starr Scholarships. Approximately twenty scholarships, varying from \$300 to \$700 according to financial need, are awarded annually to University men students in memory of Joseph Kinsman Starr, a graduate of the University of Oregon School of Law in the Class of '07. For eligibility, students must have strong academic records, must be residents of communities of population of 5,000 or less, and must be descendants of early American pioneers.

William W. Stout Scholarships. Several scholarships, ranging in amount from \$750 to \$1,250, are awarded annually to worthy students who need financial

assistance to get the maximum benefit from their education. The scholarships are supported through a bequest from the late William W. Stout of California.

C. P. Tillman Scholarship. The C. P. Tillman Scholarship, about \$100, is awarded annually to a University freshman residing in the Eugene-Springfield area, on the basis of ability and financial need. The scholarship is supported by an endowment bequeathed to the University by the late C. P. Tillman of Eugene, Oregon.

Max Tucker Scholarships. Two or three \$1,000 scholarships are awarded annually to University of Oregon students from a fund established by the will of the late Max Tucker of Lebanon, Oregon. In the selection of Tucker scholars, special consideration is given to graduates of Lebanon High School.

Zimmerman Scholarships. The Joseph P. and Eva Zimmerman scholarships, of varying amounts, are awarded to seniors and graduate students. The scholarships are supported through a bequest of the late Miss Lois Zimmerman, Class of '28, and is named in memory of her father and mother.

Zonta Scholarship. The Eugene chapter of Zonta International awards a fee scholarship to a woman student, usually a junior or a senior.

Liberal Arts

Colonial Dames of America Scholarship. A \$300 scholarship, supported by the Colonial Dames of America, is awarded annually to a student who intends to teach American history and who is in need of financial assistance.

Thomas Condon Fellowship in Paleontology. The Thomas Condon Fellowship is awarded by the Department of Geology as an aid to graduate study in the field of paleontology. The fellowship is endowed through a bequest from the late Mrs. Ellen Condon McCornack, and is named in memory of her father, Dr. Thomas Condon, pioneer Oregon geologist and a member of the University faculty from 1876 until his death in 1906.

Judy Ellefson Speech Scholarship. A \$100 scholarship is awarded annually to an upper-division student whose primary interest is in the field of speech and drama. The scholarship is named in memory of the late Miss Judy Ellefson, Class of '55, and is supported by her family and friends.

Pacific Resins and Chemicals Scholarship. A \$300 scholarship, supported by Pacific Resins and Chemicals, Inc., is awarded annually to a freshman student who is planning a career in chemistry or in the teaching of science or mathematics in the secondary schools.

F. G. G. Schmidt Fellowship in German. A \$250 fellowship, supported by a gift from the late Dr. F. G. G. Schmidt, a member of the University faculty from 1897 until his death in 1945, is awarded annually to a worthy graduate student majoring in German.

Stafford Scholarships in Chemistry. Two \$500 scholarships are awarded annually to junior or senior majors in chemistry from funds provided by the Crown Zellerbach Foundation. The donor stipulates: (1) that, in the selection of scholars, no discrimination be made on the basis of race, creed, sex, or country of origin; (2) that candidates must be citizens of the United States; (3) that financial need should not be a primary consideration in selection; (4) that scholarships shall not be awarded to students who have previously held scholarships from the Crown Zellerbach Foundation. The awards are named in honor of Orin Fletcher Stafford, member of the faculty of the University Department of Chemistry from 1902 until his death in 1941.

Architecture and Allied Arts

Ion Lewis Scholarship in Architecture. A \$2,000 traveling scholarship is awarded, when funds are available, to advanced students in architecture at the University of Oregon. Award is made on the basis of character, ability, promise, and need of travel. The scholarship is supported by a trust fund established by the late Ion Lewis of Portland, Oregon.

Ina McClung Art Scholarships. Several scholarships of varying amounts up to \$500 are awarded annually to students in the School of Architecture and Allied Arts from the income of an endowment established by Mrs. Katherine H. McClung. The scholarships are named in memory of the late Miss Ina McClung, Class of '95.

Ellen M. Pennell Scholarships. Several scholarships, covering regular fees, are awarded for a term or a year to students in the School of Architecture and Allied Arts. They are endowed through a bequest from Mrs. Ellen M. Pennell, for many years a member of the University Library staff.

Women's Architectural League Scholarship. A \$250 scholarship, supported by the Women's Architectural League, is awarded annually to a student of architecture, preferably from the Portland, Oregon vicinity.

Business Administration

Autzen Foundation Scholarship. The Autzen Foundation provides an annual award of \$500 to an upper-division student in business administration. The award is made on the basis of scholarship, qualities of leadership, and probable success in a business career.

Eppstein Scholarship for Insurance Education. An annual \$200 scholarship is awarded to a business-administration major in the field of insurance. The scholarship is a memorial to the late Arthur M. Eppstein, and is supported through a gift from agents of the Oregon Automobile Insurance Company, of which Mr. Eppstein was president. The award is made on the basis of scholarship, need, character, and professional aptitude for work in property and casualty insurance.

Eugene-Lane County Insurance Agents Scholarship. A \$250 scholarship is awarded annually to a business-administration major specializing in the field of insurance, who plans to make his career in property and casualty insurance. Funds for the scholarship are provided by the Eugene-Lane County Association of Insurance Agents.

Haskins and Sells Scholarship. A \$500 scholarship "to stimulate higher academic achievement on the part of students majoring in accounting, and to encourage promising students to major in this field" is awarded annually to an accounting student from funds provided by the Haskins and Sells Foundation.

Haskins and Sells Teaching Fellowship in Accounting. A \$1,000 fellowship is awarded each year by the Haskins and Sells foundation to a graduate student preparing for a career in college teaching of accounting. For eligibility, an applicant should have completed the requirements for a master's degree.

Insurance Society Scholarship. A \$200 scholarship is awarded annually to a student in the School of Business Administration majoring in risk and insurance. Funds are provided by the Insurance Society.

Republic Carloading and Distributing Company Scholarship. The Republic Carloading and Distributing Company awards annually a \$300 scholarship to an entering freshman student planning to major in the field of traffic management and

transportation in the School of Business Administration. The scholarship is renewable each year until the student's graduation, provided he maintains a satisfactory academic record.

Edward T. Stelle Memorial Scholarship. A \$150 scholarship named in honor of the late Edward T. Stelle is awarded annually to an outstanding student majoring in finance.

Weyerhaeuser Fellowship. The Weyerhaeuser Company Foundation offers a \$2,000 fellowship to outstanding graduate students in business administration. The award is made through the Forest Industries Management Center to encourage advanced professional training for this field. Special consideration is given to students who have a background of technical studies or related employment experience.

Journalism

Crown Zellerbach Scholarship. Two \$500 scholarships are awarded annually by the Crown Zellerbach Foundation to upper-division students majoring in journalism. Scholarship, character, and journalistic ability are the major criteria for selection; financial need is not a criterion. Candidates must be United States citizens and preferably residents of the Pacific Northwest.

Eugene Advertising Club Scholarship. A \$200 scholarship is given annually by the Eugene Advertising Club to an undergraduate journalism major whose field of emphasis is advertising. Criteria for selection are scholarship, ability, character, and need. Preference is given to Lane County, Oregon students.

Eugene Register-Guard Allen Scholarships. Two \$500 scholarships are awarded annually by the Eugene *Register-Guard* to journalism students, on the basis of scholastic achievement, journalistic ability, and financial need. Candidates must intend to make newspaper work their career. The scholarships are named in memory of Eric W. Allen, first dean of the School of Journalism and member of the University faculty from 1912 until his death in 1944.

Howard Hillis Scholarship. A \$300 scholarship, named in honor of Howard Hillis, is awarded annually to a freshman student who intends to major in journalism. Funds for the scholarship are provided by the Oregon Scholastic Press and friends of the School of Journalism.

Mainwaring Memorial Scholarship. The family of the late Bernard Mainwaring, editor and publisher of the Salem *Capital Journal*, awards annually a \$300 fee scholarship to a student majoring in journalism in the news-editorial or newspaper management field. Scholarship, character, and contribution to the OREGON DAILY EMERALD are the bases for the selection.

Oregon Industrial Advertising Scholarship. A \$300 scholarship is awarded annually by the Oregon chapter of the Association of Industrial Advertisers to an undergraduate journalism major planning a career in advertising, whose scholastic record, demonstrated ability in advertising, and character warrant a high expectancy of success in and contribution to the field.

Oregon Newspaper Publishers Association Scholarships. Six or more scholarships, ranging from \$100 to \$200, are provided through the Journalism Scholarship Fund of the Oregon Newspaper Publishers Association. The scholarships are awarded by the School of Journalism faculty to journalism majors or premajors who intend to enter the newspaper field.

Oregon Scholastic Press Scholarships. From one to four \$200 scholarships are awarded annually to freshman students intending to major in journalism, from

funds provided by the Oregon Scholastic Press and friends of the School of Journalism. Recipients are selected chiefly on the basis of high-school scholarship, journalistic interest and ability, and financial need.

Pendleton East Oregonian Scholarship. The Pendleton *East Oregonian* awards annually a fee scholarship to a Pendleton student majoring in journalism.

Register-Guard 20-Year Club Scholarship. A \$100 scholarship is awarded annually by the 20-Year Club of the Eugene *Register-Guard* to a sophomore or junior student in journalism who shows promise of achievement in the field, whose home is in the circulation area of the *Register-Guard*, and who has a need for financial assistance.

Sweet Memorial Scholarship. A \$300 scholarship, named in memory of the late Miss Florence Sweet, is awarded annually to a freshman student who intends to major in journalism. Miss Sweet was adviser to the Pendleton High School *Lantern* and president of the National Association of Journalism Directors. Funds for the scholarship are provided by the Oregon Scholastic Press and friends of the School of Journalism.

Law

James D. Barnett Scholarship. A \$300 Barnett scholarship is awarded annually by the faculty of the School of Law to a needy and worthy student. The scholarship is supported through the income of an endowment fund, established by Mrs. Winifred Barnett Allendoerfer and Professor Carl Allendoerfer, in memory of Dr. James D. Barnett, member of the University faculty from 1908 until his death in 1957.

Henry E. Collier Law Scholarships. Several scholarships are awarded annually, on the basis of financial need and good moral character, to worthy men students in the School of Law who intend to make the practice of law their life work. The scholarships are supported by the income of a \$50,000 trust fund established under the will of the late Henry E. Collier, Portland attorney. No recipient may be awarded more than \$500 in any one year.

Lorienne Conlee Fowler Law Scholarship. The Lorienne Conlee Fowler Scholarship is awarded, on the basis of need and scholastic record, to a woman student entering the School of Law; the scholarship may be renewed as long as the recipient continues to make satisfactory progress toward a professional law degree. The award consists of the income of a \$5,000 trust fund established by Dr. Frank E. Fowler, Class of '20, in memory of his wife, Mrs. Lorienne Conlee Fowler.

Herbert B. Galton Scholarship. A \$200 scholarship is provided annually by Herbert B. Galton, a Portland attorney and a member of the Class of '38, to be awarded to a second-year student, for use during his third year in the School of Law, on the basis of academic performance, production for the OREGON LAW REVIEW, and interest in the field of labor law demonstrated by writings published in the REVIEW.

Charles G. Howard Law Scholarships. Several scholarships, of varying amounts, are awarded annually on the basis of satisfactory academic progress, financial need, and the applicant's effort to solve his own financial problems, to second- and third-year students in the School of Law. The scholarships are supported through a trust fund established by members of Phi Alpha Delta, legal fraternity, and are named in honor of Charles G. Howard, professor emeritus of law, and a member of the faculty of the School of Law since 1928.

James T. Landye Scholarship. A \$300 scholarship is awarded annually by the trustees of the James T. Landye Scholarship Fund to a needy and worthy

student of outstanding scholastic ability who aspires to be a lawyer, and who is entering upon his second or third year of study in the School of Law. The scholarship is financed from the income from a fund contributed by the friends of the late James T. Landye, a Portland lawyer and a member of the Class of '34.

Law School Alumni Scholarships. Six \$330 scholarships are provided by the Law School Alumni Association for award to deserving members of the entering class of the School of Law whose prelegal academic records are of B-average quality or higher. The recipients of these scholarships are selected by the president of the association and the dean of the school.

Paul Patterson Memorial Fellowship. A \$1,000 fellowship is awarded annually to a student completing his second year in the School of Law who best exemplifies the high qualities of integrity, leadership, and dedication to public service which characterized the late governor of Oregon, Paul L. Patterson, Class of '26. The fellowship is supported through gifts from alumni and friends of the University.

Medicine*

Kenneth A. J. Mackenzie Memorial Scholarship. A \$1,000 scholarship is awarded annually for the study of medicine to the outstanding premedical student at the University of Oregon in his last year of premedical studies. The student receives \$200 during his last year of premedical work at the University and \$200 each year at the University of Oregon Medical School if he continues to maintain a high scholastic record. If the student does not maintain a high scholastic record at the Medical School, his scholarship is transferred to an outstanding member of his Medical School class who took his premedical work at the University. The scholarships are a memorial to Dr. Kenneth A. J. Mackenzie, former dean of the Medical School; they are endowed through a bequest from the late Mrs. Mildred Anna Williams.

John J. Rogers Premedical Scholarship. A \$500 scholarship is awarded annually to a premedical student. The scholarship is supported by Mrs. John J. Rogers of Eugene, Oregon.

Music

Maud Densmore Memorial Music Scholarship. The Maud Densmore Memorial Music Scholarship, approximately \$250, is awarded annually to an advanced student in music at the University. The scholarship is supported by the Eugene Women's Choral Club.

Eugene Women's Choral Club Scholarship. The Eugene Women's Choral Club awards annually a \$120 scholarship for vocal-music instruction in the University to a graduate of a Lane County, Oregon high school. The award, which is made on the basis of vocal activity, character, and financial need, may be divided between two applicants.

Mu Phi Epsilon Scholarships. These scholarships, covering applied-music fees, are awarded by the members of the Eugene, Oregon alumnae chapter and patronesses of Mu Phi Epsilon to students in the School of Music.

Musicians' Union, Local 689, Scholarships. Two music-fee scholarships for private study are awarded annually to wind-instrument players. The scholarships are supported by funds provided by Musicians' Union, Local 689.

Phi Beta Scholarships. Several scholarships, covering applied-music fees, are awarded by alumnae and patroness groups of Phi Beta, women's national pro-

* See also University of Oregon Medical School Catalog.

fessional fraternity for music and drama, to women students in the School of Music on the basis of talent, scholarship, and worthiness.

Lillian A. Seaton Music Scholarship. A \$150 scholarship is awarded annually to a student majoring in music; the scholarship is supported by Mrs. Lillian A. Steele of Eugene, Oregon, in memory of her aunt, the late Mrs. Lillian A. Seaton.

Physical Education

Faculty Scholarship in Women's Physical Education. The faculty of the division of physical education for women awards biennially a fee scholarship to an upper-division woman student who is preparing for a teaching career in health, physical education, or the dance.

Women's Physical-Education Scholarship. The Association of Oregon Physical Education Alumnae awards annually a \$100 scholarship to a freshman woman planning to major in physical education.

Veterans' Aid

Veterans of the Korean conflict may receive Federal educational aid under the provisions of Public Law 550 or 894. Application should be made through a local office of the Veterans Administration. Veterans who are residents of Oregon may receive state educational aid, on application to the Educational Officer, Department of Veterans Affairs, Salem, Oregon.

Children of deceased veterans of World War I, World War II, or the Korean conflict may qualify for Federal educational aid under the provisions of Public Law 634. For eligibility, the parent's death must have been due to a disease or injury incurred or aggravated in active military service. Application should be made through a local office of the Veterans Administration.

Prizes and Awards

DISTINCTION in scholarship is recognized at the University through degrees with honors, through election to honor societies, and through prizes and awards. A statement of the requirements for degrees with honors will be found elsewhere in this Catalog. There are also essay and oratorical prizes, and awards for proficiency in special fields and for all-round distinction in student life.

General

Carson Hall Mothers Cup. A cup, presented by the Portland, Oregon Mothers Club, is awarded annually to the outstanding girl residing in Carson Hall.

Gerlinger Cup. The Gerlinger Cup, given by Mrs. George Gerlinger, former regent of the University, is awarded by a committee of faculty, town, and student women to the best all-round woman of the junior class.

Koyl Cup. The Koyl Cup, the gift of Charles W. Koyl, Class of '11, is awarded each year to the man who, in the opinion of a committee of the faculty, is the best all-round man of the junior class.

Library Day Prizes. The Coop Book Store, the Association of Patrons and Friends of the University of Oregon Library, and other donors award prizes on Library Day each spring for the best personal libraries of University students.

Oregon Dads Honors for Leadership. In recognition of outstanding leadership in high school, superior qualities of character and scholarship, and unusual promise for leadership in public affairs, the Oregon Dads award annually to selected high-school seniors certificates of Special Honors for Leadership. Recipients in need of financial assistance to continue their education at the University may also be awarded scholarships.

Oregon Dads Honors for Scholarship. The University of Oregon Dads award annually certificates of Special Honors for Scholarship to a limited number of high-school graduates, in recognition of outstanding scholarship records in high school, superior qualities of character and leadership, and unusual promise for success in University studies. Recipients in need of financial assistance may also be awarded scholarships.

Phi Beta Kappa Prize. This prize, consisting of books to the value of \$25, is offered annually by the Alpha of Oregon chapter of Phi Beta Kappa. The award is made, on the basis of scholarship, to a student completing lower-division work. The books are chosen by the student in consultation with a committee of the chapter.

Liberal Arts

Philo Sherman Bennett Prize. A prize of from \$15 to \$50, supported by a bequest from Philo Sherman Bennett of New Haven, Connecticut, is awarded for the best essay on the principles of free government.

Julia Burgess Poetry Prize. The Julia Burgess Poetry Prize of \$25 is awarded annually for the best original poem submitted by an undergraduate. Information concerning the award may be obtained from the head of the Department of English. The prize is endowed through a bequest from the late Julia Burgess, member of the University faculty from 1907 until her death in 1942.

L. S. and D. C. Cressman Prize in Anthropology. A \$75 prize is offered annually for the best essay in any subfield of anthropology submitted by a currently enrolled graduate student. It is expected that the essay be written especially for the prize competition and be suitable for publication, both in content and form. The prize is supported through funds provided by Dr. and Mrs. Luther S. Cressman.

DeCou Prize in Mathematics. A prize of \$100 is awarded annually to a junior or senior student for excellence in the field of mathematics. The prize is named in memory of Edgar E. DeCou, a member of the University faculty from 1902 until his death in 1947, and in memory of his son, Edgar J. DeCou.

Delta Phi Alpha Award. A volume of German literature is awarded each year by the University chapter of Delta Phi Alpha, national German honor society, to the most outstanding student in German literature.

Failing-Beekman Prizes. These prizes are awarded annually to members of the senior class who have demonstrated during their University career the greatest ability in public speaking. The first prize of \$100 is the gift of Henry Failing of Portland; the second prize of \$75 is the gift of C. C. Beekman of Jacksonville, Oregon.

LeJeune W. Griffith Theater Award. A \$25 award is presented annually to the outstanding senior who contributed most during his University career to the collective theater arts: acting, directing, playwriting, designing, and technical theater. The award is supported through gifts from Mrs. LeJeune W. Griffith, Class of '48.

Haycox Short-Story Prizes. The Ernest Haycox Memorial Short-Story Prizes, \$100 and \$50, are awarded annually for the best original short stories of high literary quality submitted by undergraduate or graduate students. Information concerning this award may be obtained from the head of the Department of English. The prizes are supported through gifts from Mrs. Ernest Haycox in memory of her husband, a graduate of the University in the Class of '23.

Jewett Prizes. These prizes, amounting to more than \$200, are awarded annually in a series of public-speaking contests. Funds for the prizes were given to the University in memory of the late W. F. Jewett by his wife, Mrs. Mary Jewett.

Marion F. McClain Award in Pacific Northwest History. A \$500 award is offered annually for a manuscript, written by a candidate for an advanced degree, which presents a significant contribution to knowledge of some phase of Pacific Northwest history. The award is named in honor of the late Marion F. McClain, Class of '06, who was manager of the University Cooperative Store from 1920 to 1949. The award is supported through gifts from Mr. McClain's widow, Mrs. Mabel E. McClain, and the Cooperative Store.

Pi Delta Phi Award. The University chapter of Pi Delta Phi, national French honor society, presents book prizes each year to the students who have made the greatest progress in undergraduate courses in French.

George Rebec Prize in Philosophy. A \$100 U.S. savings bond is awarded annually to the undergraduate student who submits the best essay on a philosophical topic. The prize is named in honor of Dr. George Rebec, member of the University faculty from 1912 until his death in 1944.

Sigma Delta Pi Awards. Book prizes are awarded each year by the University Gamma chapter of Sigma Pi, national Spanish honor society, to students in advanced courses in Spanish who make the greatest progress during the year.

Sigma Xi Graduate Research Prize. A prize of \$25 is awarded annually by the Oregon chapter of Sigma Xi to the graduate student, working in one of the fields from which Sigma Xi selects its members, who submits the most outstanding piece of research.

John Watson Vogan Spanish Essay Prizes. Prizes are awarded annually to the students presenting the best essays written in the Spanish language. The prizes are supported by an endowment established by Mrs. Grace Dawson Vogan of Portland as a memorial to her husband, the late John Watson Vogan.

Alicia Woods Poetry Prize. The Alicia Woods Poetry Prize of \$15 is awarded annually for an outstanding original poem submitted by an undergraduate. Information concerning the award may be obtained from the head of the Department of English. The prize is supported from an endowment provided by friends of the late Alicia Woods, M.A., Oregon, 1958.

Business Administration

Beta Gamma Sigma Award. Each year the name of the sophomore student in business with the highest cumulative grade average is engraved on a plaque placed in the corridor of Commonwealth Hall by Beta Gamma Sigma, honorary business fraternity.

Comish Award in Marketing. An award of approximately \$30 is presented annually to a junior student in business administration who is specializing in marketing and merchandising. The award is supported through a gift from Dr. Newell H. Comish, professor emeritus of business administration.

Erickson, Eiseman & Company Awards. Five \$25 awards are made annually to students in accounting, for the purchase of books, periodicals, or other accounting materials. Funds for the awards are provided by Erickson, Eiseman & Company, Portland accounting firm.

Oregon State Society of Certified Public Accountants' Prize. This award, consisting of accounting books to the value of \$50, is made each year to the outstanding student in accounting.

Phi Chi Theta Award. The name of the sophomore woman student in business with the highest cumulative grade-point average is engraved each year on a plaque placed in the corridor of Commonwealth Hall by Phi Chi Theta, national women's business fraternity.

Phi Chi Theta Key. The Phi Chi Theta Key is awarded annually, on the basis of high scholastic standing and student activities, to a woman in the senior class of the School of Business Administration.

Journalism

William G. Gurney Memorial Award. The name of the male student in journalism who, in his junior year, shows the greatest promise as a writer is recorded annually on a plaque in the Allen Seminar Room. The award is made jointly by Sigma Delta Chi, national professional journalism fraternity, and Alpha Tau Omega, social fraternity, in honor of William G. Gurney, a journalism student who was killed while on duty in the Air Force Reserve Officers Training Corps in 1953.

Harpham Prize in Journalism. A prize of \$25 is given annually for the best writing by a journalism major on the subjects of international affairs and world peace. Funds for the award are provided by Mr. and Mrs. Everett H. Harpham of Eugene, Oregon.

Hillsboro Argus Award. The name of the senior woman in journalism having the highest scholastic average for her four years of undergraduate work is engraved each year on a plaque in the Allen Seminar Room. The plaque is a gift from the Hillsboro, Oregon, *Argus*.

Oregon Press Women Book Prize. A prize of \$100 is awarded annually by the Oregon Press Women to an outstanding sophomore woman planning to major in journalism, for the purchase of textbooks and supplementary books.

Sigma Delta Chi Scholarship Award. Recognition for exceptional scholarship is made annually to journalism senior majors by Sigma Delta Chi, professional journalism fraternity.

T. Neil Taylor Awards in Journalism. Awards of \$50, \$25, and \$15 are given annually for the three best senior theses presented by majors in journalism. Funds for the awards are provided by T. Neil Taylor of Oakland, California, University journalism graduate in the Class of '31.

Turnbull-Hall Award. Each year the name of the outstanding senior member of the staff of the OREGON DAILY EMERALD is engraved on a plaque which hangs in the EMERALD news room. The plaque was presented in 1931 by George Turnbull and Vinton H. Hall.

Law

American Jurisprudence Prizes. The Lawyers Cooperative Publishing Company and the Bancroft-Whitney Company award annually separately bound

topics from *American Jurisprudence* to those students having the best scholastic records in the several courses in the School of Law covering the topics included in *American Jurisprudence*.

Bancroft-Whitney Prize. The Bancroft-Whitney Company, law publisher, awards annually a legal publication to the senior law student who has maintained the highest grade average throughout his work in the School of Law.

Bender-Moss Prize. The Bender-Moss Company, law publisher, awards annually a set of Wharton's *Criminal Evidence* and of Schweitzer's *Cyclopedia of Trial Practice* to the senior law student who has earned the highest grades in pleading and practice courses during his three years of law study.

Bureau of National Affairs Prize. The Bureau of National Affairs awards annually a year's subscription to *United States Law Week* to the member of the graduating class of the School of Law who, in the judgment of the faculty, has made the most satisfactory scholastic progress during his final year in the school.

Nathan Burkan Memorial Prizes. The American Society of Composers, Authors, and Publishers awards a \$150 first prize and a \$50 second prize for the best papers submitted by students in the graduating class of the School of Law on the subject of copyright law.

Corpus Juris Secundum Prizes. The American Law Book Company makes available each year three selected titles of *Corpus Juris Secundum* to be awarded to the student in the first-, second-, and third-year classes who, in the opinion of the faculty, has made the most significant contribution toward over-all legal scholarship.

Lane County Bar Association Prizes. The Lane County Bar Association awards a \$65 first prize, a \$40 second prize, and a \$25 third prize for the best presentations made by law students in an annual oral case-analysis contest. The case analyses are presented at the regular luncheon meetings of the association during the academic year.

Lawyers Cooperative Prize. The Lawyers Cooperative Publishing Company awards annually a copy of Ballantine's *Law Dictionary* to the law student doing the best work in the course in Legal Bibliography.

Physical Education

Physical-Education Honor Awards. The faculty of the School of Health, Physical Education, and Recreation presents certificates each year in recognition of outstanding qualities of sound scholarship, high idealism, and professional accomplishment in the field of physical education, health education, and recreation.

Erb Memorial Student Union

ALFRED L. ELLINGSON, B.S.....	Director
BURTON A. BENSON, B.S.....	Student Publications Director
JOHN A. CROSS, M.S.....	Activities Director
KENNETH H. LARSEN, B.S., A.D.A.....	Foods Manager
ADEL McMILLAN, M.S.....	Program Director
WILLIAM M. SANFORD, B.S.....	Assistant to the Director
ORR-LYDA CHOWNING, M.A., A.D.A.....	Dietitian

THE ERB MEMORIAL STUDENT UNION is a building dedicated to making the extracurricular work of students an integral part of their education. It provides

group meeting rooms, a lounge, soda bar, cafeteria, and dining room, an art gallery, a large ballroom, and a Browsing Room, a branch of the University Library. Student activity offices are on the third floor. For recreation there is a "listening room" for classical music, a room for jazz, a piano practice room, a "combo" practice room, sixteen-lane bowling alleys, pool and billiard tables, and table tennis and shuffleboard facilities. Also housed in the building are the offices of the Y.M.C.A., a branch of the U.S. Post Office, and a six-chair barber shop.

The Student Union was built solely through gifts from alumni and friends of the University, student building fees, and the sale of bonds to be retired from future building fees. The building is named in memory of Dr. Donald M. Erb, President of the University from 1938 until his death in 1943.

Graduate School

*HARRY ALPERT, Ph.D., Dean of the Graduate School.

CLYDE P. PATTON, Ph.D., Acting Dean of the Graduate School.

NORMAN D. SUNDBERG, Ph.D., Acting Associate Dean of the Graduate School.

FRED J. MOHR, B.A., Deputy Director, Office of Scientific and Scholarly Research.

Graduate Council

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THE PRIMARY AIM in the discipline of undergraduate education is to prepare the student for cultured living and intelligent citizenship, and to acquaint him with techniques leading to a professional career. In graduate study the dominant aim is the development of the scholar, capable of original thinking and of creative achievement in the advancement and extension of knowledge. Hence, a graduate degree indicates more than the mere completion of a prescribed amount of advanced study; it indicates that the student has shown both promise and performance in some field of independent scholarship.

At the University of Oregon, all study beyond the bachelor's degree, except strictly professional work in law, medicine, and dentistry, is administered through the Graduate School. The formulation of the graduate programs of individual students and the working out and direction of these programs are the responsibilities of the instructional department, subject, however, to the general rules and requirements of the Graduate School.

Research. Through its Office of Scientific and Scholarly Research and with advice and assistance from the faculty Research Committee, the Graduate School administers the University's program for the encouragement and support of research by members of its faculty (see pages 115-119).

Advanced Degrees

THE UNIVERSITY OF OREGON offers through the Graduate School work leading to advanced degrees in the liberal arts and sciences, and in the professional fields of architecture and allied arts, business administration, dental sciences (at the Dental School in Portland), education, health, physical education, and recreation, journalism, medical sciences (at the Medical School in Portland), music, and nursing (at the School of Nursing in Portland). The degrees granted, and the fields in which programs of study leading to the respective degrees are currently offered, are listed below:

Doctor of Philosophy: anthropology, biology, chemistry, comparative literature, economics, education, English, geography, geology, Germanic languages, health, physical education, and recreation, history, mathematics, medical sciences, philosophy, physics, political science, psychology, Romance languages, sociology, speech.

Doctor of Business Administration: business administration.

* On sabbatical leave 1963-64.

Doctor of Education: education, health and physical education.

*Master of Arts: anthropology, art, biology, business administration, chemistry, Classical languages, economics, education, English, geography, geology, Germanic languages, health, physical education, and recreation, history, journalism, library science, mathematics, medical sciences, music, philosophy, physics, political science, psychology, Romance languages, sociology, speech.

*Master of Science: art, biology, business administration, chemistry, dental sciences, economics, education, geography, geology, health, physical education, and recreation, journalism, library science, mathematics, medical sciences, music, nursing, physics, political science, psychology, sociology, speech.

Master of Architecture: architecture.

Master of Fine Arts: drawing and painting, sculpture, ceramics, weaving, creative writing.

Master of Business Administration: marketing and industrial management, finance and business economics, accounting and business statistics.

Master of Education: education.

Master of Landscape Architecture: landscape architecture.

Master of Music: composition, instrumental music, vocal music, music education.

Master of Urban Planning: urban planning.

General Regulations

THE UNIVERSITY recognizes two classes of graduate students: (1) students enrolled in the Graduate School for work toward a graduate degree, and (2) students enrolled for postbaccalaureate studies without intent to earn a graduate degree. Students of the first class follow programs organized in conformity with the rules stated below. Students of the second class enroll for the courses they desire, with the understanding that the University is under no implied obligation to accept credit earned toward a graduate degree. Whether a student is adequately prepared to enroll for any graduate course is determined by the instructor in charge and the head of the department concerned.

Admission. The requirements for admission to the Graduate School for postbaccalaureate studies or for work toward a graduate degree are:

Admission for Postbaccalaureate Studies. Graduation from an accredited college or university. Such admission carries no commitment that any credit earned under postbaccalaureate status may later be applied toward a graduate degree.

An applicant for admission for postbaccalaureate studies must submit: (1) two copies of an application on an official University form—one copy to be sent to the Office of Admissions and the second copy to the school or department in which the applicant plans to study; and (2) one copy of an official transcript of his college record, to be sent to the Office of Admissions.

Admission for Work toward a Graduate Degree. Graduation from an accredited college or university with a record showing ability to maintain satisfactory scholastic progress in graduate studies. A cumulative undergraduate grade-point average of 2.50 is the minimum normally acceptable. A student with a lower undergraduate GPA or with a record of graduate work below University standards at

* See also "Interdisciplinary Master's Programs," pages 109-110.

another institution may be admitted only if supplementary information, such as a graduate aptitude score, provides evidence of ability; all applications for exceptions to the general rule are reviewed by the Graduate Admissions Committee.

In certain fields, there are additional requirements for admission to study toward a graduate degree. The applicant should check the Catalog statement on graduate work of the department or school in which he plans to study.

An applicant for admission for work toward a graduate degree must submit: (1) two copies of an application on an official University form, and (2) two copies of an official transcript of his college record. One copy of these credentials should be sent to the Office of Admissions and the second copy to the school or department in which the applicant plans to study.

The Graduate Admissions Committee reviews requests for transfer from post-baccalaureate status to regular graduate standing with the privilege of working toward a graduate degree. Such requests are judged on the basis of the student's undergraduate record, grades in graduate courses, and scores on the Miller Analogies Test, the Graduate Record Examination, or a similar objective test.

Students with degrees from nonaccredited institutions may be admitted to the University as special students, and may be granted graduate standing after the successful completion of one term of full-time graduate work.

Provisional graduate standing is occasionally granted, as a temporary classification, pending the submission of complete official records, if the applicant files evidence that he has a bachelor's degree and will be able to qualify for regular graduate standing.

Preparation Required for Graduate Study. Preparation for a graduate major must be an undergraduate major in the same subject or a fair equivalent.

Preparation for a graduate minor must be at least a one-year sequence of upper-division work in addition to foundational courses in the subject. Graduate credit may not be earned in courses for which the student does not show proper preparation by previous record or special examination.

Reservation of Graduate Credit. The Graduate School encourages superior students to begin their graduate studies as early in their careers as feasible. A student at the University of Oregon who needs not more than 48 term hours in order to complete requirements for a bachelor's degree (i.e., who has senior standing) and who has a cumulative GPA of 3.00 may petition the dean of the Graduate School for the reservation of credit in specified graduate courses. A "Reservation of Credit" form, available in the office of the Graduate School, must be filed not later than two weeks after the beginning of the term in which the courses involved are taken. Credit may not be reserved for courses taken during a period of more than three terms. A student who has been granted reservation of credit is assigned a graduate adviser to assist him in planning his graduate work.

Study Program and Load. Graduate students beginning studies toward a degree are expected to work out, in tentative form at least, a complete program leading toward the degree desired. This program should allow sufficient time for completion of the thesis. Work on the thesis should be begun as early as possible.

The maximum study load is 16 term hours for a graduate student devoting all of his time to graduate study in a regular term or an eleven-week summer session; the maximum for a graduate assistant or fellow is 12 term hours. The maximum study load in an eight-week summer session is 13 term hours. Credit for work taken beyond these maximums cannot be applied toward a degree.

Grade Requirement. A graduate student is required to earn at least a B grade average to qualify for a graduate degree. A grade-point average of less than 3.00 at any time during the student's graduate studies is considered unsatisfactory, and may result in disqualification by the dean of the Graduate School after consultation with the student's major department or school. Disqualification means

reduction to postbaccalaureate standing. A course in which the student earns a grade of D will not carry graduate credit, but will be included in the computation of the student's GPA. F grades will also be included in the GPA computation.

In all divisions except the School of Law, Research (501) and Thesis (503) are classified as no-grade courses, and are disregarded in the calculation of the student's GPA.

Graduate students are subject to disciplinary action by the Scholastic Deficiency Committee.

Graduate Courses. All courses numbered in the 500s carry graduate credit, as do those in the 400s which have been approved by the Graduate Council. Approved courses in the 400s are designated in this Catalog by (G) or (g) following the course title. Courses designated (G) may form a part of either a major or a minor; courses designated (g) may be taken toward a minor only. Graduate students taking courses in the 400s are expected to do work of a higher order and broader scope than the work of undergraduate students in the same courses. Undergraduate enrollment in the 400 courses designated (G) is generally restricted to seniors; undergraduate enrollment in 400 courses designated (g) is generally restricted to juniors and seniors.

Courses numbered in the 500s and designated (p) represent instruction offered at a level of intellectual maturity suitable for graduate students who have earned a bachelor's degree in a field other than their professional field. Such courses carry credit toward a master's degree, but this credit may not be counted toward the minimum requirement of 30 term hours in the major.

Off-Campus Graduate Courses. Graduate students at the University of Oregon may, with the consent of their advisers, take courses carrying graduate credit at Oregon State University and at the Oregon College of Education. Students register for these courses on the Eugene campus. Grades are transmitted by the instructor to the University Registrar and recorded on the student's University of Oregon transcript.

Fees and Deposits. The regular fees and tuition for graduate students total \$142.00 per term. Students holding graduate or research assistantships or fellowships pay a special reduced fee of \$32.00 per term. Students enrolled in the Graduate School do not pay the nonresident fee. Graduate students registered for 7 term hours of work or less pay the regular part-time fee (see page 76). Payment of graduate fees entitles the student to all services maintained by the University for the benefit of students.

Graduate students must make a \$15.00 deposit once each year at the time of first registration; the deposit is required as a protection to the University against the loss or damage of institutional property.

A special fee of \$20.00 is paid by all students who are granted the Ph.D., D.B.A., or D.Ed. degree to cover the cost of the reproduction of their theses on microfilm or microcards.

Degree Requirements

Master of Arts, Master of Science

Credit Requirements. For the M.A. or M.S. degree, the student must complete an integrated program of study totaling not less than 45 term hours in courses approved for graduate credit. Integration may be achieved either through a departmental major or through a program of interdisciplinary studies (see pages 109-110).

For the master's degree with a departmental major, a minimum of two-thirds of the work (30 term hours) must be in the major. One-third (15 term hours) may be in: (1) a related minor; (2) appropriate service courses; (3) suitable complementary courses in the major; or (4) some combination of (2) and (3). The student's program must include at least 30 term hours of work in subjects having no direct connection with his thesis. A strong minor is recommended, especially for candidates for the M.S. degree.

Residence Requirement. The residence requirement for the M.A. and M.S. degrees (and all other master's degrees except the M.Ed) is 30 term hours of work on the Eugene campus or at the Medical School, Dental School, or School of Nursing in Portland.*

Transferred Credit. Credit earned at other accredited institutions, or in the Division of Continuing Education of the Oregon State System of Higher Education, may be counted toward the master's degree under the following conditions: (1) the total of transferred credit may not exceed 15 term hours; (2) the courses must be relevant to the degree program as a whole; (3) the transfer must be approved by the student's major department and the Graduate School; (4) the grades earned must be A or B. Graduate credit is not allowed for correspondence courses. Credit granted for work done at another institution is tentative until validated by work in residence (see also "Time Limit" below).

Language Requirements. For the M.A. degree, the student must show, by examination or by adequate undergraduate courses (completion of the second-year college course), a reading knowledge of French, German, or Russian. By petition to the dean of the Graduate School, a student may be permitted to substitute another language, if it is equally relevant to his program of graduate studies. A foreign student whose native language is not English may petition to substitute a reading and speaking knowledge of English for satisfaction of the language requirement. For the M.S. degree there is no foreign-language requirement, unless a language is required by the school or department.

Course Requirements. For the M.A. or M.S. degree with a departmental major, at least one year sequence in the 500-599 series (normally of seminar or research nature and carrying approximately 3 hours of credit per term) is required.

Time Limit. All work toward the master's degree (including work for which credit is transferred from another institution, thesis, and the final examination) must be completed within a period of seven years.

Qualifying Examination. To become a candidate for a master's degree, the student must pass a qualifying examination designed to test his basic training and his ability to pursue studies at the graduate level in his chosen field. This examination may be oral or written or both, and may cover any work done at another institution for which transfer of credit is requested. It is expected that the examination be taken before the student has completed 15 term hours of graduate work. If satisfactory knowledge and ability are demonstrated, the student is formally advanced to candidacy for the degree sought, subject to the approval of the dean of the Graduate School.

A graduate of the University of Oregon who has taken the bachelor's degree with honors in the field of his graduate major is ordinarily exempt from the qualifying examination.

* Candidates for the M.S. degree with a major in health, physical education, and recreation may apply, toward the satisfaction of the residence requirement, a maximum of 18 term hours earned in courses in the Portland summer session taught by members of the University faculty.

Thesis. In some fields, all candidates for the M.A. or M.S. degree are required to present a thesis; in others the thesis is optional.

If a thesis is presented, the student must file in the Graduate Office, not less than two weeks before the date of his final oral examination, six copies of a thesis abstract not exceeding 500 words in length. Three clear copies of the complete thesis, including the original copy, approved and signed by the adviser, must be distributed by the candidate to the members of his examining committee two weeks before date of his final examination. At the conclusion of the final examination, these copies are filed unbound in the Graduate Office, and are bound at the expense of the University. Two copies are deposited in the Library, and one becomes the property of the major department. One of the Library copies is available for general circulation.

Full information concerning the prescribed style for theses may be obtained in the Graduate Office. Copies of theses will not be accepted by the Graduate School unless they meet satisfactory standards of form and style.

Students are not allowed to register for the final hours of Thesis unless it is very probable that the thesis will be completed within the term.

The University participates in the University Microfilms program for the microfilming of selected master's theses and publication of 150-word abstracts in *Masters Abstracts*, issued by University Microfilms. Theses are selected on the basis of the recommendation of the candidate's examining committee. Candidates whose theses are selected may obtain a Certificate of Approval from the Graduate Office; after receipt of the certificate, they are responsible for making arrangements for microfilming with the Audio-Visual Department of the University Library. A fee of \$15.00 is charged for microfilm and abstract publication. Publication is, however, not required.

Final Examination. A final examination is required of every candidate for a master's degree. For students presenting a thesis, the examination is oral and of not less than two hours' duration. For students not presenting a thesis, an oral examination of not less than one hour and a written examination are required.

The examining committee consists of from three to five members, nominated by the student's adviser, subject to the approval of the dean of the Graduate School, who is ex officio a member of all examining committees. The committee must include at least two members from the student's major field and one member from a department or school outside the major field.

A student passing a final examination with exceptional merit may, by vote of the examining committee, be awarded a master's degree with honors.

Interdisciplinary Master's Programs

In addition to specialized graduate work in the traditional fields of learning, the University provides opportunities for integrated interdisciplinary studies leading to the M.A. or M.S. degree—including both programs planned in the light of the individual student's interests and established programs of interdisciplinary studies organized and administered through interdepartmental faculty committees.

Established interdisciplinary programs have been approved by the Graduate Council in the following fields: international studies, overseas administration, East Asian studies, juvenile correction, and teaching.

Graduate students pursuing a program of interdisciplinary studies may supplement courses offered by the several departments and schools with individualized studies, for which they may enroll under the following course numbers:

ISt 501. **Research.** Hours to be arranged.

ISt 503. **Thesis.** Hours to be arranged.

The requirements for an M.A. or M.S. degree in interdisciplinary studies are the same as those for the departmental master's degree, except those requirements relating to major or minor fields.

The program is supervised by the Committee on Interdisciplinary Studies, of which Dr. Lloyd R. Sorenson, associate professor of history, is chairman.

Graduate Program for Teachers. A special program of graduate study for students working toward the satisfaction of the Oregon state requirement of a fifth year of college work for final high-school teacher certification is offered as one of the University's programs of interdisciplinary studies. Enrollment is open to any person eligible for admission to the Graduate School; the student must, however, have a reasonable background of undergraduate study in the fields in which he proposes to work, and must complete prerequisites for specific courses. The requirements for a master's degree in the program for teachers are as follows:

(1) A total of between 45 and 51 term hours in graduate courses, distributed in accordance with (a) and (b) below:

(a) A total of 36 term hours in subject fields (work in liberal arts departments or professional schools other than education), distributed in accordance with one of the following options:

Option 1. Between 15 and 21 term hours in each of two subject fields.

Option 2. A minimum of 36 term hours in one of the following fields: art, biology, business administration, English, French, geography, history, health and physical education, mathematics, music, Spanish.

Option 3. A minimum of 36 term hours in the composite field of social studies or the composite field of science. A program in social studies may include work in the fields of anthropology, economics, geography, history, political science, psychology, and sociology. A program in science may include work in the fields of biology, chemistry, geology, mathematics, and physics.

In each of the options listed above, at least 6 term hours of work must be taken in 500 courses. The student's program must be planned to provide well-rounded knowledge, and must not be made up of scattered, unrelated courses.

For Options 1 or 2, 18 term hours in each of the subject fields involved must be presented as an undergraduate prerequisite. For Option 3, the prerequisite is 36 term hours in the composite field involved.

(b) Between 9 and 15 term hours in graduate courses in the field of education, the number of hours to be determined on the basis of the amount of work in education completed by the student as an undergraduate.

(2) Satisfaction of the regular requirements of the Graduate School, except that no thesis is required. The combined total of work transferred from other accredited institutions and work done in the General Extension Division of the Oregon State System of Higher Education cannot exceed 15 term hours.

Master of Business Administration

The requirements for the degree of Master of Business Administration are listed under SCHOOL OF BUSINESS ADMINISTRATION.

Master of Education

The Master of Education is a professional degree in the field of education. Programs of study leading to this degree are designed to provide graduate training for teachers in either the elementary or the secondary schools. At the discre-

tion of the faculty of the School of Education, the candidate may be required to submit a report of a field study. A written comprehensive final examination in the student's field of specialization is required.

The residence requirement for the M.Ed. degree is 24 term hours of graduate work on the University campus or in the Portland summer session of the General Extension Division.

Master of Fine Arts

The degree of Master of Fine Arts is granted for attainments and proven creative ability in the arts. The primary requirement is the satisfactory completion of a creative project of high quality. All candidates must, however, satisfy minimum requirements of residence and study.

Early in his M.F.A. program, the student takes a qualifying examination as prescribed by the major school or department. This examination may cover any work done at another institution which is to be part of the candidate's M.F.A. program.

The student plans his M.F.A. program with the assistance of a major adviser and such faculty members as may be designated by his school or department. The program must include at least 18 hours in formal graduate courses dealing with the history and theory of his genre or with the critical investigation of its standard or classic works; this work may include related studies outside the student's major field; with the approval of the student's advisory committee, this requirement may be satisfied by comprehensive examinations.

For the M.F.A. degree, at least two years of full-time work beyond the bachelor's degree are required, of which at least one year must be spent in residence on the Eugene campus of the University of Oregon.

Every candidate for the M.F.A. degree must submit an extended creative work or project of high professional character. It is expected that the preparation of an acceptable project will require the greater part of an academic year. Three clear copies of the project or of a report on the project as prescribed by the candidate's major school or department and approved by the adviser, must be distributed by the student to the members of his examining committee not less than four weeks before the time set for his final examination; at the conclusion of the examination, these copies, with required revisions, if any, are deposited in the Graduate Office.

The final examination for the M.F.A. degree may be written in part, but must include an oral examination, open to all members of the faculty and to advanced graduate students. The date of the oral examination is publicly announced at least one week before it is held. The examining committee consists of the candidate's advisory committee and other members, including at least one not directly connected with the major department or school. The committee is nominated by the major department or school, subject to the approval of the dean of the Graduate School.

Master of Architecture

The requirements for the degree of Master of Architecture are listed under SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

Master of Landscape Architecture

The requirements for the degree of Master of Landscape Architecture are listed under SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

Master of Urban Planning

The requirements for the degree of Master of Urban Planning are listed under SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

Master of Music

The requirements for the degree of Master of Music are listed under SCHOOL OF MUSIC.

Doctor of Philosophy

General Requirements. The degree of Doctor of Philosophy is granted primarily for attainments and proven ability. Requirements of time and credit are secondary; but no candidate will be recommended for the degree until he has satisfied the minimum requirements of residence and study.

A student whose academic work, both undergraduate and graduate, has been primarily at the University of Oregon will ordinarily be required to take graduate work at another institution before being accepted as a candidate for the Ph.D. degree. Exceptions to this rule may be made by the dean of the Graduate School upon recommendation of the major school or department.

Qualifying Examination. Early in his doctoral program, the student takes a qualifying examination as prescribed by the major school or department. This examination may cover any work done at another institution for which transferred credit is requested. An exceptionally good performance on the final examinations for the master's degree may be accepted as satisfying the qualifying-examination requirement.

Doctoral Program. The student plans his doctoral program with the assistance of his major adviser. As soon as he has passed his qualifying examination, his program is presented for approval to an advisory committee, appointed by the dean of the Graduate School. The committee determines the amount of work the student is expected to do outside his major school or department, in light of his background and objectives.

Residence. For the Ph.D. degree, at least three years of full-time work beyond the bachelor's degree are required, of which at least one year (usually the last) must be spent in residence on the Eugene campus of the University of Oregon or at the University of Oregon Medical School in Portland.

Language Requirement. For the Ph.D., the student must demonstrate by formal examinations a reading knowledge of two languages other than his native language. Normally the languages are selected from French, German, and Russian; languages other than French, German, or Russian may be approved only on petition to the Graduate School. A foreign student whose native language is not English may petition to substitute a reading and speaking knowledge of English for one of the two required languages.

Comprehensive Examinations. The student working toward the Ph.D. degree must pass a group of comprehensive examinations (oral or written or both) not less than one academic year before he expects to complete work for the degree. These examinations are expected to cover all areas of concentration and may cover any supporting area if this seems desirable to the advisory committee. Advancement to candidacy is contingent on passing these examinations. The student is not eligible to take the examinations until he has satisfied the language requirement and has taken substantially all the course work for the degree.

The final examination for a doctor's degree must be taken not later than three calendar years after advancement to candidacy. Failure to complete requirements for the degree within this period will result in invalidation of the student's comprehensive examinations. This provision is effective for all doctoral students taking their comprehensive examinations after August 31, 1962, and will become effective for all other doctoral students on August 31, 1965.

Thesis. Every candidate for the Ph.D. degree must submit a thesis embodying the results of research, and showing evidence of originality and ability in independent investigation. The thesis must be a real contribution to knowledge, based on the candidate's own investigations. It must show a mastery of the literature of the subject, and be written in creditable literary form. It is expected that the preparation of an acceptable thesis will require at least the greater part of an academic year.

Three clear copies of the thesis, including the original copy, approved and signed by the adviser, must be distributed by the student, unbound, to the members of his examining committee not less than four weeks before the time set for his final examination; at the conclusion of the examination, these copies with required revisions, if any, are deposited in the Graduate Office. Copies of the thesis will not be accepted by the Graduate Office unless they meet satisfactory standards of form and style. Seven copies of an abstract of the approved thesis (not longer than 600 words) must be filed in the Graduate Office four weeks before the examination.

Final Examination. The final examination for the Ph.D. degree may be written in part, but must include an oral examination, usually of three hours' duration. The oral examination is open to all members of the faculty and to advanced graduate students. The date of the oral examination is publicly announced at least one week before it is held. The examining committee consists of the candidate's advisory committee and other members, including at least one not directly connected with the major department or school. The committee is nominated by the major department or school, subject to the approval of the dean of the Graduate School.

In the oral examination the candidate is expected to defend his thesis and to show a satisfactory knowledge of his major field. The written examination, if given, is expected to cover aspects of the major field with which the thesis is not directly concerned.

Doctor of Business Administration

The requirements for the degree of Doctor of Business Administration are listed under SCHOOL OF BUSINESS ADMINISTRATION.

Doctor of Education

General Requirements. The degree of Doctor of Education is granted in recognition of mastery of theory, practice, and research in professional education or in health and physical education. In addition to a primary area of specialization, the student's plan of study should include work in supporting areas of education, foundation areas, a research area, and some noneducation courses related to his program. There is no specific foreign language requirement for the D.Ed. degree; however, a student whose fields of training or whose research project calls for a reading knowledge of one or more foreign languages may be required to demonstrate the needed linguistic ability. With the exceptions indicated in this section, the general requirements with respect to the qualifying examination, residence, comprehensive examinations, thesis, and final examinations for the D.Ed. degree are the same as those listed above for the Ph.D. degree.

Thesis. The doctoral dissertation may be either a report of research which makes an original contribution to knowledge or a study in which the student deals with knowledge already available and produces a constructive result of importance and value for educational practice. The dissertation proposal should be developed early in the doctoral program.

Advancement to Candidacy. Advancement to candidacy for the D.Ed. degree is based on proficiency shown in comprehensive examinations and the recommendation of a doctoral advisory committee. The comprehensive examinations may be taken only after the student has (1) been admitted to the degree program, (2) completed approximately two-thirds of the total course work in his program, (3) obtained approval of his dissertation proposal by his advisory committee, and (4) received the consent of his adviser to take the examinations.

Assistantships, Scholarships, Fellowships

TEACHING AND RESEARCH assistantships, scholarships, and fellowships are awarded annually to graduates of accredited universities and colleges who have superior records in their undergraduate work. All persons holding these positions are expected to register in the Graduate School, and to become candidates for advanced degrees. Applications should be made before March 1.

The University will welcome the submission of Graduate Record Examination scores by students applying for assistantships, scholarships, or fellowships. For information about this examination, write to Educational Testing Service, Princeton, N.J. or 4640 Hollywood Blvd., Los Angeles 27, Calif.

Teaching Assistantships. A number of teaching assistantships are available to well-qualified graduate students in nearly all schools and departments. Stipends range from \$1,800 to \$2,400 for an academic year. Reappointments may be made for twelve months at proportionately higher stipends. Assistants are charged a special reduced fee of \$32.00 per term. Teaching assistants are allowed to register for a maximum of 12 term hours of course work. Duties, which are limited to 15 hours a week, consist of reading papers, supervising laboratory and quiz sections, etc. All graduate assistants are expected to be registered for at least 6 term hours of work.

Research Assistantships. A number of departments and schools employ research assistants, who work under the supervision of faculty members. Funds come from research grants and contracts. Stipends, fees, and enrollment limitations are the same as for teaching assistants; augmented service in the summer may substantially increase the annual stipend.

State Scholarships. A limited number of scholarships covering a portion of the regular fees charged by the University (\$110 a term or \$330 an academic year) are available to graduate students. All applicants, to be eligible, must be in need of financial assistance, and must show evidence of superior scholarship. Application should be made to the chairman, Committee on Scholarships and Grants in Aid, on official blanks furnished by his office, and must be filed before March 1.

Other Scholarships and Fellowships. Other scholarships and fellowships available to University graduate students are listed on pages 88-98. See especially Robert A. Booth Fellowship in Public Service, Coca Cola Scholarship, Thomas Condon Fellowship in Paleontology, Maud Densmore Music Fellowship, Haskins and Sells Teaching Fellowship in Accounting, Ion Lewis Scholarship in Architecture, F. G. G. Schmidt Fellowship in German, Weyerhaeuser Fellowship, Zimmerman Scholarships.

Special Fellowship Programs. Graduate students at the University of Oregon are eligible for fellowship awards granted by the National Science Foundation, the National Institutes of Health, the Woodrow Wilson Foundation, and other national agencies, and for fellowships awarded under the National Defense Education Act. The University participates in the National Science Foundation

cooperative fellowship program and in the N.S.F. program of summer fellowships for graduate assistants. Information concerning these programs may be obtained in the Graduate Office.

Loans. Graduate students are eligible for loans from University loan funds (see pages 86-88) and from funds available under the National Defense Education Act of 1958.

Graduate Work in Portland

GRADUATE WORK leading to degrees from the University is offered in Portland at the University of Oregon Medical School, the University of Oregon Dental School, and the University of Oregon School of Nursing, and through the Division of Continuing Education of the Oregon State System of Higher Education.

Medical School. The Medical School offers graduate instruction leading to the M.S. and Ph.D. degrees in the medical sciences (anatomy, bacteriology, biochemistry, medical psychology, pathology, pharmacology, and physiology). Graduate degrees earned at the Medical School are conferred by the University, on the recommendation of the faculty of the Medical School.

Dental School. The Dental School offers graduate work leading to the M.S. degree for students planning careers in dental education and research. Graduate major programs are offered in the fields of anatomy, bacteriology, biochemistry, dental materials, oral pathology, orthodontics, pedodontics, pharmacology, and physiology. Graduate degrees earned at the Dental School are conferred by the University, on the recommendation of the faculty of the Dental School.

School of Nursing. The School of Nursing offers graduate work leading to the M.S. degree to prepare qualified professional nurses for teaching positions in nursing. Graduate degrees earned in the School of Nursing are conferred by the University, on the recommendation of the faculty of the School of Nursing.

Portland Center. Part of the requirements for a master's degree from the University may be completed in the Portland Center of the Division of Continuing Education of the State System of Higher Education, in fields where adequate course offerings are available for an integrated program.

Research

THE UNIVERSITY'S PROGRAM for the encouragement and support of research by members of its faculty is administered through the Office of Scientific and Scholarly Research of the Graduate School, with advice and assistance from the faculty Research Committee. The Office of Scientific and Scholarly Research also serves as a coordinating agency in connection with University relations with foundations and government bodies which provide grants for research projects and supervises the programs of the University research divisions listed below.

Research programs are also conducted through the Bureau of Municipal Research and Service, the Bureau of Business Research, and the Bureau of Educational Research.

Institute of Molecular Biology

AARON NOVICK, Ph.D., Director of the Institute of Molecular Biology; Professor of Biology.

SIDNEY A. BERNHARD, Ph.D., Associate Professor of Chemistry.

EDWARD HERBERT, Ph.D., Associate Professor of Chemistry.

FRANCIS J. REITHEL, Ph.D., Professor of Chemistry.

EDWARD NOVITSKI, Ph.D., Professor of Biology.

JOHN A. SCHELLMAN, Ph.D., Associate Professor of Chemistry.

WILLIAM R. SISTROM, Ph.D., Associate Professor of Biology.

FRANKLIN W. STAHL, Ph.D., Professor of Biology.

GEORGE STREISINGER, Ph.D., Associate Professor of Biology.

RAYMOND G. WOLFE, Ph.D., Associate Professor of Chemistry.

The Institute of Molecular Biology is a center for research and research instruction in areas of biology where understanding is found in terms of the properties of macromolecules, particularly nucleic acids and proteins. Staff members hold joint appointments in a department (biology, chemistry, or physics).

Current research projects in the Institute are concerned with such topics as genetic recombination and mutation in bacteria and bacterial viruses, the genetic control of protein synthesis, the regulation of the rate of protein formation, molecular structural aspects of biological specificity, biocatalysis, and biological coding.

The Institute sponsors seminars, special lectures, visiting professorships, and instruction in research, but does not conduct a formal teaching program. Members of the Institute staff offer courses in their fields of competence through the departments with which they are affiliated.

Research instruction is offered at both the graduate and postdoctoral levels. With the approval of the department concerned, graduate students in biology, chemistry, or physics may do research in the Institute as a part of their programs leading to graduate degrees. Research advisers may be members either of the Institute staff or of a departmental faculty.

Institute of Theoretical Science

MARSHALL FIXMAN, Ph.D., Director of Institute of Theoretical Science; Professor of Chemistry.

ROBERT M. MAZO, Ph.D., Assistant Director of Institute of Theoretical Science; Associate Professor of Chemistry.

MARVIN E. GIRARDEAU, JR., Ph.D., Associate Professor of Physics.

TERRELL L. HILL, Ph.D., Research Associate; Professor of Chemistry.

JOEL W. MCCLURE, Ph.D., Research Associate; Associate Professor of Physics.

JOHN L. POWELL, Ph.D., Research Associate; Professor of Physics.

MARTIN L. SAGE, Ph.D., Assistant Professor of Chemistry.

GREGORY H. WANNIER, Ph.D., Research Associate; Professor of Physics.

The Institute of Theoretical Science provides a center for research leading to the understanding of natural processes in terms of logically constructed conceptual systems, and to the synthesis of the specialized research of physicists, biologists, and other natural scientists.

Theoretical science may be defined to include: (1) the discovery and description of the fundamental laws which govern the behavior of the elementary constituents of natural systems; (2) the theoretical description of complex systems, arising through the mutual interaction of a large number of simple systems of which we have a basic theoretical understanding; and (3) the utilization of the conceptual and analytic tools of the theoretical scientists in applied research.

Graduate students with adequate preparation in one of the science departments may elect thesis research in the Institute. The Institute also sponsors postdoctoral fellowships and visiting professorships.

Statistical Laboratory and Computing Center

*FRED C. ANDREWS, Ph.D., Director of the Statistical Laboratory and Computing Center; Associate Professor of Mathematics.

DONALD R. TRUAX, Ph.D., Acting Director; Associate Professor of Mathematics.

TED K. MATTHES, Ph.D., Assistant Professor of Mathematics.

ROBERT E. ODEH, Ph.D., Research Associate; Assistant Professor of Mathematics.

GEORGE W. STRUBLE, Ph.D., Research Associate; Assistant Professor of Mathematics.

The Statistical Laboratory and Computing Center conducts research in the development of new statistical and numerical procedures and provides a consulting service for graduate students and members of the faculty in the fields of statistical and numerical analysis. The Computing Center maintains an IBM 1620 electronic computer, which is available to the faculty and students of the University for research and instruction. The staff provides instruction in programming for the 1620 computer. Users of the computer provide necessary programs and are responsible for the actual running of the computer. Technical assistance concerning programming and computer operation is available. Courses in computing, statistical analysis, and numerical analysis are offered as part of the curriculum of the Department of Mathematics.

Institute of International Studies and Overseas Administration

JOHN F. GANGE, M.A., Director of the Institute of International Studies and Overseas Administration; Professor of Political Science.

WALLACE N. ATHERTON, Ph.D., Research Associate; Associate Professor of Economics.

LEROY E. GRAYMER, M.A., Assistant to the Director; Instructor in Political Science.

CARL L. JOHANNESSEN, Ph.D., Assistant Professor of Geography.

ANNE M. MARNIX, M. S., Assistant to the Director; Instructor in Business Education.

GENE E. MARTIN, Ph.D., Associate Professor of Geography.

RAYMOND F. MIKESELL, Ph.D., W.E. Miner Professor of Economics.

CHARLES P. SCHLEICHER, Ph.D., Professor of Political Science.

The Institute of International Studies and Overseas Administration is responsible for the development and coordination of University activities in the field of international affairs. Its primary functions are: (1) to develop programs of research, teaching, and administration, in cooperation with private and governmental agencies, and to arrange for the conduct of these programs by University personnel, both on the campus and overseas; (2) to assist the Committee on International Studies and Overseas Administration in the administration of graduate study in international affairs and to provide research training for graduate students; and (3) to serve as the University's center for other faculty and student activities concerned with international affairs.

The Institute supervises a graduate study program leading to the Master of Arts in international studies (a two-year degree program) and a program leading to the M.A. in overseas administration (a second M.A. conferred in conjunction with an M.A. degree in a departmental discipline), and cooperates with major de-

* On sabbatical leave 1963-64.

partments in the supervising of Ph.D. programs for students who elect an emphasis on international affairs within their chosen disciplines.

The Institute sponsors and encourages faculty research in international affairs and assists in providing opportunities for joint faculty and student research projects on campus and overseas. Research assistantships are available in the Institute; research and research training bases have been established in Chile, Colombia, and the Philippines.

The Institute also conducts graduate seminars to provide opportunities for students and members of the faculty to share ideas and experiences with visiting lecturers, special consultants, and among themselves. In addition to its campus programs, the Institute arranges for advanced students opportunities for overseas study and for administrative experience on foreign projects.

The Institute conducts the University's annual Summer World Affairs Program and the program of the Oregon High School International Relations League, and assists in the student-sponsored World Affairs Week and the Model United Nations program.

Center for Social Service Training and Research

MARTIN H. ACKER, Ph.D., Co-Director of the Center for Social Service Training and Research; Assistant Professor of Education.

KENNETH POLK, Ph.D., Co-Director of the Center for Social Service Training and Research; Assistant Professor of Sociology.

The Center for Social Service Training and Research administers programs of graduate instruction and research conducted by the University in the fields of juvenile correction, rehabilitation counseling, and related areas.

Rehabilitation Counseling. The program in rehabilitation counseling includes a two-year program of graduate work leading to a master's degree. The program, offered through the cooperation of the Department of Psychology and the School of Education, is designed to provide the student with a well-rounded background for professional employment as a counselor in a state or private agency concerned with the problems of physically or mentally handicapped persons. Courses in psychology, education, and sociology are supplemented by study of medical, legal, and other aspects of rehabilitation and by supervised experience in rehabilitation agencies. Financial assistance to full-time students in this program is available through traineeships provided by the U. S. Department of Health, Education, and Welfare.

Juvenile Correction. In the field of juvenile correction, the University offers, through the Center for Social Service Training and Research, a two-year interdisciplinary program of graduate study, leading to the master's degree, to prepare students for professional careers in the prevention and correction of juvenile delinquency in a variety of institutions and agencies. The research program includes studies of the etiology, prevention, and correction of juvenile behavioral problems.

Institute for Community Studies

ROLAND J. PELLEGRIN, Ph.D., Director of the Institute for Community Studies; Professor of Sociology.

JOHN M. FOSKETT, Ph.D., Deputy Director; Professor of Sociology.

RICHARD O. CARLSON, Ed.D., Research Associate; Associate Professor of Education.

DANIEL GOLDRICH, Ph.D., Research Associate; Associate Professor of Political Science.

The Institute for Community Studies conducts and encourages basic research designed to explore the structure of American communities as social and political systems and to relate selected forms of behavior to such systems. Emphasis is placed on the policy-formulation processes in such areas as education, voluntary associations, local government, health, business associations, etc.

The Institute provides facilities for individual research by members of the faculty and for cooperative projects, together with opportunities for continuing communication, criticism, and reports of progress by participating scholars. It also provides research training for graduate students in connection with Institute projects, with emphasis on the development of specific research designs as a basis for graduate dissertations.

The Institute conducts seminars for the discussion of matters of common interest to members of its staff and graduate students, including research methods in community analysis, problems in design of cooperative research projects, and reports on research in progress.

Institute for College Teaching

WILLIAM C. JONES, Ph.D., Director of the Institute for College Teaching ; Dean of Administration ; Professor of Higher Education.

The programs of the Institute for College Teaching include: (1) the conduct of research on various problems relating to college teaching, the improvement of the quality of college teaching, the preparation of college teachers, and related professional problems of direct concern to college teachers; (2) the organization, supervision, and coordination of systematic programs of carefully supervised teaching experiences for students preparing for college teaching careers; (3) the preparation and presentation of courses and seminars dealing with the nature, structure, history, philosophy, and organization of institutions of higher learning.

The Institute, with the cooperation of members of the faculties of the several school and departments, offers a seminar concerned with the broad problems of higher education and college teaching:

*IS^t 507. **Higher Education Seminar.** 1 hour.

Jones, staff.

* No-grade course.

Honors College

CHARLES E. JOHNSON, Ph.D., Dean of the College of Liberal Arts.

LUCIAN C. MARQUIS, Ph.D., Director of the Honors College; Assistant Dean of the College of Liberal Arts.

THE HONORS COLLEGE offers a four-year undergraduate program leading to the degree of Bachelor of Arts (Honors College). The College program is designed to provide full opportunity for the superior student to develop his highest potential in liberal education and specialized training; it is open to students majoring in liberal arts or in professional schools.

Honors College Center. An Honors College Center has been established in Friendly Hall. The center includes small study rooms, a colloquium meeting room, a small library, the office of the Honors College, and a common room where students may meet and talk informally.

Admission

Application for admission to the Honors College is invited from students in the top tenth of their high-school classes, who have had four years of work in English, three years in social science, and two years each in mathematics, science, and foreign language. Students of exceptional ability who lack some of these qualifications, but who believe they are capable of honors work at the University, are also invited to apply.

Freshman applicants must submit scores on College Entrance Examination Board tests, including aptitude tests and achievement tests in English, mathematics, and a foreign language. With the approval of the director of the Honors College, the examination in foreign language may be waived in special cases, e.g., if the student's high school does not offer adequate work in the field.

Students applying for admission to the Honors College must also make separate application for admission to the University. Both University and Honors College application forms may be secured from the Office of Admissions.

Admission of transfer students and students already enrolled in the University is based on the student's college records.

Curriculum and Requirements

The degree of Bachelor of Arts (Honors College) is conferred on students who satisfy the following requirements:

(1) Proficiency in a foreign language equivalent to that reached in the second-year college course.

(2) A satisfactory record on comprehensive examinations in each of six core areas. It is recommended that the student take these examinations during his lower-division years. The courses which prepare for the comprehensive examinations are:

- (a) History—History (Honors College) (Hst 107, 108, 109).
- (b) Literature—Literature (Honors College) (AL 101, 102, 103).
- (c) Social Science—Introduction to the Social Sciences (SSc 201, 202, 203);* or Principles of Economics, honors section (Ec 201, 202, 203).

* SSc 201, 202, 203 satisfies prerequisite requirements for upper-division courses in anthropology, geography, political science, psychology, and sociology.

- (d) Science—Physical Science (Honors College) (GS 204, 205, 206); *or* Biological Science (Honors College) (Bi 104, 105, 106); *or* General Chemistry (Ch 204, 205, 206); *or* General Physics, honors section (Ph 201, 202, 203).
- (e) Philosophy—Introduction to Philosophy (Honors College) (Phl 207, 208, 209).
- (f) Mathematics—Fundamentals of Mathematics (Honors College) (Mth 107, 108, 109); *or* Analytic Geometry and Calculus, honors section (Mth 204, 205, 206).

Students may prepare for the comprehensive examinations in the core areas by taking the designated courses or through independent study. A student who prepares without formal course work, and passes the comprehensive examination, may receive credit in the corresponding course. A student who receives full college credit, through the Advanced Placement Program, for a course included in the Honors College core program satisfies the requirement in that field and is excused from the comprehensive examination. With the consent of his adviser, a liberal arts major may omit one of the six core areas and a professional-school major may omit two.

(3) Honors work in English composition—one term of Expository Writing (Wr 226), two terms of Composition Tutorial (Wr 231, 232).

(4) Two terms in Colloquium (HC 404) in the junior or senior year. Colloquia provide seminar-type instruction for students of varying backgrounds, focusing for one term on a common topic outside the students' major fields.

(5) Completion of an honors program in the student's major; see MAJOR REQUIREMENTS, below.

(6) Satisfactory performance in a final comprehensive oral examination covering the student's major and related work.

Honors College students must also satisfy general University requirements for the B.A. degree (other than the group requirement).

An Honors College student majoring in a professional field may qualify for both the B.A. (Honors College) and a professional bachelor's degree.

In addition to the courses listed above, the Honors College curriculum includes honors work in English composition, honors sections in several other fields (including basic design, foreign languages, literature, United States history, speech, accounting, statistics, and health education), and opportunities for work in departmental honors seminars, research projects, and reading and conference.

The Honors College student takes approximately two-thirds of his work in honors classes and the remainder in regular University courses.

Major Requirements

The major programs planned by departments and schools for students in the Honors College provide for independent study and generally allow greater flexibility in the satisfaction of course requirements than the regular undergraduate programs of the divisions. The special requirements of the several divisions for majors enrolled in the Honors College are listed below.

General Arts and Letters. At least 9 term hours in seminar, reading and conference, thesis, or research (or a combination), leading to the preparation of senior honors thesis.

General Social Science. (1) Of the four upper-division year sequences required of all majors, at least one at the 400 level; (2) at least 9 term hours in seminar, reading and conference, thesis, or research (or a combination), leading to the preparation of senior honors thesis.

Anthropology. Senior honors thesis, requiring one or more terms for completion.

Architecture and Allied Arts. Honors reading and conference.

Biology. Honors thesis based on original observations or experiments, in place of all or part of upper-division electives in biology. (Honors students may be admitted to graduate courses in the department.)

Business Administration. (1) Special honors sections of Ac 221, BS 232, BS 333, FBE 226, FBE 320, FBE 434; (2) conference relating to the business environment, arranged with dean of school.

Chemistry. (1) Ch 204, 205, 206, Ch 207, 208, 209 for satisfaction of freshman chemistry requirement; (2) Mth 204, 205, 206; (3) in senior year, research and honors thesis.

East Asian Studies. Senior honors thesis utilizing materials in a foreign language germane to the region with which the thesis is concerned. (The final oral examination will cover the thesis.)

Economics. (1) Honors sections of Ec 201, 202, 203 and SSc 201, 202, 203; (2) at the option of the student and the instructor, 1 term hour each term in reading and conference related to the work of each upper-division economics course for which the student is enrolled; (3) Ec 375, 376, 377 before senior year; (4) 9-hour sequence in economics at the 400 level; (5) BS 232, 233 or Mth 425, 426; (6) honors seminar in the fall and winter terms of the senior year; (7) senior honors essay.

Education. (1) Honors section of Ed 315; (2) reading and conference, 3 term hours, culminating in an essay.

English. (1) 9 term hours of independent study in a literary period, type, etc., approved by the department honors committee, culminating in winter term of senior year in a scholarly or critical honors essay; (2) a comprehensive written examination (in spring term of senior year) testing knowledge of literary history and critical ability.

Foreign Languages. (1) Normally, in the junior year, seminar in the literature of the student's principal language, and attendance, in the senior year, in a second seminar, either as an auditor or for credit; (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee.

Geography. (1) Geog 335, Geog 390, Geog 391; (2) junior and senior honors seminars; (3) Geog 421, 422, 423, Geog 511, 512, 513, Geog 515, 516, 517, or 9 term hours in independent study; (4) at the student's option, senior honors thesis for 3 term hours of 9 hours in independent study. (Geol 101, 102 strongly recommended.)

Geology. (1) Year sequence in calculus or statistics; (2) Geol 311, 312, 313, Geol 406, Geol 411; (3) additional year sequence in geology, mathematics, or other science; (4) senior honors thesis based on original research, for 3 term hours of credit.

History. (1) Junior honors seminar, 9 term hours; (2) senior honors essay, 7 term hours; (3) work in two of the following fields, one of which must be (a) or (b): (a) ancient, mediaeval, or Renaissance and Reformation; (b) modern Europe; (c) United States; (d) Far East or Latin America. With the consent of his adviser, the student may enroll for a maximum of 6 term hours of work in Hst 405, preferably in close relation with the work of an upper-division lecture course.

Journalism. (1) J 485, J 487; (2) senior thesis (J 403), 6 term hours; (3) GPA of 3.00 for all work during junior and senior years; (4) examination before faculty committee on thesis and professional course work.

Law. (1) Independent reading of four to six books about the law—history, biography, jurisprudence, fiction, etc.—selected with the approval of the faculty; (2) completion of law school work counted toward the B.A. degree with a GPA of 2.25 or higher.

Mathematics. (1) Mth 204, 205, 206 (preferably honors section); (2) Mth 412, 413, 414, Mth 431, 432, 433; (3) honors seminar or approved equivalent in junior or senior year.

Medicine. (1) Three years of work in the Honors College; (2) completion of the first-year professional program in medicine with a scholastic rank in the upper half of his class.

Music. (1) 9 term hours of independent study of a musical period, style, genre, composer, etc.; (2) honors essay in spring term of senior year.

Philosophy. (1) Phl 301, 302, 303 before senior year; (2) senior honors essay, following intensive study of some aspect of philosophy on a tutorial basis, normally for 9 term hours of credit.

Physics. Maximum of 18 term hours of credit in independent study (research, reading and conference, thesis).

Political Science. (1) Fall term of senior year, honors seminar, 3 term hours; (2) winter term of senior year, reading and conference, 3 term hours; (3) spring term of senior year, honors essay, 3 term hours.

Psychology. (1) Honors seminar; (2) honors thesis. (It is strongly recommended that honors students take Mth 425, 426 *or* Mth 441, 442, 443 in the junior year.

Sociology. (1) Soc 301, Soc 302, Soc 311, Soc 334; (2) any two of the following: Soc 443, Soc 449, Soc 460, Soc 470; (3) minimum of 12 term hours in a substantive area of sociology; (4) examination covering twenty major works in the field of sociology; (5) honors thesis involving sociological analysis (maximum credit, 9 term hours).

Speech. (1) Honors seminar during junior year; (2) honors readings, fall term of senior year; (3) honors thesis, prepared during winter and spring terms of senior year.

Advanced Placement Program

Students who complete college-level work in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board and who receive satisfactory grades in examinations administered by the Board may, on admission to the University, be granted credit toward a bachelor's degree in comparable University courses. The University's participation in this program is supervised by the Honors College.

The fields included in the Advanced Placement Program are: English composition and literature, American history, European history, biology, chemistry, physics, mathematics, French, German, Spanish, and Latin.

In the field of mathematics, the University sponsors a special advanced placement program which differs in some respects from the College Board program; students completing this program may also receive credit toward a degree if they receive superior grades in examinations administered by the Department of Mathematics.

College of Liberal Arts

CHARLES E. JOHNSON, Ph.D., Dean of the College of Liberal Arts.

ROLAND BARTEL, Ph.D., Acting Associate Dean of the College of Liberal Arts.

LUCIAN C. MARQUIS, Ph.D., Director of the Honors College; Assistant Dean of the College of Liberal Arts.

FRED J. MOHR, B.A., Special Assistant to the Dean.

THE COLLEGE OF LIBERAL ARTS represents the ancient and continuing effort of men to extend the range of their experience beyond the narrow limits of the time and place in which they find themselves at birth. To achieve and enjoy such a freedom, men must know all they can about themselves and their environment, both physical and social. The liberal arts and sciences are a group of studies designed for the exploration of man's nature and his position in the world.

By the help of some of these studies, we are able to compare our own experiences with those of men in other times, places, and circumstances, and thus share in the inherited wisdom and satisfactions of mankind. Through others, we deepen and extend our knowledge of our physical environment. Knowledge—scientific, historical, and literary—is the indispensable condition of the good life of free men.

The instructional departments included in the college are: Anthropology, Biology, Chemistry, Economics, English, Foreign Languages, Geography, Geology, History, Home Economics, Mathematics, Philosophy, Physics, Political Science, Psychology, Religion, Sociology, and Speech. All the departments, except the departments of Home Economics and Religion, offer major curricula leading to baccalaureate and graduate degrees.

The University of Oregon Bureau of Municipal Research and Service and the Museum of Natural History are administered as departments of the College of Liberal Arts.

Entrance Requirements. There are no entrance requirements, beyond the general entrance requirements of the University, for students intending to choose a major within the College of Liberal Arts.

Students intending to major in any of the natural sciences are, however, advised to present at least two units of high-school mathematics and two units of high-school science. Experience has proved that students who lack this preparation are handicapped in University work in science. Students planning to major in chemistry, mathematics, or physics or planning to prepare themselves for entrance to a medical school will find it to their advantage to take intermediate algebra, plane geometry, and trigonometry in high school.

Degree Requirements. For a bachelor's degree with a major in the College of Liberal Arts, a minimum of 186 term hours of University work is required, including:

(1) A minimum of four sequences in liberal arts courses numbered from 100 to 110 or 200 to 210, in satisfaction of the general University lower-division group requirement (for a complete statement of the regulations governing this requirement, see page 66).

(2) In addition, two sequences in liberal arts courses numbered from 100 to 110, 200 to 210, or 300 to 310.* Of the total of six sequences elected for the satis-

* Requirement (2) does not apply to students who are admitted to the University of Oregon Medical School or Dental School from other accredited institutions and who are candidates for a baccalaureate degree from the University of Oregon.

faction of requirements (1) and (2), two must be chosen from each of the three groups, arts and letters, social science, and science; the two sequences in social science and in science must be from different departments.

(3) A minimum of 62 term hours in upper-division courses.

(4) A minimum of 36 term hours in the student's major field, at least 24 of which must be in upper-division courses. Some departments require more than the 36-hour minimum. For certain interdepartmental majors the major requirement is approximately 72 term hours of work distributed in several departments.

A complete list of sequences approved for the satisfaction of requirement (1) above is printed on pages 68-69. The 300-310 sequences which may be taken for the satisfaction of requirement (2) are listed below:

Arts and Letters Group

General Arts and Letters

Lit. of Ancient World (AL 304, 305, 306)
Intro. to Japanese Lit. (AL 301, 302, 303)
Intro. to Chinese Lit. (AL 307, 308, 309)

English

Three courses chosen from: Tragedy (Eng 301), Epic (Eng 303), Comedy (Eng 304), Satire (Eng 305), Literature of the English Bible (Eng 306, 307)

Foreign Languages

Livy (CL 301), Virgil's Eclogues and Georgics (CL 302), Horace's Odes (CL 303)
Survey of German Lit. (GL 301, 302, 303)
Survey of French Lit. (RL 301, 302, 303)
Survey of Spanish Lit. (RL 304, 305, 306)

Philosophy

History of Philosophy (Phl 301, 302, 303)

Speech

Theory & Lit. of Rhetoric (Sp 301, 302, 303)

Social Science Group

Anthropology

Primitive Society (Anth 301, 302, 303)

Geography

Geog. of Oregon (Geog 301)
Geog. of North America (Geog 302, 303)

History

Europe since 1789 (Hst 301, 302, 303)
English History (Hst 304, 305, 306)

Philosophy

Revolution & Reform (Phl 304, 305, 306)

Religion

Religions of Mankind (R 301, 302, 303)

Sociology

Principles of Sociology (Soc 300) and any two of the following: American Society (Soc 301), World Population and Soc. Structure (Soc 303), The Community (Soc 304), Contemporary Social Problems (Soc 305)

Science Group

Geology

Geologic Hist. of Life (Geol 301, 302, 303)

Honors College. Through the Honors College, the University offers a four-year program of liberal education for selected superior students, leading to the degree of Bachelor of Arts (Honors College). The Honors College also supervises the University's participation in the Advanced Placement Program sponsored by the College Entrance Examination Board. See pages 66 and 123.

General Arts and Letters

THE PROGRAM IN GENERAL ARTS AND LETTERS includes (1) a series of courses concerned with broad literary interrelations and with foreign literatures in translation and (2) a major curriculum in general arts and letters leading to the bachelor's degree.

The curriculum in general arts and letters is designed for students who wish to build a program of general studies around a core of literature. The work of the

first two years serves as an introduction to the main aspects of Western culture. In the last two years the more intensive study of the history of ideas, of literary movements, and of art forms serves to interpret modern trends in civilization.

The major in general arts and letters leads to the Bachelor of Arts degree. The following courses are required:

Lower Division. (1) Literature (Honors College) (AL 101, 102, 103), or World Literature (Eng 107, 108, 109), or Survey of English Literature (Eng 101, 102, 103), or Introduction to Literature (Eng 104, 105, 106), or any sequence in foreign literature which has a prerequisite of two years (or equivalent) of foreign language in college. (2) Shakespeare (Eng 201, 202, 203), or Survey of the Visual Arts (AA 201, 201, 203), or Introduction to the History of Art (AA 204, 205, 206), or Introduction to Music and Its Literature (Mus 201, 202, 203). (3) At least one year of work in a foreign language beyond the first-year college level. (4) One of the following sequences in history: History of Western Civilization (Hst 101, 202, 103); History (Honors College) (Hst 107, 108, 109); English History (Hst 304, 305, 306).

Upper Division. (1) Literature of the Ancient World (AL 304, 305, 306). (2) Dante and His Times (AL 477, 478, 479). (3) One of the following sequences in philosophy: History of Philosophy (Phl 301, 302, 303); Philosophy in Literature (Phl 431, 432). (4) History of Literary Criticism (Eng 414, 415, 416) or Aesthetics (Phl 441, 442, 443).

In addition the student must complete four upper-division year sequences, each totaling at least 6 term hours, chosen from the major departments of the College of Liberal Arts; however, any two of the following sequences may be elected for the partial satisfaction of this requirement: selected sequence in the history of music; History of Painting (AA 346, 347, 348); Classical Art (AA 376), Romanesque and Gothic Art (AA 377), Italian Renaissance Art (AA 378), Basic Design (AA 295).

The student's program of study should form an integrated whole. The electives should support the objectives of this program.

Honors. See HONORS COLLEGE, pages 120-123.

LOWER-DIVISION COURSES

AL 101, 102, 103. **Literature (Honors College).** 3 hours each term.

Intensive study of selected works of Occidental literature. Combellack, Fischler, Gontrum, Moll, Strange, Wegelin.

UPPER-DIVISION COURSES

AL 301, 302, 303. **Introduction to Japanese Literature.** 3 hours each term.

Fall: origins through Fujiwara (twelfth century A.D.), with emphasis on the *Tale of Genji*; winter: mediaeval (Kamakura, Muromachi, Tokugawa) literature including drama (*nō*, *kabuki*, *bunraku*), *haiku*, and *ukiyo* writing; spring: literature since the Meiji Restoration (1868). All readings in English. Naff.

AL 304, 305, 306. **Literature of the Ancient World.** 3 hours each term.

Fall: Homer and the Greek epic; winter: the fifth century; spring: Latin poetry. Lectures and readings in English. Special attention to influence of Greek and Latin writers on English literature. Combellack, Kim.

AL 307, 308, 309. **Introduction to Chinese Literature.** 3 hours each term.

Ancient Chinese literature and Confucian classics, with emphasis on poetry; later prose, poetry, and literary criticism; the development of drama and fiction. Readings and lectures in English. Palandri.

- AL 314, 315, 316. **Introduction to Germanic Literature.** 3 hours each term.
In English. Lectures and assigned readings covering the whole range of German literature.
- AL 321, 322, 323. **Classic Myths.** 1 hour each term.
The three major myths of the classical world: Troy, Thebes, and the Golden Fleece. Lectures and readings in English. Combellack.
- AL 331, 332, 333. **Survey of Russian Literature.** 3 hours each term.
Russian literature from 1825 to 1917, with extensive reading in the works of Gogol, Dostoevsky, and Tolstoy.
- AL 340, 341, 342. **Russian Culture and Civilization.** 3 hours each term.
Main currents of Russian intellectual, literary, and artistic life. Steussy.
- AL 351, 352, 353. **Scandinavian Literature in Translation.** 3 hours each term.
Outstanding works of Scandinavian literature, studied in translation. Fall: Norwegian; winter: Swedish; spring: Danish. Prerequisite: upper-division standing. Williams.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- AL 407. **Seminar.** (g) Hours to be arranged.
- AL 421, 422, 423. **Modern Russian Short Story, Poetry, Drama.** (g) 3 hours each term.
Fall: the short story—Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, Gorky, Soviet authors; winter: poetry—evolution of Russian poetry from the beginnings into the Soviet period, with selected readings; spring: drama—modern Russian drama from the eighteenth century. Knowledge of Russian not required; but Russian majors must do selected readings in the original.
- AL 477, 478, 479. **Dante and His Times.** (g) 3 hours each term.
Historical and literary background of the *Divine Comedy*; study of the poem and of Dante's minor works; Petrarch and Boccaccio. Lectures and readings in English. Beall.

GRADUATE COURSES

- AL 507. **Seminar.** Hours to be arranged.
- AL 514, 515, 516. **Introduction to Comparative Literature.** 3 hours each term.
Study of significant examples of literature illustrating influences, themes, and movements that cross linguistic frontiers; opportunity for individual research on problems involving two or more literatures. Fischler.
- AL 586, 587. **Comparative Literary Criticism.** 3 hours each term.
Designed to familiarize the student with the more important approaches to the criticism of literature current in the twentieth century; practical experimentation with methods and texts; readings, discussion, and analysis of literary works. Forms a year sequence with Eng 585.

General Science

THE PROGRAM IN GENERAL SCIENCE includes a series of courses of broad interdepartmental scope and a major curriculum in general science leading to the bachelor's degree.

The curriculum in general science is intended for students who wish to build a program of cultural studies around a central interest in science as an aspect of civilization, for students preparing for professional careers in science (such as medical research) for whom a departmental science major may be too narrow and highly specialized, and for prospective science teachers. The standard three-year premedical or pre-dental curriculum, followed by a year of work in a medical school or two years of work in a dental school, meets all of the requirements for the bachelor's degree in general science.

The general science major leads to the Bachelor of Arts or Bachelor of Science degree. The special requirements are—a minimum of 72 term hours in science (biology, chemistry, geology, mathematics, physics), distributed as follows: (1) Four year sequences, numbered 100-110 or 200-210, one in each of four science departments. (2) A minimum of 24 upper-division hours in science, including not less than 9 term hours in each of two science departments.

Subject Preparation for High-School Teaching. For certification as a teacher of general science in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—36 term hours of college science, including work in biology, general chemistry, and general physics; for a standard certificate, granted after five years of college work, a *standard norm*—54 term hours of college science, including the basic-norm requirement and work in earth sciences.

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 262.

LOWER-DIVISION COURSES

GS 104, 105, 106. **Physical-Science Survey.** 4 hours each term.

General introduction to the physical sciences; principles of astronomy, physics, and chemistry, geologic processes, and man's relation to them. Special emphasis on scientific method. 4 lectures. Ebbighausen, Ellickson.

GS 204, 205, 206. **Physical Science (Honors College).** 4 hours each term.

Introduction to certain basic concepts, terms, and methods of modern physical science, with emphasis on the interrelations of the physical sciences with each other and with other fields of knowledge. Dart, Wells.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

GS 411, 412, 413. **History of Science.** (g) 2 hours each term.

Lectures, readings, and discussions of selected topics in the history of science, considered as a part of the cultural history of Western civilization in the period 1500-1900.

General Social Science

THE PROGRAM IN GENERAL SOCIAL SCIENCE includes a series of courses of broad interdepartmental scope and a major curriculum in general social science leading to the bachelor's degree.

The curriculum in general social science is designed for students who wish broad cultural training, and for prospective teachers for whom a departmental major may be too highly specialized. In addition to satisfying the general University requirements, students following this program must take a minimum of 72 hours in social science courses. This work must include four lower-division year sequences, one in each of four of the following fields: anthropology, economics, geography, history, philosophy, political science, psychology, religion, sociology. Introduction to the Social Sciences (Honors College) (SSc 201, 202, 203) may be substituted for any one of the four required sequences. The upper-division work must include two one-year sequences (not less than 18 hours) in one social science department, and one one-year sequence (not less than 9 hours) in each of two other social science departments.

Subject Preparation for High-School Teaching. For certification as a teacher of social studies in Oregon high schools, the student's program must

include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—54 term hours, including 9 term hours in each of the following fields: American history, European or world history, geography, political science, economics, sociology or anthropology; for a standard certificate, granted after five years of college work, a *standard norm*—72 term hours, including the basic-norm requirement and including a total of 30 term hours in one of the fields listed for the basic norm, of which 3 term hours must be in research.

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 265.

Honors. See HONORS COLLEGE, pages 120-123.

LOWER-DIVISION COURSES

SSc 104, 105, 106. **Social Science and Social Policy.** 3 hours each term.

Not offered 1963-64.

SSc 201, 202, 203. **Introduction to the Social Sciences (Honors College).** 3 hours each term.

A study of some fundamental concepts in the social sciences. Satisfies prerequisite requirement for upper-division courses in anthropology, geography, political science, psychology, and sociology. Dumond, Marquis, Johnson, Wrench.

Anthropology

Professors: A. C. SPAULDING (department head), D. F. ABERLE, H. G. BARNETT, L. S. CRESSMAN (emeritus), THEODORE STERN.

Associate Professors: V. R. DORJAHN, A. G. SMITH.

Assistant Professors: H. B. BARCLAY, D. L. COLE, W. A. DAVIS, D. E. DUMOND, R. D. GASTIL,* P. E. SIMONDS, D. T. WALLACE.

Fellows: L. H. DONALD, JR., R. C. KISTE, MICHAEL NOWAK, F. E. POIRIER, B. J. RIGSBY, J. R. ROLLWAGEN, DEAN SNOW, W. T. STUART, D. E. WALKER, P. M. WEIL.

Assistants: H. L. ALEXANDER, JR., S. F. BEDWELL, C. T. BROCKMAN, CARL BROWN, T. C. HOGG, F. I. KHURI, K. E. KNUDSON, E. H. LARSON, R. T. MATHENY, D. H. MITCHELL, M. R. MUNSELL, M. D. OLIEN, H. S. RICE, J. A. SMITH, G. M. WHITE, R. E. WIEST.

THE COURSES offered by the Department of Anthropology are planned to provide a broad and deep understanding of human nature and society for students in other fields, as well as integrated programs for majors in anthropology.

A high-school student planning to major in anthropology is advised to take two years of high-school mathematics, preferably algebra. He should also come to the University with a sound background in English, so that he can read with understanding and express himself with clarity.

Majors in anthropology are required to take the following lower-division courses: General Anthropology (Anth 101, 102, 103) or Introduction to Cultural Anthropology (Anth 207, 208, 209); General Psychology (Psy 201, 202); Psychology of Adjustment (Psy 204) or Applied Psychology (Psy 205).

At the upper-division level the following courses are required for majors: Peoples of the World (Anth 314, 315, 316); Physical Anthropology (Anth 320,

* On leave of absence 1963-64.

321, 322); World Prehistory (Anth 411, 412, 413); and one area course at the 400 (G) level. Students planning to do graduate work should take two years of German and two years of a second foreign language, preferably French or Spanish. To insure a broad liberal education, it is strongly recommended that the student limit his undergraduate work in anthropology to a maximum of 51 term hours.

The department offers graduate work leading to the Master of Arts and Doctor of Philosophy degrees. Graduate instruction includes work in the fields of archaeology, ethnology, linguistics, and physical anthropology. To qualify for a master's degree, students must demonstrate a basic competence in all these fields.

The carefully selected anthropological collections of the Museum of Natural History provide excellent material for class instruction, particularly in the culture of the American Indian.

High-School Teaching. Students preparing for the teaching of social studies in the high schools may elect anthropology as a field of concentration. For the subject-preparation requirements for the teaching of social studies in Oregon high schools, see pages 128-129.

Honors. See HONORS COLLEGE, pages 120-123.

LOWER-DIVISION COURSES

Anth 101, 102, 103. **General Anthropology.** 3 hours each term.

Fall: man as a living organism; biological evolution; fossil man; winter: prehistoric cultures; spring: organization and functioning of culture. 2 lectures, 1 discussion period.

Anth 207, 208, 209. **Introduction to Cultural Anthropology.** 3 hours each term.

The meaning of culture; its significance for human beings; its diverse forms and degrees of elaboration among different groups of men; its processes of growth and expansion. 2 lectures; 1 discussion period. Smith.

UPPER-DIVISION COURSES

Anth 301, 302, 303. **Primitive Society.** 3 hours each term.

Social relationships and organizations among primitive peoples, including kinship, fraternal, political, and religious forms and behaviors. Prerequisite: upper-division standing. Not open for credit to majors or to students who have taken Anth 207, 208, 209. Barclay, Dumond.

Anth 314, 315, 316. **Peoples of the World.** 3 hours each term.

Historical treatment of world culture areas, exclusive of Europe. Regional variations in culture, their backgrounds, and their significance in contemporary world affairs. Materials drawn from Africa, Asia, Oceania, and the Americas. Prerequisite to area courses. Prerequisite: upper-division standing. Dorjahn.

Anth 320, 321, 322. **Physical Anthropology.** 3 hours each term.

Human physical development, racial differentiation, and racial distinctions. Fall: man's place among the Primates, fossil man, principles in human evolution; winter: morphological and genetic racial criteria, blood groups, factors in population change; spring: constitutional types, prehistoric and historic racial movements. Prerequisite: upper-division standing. Simonds.

Anth 401. **Research.** Hours to be arranged.

Anth 403. **Thesis.** Hours to be arranged.

Anth 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Anth 407. **Seminar.** (g) Hours to be arranged.

Anth 408. **Field Work in Anthropology.** (G) Hours to be arranged.

Anth 411, 412, 413. World Prehistory. (g) 3 hours each term.

Survey of the main developments in world prehistory. Fall: methods of archaeology; geological and biological background of paleolithic man; the Old World paleolithic. Winter: Old World village and urban development. Spring: New World hunting and gathering; agricultural-village life, urban society. Prerequisite: upper-division standing. Wallace.

Anth 414. Race and Culture. (G) 2 hours.

Racial classifications and comparisons; the biological base of culture; attitudes toward race in human relations. Prerequisite: 9 hours in anthropology or consent of instructor. Simonds.

Anth 415. Socialization in Primitive Society. (G) 2 hours.

Methods of child rearing, education, and social control among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. Simonds, Stern.

Anth 416. History of Anthropology. (G) 2 hours.

A nontheoretical exposition of the beginnings and specialized developments within the fields of archaeology, physical anthropology, ethnology, and linguistics. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.

Anth 417, 418, 419. The American Indian. (G) 3 hours each term.

Indian life in Central, South, and North America before white contact; contemporary Indian life where groups still survive. Prerequisite: Anth 314, 315, 316 or consent of instructor. Stern.

Anth 423, 424, 425. Peoples of the Pacific. (G) 3 hours each term.

Life and customs among the native groups of the South Pacific, including Polynesia, Micronesia, Melanesia, Australia, and Indonesia. Prerequisite: Anth 314, 315, 316 or consent of instructor. Smith.

Anth 426, 427, 428. Peoples of Africa. (G) 3 hours each term.

The cultures of Negro Africa; their history and development; the problems of contemporary Africa. Fall: South and East Africa; winter: Central and West Africa; spring: the problems of modern Africa. Prerequisite: Anth 314, 315, 316 or consent of instructor. Dorjahn.

Anth 435, 436. Peoples of the Near East. (G) 3 hours each term, fall and winter.

The ethnic groups of North Africa and Southwestern Asia; Islam and Islamic social structure as a unifying force; the relations of the Near East with Negro Africa and Asia. Prerequisite: Anth 314, 315, 316 or consent of instructor. Barclay.

Anth 437. Peoples of Interior Asia. (G) 3 hours spring.

Cultures of Interior Asia: paleo-Siberians, Mongols, Manchus, Kirghiz, Kazaks, and other peoples of Asiatic Russia. Prerequisite: Anth 314, 315, 316 or consent of instructor. Gastil.

Anth 438, 439, 440. Peoples of Southern and Eastern Asia. (G) 3 hours each term.

Introduction to the cultures of India, Farther India, China, Japan, and related areas; development of distinctive cultural configurations; interrelationships of culture; impact of westernization; racial, ethnic, and linguistic factors. Fall: the Hindu culture sphere; winter: the Chinese culture sphere; spring: southeastern Asia. Prerequisite: Anth 314, 315, 316 or consent of instructor. Stern.

Anth 444. Religion and Magic of Primitives. (G) 3 hours fall.

The religions and systems of magic of primitive peoples as reflections of their thought processes; supernatural systems in the life of primitive people. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.

Anth 445. Folklore and Mythology of Primitives. (G) 3 hours winter.

Unwritten literature as an expression of the imaginative and creative thought of primitive people. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.

Anth 446. Art Among Primitives. (G) 3 hours spring.

The artist and aesthetic expression among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.

Anth 450, 451, 452. Cultural Dynamics. (G) 3 hours each term.

Evaluation of approaches to the problem of cultural changes; analysis of invention and intergroup cultural borrowing; agents and conditions promoting change; mechanics of cultural growth; application of techniques for inducing change. Prerequisite: 9 hours in anthropology or consent of instructor. Barnett.

Anth 453. Primitive Value Systems. (G) 3 hours.

A comparative presentation and analysis of the differing world views of various primitive peoples. The basic premises and tenets revealed by an ethnic group in its interpretations of its experiences. Prerequisite: 9 hours of anthropology or senior standing in social science. Barnett.

Anth 454. Applied Anthropology. (G) 3 hours.

Study of case material in which anthropological assumptions, theories, and techniques have been applied to effect desired changes in intergroup relations. Problems of cross-cultural communication, conflict, and adjustment. Prerequisite: 9 hours in anthropology or senior standing in social science. Barnett.

Anth 455. Anthropology and Native Administration. (G) 3 hours.

Survey of present policies and techniques of native administration; application of anthropological facts and theory to the solution of practical problems; the impact of external demands on native cultures; satisfaction of social, economic, and psychological needs. Principal areas studied are Oceania and Africa, with some attention to parts of North America and Asia. Prerequisite: 9 hours of anthropology or senior standing in social science. Barnett.

Anth 456, 457, 458. Language, Culture, and Behavior. (G) 3 hours each term.

Culture as patterned interaction among individuals, groups, and environments; interaction through message networks, including verbal and nonverbal symbolic systems and how the acquisition of language changes the behavior of individuals; how men developed these systems and how this achievement led to new ways of life. Prerequisite: 9 hours in anthropology or consent of instructor. Smith.

GRADUATE COURSES***Anth 501. Research.** Hours to be arranged.**Anth 502. Research Methods in Anthropology.** Hours to be arranged.

Orientation with reference to graduate study, research methods, and bibliographical sources; preparation and presentation of graduate-level research papers. Required of all first-year graduate majors during the fall term, as a prerequisite to all Anth 501-507 courses. Smith.

***Anth 503. Thesis.** Hours to be arranged.**Anth 505. Reading and Conference.** Hours to be arranged.**Anth 506. Special Problems.** Hours to be arranged.**Anth 507. Seminar.** Hours to be arranged.

Theory and Method in Archaeology. Wallace, Spaulding.

Culture and Personality. Aberle.

Anthropological Theory. Barnett.

Field Methods in Ethnology. Barnett.

Innovation. Barnett.

The Negro in the New World. Dorjahn.

National and Civilizational Cultures. Gastil.

Changes in Modern Civilization. Gastil.

* No-grade course.

Anth 511. Culture, Society, and the Individual. 3 hours.

A review and evaluation of the concepts of culture and society, as the terms are employed by anthropologists. The relationships between culture and society, between culture and the individual, and between society and the individual. Prerequisite: graduate standing in the social sciences. Barnett.

Anth 512. The Beginnings of Civilization. 3 hours.

The change from a food-gathering to a food-producing economy; significance for cultural and social development. Prerequisite: graduate standing in the social sciences. Wallace.

Anth 514. Primitive Social Organization. 3 hours.

Primitive social organization, with particular reference to kinship and sodalities. Prerequisite: graduate standing in social science. Dorjahn.

Anth 515. Primitive Political Systems. 3 hours.

Government in primitive societies, considered from a cross-cultural perspective. Special attention to political innovations under colonial rule, and to the new nationalistic administrations in Africa and Asia. Prerequisite: graduate standing in social science. Dorjahn.

Anth 516. Primitive Economic Systems. 3 hours.

Production, consumption, distribution, and exchange in primitive societies. Special attention to property, the economic surplus, change in economic systems, and relationships between nonpecuniary economies and the world economy. Prerequisite: graduate standing in social science. Dorjahn.

Anth 520, 521, 522. Advanced Physical Anthropology. 4 hours each term.

Observations and measurements of skeletons; morphological observations and anthropometry of the living. Genetic and morphological analysis of race. Dentition, biometric statistics, blood-group genetics and techniques. 3 lectures; 1 three-hour laboratory period. Prerequisite: Anth 320, 321, 322 or consent of instructor. Cole, Simonds.

Anth 523, 524, 525. Archaeology of the New World. 3 hours each term.

Early man in the Americas. Fall: North America; winter: Meso-America; Spring: South America. Spaulding, Wallace.

Anth 526, 527, 528. Linguistics. 3 hours each term.

The relation of language to culture; nature and forms of language; influence of linguistic patterns on thought; sounds of language—phonetics and phonemics; linguistic structures; morphophonemics and morphology; semantics; techniques of linguistic recording and analysis; field work. Prerequisite: senior standing; Anth 207, 208, 209 or two years of a foreign language; consent of instructor. Smith, Stern.

Biology

Professors: B. T. SCHEER (department head), C. W. CLANCY, GRAHAM HOYLE, R. R. HUESTIS (emeritus), AARON NOVICK, EDWARD NOVITSKI, P. L. RISLEY, A. L. SODERWALL, F. W. STAHL.

Associate Professors: M. J. COHEN, L. E. DETLING, P. W. FRANK, J. KEZER, SEYMOUR SHAPIRO, J. A. SHOTWELL, F. P. SIPE (emeritus), W. R. SISTROM, JACOB STRAUS, GEORGE STREISINGER, S. S. TEPFER, D. E. WIMBER.

Assistant Professors: R. W. CASTENHOLZ,* S. A. COOK, JANE GRAY, B. H. MCCONNAUGHEY,† R. W. MORRIS,‡ F. W. MUNZ.

Instructors: D. J. KARR, P. J. KILBOURN, G. J. MURPHY.

Associates: H. L. ATWOOD, E. B. CLANCY, A. EWING, M. KATO, N. G. KURUP.

Fellows: D. D. BEATTY, E. M. EISENSTEIN, D. R. HAGUE, W. R. PEACOCK.

* On sabbatical leave 1963-64.

† On leave of absence 1963-64.

‡ On leave of absence, fall term, 1963-64.

Assistants: M. K. ARMSTRONG, G. E. BLACK, JOHN BLOOMFIELD, R. J. BOETTCHER, H. E. BROWN, JR., J. G. COLBURN, D. C. COLMAN, W. L. CRANOR, R. L. DARBY, T. A. EBERT, E. F. EHRLICH, J. W. EVANS, R. I. GREYSON, L. B. HENDRIX, N. G. HENDRIX, J. C. HICKMAN, J. F. HUNT, J. H. HUTCHISON, M. P. JOHNSON, A. J. KARPOFF, CORNELIUS LABAN, M. LENOX, M. W. MUMBACH, C. O. NELSON, J. B. PALMER, J. A. PEARY, F. M. SAHINEN, R. P. SHERIDAN, T. L. SHININGER, C. N. SKREPETOS, B. A. STOCKTON, J. E. VAN OORT, M. H. VAWTER, R. E. WHEELER, M. E. WILL, A. O. D. WILLOWS, R. W. WISE.

THE DEPARTMENT OF BIOLOGY offers an undergraduate program planned to provide an understanding of the living world as a part of a liberal education, to prepare the student for professional careers in industry, government, and secondary education, and to provide preparation for graduate work leading to careers in higher education, research, and the medical sciences.

Modern biology is a quantitative science; students planning to specialize in biology should include in their high-school preparation as much mathematics as possible, including at least algebra and geometry. Preparation in English is essential, and work in French, German, chemistry, and physics is highly desirable.

The course requirements for majors are as follows: General Biology (Bi 101, 102, 103 or Bi 104, 105, 106);* General Chemistry (Ch 104, 105, 106, or Ch 204, 205, 206); Quantitative Analysis Laboratory (Ch 108, 109, or Ch 207, 208, 209); mathematics through Mth 106; General Physics (Ph 201, 202, 203, Ph 204, 205, 206); Organic Chemistry (Ch 334, 335, 336); Introduction to Genetics (Bi 422); Cellular Physiology (Bi 311); 16 hours of upper-division work selected from Vertebrate Zoology (Bi 351, 352, 253, Bi 355, 356), Invertebrate Zoology (Bi 361), Plant Morphology (Bi 332, 333), Systematic Botany (Bi 334), and including at least one course in zoology and one course in botany; at least one additional upper-division course in biology; two years of college-level French, German, or Russian. Students who intend to go on for graduate work are urged to include calculus in their programs. The foreign-language requirement will be waived for students who enter medical or dental schools for the senior year of work towards a departmental major; medical- or dental-school courses in anatomy and physiology will be accepted in place of 8 hours of upper-division biology electives. Pre-medical and pre-dental students should make sure that their programs meet the requirements of the schools they plan to enter, as well as those of the department.

Subject Preparation for High-School Teaching. For certification as a teacher of biology in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—36 term hours, including work in general biology, anatomy, physiology, developmental biology, genetics, evolution, and ecology; for a standard certificate, granted after five years of college work, a *standard norm*—54 term hours, including the basic-norm requirement.

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 260.

To receive the unqualified recommendation of the department, prospective teachers should complete the major requirements summarized above. The foreign-language and Mth 106 requirements will be waived for students who enter student teaching in the senior year; these students should complete Introductory College Mathematics (Mth 105) and Principles of Ecology (Bi 471), and may substitute Essentials of Physics (Ph 101, 102, 103) for General Physics (Ph 201, 202, 203). Laboratory and Field Methods in Biology (Bi 494) satisfies the certification requirement for Special Secondary Methods (Ed 408).

* This requirement may be waived for students with superior high-school backgrounds, as indicated by Advanced Placement Program record or by special departmental examinations.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work. The department offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Candidates for higher degrees are expected to meet undergraduate major requirements, as determined by their undergraduate records and by examination, before advancement to candidacy for the degree.

Facilities are available for graduate study in botany (plant morphology, cytology, anatomy, taxonomy, and physiology), ecology (plant and animal), genetics, marine biology, microbiology, physiology (comparative, general, and mammalian), and zoology (cytology, embryology, invertebrate, and vertebrate).

Institute of Marine Biology. The University operates for the Oregon State System of Higher Education an Institute of Marine Biology at Charleston on Coos Bay on the Oregon Coast. The Institute is located in a setting providing access to an unusual variety of richly populated marine and terrestrial habitats. Under the guidance of an interinstitutional advisory committee, the Institute serves all units of the State System. A program of undergraduate and graduate studies is offered during the summer session.

Institute of Molecular Biology. A program of research and research instruction in areas of biology where phenomena can be understood in terms of the structure of molecules is conducted through the University of Oregon Institute of Molecular Biology. See INSTITUTE OF MOLECULAR BIOLOGY (pages 115-116).

LOWER-DIVISION COURSES

Bi 101, 102, 103. **General Biology.** 4 hours each term.

Principles of life science, illustrated by studies of selected organisms. 3 lectures; 1 three-hour laboratory period.

Bi 104, 105, 106. **Biological Science (Honors College).** 4 hours each term.

Selected studies of biological principles, with emphasis on methods of observation, comparison, analysis, experiment, and synthesis in biological science. 3 lectures; 1 three-hour laboratory period.

UPPER-DIVISION COURSES

(Bi 101, 102, 103 or equivalent is prerequisite to all upper-division courses in biology. Other prerequisites are indicated in the course descriptions.)

Bi 311. **Cellular Physiology.** 4 hours.

Cellular phenomena common to all organisms, including chemical processes of metabolism and membrane processes. Prerequisite: Ch 334.

Bi 312, 313. **Human Physiology.** 3 hours each term, winter and spring.

Required for majors in physical education, elective for others qualified. 2 lectures; 1 three-hour laboratory period. Prerequisite: one year of chemistry. Soderwall.

Bi 320. **Cell Replication and Control Mechanisms.** 4 hours.

Structure and properties of macromolecules common to all living matter, and the control of their synthesis. Prerequisite: Bi 311.

Bi 332, 333. **Plant Morphology.** 4 hours each term, fall and winter.

Comparative study of the structure and life histories of representatives of the important plant phyla. Fall: ferns, fern allies, and seed plants; winter: algae, fungi, liverworts, and mosses. 3 lectures; 2 three-hour laboratory periods. Tepfer, Castenholz.

Bi 334. **Systematic Botany.** 4 hours.

Principles of plant classification; common plant families; collection and identification of Oregon plants. Cook.

Bi 355. Comparative Anatomy. 4 hours.

Systematic study, dissection, and identification of vertebrate structures and anatomical relations. 2 lectures; 2 three-hour laboratory periods. Not open to students who have credit for Bi 362, 363, 364. Morris.

Bi 356. Vertebrate Embryology. 4 hours.

Fertilization, morphogenesis, and differentiation of organ systems of vertebrates. 2 lectures; 2 three-hour laboratory periods. Not open to students who have credit for Bi 362, 363, 364. Risley.

Bi 361. Essentials of Invertebrate Zoology. 4 hours.

Morphology, anatomy, and general biology of the major phyla of invertebrate animals. 2 lectures; 2 three-hour laboratory periods.

Bi 362, 363, 364. Vertebrate Zoology. 4 hours each term.

An integrated presentation of morphological, developmental, and functional features of the vertebrates. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Bi 101, 202, 103 and consent of instructor, or Bi 104, 105, 106. Not open to students who have credit for Bi 355, Bi 356. Morris, Munz.

Bi 381, 382. Introduction to Bacteriology. 3 hours each term.

Basic principles and techniques of bacteriology; role of bacteria and other micro-organisms in transformations of organic matter and in physical and chemical transformations in soil and water; their importance to man. 2 lectures; 2 two-hour laboratory periods. Prerequisite: general chemistry. McConnaughey, Kilbourn.

Bi 391, 392. Human Anatomy. 3 hours each term.

Gross anatomy; the skeletal and muscular structure; the circulatory, respiratory, digestive, and neural systems and their functioning in physical activities. 2 lectures; 1 three-hour dissection period. Prerequisite: junior standing. Sigerseth.

Bi 401. Research.** Hours to be arranged.Bi 403. Thesis.** Hours to be arranged.***Bi 405. Reading and Conference.** Hours to be arranged.***Bi 407. Seminar.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT*****Bi 408. Laboratory Projects.** (G) Hours to be arranged.

Special laboratory training in research methods.

Bi 414, 415, 416. Comparative Physiology. (G) 4 hours each term.

Physiology of excitation, conduction, and muscular contraction in animals; nutrition, digestion, circulation, metabolism, excretion, and integration in the major animal phyla, in relation to ecology and the evolution of physiological function. 3 lectures; 1 three-hour laboratory period. Prerequisite: organic chemistry, general physics, invertebrate zoology.

Bi 422. Introduction to Genetics. (g) 3 hours.

An introduction to the fundamental principles of genetics. 3 lectures. Prerequisite: general chemistry and college algebra (Mth 105). Clancy.

Bi 423. Genetics Laboratory. (G) 2 hours.

Fundamental principles of genetics illustrated by experiments with *Drosophila* and other organisms. 2 three-hour laboratory periods. Prerequisite: Bi 422. Clancy.

Bi 424. Human Genetics. (G) 3 hours.

The immunogenetics of the blood groups and transplantation incompatibilities; sex determination and the sex ratio; spontaneous and induced mutation; radiation effects; the genetics of populations; selection, eugenics, and the genetic aspects of the human races. 3 lectures. Prerequisite: Bi 422. Novitski.

* No-grade course.

Bi 426. Evolution. (G) 3 hours.

Theories of biological variation, race, and species formation. 3 lectures. Prerequisite: Bi 422 or equivalent; senior or graduate standing. Offered alternate years. Frank.

Bi 428, 429. Cytology. (G) 4 hours each term, winter and spring.

Microscopic and submicroscopic structure of cytoplasm, and its relation to cell function, structure and behavior of chromosomes and other nuclear components. Methods of study and experimental procedures. 2 lectures, 2 three-hour laboratory periods. Wimber.

Bi 432. Fungi. (G) 4 hours.

Structure, physiology, and classification of fungi. 2 lectures; 2 three-hour laboratory periods. Offered alternate years. Not offered 1964-65. Castenholz.

Bi 433. Algae. (G) 4 hours.

Structure, life histories, and ecology of representative fresh-water and marine algae. 2 lectures; 2 three-hour laboratory periods. Offered alternate years. Castenholz.

Bi 434. Plant Anatomy and Microtechnique. (G) 4 hours.

Comparative study of the structure and development of cells, tissues, and organs of seed plants. 2 lectures; 2 three-hour laboratory periods. Shapiro.

Bi 441. Plant Physiology. (G) 4 hours.

Growth, respiration, water relations, and functions of plant organs. 3 lectures, 1 three-hour laboratory period. Prerequisites: Bi 311, Ch 336. Straus.

Bi 455. Histology. (G) 4 hours.

Systematic study, description, and identification of microscopic structures of vertebrate tissues. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Bi 355, Bi 356.

Bi 463. Parasitology. (G) 4 hours.

Biological relationships of parasite and host, and the effect of such relationships on each. 2 lectures; 2 three-hour laboratory periods. Not offered 1964-65. McConnaughey.

Bi 471, 472, 473. Principles of Ecology. (G) 4 hours each term.

Fall: introduction to the ecosystem; interrelations between organisms and the physical environment, with emphasis on examples from higher plants. Winter: study of population; growth, structure, and species interactions. Spring: ecosystem energetics and structure, with intensive study of a few selected examples. 3 lectures; field work. Prerequisite: general chemistry, college algebra. Cook, Frank.

Bi 475. Aquatic Biology. (G) 3 hours.

The ecology of fresh-water organisms. 2 lectures; 1 three-hour laboratory Period. Prerequisite: Bi 471. Offered alternate years. Castenholz, Frank.

Bi 481, 482. Microbiology. (G) 4 hours each term.

Physiology and biochemistry of micro-organisms. The first term is mainly devoted to laboratory work on the isolation of various types of bacteria from nature and on the physiology of growth. In the second term, the emphasis is on mechanisms of metabolic control and on the physiology of growth. Prerequisite: Bi 311, Ch 336 or consent of the instructor. Sistrom.

Bi 491, 492, 493. Historical Biogeography. (G) 3 hours each term.

Fall: classification of mammals and mammalian morphology, with emphasis on comparative osteology. Winter: history of mammals; principles involved in their chronological distribution. Spring: biogeography and paleoecology. 2 lectures; 1 three-hour laboratory period. Prerequisite: senior standing in biology, geology, or anthropology. Offered alternate years. Shotwell.

Bi 494. Laboratory and Field Methods in Biology. (G) 4 hours.

Designed especially for biology teachers in the secondary schools. Field collection, identification, and culturing of living material; utilization of this material

in the biology teaching laboratory. Field trips for exploration of the various kinds of habitats found in the Pacific Northwest. Prerequisite: consent of instructor.

GRADUATE COURSES

- *Bi 501. **Research.** Hours to be arranged.
- *Bi 502. **Supervised College Teaching.** Hours to be arranged.
- *Bi 503. **Thesis.** Hours to be arranged.
- *Bi 505. **Reading and Conference.** Hours to be arranged.
- *Bi 507. **Seminar.** Hours to be arranged.
 Animal Physiology.
 Cryptogamic Botany.
 Ecology.
 Fish Biology.
 Plant Morphology.
 Plant Physiology.
- Bi 510. **Endocrinology Laboratory.** 1-3 hours.
 Laboratory work to accompany Bi 511, Bi 512, or Bi 513, conducted on a project basis.
- Bi 511. **Vertebrate Endocrinology.** 3 hours.
 The morphology and physiology of glands of internal secretion; their role in normal body function of the vertebrates. Soderwall.
- Bi 512. **Physiology of Reproduction.** 3 hours.
 Biochemical, histochemical, physiological, and other experimental approaches to problems in the physiology of reproduction. Soderwall, Risley.
- Bi 513. **Comparative Endocrinology.** 3 hours.
 The morphology and physiology of neurosecretory and other endocrine structures of the invertebrates and lower vertebrates. Scheer.
- Bi 515. **Physiology of Membrane Processes.** 3 hours.
 Experimental and theoretical approaches to the study of diffusion, permeability, and active transport across living membranes; the physiological significance of these processes. Scheer.
- Bi 516, 517. **Neurophysiological Basis of Behavior.** 3 hours each term.
 Physiology of the neuromuscular systems of animals, with emphasis on phylogenetic development and the evolution of animal behavior. Cohen, Hoyle.
- Bi 519. **Neurophysiology Laboratory.** 3 hours.
 Laboratory work to accompany Bi 516, 517, with emphasis on the electrical techniques for study of nerve and muscle function. Cohen, Hoyle.
- Bi 520, 521, 522. **Advanced Genetics.** 2 hours each term.
 Selected topics from the following: gene action, mutation, chromosome mechanics, population genetics, statistical methods, radiation genetics. 3 lectures. Novitski.
- Bi 526. **Developmental Genetics.** 3 hours.
 Selected topics from the field of developmental and biochemical genetics. Lectures, discussion, and student reports on current literature. Prerequisite: general genetics, biochemistry. Clancy.
- Bi 531. **Experimental Plant Morphogenesis.** 4 hours.
 Lectures and laboratory work demonstrating experimental modifications of plant growth; the significance of these modifications in relation to normal growth and development. Prerequisites: plant anatomy, plant physiology. Shapiro.

* No-grade course.

- Bi 537, 538, 539. **Advanced Systematic Botany.** 3 hours each term.
Classification, distribution, and speciation of seed plants of the Pacific Northwest. Prerequisite: Bi 332, 333, Bi 334. Offered alternate years. Not offered 1964-65.
- Bi 541. **Advanced Plant Physiology.** 3 hours.
Lectures on special aspects of plant respiration, salt metabolism, the photochemical reactions of photosynthesis, and on the role, mechanism of action, and metabolism of plant growth-substances. Prerequisite: plant physiology, biochemistry. Straus.
- Bi 544. **Plant Physiology Laboratory.** 2 or 3 hours.
Laboratory work in techniques used in plant-physiology research, with special emphasis on plant-tissue cultures. Prerequisite: plant physiology, biochemistry. Straus.
- Bi 545. **Physiology and Ecology of Algae.** 3 hours.
Comparative physiology of freshwater and marine algae; ecological significance of physiological processes; annual cycles and limiting factors. Emphasis on experimental and theoretical approaches to the solution of ecological problems. 2 lectures; 1 three-hour laboratory period. Offered alternate years. Castenholz.
- Bi 551. **Biology of Fishes.** 4 hours.
The anatomy, development, and biology of fishes. Morris.
- Bi 565. **Experimental Embryology.** 4 hours.
Problems and techniques of experimental morphogenesis and development. Lectures and laboratory work. Prerequisite: Bi 356. Offered alternate years. Risley.
- Bi 597, 598, 599. **Advanced Biology.** 4 hours each term.
Lectures, readings, and discussions of basic principles and recent advances in selected aspects of biological science, with special attention to the needs and problems of secondary-school teachers. Enrollment limited to teachers and prospective teachers. Not offered 1964-65. Tepfer.

COURSES OFFERED ONLY IN SUMMER SESSIONS

- Bi 417. **Introduction to Mammalian Physiology.** (g) 4 hours.
- Bi 439. **Field Botany.** (G) 4 hours.
- Bi 459. **Field Ornithology.** (G) 3 hours.
- *Bi 461, 462. **Invertebrate Zoology.** (G) 4 hours each term.
- *Bi 467. **Marine Invertebrate Types.** (g) 3 hours.
- *Bi 468. **Invertebrate Embryology.** (G) 4 hours.
- *Bi 476. **Biology of Marine Organisms.** (G) 8 hours.
- *Bi 477. **Planktonology.** (G) 4 hours.
- *Bi 478. **Marine Ecology.** (G) 4 hours.

Chemistry

Professors: R. M. NOYES (department head), V. C. BOEKELHEIDE, MARSHALL FIXMAN, T. L. HILL, L. H. KLEMM, A. H. KUNZ (emeritus), F. J. REITHEL, SHIN-ICHERO SAKAI, J. A. SCHELLMAN,† D. F. SWINEHART.

Associate Professors: S. A. BERNHARD, EDWARD HERBERT, R. M. MAZO, R. G. WOLFE.‡

Assistant Professors: L. J. DOLBY, T. W. KOENIG, I. W. PLESNER, M. L. SAGE.

* Offered at the Institute of Marine Biology.

† On leave of absence 1963-64.

‡ On sabbatical leave 1963-64.

Senior Instructor : F. J. MOHR.

Instructors : R. D. BURKHART, GERRIT DE WILDE, MARCEL GRDINIC, G. W. SAGE.

Associates : J. W. DONOVAN, K. W. GOPINATH, R. S. KARIMOTO, R. J. MOLYNEUX, I. G. MORRISON, J. B. PHILLIPS, J. E. ROBBINS, R. J. SAUER, F. CHARLOTTE SCHELLMAN, M. D. SCOTT, C. J. SMITH, P. R. WALTON, ANNEKÄTE WEISERT, J. T. WONG.

Assistants : R. J. BARNHARD, D. P. BLATTNER, D. L. BOOTH, P. D. BUCKLEY, S. C. CHANG, W. S. CHOU, R. J. CHRISTIE, P. J. CONN, G. EDLIN, J. G. EISKAMP, N. A. FEDORUK, DIANA GLOVER, W. GODCHAUX, R. GORDON, R. L. GREEN, G. W. GRIBBLE, D. W. HAMILTON, L. A. HOFFMANN, R. H. IWAMOTO, F. W. KELLY, M. J. KELLY, C. E. KLOPFENSTEIN, DAISY H. LEE, F. G. H. LEE, M. W. LEROM, B. J. LITMAN, P. D. LORD, S. L. LOWE, C. T. MACDONALD, K. K. MARK, D. R. MCCOY, T. M. MCGUIRE, F. A. MENEGHINI, C. Y. MOK, MARGARET MORRIS, R. W. MORRIS, MOSATO NAKASHIMA, R. M. NEWTON, W. T. NOLAN, H. F. NOLLER, P. J. ORIEL, W. T. PEPPERDINE, BETTY PIFER, H. E. RAST, G. N. RIDDLE, MANUEL RODRIGUEZ-FLORES, M. J. SCHWARZ, C. D. SMITH, V. A. SNECKUS, T. N. SOLIE, D. R. TAYLOR, J. F. TAYLOR, E. TERZAGHI, T. F. THOMAS, C. L. WILKINS, J. F. WITTE.

UNDERGRADUATE COURSES in chemistry are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Liberal Arts. They are also designed to provide a substantial foundation in chemistry for students interested in (1) advanced work in chemistry or other sciences, (2) teaching in colleges or secondary schools, (3) a career in industrial chemistry, and (4) premedical or pre dental studies.

The high-school preparation of a prospective chemistry major should include as much mathematics as possible. One year each of algebra and geometry is a minimum. Students entering with insufficient preparation in mathematics must remedy their deficiencies in elementary courses offered by the University. Substantial preparation in English, social science, literature, and foreign languages is expected. High-school work in chemistry and physics is desirable but not required.

The recommended curriculum for majors includes the following courses in chemistry and related fields (variations in order may be approved by the department) :

Freshman Year. General Chemistry (Ch 104, 105, 106 or Ch 204, 205, 206) ; Inorganic Qualitative Analysis (Ch 207), Introductory Gravimetric Analysis (Ch 208), Introductory Volumetric Analysis (Ch 209) ; a year sequence in mathematics (as a basis for mathematics placement, high-school records are supplemented by a placement examination) ; German.

Sophomore Year. Organic Chemistry (Ch 334, 335, 336) ; Organic Chemistry Laboratory (Ch 340, 341, 342) ; General Physics (Ph 201, 202, 203, Ph 204, 205, 206) ; Differential and Integral Calculus (Mth 201, 202, 203), if not taken in the freshman year ; German.

Junior Year. Physical Chemistry (Ch 441, 442, 443) ; Physical-Chemical Measurements (Ch 446, 447, 448) ; Biochemistry (Ch 461, 462, 463) for students intending to do graduate work in this field.

Senior Year. Research (Ch 401) ; an additional sequence in chemistry at the senior level.

The additional advanced sequence in the senior year may be elected from such courses as Physical-Inorganic Chemistry (Ch 411, 412), Biochemistry (Ch 461, 462, 463, Ch 464, 465, 466), Chemical Thermodynamics (Ch 551, 552), Advanced Organic Chemistry (Ch 531, 532, 533). Students who are particularly interested in biochemistry may take Ch 461, 462, 463 in their junior year.

The recommendations for the major outlined above meet the specifications of the Committee on Undergraduate Training of the American Chemical Society. Upon notification by the Department of Chemistry, the society issues certificates to students who successfully complete the recommended curriculum. Students who desire a less specialized major, without American Chemical Society certification, may omit German and the extra chemistry sequence in the senior year.

Students who do not earn a grade of C or better in first-year chemistry courses are not permitted to enroll in second-year courses; however, they have the option to repeat the first-year chemistry course in which they received a grade lower than C.

To be recommended for the bachelor's degree with a major in chemistry, a student must have earned a minimum GPA of 2.00 in courses in chemistry, physics, and mathematics.

To be eligible for enrollment in upper-division courses in chemistry, transfer students who plan a major in chemistry must have a college GPA of 2.75 or higher.

For students who plan to teach in secondary schools the department recommends the following as basic preparation: General Chemistry (Ch 104, 105, 106); Inorganic Qualitative Analysis (Ch 108); Introductory Volumetric Analysis (Ch 109); Organic Chemistry (Ch 334, 335, 336); Organic Chemistry Laboratory (Ch 337, 338); Quantitative Analysis (Ch 320). These courses provide acquaintance with several fields of chemistry. This recommended program does not satisfy the requirements for a bachelor's degree with a major in chemistry. Normally, students intending to teach in secondary schools meet the requirements for a bachelor's degree with a major in general science. Additional courses for secondary-school teachers are offered during the summer sessions.

Subject Preparation for High-School Teaching. For certification as a teacher of chemistry in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—36 term hours, including work in general chemistry, analytical chemistry, and organic chemistry; for a standard certificate, granted after five years of college work, a *standard norm*—54 term hours, including the basic-norm requirement. (A teacher who has completed the standard-norm requirement in chemistry and 12 term hours in physics may qualify for the teaching of physics as a second field.)

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 261.

Honors. See HONORS COLLEGE, pages 120-123.

Undergraduate Research Fellowships. Through a grant from the National Science Foundation, the department offers a number of undergraduate research participation fellowships to qualified junior and senior chemistry majors. The stipends are, on the average, \$200 for the academic year and \$600 for the summer months. Inquiries about the program should be addressed to the department head.

Graduate Study. The Department of Chemistry offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Detailed information is published in the Graduate School Catalog.

The department is prepared to accept Ph.D. candidates for work in the following fields of chemistry: physical chemistry, chemical physics, organic chemistry, theoretical chemistry, biochemistry, and inorganic chemistry.

LOWER-DIVISION COURSES

- Ch 101, 102, 103. **Elementary Chemistry.** 4 hours each term.
A brief presentation of some of the major areas of chemistry. Does not satisfy prerequisite for upper-division courses in chemistry. 2 lectures; 1 two-hour laboratory period; 1 quiz period.
- Ch 104, 105, 106. **General Chemistry.** 4 hours fall, 3 hours each term, winter and spring.
An introduction to the field of chemistry, providing an understanding of the structures of atoms, molecules, and ions and their interactions, and a foundation for the further study of chemistry. Fall: 3 lectures, 1 discussion period. Winter and spring: 3 lectures. Prerequisite: Mth 100 or equivalent.
- Ch 108. **Inorganic Qualitative Analysis.** 2 hours winter.
The separation and identification of cations and anions by semi-micro methods. Planned to accompany Ch 105. Prerequisite: grade of C or better in Ch 104. 1 three-hour laboratory period; 1 quiz period.
- Ch 109. **Introductory Volumetric Analysis.** 2 hours spring term.
Introduction to titrimetric techniques for the estimation of selected species. Planned to accompany Ch 106. Prerequisite: Ch 108, with grade of C or higher. 1 three-hour laboratory period; 1 quiz period.
- Ch 204, 205, 206. **General Chemistry.** 3 hours each term.
First-year college chemistry for selected students with excellent backgrounds in high-school chemistry, physics, and mathematics. Quantitative and theoretical aspects of the subject emphasized, with less descriptive material than in Ch 104, 105, 106. Open by invitation only to Honors College students and other well-prepared students. Selection is based chiefly on mathematics preparation. 3 lectures.
- Ch 207. **Inorganic Qualitative Analysis.** 2 hours fall.
The separation and identification of cations and anions by semi-micro methods. Planned to accompany Ch 104 or Ch 204. Intended primarily for Honors College students and prospective chemistry majors. Admission limited to selected students. 2 three-hour laboratory periods.
- Ch 208. **Introductory Gravimetric Analysis.** 2 hours winter.
The separation and gravimetric determination of selected inorganic species. Planned to accompany Ch 105 or Ch 205. Intended primarily for Honors College students and prospective chemistry majors. Admission limited to selected students. 2 three-hour laboratory periods.
- Ch 209. **Introductory Volumetric Analysis.** 2 hours spring.
The quantitative estimation of selected molecular species by titration procedures. Planned to accompany Ch 106 or Ch 206. Intended primarily for Honors College students and prospective chemistry majors. Admission limited to selected students. 2 three-hour laboratory periods.

UPPER-DIVISION COURSES

- Ch 320. **Quantitative Analysis.** 4 hours spring.
Laboratory work devoted mainly to volumetric analysis. Satisfies the requirements in quantitative analysis for admission to medical or dental schools. Not intended for chemistry majors. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Ch 106 or Ch 206; Ch 109 or Ch 209.
- Ch 334, 335, 336. **Organic Chemistry.** 3 hours each term.
Comprehensive study of the chemistry of the compounds of carbon. 3 lectures. Prerequisite: Ch 106 or Ch 206 with a grade of C or better.
- Ch 337, 338. **Introductory Organic Laboratory.** 2 hours each term, fall and winter.
Introduction to the principles and techniques of laboratory practice in organic chemistry. Prerequisite: Ch 109 or Ch 209 with a grade of C or better. 1 lecture; 1 four-hour laboratory period.

Ch 340, 341, 342. Organic Chemistry Laboratory. 2-3 hours per term.

A survey of the principles and techniques fundamental to laboratory practice in organic chemistry, including aspects of both qualitative and quantitative organic analysis. Prerequisite: Ch 109 or Ch 209 with a grade of C or better. Required for chemistry majors; open to Honors College students and, by selection, to others desiring a more intensive training in laboratory practice than is provided in Ch 337, 338. 1 lecture; 1 laboratory period.

Ch 401. Research. Hours to be arranged.

For advanced undergraduates. An introduction to the methods of chemical investigation.

Ch 403. Thesis. Hours to be arranged.

Open only to students eligible to work for the bachelor's degree with honors in chemistry.

Ch 405. Reading and Conference. Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****Ch 409. Special Laboratory Problems.** (G) Hours to be arranged.

Provides laboratory instruction not classifiable as research; laboratory work covered in other courses is not duplicated. Prerequisite: consent of instructor.

Ch 411, 412. Physical-Inorganic Chemistry. (G) 3 hours each term, fall and winter.

A comprehensive study of the structure, properties, and reactions of atomic and molecular species in the various states of aggregation. Prerequisite: three years of college chemistry.

Ch 414. Advanced Inorganic Laboratory. (G) 1 or 2 hours.

Students in Ch 411, 412 who expect American Chemical Society accreditation normally enroll in Ch 414 for one term of laboratory work. Students wishing more than one term of laboratory work may enroll in Ch 409. 1 or 2 three-hour laboratory periods.

Ch 416. Kinetics in Solution. (G) 3 hours.

Theories of rates of homogeneous reactions in solution; application to the elucidation of the mechanisms of chemical reactions. Prerequisite: physical chemistry. Offered alternate years.

Ch 441, 442, 443. Physical Chemistry. (g) 4 hours each term.

Comprehensive study of the theoretical aspects of physical-chemical phenomena. Atomic and molecular properties; macroscopic systems in equilibrium; nonequilibrium macroscopic systems. 4 lectures. Prerequisite: two years of college chemistry (except for physics majors), one year of calculus.

Ch 446, 447, 448. Physical-Chemical Measurements. (g) 2 hours each term.

Analytical applications of electrical and optical instruments; techniques of physical chemistry, including basic electronic, potentiometric, electrical, optical spectroscopic, and high-vacuum methods; experiments include thermodynamic and kinetic measurements and a short research project. Prerequisite: Ch 108, Ch 109 or Ch 208, Ch 209; Ch 441, 442, 443 (may be taken concurrently). 2 three-hour laboratory periods.

Ch 461, 462, 463. Biochemistry. (G) 3 hours each term.

Chemical interpretation of biological phenomena; study of compounds having biological significance. 3 lectures. Prerequisite: Ch 108, Ch 109 or Ch 208, Ch 209; knowledge of organic and physical chemistry and biology.

Ch 464, 465, 466. Biochemistry Laboratory. (G) 1 hour each term.

Designed to accompany Ch 461, 462, 463. Preparation and study of enzymes, use of chromatography, experiments with plant, animal, and microbiological materials. 1 three-hour laboratory period.

GRADUATE COURSES

- *Ch 501. **Research.** Hours to be arranged.
- *Ch 503. **Thesis.** Hours to be arranged.
- Ch 505. **Reading and Conference.** Hours to be arranged.
- *Ch 507. **Seminar.** 1 hour each term.
Seminars offered in physical chemistry, organic chemistry, and biochemistry.
- Ch 508. **Special Topics in Theoretical Chemistry.** 2 or 3 hours.
Topics in thermodynamics (equilibrium and nonequilibrium), statistical thermodynamics, or quantum chemistry.
- Ch 531, 532, 533. **Advanced Organic Chemistry.** 3 hours each term.
Advanced general survey of organic chemistry; structural theory, syntheses, scope and mechanism of reactions.
- Ch 534, 535, 536. **Special Topics in Organic Chemistry.** 2 or 3 hours each term.
Discussion of advanced topics selected from: carbocyclic and heterocyclic compounds, surface reactions and catalysis, stereochemistry, physical-organic concepts.
- Ch 537, 538, 539. **Advanced Organic Laboratory.** 2 hours each term.
Individual instruction in organic synthesis and techniques.
- Ch 541, 542, 543. **Chemical Kinetics.** 3 hours each term.
The work of each term is selected from such topics as: classical kinetic theory of gases, statistical mechanics, statistical thermodynamics, chemical kinetics in the gas phase and in solution, catalysis. Offered alternate years.
- Ch 544, 545, 546. **Quantum Chemistry.** 2 or 3 hours each term.
Topics of chemical interest discussed in terms of the quantum theory. Introduction to wave mechanics, discussion of chemical bonding and the origin of the theory of resonance, and topics from atomic and molecular spectra.
- Ch 551, 552. **Chemical Thermodynamics.** 3 hours each term, fall and winter.
The laws of thermodynamics and their applications to gases, liquids, solids, phase equilibria, solutions, electrolytes, chemical equilibria, electrochemistry, surfaces, elasticity, external fields, etc.
- Ch 553, 554. **Statistical Thermodynamics.** 3 hours each term, fall and winter.
Molecular interpretation of the properties of equilibrium systems; principles and applications to gases, crystals, liquids, phase transitions, solutions, electrolytes, gas adsorption, polymers, chemical equilibria, etc.
- Ch 556, 557. **Molecular Spectra and Molecular Structure.** 2 hours each term, fall and winter.
Survey of molecular spectra, with emphasis on the determination of molecular structure through spectroscopic methods.
- Ch 561, 562, 563. **Enzymes and Intermediary Metabolism.** 2 or 3 hours each term.
Enzyme kinetics and detailed consideration of glycolysis, biological oxidation, lipid metabolism, and selected biological synthesis.
- Ch 564, 565, 566. **Physical Biochemistry.** 2 or 3 hours each term.
The physical properties of biological macromolecules; proteins, nucleic acids, and viruses. The relationship between the molecular conformation and the special chemical, physical, and biological properties of these various macromolecules. Prerequisites: calculus and a knowledge of the elements of solution thermodynamics.

COURSES OFFERED ONLY IN SUMMER SESSIONS

- Ch 419. **Advanced General Chemistry.** (g) 4 or 5 hours.
- Ch 429. **Survey of Analytical Chemistry.** (g) 4 or 5 hours.
- Ch 439. **Survey of Organic Chemistry.** (g) 4 or 5 hours.

* No-grade course.

Comparative Literature

THE UNIVERSITY OFFERS a program of graduate study in the field of comparative literature, leading to the Doctor of Philosophy degree. The program is administered through an interdisciplinary committee including members of the faculties of the Department of English and the Department of Foreign Languages; Dr. Chandler B. Beall, professor of Romance languages, is chairman of the committee.

The program includes comparative studies, satisfaction of major requirements in a special field of literature, chosen from the Classical, English, German, and Romance fields, and work in one or more minor fields of literary study. A good linguistic background is required for admission; before completion of the program, the student is required to have a reading knowledge of at least three foreign languages, ancient or modern.

COMPARATIVE LITERATURE, a quarterly journal of comparative studies, is published by the University of Oregon.

Dentistry, Preparatory

THE COUNCIL ON DENTAL EDUCATION of the American Dental Association has established the following minimum requirements for admission to approved dental schools: at least 90 term hours of collegiate courses, including one year of English, one year of general chemistry, one year of biology or zoology, one year of physics, and one-half year of organic chemistry; a grade-point average of at least 2.00.

The University offers a three-year pre dental curriculum, which satisfies these requirements, to prepare students for admission to the University of Oregon Dental School and other accredited dental schools. The completion of this curriculum and two years of dental-school work satisfies all requirements for a bachelor's degree from the University with a major in general science. With the proper choice of electives in the pre dental curriculum, the student may qualify for a bachelor's degree with a major in biology.

Students who expect to complete the requirements for a bachelor's degree at the Dental School should satisfy, in their pre dental program, all requirements for the degree (including general University requirements and requirements for a major in the College of Liberal Arts) that cannot be satisfied with work taken at the Dental School. For general University requirements for a bachelor's degree, see pages 68-70.

Although a bachelor's degree is not prerequisite to a professional degree in dentistry, the University of Oregon Dental School and most other dental schools recommend that their students qualify for this degree in addition to the professional degree.

Pre dental students are advised to begin correspondence with the University of Oregon Dental School or the dental school they plan to attend during the spring term of their first year at the University. Aptitude tests given by the American Dental Association should be taken not later than the fall term one year before admission; applications to take this test must be made well in advance of the scheduled date of the test. Pre dental students should consult the Dental School Catalog for dates.

The following courses satisfy both the science requirements for admission to the University of Oregon Dental School and, with additional science instruction at the Dental School, the requirements for a major in general science:

	Term Hours
Mathematics (above level of Mth 10).....	12
General Chemistry (Ch 104, 105, 106).....	10
Inorganic Qualitative Analysis (Ch 108), Introductory Volumetric Analysis (Ch 109).....	4
Organic Chemistry (Ch 334, 335, Ch 337).....	9
General Biology (Bi 101, 102, 103).....	12
Upper-division biology (Bi 355, Bi 356 recommended).....	8
General Physics (Ph 201, 202, 203, Ph 204, 205, 206).....	15

One term of Sculpture (AA 293) or Jewelry (AA 257) is recommended as an elective.

East Asian Studies

THE CURRICULUM IN EAST ASIAN STUDIES is a program of area training through selected courses dealing with the Far East. The primary emphasis is upon the Chinese culture sphere, with special attention to Japan. The program is designed to provide necessary basic knowledge for students interested in commercial, governmental, journalistic, or educational work relating to the region, for students preparing for graduate work in East Asian studies, or for those who wish to broaden their understanding of the interrelated world in which they live. The curriculum is administered by an advisory committee, of which Dr. Forrest R. Pitts, associate professor of geography, is chairman.

The major in East Asian studies leads to the Bachelor of Arts degree. Normally, a candidate is required to take two years of either Chinese or Japanese; another language may, however, be substituted if it is germane to the region or country in which the student has a special interest. The major requirements are as follows:

(1) All majors must take the following: Far East in Modern Times (Hst or PS 391, 392, 393); Geography of East Asia (Geog 451); Peoples of Southern and Eastern Asia (Anth 438, 439, 440).

(2) The candidate must take 39 term hours of work from groups (a) and (b) below; for the satisfaction of this minimum requirement, not more than 24 term hours may be selected from group (b).

(a) Lecture-course group: Introduction to Japanese Literature (AL 301, 302, 303); Introduction to Chinese Literature (AL 307, 308, 309); Peoples of Interior Asia (Anth 437); Geography of Southern Asia (Geog 452); Southern Asia in Modern Times (PS 337, 338); Far Eastern Governments and Politics (PS 330, 331, 332); History of Oriental Art (AA 446, 447, 448); Economic Problems of the Pacific (Ec 345); Religions of Mankind (R 302); History of China (Hst 494, 495, 496); History of Japan (Hst 497, 498, 499); seminars.

(b) Language-course group: Chinese and Japanese language instruction; for courses, see pages 165-166.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work. The University also offers an interdisciplinary program of graduate work in East Asian studies in conjunction with work in a departmental field of specialization. The program leads to two M.A. degrees, one in a departmental field and the second in interdisciplinary East Asian studies. The student completes 45 term hours of work in his departmental field and, in addition, 30 term hours in East Asian studies, including a seminar in the East Asian field. His thesis applies the methodology of a departmental discipline to an East Asian subject. The candidate must demonstrate mastery, equivalent to the attainment

expected after two years of college study, in an East Asian language relevant to his program.

Center for Japanese Studies. Graduate study and research in Japanese culture and civilization is sponsored through the University Center for Japanese Studies. The program of the Center includes the direction of the work of graduate students who choose Japan as an area of concentration for the M.A. degree in East Asian studies. Through the Center, advanced students are provided an opportunity to pursue part of their studies in Japan. Dr. Forrest R. Pitts, associate professor of geography, is director of the Center for Japanese Studies.

Economics

Professors: R. L. ALLEN, CALVIN CRUMBAKER (emeritus), R. M. DAVIS, C. D. EDWARDS, J. H. GILBERT, (emeritus), P. L. KLEINSORGE, R. F. MIKESSELL,* V. P. MORRIS (emeritus), P. B. SIMPSON, M. D. WATTLES.

Associate Professors: W. N. ATHERTON, ROBERT CAMPBELL (department head), H. T. KOPLIN, B. N. SIEGEL, R. E. SMITH.

Assistant Professors: G. O. BIERWAG, M. A. GROVE, J. N. TATTERSALL.*

Instructor: Z. C. WILLIAMS.

Fellows: R. W. ADLER, D. B. ASHBY, DAVID BRADWELL, J. E. BURNS, D. N. DESIMINI, R. D. FOSTER, MARSHALL GEER III, J. E. HARRIS, R. S. KOOT, H. MEJIA, R. J. MORENO, K. W. OLSON, R. B. SWANSON.

Assistants: G. T. ABED, R. V. ARELLANES, D. B. BILLINGS, G. BURGESS, K. A. BLACKERBY, J. R. CARTER, G. L. FUQUA, D. GREER, J. T. INNES, P. V. JOHNSTON, W. C. KERBY, H. C. KIM, G. J. LONG, R. G. MURRAY, W. H. NAM, C. T. NISBET, D. H. SACKETT, N. W. SCHROCK, E. M. SYRING, J. E. ZINSER.

UNDERGRADUATE COURSES IN ECONOMICS are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Liberal Arts. They are also designed to provide a substantial foundation in economics for students interested in (1) professional graduate training in economics, (2) professional careers in business, law, and government, and (3) secondary-school teaching.

Major Requirements. The following courses are required for an undergraduate major in economics:

Lower Division. Principles of Economics (Ec 201, 202, 203); Introductory College Mathematics (Mth 104, 105, 106); 6 term hours of work in statistics. The statistics requirement may be satisfied with introduction to Business Statistics (BS 232), Elementary Inference in Business Statistics (BS 333) or Elements of Statistical Methods (Mth 425, 426).

Upper Division. Economic Theory (Ec 375, 376, 377). In addition, majors must complete 27 term hours of work in upper-division courses in economics, at least 18 of which must be in year sequences. (Ec 318, Ec 319, Ec 320 is not considered a year sequence).

Suggested programs of study for economics majors planning to attend graduate school or to enter careers in business, law, government, or secondary-school teaching may be obtained from the Department of Economics.

High-School Teaching. Students preparing for the teaching of social studies in the high schools may elect economics as a field of concentration. Suggested

* On sabbatical leave, spring term, 1963-64.

programs may be obtained in the department office. For the subject-preparation requirements for the teaching of social studies in Oregon high schools, see pages 128-129.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work in Economics. The Department of Economics offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. For the general requirements see GRADUATE SCHOOL, pages 107-113.

A candidate for the Ph.D. degree in economics must select four fields for concentrated study, including economic theory, and must pass a written comprehensive examination in each field and an oral examination covering the four fields. One field may be in another department or school of the University. A working knowledge of statistics is required for admission to candidacy for the degree.

A candidate for the Ph.D. degree in another discipline may present a field of economics as a cognate subject, provided he has had proper preparation, including a background in economic theory, to support the field of special interest.

LOWER-DIVISION COURSES

Ec 201, 202, 203. **Principles of Economics.** 3 hours each term.

Principles that underlie production, exchange, distribution, etc. Special section for Honors College students. Prerequisite: sophomore standing. Allen, Bierweg, Campbell, Kleinsorge, Koplin, Smith, Wattles.

UPPER-DIVISION COURSES

Ec 318. **Money and Banking.** 3 hours fall.

Operations of commercial banks, the Federal Reserve System, and the Treasury that affect the United States monetary system. Prerequisite: Ec 201, 202, 203 or consent of instructor. Grove.

Ec 319. **Public Finance.** 3 hours winter.

Principles and problems of government financing. Expenditures, revenues, debt, and financial administration. Prerequisite: Ec 201, 202, 203 or consent of instructor. Grove.

Ec 320. **International Finance.** 3 hours spring.

The nature of foreign-exchange markets; techniques of international payments; exchange rates and their determination; problems of an international monetary standard; international banking facilities; economic aspects of major international organizations. Prerequisite: Ec 201, 202, 203 or consent of instructor. Grove.

Ec 375, 376, 377. **Economic Theory.** 3 hours each term.

Systematic study of the concepts and methods of current economic analysis, with special attention to the neoclassical school. Includes work in the fields of value and distribution, fluctuations, employment, etc. Required of all majors. Prerequisite: Ec 201, 202, 203. Bierweg, Campbell, Koplin.

Ec 401. **Research.** Hours to be arranged.

Ec 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ec 407. **Seminar.** (g) Hours to be arranged.

Ec 411, 412, 413. **Monetary and Banking Theory.** (G) 3 hours each term.

Analysis of the nature of money, effects of changes in the money supply, monetary controls used by the Federal Reserve System and the Treasury, international repercussions of domestic monetary policies, international banking agencies; critique of various monetary policies. Prerequisite: Ec 201, 202, 203. Siegel.

Ec 414, 415, 416. Regional Economics. (G) 3 hours each term.

Economic analysis applied to regional problems, with emphasis on problems and techniques relevant to the Pacific Northwest economy. Fall: economics of land use and resource conservation; winter: theory of location of economic activities; regional social accounting, balance of payments, comparative cost studies; spring: application of analytical tools to study of regional specialization in the United States economy and to problems of regional growth and stability; urban and metropolitan structure and problems. Prerequisite: Ec 201, 202, 203. Tattersall, Allen.

Ec 417. Contemporary Economic Problems. (g) 3 hours fall.

Contemporary economic conditions and problems; analysis of economic policies and practices affecting such problems. Prerequisite: Ec 201, 202, 203. Campbell.

Ec 418. Economy of the Pacific Northwest. (g) 3 hours spring.

Historical development and present industrial structure of the Pacific Northwest economy. Analysis of recent income changes, locational factors influencing development of major industries, relations with other regions, impact of Federal and state government policy. Simpson, Tattersall.

Ec 429, 430, 431. Taxation and Fiscal Policy. (G) 3 hours each term.

Critical analysis of taxes as sources of public revenue, with emphasis on tax theories and incidence. Effects of expenditure, tax, and debt policies of government upon the total economy. Prerequisite: Ec 201, 202, 203. Grove.

Ec 432, 433, 434. The Economics of Public Policy. (G) 3 hours each term.

Application of economic principles and techniques to public policy issues; function of the economist in the formulation and implementation of public policy. Case studies involving systematic treatment of economic issues, including precise formulation and weighing of alternatives; compilation and analysis of relevant data. Prerequisite: Ec 201, 202, 203. Allen, Mikesell.

Ec 440, 441, 442. International Economics. (G) 3 hours each term.

Theory of international trade; problems in balance-of-payments adjustments during critical periods; commercial policies of the more-important nations; international economic organizations in theory and practice. Prerequisite: Ec 201, 202, 203. Wattles.

Ec 444. Labor Economics. (G) 3 hours fall.

Economic analysis applied to the labor market, with particular emphasis on wage determination, the relation between wages and prices, and the relation between wages and employment. Prerequisite: Ec 201, 202, 203. Kleinsorge, Smith.

Ec 445. Organized Labor. (G) 3 hours winter.

Theories of the labor movement; history of the American labor movement; aims, methods, and policies of trade unions, conservative and radical; the impact of labor organizations on the American economy. Prerequisite: Ec 201, 202, 203. Kleinsorge, Smith.

Ec 446. Labor Legislation. (G) 3 hours spring.

Analysis of labor legislation in the United States and of court decisions in leading labor cases; problems facing employee, employer, and public that call for regulation through public authority. Prerequisite: Ec 201, 202, 203. Kleinsorge, Smith.

Ec 447, 448, 449. Collective Bargaining. (G) 2 hours each term.

Major techniques of negotiation; union and management policies; strikes and lockouts. Methods of settling labor disputes, including grievance procedures, conciliation, fact finding, and arbitration. Prerequisite: Ec 444 or consent of instructor. Kleinsorge.

Ec 450, 451, 452. Comparative Economic Systems. (g) 2 hours each term.

An analytical comparison of capitalism and other economic systems. Prerequisite: Ec 201, 202, 203. Atherton, Wattles.

- Ec 454, 455, 456. **Economic History of Modern Europe.** (G) 3 hours each term.
The economic development and economic institutions of modern Europe. Fall: commercial revolution, mercantilism, beginnings of the Industrial Revolution; winter: the Industrial Revolution, industrial, agricultural, financial, and social changes to 1914; spring: since 1914. Lorwin.
- Ec 458, 459, 460. **Advanced Economic Theory.** (G) 3 hours each term.
Intensive examination of the basic principles of price, distribution, income, employment, and growth theory; critical analysis of proposals for public control of economic fluctuations. Prerequisite: Ec 375, 376, 377 or graduate standing. Bierwag, Koplin, Siegel.
- Ec 461. **Government Control of Private Business.** (G) 3 hours fall.
Survey of government regulation of business in the United States; historical development, present scope, economic and philosophic bases. Prerequisite: Ec 201, 202, 203. Edwards, Smith.
- Ec 462. **Economics of Public Utilities and Transportation.** (G) 3 hours winter.
Economic characteristics of natural monopolies; their history and structure. Economic and regulatory problems of rate determination, control of entry, service, and financing. Prerequisite: Ec 201, 202, 203. Edwards, Smith.
- Ec 463. **Economics of Competitive Industries.** (G) 3 hours spring.
Economics of large-scale industry; organization of industrial markets; competitive conditions and price determination. Development and application of antitrust and unfair-trade legislation; government price regulation in competitive industries. Prerequisite: Ec 201, 202, 203. Edwards, Smith.
- Ec 464, 465, 466. **Quantitative Economic Analysis.** (G) 3 hours each term.
The use of mathematical techniques in economic analysis. Consumption and production theory, programming, input-output; general equilibrium; multiplier, accelerator, growth, and inventory models. Prerequisite: Ec 201, 202, 203; Mth 104, 105, 106 or equivalent. Simpson.
- Ec 470, 471, 472. **History of Economic Thought.** (G) 3 hours each term.
The evolution of man's ideas about economic matters; the classical school and the development of modern economic thought. Prerequisite: Ec 201, 202, 203. Campbell.
- Ec 480, 481, 482. **Mathematical Economics.** (G) 3 hours each term.
Construction and fitting of mathematical models of economic life. Prerequisite: Mth 104, 105, 106; Ec 201, 202, 203. Simpson.
- Ec 483, 484, 485. **National Income and Business Cycles.** (G) 3 hours each term.
Theory and practice of social accounting, index numbers, measure of business cycle stages, leading and lagging series, behavior of labor cost, productivity, and other economic measures of business fluctuations. Prerequisite: Ec 201, 202, 203. Simpson.
- Ec 487, 488, 489. **American Economic History.** (G) 3 hours each term.
All phases of the economic development of the United States. Peterson, Tattersall.
- Ec 490, 491, 492. **Development of Industrial Economies.** (G) 3 hours each term.
Comparative study of economic growth in the advanced industrial nations: North America, Western Europe, Japan, U.S.S.R. Analysis of differential national and regional growth rates; sources of economic growth; structural characteristics of developing economies; problems in measurement of long-term growth trends. Prerequisite: Ec 201, 202, 203. Tattersall.

GRADUATE COURSES

*Ec 501. **Research.** Hours to be arranged.

*Ec 503. **Thesis.** Hours to be arranged.

* No-grade course.

Ec 505. **Reading and Conference.** Hours to be arranged.

Ec 507. **Seminar.** Hours to be arranged.

Economic History. Tattersall, Allen.

Industrial Organization and Control. Edwards, Smith.

History of Economic Thought. Campbell.

Labor Economics. Mikesell, Wattles.

International Economics. Mikesell, Wattles.

Money and Credit. Siegel.

Quantitative Economics. Simpson, Bierwag.

Ec 514, 515, 516. **Regional Economic Analysis.** 3 hours each term.

Analysis of the structure of economic regions, theories of regional and inter-regional relations, location of economic activity, central place theory and land and natural-resource use patterns, techniques of analysis, empirical studies, and regional policies. Allen, Tattersall.

Ec 524, 525, 526. **Economic Growth and Development.** 3 hours each term.

Economic, cultural, and political factors in economic development with special emphasis on low-income countries. Theory of economic development; case studies in economic growth; measures for accelerating development of poor countries; special problems of underdeveloped countries. Prerequisite: Ec 201, 202, 203; 12 term hours in upper-division social science. Mikesell.

Ec 529, 530, 531. **Fiscal Theory and Policy.** 3 hours each term.

An intensive study of fiscal theory and its appropriate role in determining financial policies of government. Grove.

Ec 561, 562, 563. **Income and Employment Theory.** 3 hours each term.

Theory of output as a whole; theories of growth and fluctuations in the economic system, with emphasis on recent literature. Davis.

Ec 575, 576, 577. **Price and Distribution Theory.** 3 hours each term.

Modern developments in the theory of price determination, income distribution, and economic welfare. Davis, Koplin.

English

Professors: KESTER SVENDSEN (department head), F. G. BLACK, H. H. HOELTJE (emeritus), J. B. HALL, R. D. HORN, A. R. KITZHABER, J. C. McCLOSKEY, W. F. McNEIR,* E. G. MOLL, CARLISLE MOORE, J. C. SHERWOOD, W. F. G. THACHER (emeritus), C. A. WEGELIN.

Associate Professors: ROLAND BARTEL, ALICE H. ERNST, (emeritus), S. B. GREENFIELD, S. N. KARCHMER,† HOWARD RICHARDSON, A. K. WEATHERHEAD (assistant department head), O. M. WILLARD.

Assistant Professors: LUCILE ALY,‡ R. C. BALL, W. E. CADBURY, F. H. CANDLERIA (director of composition), THELMA GREENFIELD, R. R. HODGES, J. A. HYNES, GLORIA JOHNSON, E. D. KITTOE, S. R. MAVEETY, T. F. MUNDLE (emeritus), W. H. NOLTE, W. A. O'NEIL, N. H. OSWALD, R. J. SALISBURY, IRMA SHERWOOD, HELEN SOEHREN, W. C. STRANGE.

Senior Instructors: CONSTANCE BORDWELL, RUTH JACKSON.

Instructors: G. L. AHO, HELEN ATHERLY, R. S. BEHAR, R. P. BENOIT, ELAINE BOWE, ANNE BRODZKY, SHARON BROWN, GLADYS CARTER, GEORGE EVANS, R. D. FRASER, PHYLLIS GAGE, F. C. GARDINER, L. H. GIBSON, E. R. GREGORY, J. T. HANSEN, R. P. HASTINGS, ELLEN HURT, NAOMI JACKSON, THOMAS JACKSON, R. L. KELLY, GLENNIE M. KITTOE, ANNABEL KITZHABER, KAREN LANSDOWNE, R. D. LARUE, LAMYRA LYON, H. R. MCKNIGHT, STODDARD MALARKEY, R. P. MARIELS, E. J. MILOWICKI, PETER MORTENSON, J. R. NELSON, LUCILE PAYNE, M. G. PORTER, J. A. REITHER, LUCYANNE SAWYER, J. R.

* On leave of absence, spring term, 1963-64.

† On sabbatical leave 1963-64.

‡ On leave of absence, fall term, 1963-64.

SELIG, K. J. SKOVAJSA, R. L. STALLMAN, JOAN TEMPLETON, J. B. TOELKEN, D. S. TOOR, E. A. VAN AELSTYN, ROBERT WILSON, JOAN YEATMAN.

Fellows: R. M. CLIFTON, B. E. COMBS, M. I. DURST, H. W. FETZ, T. J. GARDINER, R. J. GONZALES, H. S. GREESON, D. L. HASCALL, R. A. LEE, S. L. ROSEN, WALTER SCHEPS, C. W. WOOTON.

Assistants: DOROTHY BASKINS, JUNE BOHANAN, J. A. CARSTENS, R. C. COOK, JOAN DARBY, P. H. DOUGLAS, H. C. W. ELWOOD, J. D. FARLEY, G. A. FULTS, R. R. GARRIGUS, W. B. HITCHCOCK, LYNETTE INNES, R. D. JELLEMA, J. D. KALLES, ANITA KNOWLTON, D. R. LARSON, SALLY McNALL, M. D. PAYNE, V. F. PETRONELLA, M. S. RATCLIFFE, F. G. RODGERS, ROSE MARIE SCOTT, G. D. SLAWSON, SHARON THOMAS, H. M. VARNER.

THE DEPARTMENT OF ENGLISH offers instruction in English and American literature and in writing. Its lower-division courses are designed to supply the training essential for good writing, to serve as an introduction to humanistic studies, and to impart the fundamental knowledge requisite for a major in English. Its upper-division courses are designed to develop an intelligent and just appreciation of literature, to give some insight into the continuity of literature and the interrelation of literary movements, and to provide the opportunity for a well-rounded knowledge of the history of English and American literature and of the English language.

Major Requirements. The Department of English expects its majors to acquire, in addition to a knowledge of English literature, a general knowledge of philosophy and history and a reading knowledge of at least one foreign language. The general major requirements for the degree of Bachelor of Arts in the Department of English are as follows:

- (1) Satisfaction of the University language requirements for the B.A. degree.
- (2) English History (Hst 304, 305, 306), History of Western Civilization (Hst 101, 102, 103), *or* History (Honors College) (Hst 107, 108, 109).
- (3) Survey of English Literature (Eng 101, 102, 103), Introduction to Literature (Eng 104, 105, 106), World Literature (Eng 107, 108, 109), *or* Literature (Honors College) (AL 101, 102, 103); *and* Shakespeare (Eng 201, 202, 203).
- (4) A total of 36 hours in upper-division courses in the department, including 3 hours in the Middle Ages, 9 in other literature before 1800, and 9 in literature since 1800 (these hours need not be taken in period courses). Within the framework of these requirements, the student should construct, subject to his adviser's approval, a balanced and coherent program consistent with his personal interests and vocational needs. Programs centering on English literature, American literature, or creative writing are suggested, but other patterns are not excluded. Prospective high-school teachers must satisfy state certification requirements (see SCHOOL OF EDUCATION).

Preparation for High-School Teaching. For certification as a teacher of English in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. The basic certificate, granted after four years of college work, requires the completion of a *basic norm*: 42 term hours distributed among composition (including work in expository writing beyond the freshman level), American, English, and world literature, development and structure of the English language, speech, and developmental reading. The department recommends that the advanced-composition requirement be met by Wr 411 and the language requirement by Eng 491, both of which may be included by English majors in their 36 hours of upper-division work. The world literature requirement may be met by the second year of a foreign language, *or* Eng 104, 105, 106, *or* Eng 107, 108, 109, *or* Eng 394, 395,

396, or Eng 420, 421, 422, or AL 101, 102, 103, or the completion of any two of the following: Eng 301, Eng 303, Eng 304, Eng 305, Eng 430.

For a standard certificate, granted after five years of college work, the student must complete a *standard norm*: 60 term hours, including the basic-norm requirement and work in literary criticism.

The Department of English will approve a student for teacher training only if his work in English courses is of high quality.

The norm requirements listed above will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 261.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work. The Department of English offers graduate work in English literature, American literature, and linguistics, leading to the Master of Arts and Doctor of Philosophy degrees, and a graduate program in creative writing leading to the M.A. or Master of Fine Arts degree. A Ph.D. program in comparative literature, administered by a committee representing the Department of English and the Department of Foreign Languages, offers opportunity for advanced study of several literatures in their original languages (see page 145).

Except for candidates in creative writing, a thesis is not required in the M.A. program. All M.A. candidates take a written examination on a selected list of literary works.

The program leading to an M.F.A. in creative writing includes studies in English and American literature, in aesthetics, and in the history and criticism of art, music, and drama, and the production of a sustained piece of writing of high literary merit.

For the Ph.D. degree, the department recommends an elementary knowledge of Latin or Greek in addition to the required reading knowledge of two modern languages.

Literature

LOWER-DIVISION COURSES

*Eng 52. **Corrective Reading.** 1 hour any term.

Designed for students who have difficulties in reading at the college level. Methods for increasing speed and comprehension. Jackson, Willard.

†Eng 101, 102, 103. **Survey of English Literature.** 3 hours each term.

Study of the principal works of English literature based on reading selected to represent great writers, literary forms, and significant currents of thought. Provides both an introduction to literature and a background that will be useful in the study of other literatures and other fields of cultural history. Fall: Anglo-Saxon beginnings to the Renaissance; winter: Milton to Wordsworth; spring: Byron to the present. Aho, Aly, Black, Gage, Hansen, Johnson, Lansdowne, McCloskey, Malarkey, Mortenson, Mundle, Irma Sherwood, Toelken, Willard.

†Eng 104, 105, 106. **Introduction to Literature.** 3 hours each term.

Study of literature and the nature of literary experience through the reading of great works of prose and poetry, drawn from English and other literatures. Works representing the principal literary types are read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery, and symbolism. Bartel, Cadbury, Evans, Gardiner, Hansen, Hastings, Hodges, Hurt, Hynes, McKnight, Maveety, Nolte, O'Neil, Oswald, Reither, Salisbury, Stallman, Strange, Toor.

* No-grade course.

† A student may register for only one of the three sequences: Eng 101, 102, 103; Eng 104, 105, 106; Eng 107, 108, 109.

*Eng 107, 108, 109. **World Literature.** 3 hours each term.

Study of the literary and cultural foundations of the Western world through the analysis of a selection of masterpieces of literature, ancient and modern, read in chronological order. The readings include continental, English, and American works. Ball, Benoit, Candelaria, Fraser, Gibson, Gregory, Hodges, McKnight, Mariels, Yeatman.

Eng 201, 202, 203. **Shakespeare.** 3 hours each term.

Study of the important plays—comedies, histories, and tragedies. Required for majors. Black, Candelaria, Thelma Greenfield, Hodges, Horn, Johnson, McCloskey, McNeir, Maveety, Moll, Oswald, Strange, Svendsen.

Eng 253, 254, 255. **Survey of American Literature.** 3 hours each term.

American literature from its beginnings to the present day. Hodges, Svendsen.

UPPER-DIVISION COURSES

Eng 301. **Tragedy.** 3 hours.

A study of the nature of tragedy and of tragic expression in various literary forms. Hodges, Wegelin.

Eng 303. **Epic.** 3 hours.

The heroic spirit in Western European literature, with emphasis on English literature. J. C. Sherwood, Strange.

Eng 304. **Comedy.** 3 hours.

The comic view in both dramatic and nondramatic forms. Main emphasis on English masters, but with attention also to classical and continental writers. Principal theories of the comic and of comic literary forms and types. Horn.

Eng 305. **Satire.** 3 hours.

Satire, or criticism through ridicule, as a major type of literary expression. Examples from various literary forms—dramatic, narrative, and poetic—and from ancient and foreign literatures as well as English. Special emphasis on contemporary satire. Oswald.

Eng 306, 307. **The Literature of the English Bible.** 3 hours each term.

Study of the literary qualities of the English Bible, with some reference to its influence on English and American literature. Bartel, Maveety.

Eng 320, 321, 322. **English Novel.** 3 hours each term.

From Richardson and Fielding to the present. Black, Hynes.

Eng 323. **American Satire.** 3 hours.

Satire in American literature; its nature, development, and significant contributions to the interpretation of American life. McCloskey, Oswald.

Eng 391, 392, 393. **American Novel.** 3 hours each term.

Development of the American novel from its beginnings to the present. McCloskey, Nolte.

Eng 394, 395, 396. **Twentieth-Century Literature.** 3 hours each term.

A critical survey of British, American, and some European literature from 1890 to the present; significant works of poetry, drama, and fiction studied in relation to intellectual and historical developments. Cadbury, Hynes, Moore, Nolte, Weatherhead.

Eng 403. **Thesis.** Hours to be arranged.Eng 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Eng 407. **Seminar.** (G) Hours to be arranged.Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.

The development of English dramatic forms from the beginnings to Sheridan. Horn, Strange.

* See page 153, note (†).

- Eng 414, 415, 416. **History of Literary Criticism.** (G) 3 hours each term.
Studies in the theory and practice of literary criticism from Plato and Aristotle to the present. J. C. Sherwood.
- Eng 420, 421, 422. **Modern Drama.** (G) 3 hours each term.
Fall: growth of the modern theater in Europe from beginnings in romanticism through naturalism to symbolism and the poetic theater before 1914; winter: European and American drama between 1915-1940, the experimental theater and its effect on realism; spring: international developments in drama from 1941 to the present. Ball.
- Eng 425. **Early English Literature.** (g) 3 hours.
The literature of the Middle Ages, in relation to the social and literary ideas of the period. S. B. Greenfield.
- Eng 428. **Chaucer.** (g) 3 hours.
As much of Chaucer's work read as time permits. S. B. Greenfield, Malarkey, O'Neil.
- Eng 430, 431, 432. **Literature of the Renaissance.** (G) 3 hours each term.
Fall: Renaissance thought; winter: Renaissance epic and prose narrative; spring: English lyric from Wyatt to Herrick. Thelma Greenfield, McNeir, Maveety.
- Eng 434. **Spenser.** (G) 3 hours.
McNeir.
- Eng 436. **Advanced Shakespeare.** (g) 3 hours each term.
Intensive study of selected plays. Not open to majors or to students who have had any term of Eng 201, 202, 203. Oswald.
- Eng 440, 441, 442. **Seventeenth-Century Literature.** (G) 3 hours each term.
Poetry and prose from Jonson through the Restoration studied in relation to the trends of thought and feeling which characterize the century. Black, Candelaria.
- Eng 444. **Milton's Minor Poems and Prose.** (G) 3 hours.
The *Poems* of 1645 and the major prose works on liberty, education, and politics. Svendsen.
- Eng 445. **Milton's Major Poems.** (G) 3 hours.
Paradise Lost, *Paradise Regained*, and *Samson Agonistes*. Svendsen.
- Eng 450, 451, 452. **Eighteenth-Century Literature.** (G) 3 hours each term.
The prose and poetry of the century studied in relation to the social, political, and aesthetic ideas which gave the period its peculiar character. Horn.
- Eng 455. **Pope.** (G) 3 hours.
J. C. Sherwood.
- Eng 460, 461, 462. **The Romantic Poets.** (G) 3 hours each term.
Fall: Wordsworth and Coleridge; winter: Scott, Byron, and others; spring: Keats, Shelley, and others. Moll.
- Eng 463, 464, 465. **The Later Nineteenth-Century Poets.** (G) 3 hours each term.
Fall: Tennyson and Browning; winter: Arnold, the pre-Raphaelites, Swinburne, and others; spring: Morris, Thomson, Thompson, Hopkins, and others. Cadbury, Moll.
- Eng 470, 471, 472. **Nineteenth-Century Prose.** (G) 3 hours each term.
Main currents of thought as reflected in Carlyle, Mill, Newman, Ruskin, Huxley, Arnold, Pater. Moore.
- Eng 477, 478, 479. **Nineteenth-Century American Literature.** (G) 3 hours each term.
An intensive study of the American literary tradition. Fall: the beginnings

of national literature; winter: transcendentalism and anti-transcendentalism; spring: realism and naturalism. McCloskey, Wegelin.

Eng 481, 482, 483. **Major American Writers.** (G) 3 hours each term.

Intensive study of two or three major authors each term, such as Hawthorne, Emerson, Whitman, Melville, James, Twain, Dickinson, Frost, Eliot, Hemingway, Faulkner. Hynes, Nolte.

Eng 487. **Yeats and Joyce.** (G) 3 hours.

The principal works of Yeats and Joyce, considered against the background of the Irish Renaissance. J. C. Sherwood.

Eng 488. **Literature for Teachers.** (g) 3 hours.

For students interested in teaching high-school English. Training in comprehension and analysis of fiction, poetry, and drama from English and American literature. Recommended for prospective high-school teachers. Bartel.

Eng 491. **Introduction to Modern English.** (g) 3 hours.

A general view of modern English vocabulary, grammar, pronunciation, and spelling. Recommended for students preparing for the teaching of English in the secondary schools. Willard.

GRADUATE COURSES

*Eng 501. **Research.** Hours to be arranged.

*Eng 503. **Thesis.** Hours to be arranged.

Eng 505. **Reading and Conference.** Hours to be arranged.

Eng 507. **Seminar.** Hours to be arranged.

Eng 511, 512, 513. **Old English.** 3 hours each term.

Linguistic study; selected readings in prose and poetry, including entire *Beowulf*. S. B. Greenfield, O'Neil.

Eng 514, 515, 516. **Old Icelandic.** 3 hours each term.

Linguistics; selected readings in the sagas, skaldic poetry, and the *Elder Edda*. O'Neil.

Eng 517. **Middle English.** 3 hours.

The English language from the time of the Norman Conquest to the early modern period; dialectical differences. O'Neil.

Eng 518. **Chaucer's Troilus and Criseyde.** 3 hours.

Detailed study of the poem, its sources, and its influence. S. B. Greenfield.

Eng 519. **The Pearl Poet.** 3 hours.

Detailed study of *Pearl* and *Gawain*; collateral readings in dream visions and romances. S. B. Greenfield.

Eng 520, 521, 522. **History and Structure of the English Language.** 3 hours each term.

Covers the same features of the language as Eng 491, but with a more detailed consideration of historical background and recent theories. Fall: meaning and vocabulary; winter: pronunciation and spelling; spring: grammar and usage. Willard.

Eng 530, 531, 532. **Shakespeare.** 3 hours each term.

Fall: representative comedies of Shakespeare's early, middle, and late periods; winter: historical plays; spring: tragedies. Thelma Greenfield, McNeir.

Eng 540. **Problems and Methods of Literary Study.** 3 hours fall.

Bibliography and the methods of literary research as an introduction to graduate work. Required for graduate students in English. Svendsen.

Eng 585. **Modern English Literary Criticism.** 3 hours.

British and American critical theory and practice, 1900 to the present. Forms a year sequence with AL 586, 587. Weatherhead.

* No-grade course.

Eng 588, 589. **Modern Poetry.** 3 hours each term.

Fall: British poetry from Hopkins to the present; winter: American poetry from the imagists to the present. Weatherhead.

Eng 590, 591, 592. **Modern Fiction.** 3 hours each term.

Major tendencies in the fiction of the past hundred years. Fall: the rise and development of realism; winter: naturalism; spring: postnaturalism. Wegelin.

COURSES OFFERED ONLY IN SUMMER SESSIONS

Eng 423, 424. **Types of Prose Fiction.** (G) 3 hours each term.

Eng 508. **Workshop.** Hours to be arranged.

Writing

The Department of English offers required and elective courses in writing for all University students, to help them develop an ability to express themselves clearly in good English.

Undergraduate English majors may plan a program emphasizing creative writing; students planning to emphasize creative writing are advised to complete at least 6 term hours of Wr 221, 222, 223. The department also offers a graduate program in creative writing, leading to the M.A. or M.F.A. degree.

English Composition (Wr 121, 122, 123) is a freshman sequence required of all students in the University; each term's work must be taken in its sequential order. A student who demonstrates, through examination, that his writing ability meets the standard aimed at in English Composition may be excused from all or part of this required sequence. Students who do superior work in the first two terms of English Composition may be permitted to substitute Wr 224, Wr 226, or Wr 227 for Wr 123.

Students whose placement examination indicates inadequate preparation in composition are required to take Corrective English (Wr 10), offered through the Division of Continuing Education of the State System of Higher Education, before they are permitted to register for English Composition.

LOWER-DIVISION COURSES

Wr 97, 98. **English as a Second Language.** 3 hours each term.

Composition for students whose native language is not English. Admission to Wr 98 only on recommendation of instructor. Atherly.

Wr 121, 122, 123. **English Composition.** 3 hours any term.

The fundamentals of English composition; frequent written themes. Special attention to correctness in fundamentals and to the organization of papers. Candelaria, staff.

Wr 221, 222, 223. **Introduction to Imaginative Writing.** 3 hours each term.

An introductory sequence for students interested in the techniques of writing and in the development of a critical appreciation of the art of writing in its varied forms. Fall: general consideration of style; winter and spring: criticism, essentials of the short story, fundamentals of playwriting and poetry writing. Prerequisite: consent of instructor. Brown, Gibson, Karchmer, LaRue, Salisbury.

Wr 224. **Business and Professional Correspondence.** 3 hours.

Study of modern practices in business correspondence, primarily for students of business administration. Analysis and writing of the principal types of correspondence. Prerequisite: Wr 121, 122, 123. Kittoe.

Wr 226. **Expository Writing.** 3 hours.

Practice in various forms of expository writing.

Wr 227. **Scientific and Technical Writing.** 3 hours.

Practice in scientific and technical expository writing. Emphasis on the or-

ganization, form, and style of scientific, technical, and professional reports, articles, abstracts, summaries, memoranda, and correspondence. Kittoe.

Wr 231, 232. **Composition Tutorial.** 1 hour each term.

Tutorial instruction in English composition for students in the Honors College.

UPPER-DIVISION COURSES

Wr 316. **Advanced Expository Writing.** 3 hours.

Soehren.

Wr 321, 322, 323. **Play Writing.** 3 hours each term.

Creative experiment in the writing of plays, with incidental study of models. Analysis and discussion of student work. Prerequisite: consent of instructor. Karchmer, Richardson.

Wr 324, 325, 326. **Short-Story Writing.** 3 hours each term.

For students interested in creative writing or in professional writing for magazines. Prerequisite: consent of instructor. Hall, Karchmer, Salisbury.

Wr 341, 342, 343. **Poetry Writing.** 3 hours each term.

Verse writing; study of various verse forms as media of expression. Analysis of class work. Prerequisite: consent of instructor. Hall, LaRue, Salisbury.

Wr 404. **Writing and Conference.** Hours to be arranged.

Wr 420, 421, 422. **Novel Writing.** 3 hours each term.

Designed to provide apprentice training in writing of novels, and to develop a critical grasp of fiction problems. Sustained work on a writing project continued through the year. Individual assigned readings. Prerequisite: consent of instructor. Hall.

Wr 451, 452, 453. **Projects in Writing.** 3 hours each term.

For students who desire advanced instruction and practice in writing short stories, novels, television dramas, nonfiction, etc. Prerequisite: consent of instructor. Hall, Karchmer, Richardson, Salisbury.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Wr 411. **English Composition for Teachers.** (g) 3 or 4 hours.

For students planning to teach English in high school. Practice in writing and a review of the rules of composition. Recommended for satisfaction of the high-school teaching requirement in English. Aly, Kitzhaber.

Sp 464, 465, 466. **History of the Theater.** (G) 3 hours each term.

For description, see page 225. Richardson.

Wr 494. **Theory of Fiction Writing.** (G) 3 hours.

Introduction to literary theory and its application to imaginative writing. Designed for M.A. and M.F.A. candidates in writing, but open to others. Hall, Karchmer, Salisbury.

GRADUATE COURSES

*Wr 503. **Thesis.** Hours to be arranged.

Wr 504. **Writing and Conference.** Hours to be arranged.

Sp 511. **Eighteenth-Century Rhetorical Theory.** 3 hours.

For description, see page 221. Cohen.

Sp 551, 552, 553. **Theory of Dramatic Production.** 3 hours each term.

For description, see page 226. Cutler.

COURSE OFFERED ONLY IN EXTENSION

Wr 10. **Corrective English.** No credit.

* No-grade course.

Foreign Languages

Professors: D. M. DOUGHERTY (department head), C. B. BEALL, F. M. COMBEL-LACK, C. L. JOHNSON, R. J. A. KERR, E. P. KREMER, (emeritus), W. A. LEP-MANN, L. O. WRIGHT (emeritus).

Associate Professors: HENRY KRATZ, R. A. NICHOLLS, J. I. PALLEY, P. J. POW-ERS,* ASTRID M. WILLIAMS.

Assistant Professors: CAROL BEDWELL, P. H. BONNELL, R. H. DESROCHES, ALEX-ANDER FISCHLER, P. B. GONTRUM, W. L. HAHN, E. S. HATZANTONIS, EDNA LANDROS (emeritus), T. E. MARSHALL, W. E. NAFF, ANGELA PALANDRI, C. B. PASCAL, R. E. STEUSSY, VLADIMIR TOLSON.

Instructors: B. BEIT-ISHOO, CATHERINE COHEN, H. F. COOPER, HENRY CROES, SIMONE GARRAMON, HELEN KAPS, H. C. KIM, J. F. KNOWLTON, ELISABETH MARLOW, J. R. MCWILLIAMS, CAROLE J. RODNER, PATRICIA R. SCHULTHESS, R. L. SMITH, R. M. STOCKMAN, H. H. WINDSOR, III, ARDEN P. WOODS.

Lecturers: R. G. LAW, MANUEL ROJAS.

Fellows: P. J. ANTAL, T. L. BERG, L. H. DANIELS, T. J. HINES, LAWRENCE JOHN-SON, D. Z. KIRBY, EILEEN F. KRUMM, D. R. MCKAY, DENNI MACK, R. L. NICHOLAS, JANE M. WATROUS, JEAN M. WOODS.

Assistants: VIRGINIA ARVIDSON, NOELENE BLOOMFIELD, R. M. CARTER, T. M. CHAO, MARTHA COOK, ANNE-CHRISTIANE CRABTREE, D. L. DUNBAR, KAREN HALLADAY, MARGARET HULL, I. H. ISHII, SHEILA JOHNSON, BETTY L. KAS-PAR, N. H. LEWIS, H. D. MANNING, J. S. MELIM, DIANE NEWTON, LINDA PIFLE, D. RANGEL-GUERRERO, MARY RODMAN, R. V. SAVAGE, CELESTE SCHNEIDER, INGVL SYRING, BONNIE TUCKER, MARION ZUCK.

THE DEPARTMENT OF FOREIGN LANGUAGES offers instruction in Chinese, French, German, Greek, Italian, Japanese, Latin, Norwegian, Portuguese, Russian, Spanish, and Swedish. The undergraduate course offerings provide: (1) an introduction to the nature and structure of language as a basic aspect of human culture; (2) an introduction to the principal literatures of the world; (3) major programs in Greek, Latin, French, German, Italian, Spanish, and Russian; (4) a reading knowledge of languages required of candidates for advanced degrees; and (5) proficiency in the speaking, understanding, and writing of French, German, Italian, Russian, and Spanish.

A fully equipped language laboratory provides practice in speaking and understanding the modern languages through the use of tapes and of recordings made by native speakers.

Major Requirements. Departmental requirements for the Bachelor of Arts degree with a major in the Department of Foreign Languages are as follows:

Classical Languages. Twenty-four term hours in Greek or Latin beyond the second-year sequence; History of Greece (Hst 411), History of Rome (Hst 412, 413). Majors in Greek or Latin are normally expected to take work in the other Classical language or in French or German.

French, German, Italian, Russian, or Spanish. Thirty term hours beyond the second-year sequence—normally survey of literature, composition and conversation, and two additional upper-division year sequences (at least one a literature sequence).

Romance Languages, Modern Languages, Classical and Modern Languages. Thirty term hours beyond the second-year sequence in one language and 15 term

* On sabbatical leave, spring and summer, 1964.

hours beyond the second-year sequence in a second language, including two upper-division literature sequences in the first language and one in the second.

Subject Preparation for High-School Teaching. For certification as a teacher of a foreign language in Oregon high schools, the student's program must include the subject preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—45 term hours in one language, including work in language (composition and conversation) and literature; for a standard certificate, granted after five years of college work, a *standard norm*—60 term hours in one language, including the basic-norm requirement and additional upper-division work in each of the following areas: linguistics, civilization, phonetics (phonetics not required for certification in Latin).

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, pages 262, 263, 264.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Study. The Department of Foreign Languages offers programs of graduate study leading to the degree of Master of Arts in Greek, Latin, Classical languages, German, French, Spanish, and Romance languages, and to the degree of Doctor of Philosophy in Romance languages, Germanic languages, and comparative literature. For the master's degree, courses are offered in the languages and literatures of Greece, Rome, France, Germany, Spain, and Spanish America; preferably, the student's program should include work in two of these fields. For the doctorate in Romance languages, opportunities for advanced study are provided in the French and Spanish fields, supplemented by offerings in Italian, German, and Classical languages. The program for the doctorate in Germanic languages includes advanced study of literature and philology, supplemented by courses in English literature and philology and in Romance and Classical languages and literatures.

The Ph.D. program in comparative literature is administered by a committee representing the Department of English and the Department of Foreign Languages; it offers opportunity for advanced study of several literatures, in their original languages. The doctoral programs are intended primarily to prepare college teachers and research scholars. Doctoral studies may center in the investigation of a single problem, the results of which are embodied in the dissertation, or may be more broadly cultural, with less emphasis on research.

The resources of the University Library for research in Classical languages, French, Spanish, and German are adequate for the department's graduate programs; in some fields they are outstanding. The Library's holdings of learned periodicals are extensive; the quarterly journal, *COMPARATIVE LITERATURE*, is edited in the department.

Classical Languages

GREEK

LOWER-DIVISION COURSES

CL 50, 51. **Beginning Greek.** 4 hours each term.

The fundamentals of the Attic Greek language. Kim.

CL 52. **Introduction to Xenophon.** 4 hours.

Reading of the first four books of Xenophon's *Anabasis*. Kim.

CL 101, 102. **Introduction to Homer.** 4 hours each term.

Reading of Books I-VI of the *Iliad*. The Homeric dialect; practice with the Homeric meter. Lectures on the Homeric Age. Combella.

CL 103. **Introduction to Plato.** 4 hours.

Reading of the *Euthyphro*, *Crito*, and *Apology*. Combellack.

CL 231, 232. **New Testament Readings.** 4 hours each term.

Selected readings from the Gospels and Paul's Epistles. May be followed by CL 103 or CL 316 to complete a year sequence.

UPPER-DIVISION COURSES

AL 304, 305, 306. **Literature of the Ancient World.** 3 hours each term.

For description, see page 126. Combellack.

CL 314, 315. **Introduction to Homer.** 4 hours each term.

For description, see CL 101, 102. Not open to students who have completed that sequence. Combellack.

CL 316. **Introduction to Plato.** 4 hours.

For description, see CL 103. Not open to students who have completed that course. Combellack.

CL 317. **Euripides.** 3 hours.

Reading of *Alcestis* and *Electra*. Lectures on Greek stage antiquities. Combellack.

CL 318. **Herodotus.** 3 hours.

Reading of selections from Herodotus' *History*. Study of the Ionic dialect. Combellack.

CL 319. **Aristophanes.** 3 hours.

Reading of *The Frogs* and one or two other plays. Aristophanes as a literary critic. Lectures on Greek comedy. Combellack.

CL 320. **Sophocles.** 3 hours.

Reading, in alternate years, of the Trojan and the Theban plays. Combellack.

CL 321. **Demosthenes.** 3 hours.

Reading of the *De corona*. Lectures on the Attic orators. Combellack.

CL 351, 352, 353. **Greek Prose Composition.** 1 hour each term.

CL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

CL 407. **Greek Seminar.** (G) Hours to be arranged.

CL 411. **Thucydides.** (G) 3 hours.

Reading of selections from the *History of the Peloponnesian War*. Lectures on fifth-century Athens. Combellack.

CL 412. **Aeschylus.** (G) 3 hours.

Reading of the *Oresteia*. Pascal, Combellack.

CL 413. **Theocritus.** (G) 3 hours.

Reading of Theocritus and selections from other Greek bucolic poets. Lectures on ancient pastoral poetry and its influence. Pascal, Combellack.

CL 414. **Plato's Republic.** (G) 3 hours.

Reading of the *Republic*, with special attention to Plato's literary art and to his attitude toward literature. Pascal, Combellack.

CL 415. **Aristotle's Ethics.** (G) 3 hours.

Reading of the *Nicomachean Ethics*. Lectures on ancient ethical theories and on Aristotle's relationship to Plato. Combellack.

CL 416. **Greek Lyric Poetry.** (G) 3 hours.

Readings from the lyric poets, including some elegiac poets. Combellack.

GRADUATE COURSES

*CL 503. **Thesis.** Hours to be arranged.

* No-grade course.

CL 505. **Reading and Conference.** Hours to be arranged.

CL 507. **Greek Seminar.** Hours to be arranged.

CL 517, 518, 519. **Studies in Greek Literature.** Hours to be arranged.

Introduction to methods and materials for research in the classics; special attention to literary problems. Study of one of the following: Homer's *Odyssey*, Sophocles, Thucydides, Plato's *Republic*, Alexandrian poetry. Combella.

LATIN

LOWER-DIVISION COURSES

CL 60, 61, 62. **First-Year Latin.** 4 hours each term.

Fall and winter: fundamentals of Latin grammar; spring: selected readings from Caesar.

CL 104. **Cicero's Orations.** 4 hours.

Reading of selected orations, with close study of classical Latin forms and constructions as exemplified in Cicero's speeches.

CL 105. **Virgil's Aeneid.** 4 hours.

Reading of the first six books of the *Aeneid*. Practice in reading Latin hexameter.

CL 106. **Terence.** 4 hours.

Reading of a representative comedy of Terence. Survey of the early Roman theater.

UPPER-DIVISION COURSES

CL 301. **Livy.** 3 hours.

Reading of Books I and II, with attention to Livy's prose style and especially his narrative technique. Pascal.

CL 302. **Virgil's Eclogues and Georgics.** 3 hours.

Selected readings from the earlier poetic works of Virgil. Pascal.

CL 303. **Horace's Odes.** 3 hours.

Selected odes from the four books. Special attention to Horace's employment of the lyric form to express national ideals as well as personal thought and emotion. Pascal.

AL 304, 305, 306. **Literature of the Ancient World.** 3 hours each term.

For description, see page 126. Combella.

CL 341. **Horace's Satires and Epistles.** 3 hours.

Reading of selections from the *Satires* and *Epistles*. Study of the Horatian technique of satire. Pascal.

CL 342. **Pliny and Martial.** 3 hours.

Selected letters of Pliny and epigrams of Martial. Development of Silver Latin as seen in a representative prose writer and poet; the literary and historical trends in Rome of the first and early second century A.D. Pascal.

CL 343. **Tacitus' Agricola and Germania.** 3 hours.

Close study of Tacitean style in the earlier works. Pascal.

CL 345. **Ovid's Metamorphoses.** 3 hours.

Reading of some of the major myths. Study of Ovid's storytelling technique. Pascal.

CL 346. **Petronius' Cena Trimalchionis.** 3 hours.

Reading of the entire *Cena*. Petronius' role in the development of the picaresque novel. Special attention to the colloquial Latin spoken by the characters in the *Cena*. Pascal.

CL 347, 348, 349. **Latin Composition.** 2 hours each term.

Survey of classical Latin syntax; extensive practice in prose composition. Designed for majors and prospective teachers. Pascal.

- CL 361. **Cicero's Philosophical Works.** 3 hours.
Reading of the *Tusculan Disputations* and the *De officiis*. Cicero's role as an eclectic philosopher.
- CL 362. **Lucretius.** 3 hours.
Reading of Book I and other selections from the *De rerum natura*. Review of ancient atomic theory. Close study of the Lucretian hexameter. Pascal.
- CL 363. **Catullus.** 3 hours.
Reading and analysis of both the "personal" and Alexandrian poems. The political and social background of Catullus' poetry.
- CL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- CL 408. **Latin Seminar.** (G) Hours to be arranged.
- CL 461. **Propertius and Tibullus.** (G) 3 hours.
Reading of works of Propertius and Tibullus. Comparison of the poetic styles of these two Augustan poets. Combellack.
- CL 462. **Juvenal.** (G) 3 hours.
Reading of the selected satires. Juvenal's relation to the Roman tradition of satire. Pascal.
- CL 463. **Tacitus' Annals.** (G) 3 hours.
Reading of the first six books of the *Annals*. Analysis of Tacitus' style. His importance as an interpreter of the early empire. Pascal.

GRADUATE COURSES

- *CL 503. **Thesis.** Hours to be arranged.
- CL 505. **Reading and Conference.** Hours to be arranged.
- CL 508. **Latin Seminar.** Hours to be arranged.
- CL 511, 512, 513. **Readings in Mediaeval Latin.** Hours to be arranged.
- CL 514, 515, 516. **Studies in Latin Literature.** Hours to be arranged.
Intensive study of one of the following, with special attention to literary problems: Latin epic, Augustan elegy. Combellack, Pascal.

Germanic Languages

GERMAN

LOWER-DIVISION COURSES

- GL 50, 51, 52. **First-Year German.** 4 hours each term.
Designed to provide a thorough grammatical foundation and an elementary reading knowledge of German, as well as an understanding of the spoken language. Bedwell, Croes, S. Johnson, Kratz, Lewis, Newton, Schulthess, Stockman.
- GL 53, 54. **First-Year German.** 6 hours each term, winter and spring.
A two-term sequence covering the work of GL 50, 51, 52. For students who wish to begin German in the winter term. Stockman.
- GL 101, 102, 103. **Second-Year German.** 4 hours each term.
Review of grammar and composition; reading of selections from representative authors; conversation. Special section for Honors College students. Bedwell, Gontrum, Hahn, Kratz, Leppmann, McWilliams, Williams.

UPPER-DIVISION COURSES

- GL 301, 302, 303. **Survey of German Literature.** 3 hours each term.
German literature from the Middle Ages to the present; readings from repre-

* No-grade course.

sentative authors. One section conducted in German. Prerequisite: two years of college German. Gontrum, Williams.

AL 314, 315, 316. **Introduction to Germanic Literature.** 3 hours each term.

For description, see page 127. Gontrum.

GL 320, 321, 322. **Scientific German.** 3 hours each term.

Intensive practice in grammar, followed by the reading of texts in the student's major field. Intended principally for graduate students. Nicholls.

GL 334, 335, 336. **German Composition and Conversation.** 2 hours each term.

Extensive practice in speaking and writing. Required of German majors. Conducted in German. Prerequisite: two years of college German. Hahn, McWilliams.

GL 340, 341, 342. **German Culture and Civilization.** 2 hours each term.

Historical and political backgrounds of German literature and art. Prerequisite: reading knowledge of German.

GL 403. **Thesis.** Hours to be arranged.

GL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

GL 407. **Seminar.** (g) Hours to be arranged.

GL 411, 412, 413. **The Age of Goethe.** (G) 3 hours each term.

Readings in the main dramatic works of Lessing, Schiller, Kleist, and Goethe; Goethe's lyric poetry and selections from his prose. The spring term is devoted to the study of *Faust*. Prerequisite: Survey of German Literature. Leppmann.

GL 414, 415, 416. **German Literature of the Nineteenth Century.** (G) 3 hours each term.

Selections from significant authors from the death of Goethe to the flowering of naturalism. Plays of Hebbel and Grillparzer; Heine and the Young Germans; the novels and *Novellen* of Keller; the rise of naturalism and the young Hauptmann. Prerequisite: Survey of German Literature. Hahn.

GL 421, 422, 423. **German Literature of the Twentieth Century.** (G) 3 hours each term.

Representative prose, poetry, and drama by contemporary German authors and those of the recent past; particular attention to experimental forms in the theater, from Hauptmann to Zuckmayer, and to the novels of Thomas Mann and Herman Hesse. Prerequisite: Survey of German Literature. Leppmann.

GL 424, 425, 426. **Advanced German Composition and Conversation.** (G) 2 hours each term.

Systematic review of grammar; historical survey of the German language; translation of modern literary texts into German; writing of original themes. Conducted in Germany. Normally required of German majors. Kratz.

GL 427, 428, 429. **German Romanticism.** (G) 3 hours each term.

Readings in the works of Tieck, F. Schlegel, Novalis, Hoffmann, Mörike, and Eichendorff. Special emphasis on the romanticists' contributions to literary criticism, to music, and to the study of the German past. Prerequisite: Survey of German Literature. Hahn.

GL 430, 431, 432. **The German Lyric.** (G) 3 hours each term.

Study of German lyric poetry from the Middle Ages to the present, with readings from all major authors. Special emphasis on the *Lied* and the ballad and on the contemporary lyric poetry of George, Hofmannsthal, Rilke. Gontrum.

GRADUATE COURSES

*GL 503. **Thesis.** Hours to be arranged.

GL 505. **Reading and Conference.** Hours to be arranged.

* No-grade course.

- GL 507. **Seminar.** Hours to be arranged.
Humanism and the Reformation.
The German Baroque.
History of the German Language.
- GL 514, 515, 516. **Middle High German.** 3 hours each term.
Literary and linguistic study of representative texts: the *Nibelungenlied*, *Minnesang*, popular and courtly epics and lyrics, didactic works. Kratz.
- GL 517. **Modern German Drama.** 3 hours.
Analysis of the structural elements of naturalistic and expressionistic drama, and of the work of Brecht, Borchert, Dürrenmatt, and Frisch. Gontrum.
- GL 520. **Contemporary German Lyric.** 3 hours.
Problems of form in the longer poetic works of Rilke and George; Hofmannsthal, Trakl, and Benn. Gontrum.
- GL 523. **Modern German Novel.** 3 hours.
Mann, Kafka, and Hesse, with emphasis on their contributions to the art of the novel; Broch, Jünger, and Böll. Leppmann.

SCANDINAVIAN

LOWER-DIVISION COURSES

- GL 60, 61, 62. **First-Year Norwegian.** 3 hours each term.
Designed to give a thorough grammatical foundation in idiomatic Norwegian, with emphasis on both the reading and the speaking of the language. Williams.
- GL 70, 71, 72. **First-Year Swedish.** 3 hours each term.
Designed to give a thorough grammatical foundation in idiomatic Swedish, with emphasis on both the reading and the speaking of the language. Williams.
- GL 104, 105, 106. **Second-Year Norwegian.** 3 hours each term.
Review of grammar, composition, conversation; study of selections from representative authors. Williams.
- GL 107, 108, 109. **Second-Year Swedish.** 3 hours each term.
Review of grammar, composition, conversation; study of selections from representative authors. Williams.

UPPER-DIVISION COURSES

- AL 351, 352, 353. **Scandinavian Literature in Translation.** 3 hours each term.
For description, see page 127. Williams.

Oriental Languages

LOWER-DIVISION COURSES

- OL 50, 51, 52. **First-Year Chinese.** 5 hours each term.
Colloquial Mandarin (Peking); approximately half the year devoted to the oral-aural approach to conversation, and the other half to the reading and writing of materials in Chinese characters. Palandri.
- OL 60, 61, 62. **First-Year Japanese.** 5 hours each term.
Colloquial Japanese (Tokyo); approximately half the year devoted to the oral-aural approach to conversation, and the other half to the reading and writing of materials in characters and the syllabaries. Naff.
- OL 70, 71, 72. **Second-Year Chinese.** 5 hours each term.
Continuation of OL 50, 51, 52, with the systematic addition of new characters and styles; designed to increase fluency of translation in conversation, reading, and writing. Palandri.
- OL 80, 81, 82. **Second-Year Japanese.** 5 hours each term.
Continuation of OL 60, 61, 62, with the systematic addition of new characters

and styles ; designed to increase fluency of translation in conversation, reading, and writing. Naff.

UPPER-DIVISION COURSES

- AL 301, 302, 303. **Introduction to Japanese Literature.** 3 hours each term.
For description, see page 126. Naff.
- AL 307, 308, 309. **Introduction to Chinese Literature.** 3 hours each term.
For description, see page 126. Palandri.
- OL 311, 312, 313. **Third-Year Chinese.** 3 hours each term.
Advanced readings in contemporary Chinese ; introduction to classical, documentary, and historical texts. Palandri.
- OL 314, 315, 316. **Third-Year Japanese.** 3 hours each term.
Introduction to modern documentary and literary Japanese ; standard reference materials and elements of the classical language. Naff.
- OL 405. **Reading and Conference.** Hours to be arranged.

Romance Languages

FRENCH

LOWER-DIVISION COURSES

- RL 50, 51, 52. **First-Year French.** 4 hours each term.
An introduction to French, stressing reading and speaking. Exercises in elementary composition and grammar. Beit-Ishoo, Bloomfield, Cook, Daniels, Garramon, Manning, Piele, Schneider, Zuck.
- RL 53, 54. **First-Year French.** 6 hours each term, winter and spring.
Covers in two terms the work of RL 50, 51, 52. For students who wish to begin French in the winter term.
- RL 101, 102, 103. **Second-Year French.** 4 hours each term.
Study of selections from representative authors ; review of grammar ; considerable attention to oral use of the language. Special section for Honors College students. Cohen, Cooper, Desroches, Fischler, Kaps, Law, Marlow, Marshall, Rodman.

UPPER-DIVISION COURSES

- RL 301, 302, 303. **Survey of French Literature.** 3 hours each term.
French literature from the Middle Ages to the present ; readings from representative authors. Conducted in French. Prerequisite: two years of college French or equivalent. Desroches, Johnson, Marlow, Marshall.
- RL 314, 315, 316. **French Composition and Conversation.** 2 hours each term.
Exercises in pronunciation, comprehension, and composition. Ample opportunity for conversation. Conducted in French. Prerequisite: two years of college French or equivalent. Cohen, Cooper, Marlow.
- RL 331, 332, 333. **French Pronunciation and Phonetics.** 2 hours each term.
A thorough study of the fundamentals of French pronunciation, with personal attention to each student's difficulties. Prerequisite: two years of college French or equivalent. Garramon.
- RL 403. **Thesis.** Hours to be arranged.
- RL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- RL 407. **Seminar.** (G) Hours to be arranged.

- RL 411, 412, 413. **Seventeenth-Century French Literature.** (G) 3 hours each term.
Systematic study of the principal movements, types, and writers in seventeenth-century French literature, with special attention to Pascal, Corneille, Molière, and Racine. Prerequisite: Survey of French Literature. Law.
- RL 417, 418, 419. **Nineteenth-Century French Literature.** (G) 3 hours each term.
The masterworks of prose fiction and selected works of the great poets and playwrights of the century. One term devoted to each type. Prerequisite: Survey of French Literature. Johnson.
- RL 423, 424, 425. **Twentieth-Century French Literature.** (G) 3 hours each term.
Study of the writers and dominant literary currents in France since 1900. Readings, lectures, and recitations. Conducted in French. Prerequisite: Survey of French Literature. Marshall.
- RL 429, 430, 431. **French Culture and Civilization.** (G) 3 hours each term.
The political and social backgrounds of French literature; introduction to French music and art. Prerequisite: RL 301, 302, 303, or RL 314, 315, 316, or equivalent. Johnson, Law.
- RL 467, 468, 469. **Advanced French Composition.** (G) 2 or 3 hours each term.
Translation of modern literary texts into French, and writing of original themes. Conducted in French. Normally required of French majors. Prerequisite: RL 314, 315, 316 or equivalent. Dougherty, Marlow.

GRADUATE COURSES

- *RL 503. **Thesis.** Hours to be arranged.
- RL 505. **Reading and Conference.** Hours to be arranged.
- RL 507. **French Seminar.** Hours to be arranged.
- RL 514, 515, 516. **Eighteenth-Century French Literature.** 3 hours each term.
Study of the principal authors of the Enlightenment, particularly in their relationships to European currents of thought; emphasis on Montesquieu, Voltaire, Rousseau, and the Encyclopaedists. Beall, Desroches.
- RL 517, 518, 519. **Sixteenth-Century French Literature.** 3 hours each term.
A general survey of literature in the Renaissance, with emphasis on Marguerite de Navarre, Rabelais, Marot, Ronsard, Du Bellay, d'Aubigné, and Montaigne. Beall.
- RL 538, 539, 540. **Old French Readings.** 2 hours each term.
Study of the principal mediaeval genres; epic, romance, chronicles, lyric poetry, and drama. Special attention to works of fourteenth and fifteenth centuries. Dougherty.
- RL 544. **François Villon.** 3 hours.
Study of the entire work of Villon. Johnson, Dougherty.
- RL 545. **Ronsard.** 3 hours.
Study of the evolution of Ronsard's poetic genius, and of his role in acclimating classical and Italian verse in France. Particular attention to style and to characteristic Renaissance themes and motifs. Beall.
- RL 546. **Molière.** 3 hours.
Study of the principal comedies of Molière.
- RL 547. **Voltaire.** 3 hours.
Study of Voltaire's social satire and historical prose. Beall.
- RL 548. **Baudelaire.** 3 hours.
Study of all the works of Baudelaire. Johnson.

* No-grade course.

RL 549. **Paul Valéry.** 3 hours.

Intensive study of representative works of Paul Valéry. Marshall.

ITALIAN

LOWER-DIVISION COURSES

RL 70, 71, 72. **First-Year Italian.** 4 hours each term.

Grammar, pronunciation, composition, and translation of modern authors. Beit-Ishoo, Hatzantonis, Syring.

RL 104, 105, 106. **Second-Year Italian.** 4 hours each term.

Study of selections from representative authors. Composition, pronunciation, grammar. Hatzantonis.

UPPER-DIVISION COURSES

RL 371, 372, 373. **Third-Year Italian.** 3 hours each term.

Survey of Italian literature; study of representative works of principal authors; reports. Hatzantonis.

RL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AL 477, 478, 479. **Dante and His Times.** (g) 3 hours each term.

For description, see page 127. Beall.

RL 480, 481, 482. **Italian Renaissance Literature.** (G) 3 hours each term.

Study of tragedy, comedy, epic, lyric, *novella*, historical and political prose, courtesy books, criticism. Italy's role as the literary teacher of the rest of Renaissance Europe. Hatzantonis.

PORTUGUESE

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

RL 471, 472, 473. **Portuguese and Brazilian Literature.** (G) 3 hours each term.

Comparative structure of Portuguese. Reading of *contos*, writers of the classical period and of the nineteenth and twentieth centuries, and Brazilian literature. Prerequisite: facility in Spanish, Italian, French, or Latin. Melim.

SPANISH

LOWER-DIVISION COURSES

RL 60, 61, 62. **First-Year Spanish.** 4 hours each term.

An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. Arvidson, Carter, Hull, Rangel-Guerrero, Smith, Windsor.

RL 63, 64. **First-Year Spanish.** 6 hours each term, winter and spring.

Covers in two terms the work of RL 60, 61, 62. For students who wish to begin Spanish in the winter term. Dunbar.

RL 107, 108, 109. **Second-Year Spanish.** 4 hours each term.

Intensive oral and written exercises designed to help the student acquire an accurate and fluent use of Spanish. Study of selections from representative authors. Special section for Honors College students. Carter, Halladay, Knowlton, Palley, Rodner, Savage, Woods.

UPPER-DIVISION COURSES

RL 304, 305, 306. **Survey of Spanish Literature.** 3 hours each term.

Spanish literature from the Middle Ages to the present; readings from representative texts. Prerequisite: two years of college Spanish or equivalent. Palley, Powers.

- RL 347, 348, 349. **Spanish Composition and Conversation.** 2 hours each term. Fundamentals of pronunciation. Extensive oral and written practice. Conducted in Spanish. Prerequisite: two years of college Spanish. Powers, Smith, Woods.
- RL 350, 351. **Spanish Pronunciation and Phonetics.** 2 hours each term. Scientific study of Spanish sounds, rhythms, and intonation. Supervised practice, with individual use of recording equipment. Prerequisite: consent of instructor.
- RL 403. **Thesis.** Hours to be arranged.
- RL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- RL 407. **Seminar.** Hours to be arranged.
- RL 438, 439, 440. **Nineteenth-Century Spanish Literature.** (G) 3 hours each term. Reading and study of representative works in drama, poetry, and prose from the romanticists to the Generation of 1898. Conducted in Spanish. Prerequisite: Survey of Spanish Literature.
- RL 441, 442, 443. **Modern Spanish Literature.** (G) 3 hours each term. Modern Spanish literature beginning with the Generation of 1898. Principal types and authors. Extensive reading of texts. Conducted in Spanish. Prerequisite: Survey of Spanish Literature. Palley.
- RL 444, 445, 446. **Spanish-American Literature.** (G) 3 hours each term. Study of the principal authors of Spanish America since the beginning of the sixteenth century. Selections from the works of Ercilla, Sor Juana, Bello, Heredia, Sarmiento, Darío, Silva, Nervo, González Prada, Mistral, and others. Prerequisite: Survey of Spanish Literature. Smith.
- RL 451, 452, 453. **Spanish Literature of the Golden Age.** (G) 3 hours each term. Study of the outstanding authors of Spain's classical period: Garcilaso, Cervantes, Lope de Vega, Calderón, Quevedo, Góngora, and others. Prerequisite: Survey of Spanish Literature. Kerr, Powers.
- RL 461, 462, 463. **Advanced Spanish Composition and Conversation.** (G) 2 or 3 hours each term. Normally required of Spanish majors. Prerequisite: RL 347, 348, 349 or equivalent. Conducted in Spanish. Kerr, Rojas.

GRADUATE COURSES

- *RL 503. **Thesis.** Hours to be arranged.
- RL 505. **Reading and Conference.** Hours to be arranged.
- RL 508. **Spanish Seminar.** Hours to be arranged.
- RL 541, 542, 543. **Old Spanish Readings.** 2 hours each term. Study of representative texts of the three centuries preceding the Golden Age. Development of the principal genres: the chronicle, the ballad, the romance. Detailed study of *El Libro de Buen Amor*, *El Conde Lucanor*, and *Amadís de Gaula*.
- RL 554, 555, 556. **Drama of the Golden Age.** 3 hours each term. Interpretation and criticism of selected comedies of Lope de Vega, Calderón, Tirso de Molina, Ruiz de Alarcón, Agustín Moreto, and Rojas Zorilla. Conducted in Spanish. Powers.
- RL 557, 558, 559. **The "Modernista" Movement.** 3 hours each term. Interpretation and criticism of the work of leading Spanish American "modernista" writers: Martí, Silva, Julián del Casal, Gutiérrez Nájera, Darío, Lugones, and others. Rojas.
- RL 561, 562, 563. **Spanish-American Novel.** 3 hours each term. Study of the novel as a literary form in Spanish America.

* No-grade course.

ROMANCE PHILOLOGY

GRADUATE COURSES

RL 520, 521, 522. **Old French.** 3 hours each term.

Phonology and morphology. Reading of principal literary monuments. History of French literature through the thirteenth century. Dougherty.

RL 523, 524, 525. **Vulgar Latin and Old Provençal.** 2 hours each term.

RL 535, 536, 537. **Old Spanish.** 3 hours each term.

Phonology, morphology, and syntax of early texts; ecclesiastical glosses, legal documents, *Auto de los Reyes Magos*, the *Roncesvalles* fragment, the *Cantar de Mio Cid*, ancient ballads. Powers.

Slavic Languages

LOWER-DIVISION COURSES

SL 50, 51, 52. **First-Year Russian.** 4 hours each term.

The elements of the Russian language. Elementary reading, composition, and conversation. Steussy, Tolson.

SL 60, 61, 62. **Intensive Russian.** 6 hours each term.

The elements of the Russian language. Elementary reading, composition, and conversation. Covers in one year the material of SL 50, 51, 52, SL 101, 102. Bonnell.

SL 101, 102, 103. **Second-Year Russian.** 4 hours each term.

Continued study of grammar and composition; reading of representative works by great authors. Tolson.

SL 201, 202, 203. **Readings in Russian Literature.** 3 hours each term.

Study in Russian of selected literary masterpieces of the modern period. Same as SL 311, 312, 313, but may not be counted for upper-division credit. Steussy.

UPPER-DIVISION COURSES

SL 311, 312, 313. **Readings in Russian Literature.** 3 hours each term.

For description, see SL 201, 202, 203. Not open to students who have completed that sequence. Steussy.

SL 314, 315, 316. **Russian Composition and Conversation.** 2 hours each term.

Exercises in pronunciation, comprehension, and composition; ample opportunity for conversation. Conducted in Russian. Prerequisite: two years of college Russian or equivalent. Tolson.

AL 331, 332, 333. **Survey of Russian Literature.** 3 hours each term.

Russian literature from 1825 to 1917, with extensive reading in the works of Gogol, Dostoevsky, and Tolstoy. Steussy.

AL 340, 341, 342. **Russian Culture and Civilization.** 3 hours each term.

Main currents of Russian intellectual, literary, and artistic life. Steussy.

SL 403. **Thesis.** Hours to be arranged.

SL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

SL 407. **Seminar.** (g) Hours to be arranged.

SL 411, 412, 413. **The Russian Novel.** (g) 3 hours each term.

Fall: Pushkin, Gogol, Goncharov, Turgenev; winter: Dostoevsky; spring: Tolstoy. Prerequisite: SL 311, 312, 313 or equivalent. Bonnell, Steussy.

AL 421, 422, 423. **Modern Russian Short Story, Poetry, Drama.** (g) 3 hours each term.

Fall: the short story—Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov,

Gorky, Soviet authors; winter: poetry—evolution of Russian poetry from the beginnings into the Soviet period, with selected readings; spring: drama—modern Russian drama from the eighteenth century. Knowledge of Russian not required; but Russian majors must do selected readings in the original. Offered alternate years. Steussy.

SL 461, 462, 463. **Advanced Russian Composition and Conversation.** (g) 2 hours each term.

Extensive oral practice and composition of original themes. Conducted in Russian. Normally required of Russian majors. Prerequisite: SL 314, 315, 316 or equivalent. Tolson.

Geography

Professors: E. T. PRICE (department head), S. N. DICKEN.

Associate Professors: R. S. COGGINS, G. E. MARTIN, C. P. PATTON, F. R. PITTS.

Assistant Professors: C. L. JOHANNESSEN, A. W. URQUHART.

Instructor: R. L. ARTUSY.

Fellow: R. C. SHECK.

Assistants: T. A. BELL, S. F. GRAY, L. G. LEWIS, B. W. MAYHEW, S. R. MCWILLIAMS, R. M. PHILLIPS, C. L. THOMPSON, R. A. WEINKAUF.

THE DEPARTMENT OF GEOGRAPHY serves three classes of students: (1) professional major students; (2) nonprofessional major students who wish to build a broad cultural education around a central interest in geography; and (3) students majoring in other fields who wish some acquaintance with the contribution of geography to the understanding of the world and its problems.

The department offers work for major students in four fields of specialization: (1) cultural geography, including economic, urban, and population geography; (2) physical geography, including climatology and geomorphology; (3) regional geography; and (4) techniques and methodology, including cartography, the interpretation of aerial photographs, and field geography.

Major Curricula in Geography. A total of 45 term hours in geography courses is required for a major; it is strongly recommended that the student limit his work in geography to not more than 53 hours. The following courses are required for a professional major:

Lower Division. Nine term hours in lower-division geography courses; General Geology (Geol 101, 102).

Upper Division. Geography of North America (Geog 301, 302, 303); Cartography (Geog 335); Climatology (Geog 390); Geomorphology (Geog 391); Geographic Field Methods (Geog 421, 422, 423); Seminar (Geog 407).

For a nonprofessional undergraduate major, the required 36 upper-division hours must include 9 hours in physical geography or cartography.

High-School Teaching. Students preparing for the teaching of social studies in the high schools may elect geography as a field of concentration; the following courses are recommended: Introductory Geography (Geog 105, 106, 107), Geography of Oregon (Geog 301), Geography of North America (Geog 302, 303), Seminar: Geographic Literature (Geog 407), Political Geography (Geog 433), Economic Geography (Geog 434), Urban Geography (Geog 435). For the subject-preparation requirements for the teaching of social studies in Oregon high schools, see pages 128-129.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Study. The department offers graduate work leading to the M.A., M.S., and Ph.D. degrees. To qualify for the master's degree the student must complete successfully 45 term hours of graduate work, of which 36 hours must be in the field of geography. All candidates are required to complete 9 hours in advanced physical geography, 9 hours in advanced cultural geography, and 6 hours in geography seminars at the 500 level. The student's preparation for graduate work must include undergraduate courses in cartography, field geography, and physical geography. For general requirements for graduate degrees, see GRADUATE SCHOOL, pages 107 ff.

LOWER-DIVISION COURSES

Geog 105, 106, 107. **Introductory Geography.** 3 hours each term.

A general introduction to the field of geography, in sequence as follows: Geog 105, physical geography; Geog 106, regional survey of the world; Geog 107, cultural geography.

Geog 201. **Geography of Europe.** 3 hours.

Physical, political, and regional economic geography of Europe.

Geog 202. **Geography of Latin America.** 3 hours.

Physical, political, and regional economic geography of the Latin American countries.

Geog 203. **Geography of Asia.** 3 hours.

Physical, political, and regional economic geography of Asia and adjacent islands.

UPPER-DIVISION COURSES

Geog 301. **Geography of Oregon.** 3 hours fall.

Physical and cultural geography of Oregon.

Geog 302, 303. **Geography of North America.** 3 hours each term, winter and spring.

Physical and cultural geography of the North American continent north of Mexico. Winter: western United States and western Canada; spring: eastern United States and eastern Canada.

Geog 320. **Map and Air Photo Interpretation.** 3 hours.

Introduction to the use and interpretation of map and air photographs.

Geog 335. **Cartography.** 5 hours.

Study of maps; introduction to map projections; the map base; map content and design; map interpretation.

Geog 390. **Climatology.** 5 hours.

Elements of weather and climate; presentation of climatic data; climatic classifications; world climatic analysis.

Geog 391. **Geomorphology.** 5 hours.

The systematic study of landforms. Prerequisite: Geol 101, 102.

Geog 401. **Research.** Hours to be arranged.

Geog 405. **Reading and Conference.** Hours to be arranged.

Geog 407. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Geog 421, 422, 423. **Geographic Field Methods.** (G) 3 hours each term.

Research techniques in geography applied to special areas and problems. First term: introduction to tools and techniques of geographic field investigation; second term: research design, use of air photographs, maps, and other

documents; third term: data gathering and analysis, report writing. Prerequisite: Geog 335; Geog 391.

Geog 427. Geography of the Soviet Union. (G) 3 hours.

Geography of the Soviet Union; its resources, peoples, and world position. Prerequisite: 6 hours in lower-division geography courses or consent of instructor.

Geog 432. Geography of Africa. (G) 3 hours.

Physical, economic, and political geography of the African continent, with special emphasis on the area south of the Sahara. Prerequisite: 6 hours in lower-division geography courses or consent of instructor.

Geog 433. Political Geography. (G) 3 hours.

Impact of political institutions upon the landscape; resources and political decisions; relation of formal and informal groups to political areas.

Geog 434. Economic Geography. (G) 3 hours.

Location factors in primary and secondary industries, and the distribution of these industries over the earth. Prerequisite: 6 hours in lower-division geography courses or consent of the instructor.

Geog 435. Urban Geography. (G) 3 hours.

World distribution of great cities; urban patterns, forms, and functions; systems of urban land classification; forces affecting urban land use; geographic aspects of city planning. Prerequisite: 6 hours in lower-division geography courses or consent of instructor.

Geog 445. Plant Geography. (G) 3 hours.

The geographical distribution of the major vegetational associations of the world, their cartographic representation and photo interpretation, and the changes that man has induced in these associations in historical times.

Geog 451. Geography of Eastern Asia. (G) 3 hours.

Intensive study of the physical and cultural processes that have shaped the landscapes of Eastern Asia. Prerequisite: 6 hours of lower-division geography or consent of instructor.

Geog 452. Geography of Southern Asia. (G) 3 hours.

Intensive study of the physical and cultural processes that have shaped the landscapes of Southern Asia. Prerequisite: 6 hours of lower-division geography or consent of instructor.

Geog 463. Geography of Middle America. (G) 3 hours.

Intensive study of the physical and cultural processes that have shaped the landscapes of Middle America. Prerequisite: 6 hours of lower-division geography or consent of the instructor.

Geog 464, 465. Geography of South America. (G) 3 hours each term.

Intensive study of the physical and cultural processes that have shaped the landscapes of South America. Winter: South America, except Brazil; spring: Brazil. Prerequisite: 6 hours of lower-division geography or consent of instructor.

Geog 471. Geography of Atlantic and Mediterranean Europe. (G) 3 hours.

Intensive study of the physical and cultural processes that have shaped the landscapes of the Greek, Italian, and Iberian peninsulas, and of Europe west of the Rhine River. Prerequisite: 6 hours of lower-division geography or consent of the instructor.

Geog 472. Geography of Central and Eastern Europe. (G) 3 hours.

Intensive study of the physical and cultural processes that have shaped the landscapes of Germanic and Slavic Europe, excluding the Soviet Union. Prerequisite: 6 hours of lower-division geography or consent of instructor.

GRADUATE COURSES

***Geog 501. Research.** Hours to be arranged.

* No-grade course.

*Geog 502. **Supervised College Teaching.** Hours to be arranged.

*Geog 503. **Thesis.** Hours to be arranged.

Geog 505. **Reading and Conference.** Hours to be arranged.

Geog 507. **Seminar.** Hours to be arranged.

Coastal Geography.
Techniques in Geography.
Domestication of Plants.
Resource Use.
Climate Records.
Glacial Studies.
Latin America.
Historical Geography.
History of Geographic Thought.

Geog 511, 512, 513. **Advanced Physical Geography.** 3 hours each term.

Advanced systematic study of the elements of the physical landscape; emphasis on methodology. Fall: biogeography; winter: climatology; spring: geomorphology. Prerequisite: Geog 390, Geog 391.

Geog 515, 516, 517. **Advanced Cultural Geography.** 3 hours each term.

Advanced systematic study of the elements of the cultural landscape; emphasis on methodology. Fall: agricultural geography; winter: political and historical geography; spring: urban and industrial geography.

Geology

Professors: L. W. STAPLES (department head), E. M. BALDWIN, W. L. YOUNGQUIST.†

Associate Professors: E. H. LUND, J. A. SHOTWELL, J. C. STOVALL.

Assistant Professors: G. T. BENSON, M. A. KAYS, L. R. KITTLEMAN, V. E. McMATH, W. B. PURDOM.

Fellows: L. K. BURNS, D. H. GARDNER, G. H. HADDOCK, T. MADDOX, M. J. SWITEK, B. J. WITT.

Assistants: J. L. BRUEMMER, T. E. CLARK, M. H. COCCHI, M. M. GODCHAUX, D. L. HICKS, W. R. JOHNSON, G. L. MILLHOLLEN, D. N. NIEMI, J. H. SHAW.

THE DEPARTMENT OF GEOLOGY serves three classes of students: (1) professional major students; (2) nonprofessional major students who wish to build a broad cultural education around a central interest in geology; and (3) students majoring in other fields who wish some acquaintance with the contributions of geological studies to the understanding of the world and its problems.

High-school students planning to major in geology at the University are advised to include in their high-school course: algebra, plane geometry, trigonometry, geography, science (physics, chemistry, or general science).

Major Curriculum in Geology. The following courses are required for an undergraduate major in geology:

Lower Division. General Geology (Geol 101, 102, 103); Introductory College Mathematics (Mth 104, 105, 106); General Chemistry (Ch 104, 105, 106, Ch 108, 109); General Physics (Ph 201, 202, 203, Ph 204, 205, 206); Principles of Economics (Ec 201, 202, 203).

Upper Division. Mineralogy (Geol 311, 312, 313); Introduction to Paleontology (Geol 331, 332, 333); Principles of Stratigraphy (Geol 392); Field

* No-grade course.

† On sabbatical leave 1963-64.

Methods (Geol 393); Field Geology (Geol 406); Seminar (Geol 407), three terms; Economic Geology (Geol 421, 422, 423); Lithology (Geol 411) *or* Petrology and Petrography (Geol 414, 415, 416); Structural Geology (Geol 491).

Geophysics-Geochemistry Option. Undergraduate majors may elect an option in geophysics-geochemistry, in preparation for graduate work in this or other fields of quantitative geology. The requirements for this option differ from the requirements of the regular major program in geology in the following respects: (1) Differential and Integral Calculus (Mth 201, 202, 203) *or* Analytic Geometry and Calculus (Mth 204, 205, 206) is required; (2) either Advanced General Physics (Ph 320, 321, 322) *or* Quantitative Analysis (Ch 320) is required; (3) Principles of Economics (Ec 201, 202, 203), Vertebrate Paleontology (Geol 333), and Economic Geology (Geol 421, 422, 423) are not required.

Paleontology Option. Undergraduate majors may elect an option in paleontology. The requirements for this option differ from the requirements of the major curriculum in geology in the following respects: (1) Principles of Economics, and Economic Geology are not required; (2) General Biology (Bi 101, 102, 103) is required, and Invertebrate Zoology (Bi 461, 462), offered at the Institute of Marine Biology, may be substituted for Field Geology; (3) an additional 12 term hours of work must be elected from: Comparative Anatomy (Bi 355), Principles of Ecology (Bi 471, 472, 473), Historical Biogeography (Bi 491, 492, 493), Micropaleontology (Geol 440).

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Study. The department offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. A satisfactory rating on a Graduate Record Examination and on a qualifying examination are required for admission to candidacy for a graduate degree. All candidates are required to write a thesis. Suggested minor fields are: chemistry, physics, biology, or mathematics.

Facilities. The Condon Museum of Geology contains extensive collections of rocks, minerals, and fossils; its resources are supplemented by working collections for classroom and laboratory use. The varied geological terrain of the state of Oregon offers an exceptionally interesting field laboratory. Field trips are conducted during the regular academic year. Field camps in various parts of the state are operated during the summer months.

LOWER-DIVISION COURSES

Geol 101, 102, 103. **General Geology.** 4 hours each term.

Earth materials, processes, and forms; formation of economic mineral deposits; the main events in earth history. Lectures, laboratory, and field trips.

Geol 291. **Rocks and Minerals.** 3 hours.

Common minerals and rocks; origin, lore, and properties of precious, semi-precious, and ornamental stones; economically important rocks and minerals. 2 lectures; 1 three-hour laboratory period. McMATH.

Geol 292. **Elementary Areal Geology.** 3 hours.

A study of regional geology primarily for nonmajors; areal distribution of sedimentary, igneous, and metamorphic rocks in Oregon. Field studies of selected areas, with emphasis on the relationships between rock type, structure, and topography. 1 lecture; 6 hours field work. Prerequisite: Geol 101, 102, 103. Stovall.

UPPER-DIVISION COURSES

Geol 301, 302, 303. **Geologic History of Life.** 3 hours each term.

Fall: origins and early history of life, as revealed by the fossil remains of

animals and plants; winter: geologic history of vertebrates; spring: geologic history of the Primates. Not intended for majors. Stovall.

Geol 311, 312, 313. **Mineralogy.** 4 hours each term.

Descriptive and determinative mineralogy; geometric and X-ray crystallography; optical mineralogy. Prerequisite: Ch 104, 105, 106; Ch 108, 109; Geol 101, 102. Staples.

Geol 331, 332, 333. **Introduction to Paleontology.** 3 hours each term.

Structure and evolution of invertebrates and vertebrates, and their distribution in geologic time. Prerequisite: Geol 103. Youngquist, Baldwin.

Geol 352. **Geology of Oregon.** 3 hours.

Lectures, assigned reading, and field trips, to acquaint the student with some of the salient features of the geology of the state. Baldwin.

Geol 392. **Principles of Stratigraphy.** 3 hours.

Genesis and subsequent history of stratified rocks; sedimentation, induration, weathering; the methods of correlating such formations. Prerequisite: Geol 101, 102, 103. Baldwin.

Geol 393. **Field Methods.** 3 hours.

Elementary topographic mapping; use of field instruments; field mapping of selected areas. McMath.

Geol 401. **Research.** Hours to be arranged.

Geol 405. **Reading and Conference.** Hours to be arranged.

Geol 406. **Field Geology.** Hours to be arranged.

Prerequisite: Geol 393, HEc 250, consent of instructor. Staples.

Geol 407. **Seminar.** Hours to be arranged.

Current Geological Literature.
Classical Geological Literature.
Engineering Geology.
Geological Report Writing.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Geol 411. **Lithology.** (g) 3 hours.

The origin, occurrence, and classification of the principal rock types. Laboratory examination and classification of rocks in hand specimens. 2 lectures; 1 laboratory period. Prerequisite: Geol 312. Lund.

Geol 414, 415, 416. **Petrology and Petrography.** (G) 4 hours each term.

Origins, occurrences, and classifications of rocks. Laboratory work in both megascopic and microscopic examination of rocks. Prerequisite: Ph 201, 202, 203. Geol 311, 312, 313. Lund.

Geol 421, 422, 423. **Economic Geology.** (G) 3 hours each term.

The general principles of the formation of metallic and nonmetallic economic geologic deposits; principal economic deposits, domestic and foreign. 2 lectures; 1 laboratory period. Prerequisite: Ec 201, 202, 203; Geol 311, 312, 313. Kays, Purdom.

Geol 440. **Micropaleontology.** (G) 3 hours.

Survey of microfossil groups; stratigraphic distribution; methods of separation from matrices; classification. 1 lecture; 2 laboratory periods. Prerequisite: Geol 331, 332. Youngquist.

Geol 451, 452. **Pacific Coast Geology.** (G) 3 hours each term.

The general geology of the west coast of the United States and Canada from Alaska to southern California; special problems of the region. Prerequisite: Geol 101, 102, 103; senior or graduate standing. Baldwin, Youngquist.

Geol 473. **Photogeology.** (G) 3 hours.

Geologic interpretation of stereographic pairs of vertical aerial photographs. 2 lectures, 1 three-hour laboratory period. Prerequisite: Geol 101, 102, 103. Benson.

Geol 491. **Structural Geology.** (G) 4 hours.

Origin, interpretation, and mapping of major and minor geologic structures. 3 lectures, 1 laboratory period. Prerequisite: Geol 101, 102; Ph 201, 202, 203. McMath.

Geol 492. **Regional Stratigraphy.** (G) 3 hours.

Applied stratigraphy and facies analysis; stratigraphy of the United States and other countries. Prerequisite: Geol 392. Baldwin, Youngquist.

Geol 493. **Petroleum Geology.** (G) 3 hours.

The origin and accumulation of petroleum and related products; the stratigraphy and structure of oil fields; methods of locating oil and gas. 2 lectures, 1 laboratory period. Prerequisite: Geol 392, Geol 491. Youngquist.

GRADUATE COURSES

*Geol 501. **Research.** Hours to be arranged.

*Geol 503. **Thesis.** Hours to be arranged.

Geol 505. **Reading and Conference.** Hours to be arranged.

Geol 506. **Advanced Field Geology.** Hours to be arranged.

Geol 507. **Seminar.** Hours to be arranged.

Regional geologic studies.

Geol 511, 512, 513. **Advanced Microscopy and Instrumentation.** 4 hours each term.

Microtechniques in connection with the petrographic microscope, goniometer, X-ray diffractometer, and spectroscope; chemical microscopy; photomicrography. Prerequisite: Geol 313. Staples, Kays.

Geol 514, 515, 516. **Advanced Petrology and Petrography.** 3 hours each term.

Advanced study of topics relating to the origins and occurrences of rocks; microscopic examination of rock suites selected for study of special problems. Prerequisite: Geol 414, 415, 416. Kays.

Geol 520. **Advanced Economic Geology.** 3 hours.

Theories of the origin of mineral deposits; study of examples illustrating general principles. Student reports on selected types of deposits. Review of current literature. Prerequisite: Geol 421, 422, 423. Kays, Purdom.

Geol 531, 532, 533. **Advanced Paleontology.** 3 hours each term.

Methods of collecting, preparing, and identifying fossil faunas; detailed study of selected fossil groups. Prerequisite: Geol 331, 332, 333. Youngquist.

Geol 551. **Advanced Physical Geology.** 3 hours.

Comprehensive appraisal of earth materials and processes, based on the study of original sources in classical and current literature of geology. McMath.

Geol 561, 562, 563. **Geochemistry and Geophysics.** 3 hours each term.

Application of physico-chemical principles to geologic processes on and within the earth; special emphasis on thermodynamics and its application to geologic problems; methods of geophysics for the determination of the nature of the interior of the earth. Prerequisite: calculus and physical chemistry, or consent of instructor; physical chemistry may be taken concurrently. Kays.

Geol 591. **Advanced Structural Geology.** 3 hours.

Theories of the origin of geologic structures observed in deformed rocks. Comparative study and classification of structures; theoretical and experimental studies. Prerequisite: Geol 491. McMath.

COURSES OFFERED ONLY IN SUMMER SESSIONS

Geol 455. **Studies in Physical Geology.** (g) 3 hours.

Geol 456. **Regional Geology of North America.** (g) 3 hours.

* No-grade course.

History

Professors: QUIRINUS BREEN, P. S. DULL,* V. R. LORWIN,* EARL POMEROY,†
K. W. PORTER, W. O. SHANAHAN, R. WAYNE SMITH, W. H. STEPHENSON.

Associate Professors: GUSTAVE ALEF, E. R. BINGHAM, R. W. SMITH (department head), L. R. SORENSON.

Assistant Professors: R. F. BIRN,* P. S. HOLBO, S. V. JAMES, R. L. PETERSON, S. A. PIERSON.

Instructors: R. S. DILL, R. R. DOZIER, B. R. LOCKE.

Lecturers: HAROLD BAUMAN, O. D. EDWARDS, GENNARO FALCONERI.

Associate: MABEL E. McCLAIN (emeritus).

Fellows: E. R. DREGER, G. W. PLUKER.

Assistants: J. K. ARNTZ, W. M. BLANKENSHIP, K. L. BURLINGHAM, R. E. BURTON, J. F. COURSEN, A. E. CURTIS, J. S. CUTHBERT, J. H. DORN, T. D. EASTON, G. H. EATON, D. B. EPSTEIN, R. C. FREY, R. A. GATES, J. E. HENDRICKSON, D. L. KNAPP, J. L. KOEPEL, C. E. KRAFT, E. S. LARSON, F. D. MAHAR, G. W. MANNING, P. G. MERRIAM, M. R. MONTGOMERY, G. T. MORGAN, KURT REES, N. P. ROSS, L. C. SETNOSKY, S. D. STANDEN, E. V. TOY, D. L. UTECHT, B. A. WIGMORE.

THE DEPARTMENT OF HISTORY offers instruction in American, European, British, and East Asian history, and major programs designed for general education and in preparation for public school teaching and for graduate study and research.

Requirements for the Bachelor's Degree. For a bachelor's degree with a major in history, a student must complete a balanced program approved by his departmental adviser. Specific requirements are as follows:

- (1) Satisfaction of the University requirement for the B.A. degree.
- (2) Forty-two term hours in history courses, of which 24 must be upper-division, including at least 9 hours of 400-level courses (15 upper-division hours must be taken at the University of Oregon).
- (3) History of Western Civilization (Hst 101, 102, 103), *or* History (Honors College) (Hst 107, 108, 109), *or*, with consent of adviser, 15 hours of upper-division European history, including courses both before and after 1600.
- (4) A year sequence in United States history.
- (5) Not less than two terms (6 hours) of upper-division courses in each of two fields selected from the following: (a) Europe before 1600, (b) Europe after 1600, (c) United States, Far East, or Latin America.
- (6) At least one term of Seminar (Hst 407) or Colloquium (Hst 408).
- (7) A 2.25 grade-point average in history courses.

History majors should take work in allied fields that will contribute to a well-balanced liberal education. The department recommends work in foreign language and literature extending, if possible, beyond the second-year level and leading to a thorough reading knowledge of a language.

Teacher Certification. Students preparing for elementary or secondary teaching certification may elect history as a field of concentration. History majors may request waiver of the B.A. requirement if they find it impossible to satisfy

* On leave of absence 1963-64.

† On sabbatical leave 1963-64.

at the same time the department's suggested program for teaching. For the subject-preparation requirements for the teaching of social studies in Oregon high schools, see pages 128-129.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work. The department offers graduate instruction leading to the degrees of Master of Arts and Doctor of Philosophy. For requirements for graduate degrees, see GRADUATE SCHOOL, pages 107-113. A detailed statement of departmental requirements may be obtained in the department office.

LOWER-DIVISION COURSES

Hst 101, 102, 103. **History of Western Civilization.** 3 hours each term.

Origins and development of Western civilization from ancient times to the present. Alef, Birn, Breen, Dozier, Locke, Pierson, Shanahan, Sorenson.

Hst 107, 108, 109. **History (Honors College).** 3 hours each term.

Significant events, ideas, and institutions in the development of Western civilization. Alef, Bauman, Birn, Dill, Pierson, Shanahan.

Hst 201, 202, 203. **History of the United States.** 3 hours each term.

From colonial times to the present. Special section for Honors College students. Bingham, Edwards, Holbo, James, Peterson, Porter, Stephenson.

UPPER-DIVISION COURSES

Hst 301, 302, 303. **Europe since 1789.** 3 hours each term.

Political, social, economic, and cultural trends from the French Revolution to the present. Fall: 1789 to 1870; winter: 1870 to 1918; spring: 1918 to the present. Pierson.

Hst 304, 305, 306. **English History.** 3 hours each term.

A general survey, covering political, economic, social, intellectual, and religious developments. Dozier, R. W. Smith.

Hst 350, 351, 352. **Hispanic America.** 3 hours each term.

A survey of Hispanic America from the early Indian civilizations through the periods of Spanish conquest and colonization; the wars of independence; the rise of national states; their internal development and foreign relations. Holbo, R. Wayne Smith.

Hst 391, 392, 393. **Far East in Modern Times.** 3 hours each term.

Political, economic, and diplomatic history of China, Japan, and Korea, with some attention to Asiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Dull, Falconeri.

Hst 403. **Thesis.** Hours to be arranged.

Hst 405. **Reading and Conference.** Hours to be arranged.

Hst 407. **Seminar.** Hours to be arranged.

Junior Honors Seminar.
Senior Seminar.

Hst 408. **Senior Colloquium in American History.** 3 hours each term.

Study of significant historical writings from colonial times to the present, with emphasis on methods and interpretations. Prerequisite: consent of instructor. Stephenson.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Hst 411. **History of Greece.** (G) 3 hours fall.

Political and cultural history of ancient Greece. Breen, Dill.

Hst 412, 413. **History of Rome.** (G) 3 hours each term, winter and spring.

Winter: history of Rome from its earliest beginnings to the end of the Republic; spring: the period of the Empire. Breen, Dill.

- Hst 421, 422, 423. **Middle Ages.** (G) 3 hours each term.
History of Europe from the decline of the Western Roman Empire to the Renaissance. Fall: to the Carolingians; winter: to 1100; spring: to 1300. Breen.
- Hst 424, 425. **Early Modern Europe.** (G) 3 hours each term.
Political, economic, and cultural history of Europe from the Counter-Reformation to the French Revolution. Europe overseas, the rise of absolutism, the Age of Reason, and enlightened despotism. Bauman, Birn.
- Hst 430, 431. **Renaissance.** (G) 3 hours each term, fall and winter.
Fall: the Renaissance in Italy; winter: the northern Renaissance. Breen.
- Hst 432. **Reformation.** (G) 3 hours spring.
The Protestant and the Catholic reform of the sixteenth century. Breen.
- Hst 434, 435, 436. **Western Institutions and Ideas.** (G) 3 hours each term.
Intensive study of selected ideas and institutions that have influenced the history of Western civilization. Prerequisite: a college-level introductory course in European history. Sorenson.
- Hst 437, 438. **History of Germany.** (G) 3 hours each term.
First term: from the death of Frederick the Great (1786) through World War I; second term: the Weimar Republic, the Nazi era, World War II, and the postwar development of East and West Germany. Shanahan.
- Ed 440. **History of Education.** (G) 3 hours.
A general review of the growth and development of education in relation to the civilization of the times; emphasis on development of educational philosophies. Breen.
- Hst 441, 442, 443. **History of France.** (G) 3 hours each term.
Hst 441: Old Regime, revolutionary and Napoleonic era, nineteenth century to 1870; Hst 442: Third Republic, 1870-1940; Hst 443: since 1940. Locke, Lorwin.
- Hst 444, 445. **Twentieth-Century Europe.** (G) 3 hours each term.
The revolutionary consequences of World War I for society, politics, and the economy; the new democratic governments and the challenge of Bolshevism, Fascism, and Nazism; World War II and its aftermath; the Soviet satellites; rebuilding the European economy. Shanahan.
- Hst 447, 448, 449. **History of Russia.** (G) 3 hours each term.
Fall: the Kievan state and the emergence of Muscovy; winter: creation of the Russian Empire, political, social and economic developments; spring: revolutionary Russia, 1861 to the present. Alef.
- Hst 454, 455, 456. **Economic History of Modern Europe.** (G) 3 hours each term.
The economic development and economic institutions of modern Europe. Fall: commercial revolution, mercantilism, beginnings of the Industrial Revolution; winter: the Industrial Revolution, industrial, agricultural, financial, and social change to 1914; spring: since 1914. Lorwin.
- Hst 457. **The Era of American Sectional Conflict.** (G) 3 hours.
Forces, events, and persons that contributed to unity and particularism in the United States during the first half of the nineteenth century. Stephenson.
- Hst 458. **The Era of the Civil War.** (G) 3 hours.
Intensive study of the critical decade before the Civil War and of the course of that conflict. Stephenson.
- Hst 459. **The Era of Reconstruction.** (G) 3 hours.
Problems of the tragic era following the Civil War; continuing effects to the end of the nineteenth century. Edwards, Stephenson.

- Hst 460, 461, 462. **History of American Thought and Culture.** (G) 3 hours each term.
Main currents of American intellectual and cultural life from colonial times to the present. Prerequisite: Hst 201, 202, 203 or consent of instructor. Bingham.
- Hst 463. **History of Canada.** (G) 3 hours.
A survey of the growth of Canada from colony to nation, emphasizing the period after confederation. R. W. Smith.
- Hst 464. **History of Mexico.** (G) 3 hours.
Political, social, economic and intellectual trends and problems from 1810 to the present.
- Hst 465. **British Empire.** (g) 3 hours.
History of the British Empire since 1815; colonial nationalism and the development of the Commonwealth. R. W. Smith.
- Hst 466. **Tudor England.** (G) 3 hours.
The political, social, economic, and intellectual development of England through the reigns of the Tudor sovereigns, 1485-1603. R. W. Smith.
- Hst 468. **Victorian England.** (G) 3 hours.
Social, political, economic, and intellectual history of England from 1815 to 1900. R. W. Smith.
- Hst 469. **Twentieth-Century England.** (G) 3 hours.
Social, political, economic, and intellectual changes in Great Britain in the twentieth century. R. W. Smith.
- Hst 470, 471. **Social Factors in American History.** (G) 3 hours each term.
Effect of the varied character of the population on American history and culture. First term: national and racial influences; second term: religious factors. Porter.
- Hst 473, 474, 475. **American Foreign Relations.** (G) 3 hours each term.
The origins, character, and consequences of American foreign policies from the Revolutionary War to the present. Holbo.
- Hst 476, 477. **History of the West.** (G) 3 hours each term.
The American frontier. First term: the early American frontier; second term: the Great Plains and the Far West. Porter, Pomeroy.
- Hst 478. **History of the Pacific Northwest.** (G) 3 hours.
Detailed study of the building of civilization in the Pacific Northwest. Prerequisite: Hst 201, 202 or consent of instructor. Bingham, Porter.
- Hst 479. **Forces and Influences in American History.** (G) 3 hours.
Geographic influences; influence of the frontier; inheritance and tradition; economic forces; nationalism; sectionalism; manifest destiny; democracy.
- Hst 480, 481, 482. **The United States in the Twentieth Century.** (G) 3 hours each term.
Fall: to 1919; winter: 1919-39; spring: since 1939. Edwards, Pomeroy.
- Hst 484, 485, 486. **Early History of the American People.** (G) 3 hours each term.
From the discovery of America to Washington's administration. James.
- Hst 487, 488, 489. **American Economic History.** (G) 3 hours each term.
The economic development of the United States. Peterson.
- Hst 494, 495, 496. **History of China.** (G) 3 hours each term.
Fall: from legendary times through the T'ang Dynasty (618-907); winter: from the Sung Dynasty (960-1276) to the "Second Treaty Settlement" of the Manchus in 1860; spring: 1860 to the present. Dull.
- Hst 497, 498, 499. **History of Japan.** (G) 3 hours each term.
History of Japan, from its beginnings to the present. Dull, Falconeri.

GRADUATE COURSES

*Hst 501. **Research.** Hours to be arranged.

*Hst 502. **Supervised College Teaching.** Hours to be arranged.

*Hst 503. **Thesis.** Hours to be arranged.

Hst 505. **Reading and Conference.** Hours to be arranged.

Hst 507. **Seminar.** Hours to be arranged.

Greek and Roman History. Dill.

European History. Alef, Breen, Lorwin, Pierson, Shanahan, Sorenson.

European Social and Economic History. Lorwin.

English History. R. W. Smith.

American Historiography. Stephenson.

American History. Bingham, Holbo, James, Peterson, Pomeroy, Porter, Stephenson.

Latin American History. R. Wayne Smith.

History of the Far East. Dull, Falconeri.

Historical Theory. Sorenson.

Hst 520. **Historical Method.** 3 hours.

Introduction to the methods of research and writing in history. Pomeroy, Shanahan, Stephenson.

Hst 530, 531, 532. **European History: Problems and Interpretations.** 3 hours each term.

Readings, reports, and group discussions of major trends, problems, and interpretations in modern European history. Hst 530: Renaissance and Reformation; Hst 531: the seventeenth and eighteenth centuries; Hst 532: 1789 to the present. Bauman, Birn, Breen, Lorwin, Pierson, Shanahan.

Hst 591. **Japanese Political Evolution since 1912.** 3 hours.

Japanese political institutions and ideologies from 1912 to the present, and their relation to domestic and foreign policies. Prerequisite: Hst 497, 498, 499 or consent of instructor. Dull.

COURSES OFFERED ONLY IN SUMMER SESSIONS

Hst 418, 419. **Studies in Western Civilization.** (g) 4 hours each term.

Hst 490. **Problems of the Pacific.** (g) 4 hours.

Home Economics

Professor: MABEL A. WOOD.

Assistant Professors: FAITH JOHNSTON, LOIS E. NELSON, FRANCES VAN VOORHIS, MARGARET J. WIESE (department head).

THE UNIVERSITY offers elective courses in three main areas of home economics: clothing, textiles, and related arts; foods and nutrition; and family life and home administration. The courses are designed to prepare students for better home and community living as a part of their liberal education. The University does not offer major work in home economics; in the Oregon State System of Higher Education, major studies in the field are allocated to the School of Home Economics at Oregon State University.

Lower-division instruction in home economics offered at the University of Oregon and at Oregon State University is essentially the same. It is recommended that students intending to major in the field enter the institution where major work is offered at the beginning of their freshman year; they may if they wish, however, spend their freshman and sophomore years at the University of Oregon,

* No-grade course.

and transfer to Oregon State University at the beginning of the junior year, with out loss of credit and with fundamental requirements for upper-division standing fully met.

The foods and clothing laboratories of the Department of Home Economics are designed and equipped in accordance with the best modern standards for instruction in these fields.

Subject Preparation for High-School Teaching. For certification as a teacher of home economics in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. The requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—36 term hours in home economics, including work in child development, clothing, family relationships, foods and nutrition, housing and home furnishings, and home management; for a *standard norm*, granted after five years of college work, a *standard norm*—54 term hours in home economics, including the basic-norm requirement.

The University offers the work required for the basic norm; it does not, however, offer the additional work required for the standard norm.

The requirements stated above will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 263.

LOWER-DIVISION COURSES

HEc 121, 122, 123. **Clothing Construction.** 2 hours each term.

Principles of clothing construction. HEc 121: basic skills in use of patterns, fabrics, and equipment. HEc 122: selection, management, and construction, using silk and manmade fibers. HEc 123: planning and construction of a lined wool suit or coat. It is recommended that the sequence be preceded by HEc 124, 125, 126 or taken concurrently.

HEc 124, 125, 126. **Clothing Selection.** 1 hour any term.

Aesthetic and economic factors in the selection of clothing. HEc 124: aesthetic principles of line, color and texture. HEc 125: expression of individuality through clothing. HEc 126: problems of consumer buying of clothing; clothing expenditures of college students and the family.

HEc 125. **Textiles.** 2 hours any term.

Designed to develop a basic consumer understanding of the characteristics of fibers and fabrics; selection, purchase, and care of fabrics and household linens. Suggested parallel for HEc 111.

HEc 226, 227, 228. **Foods.** 3 hours each term.

Scientific approach to food preparation; nutritional, managerial, and aesthetic aspects of meal planning. 2 recitations; 2 two-hour laboratory periods.

HEc 222. **Family Relationships.** 2 hours any term.

Values and goals of modern family life; family roles of men and women; choice of a marriage partner; adjustment to family life.

HEc 225. **Nutrition.** 2 hours any term.

Scientific study of foods; choice of foods for the maintenance of health; common nutritional problems; evaluation of nutritional information provided in the mass media.

HEc 250. **Camp Cookery.** 1 hour any term.

Fundamental principles of cookery applied to simple meals in home and camp. 1 three-hour laboratory period. Open to men only.

UPPER-DIVISION COURSES

HEc 325. **Child Care.** 3 hours any term.

Current concepts of growth and development; prenatal care; behavior and

development of the preschool child; the needs of the young child in the family; adult-child relationships.

HEc 331. **Home Planning and Furnishing.** 3 hours any term.

Principles involved in the planning and furnishing of a home in the contemporary world; scientific, aesthetic, and traditional factors.

HEc 339. **Household Management.** 3 hours any term.

Management principles applied to home life; choice, use, and care of basic household equipment.

HEc 340. **Consumer Problems.** 3 hours any term.

Management of the family income; budgeting, use of credit, insurance; intelligent choice in the market; consumer aids; consumer protection.

Mathematics

Professors: A. F. MOURSUND (department head), PAUL CIVIN, C. W. CURTIS,* K. S. GHENT, I. M. NIVEN, V. I. SHAPIRO, BERTRAM YOOD.

Associate Professors: F. W. ANDERSON,† F. C. ANDREWS,† D. K. HARRISON, E. A. MAIER, D. R. TRUAX, L. E. WARD, JR.

Assistant Professors: F. S. CATER, R. M. GILLETTE, T. E. MATTHES, ROBERT ODEH, W. H. SILLS, K. R. STROMBERG, G. W. STRUBLE, J. M. VAN BUSKIRK, C. R. B. WRIGHT.

Instructors: R. B. CRITTENDEN, R. J. LINDAHL, MARIE R. MASON, LULU MOURSUND, P. R. SHERMAN, HAZEL S. SMITH, J. D. STAFNEY, ELSA B. STRUBLE, H. D. WARNER.

Fellows: G. F. BACHELIS, W. T. BEYER, P. L. CHERN, F. R. DEMEYER, J. M. FRANKLIN, L. H. HARPER, E. C. INGRAHAM, E. F. KENNEL, R. A. KREISS, J. D. LEADLEY, M. E. MANIS, H. G. RUTHERFORD, D. R. TURNIDGE, M. B. WOODROOFE.

Assistants: A. P. BAARTZ, J. A. BAKER, J. H. BJERRING, W. R. CARSRUD, A. J. CLEMONS, CAROL J. CONNOLLY, B. N. DICKMAN, G. E. DIMITROFF, KATHLEEN M. DONALDSON, G. M. ENGEL, L. L. ENGLISH, E. N. FERGUSON, R. M. FISCHLER, C. E. FORD, K. R. FULLER, H. R. GAGE, G. B. GALE, R. L. HELLMAN, R. W. HONORLAH, D. R. ILTIS, MARY ANN IVANOVICH, G. T. JANUSZ, C. L. JARVIS, R. F. JOHNSONBAUGH, C. W. JUNG, D. M. KELKER, Y. L. LEE, N. R. MARTIN, J. W. MCCOY, G. E. MEEK, G. G. MICHAEL, T. B. PAINE, H. L. PETERSON, D. T. PIELE, J. W. SHERWOOD, R. A. SHORACK, R. S. SILVERMAN, A. L. STONE, DIANE K. STONE, G. W. TRICKEY, B. A. VIK, C. C. WHITE, L. J. WILLIAMS.

MATHEMATICS COURSES at the University are designed to provide the training in rigorous thinking and analytical processes which is fundamental to a liberal education; to provide basic mathematical and statistical training for students in the social, biological, and physical sciences and in the professional schools; to prepare prospective teachers of mathematics; and to provide advanced and graduate work for students specializing in the field.

Preparation for Major Work. Students planning to major in mathematics at the University should take high-school courses in algebra (at least one and one-half years) and plane geometry and, if possible, courses covering trigonometry, solid geometry, and more advanced topics.

Majors usually begin University work in mathematics with Introductory College Mathematics (Mth 104, 105, 106), Fundamentals of Mathematics (Honors College) (Mth 107, 108, 109), or Analytic Geometry and Calculus (Mth 204, 205,

* On leave of absence 1963-64.

† On sabbatical leave 1963-64.

206). The latter sequence is recommended for well-prepared freshmen whose high-school program included trigonometry. Students not prepared for one of these sequences must make up their deficiencies in one or both of the following courses: Elements of Algebra (Mth 10), Intermediate Algebra (Mth 100).

Students may enter Mth 204, 205, 206 upon completion of Mth 105; students electing Mth 100, 104, 105 must take Mth 106 if they wish to enroll for Differential and Integral Calculus (Mth 201, 202, 203).

Science Group Requirement. The following sequences are correlated to make up an integrated year's work to satisfy the science group requirement; Mth 100, 104, 105; Mth 104, 105, 106; Mth 104, 105, 204; Mth 105, 204, 205; Mth 107, 108, 109; Mth 201, 202, 203; Mth 204, 205, 206.

Mth 204, 205, 206 is the recommended sequence for all exceptionally well-prepared students. Mth 104, 105, 106 is the standard sequence for students who enter with one and one-half years of high-school algebra, and who intend to major in mathematics, the physical sciences, or architecture, or to take more than one year's work in college mathematics. Mth 107, 108, 109 provides a distinctive approach to college mathematics for students in the Honors College. The department will recommend suitable sequences in the light of the individual student's interests and mathematics placement-test score.

Requirements for Bachelor's Degree. To qualify for a bachelor's degree with a major in mathematics, a student must complete 48 term hours of work in the field, including Differential and Integral Calculus (Mth 201, 202, 203) or Analytic Geometry and Calculus (Mth 204, 205, 206), and at least 24 term hours in upper-division mathematics courses exclusive of Mth 425, 426, 427, Mth 444. Not more than 15 hours selected from Mth 441, 442, 443, Mth 447, 448, 449 may be counted toward the minimum major requirement.

Students preparing for graduate work in mathematics should include in their programs: Mth 412, 413, 414; Mth 418, Mth 419, Mth 420; Mth 431, 432, 433; and Mth 447, 448, 449. Students preparing for graduate work in statistics should follow the same program. Attainment of a reading knowledge of at least one of the following languages is highly recommended: French, German, Russian.

Subject Preparation for High-School Teaching. For certification as a teacher of mathematics in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education for (1) the teaching of elementary algebra and geometry or (2) the teaching of advanced mathematics. The requirements are as follows:

(1) *Elementary Algebra and Geometry.* For a basic certificate, granted after four years of college work, the following *basic norm*—27 term hours of college-level mathematics, including calculus; for a standard certificate, granted after five years of college work, the following *standard norm*—39 term hours of college-level mathematics, including the basic-norm requirement.

(2) *Advanced Mathematics.* For a basic certificate, granted after four years of college work, the following *basic norm*—36 term hours of college-level mathematics, including algebra, geometry, trigonometry, and calculus; for a standard certificate, granted after five years of college work, the following *standard norm*—54 term hours of college-level mathematics, including the basic-norm requirement.

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 264.

To receive the unqualified recommendation of the department, prospective mathematics teachers should satisfy the requirements for a bachelor's degree with a major in mathematics, and should include in their programs: Calculus (Mth

313), Fundamentals of Algebra (Mth 341, 342, 343), Fundamentals of Geometry (Mth 344, 345), and Fundamentals of Statistics (Mth 346). More-advanced regular session courses with similar content and special upper-division courses offered during summer sessions are acceptable substitutes for courses listed above.

Nonmajor students who wish to prepare for the teaching of mathematics as a second field should include Fundamentals of Algebra (Mth 341, 342, 343) and Fundamentals of Geometry (Mth 344, 345) in their programs.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work. The Department of Mathematics offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Candidates for the Ph.D. degree are accepted in such fields as number theory, algebra, analysis, topology, topological algebra, and probability and statistics. Students interested in graduate work should consult the head of the department concerning departmental requirements.

Statistical Laboratory and Computing Center. A Statistical Laboratory and Computing Center is operated under the auspices of the Graduate School, in close cooperation with the Department of Mathematics. An IBM 1620 electronic computer is available for research and teaching. See page 117.

LOWER-DIVISION COURSES

Mth 100. Intermediate Algebra. 4 hours.

Fundamentals of algebra. Intended for students entering with less than two years of high-school algebra; not open for credit for students entering with four years of high-school mathematics including trigonometry.

Mth 104, 105, 106. Introductory College Mathematics. 4 hours each term.

A unified treatment of college algebra, trigonometry, analytic geometry, and elementary calculus. Prerequisite: one and one-half years of high-school algebra or Mth 100.

Mth 107, 108, 109. Fundamentals of Mathematics (Honors College). 4 hours each term.

Introduction to logic; elementary theory of sets; partitions and counting; probability; unified treatment of algebra, trigonometry, and analytic geometry. Prerequisite: one and one-half years of high-school algebra; enrollment in the Honors College.

Mth 121, 122. Mathematics for Elementary Teachers. 3 hours each term.

Basic concepts of arithmetic, elementary algebra, and plane geometry; applications to statistics and mathematics of finance. For prospective elementary teachers; not open to other students. 4 recitations.

Mth 124. Mathematics of Finance. 4 hours.

Simple and compound interest and discount, annuities, periodic-payment plans, bonds, depreciation, mathematics of insurance, and other topics related to business. Prerequisite: Mth 104.

Mth 201, 202, 203. Differential and Integral Calculus. 4 hours each term.

Standard sequence for students of physical, biological, and social sciences. Prerequisite: Mth 106. Not open to students who have credit for Mth 204, 205, 206.

Mth 204, 205, 206. Analytic Geometry and Calculus. 5 hours each term.

A unified treatment of analytic geometry and calculus; equivalent of Mth 106 and Mth 201, 202, 203. Special section for Honors College and other superior students. Prerequisite: high-school trigonometry and a high placement score; or Mth 105; or Mth 104 with a grade of A or B.

Mth 290. Seminar. Hours to be arranged.

Selected topics not covered in the regular lower-division courses. For students of high ability.

UPPER-DIVISION COURSES

Mth 313. **Calculus.** 4 hours.

Foundations of the calculus. For prospective high-school teachers. Prerequisite: year sequence in mathematics and consent of instructor. Maier, Moursund.

Mth 316, 317, 318. **Linear Algebra and Coordinate Geometry.** 3 hours each term.

Vector spaces, matrices, quadratic forms; applications to coordinate geometry. Prerequisite: year sequence in calculus or consent of instructor. Ghent, Gillette, Sills.

Mth 319. **Number Theory.** 3 hours.

Divisibility, congruences, number theoretic functions, Diophantine equations. Prerequisite: year sequence in calculus or consent of instructor. Ghent, Maier, Niven.

Mth 341, 342, 343. **Fundamentals of Algebra.** 3 hours each term.

Algebraic topics, for prospective secondary-school teachers of mathematics. Inequalities, congruences, bases of the number system, foundations of algebra, set theory, Boolean algebras, elementary matrix and group theory. Prerequisite: year sequence in calculus or consent of instructor. Ghent, Maier, Niven.

Mth 344, 345. **Fundamentals of Geometry.** 3 hours each term.

Geometric topics, for prospective secondary-school teachers of mathematics. Length, area, volume, and the related limit problem. Ruler and compass constructions, locus problems. Euclidean and non-Euclidean geometries. Coordinate and noncoordinate techniques in the plane and in space. Prerequisite: year sequence in calculus or consent of instructor. Maier, Niven.

Mth 346. **Fundamentals of Statistics.** 3 hours.

Topics in probability and statistics, for prospective secondary-school teachers of mathematics. Probability and random variables on finite sets. Binomial and hypergeometric distributions. Random number tables. Frequency distributions and histograms. Algebra of elementary statistical distributions. Tests of hypotheses and linear estimates. Prerequisite: year sequence in calculus or consent of instructor. Truax, Niven.

Mth 403. **Thesis.** Hours to be arranged.

Mth 405. **Reading and Conference.** Hours to be arranged.

Mth 407. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Mth 412, 413, 414. **Introduction to Abstract Algebra.** (G) 3 hours each term.

Sets, relations, mappings; introduction to the theory of groups, rings, fields, polynomial rings; linear algebra and matrix theory. Prerequisite: Mth 318 or consent of instructor. Anderson, Curtis, Harrison, Wright.

Mth 418. **Differential Equations.** (g) 3 hours.

Linear differential equations, applications, systems of equations. Prerequisite: Mth 201, 202, 203 or Mth 204, 205, 206. Niven, Wright, Yood.

Mth 419. **Functions of Several Variables.** (g) 3 hours.

Infinite series, power series, partial differentiation, multiple integrals, and other related topics. Prerequisite: Mth 201, 202, 203 or Mth 204, 205, 206. Niven, Wright, Yood.

Mth 420. **Vector Analysis.** (g) 3 hours.

Vector operations, divergence theorem, Stokes' theorem, applications. Prerequisite: Mth 419 or equivalent. Niven, Wright, Yood.

Mth 421. **Functions of a Complex Variable.** (g) 3 hours.

Cauchy's theorem, residues, contour integration. Shapiro.

Mth 422. Fourier Series. (g) 3 hours.

Pointwise and mean convergence, orthogonal functions, applications to partial differential equations. Shapiro.

Mth 425, 426, 427. Elements of Statistical Methods. (g) 3 hours each term.

A basic sequence in statistical analysis; not intended for mathematics majors. Presentation of data; sampling theory; tests of significance; analysis of variance and covariance; regression and correlation; sequential analysis; design of experiments; distribution-free techniques. Prerequisite: Mth 100 or equivalent; junior standing. Matthes, Odeh, Truax.

Mth 428, 429, 430. Numerical Analysis. (G) 3 hours each term.

Approximation theory, finite difference calculus, numerical integration, matrix methods, numerical solution of differential equations. Prerequisite: Mth 418 or concurrent enrollment in an upper-division analysis course. Struble.

Mth 431, 432, 433. Advanced Calculus. (G) 3 hours each term.

A rigorous treatment of topics introduced in elementary calculus or more-advanced topics basic to the study of real and complex variables. Prerequisite: calculus and upper-division mathematics sequence. Cater, Civin, Moursund.

Mth 441, 442, 443. Introduction to Statistical Theory. (g) 3 hours each term.

Designed primarily for nonmajors who have a working knowledge of calculus and for mathematics majors intending to take no further work in statistics. Topics covered include: elementary theory of probability, sampling theory, estimation, hypothesis testing, sequential and nonparametric methods, elementary decision theory. Prerequisite: calculus. Matthes, Odeh, Truax.

Mth 444. Computing. (g) 4 hours.

Introduction of the principles of digital computers; analysis of data-processing systems; programming languages and techniques; selected advanced topics of current interest. Prerequisite: Mth 106. Odeh, Struble.

Mth 447, 448, 449. Mathematical Statistics. (G) 3 hours each term.

Combinatorial probability; development of distribution theory from the theory of probability; derivation of sampling distributions; introduction to theory of statistical estimation and inference. Prerequisite: calculus and upper-division mathematics sequence. Andrews, Matthes, Truax.

GRADUATE COURSES

*Mth 501. **Research.** Hours to be arranged.

*Mth 503. **Thesis.** Hours to be arranged.

Mth 505. **Reading and Conference.** Hours to be arranged.

Mth 507. **Seminar.** Hours to be arranged.

Banach Algebras. Yood.

Commutative Algebra. Anderson, Harrison.

Complex Variable Theory. Shapiro.

Fourier Analysis. Shapiro.

Groups and Representations. Curtis, Wright.

Harmonic Analysis. Civin, Stromberg.

Homological Algebra. Anderson, Curtis, Harrison.

Noncommutative Rings. Anderson, Curtis, Harrison.

Number Theory. Niven.

Statistics and Stochastic Processes. Andrews, Matthes, Truax.

Topics in Functional Analysis. Civin, Sills, Stromberg, Yood.

Topology. Gillette, Van Buskirk, Ward.

Mth 541, 542, 543. **Abstract Algebra.** 3 hours each term.

Group theory, fields, Galois theory, algebraic numbers, matrices, rings, algebras. Anderson, Curtis, Harrison, Wright.

Mth 544, 545, 546. **Structure of Rings and Algebras.** 3 hours each term.

Topics selected from: rings with minimum condition, algebras over a commu-

* No-grade course.

tative ring, rings without finiteness assumptions, and nonassociative rings and algebras. Anderson, Curtis, Harrison, Wright.

Mth 547, 548, 549. **Algebraic Number Theory.** 3 hours each term.

Algebraic, irrational, transcendental, and normal numbers; approximation of algebraic and transcendental numbers by rationals. Niven.

Mth 551, 552, 553. **Theory of Functions of a Real Variable.** 3 hours each term.

Measure and integration, Hilbert and Banach spaces, and related topics. Cater, Stromberg, Yood.

Mth 554, 555, 556. **Theory of Functions of a Complex Variable.** 3 hours each term.

The theory of Cauchy, power series, contour integration, analytic continuation, entire functions, and related topics. Shapiro, Stromberg.

Mth 557, 558, 559. **Topics in Classical Analysis.** 3 hours each term.

Fourier series, Fourier transforms, integral equations, linear operations in Hilbert space, spectral theory. Civin, Shapiro.

Mth 561, 562, 563. **Modern Theories in Analysis.** 3 hours each term.

Measure theory, Banach spaces and algebras, analysis in topological groups; modern functional analysis, with emphasis on the connections with classical analysis and on applications to harmonic analysis. Civin, Sills, Stromberg, Yood.

Mth 571, 572, 573. **Topology.** 3 hours each term.

Set theory, topologies, comparison of topologies, product and quotient topologies, convergence, continuity, metrization, compactification, uniform structures, introduction to algebraic topology. Gillette, Van Buskirk, Ward.

Mth 581, 582, 583. **Theory of Estimation and Testing Hypotheses.** 3 hours each term.

Classical theory of testing and estimation, BAN estimates, moment estimates, sequential analysis. Andrews, Matthes, Truax.

Mth 584, 585, 586. **Theory of Probability.** 3 hours each term.

Elements of measure theory, probability in abstract spaces, random variables, independence, cumulative distribution functions, characteristic functions, moments, convergence of distributions, the central limit problem, infinitely divisible distributions; applications to statistics. Andrews, Matthes, Truax.

Mth 587, 588. **Stochastic Processes.** 3 hours each term.

A non-measure-theoretic introduction to the theory of stochastic processes; processes discrete in space and time, discrete in space and continuous in time, continuous in space and time; applications. Andrews, Truax.

Mth 591, 592, 593. **Advanced Mathematical Statistics.** 3 hours each term.

Topics selected from: analysis of variance and design of experiments; multivariate analysis; sampling from finite populations; nonparametric methods. Andrews, Matthes, Odeh, Truax.

Mth 594. **Theory of Games.** 3 hours.

The theory of games, with special emphasis on zero-sum two-person games. Matthes, Truax.

Mth 595, 596. **Statistical Decision Theory.** 3 hours each term.

Statistical decision theory based on the theory of games; sequential decision theory; comparison of experiments. Truax.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Mth 10. **Elements of Algebra.** No credit (extension).

Mth 457, 458, 459. **Foundations of Mathematics.** (g) 3-4 hours each term (summer sessions).

Mth 468, 469. **Probability and Statistics.** (g) 3-4 hours each term (summer sessions).

- Mth 478, 479. **Algebra.** (g) 3-4 hours each term (summer sessions).
 Mth 487, 488, 489. **Geometry.** (g) 3-4 hours each term (summer sessions).
 Mth 498, 499. **Analysis.** (g) 3-4 hours each term (summer sessions).
 Mth 578, 580. **Algebra.** 3-4 hours each term (summer sessions).
 Mth 589. **Geometry.** 3-4 hours (summer sessions).
 Mth 598, 599. **Analysis.** 3-4 hours each term (summer sessions).

Medical Technology

THE UNIVERSITY offers a four-year program in medical technology, leading to the bachelor's degree. The program includes three years of work on the Eugene campus and one year at the Medical School in Portland. During his three years on the Eugene campus, the student must satisfy (1) all general University degree requirements that cannot be satisfied with work taken at the Medical School, and (2) the special science requirements for admission to the fourth-year program at the Medical School. The following recommended courses satisfy the science requirements:

	Term Hours
Mathematics (above Mth 10).....	12
General Biology (Bi 101, 102, 103).....	12
General Chemistry (Ch 104, 105, 106, 107)	10
Inorganic Qualitative Analysis (Ch 108)	2
Intro. Volumetric Analysis (Ch 109)	2
Organic Chemistry (Ch 334, 335, Ch 337, 338).....	10
Quantitative Analysis (Ch 320).....	4
Essentials of Physics (Ph 101, 102, 103)	9
Intro. to Bacteriology (Bi 381, 382).....	6
Upper-division biology	6

For an outline of the fourth-year program, see the University of Oregon Medical School Catalog.

Medicine, Preparatory

THE UNIVERSITY offers a premedical program which satisfies the requirements for admission to American medical schools, including the University of Oregon Medical School in Portland. The program is supervised by a special advisory committee, of which Dr. Arnold L. Soderwall, professor of biology, is chairman.

Medical schools have varying admission requirements. The requirements of the several schools are listed in *Admission Requirements for American Medical Colleges*, an annual volume published by the Association of American Medical Colleges; students planning to seek admission to a particular school should consult this volume, and plan their premedical studies to satisfy any special requirements of the school.

Nearly all medical schools require applicants to take the Medical College Admissions Test. The test is given twice each year, in October and May; students are advised to take the test in October one year before they plan to enter medical school. Application for permission to take the test must be made about a month before the scheduled date. Application blanks may be obtained in the Office of Admissions.

The University of Oregon Medical School requires that the student must have earned a B.A. or B.S. degree before entrance or must complete the work for the degree at the University of Oregon or at the institution at which he received his premedical preparation before entering upon the work of the third year at

the Medical School. Under University of Oregon regulations, a maximum of 48 term hours of work in medicine may be counted as credit earned in residence toward the bachelor's degree.

Students who expect to complete the requirements for a bachelor's degree at the Medical School should satisfy, in their premedical program, all requirements for the degree (including general University requirements and requirements for a major in the College of Liberal Arts) that cannot be satisfied with work taken at the Medical School.

Many students elect a departmental major in the College of Liberal Arts (history, biology, chemistry, physics, etc.); these students should consult their departmental adviser at the beginning of their junior year concerning major requirements. Students may also elect a more general program leading to a major in general science.

The following courses satisfy both the science requirements for admission to the University of Oregon Medical School and, with additional science instruction at the Medical School, the requirements for a major in general science:

	Term Hours
Mathematics (above level of Mth 10)	10
General Chemistry (Ch 104, 105, 106)	9
Inorganic Qualitative Analysis (Ch 108), Introductory Volumetric Analysis (Ch 109)	4
General Biology (Bi 101, 102, 103)	12
General Physics (Ph 201, 202, 203, Ph 204, 205, 206)	15
Organic Chemistry (Ch 334, 335, Ch 337, 338)	10
Advanced biology (comparative anatomy, embryology, or genetics)	6

Scholarships. For special scholarships for premedical students, see page 97.

Honors. See HONORS COLLEGE, pages 120-123.

Nursing, Preparatory

Professor: JEAN E. BOYLE (director).

Associate Professor: GUHLI J. OLSON (in charge of prenursing program).

Instructor: VIOLA EISENBACH.

THE UNIVERSITY offers on the Eugene campus a three-term prenursing curriculum to prepare students for admission to the University of Oregon School of Nursing located on the campus of the Medical School in Portland. The student enters the School of Nursing in the summer term after her freshman year for continued liberal studies and professional courses leading to the B.S. degree. The total nursing curriculum requires four academic years and one summer term for completion.

The requirements for admission to the School of Nursing are as follows:

(1) Completion of a required freshman program at the University of Oregon, or at any accredited junior college, college, or university whose program is acceptable for transfer of credit to the University of Oregon.

(2) A grade-point average of at least 2:00 for the freshman-year program.

(3) A satisfactory rating on the National League for Nursing Prenursing and Guidance Examination. This examination should be taken early in the student's freshman year; application to take the examination should be made well in advance. Prenursing students should consult their prenursing adviser or write to the School of Nursing concerning examination dates.

Initial application for admission to the School of Nursing should be made in January of the student's freshman year. A transcript showing completion of the prenursing requirements should be filed at the close of the spring term in June. Because of the professional nature of nursing and the responsibility of the profession to the public, the faculty of the school has established high standards of student selection.

The required freshman prenursing program is outlined below:

	Term Hours
Elementary Chemistry (Ch 101, 102, 103).....	12
English Composition (Wr 111, 112, 113).....	9
Literature (Eng 101, 102, 103 <i>or</i> Eng 104, 105, 106 <i>or</i> Eng 107, 108, 109 <i>or</i> AL 101, 102, 103).....	9
Principles of Dietetics (HEc 225).....	2
Fundamentals of Speech (Sp 111).....	3
Physical education	3
Electives—Background for Nursing (Nur 111) recommended.....	10

For a detailed outline of the total nursing program, see the School of Nursing Catalog; copies of the Catalog may be obtained by writing to: Director, University of Oregon School of Nursing, 3181 S.W. Sam Jackson Park Road, Portland, Oregon.

LOWER-DIVISION COURSE

Nur 111. **Background for Nursing.** 3 hours.

The historical background of modern social and health movements; the relation of these to the evolution of nursing as a profession. Olson.

Philosophy

Professors: ALBUREY CASTELL, B. E. JESSUP.

Associate Professor: F. B. EBERSOLE (department head).

Assistant Professors: JOHN COOK, THEODORE DRANGE, ARNULF ZWEIG.

Instructors: B. E. LIDDELL, ROBERT PAUL.

Lecturer: A. B. CODY.

Assistants: V. V. CHATMAN, T. C. DARBY, R. M. DAVIS, E. D. HEATH, J. T. HOPKINS, D. S. NELSON.

THE DEPARTMENT OF PHILOSOPHY offers a major program leading to the Bachelor of Arts or Bachelor of Science degree. The lower-division courses in philosophy provide an introductory survey; the upper-division courses provide a more intensive study of selected philosophical problems and authors.

The minimum major requirement is 45 term hours of work in philosophy with grades of C or better, including 36 hours in upper-division courses. The 45-hour requirement must include History of Philosophy (Phl 301, 302, 303) and other courses arranged in consultation with department advisers.

Students may satisfy the social-science group requirement with any three of the four courses, Phl 201, Phl 202, Phl 203, Phl 204.

The department also offers a graduate program leading to the Master of Arts and Doctor of Philosophy degrees.

Honors. See HONORS COLLEGE, pages 120-123.

LOWER-DIVISION COURSES

Phl 201. **Problems of Philosophy.** 3 hours.

An introduction to the study of some of the persistent problems of philosophy.

Phl 202. **Elementary Ethics.** 3 hours.

An introduction to the philosophical study of morality, e.g., right and wrong, free will and determinism, morals and society, etc.

Phl 203. **Elementary Logic.** 3 hours.

An introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.

Phl 204. **Elementary Aesthetics.** 3 hours.

An elementary study of aesthetic fact and value, and of the relation of aesthetic interest to other human interests, such as the moral, the intellectual, and the religious. Jessup.

Phl 207, 208, 209. **Introduction to Philosophy (Honors College).** 3 hours each term.

Introduction to the study of some significant problems of philosophy and philosophical methods; concerned primarily with topics in logic, ethics, metaphysics, and theory of knowledge. Open only to students in the Honors College.

UPPER-DIVISION COURSES

Phl 301, 302, 303. **History of Philosophy.** 3 hours each term.

Survey of Western philosophy from the Greeks to the twentieth century.

Phl 304, 305, 306. **Revolution and Reform.** 3 hours each term.

A review of social philosophy from Rousseau to Marx and Lenin. Castell.

Phl 313. **The Self in Philosophy.** 3 hours.

A review of philosophical concepts and problems centering in the nature and destiny of the human self. Castell.

Phl 314. **William James.** 3 hours.

Essays by William James, setting forth his views on the nature of man, the relation of belief to action, and the case for pragmatic justification in philosophy. Castell.

Phl 328, 329. **Modern American Philosophy.** 3 hours each term.

Intensive study of selected works of major American philosophers from the late nineteenth century to the present.

Phl 361, 362. **Ethics.** 3 hours each term.

Study of the most important traditional ethical theories; modern philosophical analysis of moral terms and statements. Cody.

Phl 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Phl 407. **Seminar.** (G) Hours to be arranged.

Recent Idealism. Castell.
Wittgenstein. Cook.
Philosophy of Religion. Cook.
Philosophy of Law. Cody.
Leibniz. Paul.

Phl 411, 412. **Philosophy of Science.** (g) 3 hours each term.

Analysis of basic concepts of science, such as "explanation," "chance," "causation," etc. Nature of mathematics and its relation to science. Drange.

Phl 413, 414. **Philosophy of Mind.** (g) 3 hours each term.

Analysis of some basic concepts of psychology, such as "mind" and "behavior"; discussion of the mind-body problem and of methodological issues in psychology.

Phl 415. **Plato.** (G) 3 hours.

Analysis of Plato's major dialogues, with some attention to the significance of Platonism in the history of Western philosophy.

Phl 416. **Aristotle.** (G) 3 hours.

Aristotle's major writings on theory of knowledge, metaphysics, and ethics. Zweig.

Phl 417. **Hume.** (G) 3 hours.

Hume's writings on knowledge, morals, and religion. Ebersole.

Phl 418. **Kant.** (G) 3 hours.

Kant's writings on knowledge, morals, and religion. Zweig.

Phl 421, 422. **Russell and his Contemporaries.** (G) 3 hours each term.

Bertrand Russell's major writings on the theory of knowledge, examined in the context of parallel studies by his contemporaries, G. E. Moore and Wittgenstein. Zweig.

Phl 431, 432. **Philosophy in Literature.** (G) 3 hours each term.

Selective study of major philosophical ideas and attitudes expressed in the literature of Europe and America. Jessup.

Phl 435. **Existentialism.** (G) 3 hours.

The basic ideas of the Christian and atheistic divisions of the existentialist movement; reading of selected works of Kierkegaard, Jaspers, Heidegger, and Sartre; some attention to precursors and to the general modern philosophical situation which negatively has generated the existentialist "rebellion." Jessup.

Phl 441, 442, 443. **Aesthetics.** (G) 3 hours each term.

Systematic study of the meaning and value of aesthetic experience in everyday life and in the arts—painting, music, literature, etc. Jessup.

Phl 452. **Philosophy of Language.** (G) 3 hours.

Examination of philosophical theories of language and meaning; ideals and methods of clarification; definition, analysis; philosophy as study of language. Selected readings. Ebersole.

Phl 453, 454. **Analytic Philosophy.** (G) 3 hours each term.

A critical study of recent analytic philosophy, with special emphasis on the writings of the logical positivists and their predecessors and of contemporary British "linguistic" philosophers.

Phl 461, 462. **Symbolic Logic.** (G) 3 hours each term.

Elements of modern symbolic logic. Formal methods of determining logical validity and consistency. Drange.

Phl 465. **Logical Theory.** (G) 3 hours.

Meta-logic; proofs of consistency and completeness for sentential calculus and first-order predicate calculus; Tarski's definition of truth for formalized languages; modal logic. Prerequisite: Phl 461. Drange.

GRADUATE COURSES

*Phl 503. **Thesis.** Hours to be arranged.

Phl 505. **Reading and Conference.** Hours to be arranged.

Phl 507. **Seminar.** Hours to be arranged.

Phl 511, 512, 513. **Problems of Knowledge.** 3 hours each term.

Examinations of attempts at philosophical analysis and justification of knowledge; perception, memory, induction, the self and other selves. Ebersole.

Phl 514, 515, 516. **Ethical Theory.** 3 hours each term.

An examination of contemporary ethical theory.

* No-grade course.

Physics

Professors: J. L. POWELL (department head), BERND CRASEMANN, S. Y. CH'EN, E. G. EBBIGHAUSEN, R. T. ELLICKSON, G. H. WANNIER.

Associate Professors: F. E. DART, H. J. HROSTOWSKI, J. W. McCLURE.

Assistant Professors: M. D. GIRARDEAU, J. C. KEMP, H. W. LEFEVRE, D. K. McDANIELS, D. O. WELLS.

Associate: U. N. UPADHYAYA.

Fellows: S. D. CLOUD, K. W. DOLAN, R. P. HEBERT, C. J. PILUSO, C. A. SMITH.

Assistants: J. L. BINNEY, H. H. CHAU, H. M. COLBERT, M. E. CUNNINGHAM, P. A. DEUTCHMANN, R. O. GARRETT, D. E. GILBERT, Q. A. HOLMES, J. T. HUNT, JR., B. L. JONES, J. W. LEONARD, A. T. LONSETH, E. C. LOOI, G. A. MOSS, V. I. NEELEY, M. A. PHILIPPAS, P. V. RAO, JOHN RUVALDS, PAUL STEPHAS, D. H. TANIMOTO, A. A. TEMPERLEY, JUDITH K. TEMPERLEY, J. P. VAN DYKE, W. M. ZINIKER.

COURSES OFFERED by the Department of Physics are planned to provide basic training for (1) professional physics majors, (2) persons desiring a broad liberal arts education centered around a major in physics, (3) major students in other science fields, (4) premedical and pre dental students, and (5) students planning to teach the physical sciences in the secondary schools.

The major requirements for a bachelor's degree are: General Physics (Ph 201, 202, 203); General Physics Laboratory (Ph 204, 205, 206); Introductory College Mathematics (Mth 104, 105, 106); Differential and Integral Calculus (Mth 201, 202, 203); General Chemistry (Ch 104, 105, 106, Ch 108, Ch 109); Advanced General Physics (Ph 320, 321, 322); Modern Physics (Ph 411, 412, 413); Electricity and Magnetism (Ph 431, 432, 433); and two additional sequences chosen from the following: Advanced Optics (Ph 441, 442, 443), Thermodynamics and Kinetic Theory (Ph 451, 452, 453), Introduction to Theoretical Physics (Ph 471, 472, 473), Differential Equations (Mth 418), Functions of Several Variables (Mth 419), Vector Analysis (Mth 420), Physical Chemistry (Ch 441, 442, 443).

Students planning to teach in the secondary schools must take required courses in education (see SCHOOL OF EDUCATION).

Subject Preparation for High-School Teaching. For certification as a teacher of physics in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—36 term hours, including work in general physics, intermediate physics, and modern physics; for a standard certificate, granted after five years of college work, a *standard norm*—54 term hours, including the basic-norm requirement. (A teacher who has completed the standard-norm requirement in physics and 12 term hours in chemistry may qualify for the teaching of chemistry as a second field.)

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 265.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Work. The Department of Physics offers a program of graduate work leading to the M.A., M.S., and Ph.D. degrees, with a variety of opportunities for research. Some fields of current research interest in the department are the following: Nuclear physics—nuclear structure, including beta- and gamma-ray spectroscopy; nuclear theory. Solid state physics—optical and magnetic resonance

properties of crystals; theory of the behavior of electrons in crystals. Optical spectroscopy—perturbation of atomic-energy levels due to high pressure and temperature.

A qualifying examination for first-year graduate students is given at the beginning of the fall term. The examination is restricted to questions in the fields of mechanics and electricity. Students who show a lack of adequate preparation in either of these fields are required to take an appropriate undergraduate course, for which no graduate credit is given.

Course requirements for a master's degree with a major in physics normally include, in addition to the substantial equivalent of the undergraduate requirements listed above: two year sequences in physics, at least one of which must be a 500 sequence; and one of the following sequences in mathematics—Advanced Calculus (Mth 431, 432, 433), seminar in applied mathematics (Mth 507), Theory of Functions of a Real Variable (Mth 551, 552, 553), Theory of Functions of a Complex Variable (Mth 554, 555, 556), Topics in Classical Analysis (Mth 557, 558, 559).

LOWER-DIVISION COURSES

Ph 101, 102, 103. **Essentials of Physics.** 3 hours each term.

Fundamental principles of physics, intended for students not majoring in science; requires less mathematical preparation than Ph 201, 202, 203. 3 lectures. Prerequisite: Mth 110. Dart.

Ph 104. **Descriptive Astronomy: Solar System.** 4 hours fall.

Descriptive treatment of the solar system, including the sun, eclipses, planets, comets, and meteors. 4 lectures. Ebbighausen.

Ph 105. **Elementary Meteorology.** 4 hours winter.

Elementary treatment of weather phenomena, including discussion of instruments, cloud types, fog and rain production, frontal phenomena, and map analysis. 4 lectures. Ebbighausen.

Ph 106. **Descriptive Astronomy: Stellar System.** 4 hours spring.

Descriptive treatment of the stellar system, including variable and double stars, clusters, galaxies, and extragalactic nebulae. 4 lectures. Ebbighausen.

Ph 201, 202, 203. **General Physics.** 4 hours each term.

First-year college physics. Special section for Honors College and other superior students. 4 lectures. Prerequisite: mathematics equivalent of Mth 104, 105 or consent of instructor. Powell, Kemp.

Ph 204, 205, 206. **General Physics Laboratory.** 1 hour each term.

Planned to accompany Ph 101, 102, 103 or Ph 201, 202, 203. 1 two-hour laboratory period.

UPPER-DIVISION COURSES

(Unless an exception is noted in the course description, general physics and calculus are prerequisite to all upper-division and graduate courses.)

Ph 320, 321, 322. **Advanced General Physics.** 4 hours each term.

Fundamental principles of Newtonian mechanics; brief introduction to Lagrange's equations; thermodynamics and kinetic theory of gases; introduction to statistical mechanics. 4 lectures. Crasemann.

Ph 401. **Research.** Hours to be arranged.

Ph 405. **Reading and Conference.** Hours to be arranged.

Ph 409. **Special Laboratory Problems.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ph 407. **Seminar.** (G) Hours to be arranged.

Ph 411, 412, 413. **Modern Physics.** (G) 3 hours each term.

Introduction to the fundamental concepts of atomic, nuclear, and solid-state

physics, in terms of experimental developments during the last fifty years. Kinetic theory, Bohr atom, atomic and molecular spectra, nuclear structure, radioactivity. Must be preceded by or accompanied by calculus. Ellickson.

Ph 417, 418. **Atomic and Nuclear Physics.** (g) 3 hours each term.

Atomic structure, elements of spectroscopy. Radioactivity, nuclear reactions, nuclear structure; selected topics in quantum physics. Designed for students preparing for secondary-school teaching. 3 lectures.

Ph 427, 428, 429. **Electronics and Electrical Measurements.** (g) 2 hours each term.

Analysis and laboratory study of DC, transient, and AC response of passive networks, and networks containing active elements such as vacuum tubes and transistors; measurement of electric and magnetic fields; use of transducers and electronic circuits for study and control of physical variables. 1 lecture; 1 three-hour laboratory period. Lefevre.

Ph 431, 432, 433. **Electricity and Magnetism.** (g) 3 hours each term.

Advanced undergraduate study of electromagnetic phenomena, with emphasis on vector methods; electrostatic potentials by solution of Laplace's and Poisson's equations; field and potential changes produced by dielectric and magnetic materials; magnetic fields, potentials, and induced electromotive forces; steady currents and transients using Kirchhoff's laws; AC circuit theory with complex impedance; Maxwell's equations and electromagnetic waves. Prerequisite: Ph 320, 321, 322 or consent of instructor. Lefevre.

Ph 441, 442, 443. **Advanced Optics.** (G) 4 hours each term.

Theory of optical images, aberration; effects of apertures, optical instruments, interference, diffraction, polarization, double refraction, optical activity, dispersion, absorption, scattering, theory of reflection, theories of the nature of light. Ch'en.

Ph 444. **Spectrochemical Analysis.** (G) 3 hours.

Methods of excitation, qualitative analysis, photographic photometry; methods of quantitative analysis, analysis of absorption spectra; practical applications to various fields of industry and research. 2 lectures; 1 three-hour laboratory period. Ch'en.

Ph 451, 452, 453. **Thermodynamics and Kinetic Theory.** (G) 3 hours each term.

Thermodynamics, statistical mechanics, kinetic theory; applications to gases, liquids, solids, atoms, molecules, and the structure of matter. Wannier.

Ph 471, 472, 473. **Introduction to Theoretical Physics.** (G) 3 hours each term.

Mathematical methods of physics; linear operators and transformations, series expansions of arbitrary functions, eigenvalue problems, Green's functions, the calculus of variations, approximate methods; elementary quantum mechanics. Prerequisite: Ph 320, 321, 322 or consent of instructor. Wells.

GRADUATE COURSES

*Ph 501. **Research.** Hours to be arranged.

*Ph 503. **Thesis.** Hours to be arranged.

Ph 505. **Reading and Conference.** Hours to be arranged.

Ph 507. **Seminar.** Hours to be arranged.

Experimental Solid State Physics.

Nuclear Physics.

Advanced Quantum Theory.

Ph 517, 518, 519. **Quantum Mechanics.** 3 hours each term.

The physical basis of wave mechanics; the Schrodinger equation; the hydrogen atom and other problems with exact solutions; approximation methods; time-independent and time-dependent perturbation theory; collision theory; matrix mechanics; angular momentum, radiative transitions. 3 lectures. McClure.

* No-grade course.

Ph 524, 525, 526. Nuclear Physics. 3 hours each term.

Properties of nuclei; two-body problem; nuclear forces; polarization phenomena; beta decay; electromagnetic interactions; nuclear models; scattering, nuclear reactions. 3 lectures. Prerequisite: concurrent enrollment in Ph 517, 518, 519. McDaniels.

Ph 534, 535, 536. Advanced Physical Measurements. 1 or 2 hours each term.

Laboratory work, open only to physics majors. Development of experimental techniques in such fields as high vacua, interferometry, electronics, nuclear physics, properties of crystals, and X-ray diffraction and absorption. 1 or 2 three-hour laboratory periods.

Ph 538, 539, 540. Theoretical Mechanics. 3 hours each term.

Lagrange's equations; Hamilton's principle and equations; potential theory; applications to gravitation, hydrodynamics, and the theory of elasticity. 3 lectures.

Ph 541, 542, 543. Theoretical Nuclear Physics. 3 hours each term.

Nuclear forces, two-body problem, structure of complex nuclei, nuclear reactions, beta decay. 3 lectures. Powell.

Ph 544, 545, 546. Electromagnetic Theory. 3 hours each term.

Microscopic form of Maxwell's equations; derivation and solution of the wave equation; relativistic formulation; motion of charges in given fields; propagation and diffraction; radiation by given sources; coupled motion of sources and fields; the electromagnetic field in dense media. 3 lectures. Girardeau.

Ph 551, 552, 553. Atomic Spectra. 3 hours each term.

Relation of observed spectra to the theory of atomic and molecular structure; quantum mechanical model, electron configurations, spectral terms; Zeeman effect, analysis of band spectra of diatomic molecules, absorption spectra, Raman spectra, and methods of spectrophotometry. Ch'en.

Ph 554, 555, 556. Experimental Spectroscopy. 1 hour each term.

Spectroscopic instruments (prismatic and grating); flame, arc, and spark spectra of elements; analysis of series lines in atomic spectra; Zeeman effect, analysis of band spectra of diatomic molecules, absorption spectra, Raman spectra, and photographic photometry. 1 three-hour laboratory period. Ch'en.

Ph 578, 579, 580. Solid State Physics. 3 hours each term.

Thermal, electrical, optical, and magnetic properties of solids; band theory; metals, semiconductors, and insulators; defects in solids. 3 lectures. Prerequisite: for Ph 579, 580. quantum mechanics; may be taken concurrently. Wannier.

Political Science

Professors: J. C. DAVIES (department head), A. S. FLEMMING, J. F. GANGE, C. P. SCHLEICHER, L. G. SELIGMAN,* E. S. WENGERT.†

Associate Professors: R. E. AGGER, D. GOLDRICH, HERMAN KEHRLI, J. A. KIEFFER, L. C. MARQUIS, W. C. MITCHELL.

Assistant Professors: A. M. HANHARDT, JR., J. R. KLONOSKI.

Instructors: J. R. FISZMAN, M. N. GOLDSTEIN, LeROY GRAYMER, R. I. MENDELSON, JOYCE M. MITCHELL.

Lecturers: DEREK CRABTREE, D. M. DUSHANE.

Fellows: RICHARD HAINES, B. KENNY, K. P. LANGTON, J. OLSON, C. POWELL.

Assistants: O. ADEKANMBI, RALPH BUNCH, RAFIQUIL CHOUDHURY, RODNEY CONVERSE, D. M. DOBKIN, G. S. ESPINA, C. L. GARRISON, EDET ITUEN, R. JOHNSON, I. G. KHAN, C. L. KIM, DON LAWS, A. E. LIND, J. MCKENNY,

* On leave of absence 1963-64.

† Deceased Feb. 22, 1964.

J. F. MEDLER, JOANN PAINE, R. POMERLAU, B. F. SAALFELD, RICHARD STYSKAL, E. R. TAPPER, JIN VIBHATAKARASA, YUNG WEI, W. H. WROTH.

THE UNDERGRADUATE PROGRAM in political science is designed: (1) to provide a systematic understanding of the political process; (2) to provide a basic background to students preparing for careers in government, law, journalism, and the teaching of social studies; (3) to prepare students for graduate work leading to professional careers in political science.

At the lower-division level, the department offers three terms of work in American governmental politics (PS 201, 202, 203), with an alternative for the third term, of international relations (PS 205), and Introduction to Political Science (PS 206, 207, 208), a year sequence concerned with basic concepts and methods.

The advanced courses offered by the department fall into three groups—(1) Political theory and method: PS 311; PS 430, PS 431, PS 432; PS 433, 434, 435; PS 456, 457. (2) Comparative politics: PS 312; PS 330, 331, 332; PS 337, 338, 339; PS 351; PS 412, 413; PS 414, 415, 416; PS 424, PS 425, PS 426, PS 427, PS 428; PS 484, 485, 486; PS 487, 488, 489; PS 490, 491; PS 494, 495, 496. (3) International relations: PS 320, 321, PS 322; PS 391, 392, 393; PS 420, 421; PS 422; PS 440, 441, 442.

Undergraduate majors in political science build their programs on a base of a minimum of 9 term hours of lower-division courses in political science or Introduction to Social Science (Honors College) (SSc 201, 202, 203). Principles of Political Science (PS 311), Introduction to Comparative Politics (PS 312), one term of World Politics (PS 320), and two additional terms of work in political theory and method are required of all majors. Courses presented in satisfaction of the minimum 36-hour major requirement must be completed with a grade average of C or better.

High-School Teaching. Students preparing for the teaching of social studies in the high schools may elect political science as a field of concentration. For the subject-preparation requirements for the teaching of social studies in Oregon high schools, see pages 128-129.

Honors. See HONORS COLLEGE, pages 120-123.

Master's Degree. Normally, full-time advanced study for one year beyond the bachelor's degree will prepare a student for the final comprehensive written examination for the master's degree. A thesis is optional.

Doctor's Degree. Two years of full-time study beyond the bachelor's degree is normally required in preparation for the preliminary comprehensive examination for the Ph.D. degree. During these years the student is expected to take regular courses, seminars, and reading courses to prepare himself for the examination. After satisfaction of the language requirement and the preliminary examination, the student is expected to write a thesis. For advanced studies in political science, graduate students may draw upon the resources of the Institute for Community Studies and the Institute of International Studies and Overseas Administration.

LOWER-DIVISION COURSES

PS 201, 202 203. **American Governments.** 3 hours each term.

An introduction to the study of forms of government, public policy, public opinion, and community politics in the United States. Klonoski, Hanhardt, staff.

PS 205. **International Relations.** 3 hours.

An introduction to the intellectual tools for the analysis of relations among

nations; the nature of international relations, with contemporary international issues used for reference and illustration. Graymer, staff.

PS 206, 207, 208. **Introduction to Political Science.** 3 hours each term.

What political science is about: its basic concerns, fields, and methods of study. J. Mitchell, Hanhardt, staff.

UPPER-DIVISION COURSES

PS 311. **Principles of Political Science.** 3 hours fall.

Analysis of major concepts underlying the study of politics and administration; systematic introduction to the field for majors. W. C. Mitchell.

PS 312. **Introduction to Comparative Politics.** 3 hours, winter or spring.

Analysis of major concepts and approaches in the study of comparative government and politics. Marquis.

PS 320, 321. **World Politics.** 3 hours each term, fall and winter.

Systematic analysis of the nature of international society, and of the motivating and conditioning factors which explain interaction among states and other international entities. Schleicher.

PS 322. **American Foreign Policy.** 3 hours spring.

Contemporary foreign relations of the United States; objectives, world and domestic factors affecting American foreign policy, governmental institutions concerned with development and execution of foreign policy, major issues and problems. Schleicher.

PS 330, 331, 332. **Far Eastern Governments and Politics.** 3 hours each term.

The forms of government, internal politics, and international relations of China, Korea, and Japan. Fiszman.

PS 337, 338, 339. **Southern Asia in Modern Times.** 3 hours each term.

The political forces, institutions, and international relations of the independent countries extending from Pakistan to the Philippines; emphasis on common problems and trends. Schleicher.

PS 351. **Introduction to Public Administration.** 3 hours, fall.

Examination of various approaches to and conceptions of public administration; application of various theories of administration to the study of public organizations; substantive problems of organizations; structure and internal administration; personnel and finance. Mendelsohn.

PS 391, 392, 393. **Far East in Modern Times.** 3 hours each term.

Political, economic, and diplomatic history of China, Japan, and Korea, with some attention to Asiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Dull, Falconeri.

PS 403. **Thesis.** Hours to be arranged.

PS 405. **Reading and Conference.** Hours to be arranged.

PS 407. **Seminar.** Hours to be arranged.

The Federal Administration System. Kieffer.

Field Studies in Public Administration. Mendelsohn.

Government and Politics of Latin America. Goldrich.

Politics of Developing Nations. Davies, Goldrich, Wengert.

Publics and Political Leadership. J. Mitchell.

Studies in the Judicial Process. Klonoski.

Studies in Law and Society. Klonoski.

Studies in Legislative Politics. J. Mitchell.

Voters and Voting Behavior. Agger, Davies, J. Mitchell, W. Mitchell.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

PS 412, 413. **Administrative Organization and Behavior.** (G) 3 hours each term, winter and spring.

A comparison of concepts and theories utilized in the study of organizations and their environments; the problems of officials and employees in the organi-

zation setting and the factors influencing their behavior; an examination in depth of selected studies of organizations and their environments; problems of analysis and techniques. Mendelsohn.

PS 414, 415, 416. **Political Parties and Public Opinion.** (G) 3 or 4 hours each term.

Analysis of the structure and functions of political parties and public opinion to provide an understanding of the broad area of politics in various contexts, and of the critical role of politics in society; the interrelationship of generalization and political experience. Seligman, Davies, Crabtree, Kieffer.

PS 420, 421. **International Organization.** (G) 3 hours each term, fall and winter.

The organization of interaction among nations; institutional structures, patterns of communications, processes of collaborations and integration; special attention to the United Nations and to problems arising from the UN system. Graymer.

PS 422. **International Law.** (G) 3 hours spring.

Introduction to international public law as an aspect of international organization; international law and the political process; the International Court of Justice.

PS 424. **Government and Politics of Great Britain.** (G) 3 hours.

Governmental institutions and political processes in Great Britain. Crabtree.

PS 425. **Government and Politics of France.** (G) 3 hours.

Governmental institutions and political processes in France. Marquis.

PS 426. **Government and Politics of Germany.** (G) 3 hours.

Governmental institutions and political processes in Germany. Hanhardt.

PS 427, 428. **Government and Politics of the Soviet Union.** (G) 3 hours each term, fall and winter.

Governmental institutions and political processes in the Soviet Union. Fisman.

PS 430. **Political Theory: General Issues.** (G) 3 hours fall.

Problems posited by political theorists, past and present; demands made upon political theory by society and by practitioners of political science; relations between political theory and political behavior. Crabtree.

PS 431. **Political Theory: Values and Utopias.** (G) 3 hours winter.

Ideals, rights, values, and moral imperatives; natural rights and natural law; utopian models and images of the good life and the good society; problem of ends, related means, and the necessary social and organizational conditions; selected theories from Plato to the modern theorists of the "ideal" social and political orders. Crabtree.

PS 432. **Political Theory: Causes of Political and Social Change.** (G) 3 hours spring.

Problem of identifying change—inevitability, gradualism, and rupture; theories of change—historical, economic, social, and political; the roles of class, group, elite in relation to political power; techniques of change; levels of generality, testability and applicability; selected theories from Plato and Aristotle to the present. Crabtree.

PS 433, 434, 435. **Political Theory: The American Tradition.** (G) 3 hours each term.

The development of American thought about government and its proper relation to life, liberty, and property.

PS 440, 441, 442. **Foreign Policies of the Major Powers.** (G) 3 hours each term.

A systematic and comparative study of the foreign policies of the major world powers, in the light of the general world situation and the internal geographical, social, and institutional situations of each country. Schleicher.

PS 456, 457. **Theory of Democracy.** (G) 3 hours each term.

The internal functioning of democracy as a type of political system; social,

economic, and psychological conditions which affect its development and maintenance. W. C. Mitchell.

PS 484, 485, 486. **The Supreme Court in American Government.** (G) 3 hours each term.

The role of the Supreme Court in the American constitutional system; the nature of the judicial process; limitation of the powers of the national and state governments by guarantees of life, liberty, and property; constitutional law and the shaping of public policy. Klonoski.

PS 487, 488, 489. **The Policy Process.** (G) 3 hours each term.

Systematic study of selected major policies and programs of governmental regulations and service; topics selected from the fields of agriculture, natural resources, foreign aid, urban renewal, etc. Wengert.

PS 490, 491. **Community Politics.** (G) 3 hours each term, winter and spring.

Systematic treatment of concepts, theories, and findings in studies of small, medium, and large communities as political systems, with emphasis on American communities. Agger, Goldrich.

PS 494, 495, 496. **Federal Education, Federal Welfare, and National Security Policy.** (G) 3 hours each term.

Consideration of the factors in the development of policy, with particular reference to the Federal government. PS 494: education policy; PS 495: welfare policy; PS 496: national security policy. Flemming, J. Mitchell.

GRADUATE COURSES

*PS 501. **Research.** Hours to be arranged.

*PS 503. **Thesis.** Hours to be arranged.

PS 505. **Reading and Conference.** Hours to be arranged.

PS 507. **Seminar.** Hours to be arranged.

Allocation of Justice. Klonoski, Mendelsohn.

Analysis of Public Policy. J. Mitchell.

Armament Policies. Schleicher.

Comparative Communist Systems. Fiszman.

Comparative Community Politics. Agger, Goldrich.

Comparative Political Elites. Seligman.

Comparative Political Institutions. Fiszman.

Comparative Politics and the Novel. Marquis.

Comparative Studies in Public Administration. Wengert.

Comparative Western European Politics. Marquis.

Constitutional Law and the Judicial Process. Klonoski.

English Political Theory. Crabtree.

International Politics. Schleicher.

International Relations Theory. Schleicher.

Latin American Politics. Goldrich.

Leadership and Responsibility in U.S. Government. Kieffer.

Organization Theory. Mendelsohn, Wengert.

Policy Implementation Abroad. Gange.

Political Behavior. Davies.

Political Development in the Newer Nations. Davies, Goldrich, Wengert.

Political Revolution. Davies.

Problems of College Teaching. Hanhardt.

The Political System. W. C. Mitchell.

Public Administration and Policy Development. Mendelsohn, Wengert.

Regulatory Administration. Klonoski.

Scope and Methods of Political Science. Davies.

Theories of American Politics. W. C. Mitchell.

United States Foreign Policy. Schleicher.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

PS 340, 341, 342. **Issues and Evaluation of American Foreign Policy.** 3 hours each term (extension).

* No-grade course.

PS 453. **The Struggle for Asia: Democracy vs. Communism.** (g) 4 hours (summer sessions).

PS 454. **Competing Ideologies in the World Today.** (G) 4 hours (extension).

PS 455. **Area Tensions in the World Today.** (G) 4 hours (extension).

Psychology

Professors: R. A. LITTMAN (département head), FRED ATTNEAVE, J. V. BERREMAN, R. W. LEEPER,* N. D. SUNDBERG, LEONA E. TYLER.

Associate Professors: J. S. CARLSON,* H. R. CROSLAND (emeritus), R. F. FAGOT, F. R. FOSMIRE, RAY HYMAN, G. R. LAFORGE, R. W. LEARY,† J. L. MCGAUGH, G. R. PATTERSON, P. H. SCHOEGEN.‡

Assistant Professors: M. H. ACKER, B. F. ANDERSON, LOUIS BREGER, W. A. BRICKER, L. A. DAVISON, L. R. GOLDBERG, O. R. JOHNSON, D. P. KIMBLE, V. SERMAT, J. A. STRAUGHAN, D. F. WRENCH.

Instructors: R. J. KING, W. M. RESCH, JOANNE RUBY.

Fellows: T. L. HARRINGTON, M. C. MADSEN, LILA MCQUEEN, BETHENE PETERSON, D. G. STEIN, D. A. STEVENS, H. E. TRYK.

Assistants: H. ALPERN, A. S. BARCLAY, ELIZABETH COLEMAN, D. W. CURTIS, JR., CAROLYN DENNY, N. R. DENNY, BEVERLY FAGOT, M. A. FISH, M. M. GREENE, G. L. GREGOR, MARY HAMILTON, MARCIA HARRINGTON, H. HAWKINS, NANCY HAWKINS, E. C. HUTCHINSON, W. L. JOHNSON, J. C. KEESEY, J. KIND, DANIEL LANGMEYER, M. W. LUTTGES, R. E. MAIN, MARY L. MARTIN, R. F. MITCHELL, RICHARD OLSON, M. D. RAY, J. B. REID, LINDA ROGERS, E. S. SHIMAN, AUDREY SKAIFE, J. E. SORENG, K. M. STEIN, M. R. STEWART, J. P. TUBBS, J. W. VINCENT, R. B. WELCH, SARAH WING.

THE UNDERGRADUATE COURSES in psychology offered by the University are designed to serve several different objectives: to provide a sound basis for later professional or graduate training in psychology; to satisfy the needs of students, majors and nonmajors, who are interested in psychology primarily as a part of a broad liberal education; and to provide a background in psychological principles and techniques as intellectual tools for work in other social sciences and in such professional fields as education, business, and journalism.

The courses are planned with the thought that all students, regardless of their majors, will have to deal responsibly with many significant psychological problems in their relations with other people, in their later experiences as parents, in their own individual decisions, and in their efforts to understand the processes and problems of modern society.

A minimum of 9 term hours of lower-division work in psychology is a prerequisite for all upper-division courses—except that General Sociology (Soc 204, 205) may serve as the prerequisite for Social Psychology (Psy 334, 335) or Introduction to Industrial Psychology (Psy 447). Additional prerequisites are required for most courses at the 400 level.

To graduate with a major in psychology, a student must complete a minimum of 36 term hours in the field, including at least 24 upper-division hours. Six term hours in statistics may be included in the major requirement. Unless exception is granted by the department, majors are required to take General Psychology Laboratory (Psy 208, 209, 210) or equivalent upper-division laboratory work in psychology. The courses presented in satisfaction of the 36-hour minimum requirement must be completed with a grade average of C or better.

* On sabbatical leave 1963-64.

† On leave of absence, fall term, 1963-64.

‡ On sabbatical leave, winter and spring terms, 1963-64.

Since the Department does not have a prescribed curriculum for its majors, it is essential that majors discuss their plans with advisers; it is only in this way that a sound selection of courses may be made.

Honors. See HONORS COLLEGE, pages 120-123.

Preparation for Graduate Study. Majors in psychology should recognize that a bachelor's degree is seldom a sufficient qualification for professional work and that even the simpler professional openings require at least a year of graduate study.

Students should not undertake graduate work unless their grades in undergraduate psychology courses and courses in related fields have averaged better than B.

Students intending to do graduate work in psychology are urged to take not more than 48 term hours of work in the field as undergraduates. The undergraduate program should include courses at the 300 and 400 (g) levels which cannot be taken for graduate credit in psychology, rather than courses at the 400 (G) level. Prospective graduate students should take a course in statistics, preferably in the junior year. Undergraduate work should be planned to provide a rich background in related fields. If a student's graduate program is to emphasize experimental psychology, his undergraduate work should include courses in biology, mathematics, physics, and chemistry. If his graduate work is to emphasize the clinical or social aspects of psychology, his undergraduate program should include courses in anthropology and other social sciences, and should include some physiology. Students who may wish to do professional psychological work in the public schools, e.g., special education or guidance, should take the required background courses in the School of Education.

Any student who intends to work for the Doctor of Philosophy degree should acquire a reading knowledge of two foreign languages, preferably German and French or Russian.

Graduate Work. The department offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. Areas of specialization include comparative, learning, perception, psycholinguistics, quantitative methods, developmental, individual differences, personality, social, clinical, child-clinical, and counseling. The department maintains, in addition to a general experimental laboratory, a child-study center and child-guidance clinic and rat and monkey laboratories.

A thesis is required for all advanced degrees. Further information concerning the graduate program in psychology may be obtained on request to the department. For general regulations governing graduate work at the University, see GRADUATE SCHOOL, pages 104 ff.

All students applying for admission for graduate work in psychology must provide the department with: (1) a completed application form, (2) transcripts of all previous college work, (3) a report of the student's score on the Graduate Record Examination (Verbal and Quantitative) or the Miller Analogies Test, and (4) letters of recommendation from three persons who know the student's academic potential. These credentials should be sent to the Department of Psychology, in addition to credentials filed with the Office of Admissions.

Students beginning graduate work in psychology are required to take a year of work in a series of core seminars (see Psy 507 below) which provide a breadth of background in the field of psychology and an introduction to research. A detailed statement of the core-seminar requirements will be furnished on request.

Combined programs may be arranged with speech correction, special education, or other fields such as anthropology, biology, or sociology.

Clinical and Counseling Psychology. The University offers special programs leading to the Ph.D. degree in clinical and counseling psychology. The

clinical and counseling programs differ mainly in part of the practicum training. Counseling students may, however, place emphasis on courses dealing with vocations, industrial problems, educational administration, and personnel relations, while clinical students may place emphasis on courses dealing with psychopathology and with physiological and medical topics. The counseling psychology program is offered jointly by the Department of Psychology and the School of Education.

Practicum facilities in the University Counseling Center, the University Psychological Clinic, and the Oregon State Hospital in Salem are used extensively in all stages of training. Opportunities for supervised experience are also available in the University DeBusk Memorial Clinic and Speech and Hearing Clinic, the Fairview Home in Salem, and the Community Child Guidance Clinic and the Oregon Psychiatric Services for Children in Portland. A number of traineeships are available in Veteran Administration facilities in Roseburg and Portland. The University's doctoral programs in counseling and clinical psychology are approved by the American Psychological Association.

School Psychologist Program. A special undergraduate and graduate program is offered, through the cooperation of the Department of Psychology and the School of Education, to prepare students for positions as school psychologists. The undergraduate work leads to a bachelor's degree with a major in psychology and to a provisional teaching certificate, which qualifies the student for the teaching experience required for certification as a school psychologist. The graduate work leads to a master's degree with a major in psychology and satisfies all requirements for the Oregon school-psychologist certificate; a minimum of five terms of graduate study is required for the completion of the program. It is not possible to take all the required work in summer sessions.

The student's program is planned in consultation with his adviser; the courses included depend, to some extent, on the individual student's background of education and experience. The number of trainees who can be accommodated in the essential clinical-experience courses is limited. Students wishing admission to these courses should consult one of the program advisers not later than the beginning of the first year of graduate work.

Rehabilitation Counseling. The Department of Psychology and the School of Education sponsor jointly a two-year program of graduate training in rehabilitation counseling leading to a master's degree. The program is administered through the Center for Social Service Training and Research (see page 118).

LOWER-DIVISION COURSES

Psy 201, 202. **General Psychology.** 3 hours each term.

Introductory study of behavior and conscious processes. Survey of experimental studies of motivation, learning, thinking, perceiving, and individual differences. Prerequisite for all sections beginning in the fall term: sophomore standing. Anderson, Bricker, Davison, Fagot, Kimble.

Psy 204. **Psychology of Adjustment.** 3 hours.

Introduction to the psychology of personality; basic principles of the nature, development, and changing of personality. Davison, Goldberg, Hyman, Patterson, Serfat, Straughan.

Psy 205. **Applied Psychology.** 3 hours.

Applications of psychology in personnel selection and training; the planning and design of environmental situations for optimal human functioning. Prerequisite: Psy 201, 202.

Psy 208, 209, 210. **General Psychology Laboratory.** 1 hour each term.

Introduction to research methods. Designed to familiarize the student with scientific approaches to problems in psychology. 1 laboratory period. Anderson, Resch.

UPPER-DIVISION COURSES

Psy 334, 335. **Social Psychology.** 3 hours each term.

Analysis of psychological processes in relation to social situations. How languages, perception, learning, thinking, motivation, and attitudes determine and result from social interaction and group processes. Prerequisite: Psy 201, 202 or Soc 204, 205. Breger, Ellis, Hyman, Wrench.

Psy 401. **Research.** Hours to be arranged.

Psy 403. **Thesis.** Hours to be arranged.

Open only to students eligible to work for honors.

Psy 405. **Reading and Conference.** Hours to be arranged.

Open only to students eligible to work for honors.

Psy 416. **Laboratory in Psychological Statistics.** 1 hour.

Exercises in computational procedures, testing statistical hypotheses, and applying correlational methods. Prerequisite: enrollment in Mth 425 or completion of this course or equivalent.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Psy 407. **Seminar.** (G) Hours to be arranged.

Psy 417, 418. **Laboratory in Advanced Psychological Statistics.** (G) 1 hour each term.

Designed to familiarize the student with the principal applications of statistical methods in psychological research. Emphasis on correlational methods, including partial and multiple correlation, analysis of variance, and design of experiments. Prerequisite: enrollment in Mth 426, 427 or completion of this sequence or equivalent.

Psy 421, 422. **Principles and Methods of Psychological Assessment.** (g) 3 hours each term.

Application of psychological methods to the study of the individual; theoretical and statistical rationale of test construction and interpretation; problems involved in the prediction of human behavior; survey of psychological assessment techniques. Goldberg, Davison.

Psy 436. **Character and Personality.** (g) 3 hours fall, spring.

Major theories of personality development and function. Prerequisite: Psy 204 or equivalent. Breger, Davison, Leeper, Sermat.

Psy 439. **Somatopsychology.** (G) 3 hours.

Psychological effects of marked physical deviations, including physical disability and chronic illness. Application of basic principles of motivation, perception, learning, socialization, and adjustment to the behavior and situations of disabled persons. Prerequisite: 9 hours in psychology. Schoggen.

Psy 441, 442. **Group and Individual Differences.** (G) 3 hours each term.

Basic principles for quantitative assessment of human characteristics; research findings concerning intelligence, achievement, aptitudes, interests, and personality; group differences related to sex, age, social class, race, nationality. Tyler.

Psy 447. **Introduction to Industrial Psychology.** (g) 3 hours.

Application of psychological principles to human problems in industrial situations. Emphasis on the understanding of individual needs and motivation; problems of satisfaction and morale; uses of group processes. Prerequisite: Psy 201, 202; or Soc 204, 205 and 3 hours in psychology.

Psy 448. **Industrial Psychology.** (G) 3 hours.

Problems of industrial motivation and morale; prevention of fatigue, monotony, and accidents; principles underlying job analysis and classification; use of psychological tests in the selection and placement of employees; interviews, questionnaires, aptitude scales, and ratings as psychological measures in personnel work; evaluation of service. Prerequisite: introductory courses in statistics and testing.

- Psy 449. Occupational Choice and Psychology of Careers.** (G) 3 hours.
Theories of occupational choice and their importance for the theory of counseling; factors related to vocational development and the patterning of careers; sources of vocational information, and its evaluation and uses in educational and counseling situations. Fosmire, Tyler.
- Psy 450. Abnormal Psychology.** (g) 3 hours fall or winter.
Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Normal motives and adjustments considered in their exaggerations in the so-called neurotic person. Breger, Fosmire, Patterson, Straughan.
- Psy 451. Physiological Psychology.** (G) 2 or 3 hours.
Elementary neuroanatomy and neurophysiology; psychological effects of brain destruction and brain stimulation. Students may undertake laboratory projects by special arrangement. Kimble, Leary, McGaugh.
- Psy 460. Developmental Psychology I: Infancy and Childhood.** (g) 3 hours.
Psy 461. Developmental Psychology II: Adolescence and Maturity. (g) 3 hours.
Development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence, maturity, and old age. Changes of intelligence, motor capacity, emotional response, language, and social behavior. Emphasis on social influences on development. Bricker, Littman, Patterson, Schoggen.
- Psy 465. Motivation.** (G) 2 hours spring.
Review of fundamental concepts of motivation and emotion in humans and animals; instinct, drive, learned motivation, and activation theory, developmental and socio-economic factors. Littman.
- Psy 470. Animal Psychology.** (g) 2 hours.
A survey of learning, motivation, and perception in selected species of animals; phylogenetic comparison and the modern viewpoint. Concurrent enrollment in Psy 471 normally required. Davis, Leary.
- Psy 471. Laboratory in Animal Psychology.** (g) 1 or 2 hours.
Laboratory experience in experiments with rats and monkeys. Davis, Leary.
- Psy 490. Psychology of Learning.** (g) 3 hours.
Survey of fundamental concepts of conditioning, rote learning, discrimination, problem solving, memory, and motor skill. Theory and experimental literature. Leeper, Littman, McGaugh.
- Psy 491. Laboratory in Learning.** (g) 2 hours.
Laboratory work in design, conduct, and analysis of experiments in learning. McGaugh.
- Psy 492. Psychology of Perception.** (g) 3 hours.
Survey of fundamental concepts of vision, audition, somesthesia, etc. Psychophysiological factors and psychophysical methodology. Attneave.
- Psy 493. Laboratory in Perception.** (g) 2 hours.
Laboratory work in design, conduct, and analysis of experiments in perception. Attneave.

GRADUATE COURSES

- *Psy 501. Research.** Hours to be arranged.
- Psy 502. Research Symposium.** Hours to be arranged.
- *Psy 503. Thesis.** Hours to be arranged.
- Psy 505. Reading and Conference.** Hours to be arranged.
- Psy 507. Seminar.** Hours to be arranged.
The seminars vary from year to year depending on faculty interests and student needs. Those most frequently given are:

* No-grade course.

Advanced Counseling. Tyler.
 Communication and Persuasion. Wrench.
 Core Comparative. Leary.
 Core Developmental. Bricker, Patterson, Schoggen.
 Core History and Systems. Littman.
 Core Individual Differences. Sundberg, Tyler.
 Core Learning. Littman, McGaugh.
 Core Perception. Attneave.
 Core Personality. Breger, Leeper.
 Core Physiological. Kimble, Leary, McGaugh.
 Core Psychopathology. Fosmire, Straughan.
 Core Quantitative Methods. LaForge, Fagot, Hyman.
 Core Research. Anderson, Attneave, Breger, Davison, Fagot, Kimble, Leary, McGaugh, Patterson, Straughan.
 Core Social. Hyman, Wrench.
 Psychotherapy. Fosmire, Patterson, Straughan.
 Early Experience. Littman.
 Piaget. Hyman, Bricker.
 Game Theory as applied to Interpersonal Relations. Sermat.
 Psychological Ecology. Schoggen.
 Clinical and Counseling Practice. Breger, Sermat.
 Memory. McGaugh.
 Mathematical Psychology. Fagot.
 Multivariate Analysis. LaForge.

Psy 508. **Clinical Work with Children.** 3 hours any term.

Work in the University Psychological Clinic. Enrollment limited. Prerequisite: Psy 530, 531; consent of instructor. Straughan, clinical staff.

Psy 509. **Practicum Experience.** Hours to be arranged.

Work in selected agencies providing diagnostic and counseling services. Enrollment limited. Prerequisite: consent of instructor. Straughan, clinical staff.

Psy 521, 522, 523. **History and Systems of Psychology.** 2 hours each term.

The development of empirical research and theoretical formulations in psychology and its several fields. Littman.

Psy 524. **Individual Intelligence Testing.** 4 hours.

Supervised practice in the administration, scoring, and interpretation of the Wechsler Intelligence Scale for Children and the Wechsler Adult Intelligence scale. Prerequisite: Ed 424 or Psy 421. Waechter.

Psy 525. **Individual Intelligence Testing.** 2 hours.

Supervised practice in the administration, scoring, and interpretation of the Stanford-Binet Intelligence Scale. Prerequisite: Ed 424 or Psy 421. Waechter.

Psy 527. **Counseling Procedures.** 3 hours.

General orientation to counseling; theories of counseling; settings and roles of counselors; interviewing and the counseling process; tests and assessment; ethics and values. Prerequisite: consent of instructor. Sundberg, Tyler.

Psy 530, 531. **Foundations of Clinical and Counseling Practice.** 3 hours each term.

Basic concepts and principles of psychological work with individuals; the roles of clinicians and counselors in different settings; assessment and diagnosis; clinical and counseling research; case-study methods. Required of all candidates for the Ph.D. degree in clinical and counseling psychology. Straughan, Sundberg.

Psy 532, 533. **Advanced Personality Assessment.** 3 hours each term.

Intensive coverage of the assessment literature in psychology; principles and methods of personality measurement by observational techniques, rating scales, sociometrics, physiological and physical indices, situational testing and interviewing, projective techniques, structured inventories, etc. Breger, Goldberg, Sermat.

- Psy 535. **Advanced Social Psychology.** 3 hours.
Social behavior in relation to current psychological theory and research. Hyman, Wrench.
- Psy 537, 538, 539. **Personality Theory and Research.** 4 hours fall; 2 hours each term, winter and spring.
Intensive study of selected aspects of the various theories of personality which have been developed by academic, clinical, and psychiatric writers. Problems of formulating a theory and conducting research in the field of personality. Review of selected studies. Breger, Patterson, Straughan.
- Psy 543, 544. **Measurement: Theory and Applications.** 3 hours each term.
Nature of measurement; logic of measurement; the role of measurement in psychological theory; theory and application of psychological scaling methods. Prerequisite: Mth 426 or equivalent. Fagot.
- Psy 545. **Theory and Construction of Tests.** 3 hours.
Basic theory of test scores; reliability and validity of tests; methods of standardizing and equating test scores; problems of norms and units; weighting and differential prediction; item analysis. Prerequisite: Mth 426 or equivalent. LaForge.
- Psy 546. **Factor Analysis.** 3 hours.
Systematic and critical development of the theory of factor analysis; applications in psychology. Prerequisite: Mth 426. Fagot, LaForge.
- Psy 551, 552, 553. **Advanced Experimental Psychology.** 3 hours each term.
Thorough study of periodical literature of general psychology. The point of view is consistently experimental. Opportunity offered for an experimental project to coordinate with class discussions.
- Psy 560. **Advanced Physiological Psychology.** 2 hours.
Theory of nervous-system function in learning, motivation, and perception. Detailed study of special areas. Kimble, McGaugh.
- Psy 566. **Advanced Psychology of Perception.** 3 hours.
Basic problems and phenomena of perception. Attneave.
- Psy 567. **Advanced Laboratory in Perception.** 3 hours.
Practice in design, conduct, analysis, and reporting of experiments. Individual projects. Attneave.
- Psy 570. **Advanced Animal Psychology.** 2 hours.
Special topics in animal learning, motivation, and species comparison.
- Psy 572, 573, 574. **Advanced Psychology of Learning and Thinking.** 3 hours each term.
Survey of research methods and findings on learning and thinking. Analysis and comparison of various viewpoints in modern learning theory. Detailed study of special topics in learning, thinking, and problem solving. Anderson, Leary, Littman, McGaugh.
- Psy 575. **Advanced Laboratory in Learning.** 3 hours.
Practice in design, conduct, analysis, and reporting of experiments. Individual projects. McGaugh.

Religion

Professor: P. B. MEANS (emeritus).

Associate Professor: DOUGLAS STRATON (department head).

Assistant Professor: ALFRED BLOOM.

THE DEPARTMENT OF RELIGION is nonsectarian in spirit, the aim being to acquaint students with the far-reaching influence of religion in the cultural his-

tory of the world. Its courses are planned in accordance with the same standards of authoritative scholarship recognized in other departments of the University.

Through these courses, the University seeks to develop an understanding of the nature and processes of religious thought and experience, and to relate these to the problems of our time. The courses are also intended to meet the needs of students whose major work in other fields fits them for positions of leadership, and who can become effective and influential in the religious and spiritual life of their communities through a better understanding of the power of religion in men's lives and in the destiny of civilization.

LOWER-DIVISION COURSES

*R 201, 202, 203. **Great Religions of the World.** 3 hours each term.

Study of Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, and Islam, according to their basic scriptures. Special attention to the origins, organization, and philosophy of these religions; analysis of their world views and conceptions of God, man, ethics, and human destiny.

R 224, 225, 226. **The Bible and Civilization.** 3 hours each term.

Survey of the social and religious history of Israel through the time of Jesus. The growth of ethical and religious ideas, the origin and teachings of major Old and New Testament books; the historical background of Christianity, and the life and teachings of Jesus.

CL 231, 232. **New Testament Readings.** 4 hours each term.

For description see page 161.

UPPER-DIVISION COURSES

*R 301, 302, 303. **Religions of Mankind.** 3 hours each term.

Major living and historical religions of mankind. Fall: primitive religion, the national religions of Egypt, Mesopotamia, Greece and Rome; winter: Oriental religions, including Hinduism, Buddhism, Confucianism, Taoism, and Shinto; spring: Zoroastrianism, Judaism, Christianity, and Islam. Attention to origins, religious ideas, organization, and sacred literature.

Eng 306, 307. **The Literature of the English Bible.** 3 hours each term.

For description see page 154.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

R 405. **Reading and Conference.** (g) Hours to be arranged.

R 407. **Seminar.** (g) Hours to be arranged.

Buddhist Philosophy in India. Bloom.
Religious Philosophy of China. Bloom.
Religions in Japan. Bloom.

R 419, 420. **Philosophy of Religion.** (g) 3 hours each term, fall and winter.

Concepts of reality and human nature within a religious perspective. Fall: major ideas of Deity, patterns of reasoning concerning God as personal being, the problem of evil; winter: idea of man as spiritual, moral, and religious being in the light of other philosophies of man. R 419 prerequisite to R 420.

R 421. **Contemporary Social Problems and Religion.** (g) 3 hours spring.

The idea of ethical duty in a religious perspective; the New Testament and ethical problems, the ethics of the family, of race, of the political and economic orders; the concepts of history and human destiny in Judeo-Christian thought.

R 422. **Psychology of Religion.** (g) 3 hours.

Contributions of psychology to the understanding of various forms of religious behavior.

* Students who have taken R 201, 202, 203 may enroll for R 301 but not for R 302, 303.

R 423, 424, 425. **Contemporary Concepts of God.** (g) 3 hours each term.

Contemporary philosophical thought concerning Deity, with special attention to naturalism, idealism, and existentialism; selected readings from representative philosophers of religion such as Dewey, Wieman, Whitehead, Boodin, Royce, Brightman, Underhill, Radhakrishnan, Niebuhr, Tillich, Buber, Maritain, etc. R 423 prerequisite to R 424 and R 425.

Anth 444. **Religion and Magic of Primitives.** (G) 3 hours.

For description see page 131.

Soc 461. **Sociology of Religion.** (G) 3 hours.

For description see page 216.

Hst 471. **Social Factors in American History.** (G) 3 hours.

For description see page 181.

Sociology

Professors: W. T. MARTIN (department head), HARRY ALPERT,* J. V. BERREMAN,* ROBERT DUBIN,* J. M. FOSKETT, J. M. JACKSON,† R. J. PELLEGRIN, W. S. ROBINSON.

Associate Professors: HERBERT BISNO, R. A. ELLIS, WILL DRUM, T. B. JOHANNIS, JR., BENTON JOHNSON.

Assistant Professors: LOUIS BREGER, T. T. JITODAI, KENNETH POLK, J. L. PRICE,† R. H. RODGERS, KIM RODNER, DAVID WRENCH.

Instructors: GEORGE ROTHBART, JOHN TACHIHARA.

Associate: FRANCES SCOTT.

Fellows: KENNETH BERRY, DOUGLAS FULLER, JAMES JOHNSON, JOHN MCCARTHY, SCOTT McNALL, KENNETH MACKINTOSH, THOMAS MARTIN.

Assistants: JOAN ACKER, RICHARD BREDE, STEVEN BURKETT, DOUGLAS CARD, KEITH CROW, WILLIAM DEVAL, DANIEL GOLDMAN, GEORGE GRAY, GARY HAUSER, RITA HAYS, MARY LOU HUBBARD, BROOKE JACOBSEN, BRYCE JOHNSON, JOHN KOVAL, ANDREAS N. MARIS VAN BLAADEREN, JOHN SCANZONI, SANDRA STEELE, HERBERT WEBBER, WILLIAM ZWERMAN.

SOCIOLOGY is the analytical study of the development, structure, and function of human groups and societies. It is concerned with the scientific understanding of human behavior as it relates to, and is a consequence of, interaction within groups.

The undergraduate program in sociology at the University is designed: (1) to prepare students for graduate work leading to professional careers in the field; (2) to provide a basic background for those preparing for careers in personnel work, journalism, organizational management, social work and public welfare, city and regional planning, teaching of social studies, and research in human relations; and (3) to provide a scientific basis, in knowledge and understanding, for constructive adult citizenship.

Alpha Kappa Delta, a national sociology honorary society, has a chapter on the University campus; all students who have completed their junior year and have had at least 20 term hours of work in sociology with a grade-point average of 3.00 or higher are eligible for membership.

Interested sophomores and juniors should inquire about the availability of undergraduate research participation fellowships.

Requirements for Bachelor's Degree. Candidates for the bachelor's degree with a major in sociology must satisfy all general requirements of the University

* On sabbatical leave 1963-64.

† On leave of absence 1963-64.

and the College of Liberal Arts and complete the following required courses in sociology :

	Term Hours
General Sociology (Soc 204, 205, 206).....	9
Social Organization (Soc 342, 343).....	6
Introduction to Social Research (Soc 311).....	3
Social Psychology (Soc 334).....	3
Development of Sociology (Soc 470).....	3

Majors in sociology are required to complete a minimum of 42 hours in sociology; not more than 54 hours in sociology may be counted toward a bachelor's degree.

A grade-point average of 2.00 or higher in all sociology courses is required for graduation with a major in sociology.

High-School Teaching. Students preparing for the teaching of social studies in the high schools may elect sociology as a field of concentration; such students should include, in their work in sociology, at least one course in the area of the family and in the area of deviant behavior. For the subject-preparation requirements for the teaching of social studies in Oregon high schools, see pages 128-129.

Honors. See HONORS COLLEGE, pages 120-123.

Undergraduate Concentration in Social Work. The department offers two sequences of special value for undergraduate students who are interested in careers in social welfare: Sociology of Social Work (Soc 422, 423, 424) and Principles and Concepts of Social Work (Soc 425, 426). Students considering graduate study of social work or employment by a social-welfare agency should consult Mr. Herbert Bisno, associate professor of sociology.

A strong background in several of the social sciences is recommended for all students interested in careers in social welfare.

Areas of Study. The department offers introductory courses in General Sociology (Soc 204, 205, 206) and Principles of Sociology (Soc 300), and specialized upper-division and graduate courses in the following broad areas:

Methodology. Introduction to Social Research (Soc 311); Sociological Research Methods (Soc 411, 412, 413); Theory and Methods in Population and Ecology (Soc 415); Experimental Sociology (Soc 518).

Social Welfare and Social Work. Sociology of Social Work (Soc 422, 423, 424); Principles and Concepts of Social Work (Soc 425, 426).

Social Psychology. Social Psychology (Soc 334, 335); Marriage and the Family (Soc 338); Theory of Small Groups (Soc 430); Group Dynamics (Soc 431); Collective Behavior (Soc 436); Social Psychology of the Family (Soc 438); Analytical Problems in Social Psychology (Soc 530); Propaganda and Social Control (Soc 532); Social Movements (Soc 537).

Social Structures and Processes. American Society (Soc 301); Social Organization (Soc 342, 343); World Population and Social Structure (Soc 303); The Community (Soc 304); Contemporary Social Problems (Soc 305); Criminology and Delinquency (Soc 440, 441); Urbanization and the City (Soc 442); Social Control (Soc 443); Social Stratification (Soc 444); Sociology of Race Relations (Soc 445); Sociology of Work (Soc 446); Industrial Sociology (Soc 447); Sociology of Occupations (Soc 448); Social Change (Soc 449); Analytical Problems in Social Structures and Processes (Soc 540); Theory of Organization (Soc 541); Power and Influence in Society and Community (Soc 542).

Social Institutions. Social Institutions (Soc 460); Sociology of Religion (Soc 461); Sociology of the Family (Soc 462); Social Psychology of the Family

(Soc 438); Political Sociology (Soc 465); Analytical Problems in Social Institutions (Soc 560); Values and Social Structure (Soc 561).

General Theory. Development of Sociology (Soc 470); Analytical Problems in Sociological Theory (Soc 570); History of Social Thought (Soc 571); Development of American Sociology (Soc 572); Contemporary Sociology (Soc 573); Theory Building in Sociology (Soc 575).

Graduate Work. The graduate program of the Department of Sociology, leading to the M.A., M.S., and Ph.D. degrees, is an intensive program designed to train professional sociologists for teaching, research, and administrative posts in sociology and related fields. Most candidates for the Ph.D. degree first obtain a master's degree, but occasionally qualified students who have completed one year of work in residence are permitted to develop programs leading directly to the Ph.D.

Early in their undergraduate years, students interested in graduate work in preparation for careers as professional sociologists should consult an adviser in the department concerning the department's undergraduate preparatory program for research and teaching. Requirements include: (1) satisfaction of the language requirement for the B.A. degree; (2) a year sequence in mathematics; (3) at least one upper-division year sequence in two of the following fields—anthropology, economics, political science, psychology.

Students are not advised to seek an advanced degree in sociology unless they have achieved a grade-point average of 3.00 or better in their undergraduate work in the field; students whose undergraduate major has been in another field should have a grade-point average of 3.00 in all social science courses taken.

The Department of Sociology offers graduate study in four broad areas of concentration: theory and methodology, social psychology, social structures and processes, and social institutions. Theory and methodology are combined to insure that no student may concentrate in one without preparation in the other.

A core program is provided in each of these broad areas, which is required of every graduate student. The core courses with their prerequisites insure that every graduate student will have at least a minimum exposure to the subject matter of each of the general areas. For a second level of intensity of study, each student selects one of the general areas and is required to be broadly familiar with this area. For preparation in depth, the student, in consultation with his adviser, selects a field of specialization within the selected general area; in his specialized field he is expected to achieve a high level of competence through an intensive program of study culminating in the doctoral dissertation. Students are encouraged to select a second, supporting, area of specialization; this may be in a different general area of sociology or in another department.

The graduate core courses in sociology are open only to students with full graduate status and with a substantial foundation in basic courses in the discipline.

The department offers two programs leading to the master's degree. One program, leading to the M.A. degree, is designed as a stepping stone to the Ph.D. degree. The other leads to a terminal master's degree for students preparing to enter professional positions other than college or university teaching or research. No thesis is required in the latter program.

Although the department accepts students who are interested only in the master's degree, its program is primarily intended for doctoral candidates. All students of good academic ability are encouraged to follow a course of study leading to the Ph.D. degree.

Candidates for the doctor's degree must demonstrate clearly their basic and serious commitment to a professional career in the social sciences, with particular emphasis on sociology. The department encourages interdisciplinary studies, and provides opportunity for the development of original programs of study designed to broaden the student's professional preparation.

The doctoral candidate's dissertation must embody the results of research and show evidence of originality and ability in independent investigation. It is recommended that work on the dissertation be begun early in the doctoral program, so that the candidate's research experience will be an integral part of his total program of study.

A brochure describing the graduate program in sociology in more detail and specifying the materials that must be submitted with applications for admission may be obtained from the office of the department. All application material must be submitted at least two months before the student plans to begin graduate work; students wishing to apply for graduate assistantships must submit these materials by March 1.

LOWER-DIVISION COURSES

Soc 204, 205, 206. **General Sociology.** 3 hours each term.

Introduction to the sociological perspective; basic findings regarding the development, structure, and function of human groups and societies, with emphasis on the descriptive comparison of modern complex societies.

UPPER-DIVISION COURSES

Soc 300. **Principles of Sociology.** 3 hours.

Fundamental concepts and empirical findings in the field of sociology. Not open to students who have completed Soc 204, 205.

Soc 301. **American Society.** 3 hours.

An analysis of American society in terms of its significant structural traits and their functions; major changes in American society and selected contemporary problems examined in their relation to institutional structures. Not open to students who have completed Soc 204, 205. Prerequisite: Soc 300.

Soc 303. **World Population and Social Structure.** 3 hours.

Introduction to population studies, providing within a sociological framework an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. Prerequisite: Soc 204, 205, 206 or Soc 300. Jitodai, Martin.

Soc 304. **The Community.** 3 hours.

Analysis of the structure and organization of human communities. Prerequisite: Soc 204, 205, 206 or Soc 300. Jitodai.

Soc 305. **Contemporary Social Problems.** 3 hours.

Introduction to problems associated with the organization of social systems; deviant behavior and methods of social control. Prerequisite: Soc 204, 205, 206 or Soc 300.

Soc 311. **Introduction to Social Research.** 3 hours.

The development of social research; the nature of scientific inquiry and basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Prerequisite: Soc 204, 205, 206 or consent of instructor. Polk.

Soc 334, 335. **Social Psychology.** 3 hours each term.

Analysis of psychological processes in relation to social situations. How languages, perception, learning, thinking, motivation, and attitudes determine and result from social interaction and group processes. Prerequisite: Soc 204, 205 or Psy 201, 202. Berreman, Hyman, Wrench.

Soc 338. **Marriage and the Family.** 3 hours.

The growth and development of the husband-wife relationship throughout the family life cycle. Special emphasis on the period from engagement through the birth of the first child. Prerequisite: Soc 204, 205; or Psy 201, 202; or consent of instructor. Johannis, Rodgers.

Soc 342, 343. **Social Organization.** 3 hours each term.

Examination in depth of analytical concepts and tools and their application to theoretical materials dealing with social organization. Prerequisite: Soc 204, 205, 206.

Soc 401. **Research.** Hours to be arranged.

Soc 403. **Thesis for Honors Candidates.** Hours to be arranged.

Soc 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Soc 407. **Seminar.** (G) Hours to be arranged.

Sociology of Leisure. Johannis.

Juvenile Delinquency. Bisno.

Sociology of Illness and Health. Bisno.

Economic Sociology. Rodner.

Bureaucracy. Price.

Soc 411, 412, 413. **Sociological Research Methods.** (G) 3 hours each term.

Core sequence providing basic methodology and techniques in design of social research projects, collection of data, application of statistical procedures to the analysis of the data, and interpretation of the results of social research projects. Prerequisite: elementary statistics; the work of each term is prerequisite to that of the following term. Ellis, Robinson.

Soc 415. **Theory and Methods in Population and Ecology.** (G) 3 hours.

Methodological problems and techniques in demographic and ecological analysis. Prerequisite: Soc 303, elementary statistics; or consent of instructor. Jitodai, Martin.

Soc 422, 423, 424. **Sociology of Social Work.** (g) 3 hours each term.

Social work as a type of professional service offered within the framework of organized public and private programs, analyzed in terms of theory, principles, and methods past and present. Variations in ideology, organizational provisions, and practices related to the broader social milieu. Prerequisite: 9 hours in sociology; the work of each term is a prerequisite to that of the following term. Bisno.

Soc 425, 426. **Principles and Concepts of Social Work.** (g) 3 hours each term.

Analysis of the major components in the social-work services, such as the community setting, the organizational context of services, and the methods of providing service; emphasis on basic concepts and principles. Prerequisite: Soc 422, 423, 424. Bisno.

Soc 430. **Theory of Small Groups.** (G) 3 hours.

Analysis of interaction in small groups through reading, observation in the community, and experimentation in the classroom. Prerequisite: Soc or Psy 334. Johannis.

Soc 431. **Group Dynamics.** (g) 3 hours.

Analysis of the group aspects of professional practice; designed to provide a basis for professional participation in groups. Prerequisite: Soc 430.

Soc 436. **Collective Behavior.** (g) 3 hours.

Social-psychological study of the behavior of persons in such collective contexts as crowds, mobs, publics, i.e., in the less stable and predictable phases of group life. Fads, crazes, rumor, panics, riots, and mass hysteria analyzed in terms of social and psychological determinants and consequences. Prerequisite: Soc or Psy 334, 335. Berreman.

Soc 438. **Social Psychology of the Family.** (G) 3 hours.

The dynamics of family interaction throughout the family life cycle. Prerequisite: 12 hours in sociology. Johannis, Rodgers.

Soc 440, 441. **Criminology and Delinquency.** (g) 3 hours each term.

The nature and extent of delinquency and crime as forms of deviant social

behavior; contributing factors; current prevention and treatment programs. Prerequisite: Soc 204, 205, 206 or Soc 300. Polk, Rothbart.

Soc 442. **Urbanization and the City.** (G) 3 hours.

Determinants and consequences of urbanization under different conditions; the city as a social and ecological system. Prerequisite: 9 hours in sociology. Martin.

Soc 443. **Social Control.** (G) 3 hours.

Techniques and agencies by which the behavior of crowds, classes, associations, and publics is controlled. Prerequisite: Soc or Psy 334, 335 or consent of instructor. Berreman.

Soc 444. **Social Stratification.** (G) 3 hours.

Systematic analysis of the nature of social classes and castes, their determinants and historical development, and their consequences. Prerequisite: Soc 204, 205, 206 or Soc 300. Ellis, Johnson.

Soc 445. **Sociology of Race Relations.** (g) 3 hours.

The development of "race consciousness" and emergent problems of race-culture contacts. Prerequisite: introductory course in sociology, anthropology, or psychology. Berreman.

Soc 446. **Sociology of Work.** (G) 3 hours.

Analysis of the basic sociological features of work in modern society. The theory of work organizations; the working population; technological, formal, nonformal, and informal aspects of working; the managerial problem of directing working behavior. Dubin.

Soc 447. **Industrial Sociology.** (G) 3 hours.

Analysis of union-management relations in American society. The nature of industrial management and the bases of management's labor decisions; the origins, nature, and functions of labor unions; industrial relations; the consequences of union-management relations for social welfare. Dubin.

Soc 448. **Sociology of Occupations.** (G) 3 hours.

The nature, functions, and significance of occupational groupings in modern society; the relationships of occupation to other aspects of life; the significance of work for the various forms of social organization; the impact of change on individual occupations and occupational categories. Pellegrin.

Soc 449. **Social Change.** (G) 3 hours.

Analysis of the processes, characteristics, and conditions of change in large social systems; systematic examination of various theoretical problems and formulations. Prerequisite: 9 hours in sociology. Bisno.

Soc 460. **Social Institutions.** (G) 3 hours.

Analysis of social organization in terms of a system of interrelated and interdependent institutions; major focus on the development and utilization of an analytical framework in the examination of selected major institutions in American and other contemporary societies. Prerequisite: Soc 204, 205, 206 or Soc 300. Rodgers.

Soc 461. **Sociology of Religion.** (G) 3 hours.

Sociological analysis of religious belief and behavior; special attention to the relation between religious institutions and the larger societies of which they are a part. Prerequisite: Soc 204, 205 or Soc 300. Johnson.

Soc 462. **Sociology of the Family.** (G) 3 hours.

The family as a social institution and its relationship to other social institutions. Prerequisite: 12 hours in sociology. Johanns, Rodgers.

Soc 465. **Political Sociology.** (G) 3 hours.

Sociological theories and concepts brought to bear on the analysis of various aspects of political theory and behavior; social bases of power and policy determination; institutional interrelationships; intellectuals and ideologies;

political trends and change; political participation and membership. Prerequisite: 9 hours of sociology. Bisno, Rodner.

Soc 470. **Development of Sociology.** (g) 3 hours.

Major writers and ideas that have shaped contemporary sociology; recurrent concepts and issues that continue to challenge sociological inquiry. Prerequisite: 9 hours in upper-division sociology courses.

GRADUATE COURSES

*Soc 501. **Research.** Hours to be arranged.

*Soc 502. **Supervised College Teaching.** Hours to be arranged.

*Soc 503. **Thesis.** Hours to be arranged.

Soc 505. **Reading and Conference.** Hours to be arranged.

Soc 507. **Seminar.** Hours to be arranged.

Comparative Family Systems. Johannis.
 Contemporary Family Research. Johannis.
 Population and Social Structure. Martin.
 Sociology of Professions. Bisno.
 Sociology of Religion. Johnson.
 Sociology of Deviant Behavior. Rothbart.
 Social Stratification. Ellis, Johnson.
 Primary Human Interaction. Dubin.
 Community Analysis. Foskett, Pellegrin.
 Theory of Action. Johnson.
 Urbanization. Martin.
 Quantitative Sociology. Robinson.
 Correctional Research. Rothbart.
 Sociology of Adolescence. Polk.

Soc 518. **Experimental Sociology.** 3 hours.

Critical analysis of selected experiments in sociology; each student formulates a research problem and designs an experiment suitable for the testing of the hypothesis. Prerequisite: elementary statistics. Dubin.

Soc 530. **Analytical Problems in Social Psychology.** 3 hours.

Core course providing basic graduate orientation in social psychology. Prerequisite: regular graduate standing; 9 hours in sociology; introductory psychology and social psychology.

Soc 532. **Propaganda and Social Control.** 3 hours.

Propaganda as a means of social control; the nature of propaganda, the techniques used and the psychological and sociological conditions of their effectiveness; the implications of media of mass communication for stability and change of social systems. Prerequisites: Soc or Psy 334, 335 or consent of instructor. Berreman.

Soc 537. **Social Movements.** 3 hours.

Study of the endeavors of groups of people to alter the course of events by their joint activities; social and psychological factors which give rise to social movements and determine their course; the relation of such purposive collective activity to the process of social and cultural change. Prerequisite: Soc or Psy 334, 335 or consent of instructor. Berreman.

Soc 540. **Social Structure and Processes.** 3 hours.

Core course providing basic graduate orientation in problems of social system organization, stability, and change. Prerequisite: regular graduate standing; 9 hours in sociology, including at least one course in social structures or social processes. Pellegrin.

Soc 541. **Theory of Organization.** 3 hours.

The analysis of formal organizations, their functions in social organizations, their operating characteristics, and the person-organization linkage. Dubin.

* No-grade course.

Soc 542. Power and Influence in Community and Society. 3 hours.

Critical examination and evaluation of studies of power structures and the decision-making process, particularly at the community level, in terms of theoretical and methodological considerations. Pellegrin.

Soc 560. Analytical Problems in Social Institutions. 3 hours.

Core course providing basic graduate orientation to conceptual and theoretical problems in the area of social institutions. Prerequisite: regular graduate standing, 9 hours of sociology, including one upper-division course in institutional area. Foskett.

Soc 561. Values and Social Structure. 3 hours.

Examination of value and belief systems as related to socially patterned behavior; consideration of major theoretical perspectives, methods of classification, and selected empirical studies. Prerequisite: 9 hours in sociology. Johnson.

Soc 570. Analytical Problems in Sociological Theory. 3 hours.

Core course. The nature and purpose of scientific theory, with special reference to sociology; critique of existing theoretical models in the field. Prerequisite: regular graduate standing; at least two of the following: Soc 571, Soc 572, Soc 573. Johnson.

Soc 571. History of Social Thought. 3 hours.

An historical analysis of Western social thought in terms of its recurrent problems, its basic concepts, and its relation to contemporary sociological theory. Foskett.

Soc 572. Development of American Sociology. 3 hours.

The emergence of American sociology in the nineteenth century; the problems, concepts, and theories of leading American sociologists to 1930. Foskett.

Soc 573. Contemporary Sociology. 3 hours.

Analysis of the work of leading contemporary sociologists, with special emphasis on the problems, concepts, and methods of sociological inquiry. Price.

Soc 575. Theory Building in Sociology. 3 hours.

Analysis in relation to theories in the behavioral sciences: the components of a scientific theory; the relationship between theory and research; the nature of scientific tests of theories. Dubin.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION**Soc 346. Social Case Methods in Nursing.** 3 hours (extension).**Soc 347. Social Welfare Resources and Organization.** 3 hours (extension).**Soc 508. Workshop.** Hours to be arranged (summer sessions).**SW 507. Seminar.** Hours to be arranged (extension).**SW 511, 512, 513. Social Case Work.** 3 hours each term (extension).**SW 516, 517. Personality Development.** 2 hours each term (extension).**SW 521. Social Group Work.** 2 hours (extension).**SW 556, 557. Medical Information for Social Work.** 2 hours each term (extension).**SW 572. Community Organization for Social Welfare.** 3 hours (extension).**SW 580. Introduction to Public Welfare.** 3 hours (extension).**SW 581. The Child and the State.** 3 hours (extension).**SW 582. Administration of Social Insurances.** 3 hours (extension).**SW 584. Public Assistance: Policy and Method.** 3 hours (extension).

Speech

Professors: GLENN STARLIN (department head), BOWER ALY,* R. D. CLARK, HORACE W. ROBINSON,† K. S. WOOD.

Associate Professors: HERMAN COHEN,‡ W. A. DAHLBERG, J. T. DREIER, E. A. KRETSINGER, C. A. LEISTNER, K. E. MONTGOMERY, W. S. NOBLES, HOWARD RICHARDSON, OTTILIE T. SEYBOLT (emeritus), J. R. SHEPHERD.

Assistant Professors: N. J. CHRISTENSEN, J. V. CUTLER, A. J. JACOBS, C. M. PECK.

Instructors: J. M. DOLPH, W. R. ELWOOD, L. G. JERSTAD, S. A. KAYE, A. L. LEWIS, B. D. LOEBS, P. S. MELHUIH, D. E. SCANLAN, D. W. WILE.

Assistants: R. C. ADAMS, R. B. DOUGHTY, BETTY E. EVANS, DIANE FAWSON, R. L. HALLE, MARIJEAN A. LINS COTT, LUCY A. MELHUIH, G. L. STEVENS.

THE DEPARTMENT OF SPEECH offers major curricula leading to the Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, and Doctor of Philosophy degrees, with opportunities for study in rhetoric and public address, radio and television broadcasting, speech and hearing therapy, and theater.

Work in speech is also offered for students majoring in other fields. For these students, the department directs its efforts toward two principal objectives: (1) the development of the ability to communicate thought and feeling; and (2) the improvement of powers of appreciation and evaluation in listening.

Practical experience in the various phases of the departmental program is provided through the University Theater, the University Symposium and forensic activities, the University Broadcasting Studios, and the Speech and Hearing Clinic.

In the planning of its major undergraduate programs, the Department of Speech recognizes three principal objectives:

(1) The achievement, by all of its major students, of a broad liberal education. The following major requirements relate to this objective:

(a) To complement work in the department, the student must elect courses in other departments which are of substantial value in relation to his major program, including at least 18 term hours in upper-division courses in a single related field.

(b) A maximum of 60 term hours of work in speech may be included in the student's program for a bachelor's degree.

(2) Sufficient work in the several fields of speech instruction to provide an appreciation of the different areas of communication. The following major requirements relate to this objective:

(a) The following basic courses are required of all majors: Fundamentals of Speech (Sp 121, 122); Theory and Literature of Rhetoric (Sp 301); Advanced Interpretation (Sp 311); Speech Science (Sp 371); Radio and Television and the Public (Sp 448); History of the Theater (Sp 464).

(b) A minimum of 40 term hours in speech courses is required of all majors, at least 25 of which must be upper-division courses.

(c) A minimum of 9 term hours of work in general psychology or in history is required of all majors.

(3) The mastery of at least one of the four following fields: rhetoric and public address, radio and television broadcasting, speech and hearing therapy, theater. The minimum requirements in each of the four fields are as follows:

* On leave of absence, fall term, 1963-64.

† On sabbatical leave 1963-64.

‡ On sabbatical leave, spring term, 1963-64.

(a) *Rhetoric and Public Address: Fundamentals of Speech* (Sp 123); Public Discussion (Sp 221) *or* Advanced Public Discussion (Sp 331); Argumentation, Persuasion, and Discussion (Sp 321, 322, 323); Theory and Literature of Rhetoric (Sp 302, 303); Classical Oratory (Sp 421), British Oratory (Sp 422), American Oratory (Sp 423).

(b) *Radio and Television Broadcasting: Fundamentals of Broadcasting* (Sp 241); Theater Principles (Sp 261, 262, 263) *or* Play Direction (Sp 364); Radio and Television Workshop (Sp 341); Radio Workshop (Sp 342, 343) *or* Television Workshop (Sp 344, 345); Radio and Television Script Writing (Sp 347, 348, 349).

(c) *Speech and Hearing Therapy: Phonetics* (Sp 370); Speech Pathology (Sp 481, 482, 483); Clinical Speech Therapy (Sp 484, 485, 486); Audiology (Sp 487, 488); Seminar: Teaching of Lip Reading (Sp 407).

(d) *Theater: Theater Principles* (Sp 261, 262, 263); 6 term hours selected from Production Workshop (Sp 264, 265, 266), Costume Workshop (Sp 315); 6 term hours selected from Elements of Acting (Sp 251), Technique of Acting (Sp 351, 352); Play Direction (Sp 364); History of the Theater (Sp 465).

Subject Preparation for High-School Teaching. For certification as a teacher of speech and drama in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—18 term hours, including work in fundamentals of speech, speech arts (oral interpretation and fundamentals of acting), and speech science; for a standard norm, granted after five years of college work, a *standard norm*—30 term hours, including the basic-norm requirement and advanced work in fundamentals of speech, speech arts, and speech science.

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 266.

Honors. See HONORS COLLEGE, pages 120-123.

Committee on Discussion and Debate. The national office of the Committee on Discussion and Debate of the National University Extension Association is located on the campus of the University of Oregon. The committee provides services to high-school debate leagues throughout the United States, including publication of the N.U.E.A. debate manual and related books, distribution of discussion and debate materials, and maintenance of a forensics library.

Rhetoric and Public Address

LOWER-DIVISION COURSES

Sp 121, 122, 123. **Fundamentals of Speech.** 3 hours each term.

Projects in extempore speaking. Sp 121, 122: emphasis on content, organization, performance, audience motivation, language, discussion, and parliamentary procedures. Sp 123: emphasis on voice and diction, bodily action and reading from the printed page; attention to style in the preparation and presentation of speeches. Special section for Honors College students.

Sp 221. **Public Discussion.** 2 hours winter or spring.

Preparation of speeches for delivery before public audiences in conjunction with the University's forensic program. Nobles.

Sp 235. **Public Speaking.** 5 hours any term.

Theory and practice of public speaking, with constructive criticism of performance. Particular attention to individual problems in speechmaking. Not offered 1964-65.

UPPER-DIVISION COURSES

- Sp 301, 302, 303. **Theory and Literature of Rhetoric.** 3 hours each term.
Selected readings on the principles of rhetoric and public address from Plato to modern times. Cohen.
- Sp 321, 322, 323. **Argumentation, Persuasion, and Discussion.** 3 hours each term.
Fall: argumentation; winter: audience motivation and audience response; spring: principles and practice in various discussion forms. Dahlberg, Leister, Montgomery, Nobles.
- Sp 331, 332. **Advanced Public Discussion.** 2 hours each term, winter and spring.
Preparation of speeches to be delivered before public audiences in conjunction with the University's forensic program. Prerequisite: consent of instructor. Nobles.
- Sp 407. **Seminar.** Hours to be arranged.
- Sp 416. **Speech Composition.** 3 hours any term.
Speech forms, types, and techniques; emphasis on application of basic rhetorical elements. Designed for prospective high-school teachers and other nonmajors. Prerequisite: upper-division standing. Dahlberg, Montgomery.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Sp 421. **Classical Oratory.** (G) 3 hours.
Rhetorical criticism of masterpieces of Greek and Roman oratory. Prerequisite: Sp 301 or equivalent. Aly, Dahlberg.
- Sp 422. **British Oratory.** (G) 3 hours.
British oratory from Pitt to modern times. Prerequisite: Sp 301 or equivalent. Aly, Cohen.
- Sp 423. **American Oratory.** (G) 3 hours.
Study of selected American orations. Prerequisite: Sp 301 or equivalent. Aly, Nobles.

GRADUATE COURSES

- *Sp 501. **Research.** Hours to be arranged.
- *Sp 503. **Thesis.** Hours to be arranged.
- Sp 505. **Reading and Conference.** Hours to be arranged.
- Sp 507. **Seminar.** Hours to be arranged.
Introduction to Graduate Study.
Argumentation and Debate.
Literature of the Rhetorical Tradition.
Principles of Oral Discourse.
- Sp 511. **Eighteenth-Century Rhetorical Theory.** 3 hours.
The neoclassical interpretation of the canons of ancient rhetorical theory; its relation to the literary criticism, aesthetics, and logic of the period. Cohen.
- Sp 512. **American Public Address.** 3 hours.
The history of public speaking in the United States, with emphasis on the relation of historical development to current problems in criticism. Aly.
- Sp 513. **Recent Rhetorical Criticism.** 3 hours.
The revival of the Aristotle-Cicero canon; the impact of contemporary literary criticism on rhetoric; the relevance of content analysis to rhetorical criticism. Clark, Nobles.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

- Sp 225, 226. **Public Speaking for Business and Professional Men and Women.** 2 hours each term.
- Sp 424. **Speech Forms and Techniques of Group Control.** (g) 3 hours.

* No-grade course.

Radio and Television Broadcasting

LOWER-DIVISION COURSE

Sp 241. Fundamentals of Broadcasting. 2 hours any term.

General survey of broadcasting, including history, growth, social aspects, laws and policies, station and network organization, programming, the advertiser, the listener, public interest, standards of criticism, comparison of broadcast systems, international broadcasting and propaganda. Shepherd, Wile.

UPPER-DIVISION COURSES

Sp 341. Radio and Television Workshop. 2 hours.

Broadcast performance technique; physical, acoustic, and mechanical theory and its application; interpretative theory and its application. Prerequisite: consent of instructor. Jacobs, Kretsinger, Shepherd.

Sp 342, 343. Radio Workshop. 2 hours each term.

Theory and practice of radio broadcasting. Prerequisite: Sp 341. Shepherd.

Sp 344, 345. Television Workshop. 2 hours each term.

Theory and practice of television broadcasting. Prerequisite: Sp 341. Kretsinger, Jacobs.

Sp 347, 348, 349. Radio and Television Script Writing. 2 hours each term.

Radio and television writing techniques; theory and practice in the writing of all major continuity types. Prerequisite: junior standing. Kretsinger, Starlin.

J 407. Seminar. Hours to be arranged.

Television problems. Radio-television station policies.

Sp 407. Seminar. Hours to be arranged.

J 431. Radio-Television News I. 3 hours.

For description see SCHOOL OF JOURNALISM.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 432. Radio-Television News II. (G) 3 hours.

For description see SCHOOL OF JOURNALISM.

Sp 444. Radio-Television Direction. (G) 3 hours.

Theory and technique involved in the broadcasting directional assignment. Practice in directing typical formats developed for radio and television. Prerequisite: consent of instructor. Shepherd.

Sp 445. Radio-Television Production. (G) 3 hours.

Problems and procedures in the synthesis of talent, material, sponsorship, etc. in broadcast production. Preparation and production of live broadcasts. Prerequisite: Sp 444; consent of instructor. Shepherd.

Sp 446. Radio-Television Programming. (G) 3 hours.

Analysis of values, trends, and procedures in programming broadcast schedules; problems in planning program structure to meet community and public service needs. Prerequisite: consent of instructor. Shepherd, Starlin.

Sp 448. Radio and Television and the Public. (G) 3 hours spring.

The influence and importance of broadcasting as a social, political, and cultural force; the development of broadcasting; public-service broadcasting; the rights and duties of listeners; public opinion and propaganda influence. Shepherd, Starlin.

Sp 469. Lighting for Television. (G) 2 hours.

Functions of light in the television studio; theories, methods, and special equipment for lighting television productions. Prerequisite: Sp 263 or consent of instructor. Wile.

GRADUATE COURSES

- *Sp 501. **Research.** Hours to be arranged.
- *Sp 503. **Thesis.** Hours to be arranged.
- Sp 505. **Reading and Conference.** Hours to be arranged.
- Sp 507. **Seminar.** Hours to be arranged.
Introduction to Graduate Study.
Problems of Education by Television.
- Sp 541. **Theory and Criticism of Broadcasting.** 3 hours.
A comparative study of systems of broadcasting; the development of ethical, artistic, and critical standards in radio and television. Starlin.
- Sp 544. **Radio-Television Program Evaluation.** 3 hours.
Background and development of broadcast measurements; experimental and survey procedures applicable to the testing of hypotheses in these media. Prerequisite: Mth 425 or equivalent. Kretsinger, Shepherd.

Speech and Hearing Therapy

LOWER-DIVISION COURSE

- Sp 130. **Voice and Articulation.** 3 hours any term.
Study and practice in the perception and production of the elements of American speech. Limited to students seeking articulatory or vocal improvement; special sections for foreign-born students. Montgomery.

UPPER-DIVISION COURSES

- Sp 370. **Phonetics.** 3 hours.
Study of sounds used in speech. Determination of sounds; their symbolic nature; their production; physical and psychological problems involved in their perception; sectional differences. Montgomery.
- Sp 371. **Speech Science.** 3 hours.
A study of the anatomy, psychology, and physics of speech. Wood.
- Sp 407. **Seminar.** Hours to be arranged.
Teaching of lip reading.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Sp 472. **Experimental Phonetics.** (G) 3 hours.
Experimental methods in voice and phonetics; analysis and measurement of variables in the production of speech. 1 hour of laboratory work required. Prerequisite: Sp 370, Sp 371 or consent of instructor. Wood.
- Sp 481, 482, 483. **Speech Pathology.** (G) 3 hours each term.
Symptoms, causes, and treatment of speech abnormalities. Fall: functional articulatory defects, delayed speech, emotional speech disorders; winter: organic speech disorders, including deviations due to congenital malformation, injury, deafness, and neurological impairment; spring: public school speech correction, specific techniques in the diagnosis and treatment of major speech problems. Prerequisite: Sp 370, Sp 371 or consent of instructor. Christensen, Wood.
- Sp 484, 485, 486. **Clinical Speech Therapy.** (G) 2 hours each term.
Supervised clinical work with speech-defective children and adults, enrolled for counseling, testing, and treatment in the Speech and Hearing Clinic; group discussion of case histories and techniques. Prerequisite: Sp 481, 482 or consent of instructor. Christensen, Wood.

* No-grade course.

Sp 487, 488, 489. **Audiology.** (G) 3 hours each term.

The auditory function, hearing impairment, and the speech education or re-education of persons with hearing loss. Fall: anatomy of the ear, psychophysics of hearing, physical attributes of speech sounds, types and causes of hearing loss, speech involvements of deafness; winter: auditory tests and their clinical interpretation, selection and use of hearing aids; spring: speech and auditory training, psychology of deafness, school and vocational problems. Prerequisite: Sp 370, Sp 371 or consent of instructor. Christensen.

GRADUATE COURSES

*Sp 501. **Research.** Hours to be arranged.

*Sp 503. **Thesis.** Hours to be arranged.

Sp 505. **Reading and Conference.** Hours to be arranged.

Sp 507. **Seminar.** Hours to be arranged.

Introduction to Graduate Study.
Psychology of Speech.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Sp 392. **Principles and Techniques of Speech Correction.** 3 hours (extension and summer sessions).

Sp 490. **Lip Reading for the Deaf and Hard-of-Hearing.** (G) 3 hours (extension).

Sp 491. **Advanced Language Development for the Deaf.** (G) 3 hours (extension).

Sp 492. **Voice and Speech for the Deaf.** (G) 3 hours (extension).

Theater

LOWER-DIVISION COURSES

Sp 229. **Interpretation.** 2 hours.

The application of the principles of oral reading to literature. Jerstad, Scanlan.

Sp 251. **Elements of Acting.** 3 hours.

Elementary principles of acting technique. Scanlan.

Sp 252. **Make-Up.** 1 hour.

The history, purpose, and techniques of application of theatrical make-up; the use of make-up in the various theatrical media, with emphasis on stage and television performers. Peck.

Sp 261, 262, 263. **Theater Principles.** 1 hour each term.

Development of the physical theater; the mechanics of its stage and shops; planning and construction of stage settings and properties; basic principles of stage lighting. Peck.

Sp 264, 265, 266. **Production Workshop.** 2 or 3 hours each term.

Practical experience in the construction, painting, and handling of scenery, and in the lighting of plays. Prerequisite: Sp 261, 262, 263. Peck.

Sp 267, 268. **Appreciation of Drama.** 2 hours each term.

Study of design, acting, and playwriting, for the purpose of achieving a better appreciation of the drama. Scanlan.

Sp 269. **Appreciation of the Motion Picture.** 2 hours.

Study of the motion picture as a dramatic art form. Robinson.

UPPER-DIVISION COURSES

Sp 311. **Advanced Interpretation.** 3 hours.

Instruction in the discovery and oral expression of meaning and feeling in prose, poetry, and dramatic literature. Scanlan.

* No-grade course.

- Sp 315. **Costume Workshop.** 3 hours.
Instruction in the art and craft of stage costuming; practical experience in the design, construction, and maintenance of theatrical costumes. Peck.
- Wr 321, 322, 323. **Play Writing.** 3 hours each term.
For description, see page 158.
- Sp 351. **Technique of Acting: Voice.** 3 hours.
Problems in the use of voice in dramatic roles. Cutler, Robinson.
- Sp 352. **Technique of Acting: Characterization.** 3 hours.
Problems in the analysis and presentation of characters. Cutler, Robinson.
- Sp 353. **Advanced Acting.** 3 hours.
Advanced problems in acting technique: study, rehearsal, and performance. Prerequisite: Sp 251, Sp 351, Sp 352; consent of instructor. Cutler, Robinson.
- Sp 364. **Play Direction.** 3 hours.
Sources of dramatic material, choice of plays, casting and rehearsal of players, production organization. Dreier, Richardson.
- Sp 365. **Direction of Children's Theater.** 3 hours.
History and objectives of theater for the child audience; survey of existing professional and community children's theater programs; techniques of acting, directing, and producing plays for and by children. Dreier.
- Sp 407. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.
For description, see page 154.
- Eng 420, 421, 422. **Modern Drama.** (G) 3 hours each term.
For description, see page 155.
- Sp 460. **Advanced Play Direction.** (G) 3 hours.
Advanced theory and practice in direction of plays for public performance. Prerequisite: Sp 364 or consent of instructor. Cutler, Robinson.
- Sp 461. **Introduction to Scene Design.** (G) 3 hours.
Basic principles and techniques of theatrical design for the school and community theater. Prerequisite: Sp 261, 262, 263 or consent of instructor. Dreier.
- Sp 462. **Styles in Scene Design.** (G) 3 hours.
History of scene design; historical styles and their use in the design of productions of theater classics; twentieth-century approaches to production design; the designer's analysis of the play script. Prerequisite: Sp 461. Dreier.
- Sp 463. **Advanced Problems in Scene Design.** (G) 3 hours.
Selected problems in the design of dramatic productions. Prerequisite: Sp 461, Sp 462; consent of instructor. Dreier.
- Sp 464, 465, 466. **History of the Theater.** (G) 3 hours each term.
An historical study of the theatre from ancient to modern times. Cutler, Richardson.
- Sp 467, 468. **Lighting for the Stage.** (G) 2 hours each term.
The functions of lighting on the stage. Fall: the qualities of light, lighting instruments, control systems; winter: theories and methods of lighting stage productions. Prerequisite: Sp 263 or consent of instructor. Dreier.

GRADUATE COURSES

- *Sp 501. **Research.** Hours to be arranged.
- *Sp 503. **Thesis.** Hours to be arranged.

* No-grade course.

Sp 505. **Reading and Conference.** Hours to be arranged.

Sp 507. **Seminar.** Hours to be arranged.

Introduction to Graduate Study.
 Technical Problems of the Theater.
 Interpretation.
 Cinematography.

Sp 551, 552, 553. **Theory of Dramatic Production.** 3 hours each term.

Fall: theory of acting; winter: theory of dramatic direction; spring: theory of dramatic structure. Cutler, Richardson, Robinson.

Bureau of Municipal Research and Service

HERMAN KEHRLI, M.A.....	Director
DONALD L. JONES, M.A.....	Assistant Director
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ORVAL ETTER, J.D.....	Research Attorney
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THE BUREAU OF MUNICIPAL RESEARCH AND SERVICE carries on a comprehensive program of research and service in the field of local government. A reference library is maintained and an information service provided for public officials and civic groups on various aspects of municipal administration and public finance. Special studies are conducted, at the request of legislative interim committees and public officials, in the broader fields of state government, public finance, and public law. The bureau cooperates with the League of Oregon Cities and the Association of Oregon Counties in providing a consultation service on problems related to local legislation, charter revision, ordinance codification, municipal budgeting, revenue and taxation, law and general administration. A program of planning assistance to city, county, and regional governmental agencies in Oregon, authorized by the Oregon Legislature, is administered by the bureau.

Assistance is provided in conducting in-service training programs for local officials in cooperation with the Oregon Finance Officers Association and the Oregon Association of City Police Officers.

The bureau publishes special research studies and several series of bulletins, intended primarily as a service to city and county officials in the state of Oregon.

School of Architecture and Allied Arts

WALTER L. CREESE, Ph.D., Dean of the School of Architecture and Allied Arts.
FREDERICK T. HANNAFORD, B.A., Executive Secretary.
FRANCES S. NEWSOM, M.A., Architecture and Allied Arts Librarian.

Architecture

Professors: W. S. HAYDEN (department head), G. F. ANDREWS, R. R. FERENS,
F. T. HANNAFORD.

Associate Professors: J. L. BRISCOE, EYLER BROWN (emeritus), S. W. BRYAN,*
BROWNELL FRASIER, E. E. MOURSUND.

Assistant Professors: DALE BENEDICT, ROBERT BOSWORTH, PHILIP DOLE, P. C.
GILMORE, PETER GYGAX, D. W. HERBERT, HARLOW HUDSON, JON KEMP,
JOHN KENYON, M. D. LATOURELL, JERRY NIELSON, ROBERT RENTCHLER, JULIO
SAN JOSÉ, RICHARD SMITH, J. E. STAFFORD.†

Instructors: DONALD PETING, ERNEST MUSTER.

Lecturers: EUGENIO BATISTA, J. H. QUINER.

Assistants: MALCOLM CAMPBELL, JOHN GAITANAKIS, DIANE SARAIARPUR,
HADI SARAIARPUR.

Landscape Architecture and Urban Planning

Professors: F. A. CUTHBERT (department head), LLOYD BOND, H. W. BUFORD,
G. S. JETTE.

Associate Professors: W. M. RUFF.

Assistant Professors: STEPHEN BOCHKOR.

Instructor: HUGH MITCHELL.

Fine and Applied Arts

Professors: JACK WILKINSON (department head), D. J. MCCOSH, A. M.
VINCENT.

Associate Professors: MAUDE I. KERNS (emeritus), C. M. NIXON, VICTORIA A.
ROSS, C. B. RYAN, JAN ZACH.

Assistant Professors: PAUL BUCKNER, D. C. FOSTER, R. C. JAMES, J. V. SOEDER.*

Instructors: GEORGE ESSAYIAN, J. U. STARCK.

Assistants: JOHN CHAMPION, RICHARD LOLCAMA, T. L. MELTON, CHARLES
MILLER, PAUL PEARSON, P. L. C. RUDDICK, A. R. STARK.

Art History

Professors: M. D. ROSS (department head),‡ W. S. BALDINGER.

Assistant Professors: LUCILE M. GOLSON, EDITH KRAMER, PATRICIA LAWRENCE.

Assistant: J. E. DENHAM.

* On sabbatical leave 1963-64.

† On leave of absence, fall term, 1963-64.

‡ On sabbatical leave, fall term, 1963-64.

Art Education

Associate Professors: T. O. BALLINGER (department head), J. W. BURGNER.*

Assistant Professor: JANE GEHRING.

Instructors: P. H. TETZNER, JOAN WOOD.

Assistants: SANDRA DEUTCHMAN, DUANE LOPPNOW.

THE SCHOOL OF ARCHITECTURE AND ALLIED ARTS offers instruction leading to baccalaureate and advanced degrees in the fields of architecture, interior architecture, landscape architecture, urban planning, drawing and painting, sculpture, ceramics, weaving, jewelry and metalsmithing, art history, and art education. Most art studio courses and all courses in art history may be elected by nonmajors.

Admission. The major curricula in the fields listed above are organized on an upper-division and graduate basis. Freshman students intending to major in any of these fields are enrolled in the College of Liberal Arts and pursue, for two years, a program combining liberal arts courses with introductory preprofessional courses in the School of Architecture and Allied Arts.

The lower-division preprofessional courses are planned to provide continuity of training and experience in the several major fields throughout the student's undergraduate years. Educational continuity is further insured through the assignment of members of the faculty of the School of Architecture and Allied Arts as advisers to preprofessional students.

Before admission as professional majors, students are expected to satisfy all lower-division requirements of the University.

Students transferring to the University from other collegiate institutions for work in the School of Architecture and Allied Arts must satisfy the regular lower-division requirements, including both liberal arts and preprofessional requirements, before admission as professional majors. Students transferring from institutions outside the Oregon State System of Higher Education must have earned a 2.50 grade-point average for all courses for which credit is transferred. Credit may be transferred for courses that are the equivalent of University offerings; but transfer students wishing credit, toward major requirements, for upper-division professional work completed at another institution must first submit evidence of ability for performance at an advanced level.

Facilities. The school is housed in Lawrence Hall, named in memory of Ellis F. Lawrence, first dean of the School of Architecture and Allied Arts. The building contains drafting rooms, exhibition rooms, studios, classrooms, a library, and staff offices.

The school provides desks, easels, and certain materials that are not readily available for individual purchase. Students supply their own instruments and drawing materials; these materials are obtainable from a branch of the University Co-operative Store maintained in Lawrence Hall.

The Architecture and Allied Arts Library is a reference collection of about 6,000 books, administered as a branch of the University Library.

All work done by students is the property of the school unless other arrangements are approved by the instructor.

Graduate Work. The School of Architecture and Allied Arts offers graduate work leading to master's degrees in architecture, landscape architecture, urban planning, drawing and painting, sculpture, ceramics, weaving, art education, and art history. Graduate programs may emphasize either creative work or technical, theoretical, and historical studies. The following graduate degrees are granted:

Master of Architecture—for creative work in architectural design.

* On sabbatical leave 1963-64.

Master of Landscape Architecture—for creative work in landscape design.

Master of Fine Arts—for creative work in drawing and painting, sculpture, ceramics, or weaving.

Master of Urban Planning—for work in urban planning.

Master of Arts, Master of Science—for historical and theoretical studies in the visual arts or art education.

Graduate work in the school is governed by the regulations of the University Graduate School and by special requirements of the School of Architecture and Allied Arts. These special requirements, which apply particularly to graduate work of a creative nature leading to the M.Arch., M.L.Arch., or M.F.A. degree, are as follows:

(1) A student applying for admission for creative work at the graduate level must submit to the dean of the School of Architecture and Allied Arts photographs of recent work or other materials indicating creative ability.

(2) The student's qualifying examination, must include a display of creative work done both before and after admission to graduate standing.

(3) The requirements for the M.Arch., M.L.Arch., and M.F.A. degree include the completion of a creative terminal project. The student's plan for his terminal project must be approved by his graduate committee before it is undertaken.

(4) On the completion of his terminal project, the student must submit as a supplement three copies of a typewritten report describing the development of the project, the materials and equipment employed, and the technical procedures followed, and give other essential information bearing on the project; the report should be documented by photographs.

(5) After the completion of the terminal project, but before his final examination, the student must install a public exhibition presenting the several parts of the project. The School of Architecture and Allied Arts reserves the right to retain any part of the material exhibited as an indefinite loan.

(6) After the installation of the exhibition, but before public showing, the project is given a final review by the graduate committee, in the presence of the candidate. The review is accompanied by an oral examination of the candidate, which may be supplemented by a written examination.

Architecture

THE CURRICULUM IN ARCHITECTURE, leading to the degree of Bachelor of Architecture, is a five-year program. The lower-division program includes courses which provide acquaintance with the elementary aspects of architecture; these courses are organized to insure continuity with the professional work begun in the third year. The following courses are required for admission to an upper-division major in architecture:

	First Year	Term Hours
Design Studio I (AA 187).....		9
Painting (AA 290) or Sculpture (AA 293) or Drawing (AA 291).....		6
Mathematics		12
	Second Year	
Design Studio II (AA 287).....		9
Graphics (AA 231, 232, 233)		6
Design Orientation (AA 11, 12, 13)		0
Physics		9
Survey of Visual Arts (AA 201, 202, 203) or Introduction to the History of Art (AA 204, 205, 206).....		9

Because the upper-division program is planned in continuity with the basic courses offered during the first two years, students intending to major in architecture at the University of Oregon are strongly advised to enter the University as freshmen, in order to profit by this continuous training. Students transferring from other institutions, with preprofessional preparation differing from the pat-

tern indicated above, may be admitted to the professional curriculum upon examination. The following upper-division program is required :

Third Year	Term Hours
Architectural Design (AA 387).....	12
Mechanical Equipment of Buildings (AA 320, 321, 322).....	9
Theory of Structures I (AA 369, 370, 371).....	12
History of Architecture I (AA 337, 338, 339).....	9
City Planning I (AA 353, 354, 355).....	6
Fourth Year	
Architectural Design (AA 487).....	15
Theory of Structures II (AA 469, 470, 471).....	9
History of Architecture II (AA 340, 341, 342).....	9
Surveying for Architects (AA 317).....	2
Art & architecture elective.....	4
Liberal-arts elective	6
Fundamentals of Speech (Sp 111).....	3
Fifth Year	
Architectural Design (AA 587).....	18
Ethics & Practice (Architecture) (AA 529).....	2
Working Drawings, Specifications & Estimating (AA 417, 418, 419).....	6
Architecture elective	11
Liberal-arts elective	9

The requirements for a structural option include the courses listed above and, in addition :

	Term Hours
Differential & Integral Calculus (Mth 201, 202, 203).....	12
Theory of Structures III (AA 472, 473, 474).....	12

Graduate work is offered in architecture, leading to the Master of Architecture degree. For requirements, see pages 228-229.

The curriculum in architecture is accredited by the National Architectural Accrediting Board.

Business and Construction. Under the joint supervision of the School of Architecture and Allied Arts and the School of Business Administration, the University offers a five-year program of study for students who plan to enter the construction industry. The program, which leads to a bachelor's degree with a major in business administration, combines training in business methods and in the structural phases of architecture. For requirements see SCHOOL OF BUSINESS ADMINISTRATION.

LOWER-DIVISION COURSES

*AA 11, 12, 13. **Design Orientation.** No credit.

Lectures on the theory and practice of planning and design, intended to acquaint the student with the scope and nature of the design professions. Required for majors in architecture, landscape architecture, and interior architecture. Normally taken concurrently with AA 287. 1 hour.

AA 121. **Construction Materials.** 2 hours any term.

Materials and techniques of construction used in buildings and their furnishings. Materials utilized in framing, fabrication, enveloping, surfacing, and finishing. Aspects of color, scale, texture, techniques for use. Manufacture, distribution, availability, maintenance, and depreciation. Field trips, demonstrations, illustrated lectures, and laboratory investigation.

*AA 187. **Design Studio I.** 3 hours each term.

Execution of design projects and exercises intended to familiarize the student with fundamental form and space concepts of architecture; development of skill in control of proportion, scale, and design relationships. Students are encouraged to develop habits of problem formulation and sound bases for

* No-grade course.

value judgments; the release of the student's potential creative capacities is a primary concern of the course. Starck, Gilmore, Hudson, Kenyon, Gygax, Smith, Hayden.

AA 231, 232, 233. **Graphics.** 2 hours each term.

Intensive study of systems of drawing. Orthographic projection, descriptive geometry. Integration of the media and methods controlling delineation and other expressions of architectural subjects. 6 hours required for majors in architecture. Starck, Bryan, Latourell, Kemp, Kenyon.

*AA 287. **Design Studio II.** 3 hours each term.

The major factors which influence design decisions; relation of the physical and human environment to design; integration of design considerations involved in the production of an art form. Required for majors in architecture, interior architecture, and landscape architecture. Prerequisite: AA 187 or equivalent. Gilmore, Benedict, Moursund, Latourell, Ferens.

UPPER-DIVISION COURSES

AA 317. **Surveying for Architects.** 2 hours fall or spring.

Elements of plane surveying adapted to the needs of architects; field practice in the use of steel tape, level, and transit; determination of building-plot contours and their interpretation on plot-plan drawings; methods of calculating excavations and fills for building purposes. Quiner.

AA 320, 321, 322. **Mechanical Equipment of Buildings.** 3 hours each term.

Principles of plumbing, heating, ventilation, lighting, acoustics. Prerequisite: Ph 101, 102, 103; Mth 104. Rentschler.

AA 369, 370, 371. **Theory of Structures I.** 4 hours each term.

Application of mathematics to the design of building structures. Wood and steel construction; beams, columns, and simple frames; the relationship of structural design to architectural design. Prerequisite: algebra, trigonometry, physics. Briscoe, Peting.

*AA 387. **Architectural Design.** 1 to 8 hours any term.

Exploration of the creative process in architecture through development of design projects. Methods of problem solution, visual communication; individual criticisms, review of drawings and models, group discussion, field trips. Prerequisite: AA 287. Andrews, Hudson, Kenyon, Kemp, Smith, Hayden.

AA 401. **Special Studies.** Hours to be arranged.

AA 405. **Reading and Conference.** Hours to be arranged.

AA 407. **Seminar.** Hours to be arranged.

AA 417, 418, 419. **Working Drawings, Specifications, and Estimating.** 2 hours each term.

The preparation of working drawings, including scale and full-sized details; architectural specifications; field supervision of building construction. Bryan, Kemp.

AA 420, 421, 422. **Building Materials and Construction.** 3 hours each term.

Study of materials and methods of building construction. Contract documents and their use. Materials and labor estimating methods used by contractors and material dealers. Hannaford.

*AA 487. **Architectural Design.** 1 to 10 hours any term.

Extension of creative processes; synthesis and coordination of technological, cultural, and social aspects of architecture; design projects, individual criticism, group discussions, lectures and discussions by visiting specialists, reviews of projects. Prerequisite: 12 term hours in AA 387. Benedict, Briscoe, Dole, Gilmore, Latourell, Moursund.

* No-grade course.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- AA 469, 470, 471. **Theory of Structures II.** (G) 3 hours each term.
Wood and steel building trusses, reinforced-concrete building construction; retaining walls, footings, and foundations for buildings. Prerequisite: AA 369, 370, 371. Hannaford.
- AA 472, 473, 474. **Theory of Structures III.** (G) 4 hours each term.
Continuous frames, rigid frames, and their effects on architectural design. A series of problems, presented in conjunction with fifth-year architectural design. Hannaford.

GRADUATE COURSES

- *AA 501. **Special Studies.** Hours to be arranged.
- AA 505. **Reading and Conference.** Hours to be arranged.
- AA 507. **Seminar.** Hours to be arranged.
- AA 509. **Terminal Creative Project.** Hours to be arranged.
Open only to master's degree candidates
- *AA 529. **Ethics and Practice (Architecture).** 2 hours fall or spring.
Problems of professional ethics, business relations, office management, etc. Open only to fifth-year students.
- *AA 587. **Architectural Design.** 1 to 12 hours any term.
Relation of architecture to the immediate environment and to the city-scape; analysis of determinant factors influencing planning and design. One-half of the year is devoted to the solution of problems of extensive scale and broad scope. The terminal architectural design project is executed as a final half-year problem under the direction of a thesis committee. Prerequisite: 15 term hours in AA 487. Andrews, Bryan, Ferens, Gyax.

Interior Architecture

THE SCHOOL OFFERS a five-year curriculum in interior architecture leading to the degree of Bachelor of Interior Architecture. The lower-division program includes courses which provide acquaintance with the more elementary aspects of interior design, architectural design, and landscape design, organized to provide continuity with the professional design work begun in the third year. The curriculum is planned to prepare students for the professional practice of interior design.

For students who do not intend to practice professionally, the school also offers a two-year upper-division program in interior architecture, following two years of lower-division work; this program leads to a Bachelor of Science or Bachelor of Arts degree.

The following courses are required for admission to an upper-division major in interior architecture.

	First Year	Term Hours
Design Studio I (AA 187).....		9
Painting (AA 290).....		6
	Second Year	
Design Studio II (AA 287).....		9
Graphics (AA 231, 232, 233)		6
Interior Design (AA 288).....		4
Survey of Visual Arts (AA 201, 202, 203) or Intro. to History of Art (AA 204, 205, 206).....		9
Design Orientation (AA 11, 12, 13)		0

* No-grade course.

In the upper-division program, the student is assigned individual problems involving all phases of interior planning; emphasis is placed on creative development. Individual criticism is supplemented by lectures and reviews by members of the design staff. The student works in the same drafting room with the students and instructors in architecture and landscape design. The program includes field trips to acquaint the students with outstanding examples of current professional work in interior architecture. Opportunities are provided for collaboration on design problems with students in other fields in the arts. Students transferring from other institutions, with preprofessional preparation differing in some respects from the pattern indicated above, may be admitted to the professional curriculum upon examination.

The following courses are required in the three-year upper-division program:

Third Year	Term Hours
Interior Design (AA 388).....	12
Materials of Interior Design (AA 330, 331, 332).....	9
Ceramics (AA 255) or Weaving (AA 256).....	6
History of Architecture I (AA 337, 338, 339).....	9
Liberal arts	12
Fourth Year	
Interior Design (AA 488).....	15
History of Interior Architecture (AA 443, 444, 445).....	6
Furniture & Accessories (AA 424).....	2
Custom Cabinet & Furniture Design (AA 425, 426).....	8
Advanced Ceramics (AA 455) or Advanced Weaving (AA 456).....	6
History of Architecture II (AA 340, 341, 342).....	9
Liberal arts (upper-division).....	9
Fifth Year	
Interior Design (AA 588).....	18
Ethics & Office Practice (Interior) (AA 530).....	2
Working Drawings in Interior Arch. (AA 462, 463, 464).....	9
Workroom Procedures in Interior Design (AA 449).....	1
Art & architecture electives (American Architecture, Background of Modern Art, or Applied Design).....	9
Liberal arts	9

LOWER-DIVISION COURSES

AA 223. **Elements of Interior Design.** 2 hours.

Introduction to the scope, aim, and techniques of interior design, intended to provide a comprehensive understanding of the professional field. Open to nonmajor students with the consent of instructor. Frasier.

*AA 288. **Interior Design.** 2 hours any term.

Introduction to the field of interior design; relation to architecture and the allied arts; the basic principles of design and planning processes by which interior spaces and forms are studied and executed.

UPPER-DIVISION COURSES

AA 330, 331, 332. **Materials of Interior Design.** 3 hours each term.

Critical survey and study of the properties, manufacture, and application of materials used in interior design. Field trips to supply sources, etc. Open only to professional majors. Frasier.

*AA 388. **Interior Design.** 1 to 8 hours any term.

A series of creative problems in interior design; intensive analysis of design; methods of problem solution; individual criticism, review of design projects; group discussion and field trips. Prerequisite: AA 287, AA 288. Frasier, Nielson.

AA 401. **Special Studies.** Hours to be arranged.

AA 405. **Reading and Conference.** Hours to be arranged.

* No-grade course.

AA 407. **Seminar.** Hours to be arranged.

AA 424. **Furniture and Accessories.** 2 hours.

Analysis of standard lines of furniture and accessories; emphasis on design and its development, materials, methods of manufacture and distribution; furniture construction and techniques of shop drawing.

AA 425, 426. **Custom Cabinet and Furniture Design.** 4 hours each term.

First term: projects involving the design of custom furniture, preparation of detailed shop drawings, shop procedure; second term: construction of furniture designed during first term. Prerequisite: AA 424. Open to nonmajors with consent of instructor. Nielson, Muster, Frasier.

AA 449. **Workroom Procedure in Interior Design.** 1 hour.

Technical study of old and new materials; design and installation; drawings and estimates. Visits to workrooms. For professional majors only. Frasier.

AA 462, 463, 464. **Working Drawings in Interior Architecture.** 3 hours each term.

Preparation of working drawings, specifications, and estimates for materials and labor on projects in interior design. For professional majors only.

*AA 488. **Interior Design.** 1 to 10 hours any term.

A series of advanced creative design problems in interior architecture intended to develop the analytical approach; emphasis on integration with architecture and landscape design. Individual criticism, group discussions, and reviews. Prerequisite: 12 term hours in AA 388. Frasier, Nielson.

GRADUATE COURSES

*AA 501. **Special Studies.** Hours to be arranged.

AA 505. **Reading and Conference.** Hours to be arranged.

AA 507. **Seminar.** Hours to be arranged.

AA 509. **Terminal Creative Project.** Hours to be arranged.

Open only to master's degree candidates.

AA 530. **Ethics and Office Practice (Interior).** 2 hours.

Ethics and office procedure for the interior designer in private practice; trade contracts, discounts, interprofessional relations; sources of materials. Frasier.

*AA 588. **Interior Design.** 1 to 12 hours any term.

Professional interior design problems of increasing complexity for one-half of the year, involving collaborative problems, field trips, and reviews. A terminal design project executed as a final half-year problem under the direction of a thesis committee. Prerequisite: 15 term hours in AA 488. Frasier, Nielson.

Landscape Architecture and Urban Planning

THE CURRICULUM IN LANDSCAPE ARCHITECTURE, leading to the degree of Bachelor of Landscape Architecture, is a five-year program. The following courses are required for admission to an upper-division major in landscape architecture:

	First Year	Term Hours
Design Studio I (AA 187).....		9
Painting (AA 290) or Sculpture (AA 293) or Drawing (AA 291), and Water Color (AA 292).....		6
	Second Year	
Design Studio II (AA 287).....		9
Graphics (AA 231, 232, 233)		6

* No-grade course.

	Term Hours
Survey of Visual Arts (AA 201, 202, 203) <i>or</i> Introduction to the History of Art (AA 204, 205, 206).....	9
Design Orientation (AA 11, 12, 13)	0
Surveying for Architects (AA 317).....	2

The program provides the student with a broad educational background, together with technical studies essential for the professional practice of landscape architecture. Courses in the field are supplemented by courses in art, architectural design, construction, and city planning. Majors in landscape architecture work side by side with students of architecture and interior architecture, and have the benefit of design criticism from the entire faculty of the School of Architecture and Allied Arts. Opportunities are provided for collaboration on design problems by landscape and architecture students. The instructional program includes field trips to acquaint students with outstanding examples of the design and construction of parks, cemeteries, airports, private properties and subdivisions, golf courses, and planned civic developments—and for study of the use of various plant materials under difficult conditions of climate, soil, and exposure.

Students planning to major in landscape architecture may obtain necessary preparation in mathematics by completing courses in high-school mathematics through trigonometry.

The following upper-division courses are required for a major in landscape architecture:

Third Year	Term Hours
Landscape Design (AA 389).....	9
Plant Materials (AA 326, 327, 328).....	9
Landscape Maintenance (AA 358, 359).....	4
Landscape Construction I (AA 360, 361, 362).....	9
City Planning I (AA 353, 354, 355).....	6
History of Architecture I (AA 337, 338, 339).....	9
Fourth Year	
Seminar: Landscape Design Theory (AA 407).....	3
Landscape Design (AA 489).....	12
Plant Composition (AA 430, 431, 432).....	9
Landscape Field Practice (AA 459).....	3
Landscape Construction II (AA 460, 461).....	6
History & Literature of Landscape Architecture (AA 356, 357).....	6
Landscape Structures (AA 366).....	3
Fifth Year	
Landscape Design (AA 589).....	24
Ethics & Practice (Landscape) (AA 433, 434, 435).....	3
City Planning II (AA 499).....	6
Seminar in Planning & Housing (AA 508) <i>or</i> Seminar in Planning Administration (AA 507).....	6

During the three upper-division years, the student must complete 6 term hours of work in sculpture or painting and 9 term hours in electives outside the school.

The curriculum in landscape architecture is accredited by the American Society of Landscape Architects.

Graduate work is offered in landscape architecture, leading to the degree of Master of Landscape Architecture, and in urban planning, leading to the degree of Master of Urban Planning. The graduate program in urban planning is described below.

Urban Planning. The University offers a program of graduate study leading to the degree of Master of Urban Planning, for students interested in professional careers in city planning and in the planning of other areas affected by urbanization.

The program usually requires two years for completion. It is interdisciplinary in approach, including studies in urban geography, land economics, state and local government, statistics, sociology, etc., in addition to studies in physical planning,

civic design, and planning administration. A thesis or terminal planning project is required.

Undergraduate major work in architecture, landscape architecture, civil engineering, economics, geography, or political science provides good preparation for graduate study of urban planning.

LOWER-DIVISION COURSE

*AA 289. **Landscape Design.** 2 hours any term.

Study of the background and principles of landscape design; lectures, field trips, design of small properties. Open to nonmajors. Ruff.

UPPER-DIVISION COURSES

AA 326, 327, 328. **Plant Materials.** 3 hours each term.

The characteristics, identification, and design uses of trees, shrubs, vines, and flowers. Open to nonmajors with consent of instructor. Jette.

AA 353, 354, 355. **City Planning I.** 2 hours each term.

Fall and winter: history and significance of city planning; modern achievements in zoning, housing, and city and regional planning. Spring: economic, practical, and aesthetic factors. Dole.

AA 358, 359. **Landscape Maintenance.** 2 hours each term.

Cultivation of landscape plant materials; maintenance problems in relation to landscape architecture. Ruff.

AA 360, 361, 362. **Landscape Construction I.** 1 to 3 hours each term.

Elementary problems in the construction of landscape features.

AA 366. **Landscape Structures.** 3 hours.

The design and construction of simple wood and masonry landscape structures. Briscoe.

*AA 389. **Landscape Design.** 1 to 8 hours any term.

A series of problems in landscape architecture, beginning a three-year sequence of intensive study in analysis, solution, and presentation. Seminars and field trips. Prerequisite: AA 287.

AA 401. **Special Studies.** Hours to be arranged.

AA 405. **Reading and Conference.** Hours to be arranged.

AA 407. **Seminar.** Hours to be arranged.

*AA 489. **Landscape Design.** 1 to 10 hours any term.

A series of advanced problems in landscape architecture, with emphasis on broad planning problems and integration with architecture. Field trips and seminars. Prerequisite: 9 term hours in AA 389.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AA 411, 412, 413. **Parks, School Grounds, and Recreation Areas.** (g) 3 hours each term.

Principles of landscape design, related to the location and development of land for school, park, and recreation uses. Topographical factors and construction and maintenance problems. Planned for students in recreation, urban planning, and educational administration. Lectures, reports, study trips, projects. Jette .

*AA 430, 431, 432. **Plant Composition.** (G) 3 to 6 hours each term.

Design of plantings of trees, shrubs, and flowers. Lectures, field trips, and drafting. Prerequisite: AA 326, 327, 328. Cuthbert.

AA 433, 434, 435. **Ethics and Practice (Landscape).** (G) 1 hour each term.

Professional ethics, office management, and principles of superintendence. Cuthbert, Jette, Ruff.

* No-grade course.

- AA 459. **Landscape Field Practice.** (G) 3 hours.
Problems in making surveys, calculating grading, road layout, and siting. Ruff.
- AA 460, 461. **Landscape Construction II.** (G) 3 hours each term.
Advanced problems in landscape construction; retaining walls, drainage, irrigation; specification writing. Ruff.
- *AA 499. **City Planning II.** (G) 1 to 6 hours any term.
Urban and regional planning. Seminars, field study, design laboratory. Prerequisite: AA 353, 354, 355.

GRADUATE COURSES

- *AA 501. **Special Studies.** Hours to be arranged.
- AA 505. **Reading and Conference.** Hours to be arranged.
- AA 507. **Seminar.** Hours to be arranged.
Planning administration. Buford.
- AA 508. **Seminar in Planning and Housing.** 2 to 3 hours any term.
Discussions of housing and of urban and regional planning problems, led by faculty members and consultants. Assigned reading. Prerequisite: AA 353, 354, 355; fifth-year or graduate standing; consent of instructor. Cuthbert.
- AA 509. **Terminal Creative Project.** Hours to be arranged.
Open only to master's degree candidates.
- *AA 589. **Landscape Design.** 1 to 12 hours any term.
Landscape-design problems of increasing complexity. Collaborative problems, field trips, seminars. Third term devoted to terminal project. Prerequisite: 12 hours in AA 489.

Drawing, Painting, and Graphic Arts

WORK IN DRAWING AND PAINTING at the lower-division level is offered both for students preparing for advanced professional study and for other University students who wish some experience in creative work as a part of a liberal education. Sufficient studio work is provided to insure adequate technical training as a basis for an upper-division major in drawing and painting.

At the upper-division level, the special interests of students (landscape, portraiture, mural design, commercial applications, etc.) are given attention and encouragement. All teaching is through individual criticism. The student works at his easel or drawing board on his particular problem, and receives individual help from the instructor.

The following lower-division courses in art are required as preparation for a major in drawing and painting or in graphic arts:

	Term Hours
Basic Design (AA 295).....	6
Survey of Visual Arts (AA 201, 202, 203) or Intro. to Hist. of Art (AA 204, 205, 206).....	9
Painting (AA 290).....	12-15
Drawing (AA 291).....	6-9
Water Color (AA 292).....	2-3

Drawing and Painting. The upper-division major program leading to a bachelor's degree with a major in drawing and painting must include a minimum of 75 hours, normally distributed as follows:

	Third Year	Term Hours
Painting (AA 390).....		9
Drawing (AA 391).....		9
Composition & Visual Theory (AA 392).....		6
Art history		9
Art electives		6

* No-grade course.

Fourth Year	Term Hours
Advanced Painting (AA 490).....	9
Advanced Drawing (AA 491).....	6
Composition & Visual Theory (AA 492).....	9
Art electives	12

Graduate work leading to the degree of Master of Fine Arts is offered in the field of drawing and painting. For requirements, see pages 228-229.

Graphic Arts. The upper-division requirements for a bachelor's degree with a major in graphic arts are as follows :

Third Year	Term Hours
Composition & Visual Theory (AA 392), Visual Continuity (AA 493).....	12
Fundamentals of Print Making (AA 349).....	6
Calligraphy & Letter Design (AA 382).....	2
Drawing (AA 391)	6
Lithography (AA 480)	2
Studio elective	4

Fourth Year	Term Hours
Composition & Visual Theory (AA 492), Visual Continuity (AA 493).....	12
Fundamentals of Print Making (AA 349).....	6
Drawing (AA 491)	6
Painting (AA 490)	6
Studio elective	4
Art history	4

LOWER-DIVISION COURSES

AA 290. **Painting.** 2 to 3 hours any term.

Instruction in the use of oil color, water color, and other media. Registration permitted any term, but it is desirable that the work be started in the fall. 12 term hours required for upper-division standing. Vincent, Ryan, Soeder, Wilkinson, Foster, Tetzner.

AA 291. **Drawing.** 1 to 3 hours any term.

Training in observation and selection of significant elements. Registration permitted any term, but it is desirable that the work be started in the fall. 6 term hours required for upper-division standing. Soeder.

AA 292. **Water Color.** 2 to 3 hours.

The technique and use of water color, with special attention to its characteristics as a painting medium. Emphasis on landscape material. May be substituted for a third term of AA 291 to meet lower-division major requirement. Open to nonmajors with 4 hours of work in AA 291 or with consent of instructor. Soeder.

*AA 295. **Basic Design.** 2 hours each term.

Studio participation exercises involving the basic principles of design; a three-term introductory sequence. Open to nonmajors. Special section for Honors College students. Foster, James, Ryan.

*AA 298. **Sketching.** 1 hour any term.

Sketching from costumed models, to develop ability to observe clearly and record accurately. Offered especially for nonmajor students who have had no previous training in sketching or drawing. Soeder.

UPPER-DIVISION COURSES

AA 349. **Fundamentals of Print Making.** 3 hours.

Graphic reproduction and print techniques in silk screen, block printing, and photographic processes. Starck.

AA 381. **Water Color.** 2 to 3 hours.

Continuation of AA 292. The technique and use of water color, with particular attention to landscape material. McCosh.

* No-grade course.

- AA 382. **Calligraphy and Letter Design.** 1 to 3 hours.
Basic historical and contemporary determinants of letter forms; configuration and recognition in relation to communication problems; development of skill and expression in the formation of letters. Starck.
- AA 390. **Painting.** 2 to 4 hours any term.
Third-year painting. Still life, figure, portrait, and landscape; pattern and space organization; color and design studies; various media and processes. Prerequisite: 9 hours in AA 290. Vincent, Wilkinson.
- AA 391. **Drawing.** 1 to 4 hours any term.
Second sequence in drawing. Space and form representation; analysis and statement of form; linear and total statement; structure and movement as factors in drawing; still life and figure; use of various media. Prerequisite: 6 hours in AA 291 or AA 292. Soeder.
- AA 392. **Composition and Visual Theory.** 2 to 4 hours any term.
Light, color, and design as they relate to painting problems; relationship of painting to architecture; mural design and other problems. Open to nonmajors with consent of instructor. Wilkinson.
- AA 401. **Special Studies.** Hours to be arranged.
- AA 405. **Reading and Conference.** Hours to be arranged.
- AA 407. **Seminar.** Hours to be arranged.
- AA 481. **Water Color.** 2 to 4 hours spring.
Advanced work in water color, with particular attention to landscape material. Open to nonmajors with consent of instructor. Continuation of AA 381. McCosh.
- AA 482. **Anatomy for Artists.** 2 to 4 hours winter.
Study of the principles and formation of the skeletal and muscular structure of the human figure, as an aid to observation for graphic statements. Prerequisite: AA 290 or AA 291. Wilkinson, McCosh.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- AA 480. **Lithography.** (g) 2 to 4 hours any term.
Principles and methods of lithography; practice in all stages from the preparation of stones to the hand printing of editions. Special emphasis on the medium's contribution to drawing. McCosh.
- AA 490. **Advanced Painting.** (g) 2 to 4 hours any term.
Advanced problems in portrait figure, landscape, and still life, in all media. Prerequisite: 12 hours in AA 290 or AA 390. Vincent, Wilkinson.
- AA 491. **Advanced Drawing.** (g) 1 to 4 hours any term.
Advanced work in drawing. Study of form from the figure. Prerequisite: 6 hours in AA 291 or AA 391. Essayian.
- AA 492. **Composition and Visual Theory.** (G) 2 to 4 hours any term.
A study of light, color, and visual processes as they relate to easel and mural painting. Wilkinson.
- AA 493. **Visual Continuity.** (G) 1 to 3 hours any term.
Study of the problems of image sequence and continuity in printed material, display, photography, and film. Prerequisite: AA 295 or consent of instructor. Open to nonmajors. Foster.

GRADUATE COURSES

- *AA 501. **Special Studies.** Hours to be arranged.
- AA 505. **Reading and Conference.** Hours to be arranged.
- AA 507. **Seminar.** Hours to be arranged.

* No-grade course.

AA 509. **Terminal Creative Project.** Hours to be arranged.

AA 580. **Graduate Studies in Print Making.** Hours to be arranged.

Advanced work in lithography and engraving. Black-and-white and multiple-color process. McCosh.

AA 590. **Graduate Studies in Painting, Drawing, and Design.** Hours to be arranged.

Work at an advanced level with problems of color and form, techniques, processes, and visual theories. McCosh, Vincent, Wilkinson, Ryan, Soeder.

Sculpture and Applied Design

THE PROGRAM IN SCULPTURE AND APPLIED DESIGN includes instruction and major curricula in sculpture, ceramics, weaving, and jewelry and metalsmithing.

Sculpture. The degree program in sculpture is planned to provide a sound foundation for mature investigation of the practical, theoretical, and historical aspects of the discipline. The student is encouraged to take advantage of the opportunities offered by the University for liberal education, while at the same time developing appreciation and technique within the broad field of art.

In the lower-division classes, the emphasis is on elements in the language of form. Upper-division instruction enlarges upon theoretical perspectives, directing the student to personal investigations of the physical and expressive provinces of sculpture, to the study of constructive and destructive elements of light, and to the use of air as a plastic solid in equal partnership with the visible solid.

The following lower-division courses in art are required as preparation for a major in sculpture:

	Term Hours
Basic Design (AA 295).....	6
Survey of Visual Arts (AA 201, 202, 203) or Intro. to Hist. of Art (AA 204, 205, 206).....	9
Elementary Sculpture (AA 293).....	9
Drawing or Painting (AA 290 or AA 291).....	6

The upper-division major program in sculpture, leading to a bachelor's degree, includes the following required courses:

Third Year	Term Hours
Techniques of Sculpture (AA 393).....	15
Art history	9
Advanced Drawing (AA 491).....	6
Fourth Year	
Advanced Sculpture (AA 494).....	12
Seminar (AA 407).....	6
Background of Modern Art (AA 476, 477, 478).....	9

For the requirements for the Master of Fine Arts degree with a major in sculpture, see pages 228-229.

Applied Design. The University offers instruction and major programs in the following fields of applied-design: ceramics, weaving, and jewelry and metalsmithing. The following lower-division courses in art are required as preparation for a major:

	Term Hours
Basic Design (AA 295).....	6
Survey of Visual Arts (AA 201, 202, 203) or Intro. to Hist. of Art (AA 204, 205, 206).....	9
Drawing or Painting (AA 290 or AA 291).....	6
Applied design	9

The curriculum is designed to acquaint the student with the general character, techniques, and materials of applied design.

The upper-division major program in applied design, leading to a bachelor's degree, includes the following required courses:

Third Year	Term Hours
Advanced applied design.....	12
Advanced studio course (drawing, painting, or sculpture).....	6
Art history	9
Art electives	9
Fourth Year	
Advanced applied design.....	18
Advanced studio course.....	9
Background of Modern Art (AA 476, 477, 478).....	9

For the requirements for the Master of Fine Arts degree with a major in ceramics or weaving, see pages 228-229.

LOWER-DIVISION COURSES

AA 255. **Ceramics.** 2 to 4 hours any term.

Introduction to ceramic techniques and materials. Throwing, molding, and hand building. Surface decoration of two- and three-dimensional surfaces. Students participate in stacking, firing, and drawing the kilns. Open to nonmajors. Victoria Ross, James.

AA 256. **Weaving.** 2 to 4 hours any term.

Introduction to basic weaving techniques. The dressing, care, and manipulation of several types of looms. Experimentation with a wide variety of fibers. Production of textiles of original design on 4- and 8-harness looms. Nixon.

AA 257. **Jewelry and Metalsmithing.** 2 to 4 hours any term.

Introduction to the handworking of nonferrous metals—copper, brass, bronze, silver, gold; practical information about making jewelry and metal objects—soldering, stone setting, centrifuge casting, forging, raising. Nixon.

AA 293. **Elementary Sculpture.** 2 to 4 hours any term.

Introduction to materials. Elementary considerations of form; technical and compositional exercises in clay, plaster, wood, and stone. Sections for pre-dental students and other nonmajors. Zach, Buckner.

UPPER-DIVISION COURSES

AA 393. **Techniques of Sculpture.** 2 to 6 hours any term.

Modeling problems in portraiture, figure study, and group composition. Technical and aesthetic considerations of the several sculptural media. Buckner, Zach.

AA 401. **Special Studies.** Hours to be arranged.

AA 405. **Reading and Conference.** Hours to be arranged.

AA 407. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AA 455. **Advanced Ceramics.** (G) 2 to 4 hours any term.

Advanced studio work; individual projects. Emphasis on creative form. Study of material, texture, and functional relationships. Body and glaze making; earthenware, stoneware, and porcelain. Kiln atmosphere and effects on body and glaze. Students assume responsibility for firing their own work. 30 term hours required for majors. Prerequisite: 6 term hours in AA 255. James, Victoria Ross.

AA 456. **Advanced Weaving.** (G) 2 to 4 hours any term.

Emphasis on creative work. Production of a wide variety of handwoven fabrics. Historical studies, fabric analysis, spinning, dyeing. 30 term hours required for majors. Nixon.

- AA 457. **Advanced Jewelry and Metalsmithing.** (G) 2 to 4 hours any term.
Emphasis on creative work. Advanced problems in forging, raising, centrifuge casting, enameling, etching, stone setting. Nixon.
- AA 458. **Textile Printing.** (G) 2 to 4 hours.
Advanced problems in design and color, applied to standard textiles. Technique in pattern design and yardage printing. Silk screen, block print, etc. Gehring.
- *AA 494. **Advanced Sculpture.** (G) 2 to 4 hours any term.
Coordination of sculpture with related fields of architectural, landscape, interior, and industrial design. Zach.
- AA 496. **Ceramic Sculpture.** (G) 2 hours any term.
Techniques in building, modeling, molding, and surfacing terra cotta. Emphasis on the character of the materials and their effectiveness as sculptural media. Study of forms appropriate to residential and civic design. Prerequisite: three terms of AA 293, three terms of AA 255.

GRADUATE COURSES

- *AA 501. **Special Studies.** Hours to be arranged.
- AA 505. **Reading and Conference.** Hours to be arranged.
- AA 507. **Seminar.** Hours to be arranged.
- AA 509. **Terminal Creative Project.** Hours to be arranged.

Art History

THE PROGRAM IN ART HISTORY provides: (1) instruction in this basic aspect of human culture for all University students (all courses in art history are open to nonmajors); (2) the historic background in art and architecture needed in the several major curricula of the School of Architecture and Allied Arts; and (3) a core of studies for a major curriculum in the history of art.

The art-history major combines historical study with creative studio practice. It is designed to provide a broad perspective for the understanding of the art of the past and present, and a basis for critical judgment of individual works of art. The following lower-division courses are required as preparation for a major:

	Term Hours
Elementary studio courses (drawing, painting, sculpture, or applied design).....	12
Intro. to Hist. of Art (AA 204, 205, 206) or Survey of Visual Arts (AA 201, 202, 203).....	9
Two years of French or German.....	24

The upper-division major program in art history, leading to a bachelor's degree, includes the following required courses:

Third Year	Term Hours
History of art (selected).....	18
Language or literature.....	9
Electives (recommended: art studio courses, history, anthropology, philosophy).....	18
Fourth Year	
History of art (selected).....	18
Aesthetics (Phl 441, 442, 443).....	9
Electives (recommended: language or literature, history, anthropology, art studio courses).....	18

LOWER-DIVISION COURSES

- †AA 201, 202, 203. **Survey of the Visual Arts.** 3 hours each term.
Cultivation of understanding and intelligent enjoyment of the visual arts

* No-grade course.

† Students will not be permitted to enroll for both AA 201, 202, 203 and AA 204, 205, 206.

through a study of historical and contemporary works; consideration of motives, media, and forms. Baldinger, Kramer.

*AA 204, 205, 206. **Introduction to the History of Art.** 3 hours each term.

An historical survey of the visual arts from prehistoric to modern times. Selected works of painting, sculpture, architecture, and other arts are studied in relation to the cultures producing them. Designed for nonmajor students, as well as for majors in art history. Special section for Honors College students. Golson, Lawrence.

UPPER-DIVISION COURSES

AA 337, 338, 339. **History of Architecture I.** 3 hours each term.

Descriptive and critical analysis of architecture from prehistoric times to the Renaissance in Italy. Includes the study of ancient, mediaeval, Islamic, and pre-Columbian American architecture. M. D. Ross, Lawrence.

AA 340, 341, 342. **History of Architecture II.** 3 hours each term.

Descriptive and critical analysis of architecture from the Renaissance in Italy to the present day. Evolution of modern architecture. M. D. Ross.

AA 346, 347, 348. **History of Painting.** 3 hours each term.

Chronological and interpretative study of the language of painting. Emphasis on the development of painting from the Renaissance to the nineteenth century. Kramer.

AA 356, 357. **History and Literature of Landscape Architecture.** 3 hours each term.

History of gardens and public open spaces. Fall: development of the formal garden from the end of the Middle Ages to the eighteenth century; winter: the landscape garden since the eighteenth century, Oriental and modern garden design. Majors in landscape architecture complete a year sequence with AA 342. M. D. Ross.

AA 376. **Classical Art.** 3 hours.

Historical and interpretative study of the art of ancient Greece and Rome. Lawrence.

AA 377. **Romanesque and Gothic Art.** 3 hours.

Historical and interpretative study of the art of the Middle Ages in northern Europe. Kramer.

AA 378. **Italian Renaissance Art.** 3 hours.

Historical and interpretative study of the art of Italy in the fifteenth and sixteenth centuries. Golson.

AA 401. **Special Studies.** Hours to be arranged.

AA 405. **Reading and Conference.** Hours to be arranged.

AA 407. **Seminar.** Hours to be arranged.

AA 443, 444, 445. **History of Interior Architecture.** 2 hours each term.

History of interior architecture, including the study of contemporary furniture, textiles, rugs, etc., as an art expression. Frasier.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AA 440. **American Architecture.** (G) 3 hours.

History of architecture in the United States. Special emphasis on regional building in the Pacific Northwest. Seminar discussions and assigned research. Students wishing to devote additional time to special research projects may enroll also under AA 401. M. D. Ross, Kramer.

AA 446, 447, 448. **History of Oriental Art.** (G) 3 hours each term.

Comparative study of architecture, sculpture, landscape design, and painting as expressions of individual and social experience in the cultures of the Far East. Fall: Indian and Indonesian; winter: Chinese; spring: Japanese. Baldinger.

* See page 242, note (†).

AA 450, 451, 452. **Art in Latin America.** (G) 3 hours each term.

Preconquest art of the Andean, Mexican, Mayan, and related cultures. Development of architecture, painting, and sculpture in the Spanish and Portuguese colonies from the sixteenth to the nineteenth centuries, with emphasis on the fusion of European and indigenous elements. Development of modern art in the twentieth century in Mexico and Brazil. M. D. Ross.

AA 476, 477, 478. **Background of Modern Art.** (G) 3 hours each term.

Intensive study of the development of art in the nineteenth and early twentieth centuries. Prerequisite: AA 201, 202, 203 or AA 204, 205, 206. Golson.

GRADUATE COURSES

*AA 501. **Special Studies.** Hours to be arranged.

*AA 503. **Thesis.** Hours to be arranged.

AA 505. **Reading and Conference.** Hours to be arranged.

AA 507. **Seminar.** Hours to be arranged.

Ancient Art.

Mediaeval Art.

Renaissance Studies.

Baroque Art.

Twentieth-Century Art.

Islamic Architecture.

Chinese and Japanese Landscape Painting.

Himalayan Art.

Art Education

THE CURRICULUM IN ART EDUCATION leads to the B.S. or B.A. degree and to an Oregon basic teaching certificate. The program is designed to prepare students for teaching art in junior and senior high schools and to provide a background for the supervision of art in the elementary-school program. The following lower-division courses are required as preparation for a major in art education and for admission to student teaching. Art electives must include 4 to 6 hours in each of the following areas: drawing and painting, sculpture, ceramics, jewelry or weaving.

	Term Hours
Basic Design (AA 295).....	6
Survey of Visual Arts (AA 201, 202, 203) or Intro. to Hist. of Art (AA 204, 205, 206)	9
†Human Development & Learning (Ed 315).....	5
Art electives (studio).....	24
Psychology	9

The following upper-division courses are required to complete requirements for a degree with a major in art education:

Third Year	Term Hours
Introduction to Art Education (ArE 314).....	3
Art in the Junior High School (ArE 315).....	3
Art in the Senior High School (ArE 414).....	3
Art electives	18
†Student Teaching: Junior High (Ed 416).....	5
†Student Teaching: Senior High (Ed 417).....	5
Fourth Year	
Art electives chosen from: drawing, painting, lithography, water color, composition and visual theory, visual continuity, sculpture, ceramics, weaving, or jewelry	18-24
History of art	9
Seminar: Methods and Research in Secondary-School Art (ArE 407).....	3

* No-grade course.

† Education courses required for certification by the Oregon State Department of Education.

A fifth year of preparation is required for standard secondary-school (junior and senior high school) certification in Oregon. Students working toward the completion of the fifth-year requirements are advised individually concerning the selection of courses. Students completing a properly planned fifth-year program may qualify for a master's degree.

Minimum Requirements for Art Teaching. The minimum subject requirements for certification of a teacher of art in Oregon high schools, established by the Oregon State Department of Education, are as follows: for a basic certificate, granted after four years of college work, a *basic norm*—36 term hours of work in art, including work in each of the following: drawing and painting, sculpture, art history, crafts, and basic design (of the 36-hour total, 27 hours must be in studio work, including 6 hours in basic design); for a standard certificate, granted after five years of college work, a *standard norm*—57 term hours of work in art, including the basic-norm requirement.

The norm requirements listed above will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 260.

UPPER-DIVISION COURSES

AA 311, 312. Art in the Elementary School. 2 hours each term.

First term: introduction to the visual arts through laboratory experiences; design, drawing, painting, and other two-dimensional activities with materials appropriate for the primary- and intermediate-school child; lectures, group discussions, evaluations, studio work. Second term: continuation of art experiences for the elementary-school child, with emphasis on three-dimensional form. AA 311 prerequisite to AA 312.

ArE 313. Art in the Elementary School. 3 hours.

Critical examination of individual and group activities currently offered in the elementary-school art program; lectures, curriculum design, evaluation of process and technique; literature in the field. Satisfies the Oregon State Department of Education methods-course requirement. Prerequisite: AA 311, 312 or consent of the instructor.

ArE 314. Introduction to Art Education. 3 hours fall.

A lecture-laboratory-seminar study of the growth and developmental stages of children in relation to creative experience with visual-art materials. Required of all majors and students working for certification in secondary-school art. Prerequisites: Ed 310; two years of lower-division work in art studio and art history courses. Ballinger.

ArE 315. Art in the Junior High School. 3 hours winter.

Critical evaluation of ideas, materials, and program content appropriate for art experiences of the pre-adolescent junior-high-school student. Offered concurrently with the first term of student teaching in junior high school. Lecture, laboratory course. Prerequisite: ArE 314. Ballinger, Gehring.

ArE 316. Children's Art Laboratory. 2 hours.

Work with children in a supervised art laboratory; designed for students preparing for art teaching at both the elementary and secondary levels. Burgner.

ArE 401. Special Studies. Hours to be arranged.

ArE 405. Reading and Conference. Hours to be arranged.

ArE 407. Seminar. Hours to be arranged.

Methods and Research in Secondary-School Art. Ballinger, Gehring.

*Ed 416. **Supervised Teaching: Junior High School.** 5 to 15 hours any term.

*Ed 417. **Supervised Teaching: Senior High School.** 5 to 15 hours any term.

Student teaching experience in the public schools. One hour a day, five days a week; first term junior high school, second term senior high school. Maxi-

* No-grade course.

mum credit, 15 hours for two terms. Permission for student teaching must be obtained from the art-education division. Gehring.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

ArE 409. **Practicum.** (g) Hours to be arranged.

Practicum experience provided in the use of creative activities as problem-solving opportunities for the mentally retarded child; laboratory experiences with art and craft materials. Gehring.

ArE 411. **Methods and Research Materials: Art in Elementary Schools.** (G) 3 hours fall.

A study of significant literature and research in the field; laboratory investigation of materials, ideas, and methods currently used in elementary schools. Satisfies state certification requirement for an elementary art-methods course. Prerequisite: ArE 311, 312, previous teaching experience, or consent of the instructor. Burgner.

ArE 414. **Art in the Senior High School.** (G) 3 hours spring.

A laboratory course designed to explore the possibilities of new and significant art activities appropriate for the adolescent. Prerequisite: ArE 314, ArE 315. Foster.

GRADUATE COURSES

*ArE 501. **Special Studies.** Hours to be arranged.

ArE 505. **Reading and Conference.** Hours to be arranged.

ArE 507. **Seminar.** Hours to be arranged.

ArE 532. **Supervision of Children's Art Laboratory.** 3 hours any term.

Designed to provide an opportunity for work with children in a planned laboratory situation; responsibility for program design and supervision of children's art activities. Prerequisite: teaching experience or consent of instructor. Burgner.

ArE 535. **Art and Architecture for the School Administrator.** 3 hours.

Problems of the school administrator in the field of art programming; architectural principles in relation to school-plant design. Lectures and studio-laboratory demonstration.

* No-grade course.

School of Business Administration

RICHARD W. LINDHOLM, Ph.D., Dean of the School of Business Administration.
WESLEY C. BALLAINE, Ph.D., Director of the Bureau of Business Research.
STUART U. RICH, D.B.A., Director of Forest Industries Management Center.

Accounting and Business Statistics

Professors: J. O. EATON, C. E. JOHNSON, A. B. STILLMAN (emeritus).
Associate Professors: D. A. BAERNCOFF, (acting department head), D. S. HARWOOD, JR., J. W. SOHA.*
Assistant Professors: C. E. BROWNING, G. A. CHRISTY, A. L. PEETERSON, A. L. THOMAS.
Lecturer: C. J. LUNESKI.
Instructors: M. CHATFIELD, P. B. McDOWELL, D. R. ROGERS, R. J. SMITH, JR.
Fellow: J. W. WILKINSON.
Assistants: W. K. ELLEFSON, J. L. FERGUSON, R. D. HAYMAN, L. P. ISOTALO, D. C. KRESGE, R. J. PETERSEN.

Finance and Business Environment

Professors: E. W. REED (department head), W. C. BALLAINE, O. K. BURRELL, S. J. KAGAN, R. W. LINDHOLM, V. P. MORRIS (emeritus), W. J. ROBERT.†
Associate Professors: W. D. RICHINS, K. D. SKELTON, D. A. WATSON.
Assistant Professors: G. A. CHRISTY, L. W. ROSS, JR.
Instructors: NABIL ABOULFADL, R. V. COTTER, PRETORIUS VAN DEN DOOL.
Fellow: T. E. STITZEL.
Assistants: G. T. JACOB, N. R. MADHOC, M. J. NELSON, L. A. PETERSEN, C. E. RUCKWARDT, I. J. SAUNES, P. D. WILLIAMS.

Marketing, Insurance, and Transportation

Professors: M. R. GREENE (department head),‡ N. H. COMISH (emeritus), A. L. LOMAX (emeritus).
Associate Professors: S. U. RICH, R. J. SAMPSON, C. F. ZIEBARTH.
Assistant Professors: C. E. BROWNING, D. P. REMINGTON, N. R. SMITH, D. L. THOMPSON.
Instructors: R. C. BERSCHINSKI, R. E. BROWN, M. B. BYRNE, L. J. HUNT, ALAN MACDONALD.
Fellow: R. H. EVANS.
Assistants: C. A. AROLA, T. L. CALOURI, J. P. LIEFELD, H. E. TENNANT.

Personnel and Industrial Management

Professors: S. C. VANCE (department head), J. B. MINER.
Associate Professors: E. F. BEAL, F. J. SEUBERT.†

* On leave of absence 1963-64.

† On sabbatical leave 1963-64.

‡ On sabbatical leave, spring term, 1963-64.

Assistant Professors: CATHERINE M. JONES, A. K. KORMAN.

Instructors: D. L. COCHRAN, W. C. BESSEY, M. F. EL HITAMI, P. B. FOSTER, C. F. GRAY, K. D. RAMSING, C. W. RICE, JR.

Fellow: N. SIEMENS.

Assistants: R. L. BURROW, W. G. GIBBS, A. K. GULEZIAN, J. A. RUPP.

Secretarial Science

Instructors: ILA M. BEAVER, ANNE M. MARNIX, LUCILLE R. NEEDHAM.

THE SCHOOL OF BUSINESS ADMINISTRATION recognizes, as its primary function in the University, the provision of the broad education and understanding essential for responsible careers in the business world, in which leaders must be capable of continued adjustment to changing conditions in the firm and in the general social, economic, and political environment within which the firm operates.*

To insure such an education for its students, the school requires that undergraduate majors take one-half of their work in the liberal arts and sciences. Within the school, professional courses relate new insights and developments in the social and natural sciences to the needs of business firms in meeting their responsibilities to their owners, employees, and customers.

Although the school is primarily concerned with providing capable administrative, research, and technical personnel for business, its curricula also provide excellent preparation for careers in government and education.

The instructional program of the school is organized in two divisions: the Division of Undergraduate Studies and the Division of Graduate Studies. The Division of Graduate Studies operates under the general direction of the Graduate School of the University.

The School of Business Administration was established in 1914 as the School of Commerce; the present name was adopted in 1921. It has been a member of the American Association of Collegiate Schools of Business since 1923. During the year 1964 the school is celebrating its golden anniversary.

The following business honorary and professional societies have active chapters at the University: Beta Gamma Sigma, business administration scholastic honorary; Beta Alpha Psi, accounting; Delta Nu Alpha, transportation; Eta Mu Pi, merchandising; Phi Chi Theta, business women; Propeller Club, foreign trade.

Scholarships and Awards. For scholarships and fellowships established specifically for students in business administration, see pages 94-95. For business administration prizes and awards, see pages 100-101.

Bureau of Business Research. The Bureau of Business Research conducts a continuing program of research in economic and business problems. The program includes the regular collection of economic data for the state of Oregon and intensive investigation of special problems. Although the Bureau emphasizes research problems of particular interest to Oregon, it also concerns itself with problems of general importance. The program is supported in part through grants from Federal, state, and local governmental agencies, foundations, trade associations, private business firms, etc. Selected graduate students are offered the opportunity for valuable training through working on research problems.

* An undergraduate program, combining courses in business and courses in a technical field, is offered at Oregon State University, Corvallis, through the School of Business and Technology. Technical "minors" are available in science, agriculture, engineering, forestry, and home economics; 27 term hours in the technical minor are required, in addition to courses in business. The Oregon State program leads to a bachelor's degree; by action of the State Board of Higher Education, graduate major work in business is offered exclusively at the University of Oregon.

Currently the Bureau is cooperating in a comprehensive study and evaluation of the curriculum of the School of Business Administration.

The Bureau of Business Research publishes the monthly *Oregon Business Review* (sent free of charge to Oregon residents on request), the annual *Oregon Economic Statistics*, reprint *Faculty Studies in Business Administration*, and occasional research monographs.

The Bureau is aided in its work by an Advisory Committee; members of the committee are: T. E. Bolger, vice-president and general manager, Pacific Bell Northwest; Harold Cake, vice-president, Equitable Savings and Loan Association; Thomas W. Delzell, chairman of the Board and chief executive officer, Portland General Electric Company; Charles F. Luce, administrator, Bonneville Power Administration; George B. Martin, assistant superintendent of schools, Salem; Tom Scanlon, educational director, Oregon State AFL-CIO; Edgar Smith; Ray Vester, vice-president, Capitol Finance Corporation; S. H. Mallicoat, director, Oregon State Department of Planning and Development.

Forest Industries Management Center. The Forest Industries Management Center conducts a comprehensive program of management and marketing research and service for the forest-products industries, coordinated with a program for the training of students for management careers in these industries. The forest industries training program supplements the regular major courses and curricula in business administration by providing specialized knowledge useful in forest industries careers through seminars and research projects.

Both the research and the training programs are planned and conducted with the active support and participation of executives in the forest industries of the Pacific Northwest, under the leadership of the Forest Industries Management Center Advisory Committee; the members of the Executive Subcommittee of the Advisory Committee are: Foster Anderson, partner, Clear Fir Products; Lester E. Anderson, vice-president, Random Lengths Publishing Company; R. A. Kronenberg, manager, Lumber and Plywood Division, Springfield Division, Weyerhaeuser Company; Joseph W. McCracken, executive vice-president, Western Forest Industries Association; Dr. Donald B. Slocum, Orthopedic and Fracture Clinic, Eugene.

Conferences and Lectures. Frequent conferences on general and specialized business problems are sponsored each year by the School of Business Administration, with the cooperation of business leaders of the Pacific Northwest. These conferences are usually open to students in the school.

Leaders in various fields of business are regularly invited to the campus to discuss new developments and professional opportunities with undergraduate and graduate students.

Division of Undergraduate Studies

THE DIVISION OF UNDERGRADUATE STUDIES of the School of Business Administration includes four departments, each of which offers several major options, leading to the Bachelor of Business Administration, Bachelor of Arts, or Bachelor of Science degrees:

Accounting and Business Statistics—accounting; professional accounting; business statistics.

Finance and Business Environment—banking; investments; finance management; international business; business economics; business teacher education.

Marketing, Insurance, and Transportation—marketing; insurance; traffic management and utilities; real estate; business and construction; transportation.

Personnel and Industrial Management—production; personnel; management; office administration.

Admission. The undergraduate major curricula in business administration are organized on an upper-division basis. Freshman students intending to major in business administration are enrolled in the College of Liberal Arts for a two-year prebusiness program, which combines liberal arts courses with introductory preprofessional courses in the School of Business Administration. The lower-division prebusiness courses are planned to provide continuity of training throughout the student's undergraduate years. Educational continuity is further insured through the assignment of members of the faculty of the School of Business Administration as advisers to prebusiness students.

Students planning to enroll in the School of Business Administration for upper-division major studies leading to a bachelor's degree must make formal application to the dean of the school after the completion of two years of college work, but not later than one month before the opening of the term in which admission is sought. Notification of acceptance will be made when eligibility has been established. This requirement will be applicable with the graduating class of 1967 (normally, students seeking admission to an upper-division major in the fall of 1965).

To be eligible for admission, the student must have satisfied all lower-division requirements of the University, must have maintained a C average in English Composition (Wr 121, 122, 123), and must have completed the following required prebusiness courses:

	Term Hours
*Intro. College Math. (Mth 104)	4
Fundamentals of Speech (Sp 121)	3
Business Law I (FBE 226)	3
Intro. to Business Statistics (BS 232)	3
Principles of Economics (Ec 201, 202, 203)	9
†Fundamentals of Accounting (Ac 221, 222)	6

Business Environment, (MIT 125, 126) is recommended as a freshman elective, but is not required.

Major Requirements. To qualify for a bachelor's degree with a major in the School of Business Administration, the student must complete: (1) a group of core courses required of all majors, (2) the specialized courses required in one of the several major options offered by the school, (3) a minimum of 66 term hours of work after formal admission as an upper-division major,‡ and (4) a minimum of 90 term hours in courses outside the School of Business Administration. The student must also earn a cumulative 2.00 grade-point average in business courses and a 2.00 GPA in business courses taken at the University of Oregon. The upper-division core courses are:

Junior Year	Term Hours
Organization & Interpersonal Relations (PIM 321)	3
Financial Institutions (FBE 320)	3
Elements of Marketing (MIT 323, 324)	6
§Production Management (PIM 329)	3
Elementary Inf. in Bus. Stat. (BS 333)	3
¶Managerial Accounting (Ac 313)	3
Business Finance (FBE 322)	3
Business Law II (FBE 326)	3

* Students who receive a grade of 3 on a mathematics placement test given all entering students are exempt from this requirement.

† The third term of Fundamentals of Accounting (Ac 223) is required for accounting majors.

‡ This requirement will be applicable with the graduating class of 1967—normally, students admitted as upper-division majors in the fall of 1965.

§ Not required for the option in business teacher education.

¶ Not required for accounting majors.

Senior Year

Two of the following courses:	Term Hours
Business Policies (PIM 453)	3
Business Fluctuations & Expansion (FBE 466)	3
Business History (PIM 480)	3
Business Enterprise & Social Responsibility (FBE 434)	3

The core courses provide all able graduates with a general education for the management of business firms and a sound management background for careers in government and education and for life in our highly competitive and technical society. The major options offered by the several departments provide specialized training for a variety of careers in business.

Accounting and Business Statistics

THE PROGRAM IN ACCOUNTING and business statistics is designed to prepare students for professional careers in these special fields and to provide all students of business with an understanding of the theory and techniques of quantitative analysis as a basis for administrative decision making.

General Accounting. The major curriculum in accounting is a four-year program designed for students who wish to prepare for a professional career in business or government service with an emphasis on accounting and quantitative analysis of business data. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Asset Valuation & Income Measurement (Ac 350, 351).....	6
Principles of Cost Accounting (Ac 360, 361).....	6
Corporate Accounts & Statements (Ac 352).....	3
Income-Tax Procedures (Ac 411, 412).....	4
Minimum of 11 term hours selected from electives listed below.....	11
	<hr/>
	30

ELECTIVES

Income-Tax Procedures (Ac 413).....	2
Special Topics in Accounting (Ac 450, 451).....	6
Accounting Verification (Ac 440, 441).....	6
Management Information Systems (Ac 420, 421).....	6
Money & Banking (Ec 318).....	3
Public Finance (Ec 319).....	3
Economic Theory (Ec 375, 376, 377).....	9
Computing (Mth 444).....	4
Investments (FBE 463).....	3
Risk & Insurance (MIT 354).....	4
Quantitative Analysis for Business Decisions (BS 432).....	3

All majors in general accounting are required to take one year of college mathematics during their lower-division years. Courses in mathematics of finance or similar courses may not be counted toward the satisfaction of this requirement.

Professional Accounting. A special five-year program in professional accounting is offered for students who wish to prepare for careers as certified public accountants or accounting executives. Students who satisfy the requirements of the Graduate School and the School of Business Administration may earn the M.B.A. degree at the end of the fifth year. The major requirements, in addition to the core program of the school, are as follows:

	Term Hours
Asset Valuation & Income Measurement (Ac 350, 351).....	6
Corporate Accounts & Statements (Ac 352).....	3
Principles of Cost Accounting (Ac 360, 361).....	6
Income-Tax Procedures (Ac 411, 412, 413).....	6
Special Topics in Accounting (Ac 450).....	3

	Term Hours
Accounting Verification (Ac 440, 441).....	6
Minimum of 15 term hours selected from electives listed below, of which 9 hours must be in courses numbered 500 and above.....	15
	45

ELECTIVES

Management Information Systems (Ac 420, 421).....	6
Fund Accounting (Ac 430)	3
Special Topics in Accounting (Ac 451).....	3
Advanced Accounting Problems (Ac 480, 481).....	5
Cost Analysis & Interpretation (Ac 562).....	3
Auditing Concepts (Ac 542).....	3
Advanced Business Law (FBE 418).....	5
Quantitative Analysis for Business Decisions (BS 432).....	3
Economic Theory (Ec 375, 376, 377).....	9
Problems in Production Management (PIM 430)	3
Computing (Mth 444).....	4
Seminar in accounting (Ac 507).....	3
Accounting Theory (Ac 552).....	3

All professional accounting majors are required to take one year of college mathematics during their lower-division years. Courses in mathematics of finance or similar courses may not be counted toward the satisfaction of this requirement.

Business Statistics. The major program in business statistics is designed to prepare the student for a career in business research; primary emphasis is on the application of modern statistical methods to business problems. Majors in business statistics must complete work in basic mathematics through calculus (equivalent of Mth 201, 202, 203 or Mth 204, 205, 206). Additional courses in mathematics, accounting, and quantitative methods in economics or other social sciences are highly recommended. The major requirements, in addition to the core program of the school, are as follows:

	Term Hours
Quantitative Analysis for Business Decisions (BS 432).....	3
Special Topics in Business Statistics (BS 433).....	3
Principles of Cost Accounting (Ac 360)	3
Computing (Mth 444)	4
Economic Theory (Ec 375, 376).....	6
Minimum of 9 term hours selected from electives listed below.....	9
	28

ELECTIVES

Management Information Systems (Ac 420, 421).....	6
Marketing Research (MIT 415)	3
Introduction to Statistical Theory (Mth 441, 442).....	6
Economic Theory (Ec 377).....	3
Linear Algebra & Coordinate Geometry (Mth 316).....	3
Mathematical Economics (Ec 480).....	3
Principles of Cost Accounting (Ac 361)	3
Seminar: Operations Research (PIM 407)	3
Taxation & Business Policy (Ac 311)	3
National Income & Business Cycles (Ec 483, 484, 485)	9

Majors in business statistics must include Business Fluctuations and Expansion (FBE 466) as a part of their senior core program.

Accounting

LOWER-DIVISION COURSES

Ac 221, 222. **Fundamentals of Accounting.** 3 hours each term.

Function of accounting as a tool for the planning and administration of business enterprise; primary emphasis on analysis and interpretation of financial data. First term: position and income statements, conceptual bases for collecting and presenting data, flows of cost, the accounting cycle, depreciation, formation of working capital; second term: inventory and its control, debt-

equity relationships, interest, asset valuation problems, manufacturing costs. Special sections for Honors College students. Prerequisite: sophomore standing or consent of instructor. Harwood, Thomas.

Ac 223. Fundamentals of Accounting. 3 hours.

Application of cost concepts in decision making, taxation and its effect on planning, break-even analysis, internal control, critique of accounting reports, analysis of financial data from the viewpoint of outside interests. Required for all accounting majors. Special section for Honors College students. Harwood, Thomas.

UPPER-DIVISION COURSES

Ac 311. Taxation and Business Policy. 3 hours.

Designed for students not specializing in accounting. Emphasis on the impact of Federal income and estate taxes on decisions of business management, such as decisions to invest, to merge, to distribute earnings, to establish retirement programs. Students not admitted to both Ac 311 and Ac 411, 412. Prerequisite: Ac 223 or Ac 313. Lindholm.

Ac 313. Managerial Accounting. 3 hours.

Designed for students not specializing in accounting. Emphasis on decision-making and planning aspects of accounting, covering topics similar to those discussed in Ac 223 but with less emphasis on technical details. Credit will not be granted for both Ac 223 and Ac 313. Prerequisite: Ac 222. Soha.

Ac 314. Financial Accounting Analysis. 3 hours.

Underlying concepts; preparation of financial statements from the point of view of the users of these statements. Planned for students who are not majors in accounting. Prerequisite: Ac 223 or Ac 313.

Ac 315. Managerial Accounting Analysis. 3 hours.

Uses of cost data for control and decision making, from the point of view of management; collection and transmission of quantitative information to meet various needs within the firm. Planned for students who are not majors in accounting. Prerequisite: Ac 223 or Ac 313.

Ac 350, 351. Asset Valuation and Income Measurement. 3 hours each term.

Accounting principles and procedures in asset valuation and management and in the determination of periodic income; problems of measurement and of interpretation of financial accounting data. Prerequisite: Ac 223 or Ac 313. Johnson, Luneski.

Ac 352. Corporate Accounts and Statements. 3 hours.

Special problems of accounting for corporations; preparation and analysis of corporate financial statements; use of cash-flow and fund statements. Prerequisite: Ac 351. Johnson, Luneski.

Ac 360, 361. Principles of Cost Accounting. 3 hours each term.

Development, presentation, and interpretation of cost information to aid management in planning and controlling business operations; methods of collecting cost information, basic principles of cost reports to management, problems of cost allocation; use of standard costs for control, various concepts of capacity in relation to overhead allocation, cost-volume relationships, variable budgeting, and analysis of differential costs. Prerequisite: Ac 223 or Ac 313. Harwood.

Ac 407. Seminar. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 274-275.)

Ac 411, 412, 413. Income-Tax Procedures. (G) 2 hours each term.

Professional study and analysis of the Federal and Oregon income-tax structure, and of the problems involved in determining income-tax liabilities; determination of taxable income and computation of taxes for individuals, partnerships, corporations, estates, and trust; introduction to tax research. Prerequisite: Ac 223 or Ac 313. Peiterson.

Ac 420, 421. Management Information Systems. (G) 3 hours each term.

Data processing within the business firm or government unit; conceptual and procedural problems associated with the programming and use of data-processing equipment; principles of systems design; use of basic analysis tools in programming machines and in designing systems and procedures; critical analysis of modern concepts of administrative control and the functions of the controller as they relate to interpretive reporting and the processing of business information. Prerequisite: Ac 223 or Ac 313; senior standing or consent of instructor. Soha.

Ac 430. Fund Accounting. (G) 3 hours.

Financial administration and reporting requirements of Federal, state, and local governmental units, with emphasis on the use of fund accounting as a basis for budgetary control in these and other nonprofit organizations; laws relating to the budgetary, financial, accounting, and auditing requirements of Oregon municipalities; recent developments in performance budgeting. Prerequisite: Ac 223 or Ac 313. Harwood.

Ac 440, 441. Accounting Verification. (G) 3 hours each term.

Auditing standards and procedures observed by certified public accountants in the examination of the financial statements of business and other organizations; audit standards and objectives, collection of evidence, evaluation of internal control, problems of verification and application of procedures, preparation of programs, work papers, and reports. Prerequisite: Ac 352, Ac 361. Soha.

Ac 450, 451. Special Topics in Accounting. (G) 3 hours each term.

Advanced topics in financial accounting analysis of cash flows and the capital budgeting decision; special problems in partnership accounting; accounting reports for firms in financial difficulties; consolidated financial statements; estate and trust accounts and reports. Prerequisite: Ac 352; one year of college mathematics. Johnson.

Ac 480, 481. Advanced Accounting Problems. (G) Hours to be arranged.

Problems in professional examinations given by the American Institute of Accountants; emphasis on problem analysis and development of working papers. Prerequisite: consent of instructor. Luneski.

Business Statistics

LOWER-DIVISION COURSE

BS 232. Introduction to Business Statistics. 3 hours.

Modern business decision theory, and statistics as a tool for business decision making. Primary emphasis on statistical description (tables, charts, and frequency distributions) and the elements of probability; consideration also of modern data processing, index numbers and time series analysis (trend, cyclical, and seasonal adjustments) of business data. Special section for Honors College students. Baerncopf, Browning, Luneski.

UPPER-DIVISION COURSE

BS 333. Elementary Inference in Business Statistics. 3 hours.

Applications of statistical inference and regression analysis to business situations; sampling and its role in estimation and hypothesis testing; uses of subjective probability for business decisions; simple linear regression analysis and correlation. Special section for Honors College students. Prerequisite: BS 232. Baerncopf, Christy.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see page 274.)

BS 432. Quantitative Analysis for Business Decisions. (G) 3 hours.

Uses of subjective probability and modern utility theory in dealing with conditions of risk and uncertainty in business situations; elementary mathematical

models of business behavior; applications to inventory and waiting-line problems. Prerequisite: one year of college mathematics; BS 232, BS 333, or equivalent. Baerncof.

BS 433. Special Topics in Business Statistics. (G) 3 hours.

Development of competence in applying the ideas of probability and statistical inference to problems in business administration; mathematical models in business, regression analysis, elementary considerations of game theory, time-series analysis. Prerequisite: one year of college mathematics; BS 232, BS 333, or equivalent. Baerncof.

Finance and Business Environment

THE PROGRAM offered by the Department of Finance and Business Environment is designed to prepare students for careers in the basic fields of domestic and foreign finance and managerial economics. The courses provide a fundamental understanding of the application of economic analysis to the solution of problems of business management and of business finance and financial institutions, with special attention to the relation of financial policies and operations to the functioning of the economic system as a whole.

The department offers six major options: banking, investments, finance management, international business, business economics, and business education.

Banking. The option in banking is designed to prepare students for careers in banks and related financial institutions. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Public Finance (Ec 319)	3
Introduction to Real Estate & Urban Land Use (MIT 330)	5
Risk & Insurance (MIT 354)	4
Commercial Bank Management (FBE 460).....	5
Investments (FBE 463).....	3
Financial Problems Analysis (FBE 340)	3
Mortgage Lending (FBE 440)	3
Minimum of 5 term hours selected from electives listed below.....	5
	31
ELECTIVES	
Taxation & Business Policy (Ac 311)	3
Advanced Business Law (FBE 418).....	5
Investments (FBE 464).....	3
Foreign Exchange & International Finance Management (FBE 474).....	5

Investments. The option in investments is designed to prepare students for careers in investment banking, investment management, and stock brokerage. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Financial Problems Analysis (FBE 340)	3
Mortgage Lending (FBE 440)	3
Taxation & Business Policy (Ac 311)	3
Investments (FBE 463, 464).....	6
A minimum of 12 term hours selected from electives listed below.....	12
	27
ELECTIVES	
Public Finance (Ec 319).....	3
Commercial Bank Management (FBE 460).....	5
Introduction to Real Estate & Urban Land Use (MIT 330)	5
Life & Health Insurance (MIT 456)	4
Money & Banking (Ec 318).....	3
Economics of Competitive Industries (Ec 463).....	3
Public Utility Management (MIT 467)	3

Finance Management. The option in finance management prepares students for careers as financial administrators, comptrollers, and treasurers in business enterprises. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
*Managerial Accounting Analysis (Ac 315).....	3
Commercial Bank Management (FBE 460).....	5
Financial Problems Analysis (FBE 340)	3
Mortgage Lending (FBE 440)	3
Taxation & Business Policy (Ac 311)	3
Minimum of 12 term hours selected from electives listed below.....	12
	29

ELECTIVES

Government Control of Private Business (Ec 461).....	3
Public Utility Management (MIM 467)	3
Economics of Competitive Industries (Ec 463).....	3
Investments (FBE 463, 464).....	6
*Asset Valuation & Income Measurement (Ac 350, 351).....	6
*Corporate Accounts & Statements (Ac 352).....	3
Risk & Insurance (MIM 354).....	4

International Business. The option in international business is designed to prepare students for careers in overseas and foreign divisions of domestic businesses. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
Ocean Transport. & Traffic Mgt. (MIT 349)	5
International Economics (Ec 440, 441)	6
Seminar: Foreign Exchange & Internat. Fin. Mgt. (FBE 407)	3
Seminar: Foreign-Trade Marketing (FBE 407)	3
Seminar: Foreign Bus. Operations (FBE 407)	3
Seminar: Foreign Commercial Law (FBE 407)	3
Taxation & Business Policy (Ac 311)	3
Foreign language or courses in foreign culture	12
	38

Students are advised to enrich their training through a wide selection of courses in foreign languages, geography, history, and political science and additional courses in economics and business administration.

Business Economics. The option in business economics is designed to integrate economic theory with business practice; the courses provide a broad background in the principles of economics, with special attention to the relation of these principles to the management of industrial firms. The student should satisfy the science group requirement with a year sequence in mathematics. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
Government Control of Private Business (Ec 461)	3
Economic Theory (Ec 375, 376, 377)	9
Mgt. Information Systems (Ac 420, 421)	6
Marketing Research (MIT 415)	3
Seminar: Operations Research (PIM 407)	3
Taxation & Business Policy (Ac 311)	3
National Income & Business Cycles (Ec 483)	3
Minimum of 3 term hours selected from electives listed below	3
	33

ELECTIVES

Intro. to Statistical Theory (Mth 441, 442, 443)	9
National Income & Business Cycles (Ec 484, 485)	6
Quantitative Economic Analysis (Ec 464, 465, 466)	9

* Ac 350, 351, Ac 352 may be substituted for Ac 315.

Majors in business economics are required to take Business Fluctuations and Expansion (FBE 466) as one of their senior-year core courses.

Business Teacher Education. The option in business teacher education provides a thorough background in business administration and professional courses in education to prepare students for the teaching of business and economic subjects in the secondary schools. Two programs have been arranged, one emphasizing preparation for the teaching of secretarial subjects, the other emphasizing basic business; both programs prepare the students for the teaching of typing.

Secretarial. The requirements are as follows: (1) completion of the core program of the School of Business Administration (except Production Management), (2) the specialized courses listed below, (3) competence in the skill subjects prerequisite to Applied Stenography (SS 213), demonstrated by examination or by college-level courses, and (4) completion of the general requirements for secondary teacher certification.

	Term Hours
Business & Professional Correspondence (Wr 224)	3
Applied Stenography (SS 223)	3
Office Practice (PIM 324, 325)	4
Office Organization & Management (PIM 333)	2
Typewriting for Business Teachers (BEd 371).....	3
Shorthand for Business Teachers (BEd 373).....	3
Two of the following three courses: Foundations of Bus. Educ. (BEd 421), Bus. Ed. & the Community (BEd 422), Problems of Bus. Educ. (BEd 423)	6
Taxation and Business Policy (Ac 311)	3
	30

Basic Business. The requirements are as follows: (1) completion of the core program of the School of Business Administration (except Production Management), (2) the specialized courses listed below, (3) competence in typing demonstrated by examination or college-level courses, and (4) completion of the general requirements for secondary teacher certification.

	Term Hours
Office Organization & Management (PIM 333)	2
Financial Accounting Analysis (Ac 314)	3
Managerial Accounting Analysis (Ac 315)	3
Business Machines (PIM 323)	2
Income-Tax Procedures (Ac 411, 412, 413)	6
Public Finance (Ec 319)	3
Bookkeeping for Business Teachers (BEd 372)	3
Foundations of Business Education (BEd 421)	3
Business Education & the Community (BEd 422)	3
Problems of Business Education (BEd 423)	3
Minimum of 3 term hours selected from electives listed below	3
	34

ELECTIVES

Risk & Insurance (MIT 354)	4
Investments (FBE 463)	3
Marketing Communications (MIT 341)	3

The following electives are recommended for all majors in business teacher education: Personnel Management (PIM 412), Government Control of Private Business (Ec 461).

For certification as a teacher of business education in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic-norm*—42 term hours of college work in business education, including a total of 9 term hours in economics, business law, and business fundamentals, and 33 term hours in business courses taught in high school, including work in typing, shorthand, bookkeeping, and office practice; for a standard certificate, granted after five years of college

work, a *standard norm*—57 term hours in business education, including the basic-norm requirement, and an additional 15 term hours in economics, business law, and business fundamentals. (Teachers who hold the basic or standard certificate and who teach only typing may substitute evidence of proficiency in lieu of college credit and will not be required to meet the business-education norm.)

The norm requirements listed above will be mandatory after July 1, 1962. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 261.

Finance and Business Environment

LOWER-DIVISION COURSE

FBE 226. **Business Law I.** 3 hours.

The framework of the law as it affects the businessman; how the law operates; how it is enforced; how to use the law in business. The origins of law; the relations of business to society and the law; evolution of business within the framework of the law; the historical development and present-day applications of the law of contracts. Roberts, Skelton, Ross.

UPPER-DIVISION COURSES

FBE 320. **Financial Institutions.** 3 hours.

The functions and economic significance of the major financial institutions in the economy that make the savings of society available to consumers, businesses, and governments, including commercial banks, savings banks, savings and loan associations, credit unions, insurance companies, investment trusts, various governmental lending agencies, and international financial institutions. Analysis of each institution and the part it plays in providing the short, intermediate, and long-term credit needs of the users of funds. The commercial banking system in relation to its function of supplying the nation's money supply. The nature and functions of money and credit and the interrelationship of money, credit, and prices as they affect business decisions. Special section for Honors College students. Prerequisite: Ec 201, 202, 203. Reed, Christy.

FBE 322. **Business Finance.** 3 hours.

Problems of the financial management of a business unit. Financial analysis and planning, including capital budgeting, the acquisition of funds, and the management of funds. The financial manager in his role as a decision maker. How to determine the financial condition of the firm. Money and capital markets, trade credit, commercial bank loans, sources of intermediate-term funds, and long-term money in the form of bonds and stocks examined to discover their relative usefulness and applications. The internal day-to-day problems of maintaining an even flow and turn of assets to their best use. Prerequisite: FBE 320. Burrell, Watson, Christy.

FBE 326. **Business Law II.** 3 hours.

The law of agency; the master-servant relationship, including elementary labor law; the law of business organizations, including corporations, partnerships, and other forms of business association; applications of the Uniform Commercial Code to these topics.

FBE 330. **Introduction to Real Estate and Urban Land Use.** 5 hours.

Real-estate principles and practices, with special emphasis on urban land-use analysis; nature of real property and property rights; organization of the real-estate industry and real-estate markets; the urban spatial structure and location analysis; land-use competition; management of real properties; subdivision and land development; real-estate financing; the impact of government policies upon the real-estate industry. Browning.

FBE 340. **Financial Problems Analysis.** 3 hours.

Definition, evaluation, and analysis of concepts and principles fundamental to valuation and assessment of financial alternatives. Economic concepts of

interest, including opportunity cost; interest functions and their relation to determination of cost, earning power, and capital value. Time-value of money and time-shape of cash flows; the notion of equivalence; role of time span and uncertainty to financial decisions.

FBE 407. **Seminar.** Hours to be arranged.

FBE 434. **Business Enterprise and Social Responsibility.** 3 hours.

Analysis of specific management policies as they relate to social objectives; patterns of governmental regulations; political activities of trade associations and other special-interest groups; relation of the growth of corporate enterprise to public policy and to the responsibilities of business management. Special section for Honors College students. Prerequisite: senior standing. Richins.

FBE 440. **Mortgage Lending.** 3 hours.

The role of mortgage lending in our economy; organization and operation of public and private lending agencies in the residential and commercial real estate markets; legal aspects of real estate lending.

FBE 459. **Problems in Business Finance.** 5 hours.

Analysis and appraisal of selected problems in finance concerned with the organization, operation, and management of business enterprises. Prerequisite: FBE 322. Burrell, Watson.

FBE 463. **Investments.** 3 hours.

Economic and mathematical principles relating to the investment valuation process; corporate practices and financial institutions and organizations that serve the investor; analysis of various types of securities and other investment media; investment policy for both individuals and institutions. Prerequisite: Ec 201, 202, 203; Ac 221, 222, Ac 311. Burrell.

FBE 466. **Business Fluctuations and Expansion.** 3 hours.

Designed to prepare the student to plan successfully in a dynamic business environment. Analysis of forces that cause pervasive fluctuations in aggregate business activity; the effects of these fluctuations on individual business firms and industries. The relationships among long-run trends and shorter cycles; forecasting techniques and policy measures. The growing impact of government decisions on the profits of a particular business and on price and income levels related to business actions such as inventory and investment policies which affect economic stability. Prerequisite: senior standing. Kagan.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 275-277.)

FBE 415. **Commercial and Industrial Site Location.** (G) 3 hours.

Major principles and practices in the site-selection decision-making process, considered in the light of general location theory, the overall pattern of urban land use, specific types of business, consumer shopping behavior, real-estate considerations, and government policy; emphasis on problems of intraregional rather than interregional site selection and on urban developments.

FBE 418. **Advanced Business Law.** (G) 5 hours.

Study of the several fields of law related to business: negotiable instruments; sales of personal property; real property, including landlord and tenant and mechanic's liens; security devices for credit transactions; business torts; government regulation of business; labor law. Prerequisite: FBE 216. Robert.

FBE 430. **Advanced Real Estate and Urban Land Use.** (G) 3 hours.

Principles and practices of real-property valuation; factors affecting real-property values and incomes; relationship between land use and land values; the appraisal process; policies and problems of real-estate taxation; trends in real-property values and appraisal procedures. Prerequisite: FBE 330 or consent of instructor. Browning.

FBE 460. Commercial Bank Management. (G) 5 hours.

Practices, policies, and problems of commercial bank management and operation; loan and investment administration; regulation and supervision; earnings, expense, and dividend policies; the economic and social importance of the commercial banking system as the center of the American financial system. Prerequisite: FBE 322; senior standing. Reed.

FBE 464. Investments. (G) 3 hours.

Special methods used in analysis of industrial, public utility, railroad, and other securities; taxation of investment income in relation to investment policy; development of sound principles of timing and selection of securities to meet the needs of various types of investment funds. Prerequisite: FBE 463. Burrell.

FBE 474. Foreign Exchange and International Finance Management. (G) 5 hours.

The role played by commercial and central banks in various nations of the world; special emphasis on the methods by which these banks finance the international flow of goods, services, and investment. The instruments of foreign exchange, the setting of exchange rates, and the institutions, both national and international, which participate in the worldwide flow of funds and goods. Prerequisite: senior standing. Kagan.

FBE 475. Foreign-Trade Marketing. (G) 5 hours.

Commercial policies of nations and their effects on the decision of foreign trading and investing business firms; composition of trade between nations and stability; government controls and promotion; international commodity agreements; global and regional institutions; structural changes due to industrialization of emerging nations. Prerequisite: FBE 474. Kagan.

FBE 476. Foreign Business Operations. (G) 5 hours.

Determinants of foreign business decision making in light of case studies; operations versus licensing; control versus joint venture; problems of taxation, labor, and marketing; partners-in-progress approach; skill formation, managerial training, cooperation with national planning authorities; public development banks and industrial corporations; emphasis throughout upon the individual business unit. Prerequisites: FBE 474, FBE 475. Kagan.

COURSES OFFERED ONLY IN EXTENSION

FBE 425. Real-Estate Fundamentals. 3 hours (extension).**FBE 426. Real-Estate Practice.** 3 hours (extension).**FBE 427. Real-Estate Appraising.** 3 hours (extension).**Business Education**

UPPER-DIVISION COURSES

BEd 371. Typewriting for Business Teachers. 3 hours.

Principles underlying development of typing skill; standards of achievement; methods and materials of instruction; selection of equipment; analysis of research studies in the field; individual technique improvement; laboratory. Prerequisite: consent of instructor. Jones.

BEd 372. Bookkeeping for Business Teachers. 3 hours.

Methods and materials of instruction; handling student differences; trends affecting teaching of bookkeeping. Prerequisite: consent of instructor. Jones.

BEd 373. Shorthand for Business Teachers. 3 hours.

Problems in the development of occupational proficiency in shorthand; standards of achievement; transcription problems; integration of shorthand, typing, and English; comparison and evaluation of methods; instructional materials; individual technique improvement. Prerequisite: consent of instructor. Jones.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

BEd 407. **Seminar.** (g) Hours to be arranged.

BEd 421. **Foundations of Business Education.** (g) 3 hours.

Objectives of business education; history, trends, issues; literature of the field; professional organizations; contribution of business education to general education; curriculum construction at the junior and senior high-school and junior-college levels; instructional problems; significant related research. Prerequisite: senior standing, consent of instructor. Jones.

BEd 422. **Business Education and the Community.** (g) 3 hours.

Auditory and visual aids; types of institutions offering business education; current educational attitudes of business and labor; community surveys and analysis of local needs; guidance programs; placement and follow-up; school and business standards; objectives and principles of measurement in business education. Prerequisites: senior standing, consent of instructor. Jones.

BEd 423. **Problems of Business Education.** (g) 3 hours.

In-service training for teachers; administrative problems of supervision of business education; organization and operation of distributive-education programs on local, state, and national levels; work-experience programs; effects of automation on business education; evaluation of text materials. Prerequisite: senior standing, consent of instructor. Jones.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

BEd 508. **Workshop.** Hours to be arranged.

Marketing, Insurance, and Transportation

THE EDUCATIONAL OBJECTIVES of the Department of Marketing, Insurance, and Transportation are: (1) to provide the student with an understanding of the basic functions of management as they are applied in the areas of marketing, insurance, transportation, and real estate; (2) to give the student an opportunity to develop fruitful approaches to the solution of specialized management problems in these areas; and (3) to enable the student to develop his capacity for research and scientific analysis of basic problems in the areas of marketing, insurance, transportation, and real estate.

The department offers major options in marketing, insurance, transportation, real estate, and business and construction.

Marketing Advisory Council. The department is aided in its program by the continuous advice and assistance of a Marketing Advisory Council composed of prominent representatives from the business community. The members of the council are: Donn D. Ankrom, Ankrom Drug, Inc.; John L. Aram, vice-president, Weyerhaeuser Company; C. M. Bishop, Jr., manager of sales, Pendleton Woolen Mills; F. W. Brunner, president, Chet's Famous Foods; Joe B. Callihan, general manager, Benson Hotel; Philip Corbit, division general manager, Page & Page Company; R. V. Cummins, vice-president and sales director, Standard Insurance Company; Douglas David, president, North Pacific Lumber Company; R. W. deWeese, vice-president, sales, Esco Corporation; Bass Dyer, Abbott Kerns & Bell; Gerry Frank, vice-president, Meier & Frank Company; W. H. Gonyea, president, Clear Fir Sales Company; F. Nephi Grigg, president, Ore-Ida Foods, Inc.; Harold Hirsch, president, White Stag Manufacturing Company; Charles R. Holloway, Jr., vice-president, Northwest Natural Gas Company; Veryl N. Hoover, vice-president, sales and industrial development, Pacific Power and Light Company; Donald E. Kennedy, vice-president and general sales manager, Jantzen, Incorporated; Roald G. Lund, president, R. G. Lund Company; Arthur F. McGarr, president, Lomac Motors; Alan C. Macdonald,

Northwest Packing Company; Palmer C. Macdonald, general merchandising manager, Blake-Moffitt & Towne; A. E. Montgomery, vice-president, Boise Cascade Corporation; Richard Nelson, director, personnel and marketing research, warehouse division, Georgia-Pacific Corporation; G. Paige Newton, president, Mitchell, Lewis & Staver; Guy E. Sabin, vice-president, marketing, Omark Industries, Inc.; Jack J. Saltzman, president, Oregon-Pacific Forest Products Company; Robert Saunders, manager, Eugene branch, McDonald Candy Company; Robert E. Smith, president, Crow's Digest; Frank M. Warren, Jr., president, Portland General Electric Company; Robert Wong, Kubla Khan Food Company.

Marketing. The option in marketing is designed to provide preparation for careers in the complex of functions in which the producer and the consumer are related. There are opportunities for student emphasis on sales and marketing management, marketing research, advertising, retailing, and foreign marketing. Special attention is given to the contributions of the behavioral sciences to the study of marketing. The program includes intensive study of the application of principles of management to marketing problems. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
General Psychology (Psy 201, 202) <i>or</i> General Sociology (Soc 204, 205).....	6
Marketing Communication (MIT 341)	3
Marketing Research (MIT 415)	3
Marketing Analysis I (MIT 443)	4
Marketing Analysis II (MIT 444)	3
Analysis of Consumer Behavior (MIT 442)	3
Retail Administration (MIT 330) <i>or</i> Seminar: Industrial Marketing (MIT 407)	3
Social Psychology (Soc or Psy 334) <i>or</i> Social Institutions (Soc 460) <i>or</i> Social Stratification (Soc 444)	3
A minimum of 6 hours of the electives listed below	6
	34

ELECTIVES

American Society (Soc 301)	3
Social Stratification (Soc 444)	3
Quantitative Analysis for Business Decisions (BS 432).....	3
Principles of Advertising (J 341).....	2-3
Retail Institutions in Marketing System (MIT 436)	4
Domestic Transportation & Distribution Management (MIT 349)	5
Seminar: Operations Research (PIM 407)	3
Seminar: Foreign Exchange (FBE 407)	3
Seminar: Foreign Trade Marketing (FBE 407)	3
Seminar: Foreign Business Operations (FBE 407)	3
Seminar: Management of Forest Products Companies (MIT 407)	3

Risk and Insurance. The risk and insurance option is designed to provide specialized education for the student interested in a career in the insurance industry or as an insurance specialist in business or government. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Risk & Insurance (MIT 354)	4
Property & Liability Insurance (MIT 455)	5
Life & Health Insurance (MIT 456)	4
Social Insurance (MIT 458)	3
Taxation & Business Policy (Ac 311)	3
*Minimum of 6 term hours selected from electives listed below.....	6
	25

ELECTIVES

Personnel Management (PIM 412)	3
Special Problems in Bus. Statistics (BS 433)	3

* Students interested in actuarial work may elect certain courses in mathematics for the satisfaction of this requirement.

	Term Hours
Advanced Business Law (FBE 418)	3
Analysis of Consumer Behavior (MIT 442)	3
Business Finance (FBE 322).....	5
Introduction to Real Estate & Urban Land Use (FBE 330).....	5
Investments (FBE 463).....	3
Building Materials & Construction (AA 420).....	3
Quantitative Analysis for Business Decisions (BS 432).....	3
Domestic Transportation & Traffic Management (MIT 349)	5

Students who select the risk and insurance option are required to take Business Fluctuations and Expansion (FBE 466) as a part of their senior core program.

Students interested in qualifying for certification as a C.L.U. (chartered life underwriter) or a C.P.C.U. (chartered property casualty underwriter) should consult their adviser concerning courses outside the School of Business Administration which are of special value in meeting the requirements for these certificates.

Transportation, Traffic Management, and Utilities. This option is designed to prepare students for careers with transportation or utility companies, for traffic positions with industrial or commercial firms or trade associations, and for governmental positions with regulatory agencies or publicly owned utilities. Geography of Europe (Geog 201), Geography of Latin America (Geog 202), Geography of Asia (Geog 203), American Governments (PS 201, 202, 203), and Introductory College Mathematics (Mth 104, 105, 106) are recommended as lower-division electives. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
Domestic Transportation & Distribution Management (MIT 349)	5
Ocean Transportation & Distribution Management (MIT 350) <i>or</i>	
Public Utility Management (MIT 467)	3-5
Transportation Regulatory Laws & Procedures (MIT 451)	3
Economics of Public Utilities & Transportation (Ec 462).....	3
Taxation & Business Policy (Ac 311)	3
Minimum of 8 or 10 term hours selected from electives listed below	
(those taking MIT 467 will elect 10 hours)	8-10
	27

ELECTIVES

Public Utility Management (MIT 467) <i>or</i>	
Ocean Transportation & Distribution Management (MIT 350)	3-5
Special Problems in Transportation & Traffic Management (MIT 452)	3
*Highway Transportation (MIT 447)	3
*Air Transportation (MIT 448)	3
Principles of Cost Accounting (Ac 360).....	3
Quantitative Analysis for Business Decisions (BS 432).....	3
Property & Liability Insurance (MIT 455)	5
Seminar: Operations Research (PIM 407)	4
Computing (Mth 444)	4
Advanced Business Law (FBE 418)	5

Real Estate. The option in real estate is designed to provide professional training in the development, financing, marketing, and management of real estate. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
Advanced Business Law (FBE 418).....	5
Introduction to Real Estate & Urban Land Use (FBE 330).....	5
Advanced Real Estate & Urban Land Use (FBE 430).....	3
Commercial & Industrial Site Location (FBE 415)	3
Taxation & Business Policy (Ac 311)	3
Mortgage Lending (Ac 440)	3
Minimum of 9 term hours selected from electives listed below	9
	31

* Offered in the Portland Center.

ELECTIVES	Term Hours
Property & Liability Insurance (MIT 455)	5
Public Finance (Ec 319)	3
Commercial Bank Management (FBE 460)	5
Investments (FBE 463)	3
Analysis of Consumer Behavior (MIT 442)	3
Building Mat. & Construction (AA 420)	3

Business and Construction. A five-year program of study for students who plan to enter the construction industry is offered under the joint supervision of the School of Business Administration and the School of Architecture and Allied Arts. The program, which leads to the bachelor's degree with a major in business administration, combines sound training in business methods and in the structural phases of architecture.

The major requirements, in addition to the core program of the School of Business Administration, are listed below :

Lower Division	Term Hours
Design Studio I (AA 187)	9
Graphics (AA 231)	2
Design Studio II (AA 287)	3
Mathematics (Mth 104, 105, 106)	12
Essentials of Physics (Ph 101, 102, 103)	9

Upper Division

Commercial & Industrial Site Location (FBE 415)	3
Advanced Business Law (FBE 418)	5
Introduction to Real Estate & Urban Land Use (FBE 330)	5
Advanced Real Estate & Urban Land Use (FBE 430)	3
Business Finance (FBE 322)	3
Principles of Cost Accounting (Ac 360)	3
Office Organization & Management (PIM 333)	2
Personnel Management (PIM 412)	3
Surveying for Architects (AA 317)	2
Mechanical Equipment of Buildings (AA 320, 321, 322)	9
History of Architecture II (AA 340, 341, 342)	9
Theory of Structures I (AA 369, 370, 371)	12
Theory of Structures II (AA 469, 470, 471)	9
Building Materials & Construction (AA 420, 421, 422)	9
Electives in business and architecture (the courses listed below are recommended)	30

ELECTIVES

Domestic Transportation & Distribution Management (MIT 349)	5
Risk & Insurance (MIT 354)	4
Property & Liability Insurance (MIT 455)	5
Taxation & Business Policy (Ac 311)	3
Graphics (AA 232, 233)	4
History of Architecture I (AA 337, 338, 339)	9
American Architecture (AA 440)	3
Theory of Structures III (AA 472, 473, 474)	12

LOWER-DIVISION COURSES

MIT 125, 126. **Business Environment.** 3 hours each term.

The role and responsibilities of business in society; influence of the historical, social, political, and economic environments within which business operates; adjustments to changes in these environments; interrelationships of major functional areas of business. Sampson, Hunt.

UPPER-DIVISION COURSES

MIT 323. **Elements of Marketing I.** 3 hours.

The American marketing system in historical perspective; structure of marketing institutions; introduction to analysis of consumer behavior.

MIT 324. **Elements of Marketing II.** 3 hours.

Marketing problems of the individual firm; determination of marketing ob-

jectives and programs; analysis of the management functions of marketing; product policy, selection of distribution channels, promotion, and pricing strategy; introduction to the use of marketing research.

MIT 330. Retail Administration. 3 hours.

Internal adjustments of the retail institution to its dynamic external socio-economic environment; focus on adjustments the retailer must make in his internal organization and mode of operation for effective adaptation to his external environment. Thompson, Rich.

MIT 341. Marketing Communications. 3 hours.

Problems of marketing to consumers considered as problems in communication; advertising and sales promotion as formal channels of communication; economics of advertising and sales promotion; marketing communications as they relate to the public and to public policy. Prerequisite: MIT 323 (may be taken concurrently). Smith.

MIT 349. Domestic Transportation and Distribution Management. 5 hours.

Designed to acquaint the student with principles and practices of transportation which should be known to every businessmen engaged in production or distribution. The physical transportation plant of the United States and its performance; carrier responsibilities, services, and cooperation; economic and legal bases of rates, the process of freight classification and tariff preparation and interpretation, various kinds of rate structures, and relationships between transportation and the location of economic activity. Organization, management, and services of industrial traffic departments. Prerequisite: Ec 201, 202, 203 or consent of instructor. Sampson, Ziebarth.

MIT 350. Ocean Transportation and Distribution Management. 5 hours.

The basic laws and policies of the United States relating to the merchant marine in foreign trade and national defense; construction and operating differential subsidies and control of trade routes. Ocean carrier organization; departmental controls as these affect the operation of the ship; the handling and storage of cargo, terminal administration, harbor belt lines, and documentary procedures. Prerequisite: Ec 201, 202, 203 or consent of instructor. Sampson, Ziebarth.

MIT 354. Risk and Insurance. 4 hours.

Introduction to the basic principles of insurance from the viewpoint of the consumer; risk and risk bearing; ways of handling risk; insurance as a device to handle risk; principles of insurance buying, including carrier and agency selection; major types of private insurance—life, property, and liability—with emphasis on the underlying economic problems each type is designed to meet; the insurance contract and its legal basis, with emphasis on the elements common to all insurance contracts; economic and historical significance of insurance; insurance regulation. Greene.

MIT 407. Seminar. Hours to be arranged.

Management of Forest Products Companies. Rich.
Industrial Marketing. Rich.

MIT 415. Marketing Research. 3 hours.

Influence of marketing research on the decision-making process; effect on the executive who must use it; uses and misuses. Problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and reporting. Cases analyzed by students; each student develops a research project concerning a local firm. Prerequisites: BS 232, BS 333, MIT 323. Remington.

MIT 436. Retailing Institutions in the Marketing System. 4 hours.

Composition of the retailing structure; institutional types currently operating in industrial societies; economic, social, and commercial role of retailing and its effectiveness in meeting society's changing needs. Smith, Rich.

MIT 442. Analysis of Consumer Behavior. 3 hours.

The consumer-firm relationship analyzed through the application of concepts

drawn from contemporary behavioral science to concrete business cases and practices; role theory, theories of attitude, change, and principles of perception given primary emphasis; analysis directed to advertising, display, layout, packaging, design of retail establishments, interpersonal relations of consumer and seller, and business "image." Prerequisite: Psy 201, 202 or Soc 204, 205; Psy or Soc 334. Smith.

MIT 443. Marketing Analysis I. 4 hours.

The techniques, problems, tools, and broad policies of marketing management. Basic marketing forces; standards for judging marketing performance; merchandising tactics; methods of developing coordinated strategies; practice in research, decision making, and oral and written communication. Prerequisite: MIT 323, senior standing. Greene, Thompson.

MIT 444. Marketing Analysis II. 3 hours.

Problem areas and problem-solving techniques in marketing. Analysis of marketing cases in product planning, pricing, distribution channels, consumer attitudes, advertising, and personal selling. Simple marketing models; application of analytical tools developed in economics, mathematics, psychology, sociology, and other disciplines. Emphasis on the management decision-making process in marketing. Prerequisite: MIT 443. Greene, Thompson, Remington.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 277-278.)

MIT 451. Transportation Regulatory Laws and Procedures. (G) 3 hours.

The historical background and present status of state and Federal transport regulation, with particular attention to the Interstate Commerce Act and other pertinent Federal and state statutes. The organization and procedure of transport regulatory agencies, and the rules of practice before such bodies. Prerequisite: MIT 349, Ec 462, or consent of instructor. Sampson, Ziebarth.

MIT 452. Special Problems in Transportation and Traffic Management. (G) 3 hours.

Major national and regional transportation problems. In addition to classroom work, each student makes an intensive exploration of a particular problem or phase of transport or traffic management of regional or national economic significance, or a detailed study of a type of carrier related to his specific career interest. Prerequisite: MIT 349; MIT 350 or MIT 467; or consent of instructor. Sampson, Ziebarth.

MIT 455. Property and Liability Insurance. (G) 5 hours.

The more important methods of reducing business and personal risks from physical and moral hazards; major contracts of insurance to indemnify for losses from such perils as fire, windstorm, explosion, transportation, legal liability, dishonesty, and insolvency of others; loss adjustment practices, underwriting problems, reinsurance, rate making, consequential losses. Prerequisite: MIT 354 or consent of instructor. Greene.

MIT 456. Life and Health Insurance. (G) 4 hours.

The chief methods of handling personal risks, in business as well as individual application. Analysis of life insurance, annuity, and health insurance contracts from the viewpoint of the insurance consumer; legal and economic bases of life and health insurance; interpretation of major policy provisions; importance of rate making and reserve practices to the policy holder; integration of private policies with social-insurance coverages; estate planning and the role of income and estate taxation; business and personal uses of wills and trusts; settlement options; pension planning. Prerequisite: MIT 354 or consent of instructor. Greene.

MIT 458. Social Insurance. (G) 3 hours.

Analysis of the major kinds of compulsory insurance and their interrelations; old-age and survivors' insurance, unemployment insurance, workmen's compensation, nonoccupational disability insurance, and compulsory automobile insurance; comparison of social and private insurance. Prerequisite: MIT 354 or consent of instructor. Greene.

MIT 467. **Public Utility Management.** (G) 3 hours.

Review of historical and present regulatory laws, agencies, and procedures; problems and policies of municipal, state, and Federal ownership; management of various kinds of privately owned utility firms (electric, gas, communications, etc.). Organizational structures, price policies, marketing of services, short- and long-range planning, public relations. Particular emphasis on problems affecting the Pacific Northwest. Prerequisite: Ec 201, 202, 203 or consent of instructor. Sampson.

COURSES OFFERED ONLY IN EXTENSION

MIT 447. **Highway Transportation.** (G) 3 hours (extension).MIT 448. **Air Transportation.** (G) 3 hours (extension).

Personnel and Industrial Management

THE EDUCATIONAL OBJECTIVE of the Department of Personnel and Industrial Management is to provide an understanding of basic management functions and techniques in the use of people, materials, and equipment in the operation of a business enterprise.

The department offers major options in production, personnel, management, and office administration.

Management Development Committee. The School of Business Administration participates actively in development programs for industrial executives through seminars and conferences on the campus. In these programs and in the planning of the regular instructional program in management, the school is assisted by a Management Development Committee, a group of Pacific Northwest businessmen. The members of the committee are: F. O. Boylon, vice-president, manufacturing, Crown-Zellerbach Corporation; J. O. Julson, branch manager, Pulp Division, Weyerhaeuser Company; E. E. Coleman, general manager for Oregon, Hanna Mining Company; Marshall Leeper, vice-president, United States Plywood Corporation; C. E. Sheldon, assistant manufacturing manager, Aero-Space Division, Boeing Company; W. J. William, vice-president, Harry and David at Bear Creek Orchards; Warne Nunn, executive assistant to the Governor, state of Oregon; Dwight E. Haugen, president, Wedgwood Homes.

Production. The production option provides specialized knowledge in preparation for careers in production management in manufacturing, with emphasis on such areas as methods-time analysis, production control, and quality control.

The major requirements for the production option, in addition to the core program of the school, are listed below:

	Term	Hours
Principles of Cost Accounting (Ac 360).....	3	3
Seminar: Operations Research (PIM 407)	3	3
Two of the following seminars: Methods-Time Analysis, Production Control, Quality Control (PIM 407)	6	6
Problems in Production Management (PIM 430)	3	3
Taxation & Business Policy (Ac 311)	3	3
Minimum of 9 term hours selected from electives listed below.....	9	9
	<hr/>	27

ELECTIVES

Wage & Salary Administration (PIM 413).....	3
Quantitative Analysis for Business Decisions (BS 432).....	3
Problems in Personnel Management (PIM 414).....	3
Risk & Insurance (PIM 354).....	4
Principles of Cost Accounting (Ac 361).....	3
Domestic Transportation & Distribution Mgt. (MIT 349).....	5

Personnel. The personnel option is designed to prepare students for careers in personnel management and labor relations in business, government, and labor organizations. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
Personnel Management (PIM 412).....	3
Wage & Salary Administration (PIM 413).....	3
Problems in Personnel Management (PIM 414).....	3
Seminar: Personnel Psychology (PIM 407).....	3
Organized Labor (Ec 445) <i>or</i> Labor Legislation (Ec 446).....	3
Minimum of 9 term hours selected from electives listed below.....	9
	24
ELECTIVES	
Industrial Psychology (Psy 448).....	3
Social Psychology (Psy 334, 335 or Soc 334, 335).....	6
Social Insurance (MIT 458).....	3
Industrial Sociology (Soc 456).....	3
Organized Labor (Ec 445).....	3
Labor Legislation (Ec 446).....	3
Seminar: Problems in Interpersonal Relations (PIM 407).....	3

Management. The objective of the management option is to provide education in business administration with emphasis on management techniques in major areas, on the application of quantitative methods to managerial problems, and on an integrated view of business problems confronting top management and the ways in which they are solved. The major requirements, in addition to the core program of the school, are listed below :

	Term Hours
Marketing Analysis I (MIT 443).....	4
Problems in Production Management (PIM 430).....	3
Personnel Management (PIM 412).....	3
Seminar: Problems in Interpersonal Relations (PIM 407).....	3
Managerial Accounting Analysis (Ac 315) <i>or</i> Seminar: Operations Research (PIM 407).....	3
Taxation & Business Policy (Ac 311).....	3
Minimum of 9 term hours from electives listed below.....	9
	28
ELECTIVES	
Economic Theory (Ec 375).....	3
Office Organization & Management (PIM 333).....	2
Government Control of Private Business (Ec 461) <i>or</i> Business Enterprise & Social Responsibility (FBE 434).....	3-5
Risk & Insurance (MIT 354).....	4
Problems in Business Finance (FBE 459).....	5
Problems in Personnel Management (PIM 414).....	3
Management Information Systems (Ac 420, 421).....	6
Domestic Transportation & Distribution Management (MIT 349).....	5

Students who select the management option are required to take Business Policies (PIM 453) as a part of their senior core program.

Office Administration. The option in office administration prepares young men and women for administrative positions as office managers and junior executives. The major requirements, in addition to the core program of the School of Business Administration, are as follows :

	Term Hours
Office Organization & Management (PIM 333).....	2
Taxation & Business Policy (Ac 311).....	3
Personnel Management (PIM 412).....	3
Government Control of Private Business (Ec 461).....	3
Business & Professional Correspondence (Wr 224).....	3
Typing (SS 122, 123 or equivalent)	2-4
Business Machines (PIM 323).....	2
Office Practice (PIM 324, 325).....	4
Minimum of 6 term hours selected from electives listed below.....	6

	ELECTIVES	Term Hours
Marketing Communications (MIT 341).....		3
Wage & Salary Administration (PIM 413).....		3
Investments (FBE 463, 464).....		6
Problems in Personnel Management (PIM 414).....		3
Marketing Analysis I (MIT 443).....		4
Business Finance (FBE 322).....		3

UPPER-DIVISION COURSES

PIM 321. Organization and Interpersonal Relations. 3 hours.

Principles of management applied to commercial and industrial concerns; business planning, policy formulation, establishment of procedures, operations; theory and design of organizational structure; impact of work-flow plans, leadership patterns, and control systems upon human behavior. Seubert, Miner, Korman.

PIM 323. Business Machines. 2 hours.

Study of ten-key and full-key adding machines and the rotary calculator; development of operating skills; practical applications to business procedures. Open to nonmajors. Marnix.

PIM 324, 325. Office Practice. 2 hours each term.

Advanced secretarial instruction; general secretarial duties, responsibilities, and procedures; different methods of duplicating; filing systems and their practical application to business; training in the operation of voice-writing machines. Marnix.

PIM 329. Production Management. 3 hours.

The planning, operations, and control of mass-production manufacturing; procurement, handling, and control of materials and control of quantity and quality. Ways of setting standards and improving methods; use of motion and time study; automation and automatic processing equipment. Supervision of operating employees and personnel relations as they affect production work. Emphasis on principles and relationships rather than specific techniques. Laboratory sessions (including field trips) illustrate selected methods, techniques, and management tools. Vance, Seubert.

PIM 333. Office Organization and Management. 2 hours.

Management and organization of the office, with special attention to the scientific approach to analysis and control; functional office layout and equipment; selection, training, and supervision of office personnel; place of automation in the office; planning, organizing, and controlling office services, such as correspondence, records management, communications. Prerequisite: junior standing. Jones.

PIM 407. Seminar. Hours to be arranged.

Operations Research. Vance.
 Methods-Time Analysis. Seubert.
 Production Control. Vance.
 Quality Control. Vance.
 Problems in Interpersonal Relations. Miner.
 Personnel Psychology. Korman.

PIM 430. Problems in Production Management. 3 hours.

A "model enterprise" built, and its production management problems analyzed, with the use of methods of linear programming, statistics, and economics. Planned to acquaint the students with tools of scientific analysis which are applicable to problems in production management. Vance.

PIM 453. Business Policies. 3 hours.

The interdependence of the different departments of a business concern. Designed to provide an integrated view of business operations, and to coordinate the more specialized instruction of the school. Prerequisite: senior standing. Seubert, Vance.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

*(For 500 courses, open only to graduate students, see pages 278-279.)*PIM 412. **Personnel Management.** (g) 3 hours.

Personnel management in the modern business organization; personnel policies and practices conducive to good relations with employees; personnel problems of small organizations. Beal.

PIM 413. **Wage and Salary Administration.** (G) 3 hours.

Systematic administration of wages and salaries as a means of motivation and control in the business enterprise. Job analysis, description, and specifications; job evaluation methods; community wage and salary surveys; establishing wage structures by job evaluation and wage levels by collective bargaining and other methods; principles and administration of wage incentive plans; evaluating the results of wage incentives; compensating clerical, supervisory, and management personnel. Prerequisite: PIM 412 or consent of the instructor. Beal.

PIM 414. **Problems in Personnel Management.** (g) 3 hours.

Major areas of personnel policy determination, with special emphasis on relations with organized employees at the enterprise level and within the enterprise. The impact of union practices on personnel policy and procedures in both unionized and nonunion enterprises. Prerequisite: PIM 412 or consent of the instructor. Beal, Korman.

PIM 480. **Business History.** (G) 3 hours.

Evolving business systems in the changing American business environment since the colonial period; study of individual business firms and businessmen that illustrate these systems at critical times in their development; the results of decisions made at such junctures examined for their significance for business management.

Secretarial Science

LOWER-DIVISION COURSES

SS 10. **Beginning Typing.** No credit.

Principles of touch typing; emphasis on development of speed and accuracy. 5 hours laboratory. Needham.

SS 122, 123. **Advanced Typing.** 2 hours each term.

Typing of business letters, manuscripts, and various kinds of business forms; development of speed and accuracy in production. 5 hours laboratory. Beaver.

SS 126, 127, 128. **Stenography.** 3 hours each term.

Gregg shorthand. SS 127, 128 devoted to the study of basic shorthand theory; SS 128 devoted to the development of speed in business letter dictation and transcription. Students must also take SS 122, 123, unless they have had equivalent training. Students who have had one year of high-school shorthand may not take SS 127 for credit. Section of SS 127 also offered in Briefhand, a system of abbreviating longhand, using only alphabetical characters. 4 recitations. Needham.

SS 221, 222, 223. **Applied Stenography.** 3 hours each term.

Combination of shorthand, typewriting, and English into an employable skill; emphasis on speed development in dictation and transcription; phrasing techniques, vocabulary development; efficient and correct procedures for the preparation of business letters, forms, manuscripts, and reports. Prerequisite: SS 128, SS 122, or equivalent. 4 hours recitation. Marnix.

Division of Graduate Studies

THE DIVISION OF GRADUATE STUDIES provides: (1) basic professional business education for entering graduate students who have had little or no undergraduate work in business administration; (2) advanced work in general management and in business specialties for students who have completed an undergraduate major in business administration; (3) studies planned to invigorate and modernize the business skills of experienced business managers; and (4) preparation for careers in college teaching and research.

Instruction is offered through the Division of Graduate Studies in the fields listed below. In all fields, instruction in the School of Business Administration is supported by courses in cognate fields offered by other divisions of the University.

Accounting—public, industrial and government, control theory.

Business Statistics—quantitative analysis for business decisions.

Finance—banking, investments, real estate, finance management.

Forest Industries Management—management of forest products industries (lumber, plywood, pulp and paper, construction and housing).

Managerial Economics—economic principles of business management, business planning, forecasting, business fluctuations.

International Business—finance, trade, management, foreign commercial law.

Risk and Insurance—risk management, personal and property insurance, pensions and group insurance, social insurance.

Marketing—marketing theory, marketing research, market communications, price and product policy, consumer behavior.

Business Organization Theory—management functions, organizational conflict and change, leadership, group behavior.

Transportation—industrial traffic management, highway, rail, air, and ocean transportation, public utilities.

Production—operations research, production programming, industrial management, industrial structure and policy.

Personnel—selection, training, wage and salary administration, labor relations.

The graduate program is developed and planned with the active participation of an Advisory Council. The members of the council for 1963-64 are: George W. Gleeson, dean, School of Engineering, Oregon State University; J. B. Kolliner, vice-president, White Stag Manufacturing Company; Philip S. McAllister, chairman, Department of Business Administration, Lewis and Clark College; T. S. Prideaux, vice-president, United States National Bank, Portland; B. S. Quayle, assistant traffic manager, Southern Pacific Company; John L. Wallen, director, Human Relations Development Group, Tektronix, Inc.

Master's Program

THE DIVISION OF GRADUATE STUDIES offers a two-year program leading to the Master of Business Administration, Master of Science, or Master of Arts degree. For students entering with little or no undergraduate work in business, a total of 75 term hours of work is required, including a 30-hour first-year core program, all or part of which may be waived for students who have had equivalent work as undergraduates.

Admission. For admission to the master's program, the student must satisfy the general requirements for admission to the Graduate School (see pages 105-107). Admission to 500 courses may, however, be restricted to students with a grade-point average of 2.75 or higher. Formal admission to candidacy for a master's degree is granted only after a qualifying examination following the student's first term of graduate study.

Core Programs. The first year of the master's program includes a series of core seminars and two terms of work in Principles of Economics, planned especially for students whose undergraduate studies have been in fields other than business administration. For these students, the first-year core program is required; all or part of the requirement may be waived for students who have had equivalent instruction as undergraduates at the University of Oregon or another institution. The first-year core requirement is as follows:

	Term Hours
Accounting in Administration (Ac 511, 512).....	6
Statistics for Business Decisions (BS 511).....	3
Financial Environment (FBE 514).....	3
Financial Management (FBE 516).....	3
Legal Environment of Business (FBE 517).....	3
Industrial Administration (PIM 511).....	3
Administration of Marketing Function (MIT 511).....	3
Principles of Economics (Ec 201, 202).....	6
	30

The second year of the master's program also includes a group of core courses, providing an understanding of management science and of the utilization of functional areas of business in the application of management principles. The second-year core courses are:

	Term Hours
Theory of Business Organization (PIM 531).....	3
Administrative Controls (Ac 540).....	3
Managerial Economics (FBE 530).....	3
Problems in Business Finance (FBE 522).....	3
Seminar: Legal & Social Philosophy of Business (FBE 507).....	3
Seminar: Quantitative Analysis for Business Decisions (BS 507).....	3
	18

Master of Business Administration. The program leading to the M.B.A. degree emphasizes the development of breadth of understanding of business problems and of general management skills; the program is especially adapted to the needs of students who have earned their bachelor's degree in the social sciences, humanities, sciences, or engineering.

The requirements are: (1) completion of the first-year core program or equivalent; (2) completion of the full second-year core program; (3) a maximum of 18 term hours in a field of business specialization. A thesis is not required; if the student elects to submit a thesis, thesis credit (9 term hours) is counted as part of the 18-hour maximum in his field of specialization.

All candidates for the M.B.A. degree are required to take a final written comprehensive examination, covering (1) the second-year core program and (2) the field of specialization.

Portland M.B.A. Program. Candidates for the M.B.A. degree may complete the 18-hour second-year core program in the Portland Continuation Center of the Oregon State System of Higher Education. They may also satisfy in Portland the 18-hour specialization requirement, in fields in which faculty and library resources are available. Candidates who complete their course work in Portland are required to write a thesis, in consultation with advisers on the Eugene campus.

Instruction providing the equivalent of the first-year core program is also offered in the Portland Center.

Students enrolled in the Portland M.B.A. program may take supporting work in graduate engineering courses offered by the School of Engineering at Oregon State University through the Portland Center.

Master of Science or Master of Arts. The program leading to the M.S. or M.A. degree allows more specialization than the M.B.A. program, and is especially adapted to the needs of students interested in careers in accounting, business statistics and research, and industrial management.

The requirements are: (1) completion of the first-year core program or equivalent; (2) 9 term hours of work selected from the second-year core program in consultation with the candidate's adviser; (3) completion of a major in a specialized field of business, normally 15 term hours; (4) a thesis, 9 term hours; (5) completion of a minor in the school or in a cognate field (minimum, 12 term hours); (6) for the M.A. degree, competence in a foreign language.

Candidates for the M.S. or M.A. degree are required to take a final written comprehensive examination covering the major field of specialization and an oral examination on the thesis.

Minor in Business Administration. A master's candidate with a major in another field may elect a minor in business administration. The minor may consist of (1) 15 term hours of work selected from the second-year core program or (2) 15 term hours in one general field of specialization. The adequacy of the candidate's preparation is reviewed by the school before admission to work for a minor.

Students working for a master's degree in engineering from Oregon State University at the Portland Continuation Center of the State System of Higher Education may satisfy the requirements for a minor in business administration through University graduate courses offered in Portland.

Foreign Students. The work of foreign graduate students (other than Canadians) during their first year of residence is considered probational. A foreign student will be admitted to candidacy for a master's degree only after the faculty has had an opportunity to judge the adequacy of his background in business education, his facility in the English language, and his ability to adjust to an unfamiliar educational environment. In the program of the Division of Graduate Studies, considerable attention is given to individual student problems, and especially to the problems of foreign students.

Doctoral Program

THE DIVISION OF GRADUATE STUDIES offers a program of advanced graduate study and research leading to the degree of Doctor of Business Administration, to careers in college teaching and administration, and to responsible research positions in business and government.

Admission. For admission to the doctoral program, the student must (1) satisfy the admission requirements of the Graduate School, and (2) have the background of graduate work required for a master's degree in business administration.

Degree Requirements. The requirements for the D.B.A. degree are as follows:

(1) Completion of a minimum of 63 term hours of work above the level expected for a master's degree in business administration.

(2) Completion of studies in each of the following five areas:

	Term Hours
Business organization theory & policy—minimum.....	9
A major functional area of business (accounting, finance, marketing, production—programs in other areas may be arranged)—minimum.....	9
Statistics & quantitative control—minimum.....	9
Advanced Economic Theory (Ec 458, 459, 460).....	9
*A field of study other than business—minimum.....	9

(3) Submission of a thesis presenting an original and major contribution to the understanding of the thesis subject, for a minimum of 18 term hours of credit (the student must enroll for 3 term hours in Thesis in each term the thesis is uncompleted after he has passed his comprehensive examinations, up to a maximum of 36 term hours).

(4) Examinations, including: (a) a qualifying examination, normally taken during the student's second term of doctoral studies; (b) written comprehensive examinations, not less than one academic year before the student expects to complete work for the degree, covering the required five areas of study—see (2), above; (c) a final oral examination on the thesis.

Reading knowledge of foreign languages is not required.

Research. Doctoral candidates are expected to become actively engaged in the research program of the school. Opportunities for research experience are provided in connection with projects of individual faculty members and in the comprehensive program of the Bureau of Business Research.

Graduate Courses

Accounting and Business Statistics

†Ac 501. **Research.** Hours to be arranged.

†Ac 503. **Thesis.** Hours to be arranged.

Ac 507. **Seminar.** Hours to be arranged.

Accounting in Administration. Harwood.

Financial Accounting. Luneski.

Managerial Cost Analysis. Harwood.

Accounting Trends. Soha.

BS 507. **Seminar.** Hours to be arranged.

Statistics for Business Decisions. Baerncopf.

Quantitative Analysis for Business Decisions. Baerncopf.

Ac 511, 512. **Accounting in Administration.** (p) 3 hours each term.

Accelerated introduction to principles and procedures of accounting and the use of accounting data as a basis for business decisions; intensive survey of the data-creating process, followed by study of asset valuation, income measurement, cost analysis and control, and budgeting. Open only to graduate students who have not completed a college-level course in accounting.

BS 511. **Statistics for Business Decisions.** (p) 3 hours.

Accelerated study of business statistics; decision theory applications in business; probability, estimation, hypothesis testing, uses of subjective probability, introduction to regression analysis. Open only to graduate students who have not completed BS 232, BS 333 or equivalent. Prerequisite: one year of college mathematics.

* Facility in the reading of business articles in a foreign language and a general knowledge of the culture of the region where the language is spoken may be substituted for work in a field of study other than business.

† No-grade course.

Ac 540. Administrative Controls. 3 hours.

Nature of control in human organization; place of control in total management; conventional and developing techniques of control; basic statistical methods for control; the role of the computer in control systems. Harwood.

Ac 542. Auditing Concepts. 3 hours.

Analysis of the problems encountered in examining and reporting on the financial statements of a business enterprise, verification standards, theory and application of sampling techniques, problems posed by data-processing machine systems, innovations in auditing concepts; selection, scope, and application of auditing procedures in the continued examination approach. Prerequisite: Ac 440, 441. Soha, Eaton.

Ac 552. Accounting Theory. 3 hours.

The basic conceptual framework underlying accounting procedures, with emphasis on the problem of valuation and its relation to the definition and measurement of periodic income. Readings in accounting literature, study of current controversial areas in accounting theory, with emphasis on the effect of changing prices and price levels on accounting data. Prerequisite: Ac 450. Johnson.

Ac 562. Cost Analysis and Interpretation. 3 hours.

Theory of cost analysis and the problem of determining cost for various decision-making purposes; the function of the comptroller in management planning and control, marginal and differential costs, the joint-cost problem, direct costing, budgeting, intrafirm pricing and pricing policy. Readings in cost accounting literature and case studies. Prerequisite: Ac 361. Harwood.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION**Ac 508. Workshop.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**

(For descriptions, see pages 253-255.)

Ac 411, 412, 413. Income-Tax Procedures. (G) 2 hours each term.**Ac 420, 421. Management Information Systems.** (G) 3 hours each term.**Ac 430. Fund Accounting.** (G) 3 hours.**BS 432. Quantitative Analysis for Business Decisions.** (G) 3 hours.**BS 433. Special Topics in Business Statistics.** (G) 3 hours.**Ac 440, 441. Accounting Verification.** (G) 3 hours each term.**Ac 450, 451. Special Topics in Accounting.** (G) 3 hours each term.**Ac 480, 481. Advanced Accounting Problems.** (G) Hours to be arranged.**Finance and Business Economics*****FBE 501. Research.** Hours to be arranged.***FBE 503. Thesis.** Hours to be arranged.**FBE 507. Seminar.** Hours to be arranged.

Legal and Social Philosophy of Business. Richins.

FBE 511. Methods in Business Research. 3 hours.

Research techniques in business; project design, analysis of data, presentation of research findings. Ballaine.

FBE 512. Problems in Business Planning and Forecasting. 3 hours.

Establishment of business plans for expansion and development on the basis of economic and market data; planning fundamentals, forecasting procedures, interrelations of marketing, financial and personnel planning, organization of

* No-grade course.

the planning and forecasting process; theories of business cycles and economic growth. Lindholm.

FBE 514. Financial Environment. (p) 3 hours.

The financial system as an external environment affecting business and financial decisions. Characteristics of the overall financial system of an enterprise economy; nature and functions of money and credit, and their influence on product demand and the supply of finance from the standpoint of the individual business; roles of monetary and fiscal policy, debt management, and the money and capital markets. Reed.

FBE 516. Financial Management. (p) 3 hours.

Objectives, tools, methods, and problems of financial management from the viewpoint of the individual business firm; profit versus liquidity—the financial manager's dilemma; special problems in financial management, including taxes, mergers, forecasting, and organization of the finance function. Burrell.

FBE 517. Legal Environment of Business. (p) 3 hours.

Designed to provide a basic legal background for the study of business administration; contracts, agency, business organization, and fields within the framework of the Uniform Commercial Code; international aspects of law and business. Robert.

FBE 522. Problems in Business Finance. 3 hours.

Selected problems in the financing of business enterprise, including short-term financial arrangements. Credit management, short-term bank borrowing, the preparation and use of financial information, the uses and difficulties of forecasting money needs, the choice between debt and equity, the cost of capital, and other problems. Classroom discussion of cases. Burrell, Christy.

FBE 525. Foreign Commercial Law. 3 hours.

Basic legal concepts applicable to commercial transactions in foreign trade; comparison of commercial law and legal institutions of foreign countries and the United States; major legal systems, including civil law, Islamic law, and common law; legal documents involved in foreign-trade transactions; anti-trust problems in international trade. Robert.

FBE 530. Managerial Economics. 3 hours.

The varied forms in which economic concepts appear in the operation of individual business units; emphasis on the approach to problems of management decision making and forward planning through formulation of problems in a conceptually quantitative manner capable of numerical solution. Integration of economic principles with various areas of business administration; the role of uncertainty given particular attention. Ballaine, Richins.

FBE 535. Taxation and Business Management. 3 hours.

Obligations of the business manager to his government and firm in connection with tax legislation and administration; role of the business institution in the tax collection process; impact of personal and business taxes on business organization, capital sources, profit distribution, labor contracts, management compensation, inventory valuation, capital goods purchases, product development, foreign operations, merger or liquidation; judicial reasoning in tax case decisions. Prerequisite: Ec 429 or equivalent. Lindholm, Reed.

FBE 565. Security Analysis. 3 hours.

Each student selects a specific industry for intensive study, prepares a comprehensive appraisal of its financial problems, and subjects typical companies within the industry to critical examination on a comparative basis. Burrell.

FBE 566. Investment Policy. 3 hours.

Development of sound principles of investment management through the study of cases. Relation of investment policy to money markets and business fluctuations; selection of securities for investment portfolios in the light of long- and short-range objectives of the individual investor or institution. Burrell.

FBE 575. The Money Market. 3 hours.

Money-market instruments and institutions, and the part they play in the

money market of the nation; analysis of the factors that influence the cost and availability of credit and money, including the influence of the Federal Reserve System and the Treasury. The aim is to develop an ability to analyze and appraise money-market trends and developments. Reed, Lindholm.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

FBE 508. **Workshop.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see pages 259-260.)

FBE 418. **Advanced Business Law.** (G) 5 hours.

FBE 430. **Advanced Real Estate and Urban Land Use.** (G) 3 hours.

FBE 460. **Commercial Bank Management.** (G) 5 hours.

FBE 464. **Investments.** (G) 3 hours.

FBE 474. **Foreign Exchange and International Finance Management.** (G) 5 hours.

FBE 475. **Foreign-Trade Marketing.** (G) 5 hours.

FBE 476. **Foreign Business Operations.** (G) 5 hours.

Marketing, Insurance, and Transportation

*MIT 501. **Research.** Hours to be arranged.

*MIT 503. **Thesis.** Hours to be arranged.

MIT 507. **Seminar.** Hours to be arranged.

Marketing Theory. Remington.

Consumer Behavior. Smith.

Marketing Communication. Smith.

Risk Management. Greene.

Industrial Marketing. Rich.

Transportation Theory and Practice. Sampson.

Management of Forest Products Companies. Rich.

Marketing Research. Remington.

MIT 511. **Administration of the Marketing Function.** (p) 3 hours.

Significance of marketing in an industrialized economy; marketing strategy and its relationship to profits and competition; consumer demand and motivation; promotion and price analysis in marketing; promotion programs and the sales function; location decisions and demographic influences.

MIT 520. **Marketing Problems and Policies.** 3 hours.

Cost controls in distribution, delineation of market areas for the firm and industry, trade-channel analysis, organization for distribution, market-share analysis, product development and innovation, interregional trends. Greene, Smith.

MIT 521. **Pricing Policies.** 3 hours.

The development of individual company pricing policies; intra-industry pricing policies and their competitive aspects; influence of trade associations in price determination; legislation and pricing; effect of specific court rulings on price policy. Rich, Remington.

MIT 555. **Risk and Insurance Theory.** 3 hours.

Major problems of insurance theory; mathematical, psychological, economic, statistical, and legal aspects; relation of business organization to theory in risk and insurance; application of theory to practical problems of insurers and the insured. Greene.

* No-grade course.

MIT 556. **Pensions and Group Insurance.** 3 hours.

Economic and business conditions giving rise to the pension movement. The role of private pension plans and group life and disability insurance in overall employee benefit plans. Funding, tax, actuarial, and legal problems in pensions and group insurance. Profit-sharing and labor-negotiated plans. Case studies of industrial retirement plans. Greene.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

MIT 508. **Workshop.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see pages 266-267.)

MIT 447. **Highway Transportation.** (G) 3 hours (extension).

MIT 448. **Air Transportation.** (G) 3 hours (extension).

MIT 451. **Transportation Regulatory Laws and Procedures.** (G) 3 hours.

MIT 452. **Special Problems in Transportation and Traffic Management** (G) 3 hours.

MIT 455. **Property and Liability Insurance.** (G) 5 hours.

MIT 456. **Life and Health Insurance.** (G) 4 hours.

MIT 458. **Social Insurance.** (G) 3 hours.

MIT 467. **Public Utility Management.** (G) 3 hours.

Personnel and Industrial Management

*PIM 501. **Research.** Hours to be arranged.

*PIM 503. **Thesis.** Hours to be arranged.

PIM 507. **Seminar.** Hours to be arranged.

Research Design. Korman.

PIM 511. **Industrial Administration.** (p) 3 hours.

Concepts and techniques basic to sound industrial administration; scientific management, technological change, organization structure and dynamics, decision making; techniques of production control, work measurement, statistical quality control, newer quantitative tools such as linear programming. Case studies. Seubert.

PIM 530. **Production Programming.** 3 hours.

Analysis of schematic and mathematical models in the allocation of productive resources in the manufacturing process; linear programming, statistical techniques, and other quantitative norms applied in production control, equipment replacement analysis, economic lot size determination, and quality control. Vance.

PIM 531. **Theory of Business Organization.** 3 hours.

The role of theory in the social sciences; research and theory dealing with organizational structure, leadership, communication, evaluation, decision making, control; an attempt to integrate traditional and behavioral-science approaches to organization and organizational behavior. Miner, Seubert.

PIM 532. **Problems in Business Policies.** 3 hours.

Business policy formulation considered as a derivative of corporate objectives and philosophy; emphasis on the effects of intra- and extra-organizational forces which require periodic policy modifications. Analysis of specific case illustrations on a company and an industry basis. Research into the conceptual and operational ramifications of a current problem. Vance.

* No-grade course.

PIM 533. Theory of the Industrial Work Group. 3 hours.

Major theories of group formation and behavior considered in terms of their implications for business management; analysis of the literature concerning supervisory behavior and leadership, characteristics of managers, group cohesiveness, conformity, productivity standards, problem-solving efficiency, and morale. Miner, Korman.

PIM 534. Personnel Administration. 3 hours.

Mobilizing and deploying the human resources of the enterprise, from the standpoint of the personnel-administration specialist; employment, training, evaluation, wage and salary administration; labor relations from the standpoint of the firm; specialist contributions to personnel programs. Beal.

PIM 535. Personnel Psychology. 3 hours.

Analysis of studies in psychological literature concerning techniques of personnel selection and screening, methods of evaluating employee and managerial performance, training and management development, effects of working conditions on performance, job and equipment design in relation to employee characteristics, and attitude and morale measures. Miner, Korman.

PIM 536. Organizational Conflict and Change. 3 hours.

Factors contributing to internal conflict and to changed patterns of behavior within organizations, from the viewpoint of business management; managerial decision making and conflict; implications of cultural values for the administration of scientific research groups; labor-management conflict; coercion and manipulation; planned change. Miner.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see page 270.)

PIM 412. Personnel Management. (g) 3 hours.

PIM 413. Wage and Salary Administration. (G) 3 hours.

PIM 414. Problems in Personnel Management. (g) 3 hours.

PIM 480. Business History. (G) 3 hours.

Dental School

HAROLD J. NOYES, D.D.S., M.D., Dean of the Dental School.

LOUIS G. TERKLA, D.M.D., Assistant to the Dean.

EUGENE W. BAUER, B.S., Business Manager ; Assistant to the Dean.

ERNEST A. HURLEY, D.M.D., Registrar.

THE UNIVERSITY OF OREGON DENTAL SCHOOL, located in Portland, was established through an act of the 1945 Oregon Legislature; the act accepted the gift of the property of the North Pacific College of Oregon, and incorporated the college into the Oregon State System of Higher Education as a school of the University. The North Pacific College was the outgrowth of the merger in 1900 of the Tacoma Dental College (founded in 1893) and the Oregon College of Dentistry (founded in 1898).

The Dental School offers a professional curriculum in dentistry, leading to the degree of Doctor of Dental Medicine, graduate programs leading to the Master of Science degree with majors in the fields of anatomy, bacteriology, biochemistry, dental materials, oral pathology, orthodontics, pedodontics, pharmacology, and physiology, and a two-year program for the training of dental hygienists.

The professional curriculum is organized to provide the basic scientific knowledge, the mechanical skills, and the clinical experience essential for competence and success in dentistry. The curriculum requires four years of didactic and clinical training, following two or more academic years of preprofessional work in liberal arts in an accredited college or university. The University offers, on the Eugene campus, a three-year pre dental curriculum which satisfies the admission requirements of the Dental School (see pages 145-146).

Students completing the two-year dental-hygiene program may, by taking two additional years of work on the Eugene campus, satisfy the requirements for the Bachelor of Science degree with a major in health education (see SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION).

Detailed information concerning the Dental School is published in a separate catalog; copies will be furnished on request.

School of Education

PAUL B. JACOBSON, Ph.D., Dean of the School of Education.

CLARENCE HINES, D.Ed., Acting Associate Dean of the School of Education.

Professors: C. E. AVERY, H. W. BERNARD, QUIRINUS BREEN, ALBUREY CASTELL, H. H. CLARKE, KEITH GOLDHAMMER, GRACE GRAHAM, F. B. HAAR, A. C. HEARN, CLARENCE HINES, C. L. HUFFAKER (emeritus), P. B. JACOBSON, P. E. KAMBLY, R. N. LOWE, M. C. ROMNEY,* J. F. RUMMEL,* A. A. SANDIN, P. B. SIMPSON, V. S. SPRAGUE, F. L. STETSON (emeritus), D. E. TOPE, R. S. VAGNER, HUGH B. WOOD.

Associate Professors: F. C. ANDREWS, T. O. BALLINGER, DOROTHY N. CANDLAND, R. O. CARLSON, JACK CULBERTSON,* J. E. S. DE JUNG, E. W. DILS, FRANK FARNER, W. R. HILL, JR., SILVY A. KRAUS, J. M. LAING, J. R. LENT, J. W. LOUGHARY, ARTHUR MITTMAN, JESSIE L. PUCKETT, O. F. SCHAAF, FRANCES A. SCOTT, J. E. SUTTLE, RUTH A. WILLARD, MILDRED H. WILLIAMS.

Assistant Professors: M. H. ACKER, ABBY ADAMS, EXINE A. BAILEY, M. B. BERRYHILL, H. J. CARLSON, O. E. CHRISTENSEN, JR., J. H. HANSEN, MARGARET LANE, L. L. LOVELL, R. H. MATTSO, R. E. MYERS, R. P. NELSON, VERNICE T. NYE, WAYNE OTTO, IONE PIERRON,† G. P. PETERSEN, C. W. SCHMINKE, D. P. TEN BRINKE, C. W. THOMAS, JORDAN UTSEY, K. W. WEGNER.

Senior Instructors: HAZEL E. HOLBOKE, SUSAN MILLER.

Instructors: J. R. BOOTH, D. A. BROWN, CHESTER BUMBERGER, CALVIN FRAZIER, JANE GEHRING, RUTH WAUGH, KATHRYN I. WHYTE.

Associate: T. D. RIGBY.

Assistants: MARIAN AIKIN, DONALD BELL, DOROTHY BURNS, ROBERT CARSON, LLOYD COLVIN, RUDY COOK, LEONARD CURTIS, DONALD EMPHEY, DEE FLITTON, DAVE FORD, WALTER FOSTER, GRANT GIFFORD, N. A. GLASER, GRANT HOLLIS, NORMAN HYATT, JOHN KOHL, FRED LAMSON, FRANK LARIZA, RUSSELL J. LESKIW, JAMES LEVELL, LAWRENCE PERKINS, RODNEY PETTY, ROBERT RATH, ROBERT SKIPPEN, WARD SYBOUS, ROBERT WENDT, MELVIN WOLFORD.

THE SCHOOL OF EDUCATION offers undergraduate and graduate work in teacher education at the elementary and secondary levels. Instruction is also offered, principally at the graduate level, in the fields of school administration, school psychological services, and higher education. Through the Department of Librarianship, undergraduate and graduate professional education is provided for librarians, with particular emphasis on the preparation of school librarians.

The University of Oregon is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary and secondary teachers, school administrators, and specialists in school personnel services. The council has also approved the graduate programs in these fields leading to the master's and doctor's degree.

Admission to Teacher Education. Students may enroll in methods courses in the School of Education only after they have been admitted to the teacher education program. Admission requirements include (1) at least sophomore standing, (2) a cumulative GPA of at least 2.25, (3) speech clearance, and (4) writing clearance. Further information and admission application forms may be obtained in the Teacher Education Office in the School of Education.

* On leave of absence 1963-64.

† On sabbatical leave 1963-64.

Undergraduate Program. In planning its teacher education program, the University recognizes three qualifications for a good teacher: (1) a broad and liberal education; (2) a mastery of subject matter; (3) a knowledge of child and adolescent psychology and an understanding of professional problems and techniques.

To encourage prospective teachers to devote their first two years at the University exclusively to liberal arts and to basic work in the subject fields, the University of Oregon has organized its professional instruction in education on an upper-division and graduate basis, and requires junior standing for admission to major work in the School of Education. Lower-division students planning to major in education are enrolled in the College of Liberal Arts.

Students preparing for secondary-school teaching are also encouraged to complete their work for a bachelor's degree with a major in a subject field—taking as electives the professional courses in education required for teacher certification. An undergraduate major program in education is, however, available principally for students preparing for elementary-school teaching. The program leads to the Bachelor of Arts, Bachelor of Science, or Bachelor of Education degree.

Before the end of their senior year, undergraduate education majors should take sufficient elective work in education, in addition to courses required for certification, to satisfy the 36-hour major requirement for a baccalaureate degree. General Psychology (Psy 201, 202) may be counted toward the satisfaction of the major requirement.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Program. Professional work in education beyond the undergraduate courses required for certification is offered principally at the graduate level. Specialized graduate work is offered in school administration and supervision, librarianship, school psychological services, curriculum and instruction, elementary education, secondary education, higher education, history and philosophy of education. Graduate work in education leads to the following degrees: Master of Arts, Master of Science, Master of Education, Doctor of Philosophy, Doctor of Education.

Special programs of graduate study are also offered toward the satisfaction of the Oregon state requirement of a fifth year of college work for regular high-school teacher certification. The student may qualify, on the completion of the fifth year, for an interdisciplinary M.A. or M.S. in a program planned especially for teachers or for a departmental degree with a major in a subject field or in education.

Bureau of Educational Research. The Bureau of Educational Research conducts basic research in the field of education and provides consultant and field services to the schools of the state for the solution of problems related to the administration, organization, and operation of educational programs.

Affiliated with the Bureau is the Oregon School Study Council, a research and service agency sponsored by the Oregon State Department of Education, the Oregon School Boards Association, and the University of Oregon. Its program is supported by dues paid by participating school districts.

Curriculum Laboratory. The Curriculum Laboratory, located in the University Library, provides facilities for specialized study of the public school curriculum and for practical research on curriculum problems. The equipment of the laboratory includes: (1) recent and important courses of study, units, and other curriculum materials available in the United States; (2) a comprehensive collection of elementary- and secondary-school textbooks; (3) an extensive file of standardized texts and other instruments of pupil evaluation; (4) a large collection of free and inexpensive pamphlets, maps, exhibits, and other material suitable

for use in the classroom; (5) bibliographies on various phases of the public school curriculum.

Placement Service. The University maintains a central Placement Service which provides assistance to graduating students and alumni who are seeking new or better teaching and administrative positions at the elementary, secondary, and college levels. See page 80.

General Education

BROAD FUNDAMENTAL COURSES offered by the School of Education for students preparing for teaching and administration at all levels of education are listed below.

UPPER-DIVISION COURSES

Ed 310. **The School in American Life.** 3 hours.

The school as a social institution; the impact of dominant characteristics of American society on the school; historical developments of elementary and secondary education; patterns of curriculum development; school organization; school law; current issues in education. Tope.

Ed. 315. **Human Development and Learning.** 5 hours.

The understanding of children's behavior at various developmental levels during the school years; learning theories and principles, and application to classroom situations; individual differences as they effect developmental and learning patterns; methods of evaluating changes in children's behavior. Lovell.

Ed 317, 318. **Social Foundations of Teaching.** 3 hours each term.

First term: the nature and influence of such social determinants of child behavior as family, class structure, peer groups, mass media of communication, etc.; the social status of childhood, emerging rights, agencies concerned with children. Second term: the social role of the school, including a study of community-analysis techniques as an approach to the school environment; community resources for teaching, and ways of utilizing these resources; educational implication of children's out-of-school activities and problems; community beliefs and practices, and their relation to the curriculum. Graham.

Ed 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. **Seminar.** (G) Hours to be arranged.

Logic and Learning. Castell.

Ed 435. **Audio-Visual Aids.** (G) 4 hours.

The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc. are utilized. Sources of materials and equipment; administration of audio-visual programs.

Ed 440. **History of Education.** (G) 3 hours.

A general review of the growth and development of education in relation to the civilization of the times; emphasis on development of educational philosophies. Breen.

Ed 441. **History of American Education.** (G) 3 hours.

The intellectual development of the United States, with special reference to the development of the school system. Prerequisite: knowledge of American history. Castell.

- Ed 445. **Modern Philosophies of Education.** (G) 3 hours.
An examination of educational philosophies proposed by recent leaders and critics of American educational theory and practice. Castell.
- Ed 476. **School Law and Organization.** (G) 2 hours any term.
Oregon laws applying to schools and teachers; teacher personnel policies and practices; professional organizations; means for continued professional growth.
- Ed 491. **Social Education.** (G) 3 hours.
Structure and functioning of society, as a background for the study and evaluation of education in its varied forms; the contribution of sociological principles and findings to the improvement of educational practices. Graham.

GRADUATE COURSES

- *Ed 501. **Research.** Hours to be arranged.
- *Ed 503. **Thesis.** Hours to be arranged.
- Ed 505. **Reading and Conference.** Hours to be arranged.
- Ed 507. **Seminar.** Hours to be arranged.
- *Ed 508. **Workshop.** Hours to be arranged.
Opportunity for group work on special problems.
- Ed 542. **Urbanization, the Pupil, and the School.** 3 hours.
Prevailing social patterns in urban society that are pertinent to an understanding of what pupils learn and study, pupil behavior in general, and school problems; impact of urbanization on the changing American family, teenage culture, population migrations, and the school. Emphasis on effects on children. Graham.
- Ed 545. **School and Society in the Recent Past.** 3 hours.
The liberal evolution in modern education; the state and education; freedom in teaching; education and social ends; the place of religion in secular education. Castell.
- Ed 565. **Curriculum Foundations.** 4 hours.
Implications of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning. Wood.
- Ed 566. **Curriculum Construction.** 4 hours.
Survey and appraisal of curricular patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning. Wood.
- Ed 567. **Curriculum Materials.** 4 hours.
Effective use and organization of curriculum materials; text and reference books, supplementary pamphlet materials, films and slides, records and recordings, pictures, radio, etc.; programmed learning; techniques of unit construction. Wood.
- Ed 598. **Comparative Education.** 3 hours.
Educational systems, philosophies, curricula, and recent developments in European, Asian, African, Pan-American, and other countries of the world; origins; factors underlying common and unique characteristics of various educational systems. Wood.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

- Ed 475. **Parent-Teacher Organizations.** 2 hours (extension and summer sessions).
- Ed 478. **Improvement of Instruction in Reading.** (G) 3 hours (extension).

* No-grade course.

Elementary Education

THE UNIVERSITY OF OREGON offers, in the field of elementary education, (1) a four-year program leading to a bachelor's degree and (2) a full program of graduate work leading to advanced degrees.

Undergraduate Program. The undergraduate program in elementary education is planned to meet the requirements of the Oregon State Board of Education for a basic certificate. The program includes: (1) a broad distribution of studies in subject fields, (2) three integrated blocks of professional courses, and (3) an additional group of professional courses. The three blocks must be taken in sequence, and the instruction included in each block must be taken concurrently.

	General Education Courses*	Term Hours
Arts and Letters:		
English Composition (Wr 121, 122, 123)		9
Fundamentals of Speech (Sp 121)		3
Literature (Eng 101, 102, 103, Eng 104, 105, 106, or Eng 107, 108, 109)....		9
Art in the Elementary School (AA 311, 312)		4
Music Fundamentals (Mus 321, 322)		4
Electives (language, literature, literary criticism, speech)		6
Social Science:		
History of the United States (one term)		3
Introduction to Geography (one term)		3
Sequence in social science—completion of history or geography sequence or any year sequence which satisfies the social science group requirement		6-9
Social science electives (total of 27 term hours in social science required)		12-15
Science:		
General Biology (Bi 101)		4
Physical science—Physical-Sc. Survey (GS 104) or Elcm. Chemistry (Ch 101) or Gen. Geology (Geol 101) or Ess. of Physics, with laboratory (Ph 101, Ph 204)		4
Sequence in science—completion of biology or physical science sequence or any year sequence, except psychology, which satisfies the science group requirement		8-12
† Mathematics for Elementary Teachers (Mth 111, 112)		6
Science electives (total of 26 term hours in science required)		0-4
Health and Physical Education:		
Physical Education (PE 180)		2
Games for the Elementary School (PE 221), Rhythms for the Elementary School (PE 222), Fund. Body Movement, Posture, Tumbling (PE 223)		3
Elementary-School Health Education (HE 450)		3
Professional Courses		
Block I:		
Social Foundations of Teaching (Ed 317)		3
Human Development & Learning (Ed 315)		5
Intro. to Basic Classroom Procedures (Ed 331)		2
Block II:		
Teaching Social Studies & Science in the Element. School (Ed 334)		5
Student Teaching (Ed 415)		4
Block III:		
Teaching Language Arts in the Elementary School (Ed 332)		3
Children's Literature (Lib 490)		3
Student Teaching (Ed 415)		10
Additional Professional Courses:		
Teaching Reading in the Elementary School (Ed 335)		3
Teaching Mathematics in the Elementary School (Ed 333)		3
Art in the Elementary School (ArE 313)		3
Teaching of Music: Elementary School (MuE 317)		3
Methods in Elementary-School Phys. Ed. (PE 420)		3

* Honors College courses may be taken in place of the courses in literature, social science, and science listed below as requirements.

† Students who have had equivalent work in mathematics are exempt from this requirement.

The University is developing an elementary teacher education program that includes a period of internship. For information concerning this program, consult the Teacher Education Office, School of Education.

Graduate Program. The graduate program in the field of elementary education is designed to provide continued study opportunities for professional personnel in the field and, with the cooperation of other divisions of the University, to prepare master elementary-school teachers, elementary-school principals, supervisors, and directors, college teachers in the field of elementary education, and other specialists with responsibilities for the education of children. A brochure describing the graduate program in elementary education will be furnished on request to the School of Education.

UPPER-DIVISION COURSES

Ed 330. Field Experience. 1-2 hours.

Direct experience with children of all ages, with selection of setting determined by student needs; work with hospitalized, mentally retarded, or delinquent children; September experience in a regular classroom during the first two weeks of the school year; leadership in recreational activities. Holboke.

Ed 331. Introduction to Basic Classroom Procedures. 2 hours.

The elementary teacher's role in the organization of time, space, and materials. To accompany directed observation and participation in elementary-school classroom activities, one-half day a week.

Ed 332. Teaching Language Arts in the Elementary School. 3 hours.

Language development from kindergarten through elementary school; emphasis on language as a means of thinking and communication. Curriculum, methods, materials, and evaluation in the teaching of speaking, listening, handwriting, spelling, correct language usage, etc. Carlson.

Ed 333. Teaching Mathematics in the Elementary School. 3 hours.

Arithmetic in the elementary-school program. Types of instruction, criteria for selection, placement, and organization of content. Prerequisite: Ed 315. Schminke.

Ed 334. Teaching Social Studies and Science in the Elementary School. 5 hours.

Social studies and science in the elementary-school curriculum. Ways of developing basic concepts in human relationships and community living. Emphasis on the effective use of instructional media and on related problems of individual differences, cultivation of critical thinking, provision for growth and retention, and methods of evaluating results of instruction. Prerequisite: Ed 315.

Ed 335. Teaching Reading in the Elementary School. 3 hours.

The nature of the reading process; development of reading readiness, word recognition, study skills, vocabulary, comprehension, and reading interest. Methods of diagnosing difficulties; evaluation of programs; selection of materials. Utsey.

***Ed 404. Seminar: Elementary Student Teaching.** 2 hours.

Ed 407. Seminar. (G) Hours to be arranged.

***Ed 414. Student Teaching: Kindergarten.** 3-15 hours (15 hours maximum credit).

***Ed 415. Student Teaching: Grades 1-6.** 3-15 hours (15 hours maximum credit).

UPPER-DIVISION COURSE CARRYING GRADUATE CREDIT

Ed 451. Early Childhood Education. (G) 3 hours.

Relationship of the development of young children to the educational programs provided for them. Program planning; group behavior; individual

* No-grade course.

behavior; the place of the teacher; equipment; activities; books and music for young children. Candland.

GRADUATE COURSES

*Ed 501. **Research.** Hours to be arranged.

Ed 505. **Reading and Conference.** Hours to be arranged.

Independent study for graduate students interested in special problems or topics in elementary education.

Ed 507. **Seminar.** Hours to be arranged.

Ed 534. **Science in the Elementary School.** 3 hours.

The place of science in the elementary school, with particular reference to the value of science in the lives of children. Selecting and organizing content; coordinating science with elementary-school activities; methods and materials; rooms and equipment. Suttle.

Ed 535. **Social Studies in the Elementary School.** 3 hours.

Social-education objectives; children's social problems; unit development; work-study skills; organization of the program; materials; research findings basic to the social education of children. Willard.

Ed 536. **Language Arts in the Elementary School.** 3 hours.

The role of language arts in the elementary-school program; objectives; research findings on language development; the teaching of spelling, writing, and speaking-listening skills; newer instructional materials; testing and evaluation. Carlson.

Ed 537. **Reading in the Elementary School.** 3 hours.

Nature of the reading process, objectives, organization of a desirable reading program; reading readiness, reading skills; procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. Willard.

Ed 538. **Mathematics in the Elementary School.** 3 hours.

Number abilities needed by children; research findings in mathematics education; designing number experiences; theories of teaching, desirable teaching procedures, selection and use of materials. Schminke.

Ed 552. **Elementary-School Problems.** 4 hours.

A study of current problems, issues, significant research, and theories in the field of elementary education. Sandin.

Ed 553. **Elementary-School Curriculum.** 4 hours.

A systematic study of the elementary-school curriculum, including pupil needs in everyday life situations, objectives, essentials of a good program, varying curriculum designs, organization of learning experiences, evaluation of learning, and appraisal of newer curriculum practices. Sandin.

Ed 554. **Elementary-School Supervision and Administration.** 4 hours.

For mature students of elementary education who are preparing for administrative or supervisory positions. Characteristics of good elementary schools, leadership responsibilities and processes, school organization patterns, pupil personnel policies, school-community relationships. Sandin.

Secondary Education

UNDER OREGON SCHOOL LAW, five years of collegiate preparation, including specified work in education and in subject fields, is required for a standard teacher's certificate. However, graduates of accredited colleges and universities who have completed a four-year teacher-education program may, on graduation,

* No-grade course.

be granted a basic certificate, which is valid for three years. For renewal of the basic certificate after three years, 24 term hours of work toward the completion of the fifth-year program are required.

The following education courses are recommended as part of the preparation of secondary teachers:

Junior Year	Term Hours
Human Development & Learning (Ed 315).....	5
Princ. of Secondary Teaching (Ed 314) or Special Secondary Methods (Ed 408)	3
Elective from fields listed below under "graduate year".....	3
Senior Year	
*Student Teaching: Junior High (Ed 416) or Senior High (Ed 417).....	10
*Special Secondary Methods (Ed 408).....	3
Graduate Year	
Philosophy or history of education.....	3
Courses in two of more of the following fields of education: curriculum, evaluation of learning, guidance & counseling, teaching of reading, social foundations of education, education of the exceptional child, educational teaching media	12

A student who has completed the courses listed under "junior year" and "senior year," has attained adequate preparation in a subject field, and has earned a bachelor's degree, is eligible for a basic certificate. A student who has taken part of his preparatory work at another institution, especially an out-of-state institution, should consult the School of Education concerning allowed equivalents for the satisfaction of Oregon requirements.

Before assignment to student teaching, a student must obtain the recommendation of his major school or department.

Subject Preparation. Under regulations adopted by the Oregon State Board of Education, new teachers employed in approved high schools may be assigned to teach only in those subject fields in which they have completed a stated minimum of college preparation.

One of the student's subject fields must be a field in which the University offers supervised teaching: art, biology, business, chemistry, English, French, general science, German, health education, journalism, Latin, librarianship, mathematics, music, physical education, physics, social studies, Spanish, or speech and drama. For specific requirements in these fields, see the sections of this Catalog in which the several subject-field programs are described. Information concerning teaching norms may also be obtained in the Teacher Education Office of the School of Education.

The University is developing a secondary teacher education program that includes a period of internship. For details of this program, consult the School of Education.

Graduate Work. The University's program of graduate study in the field of secondary education, leading to master's and doctor's degrees, is planned to suit the needs of both teachers and administrators.

Many students, while meeting the fifth-year requirements for standard secondary teacher certification, find it possible to satisfy, at the same time, the requirements for an interdisciplinary master's degree or for a departmental master's degree in a subject field or in education.

UPPER-DIVISION COURSES

Ed 314. Principles of Secondary Teaching. 3 hours.

Study of the actual classroom teaching process, including classroom organization and management, planning teaching units, evaluating pupil learning, and similar problems. Prerequisite: Ed 315. Kambly.

* This work may be taken in the graduate year, but may not be applied toward a graduate degree; Ed 416 or Ed 417 is required for the basic certificate.

Ed 408. **Special Secondary Methods.** 1 to 3 hours.

Prerequisite: Ed 315.

*Ed 416. **Student Teaching: Junior High School.** 3-15 hours.

15 hours maximum credit for Ed 416 or Ed 417 or any combination of these courses.

*Ed 417. **Student Teaching: Senior High School.** 3-15 hours.

15 hours maximum credit for Ed 416 or Ed 417 or any combination of these courses.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 427. **School Activities.** (G) 3 hours.

Principles and purposes of school activities; pupil participation in school government; assemblies; clubs, social activities; athletics, speech activities, drama, music, publications; evaluation of the school activity program. Hearn.

Ed 484. **The Junior High School.** (G) 3 hours.

Origin and functions of the junior high school; characteristics and needs of the early adolescent; administration of the junior high school; curriculum and instruction; guidance; school activities; evaluation. Hearn.

GRADUATE COURSES

Ed 522. **Secondary-School Curriculum.** 3 hours.

Overview of the secondary-school curriculum, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the course of study; evaluation of the secondary-school curriculum. Hearn.

Ed 527. **Secondary-School Administration and Supervision.** 3 hours.

The secondary-school principalship; principles of administration, staff relationships, public relations, and professional growth; business administration; administration of guidance services, curriculum, and school activities; evaluation of the secondary school. Hearn.

Ed 559. **Evaluation of Secondary-School Programs.** 3 hours.

Appraisal of secondary schools on the basis of evaluative criteria, with special attention to the work of the National Study of Secondary School Evaluation. Hearn.

Ed 560. **Secondary-School Problems.** 3 hours.

Current problems in the field of secondary education. Hearn.

Ed 571. **Junior High-School Curriculum.** 3 hours.

Instructional programs appropriate for the early adolescent years, with emphasis upon the various subject fields. Hearn.

Ed 593. **Methods in Secondary-School Language Arts.** 3 hours.

Review of research in the problems of teaching language arts in the secondary schools; observation and participation in demonstration teaching of literature, grammar, and composition. Designed for administrators and supervisors, as well as classroom teachers. Prerequisite: teaching experience or consent of instructor. Kraus.

Ed 594. **Methods in Secondary-School Mathematics.** 3 hours.

Development of proficiency in the use of the problem-solving approach to the teaching of topics in arithmetic, algebra, geometry, and advanced high-school mathematics. Consideration of the strengths, inadequacies, and needed revisions of the present-day mathematics curriculum. Prerequisite: teaching experience or consent of instructor. Schaaf.

Ed 595. **Methods in Secondary-School Science.** 3 hours.

Selection of materials for secondary-school science teaching, demonstrations,

*No-grade course.

science test construction, instructional devices; use and care of microscopes, meters, and other equipment. Prerequisite: teaching experience or consent of instructor. Ten Brinke.

Ed 596. **Methods in Secondary-School Social Studies.** 3 hours.

Trends in the social-studies curriculum; the unit method of teaching; the core curriculum; social-studies materials and teaching techniques; teaching reflective thinking; teaching current affairs. Students may work on problems of individual interest, and prepare materials for use in junior and senior high-school classes. Prerequisite: teaching experience or consent of instructor. Williams.

School Psychological Services

THE SCHOOL PSYCHOLOGICAL SERVICES PROGRAM coordinates instruction and clinics in remedial education, educational psychology, school psychology, counseling psychology, school counseling, rehabilitation counseling, juvenile correction, and education of exceptional children. The several clinics operate through the DeBusk Memorial Center, named for its founder and first director, the late Dr. Burchard W. DeBusk.

The program, in all of its phases, is interdisciplinary in character, involving cooperation of the faculties of the School of Education and of several departments of the College of Liberal Arts. The courses listed below are those for which the School of Education has the principal responsibility; students working in the several fields also take selected courses offered in the College.

A doctoral program in counseling psychology and two-year programs in rehabilitation counseling and in school psychology, leading to the master's degree, are offered jointly by the Department of Psychology and the School of Education. Graduate programs in speech pathology and audiology are offered through the School of Education in collaboration with the Department of Speech and the University of Oregon Medical School.

The school psychological services program is planned principally for graduate students working toward master's and doctor's degrees; but many of the courses are applicable to the needs of students completing the degree requirements in elementary education, secondary education, and school administration. The program of the individual student is developed in the light of his background, experience, and professional objectives.

In all fields, supervised practical experience is provided in schools, hospitals, mental health agencies, juvenile departments, rehabilitation centers, and other agencies concerned with learning and adjustment problems of children and adults.

Practicum instruction is organized on two levels. Students who are receiving their first experience in a field and require relatively close supervision are enrolled in Ed 409; advanced students who are able to work more independently are enrolled in Ed 509.

The programs in rehabilitation counseling and in juvenile correction are administered through the Center for Social Service Training and Research. Both programs lead to the master's degree, and normally require two years for completion. For further information see CENTER FOR SOCIAL SERVICE TRAINING AND RESEARCH, page 118.

Remedial Education

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 409. **Practicum.** (G) Hours to be arranged.

Remedial Clinic—Remediation.

Remedial Clinic—Diagnosis.

- Ed 428. **Psychology of Reading Instruction.** (G) 3 hours.
Nature of the reading process; factors of learning and development related to reading achievement; psychological foundations of methods and materials of reading instruction; nature and treatment of reading disability.
- Ed 429. **Principles of Remedial Education.** (G) 3 hours.
Survey of remedial education; factors associated with underachievement; general principles of diagnosis and remediation; diagnostic instruments and remedial resources. A first course in remedial education, with application to both elementary and secondary education. Hill.
- Ed 465. **Diagnostic Techniques in the Basic Skills.** (G) 3 hours.
Analysis of difficulty in the skills of reading, and related skills; selection, administration, and interpretation of group and individual diagnostic achievement tests; diagnostic procedures; development of the diagnostic report. Concurrent enrollment in Practicum: Remedial Clinic—Diagnosis (Ed 409) required.
- Ed 468. **Remedial Techniques in the Basic Skills.** (G) 3 hours.
Organization and implementation of the remedial program; specific procedures in the remediation of difficulty in the skills of reading, and related skills. Concurrent enrollment in Practicum: Remedial Clinic—Remediation (Ed 409) required.
- Ed 469. **Reading in High School and College.** (G) 3 hours.
Basic principles of reading instruction; nature and scope of the total reading program; methods, materials, and organization of the developmental and corrective reading programs in high school and college. Hill.

GRADUATE COURSES

- *Ed 501. **Research.** Hours to be arranged.
Word Perception.
Disability Syndromes.
Basic Skills Assessment.
Early Learning Problems.
- Ed 505. **Reading and Conference.** Hours to be arranged.
Intensive study of problems relating to the education of children with difficulties in the mastery of the basic skills, including reading, arithmetic, spelling, etc.
- Ed 507. **Seminar.** Hours to be arranged.
Problems in Remedial Instruction. Hill.
Problems in Educational Diagnosis. Hill.
- Ed 509. **Practicum.** Hours to be arranged.
Diagnosis and Treatment of Underachievement. Hill.
- Ed 562. **Issues in Extreme Learning Difficulty.** 3 hours.
Theory and research concerning extreme learning problems in the basic skills; analysis of differential learning capacity; reading-listening relationships; sensory-motor modes of remediation; social-emotional correlates of skills disability; therapeutic elements of remediation. Hill.

Education of Exceptional Children

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Ed 409. **Practicum.** (G) Hours to be arranged.
Exceptional Children—The Mentally Retarded.
Exceptional Children—The Gifted. Lovell.
Exceptional Children—The Emotionally Disturbed. Lowe, Mattson.
Exceptional Children—The Physically Handicapped. Mattson.

*No-grade course.

Ed 439. **The Gifted Child.** (G) 3 hours.

The psychology, education, and guidance of the mentally superior and the extraordinarily gifted child. Lovell.

Ed 462. **Psychology of Exceptional Children.** (G) 3 hours.

Characteristics and problems of all types of exceptional children, with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Mattson.

Ed 463. **The Maladjusted Child.** (G) 3 hours.

The discovery and treatment of the emotionally and socially maladjusted child; the home, school, and community in relation to the child's mental health. Opportunities for the observation of family counseling techniques. Lowe.

Ed 464. **The Mentally Retarded Child.** (G) 3 hours.

The psychology, education, and guidance of the mentally retarded child.

Ed 471. **Administration of Special Education.** (G) 3 hours.

Organizing, financing, housing, equipping, staffing, and supervising the special-education program; desirable educational provisions for each type of handicapped child; legal provisions for special education.

Ed 489. **Curriculum for the Mentally Retarded.** (G) 3 hours.

Curriculum, methods, and materials for special classes, developed on the basis of the diagnosed characteristics of mentally retarded children. Prerequisite: Ed 464.

GRADUATE COURSES

*Ed 501. **Research.** Hours to be arranged.

Problems in Educating Exceptional Children. de Jung.

Ed 505. **Reading and Conference.** Hours to be arranged.

Intensive study of problems relating to educating the handicapped. Areas of study are selected in light of the student's interests and professional plans. Mattson.

Ed 507. **Seminar.** Hours to be arranged.

Teaching the Mentally Retarded.

Teaching the Gifted. Lovell.

Curriculum for the Gifted. Lovell.

Adlerian Theory. Lowe.

Teaching the Emotionally and Socially Maladjusted. Mattson.

Curriculum for the Emotionally and Socially Maladjusted. Mattson.

The Physically Handicapped. Mattson.

Ed 509. **Practicum.** Hours to be arranged.

Exceptional Children—The Mentally Retarded.

Exceptional Children—The Gifted. Lovell.

Exceptional Children—The Emotionally Disturbed. Lowe, Mattson.

Exceptional Children—The Physically Handicapped. Mattson.

Ed 563. **Diagnosis in Mental Retardation.** 3 hours.

Critical evaluation of instruments and techniques used in the identification and diagnosis of mentally retarded children; practice in the solution of problems involving the mentally retarded. Prerequisite: Ed 424, Ed 464, Ed 489; or consent of instructor.

Educational Psychology

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. **Seminar.** (G) Hours to be arranged.

Educational Psychology.

* No-grade course.

Ed 409. **Practicum.** (G) Hours to be arranged.

Psychometry. Lovell, Lowe, Mittman.
School Psychology. Lovell.
Clinical Procedures in Education. Waugh.

Ed 424. **Measurement in Education.** (G) 3 hours.

Use and interpretation of informal and standardized tests as supervisory and guidance instruments for the diagnosis, analysis, evaluation, and improvement of instruction in the elementary and secondary schools. Test planning, item writing, essay testing, administration and scoring, analysis of scores and grade assignment. The course includes simple statistics of test interpretation. Mittman.

GRADUATE COURSES

*Ed 501. **Research.** Hours to be arranged.

School Psychology. Lovell.
Problems in Learning. Lovell, Mittman.

Ed 509. **Practicum.** Hours to be arranged.

Psychometry. Lovell, Lowe, Mittman.
School Psychology. Lovell.

Ed 512. **Research Procedures in Education.** 3 hours.

The nature and procedures of research in education. Open to graduate students majoring in other fields. Does not take the place of individual supervision of the student's thesis. An introductory course in statistics is desirable preparation. Mittman.

Ed 515, 516, 517. **Educational Statistics.** 3 hours each term.

Technique in quantitative and experimental methods. Calculus not required. Admission after fall term only with consent of instructor.

Ed 525. **Theory and Technique of Educational Measurement.** 3 hours.

The theoretical bases and principles of educational measurement; item writing, try-out, selection and revision, reproduction and administration; nature of measurement; units and norms; reliability and validity; batteries and profiles; local and wide-scale testing programs. Designed primarily for advanced students in educational psychology and human development. Prerequisite: Ed 424, Ed 515, or equivalent. Lovell, Mittman.

Ed 528. **Group Testing in Schools and Colleges.** 3 hours.

An intensive study of the purposes, uses, administration, scoring, and interpretation of group tests commonly used in public schools and colleges. Testing in the areas of achievement, aptitudes, interests, and personality. Designed primarily for advanced students in educational psychology, human development, psychometrics, and counseling. Prerequisite: Ed 424. Christensen, Loughary.

Ed 529, 530, 531. **Advanced Educational Psychology.** 2 hours each term.

Review of some modern viewpoints in educational psychology, with particular attention to theories of learning and their application to problems of school learning. Must be completed in sequence; students who have had a course in the psychology of learning may be permitted to enter in the winter term. Prerequisites: courses in educational or general psychology; statistics. Lovell.

Ed 549. **Principles and Practices in School Psychology.** 2 hours.

Primarily for students majoring in school psychology. Applications of psychological knowledge to the educational process; roles of the school psychologist; relationships to other professional personnel in school and community. Lovell.

Ed 564. **Mental Tests.** 4 hours.

Selection, administration, and interpretation of individual tests utilized in testing exceptional and extremely deviate children. Prerequisite: Ed 424, Psy 524 or Psy 525.

*No-grade course.

Counseling

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Ed 409. **Practicum.** Hours to be arranged.
 Secondary-School Counseling. Loughary, Acker, Christensen, Lowe.
 Elementary-School Counseling. Lowe, Christensen, Loughary.
 Family Counseling. Lowe, Christensen.
 Group Counseling. Lowe, Loughary.
 Rehabilitation Counseling. Acker, Booth, Thomas.
- Ed 485. **Principles and Practices of Guidance Services.** (G) 3 hours.
 The need for guidance services in the schools; tests, inventories, questionnaires, and records; the role of the home and the community in guidance; counseling the individual student. Loughary.
- Ed 488. **Educational and Vocational Guidance.** (G) 3 hours.
 Designed primarily for advanced students preparing for positions as counselors. A study of current materials and trends in educational and vocational opportunities. Prerequisite: Ed 424, Ed 485. Loughary, Acker.
- Ed 492. **Functional Aspects of Physical Disability.** (G) 3 hours.
 Designed to familiarize the student with the impact of physical disability and chronic illness on vocational capacity; review of basic anatomy and physiology of several major medical conditions which frequently result in impairment of physical function. Acker, Thomas.

GRADUATE COURSES

- Ed 501. **Research.** Hours to be arranged.
 Problems in Rehabilitation Counseling.
 Problems in School Counseling.
 Pupil Personnel Services.
- Ed 507. **Seminar.** Hours to be arranged.
 Elementary School Guidance. Loughary, Lowe.
- Ed 509. **Practicum.** Hours to be arranged.
 Secondary-School Counseling. Loughary, Acker, Christensen, Lowe.
 Elementary-School Counseling. Lowe, Christensen, Loughary.
 Family Counseling. Lowe, Christensen.
 Group Counseling. Lowe, Loughary.
 Rehabilitation Counseling. Acker.
 Field Instruction. Acker, Booth, Thomas.
- Ed 526. **Counseling Theories.** 3 hours.
 Designed primarily for students preparing for positions in counseling in both school and nonschool settings; major emphasis placed upon counseling points of view; consideration given to purposes, techniques, and processes of counseling. Prerequisites: Ed 424, Ed 485, and Psy 527. Loughary.
- Ed 570. **Advanced Functional Aspects of Physical Disability.** 3 hours.
 Review of the historical and contemporary structures of medical practice, and of the influence of these structures on patient-physician and physician-counselor relationships; principles of consultation, with special reference to medical consultation in counseling; application of the principles of vocational evaluation, with specific emphasis on the most effective incorporation of medical data. Acker.
- Ed 589. **Organization and Administration of Guidance Services.** 3 hours.
 Principles and functions of guidance; organizing the guidance program; guidance personnel; evaluation of the school's guidance services. Loughary.

Higher Education

THE PROGRAM IN HIGHER EDUCATION, offered at the graduate level, includes the following courses, together with seminars, individual study, and research.

GRADUATE COURSES

- *Ed 501. **Research.** Hours to be arranged.
- *Ed 502. **Supervised College Teaching.** Hours to be arranged.
Lovell, Tope.
- Ed 507. **Seminar.** Hours to be arranged.
- Ed 509. **Practicum.** Hours to be arranged.
- Ed 590. **Higher-Education Survey.** 3 hours.
Problems of higher education. Organization, administration, finance; philosophy, purposes, curricula; student and faculty personnel; extension and special services. Wood.
- Ed 591. **Teacher-Education Survey.** 3 hours.
Purposes, needs, and objectives of teacher education; present facilities and types of organization; student-selection procedures; staff; curriculum. Relationships of preservice undergraduate, preservice graduate, in-service campus, and in-service field training. Kambly.
- Ed 592. **Administration of Colleges and Universities.** 3 hours.
The administration of liberal arts colleges and of complex institutions, such as universities; business affairs; administration of schools and departments. Wood.

Educational Administration

THE SCHOOL OF EDUCATION offers a full graduate program in educational administration, including: (1) all work required for each of the five types of administrative certificates issued by the Oregon State Department of Education; (2) graduate programs leading to master's and doctor's degrees; and (3) a special two-year graduate program which satisfies the membership requirements of the American Association of School Administrators, including work in related disciplines, especially the social sciences, and a systematic field experience or internship.

By act of the Oregon Legislature, all persons employed in the Oregon public schools in administrative or supervisory capacities must hold an appropriate administrative certificate. The requirements for the several administrative certificates are as follows:

Superintendent's Certificate. (1) A regular Oregon teacher's certificate, either elementary or secondary. (2) Five years of school experience at the elementary and secondary levels, with at least two years in an administrative capacity and at least two years in a teaching capacity. (3) A master's degree from a standard college or university. (4) Twelve term hours of credit, beyond the master's degree, in professional or nonprofessional studies at the upper-division or graduate level. (5) The following graduate courses:

	Term Hours
Public School Administration (Ed 572).....	3
School Finance (Ed 575).....	3
School Buildings (Ed 576)	3
School Supervision (Ed 574); <i>or</i> Elementary-School Supervision & Administration (Ed 554); <i>or</i> Secondary-School Administration & Supervision (Ed 527)	3
Curriculum Construction (Ed 566); <i>or</i> Curriculum Foundations (Ed 565); <i>or</i> Secondary-School Curriculum (Ed 522); <i>or</i> Elementary-School Curriculum (Ed 553)	3
School Law & Organization (Ed 476); <i>or</i> Seminar: Advanced School Law (Ed 507)	2

*No-grade course.

If an applicant holds only a secondary teacher's certificate, he is required to complete 12 term hours of work in elementary-school methods or curriculum. If he holds only an elementary teacher's certificate, he must complete 12 term hours of work in secondary methods or curriculum.

Secondary Principal's Certificate. (1) A regular Oregon secondary teacher's certificate. (2) Three years of teaching or administrative experience at the secondary level. (3) A master's degree from a standard college or university. (4) Twelve term hours of professional or nonprofessional study at the upper-division or graduate level after earning the master's degree. (5) The following graduate courses:

	Term Hours
Secondary-School Administration & Supervision (Ed 527).....	3
School Supervision (Ed 574); <i>or</i> Elementary-School Supervision & Administration (Ed 554)	3
School Finance (Ed 575).....	3
Curriculum Construction (Ed 566); <i>or</i> Curriculum Foundations (Ed 565); <i>or</i> Secondary-School Curriculum (Ed 522); <i>or</i> Elementary-School Curriculum (Ed 553)	3
School Law & Organization (Ed 476); <i>or</i> Seminar: Advanced School Law (Ed 507)	2

Elementary Principal's Certificate. (1) A regular Oregon elementary teacher's certificate. (2) Three years of teaching or administrative experience at the elementary level. (3) A master's degree from a standard college or university. (4) The following graduate courses:

	Term Hours
Elementary-School Supervision & Administration (Ed 554)	3
School Supervision (Ed 574); <i>or</i> Secondary-School Supervision & Administration (Ed 527)	3
School Finance (Ed 575)	3
Curriculum Construction (Ed 566); <i>or</i> Curriculum Foundations (Ed 565); <i>or</i> Secondary-School Curriculum (Ed 522); <i>or</i> Elementary-School Curriculum (Ed 553)	3
School Law & Organization (Ed 476); <i>or</i> Seminar: Advanced School Law (Ed 507)	2

Supervisor's Certificate. (1) A regular Oregon teacher's certificate, either elementary or secondary. (2) Three years of teaching experience. (3) A college major or 45 term hours of work in the area supervised. (4) A master's degree from a standard college or university. (5) The following graduate courses:

	Term Hours
School Supervision (Ed 574); <i>or</i> Secondary-School Administration & Supervision (Ed 527); <i>or</i> Elementary-School Supervision & Administration (Ed 554)	3
Curriculum Construction (Ed 566); <i>or</i> Curriculum Foundations (Ed 565); <i>or</i> Secondary-School Curriculum (Ed 522); <i>or</i> Elementary-School Curriculum (Ed 553)	3
School Law & Organization (Ed 476); <i>or</i> Seminar: Advanced School Law (Ed 507)	2

Special-Education Supervisor's and Director's Certificate. (1) A master's degree from a standard college or university. (2) A regular Oregon teacher's certificate, either elementary or secondary. (3) An Oregon certificate for teaching of exceptional children or a school psychologist's certificate. (4) Three years of professional experience, including one year in special education or public school psychology. (5) The following graduate courses:

	Term Hours
Administration of Special Education (Ed 471).....	3
School Supervision (Ed 574); <i>or</i> Elementary-School Supervision & Administration (Ed 554); <i>or</i> Secondary-School Administration & Supervision (Ed 527)	3
School Law & Organization (Ed 476); <i>or</i> Seminar: Advanced School Law (Ed 507)	2

GRADUATE COURSES

Ed 507. **Seminar.** Hours to be arranged.

Administrative Problems. Jacobson, Goldhammer, Tope, Carlson.

Advanced School Law. Farner.

Change in Organizations. Carlson.

Education and the Humanities. Castell, Goldhammer.

Nature and Problems of Administrative Behavior. Jacobson, staff.

Problems of Staff Personnel. Tope.

Problems of Government Finance.

Research Design. Farner.

Scope and Method of the Social Sciences. Tope, staff.

School Business Administration. Hines.

Ed 572. **Public School Administration.** 3 hours.

Interpersonal relationships in administration; school-board powers, duties, roles, relationships; the superintendency—roles, responsibilities, issues, problems; problems of staff personnel; student personnel problems at the local district level; problems and issues relating to the development of effective school-community relationships. Tope.

Ed 573. **Public School Organization.** 3 hours.

The schools in relation to state and Federal agencies; the intermediate unit, its purposes, organization, trends; local school districts—problems of organization, plant planning and management, school business administration, transportation, school finance, textbooks and supplies; extralegal agencies affecting education. Carlson.

Ed 574. **School Supervision.** 3 hours.

The role of the supervisor in keeping education geared to the changing demands of society; theories of leadership; group processes and individual conference techniques; action research and related approaches to curriculum change; analysis of concrete supervisory problems. Prerequisite: Teaching or administrative experience or consent of instructor. Hines.

Ed 575. **School Finance.** 3 hours.

The problems of school finance and business management; sources of school income; relationship to the state financial structure; expenditure analysis; budgeting and accounting. Includes the construction of a school budget. Prerequisite: work in administration and organization; or consent of instructor. Farner.

Ed 576. **School Buildings.** 3 hours.

Study of the problems involved in planning, financing, and construction of school buildings; care and maintenance of buildings; problems of equipment. Includes analysis of the problems of a specific district. Prerequisite: work in administration and organization; or consent of instructor. Hines.

See also under *Elementary Education*, Ed 554; under *Secondary Education*, Ed 527; under *School Psychological Services*, Ed 471, Ed 485, Ed 589; under *Higher Education*, Ed 592; under *Librarianship*, Lib 484.

Librarianship

Professors: C. W. HINTZ, P. D. MORRISON.

Associate Professors: ELIZABETH FINDLY, A. W. ROECKER.

Assistant Professors: MARGARET LANE, R. R. MCCOLLOUGH, IONE F. PIERRON.

THE DEPARTMENT OF LIBRARIANSHIP offers a series of courses designed for: (1) University students in general, to acquaint them with the resources of the University Library, and to provide instruction in the efficient use of these resources; (2) students preparing for positions as librarians and teacher-librarians

in the public schools; (3) teachers and prospective teachers who wish to become better acquainted with books and other library materials suitable for use with children and young people; (4) school administrators who wish to explore from an administrative viewpoint the place of the library in the instructional program of the school; (5) students preparing for intermediate professional positions in public libraries; (6) graduate students, who may complete a program leading to the M.A. or M.S. degree with a major in librarianship.

Subject Preparation for School Librarians. For certification as a librarian in Oregon schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—18 term hours in library science, including work in cataloging and classification, reference, book selection, and library administration; for a standard certificate, granted after five years of college work, a *standard norm*—30 term hours in library science, including the basic-norm requirement. (Work in audio-visual aids may be counted toward the satisfaction of the basic- or standard-norm requirements.)

These requirements will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 263.

The following courses are recommended for the satisfaction of the basic-norm requirement: Bibliography and Reference (Lib 481); School Library Administration (Lib 484); Introduction to Cataloging and Classification (Lib 486); Audio-Visual Aids (Ed 435); two of the following three courses: Books and Related Materials for Young People (Lib 488), Children's Literature (Lib 490), Storytelling (Lib 491).

It is also recommended that work taken for the satisfaction of the student teaching requirement for the basic certificate include at least 5 term hours in supervised practice in a school library.

The following courses are recommended for satisfaction of part of the standard-norm requirement: Cataloging and Classification (Lib 487); Library in the Modern Community (Lib 496).

LOWER-DIVISION COURSE

Lib 127. **Use of Library.** 1 hour any term.

Training in the use of the card catalog, periodical indexes, and reference books; experience in the preparation of bibliographies. As far as possible, problems are coordinated with the individual student's study program.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Lib 481. **Bibliography and Reference.** (G) 3 hours.

Introduction to reference services; evaluation and use of reference materials; correct bibliographical forms; practical problems in the use of reference books in school and other small libraries. Pierron.

Lib 483. **Principles of Book Selection.** (G) 3 hours.

Analysis of criteria for book selection in the light of library objectives; reading habits and interests of adults; use of selection aids and reviewing media; censorship. Practice in oral book reviewing and written annotations. Pierron.

Lib 484. **School Library Administration.** (G) 3 hours.

Introduction to school librarianship and to the objectives of the school library in the instructional program; problems relating to budget and finance, housing and equipment, personnel, etc. Emphasis on national and state standards for the instructional materials center. Lane.

Lib 485. **Advanced Bibliography and Reference.** (G) 3 hours.

Reference books in the various subject fields; theory and history of bibliography; interlibrary loan. Prerequisite: Lib 481 or consent of instructor.

- Lib 486. **Introduction to Cataloging and Classification.** (G) 3 hours.
Instruction and practice in simplified procedures for the classification and cataloging of books, films, filmstrips, phonorecords, and maps. Procedure for ordering and using Library of Congress and Wilson cards. Pierron.
- Lib 487. **Cataloging and Classification.** (G) 3 hours.
More-difficult problems in the cataloging and classification of books and other library materials; brief survey of theories and experiments in cataloging and classification and their implications for the future. Prerequisite: Lib 486 or consent of the instructor. Pierron.
- Lib 488. **Books and Related Materials for Young People.** (G) 3 hours.
Survey of books and nonbook materials suitable for students of junior and senior high-school age; emphasis on selection and evaluation of books, adolescent reading interests, and reading guidance for curricular and personal needs. Lane.
- Lib 490. **Children's Literature.** (G) 3 hours.
Survey of children's literature, with emphasis on selection and evaluation of books suitable for public and school libraries; reading guidance in relation to both personal and curricular needs. Lane.
- Lib 491. **Storytelling.** (G) 3 hours.
Fundamental principles of the art of storytelling, including the planning of a story hour, location of suitable materials for use, and the techniques of learning and presenting the story; study and selection of literature appropriate for oral presentation to children of all ages. Lane.
- Lib 493. **Literature of the Humanities.** (G) 3 hours.
The role of the humanities in modern life; survey and evaluation of library resources in the humanistic disciplines. McCullough.
- Lib 494. **Literature of the Sciences.** (G) 3 hours.
Survey and evaluation of library materials in the fields of science and technology; problems of scientific documentation; literature searching methods; compilation, classification, and reporting of information. Roecker.
- Lib 495. **Literature of the Social Sciences.** (G) 3 hours.
Survey of key men and ideas in the social sciences, with emphasis on past development and present tendencies; source materials for research; selection of books, maps, periodicals, etc. for school and college libraries and for personal reading; introduction to the bibliography of each of the social sciences. Designed for all interested students as well as library majors. Morrison.
- Lib 496. **The Library in the Modern Community.** (G) 3 hours.
The development of American libraries; their present-day functions as educational and cultural institutions; legal structure; interlibrary cooperation; relations with the mass media; librarianship as a profession. Pierron.

GRADUATE COURSES

- *Lib 503. **Thesis.** Hours to be arranged.
- Lib 505. **Reading and Conference.** Hours to be arranged.
- Lib 507. **Seminar.** Hours to be arranged.
- Lib 511. **History of the Book.** 3 hours.
Development of the book in its various forms from earliest times to the present; origin and evolution of the alphabet and scripts; history of manuscript books; invention and spread of printing; production and distribution of printed books. Emphasis on the relation of books to social conditions in the various periods studied. Hintz.

*No-grade course.

Lib 512. **Government Publications.** 3 hours.

The acquisition, organization, and use of government publications of the United States, selected foreign countries, and international organizations, with special attention to United States government documents. Findly.

Lib 514. **Library Administration.** 3 hours.

Principles of administration as applied to the government, organization, staffing, financing, housing, interpretation, and evaluation of libraries. Student projects relate the principles to specific types of libraries.

COURSE OFFERED ONLY IN SUMMER SESSIONS

Lib 508. **Workshop.** Hours to be arranged.

School of Health, Physical Education, and Recreation

ARTHUR A. ESSLINGER, Ph.D., Dean of the School of Health, Physical Education, and Recreation.

Professors: FLORENCE D. ALDEN (emeritus), W. J. BOWERMAN, L. J. CASANOVA, H. H. CLARKE, M. FRANCES DOUGHERTY, A. A. ESSLINGER, F. B. HAAR, L. A. HARRIS, D. H. KIRSCH, E. R. KNOLLIN (emeritus), F. N. MILLER (emeritus), MARIAN H. MILLER, JENNELLE MOORHEAD, MARGARET S. POLEY,* W. P. RHODA, L. S. RODNEY, VIRGINIA L. SHAW, P. O. SIGERSETH,† V. S. SPRAGUE, HARRIET W. THOMSON (emeritus), P. R. WASHKE, JANET G. WOODRUFF.

Associate Professors: STEPHEN BÉLKO, R. M. BLEMKER, W. B. BRUMBACH, E. D. FURRER, JESSIE PUCKETT, W. E. SMITH, MIRIAM L. TUCK.

Assistant Professors: J. W. BORCHARDT, M. B. COLEY, M. DODDS-BELANGER, PHYLLIS FORD, G. L. FREI, D. K. GILLESPIE, JOAN HARRISTHAL, L. D. JACOBSON, ROBERT KIME, THERESA M. MALUMPHY, PATRICIA MONTGOMERY,‡ CORLEE MUNSON, E. R. REUTER, J. J. ROCHE, D. P. VAN ROSSEN, JEAN M. WEAKLAND,‡ LOIS J. YOUNGEN.

Instructors: R. B. BALLOU, CHARLES BOWLES, JAN BROEKHOFF, HELEN R. CONNOR, JAMES H. MCCALLUM, P. I. MCHUGH, FRANK MUMAW, RICHARD MUNROE, R. O. OFFICER, SUE PRINCE, J. A. ROBINSON, JACK SCHENDEL, RICHARD SMITH.

Lecturers: R. M. ARTZ, PAUL BEISTEL, J. W. BROOKE, RUTH HULL, W. R. MATSLER, F. O. RANKIN, D. B. SLOCUM.

Assistants: JOHN BLOOMFIELD, PATRICIA DOWNIE, JOHN DROWATZKY, KENNETH FLYNN, CHARLES GRAY, JUDY HALL, YOSHIRO HATANO, D. B. JORDAN, RICHARD LAPTAD, JOHN MALLEA, JOAN MEYER, REID MITCHELL, CURTIS NELSON, GARY PENNINGTON, JOAN WAHL, ELLES WEST, JACK WILMORE, GARY WIREN, CHERYLEE WORDEN.

THE SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION is responsible for three programs: (1) service courses in health education and physical education for men and women; (2) intramural sports for men and women; (3) professional study, both undergraduate and graduate, in health education, physical education, dance, and recreation management.

Service Courses. Courses providing instruction in recreational skills and in the principles of physical conditioning and health are offered for all students.

The University graduation requirements for all students include five terms of physical education and a course in health education, unless the student is excused by the dean of the school.§ Students may be exempted from one or more terms of the physical-education requirement and from the health-education requirement on the basis of proficiency examinations.

Courses which satisfy the physical-education requirement are: PE 180 for women, PE 190 for men; not more than 1 hour of credit may be earned in these

* Deceased Dec. 24, 1963.

† On sabbatical leave, fall and winter terms, 1963-64.

‡ On leave of absence 1963-64.

§ Students who have completed six months of active military service in the Armed Forces of the United States are exempt from three terms of the physical-education requirement.

courses in any one term. The student's program in physical education is adjusted to his needs and abilities; whenever possible, the work is adapted to remedy physical disabilities. Majors and other students preparing for the teaching of physical education in the schools satisfy the requirement with a series of professional activity courses.

Men students satisfy the health-education requirement with HE 150 or HE 250. Women students satisfy the requirement with HE 250. Students are urged to satisfy this requirement during their freshman year.

Elective service courses (regularly scheduled classes) in physical activities are offered for juniors and seniors. A total of not more than 12 term hours may be earned toward graduation in lower-division and upper-division service courses in physical education. Not more than 1 hour of credit may be earned in any one term.

Intramural Sports. The School of Health, Physical Education, and Recreation sponsors a comprehensive program of intramural sports. A primary purpose of the program is to encourage sportsmanship and friendly relations among the students of the University through athletic competition. Individual and group competitive sports for men are organized under the guidance of the department for men. The department for women provides a wide variety of sports for women students. Student leadership for women's athletics is furnished by the Women's Recreational Association.

Undergraduate Study. Undergraduate major programs are offered in the fields of health education, physical education, dance, and recreation management. Graduates of the school hold positions as: high-school teachers of physical education and health education; athletic coaches; directors of high-school athletics; supervisors of health and physical education; community recreation and playground directors; leaders in Y.M.C.A., Y.W.C.A., and other youth-organization work; directors of restricted and corrective physical education; workers in the field of physical therapy; college and university teachers and research workers in child growth, health education, physical education, and dance.

Graduate Study. The School of Health, Physical Education, and Recreation offers graduate work leading to the Master of Arts, Master of Science, Doctor of Education, and Doctor of Philosophy degrees.

Candidates for the master's degree may major in one of the following seven areas or in a combination of related areas: (1) administration of programs, buildings and grounds; (2) school health education; (3) corrective activities and physical therapy; (4) recreation management; (5) anatomy, kinesiology, and physiological training and conditioning factors; (6) morphological, physiological, and motor aspects of child growth; (7) measurement and evaluation in physical education.

Ph.D. and D.Ed. candidates are expected to concentrate in one of the following fields of specialization: (1) administration; (2) health education; (3) child growth and development; (4) corrective physical education; (5) scientific bases of physical education; (6) recreation management. The Ph.D. dissertation must be an original contribution to knowledge.

Advance study in dance may be arranged under the interdisciplinary master's program (see pages 109-110).

Fees. Payment of regular University registration fees entitles every student to the use of gymnasiums, pools, and showers, to the use of gymnasium and swimming suits and towels, and to laundry service, whether or not they are registered for physical-education courses. Students are urged to make full use of the gymnasium facilities for exercise and recreation.

Facilities. The University's buildings and playfields devoted to physical-education instruction and recreation occupy a 42-acre tract at the southeast corner

of the campus. The Physical Education Building provides offices, classrooms, study halls, and research laboratories for the school and gymnasium facilities for men. The building is planned especially for the professional preparation in physical education, as well as for the recreational needs of students. The men's swimming pool is adjacent to the Physical Education Building.

The women's gymnasium and the women's swimming pool are in Gerlinger Hall, west of the Physical Education Building across University Street. There are playing fields for women south and west of Gerlinger.

Adjoining the Physical Education Building to the south is McArthur Court, basketball pavilion and athletic center of the Associated Students. McArthur Court seats over 10,000 spectators.

Playing fields located east and south of the Physical Education Building provide excellent facilities for outdoor class instruction and for intramural and inter-collegiate sports. Hayward Stadium, the Associated Students' athletic field, has seats for 23,000 spectators. North of Hayward Stadium are six standard concrete tennis courts. Eight additional courts are located south of the Education Building.

Institute of Recreation Research and Service. The Institute of Recreation Research and Service, maintained by the School of Health, Physical Education, and Recreation in conjunction with its instructional program in recreation management, assists communities in the development of recreation, park, and youth-service resources, conducts research in various aspects of recreation development, and provides information on research findings and nation-wide community experience as a basis for the solution of recreation problems. The Institute sponsors conferences and workshops, and welcomes requests for information and assistance from public and private recreation agencies.

High-School Teaching Norms

For certification as a teacher of health and physical education in Oregon high schools, the student's program must include subject preparation required by the Oregon State Department of Education. The requirements, which will be mandatory after July 1, 1965, are listed below. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, pages 262, 264-265.

Physical Education. For a basic certificate, granted after four years of college work, the following *basic norm*—35 term hours in physical education, including 21 term hours in the following areas: human anatomy, human physiology, principles of physical education, physical-education curriculum, and organization and administration of physical education; and including 14 term hours in laboratory courses in the following areas: games, relays, stunts and self-testing activities, rhythms, gymnastics, fundamentals of body movement and mechanics, sports (individual, dual, and team), and aquatics. The following program is recommended for the satisfaction of this requirement:

	Term Hours
Principles & Practices of Physical Education (PE 341)	3
Class Techniques in Physical Education (PE 342)	3
Organization & Admin. of Physical Educ. (PE 343)	3
The School Program (PE 445)	3
Human Anatomy (Bi 391, 392)	6
Human Physiology (Bi 312, 313)	6

PROFESSIONAL ACTIVITIES (MEN)

Fundamentals of Body Movement & Games, Track and Field (PE 195)	4
Elementary Apparatus (PE 295)	2
Folk, Social & Square Dance (PE 395)	2
Team Sports, Badminton, Tennis (PE 395)	4
Wrestling & Weight Training (PE 495)	2

PROFESSIONAL ACTIVITIES (WOMEN)

	Term Hours
Tumbling, Apparatus, Track & Field, Individual & Dual Sports, Swimming (PE 294)	4
Basic Physical Education, Field Sports, Track, Square & Ballroom Dancing, Softball, Swimming (PE 394)	6
Contemporary Dance, Basketball, Volleyball (PE 494)	4

For a standard certificate, granted after five years of college work, the following *standard norm*—47 term hours in physical education, including the basic-norm requirement and an additional 12 term hours in the following areas: kinesiology, physiology of exercise, evaluation in physical education, and remedial physical education. The following courses are recommended for the satisfaction of the additional 12-hour requirement:

	Term Hours
Corrective Physical Education (PE 444)	3
Tests & Measurements in Physical Education (PE 446)	3
Kinesiology (PE 472)	3
Physiology of Exercise (PE 473)	3

Health Education. For a basic certificate, granted after four years of college work, the following *basic norm*—42 term hours in health education, including work in school health service, human anatomy, human physiology, nutrition, safety and first aid, personal health, community health, family living, communicable and noncommunicable diseases. The following courses are recommended for the satisfaction of this requirement:

	Term Hours
General Biology (Bi 101, 102, 103)	12
School Health Services (HE 465)	3
Human Anatomy (Bi 391, 392)	6
Human Physiology (Bi 312, 313)	6
Nutrition (HEc 225)	2
Safety Education (HE 358)	3
First Aid (HE 252)	3
Personal Health Problems (HE 361)	3
Community Health Problems (HE 362)	3
Communicable & Noncommunicable Diseases (HE 363)	3
Health Instruction (HE 464)	3

For a standard certificate, granted after five years of college work, the following *standard norm*—51 term hours in health education, including the basic-norm requirement and an additional 9 term hours in mental health and organization and administration of health education. The following courses are recommended for the satisfaction of the additional 9-hour requirement:

	Term Hours
Advanced Health Instruction (HE 543)	3
Special Problems: Mental Health (HE 506)	3
Administration of School Health Education (HE 552)	3

Health and Physical Education. The State Department of Education has also set special norm requirements for positions involving the teaching of both health and physical education. The requirements for the *basic norm* are—45 term hours in health and physical education, including: 24 term hours in human anatomy, human physiology, health services, principles of physical education, and organization and administration of health and physical education; 9 term hours in nutrition, safety and first aid, personal health, community health and sanitation, family living, and communicable and noncommunicable diseases; and 12 term hours in physical-education laboratory courses in the following areas: fundamentals of body movement and mechanics, rhythms, gymnastics, sports (individual, dual, and team), aquatics, and games, relays, stunts, and self-testing activities.

The requirements for the *standard norm* are—54 term hours, including the basic-norm requirement and an additional 9 term hours in kinesiology, physiology of exercise, remedial physical education, evaluation in health and physical education, and mental health.

A program for the satisfaction of these requirements may be arranged with advisers in the School of Health, Physical Education, and Recreation.

Physical Education

THE BASIC UNDERGRADUATE CURRICULUM in physical education, leading to the Bachelor of Science or Bachelor of Physical Education degree, provides a strong program of professional work. During his freshman and sophomore years, the student obtains a sound foundation in the liberal arts and in the sciences basic to professional studies, supplemented by introductory instruction in physical-education theory and activities. The upper-division program is devoted principally to professional studies.

The basic program is planned to satisfy the usual needs of the student planning to teach physical education in the public schools; it includes sufficient work in health education to enable him to qualify for positions which require the teaching of both physical education and health education. Modifications of this program may be arranged for students with special interests in such fields as the dance, social studies, and physical therapy.

Superior students who are interested in preparing for careers in the scientific and research aspects of physical education may arrange a program in which greater concentration in biology, physiology, chemistry, and mathematics is substituted for certain courses directly related to preparation for secondary-school teaching.

Lower Division	Term Hours
General Biology (Bi 101, 102, 103).....	12
Elementary Chemistry (Ch 101, 102, 103).....	12
Nutrition (HEc 225).....	2
General Psychology (Psy 201, 202).....	6
Psych. of Adjustment (Psy 204) or Applied Psych. (Psy 205).....	3
Introduction to Health & Physical Education (PE 131).....	2
First Aid (HE 252).....	3
Professional activities.....	12
Upper Division	
Human Anatomy (Bi 391, 392).....	6
Human Physiology (Bi 312, 313).....	6
Princ. & Practices of Physical Education (PE 341).....	3
Class Techniques in Physical Education (PE 342).....	3
Organ. & Admin. of Physical Education (PE 343).....	3
Tests & Measurements in Physical Educ. (PE 446).....	3
School Program (PE 445).....	3
Corrective Physical Education (PE 444).....	3
Kinesiology (PE 472), Physiology of Exercise (PE 473).....	6
Personal Health Problems (HE 361), Community Health Problems (HE 362), Communicable & Noncommunicable Diseases (HE 363).....	9
Health Instruction (HE 464), School Health Service (HE 465).....	6
Professional activities.....	12

Social Science Option. Majors in physical education who wish to place an emphasis on the social sciences in their studies in the liberal arts may, with the approval of the dean of the School of Health, Physical Education, and Recreation, substitute selected social science courses for a portion of the science requirement in the basic undergraduate curriculum.

Dance Option. The dance option combines professional work in physical education with special instruction in dance and related arts. There are excellent vocational opportunities in the fields of physical education and recreation for persons whose professional training includes this instruction. In addition to the dance option, the School of Health, Physical Education, and Recreation offers a major curriculum in the dance as a contemporary art form (see pages 311-313).

Pre-Physical Therapy Option. Standard schools of physical therapy, which are usually operated in conjunction with medical schools, have admission requirements with strong emphasis on foundation work in the basic sciences. The sciences included in the basic curriculum in physical education, together with the understanding of body movement and exercise activities gained in professional physical-education courses, provide excellent preparation for physical-therapy training. Students interested in this work may arrange a special program, within the general framework of the physical-education major, but excluding courses especially designed to meet the requirement for a teacher's certificate.

Minor for Elementary Teachers. Majors in elementary education may, in consultation with advisers in the School of Health, Physical Education, and Recreation, arrange a minor in physical education, including selected theory and activities courses in addition to work required for elementary teacher certification.

Service Courses for Men

LOWER-DIVISION COURSES

PE 190. **Physical Education (Men).** 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division men students. 3 hours a week.

UPPER-DIVISION COURSES

PE 390. **Physical Education for Junior and Senior Men.** 1 hour each term, six terms.

3 hours a week.

Service Courses for Women

LOWER-DIVISION COURSES

PE 180. **Physical Education (Women).** 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division women students. 3 hours a week.

UPPER-DIVISION COURSES

PE 380. **Physical Education for Junior and Senior Women.** 1 hour each term, six terms.

3 hours a week.

Professional Courses

LOWER-DIVISION COURSES

PE 131. **Introduction to Health and Physical Education.** 2 hours fall or spring.

Professional orientation; basic philosophy and objectives; professional opportunities and qualifications. Puckett, Schendel.

PE 194. **Professional Activities (Women).** 1-2 hours each term, three terms.

For professional students. Instruction and practice. Fall: field sports, basic physical education. Winter: tumbling, basketball. Spring: elementary contemporary dance, tennis.

PE 195. **Professional Activities (Men).** 2 hours each term, three terms.

For professional students. Methods, teaching techniques, and basic skills. Fall: fundamentals of body movement, games. Winter: elementary aquatics. Spring: track and field.

- PE 221. **Games for the Elementary School.** 1 hour.
Creative games, games of low organization, and fundamental sport skills suitable for elementary children. Munson.
- PE 223. **Fundamental Body Movement, Posture, and Tumbling.** 1 hour.
The mechanics of movement, posture, conditioning exercises, stunts, tumbling, self-testing, apparatus, and evaluation for the elementary-school child. Munson.
- PE 291. **Life Saving in Aquatic Programs.** 2 hours.
Basic skills of life saving in aquatic programs; leads to American Red Cross certification in senior life saving. Open to men and women students who pass qualifying tests in swimming.
- PE 292. **Swimming and Water Safety Instruction.** 2 hours.
Analysis, methods of instruction, and evaluation at all age levels; leads to American Red Cross certification in water safety instruction. Open to men and women students who pass qualifying tests in swimming and life saving.
- PE 294. **Professional Activities (Women).** 1-2 hours each term, three terms.
For professional students. Instruction and practice. Fall: swimming, badminton. Winter: tumbling, trampoline, and apparatus. Spring: track and field, golf.
- PE 295. **Professional Activities (Men).** 2 hours each term, three terms.
For professional students. Methods, teaching techniques, and basic skills. Fall: baseball, basketball. Winter: elementary apparatus. Spring: football and touch football.

UPPER-DIVISION COURSES

- PE 341. **Principles and Practices of Physical Education.** 3 hours fall.
An interpretative study and analysis of the principles and practices of physical education, through their historical development and in their present application and significance. Sprague.
- PE 342. **Class Techniques in Physical Education.** 3 hours winter.
Organizing and conducting physical-education classes in secondary schools. Sprague, Puckett.
- PE 343. **Organization and Administration of Physical Education.** 3 hours spring.
Planning and organizing the use of buildings, grounds, and recreational areas for the physical-education program; purchase and care of equipment; budgeting equipment and operating costs. Sprague.
- PE 344. **Administration of Aquatic Programs.** 3 hours spring.
Organization and administration of aquatic programs. Open to men and women majors, and to others with consent of instructor.
- PE 361. **Care and Prevention of Injuries.** 3 hours winter.
Bandaging, massage, and other specialized mechanical aids for the prevention of injuries. Analysis of types of injuries; emergency procedures. Prerequisite: Bi 391, 392. Rhoda, Sigerseth.
- PE 394. **Professional Activities (Women).** 1-2 hours each term, three terms.
For professional students. Advanced practice and teaching techniques. Fall: fundamental activities, field sports, or dance composition. Winter: folk, square, and ballroom dance. Spring: softball, swimming.
- PE 395. **Professional Activities (Men).** 2 hours each term, three terms.
For professional students. Methods, teaching techniques and basic skills. Fall: tennis and soccer. Winter: dance. Spring: badminton and volleyball.
- PE 403. **Thesis.** Hours to be arranged.
Thesis based on student's own investigation. Subject chosen after consultation with adviser. Credit determined by quality of work done.

- PE 405. **Reading and Conference.** Hours to be arranged.
Reading and assignments in connection with other courses for extra credit. Honors readings. Prerequisite: consent of instructor.
- PE 406. **Special Problems.** Hours to be arranged.
- PE 420. **Methods in Elementary-School Physical Education.** 3 hours.
Program development; methods of instruction in elementary-school physical education. The purposes and requirements of the elementary physical-education program, with emphasis on program planning, methods, and materials of instruction. Munson.
- PE 444. **Corrective Physical Education.** 3 hours spring.
Survey of common deviations of posture and feet, functional disturbances, and crippling conditions found in school children. Consideration of the extent and limitations of the teacher's responsibility for their amelioration or improvement. Prerequisite: Bi 391, 392; PE 472.
- PE 445. **The School Program.** 3 hours winter.
Construction of physical-education and intramural programs, on the basis of accepted principles, criteria, functions, and evaluations; emphasis on integration with the total school program. Prerequisite: PE 341, PE 342. Sprague.
- PE 465. **Football Coaching.** 3 hours winter.
Systems of play, strategy, responsibilities of the coach, public relations, conference organization. Casanova.
- PE 466. **Basketball Coaching.** 2 hours winter.
Coaching methods and problems. Fundamentals of team play; comparison of systems; strategy; training, conditioning; selection of men for positions. Belko.
- PE 467. **Baseball Coaching.** 2 hours spring.
Review of fundamentals, with emphasis on methods of instruction; problems and duties of the baseball coach, including baseball strategy, baseball psychology, training, conditioning. Kirsch.
- PE 468. **Track Coaching.** 2 hours spring.
Principles of training; development of performance for each track event; selection of men for different events; conducting meets. Laboratory experience in PE 195. Bowerman.
- PE 472. **Kinesiology.** 3 hours spring
Action of muscles involved in fundamental movements, calisthenics, gymnastics, and athletics. Prerequisite: Bi 391, 392. Sigerseth.
- PE 473. **Physiology of Exercise.** 3 hours spring.
Physiological effects of muscular exercise, physical conditioning, and training; significance of these effects for health and for performance in activity programs. Prerequisite: PE 472. Sigerseth.
- PE 494. **Professional Activities (Women).** 1-2 hours each term, three terms.
For professional students. Advanced practice and teaching techniques. Fall: basketball-volleyball officiating, intermediate contemporary dance. Winter: contemporary dance. Spring: archery, bowling, tennis.
- PE 495. **Professional Activities (Men).** 2 hours each term, three terms.
For professional students. Methods, teaching techniques, and basic skills. Fall: wrestling and weight training. Winter: advanced apparatus. Spring: advanced aquatics or golf, handball, archery.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- PE 408. **Workshop.** (g) Hours to be arranged.
- PE 421. **Administration of Elementary-School Physical Education.** (g) 3 hours.
Modern trends in elementary-school physical education; duties of the physical-education specialist; organization and administration at the primary, inter-

mediate, and upper-grade levels; evaluative procedures and techniques; the role of elementary physical education in outdoor education. Prerequisite: PE 221, PE 223, PE 420, or consent of instructor.

PE 446. **Tests and Measurements in Physical Education.** (G) 3 hours.

Use of tests and measurement in physical education; evaluation of objectives, programs, and student achievement through measurement techniques. Reuter.

GRADUATE COURSES

*PE 501. **Research.** Hours to be arranged.

*PE 503. **Thesis.** Hours to be arranged.

PE 505. **Reading and Conference.** Hours to be arranged.

PE 506. **Special Problems.** Hours to be arranged.

Study of selected problems in the field of physical education.

PE 507. **Seminar.** Hours to be arranged.

Anatomical, Physiological, and Kinesiological Bases of Physical Education.
Body Growth and Development through Physical Education.
Administration of Physical Education.
Philosophy of Physical Education.

PE 508. **Workshop.** Hours to be arranged.

PE 509. **Practicum.** Hours to be arranged.

Practical experience in handling corrective cases; to be taken in conjunction with PE 521, PE 522, PE 523.

PE 515. **History and Theories of Physical Education.** 3 hours fall.

The history of physical education from the Greeks to modern times; emphasis on modern development. Washke.

PE 516. **Intramural Organization and Management.** 3 hours.

Nature and purposes of intramural programs; history of their development. Departmental organization. Relationship of the program to physical-education instruction. Administrative problems. Washke.

PE 517. **Methods of Research.** 3 hours.

Study of the methods and techniques of research in health, physical education, and recreation; practice in application to problems of current interest. Clarke.

PE 521. **Basic Procedures in Corrective Physical Education.** 3 hours.

Common postural deviations; causes; basic principles underlying the prescription of exercise for those conditions which may be handled safely by the physical-education teacher; methods of referral when advisable. Prerequisite: Bi 391, 392; PE 472.

PE 522. **Advanced Corrective Procedures.** 3 hours.

Survey of the orthopaedic conditions which fall in the province of the corrective physical-education specialist; recommended therapeutic procedures; the orthopaedic examination; organization of the corrective physical-education program in schools and colleges. Prerequisite: PE 521 or consent of instructor.

PE 523. **Physical Education of the Handicapped.** 3 hours.

The major crippling conditions, such as cerebral palsy and poliomyelitis, and functional disturbances, such as cardiac and respiratory conditions; planning the physical-education program for these conditions.

PE 530. **Developmental Program in Physical Education.** 3 hours.

Programs to meet individual physical-fitness and social needs through physical-education activities; case-study techniques, developmental programs, development of social traits; administrative problems. Prerequisite: PE 444, PE 446. Clarke.

* No-grade course.

- PE 531. **Muscle Testing and Therapeutic Exercise.** 3 hours.
Fundamentals of muscle re-education. Methods of determining specific muscle weaknesses; restoration of normal function following injury.
- PE 532. **Heat Therapy and Massage.** 3 hours.
The theory and technique of the use of heat and cold as first-aid measures and as adjuncts to rehabilitative procedures practiced by physical educators. The commonly used techniques of massage, their physiological and mechanical effect, and their application by physical educators.
- PE 533. **Techniques of Relaxation.** 3 hours.
The common causes of fatigue and neuromuscular hypertension; methods of combating them. Theories underlying techniques of relaxation; application of these techniques in daily living and in activities.
- PE 540, 541. **Statistical Methods in Physical Education.** 3 hours each term.
The use of norms, comparable scores, rating scales, multiple regression, curve fitting, and factor analysis as tools of research and interpretation of physical growth, physical status, and physical performance data. Prerequisite: graduate standing. Clarke.
- PE 542. **Experimental Design in Physical-Education Research.** 4 hours.
Techniques and procedures of laboratory research in physical education; construction of tests; technical laboratory tests and their use; design of experiments; application of advanced quantitative methods. Prerequisite: PE 446, PE 540, 541. Clarke.
- PE 550. **Current Movements in Physical Education.** 3 hours.
The different schools of thought and practice which determine the purposes and procedures in the professional field of physical education. Analysis of the Oregon and other regional public school physical-education programs. Washke.
- PE 551. **Administration of Physical Education.** 3 hours winter.
Organization and administration of the physical-education program at the college level. Esslinger, Rhoda.
- PE 552. **Administration of Athletics.** 3 hours.
Historical development of athletics and their control. Place of athletics in education; purposes, administrative control, management, operational policies, care of equipment and facilities. Sprague.
- PE 553. **Motor Skill Learning.** 3 hours.
Review of the psychology of learning as it pertains to motor skills; research bearing upon the teaching and learning of gross motor skills. Brumbach.
- PE 556. **Administration of Buildings and Facilities.** 3 hours.
Building layout and equipment; the relationship of the various functional units—equipment service, dressing facilities, activity spaces, administrative units, permanent and dismantlable equipment. Rhoda.
- PE 557. **Supervision of Physical Education for City Supervisors.** 3 hours.
The purpose of supervision; supervision of staff, facilities, and areas; departmental organization, regulations, and policies. Sprague.
- PE 558. **Curriculum Construction in Physical Education.** 3 hours.
Basic elements and procedures of curriculum construction in physical education; special application at the city, county, and state levels. For supervisors and administrators of physical-education programs. Sprague.
- PE 559. **Professional Preparation in Physical Education.** 3 hours.
Historical development of professional preparation in the field of physical education; curriculum, evaluation, and recruitment in the development and conduct of teacher-education programs in physical education. Sprague.
- PE 561. **Foundations of Physical Growth.** 3 hours.
Concept of growth, objectives in studying growth, procedures in collection

and analysis of growth data. Physical growth from the beginning of prenatal life to the close of infancy. Prerequisite: Bi 391, 392, PE 472, PE 540.

PE 562. **Changes in Body Size and Form During Childhood and Adolescence.** 3 hours.

Growth in external dimensions and proportions from late infancy to early adulthood. Differences associated with sex, puberty, socio-economic status, race, secular periods, health regimen. Prerequisite: PE 561.

PE 563. **Growth of Body Tissues and Organs.** 3 hours.

Study of materials important to teachers and others concerned with child growth. Ossification of the child's skeleton, calcification and eruption of teeth, morphologic development of heart and voluntary musculature, age changes in subcutaneous adipose tissue. Prerequisite: PE 561.

PE 564. **Morphologic and Physiologic Appraisalment of School Children.** 3 hours.

Critical examination of various proposals for evaluating individual status and progress; emphasis on measurement proposals suitable for use in school health and physical-education programs. Prerequisite: PE 446 or HE 465. Sigerseth.

PE 566. **Research Methodology for Child Growth.** 3 hours.

Anthropometric instruments, landmarks, and methods; reliability of measurements and ratings; application of biometric procedures.

PE 567. **Motor Development in Infancy and Childhood.** 3 hours.

Study of the acquisition of motor skills during the first decade of life. Prerequisite: PE 446 or Psy 460, or consent of instructor.

PE 572, 573. **Gross Anatomy.** 3 hours each term.

Principles and facts in the fields of myology, osteology, arthrology, neurology, and angiology of importance to college teachers of physical education who give instruction in anatomy, kinesiology, and physiology of exercise. Application to body movement and performance. Prerequisite: Bi 391, 392, PE 472, PE 473; or equivalent. Sigerseth.

PE 574. **Physiological Principles of Advanced Conditioning.** 3 hours.

Physiological principles and facts upon which conditioning for competition in athletic activities and physical performances should be based. Direct application to training for competition in major sports and individual activities. Prerequisite: Bi 312, 313; PE 473. Sigerseth.

PE 575. **Mechanical Analysis of Motor Skills.** 3 hours.

Analysis of various physical-education activities to determine their relation to laws of physics concerning motion, force, inertia, levers, etc. Sigerseth.

Dance

A MAJOR CURRICULUM IN THE DANCE as a contemporary art form and a major option combining work in physical education and the dance (see page 305) are offered by the School of Health, Physical Education, and Recreation. The major curriculum provides a broad cultural education and instruction in related arts; the requirements are:

	Lower Division	Term Hours
General Biology (Bi 101, 102, 103) or foreign language.....		12
Personal Health (HE 250)		3
Introduction to Music & Its Literature (Mus 201, 202, 203).....		9
Professional activities		4
Electives in supporting fields.....		6
Intro. to Cultural Anthropology (Anth 207, 208, 209).....		9
General Psychology (Psy 201, 202).....		6
Psychology of Adjustment (Psy 204).....		3
*General Psychology Lab. (Psy 208, 209, 210).....		3
Survey of Visual Arts (AA 201, 202, 203) or foreign language.....		9-12

* Required for satisfaction of science group requirement for candidate for B.A. degree.

	Term Hours
Introduction to Dance (PE 251).....	2
Fundamentals of Rhythm (PE 252).....	2
Rhythms for the Elementary School (PE 222).....	1
Professional activities	6
Electives in supporting fields.....	6
Upper Division	
History of Philosophy (Phl 301, 302, 303).....	9
Peoples of the World (Anth 314, 315, 316).....	9
Elementary Dance Composition (PE 351).....	3
Advanced Dance Composition (PE 352).....	3
Dance Accompaniment (PE 353).....	3
Dance & P.E. Lab. (PE 354, 355, 356).....	6
Aesthetics (Phl 441, 442, 443).....	9
Techniques of Teaching Contemporary Dance (PE 494).....	2
Dance Programs and Production (PE 451).....	3
History of Dance to 1900 (PE 452).....	3
History of Dance since 1900 (PE 453).....	3
Human Anatomy (Bi 391, 392), Kinesiology (PE 472), <i>or year sequence in art, music, or literature</i>	9
Dance & P.E. Lab. (PE 454, 455, 456).....	6
Electives in supporting fields.....	31

LOWER-DIVISION COURSES

PE 222. Rhythms for the Elementary School. 1 hour spring.

The dance program for children in the elementary school, grades one through six. Locomotor and nonlocomotor movement; dramatization and creative dance studies; singing games; traditional dance skills and folk dances for children of the intermediate grades. Offered alternate years. Munson.

PE 251. Introduction to the Dance. 2 hours fall.

An overview of the dance. Introduction to dance history and to the significance of dance as an art form. Dougherty.

PE 252. Fundamentals of Rhythm. 2 hours spring.

Rhythm as a basic factor for movement. Rhythmic devices used in the dance. Notation and rhythmic analysis. Offered alternate years.

PE 254, 255, 256. Dance and Physical Education Laboratories. 2 hours each term.

Instruction and practice. Fall: contemporary dance; winter: folk and square dance; spring: contemporary dance, swimming.

UPPER-DIVISION COURSES

PE 351. Elementary Dance Composition. 3 hours fall.

Analysis of the dance medium, and the relationship of the aspects of time, space, and force to that medium. Principles of form basic to dance composition.

PE 352. Advanced Dance Composition. 3 hours winter.

Compositional forms and styles in dance. Preclassic and modern dance forms. Prerequisite: PE 351.

PE 353. Dance Accompaniment. 3 hours spring.

Function of accompaniment for dance skills and composition. Types of accompaniment—instrumental, percussion, voice. Prerequisite: PE 351. Dougherty.

PE 354, 355, 356. Dance and Physical-Education Laboratories. 2 hours each term.

Advanced instruction and practice. Fall and winter: dance, composition; spring: ballroom dance, swimming.

PE 403. Thesis. Hours to be arranged.

PE 406. Special Problems. Hours to be arranged.

PE 451. Dance Programs and Production. 3 hours winter.

Production problems of staging, lighting, and costuming for the dance; dance

demonstration and concert. Construction of a dance program as a part of the physical-education program for the secondary schools.

PE 452. History of the Dance to 1900. 3 hours fall.

Historical survey of the dance and its relationship to other arts from the basic cultures through the late Middle Ages. Dougherty.

PE 453. History of the Dance since 1900. 3 hours spring.

Development of the dance in America. Influences of leading dance artists; dance in education; dance in psychotherapy. Dougherty.

PE 454, 455, 456. Dance and Physical-Education Laboratories. 2 hours each term.

Advanced instruction and practice. Fall: technique of teaching contemporary dance; winter: dance workshop; spring: dance workshop, tennis.

Health Education

A MAJOR PROGRAM OF UNDERGRADUATE STUDY is offered for students who wish to specialize in health education. A few Oregon public school systems and many schools in other states organize their health instruction as the responsibility of one specially trained teacher. Excellent vocational opportunities are available in such schools and with public and voluntary health agencies for persons with professional training in health education. The curriculum provides a strong basis for graduate work in health education, public health, physical therapy, and the health sciences. The requirements are as follows:

Lower Division	Term Hours
General Biology (Bi 101, 102, 103).....	12
Elementary Chemistry (Ch 101, 102, 103).....	12
General Psych. (Psy 201, 202), Psych. of Adjustment (Psy 204).....	9
General Sociology (Soc 204, 205, 206).....	9
Nutrition (HEc 225).....	2
First Aid (HE 252).....	3
Personal Health (HE 250).....	3
Upper Division	
Intro. to Bacteriology (Bi 382), Human Physiology (Bi 312, 313).....	9
Human Anatomy (Bi 391, 392).....	6
Safety Education (HE 358).....	3
Personal Health Problems (HE 361).....	3
Community Health Problems (HE 362).....	3
Communicable & Noncommunicable Diseases (HE 363).....	3
Introduction to Public Health (HE 364, 365, 366).....	9
Social Health (HE 463).....	3
Health Instruction (HE 464).....	3
School Health Services (HE 465).....	3
Evaluation of School Health Education (HE 466).....	3
Corrective Physical Education (PE 444).....	3
Kinesiology (PE 472), Physiology of Exercise (PE 473).....	6
Genetics (Bi 422, Bi 424).....	6

Dental-Hygiene Option. Students who complete the two-year curriculum in dental hygiene, offered by the University of Oregon Dental School in Portland, may satisfy the requirement for a B.S. degree, with a major in health education, on the satisfactory completion of two additional years of work on the Eugene campus of the University. Under an alternative plan, dental-hygiene students may begin their University work with one year of study on the Eugene campus, transfer to the Dental School for two years, and return to the Eugene campus in their senior year to complete general University and professional requirements for a bachelor's degree and requirements for a major in health education.

Service Courses

LOWER-DIVISION COURSES

- HE 150. **Health Education.** 1 hour any term.
Study of personal health problems which confront the college student; the basic scientific principles of healthful living. Meets the health-education requirement for men. Furrer, Jacobson, Kime.
- HE 250. **Personal Health.** 3 hours any term.
Study of the personal health problems of university men and women, with emphasis on implications for family life. Mental health, communicable diseases, degenerative diseases, nutrition. Satisfies the University requirement in health education for men and women. Furrer, Gillespie, Haar, Jacobson, Malumphy, Kime, Puckett, Smith, Tuck.
- HE 251. **Community Health.** 3 hours winter.
Methods of handling health and sanitation problems in the community, with special reference to water supply, food and milk sanitation, sewage disposal, insect and rodent control; state and county health departments. Kime.
- HE 252. **First Aid.** 3 hours winter or spring.
Study of first aid and safety procedures—for the individual, schools, athletics, and civilian defense; meets certification standards of the American Red Cross. Brumbach, Schendel, Smith, Washke.

Professional Courses

UPPER-DIVISION COURSES

- HE 359. **Safety Education.** 3 hours spring.
Basic principles of safety education; current safety programs as they apply to the school, home, and community. Individual and group projects in the organization of materials for teaching safety education in public schools. Smith.
- HE 361. **Personal Health Problems.** 3 hours fall.
For health teachers in the public schools. Hygienic care of the body and other personal health problems important in health instruction. Prerequisite: junior standing in health or physical education, or consent of instructor. Kime.
- HE 362. **Community Health Problems.** 3 hours winter.
Basic community health problems important in public school health instruction. Designed primarily for teachers and community leaders. Prerequisite: junior standing or consent of instructor. Gillespie.
- HE 363. **Communicable and Noncommunicable Diseases.** 3 hours spring.
Nature, prevention, and control of common communicable diseases, considered in relation to health instruction in the public schools. Prerequisite: junior standing in science or health and physical education. Gillespie.
- HE 364, 365, 366. **Introduction to Public Health.** 3 hours each term.
Functions and organization of public health; vital statistics; consumer health problems; health education in the Oregon public schools, with special emphasis on health teaching in the junior and senior high schools. Admission after fall term only with consent of instructor. Prerequisite: junior standing in science or health and physical education. Haar.
- HE 405. **Reading and Conference.** Hours to be arranged.
- HE 407. **Seminar.** Hours to be arranged.
- HE 467. **Driver Education.** 3 hours.
Designed to prepare teachers to conduct driver-education courses in the secondary schools. Use of teaching devices, development of instructional units, behind-the-wheel instruction. Kime.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

HE 408. **Workshop.** (g) Hours to be arranged.

HE 450. **Elementary-School Health Education.** (g) 3 hours.

The purposes and requirements of the school health service program, with emphasis on organization and procedures for the school health examination. Organization and presentation of teaching materials based on the health needs of the child, community needs, and school health services. Tuck.

HE 463. **Social Health.** (G) 3 hours.

Social-health content, methods, and materials appropriate for junior and senior high schools. Prerequisite: senior standing in health education or biology; graduate standing in education or physical education. Tuck.

HE 464. **Health Instruction.** (G) 3 hours fall.

Methods and materials in health instruction for junior and senior high schools. Special emphasis on the construction of health teaching units for Oregon secondary schools. Prerequisite: HE 361, 362, 363 or consent of instructor. Gillespie.

HE 465. **School Health Service.** (G) 3 hours winter.

Purpose and procedures of health service in the schools; control of common communicable diseases; technique of pupil health appraisal by the teacher. Prerequisite: HE 361, 362, 363 or consent of instructor. Haar, Tuck.

HE 466. **Evaluation of School Health Education.** (G) 3 hours.

Appraisal and evaluation of the program in terms of objectives and standards, with special emphasis on health education in Oregon junior and senior high schools. Prerequisite: HE 361, 362, 363, HE 464, 465; or consent of instructor. Kime.

GRADUATE COURSES

*HE 501. **Research.** Hours to be arranged.

*HE 503. **Thesis.** Hours to be arranged.

HE 505. **Reading and Conference.** Hours to be arranged.

HE 506. **Special Problems.** Hours to be arranged.

Study of selected problems in the field of health education.

HE 507. **Seminar.** Hours to be arranged.

Seminars dealing with special aspects of health education are conducted each term. Open to qualified graduate students.

HE 508. **Workshop.** Hours to be arranged.

HE 542. **Basic Issues in Health Education.** 3 hours.

Current basic issues and problems in school health education; economic and social forces affecting health education; implications for programs. Haar.

HE 543. **Advanced Health Instruction.** 3 hours spring.

Organization of the public-school health-instruction program; for health teachers, supervisors, and coordinators. Basic steps in the development of the program. Prerequisite: HE 464 or consent of instructor. Smith.

HE 552. **Administration of School Health Education.** 3 hours winter.

Organization and administration of the school health program. Haar.

Recreation Management

THE RECREATION MANAGEMENT CURRICULUM includes programs of undergraduate and graduate professional study planned to prepare young men and women for careers in leadership, supervision, and management of recreation, park, and youth-serving agencies. The programs provide a broad liberal education,

* No-grade course.

together with professional and technical studies essential for careers in the field. Graduates in recreation management become recreation directors in community centers, playgrounds, the armed forces, industries, hospitals, churches, and institutions; directors, supervisors, and secretaries in youth-serving agencies; superintendents and managers of park departments and districts; administrators of recreation in cities, counties, and state agencies; and directors of camping and outdoor education.

The undergraduate major programs lead to the Bachelor of Science degree and provide a foundation for graduate work leading to the Master of Science and Doctor of Philosophy degrees.

Major Requirements. Candidates for the bachelor's degree with a major in recreation management must satisfy all general requirements of the University and complete: (1) a group of required core courses in recreation management, (2) the courses required in one of five options of specialization, and (3) a minimum of 90 term hours in courses outside the School of Health, Physical Education, and Recreation. The required core courses which provide a general background for work in any area of recreation management or leadership are:

	Term Hours
Recreation in American Life (RM 250).....	3
History & Theory of Recreation (RM 251).....	3
Recreation Leadership (RM 252).....	3
Organization & Administration of Recreation (RM 370).....	3
School & Community Recreation Programs (RM 499).....	3
Fundamentals of Speech (Sp 121).....	3

Within the framework of the major in recreation management, the following major options are offered: (1) park and recreation administration, (2) youth agencies, (3) recreation leadership, (4) program specialities (dance, arts and crafts, music, drama, physical education, or athletics), and (5) camping and outdoor education.

Park and Recreation Administration. The option in park and recreation administration is designed to provide preparation for careers in the management of public park and recreation programs and of private recreation organizations. Emphasis is placed on management techniques, managerial problems, park and recreation organization and operation, and recreation programs and service. The work includes training in phases of landscape architecture and urban planning related to recreation. The major requirements, in addition to the core program, are:

	Term Hours
Organization & Administration of Recreation (RM 370, 371).....	6
Landscape Maintenance (AA 358, 359).....	4
Landscape Construction (AA 361, 362).....	4
Seminar: Recreation Budgeting & Finance (RM 407).....	3
Seminar: Park Organization & Operation (RM 407).....	6
Park & Recreation Field Work (RM 415).....	9
Parks, School Grounds & Recreation Areas (AA 411, 412, 413).....	9
Recreation & Natural Resources (RM 492).....	3
Recreation & Park Facilities (RM 497).....	3

SUGGESTED ELECTIVES

Community Politics (PS 490, 491).....	6
Office Organization & Management (BEEd 333).....	3
Intro. to Public Administration (PS 351).....	3
Admin. Organization & Behavior (PS 412, 413).....	6
The Community (Soc 304).....	3
Publicity & Public Relations (J 459).....	3
Administration of Aquatic Programs (PE 344).....	3

Youth Agencies. The youth-agencies option provides preparation for careers in voluntary youth-serving recreation organizations and clubs (Y.M.C.A., Y.W.C.A., Boy and Girl Scouts, etc.). Emphasis is placed on community leader-

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ship, group work, and the role of recreation in the social structure of the community. The major requirements, in addition to the core program, are :

	Term Hours
General Psychology (Psy 201, 202).....	6
Psychology of Adjustment (Psy 204).....	3
General Sociology (Soc 204, 205, 206).....	9
Camp Counseling (RM 390).....	3
Organization & Admin. of Camping (RM 391).....	3
The Camp Program (RM 392).....	3
Youth Agencies (RM 394).....	3
Social Recreation (RM 395).....	3
Recreation Field Work (RM 415).....	9
Human Development & Learning (Ed 315).....	5
Group Dynamics (Soc 431).....	3
Professional activities	6

SUGGESTED ELECTIVES

Music Fundamentals (Mus 321, 322).....	4
Play Direction (Sp 364).....	3
Organization & Admin. of Recreation (RM 371).....	3
The Community (Soc 304).....	3
Character & Personality (Psy 436).....	3
The Maladjusted Child (Ed 463).....	3
First Aid (HE 252).....	3

Recreation Leadership. The option in recreation leadership is designed to prepare students for leadership in recreation programs in community and youth centers, playgrounds, hospitals, institutions, service clubs in the armed forces, etc. The major requirements, in addition to the core program, are :

	Term Hours
General Sociology (Soc 204, 205, 206).....	9
Art in Elementary School (AA 311).....	2
Music Fundamentals (Mus 321, 322).....	4
Play Direction (Sp 364).....	3
Camp Counseling (RM 390).....	3
Youth Agencies (RM 394).....	3
Social Recreation (RM 395).....	3
Recreation Field Work (RM 415).....	9
First Aid (HE 252).....	3
Human Development & Learning (Ed 315).....	5
Professional activities	6

SUGGESTED ELECTIVES

Games for the Elementary School (PE 221).....	1
Rhythms for the Elementary School (PE 222).....	1
The Camp Program (RM 392).....	3
The Community (Soc 304).....	3
Group Dynamics (Soc 431).....	3
The Maladjusted Child (Ed 463).....	3
Sociology of the Family (Soc 465).....	3

Program Specialties. The option in program specialties is designed to prepare students for careers in special recreation program areas such as music, arts and crafts, dance, drama, physical education, or athletics. Emphasis is placed on the development of a high degree of competency in a field of specialization currently represented in recreation programs. In consultation with his adviser, the student elects from 24 to 35 hours in courses in a field of specialization. The major requirements, in addition to the core program, are :

	Term Hours
General Psychology (Psy 201, 202).....	6
Psychology of Adjustment (Psy 204).....	3
Camp Counseling (RM 390).....	3
Youth Agencies (RM 394).....	3
Social Recreation (RM 395).....	3
Recreation Field Work (RM 415) or Student Teaching (Ed 417).....	9-10
Human Development & Learning (Ed 315).....	5
Courses in area of specialization.....	24-35

SUGGESTED ELECTIVES	Term Hours
Group Dynamics (Soc 431)	3
Princ. of Outdoor Education (RM 490).....	3

Camping and Outdoor Education. The option in camping and outdoor education is designed to prepare students for careers in camp management, supervision, or outdoor education in the public schools. The major requirements, in addition to the core program, are :

	Term Hours
Music Fundamentals (Mus 321, 322).....	4
Play Direction (Sp 364).....	3
Camp Counseling (RM 390).....	3
Org. & Admin. of Camping (RM 391).....	3
The Camp Program (RM 392).....	3
Youth Agencies (RM 394).....	3
Social Recreation (RM 395).....	3
Principles of Outdoor Education (RM 490).....	3
Recreation & Natural Resources (RM 492).....	3
Recreation Field Work (RM 415).....	9
Science	9-12

SUGGESTED ELECTIVES

General Geology (Geol 101, 102).....	8
Games for Elementary School (PE 221).....	1
Art in the Elementary School (AA 311, 312).....	4
Seminar: Conservation Education (RM 407).....	12
First Aid (HE 252)	3

LOWER-DIVISION COURSES

RM 250. Recreation in American Life. 3 hours.

Concept of community recreation; scope of recreation in American life; the role of recreation, parks, and sports in human experience and in the structure of community living. Rodney.

RM 251. History and Theory of Recreation. 3 hours fall.

Introduction to the basic historical and philosophical foundations of leisure and recreation. Rodney.

RM 252. Recreation Leadership. 3 hours.

Techniques of group leadership; interpretation of leadership; analysis of problems at various organization levels; examination of methods. Rodney, Ford.

UPPER-DIVISION COURSES

RM 370, 371. Organization and Administration of Recreation. 3 hours each term.

Administration of public recreation and park services provided by municipal, district, county, state, and Federal departments; legal provisions; organization; finance; public relations. Rodney.

RM 390. Camp Counseling. 3 hours.

Preparation of men and women for positions in camp counseling; practical as well as theoretical aspects of group and individual leadership and guidance in a camp situation; development and application of outdoor skills. Ford.

RM 391. Organization and Administration of Camping. 3 hours.

Selected organizational and administrative aspects of organized camping, including camp committees, personnel, budgets, camp sites, publicity, recruitments, insurance, nutrition, health and safety, and policies. Rodney, Ford.

RM 392. The Camp Program. 3 hours.

Content and construction of camp programs in various types of summer camps; emphasis on the objectives of the camping movement, educational principles, and varying abilities of campers. Ford.

- RM 394, 395. **Youth Agencies.** 3 hours each term.
 First term: survey of youth-serving organizations; role of agencies in relation to adolescent-youth problems and character development. Second term: administrative organization and management problems of social and voluntary agencies.
- RM 396. **Social Recreation.** 3 hours.
 Methods of developing effective leadership in social-recreation activities. Ford.
- RM 405. **Reading and Conference.** Hours to be arranged.
- RM 407. **Seminar.** Hours to be arranged.
 Recreation Budgeting and Finance. Rodney.
 Recreation Supervision. Rodney.
 Park Organization and Operation.
 Student Union Management. Ellingson.
 College Activity Programming. McMillan.
- RM 415. **Recreation Field Work.** Hours to be arranged (9 hours maximum credit).

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- RM 408. **Workshop.** (g) Hours to be arranged.
- RM 490. **Principles of Outdoor Education.** (G) 3 hours.
 Development of outdoor education and school camping; theories, practices, educational significance; organization, administration, and program planning. Ford.
- RM 492. **Recreation and Natural Resources.** (G) 3 hours.
 Administration of natural resources at the national, state, local, and private levels; emphasis on the understanding of the functions of the recreation profession in the administration of public wild lands. Ford.
- RM 497. **Recreation and Park Facilities.** (G) 3 hours fall.
 Acquisition, development, construction, and maintenance of recreational areas, facilities, and buildings. Rodney.
- RM 499. **School and Community Recreation Programs.** (G) 3 hours.
 Principles of program planning for school and community; types of programs considered in relation to sex and age and individual interests, needs, and capacities. Rodney, Ford.

GRADUATE COURSES

- *RM 501. **Research.** Hours to be arranged.
- *RM 503. **Thesis.** Hours to be arranged.
- RM 505. **Reading and Conference.** Hours to be arranged.
- RM 506. **Special Problems.** Hours to be arranged.
- RM 507. **Seminar.** Hours to be arranged.
 Basic Issues in Parks and Recreation.
 Public Park Administration.
 Problems of Recreation Finance. Rodney.
 Administrative Problems of Recreation. Rodney.
 Foundations of Recreation.
 Youth and Leadership. Rodney.
- RM 508. **Workshop.** Hours to be arranged.
- RM 552. **Principles and Problems of Recreation Supervision.** 3 hours.
 The purpose of supervision; principles and techniques of supervision in a modern program of recreation; staff relationships; departmental organization; policies, regulations, problems. Rodney.

* No-grade course.

RM 553. **Administration of Recreation.** 3 hours winter.

Organization and administration of recreation programs in recreational districts, communities, and municipalities; legal aspects, source of funds, types of programs. Rodney.

RM 554. **Problems of Camp Management.** 3 hours.

Analysis of problems under various types of camp sponsorship; principles, techniques, resources, administrative practices; principles and problems of leadership and group behavior. Rodney, Ford.

School of Journalism

JOHN L. HULTENG, M.S., Dean of the School of Journalism.

Professors: J. L. HULTENG, W. C. PRICE, W. F. G. THACHER (emeritus), G. S. TURNBULL (emeritus), R. M. WALES.

Associate Professors: R. C. HALL (emeritus), R. P. NELSON, G. R. RARICK, C. C. WEBB.

Assistant Professors: B. L. FREEMESSER, K. J. NESTVOLD.

Instructor: KATHERINE H. JOHNSTONE.

Assistants: JANET G. GRYTH, B. M. HARTMAN, R. L. NORTON, P. A. WOLCOTT.

A DEPARTMENT OF JOURNALISM was organized at the University of Oregon in 1912, and was raised to the rank of a professional school in 1916. The school is accredited by the American Council on Education in Journalism.

Admission. The major program in journalism is organized on an upper-division and graduate basis. During his freshman and sophomore years, a student planning to specialize in journalism pursues a preprofessional program which will insure a sound educational basis for professional study at the upper-division level.

Introduction to Journalism (J 224, 225, 226) is required of all prejournalism students. The following basic courses are open to sophomores: Mechanics of Publishing (J 321); Reporting I (J 361); Principles of Advertising (J 341); Copy Editing I (J 371).

Prejournalism students are advised: (1) to complete as many as possible of the courses in liberal arts which are required and recommended by the school; (2) to gain proficiency in the use of the typewriter; and (3) to participate in extracurricular journalistic activities.

Requirements for Bachelor's Degree. In its requirements for an undergraduate major, the School of Journalism places strong emphasis on courses which will provide a broad liberal education. The requirements in liberal arts are as follows:

Lower Division—(1) English or American literature, 18 term hours; (2) history, 9 term hours; (3) economics and political science, 9 term hours in each field, or 9 term hours in either economics or political science and 9 term hours in one of the following fields: anthropology, geography, philosophy, psychology, sociology. All journalism majors are encouraged to study one foreign language through the second-year college level.

Upper Division—A 27-hour minor in a liberal arts field, including at least 9 term hours at the upper-division level (it is recommended that majors also complete at least one upper-division year sequence in another liberal arts field).

The professional requirements for a bachelor's degree with a major in journalism are as follows:

(1) Introduction to Journalism (J 224, 225, 226).

(2) A minimum of 33 term hours in upper-division professional courses (the maximum allowed, within the first 186 term hours of an undergraduate program, is 46 hours).

(3) Journalism and Contemporary Affairs (J 495, 496), including the writing of a senior thesis.

(4) At least two courses or sequences chosen from each of the following two groups: *Group A*—Reporting I (J 361); Reporting II (J 462); Magazine Article Writing I and II (J 468, 469); Advertising Copy and Layout (J 446); Radio-Television News I (J 431); Interpretive Writing (J 464). *Group B*—Copy Editing I (J 371); Copy Editing II (J 372); Advertising Copy and Layout (J 447); Magazine Editing (J 470); Seminar: Picture Editing (J 407).

(5) A minimum cumulative grade-point average of 2.25.

In consultation with his adviser, a journalism major selects professional courses which will provide a measure of concentration in a special field of journalism. The following concentration programs are recommended:

Advertising—Principles of Advertising (J 341); Advertising Copy and Layout (J 446, 447); Courses selected from the following: Media of Advertising (J 441, 442, 443), Advertising Production (J 440), Advertising Agencies and Departments (J 445), Advertising Problems (J 444), News Photography I (J 335), Reporting I (J 361), Mechanics of Publishing (J 321).

News-Editorial—Reporting I (J 361); Copy Editing I and II (J 371, 372); Reporting II (J 462); History of Journalism (J 487); courses selected from the following: Mechanics of Publishing (J 321), Law of the Press (J 485), Magazine Article Writing (J 468, 469), Interpretive Writing (J 464), The Community Newspaper (J 424), News Photography I (J 335).

Newspaper Management—Mechanics of Publishing (J 321); Principles of Advertising (J 341); Reporting I (J 361); Copy Editing I (J 371); The Community Newspaper (J 424); Newspaper Management (J 421); courses selected from the following: Reporting II (J 462), News Photography I (J 335), Law of the Press (J 485), Advertising Copy and Layout (J 446, 447), Advertising Production (J 440).

Radio-Television Journalism—Radio-Television News I and II (J 431, 432); Seminar: Radio-Television Station Management (J 407); courses selected from the following: Radio and Television Workshop (Sp 341, Sp 345), News Photography I (J 335), Reporting II (J 462), Radio-Television Direction (Sp 444), Radio-Television Production (Sp 445), Radio-Television Programming (Sp 446), Seminar: Television News Film (J 407), Media of Advertising (J 441, 442, 443), Radio and Television Script Writing (Sp 347, 348, 349).

Magazine Journalism—Magazine Article Writing (J 468, 469); Magazine Editing (J 470); courses selected from the following: Mechanics of Publishing (J 321), Principles of Advertising (J 341), Copy Editing I (J 371), Seminar: Industrial Editing (J 407), Advertising Copy and Layout (J 447), Interpretive Writing (J 464), Law of the Press (J 485).

Public Relations—Publicity and Public Relations (J 459); Public Relations Problems (J 483); courses selected from the following: Mechanics of Publishing (J 321), Principles of Advertising (J 341), Reporting I (J 361), Seminar: Industrial Editing (J 407), Seminar: Documentary News Film (J 407), Advertising Production (J 440), Media of Advertising (J 443), Advertising Copy and Layout (J 446, 447).

Photo Journalism—News Photography I and II (J 335, 336); Seminar: Picture Editing (J 407); courses selected from the following: Seminar: Television News Film (J 407), Reporting I (J 361), Radio and Television Workshop (Sp 341, Sp 345), Principles of Advertising (J 341), Public Relations Problems (J 483), Magazine Editing (J 470), History of Journalism (J 487).

Subject Preparation for High-School Teaching. For certification as a teacher of journalism in Oregon high schools, the student's program must include the subject-preparation requirements of the Oregon State Department of Education. These requirements are: for a basic certificate, granted after four years of college work, a *basic norm*—9 term hours, including work in newswriting, copy editing, and newspaper and society; for a standard certificate, granted after five years of college work, a *standard norm*—18 term hours, including the basic-norm requirement and work in advanced writing, advanced copy editing, and high-school publications.

The following courses satisfy these requirements: *basic norm*, J 361, J 371, J 450; *standard norm*, J 462, J 372, J 455. The following additional courses are recommended: J 321, J 335, J 341.

The norm requirements listed above will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 263.

Honors. See HONORS COLLEGE, pages 120-123.

Graduate Study. The School of Journalism offers work leading to the Master of Arts or Master of Science degree. Programs are provided for candidates with considerable journalistic experience and for those with little experience, under the following plans:

Plan A. Thesis required. Designed for students with an extensive background in journalism. The candidate may, on request, be permitted to satisfy the major requirement with less than the normal 30 term hours of work in journalism.

Plan B. Thesis optional. Designed for students with little or no journalistic background. The candidate may take a maximum of 40 term hours of work in journalism. If he elects not to write a thesis, he must submit three term papers, written under the supervision of his adviser.

Facilities. The School of Journalism is housed in Eric W. Allen Hall, a three-story brick structure erected in 1954 and named in memory of the late Eric W. Allen, the first dean of the School of Journalism. Fully equipped laboratories are provided for newswriting, editing, advertising, radio-television news (the school has its own broadcasting studios), photography, and typography. Current files of newspaper and trade publications are maintained in the Journalism Reading Room; the University Library has an excellent collection of the literature of mass communications. The School of Journalism receives the regular newspaper, radio-television, and teletypesetter monitor services of the Associated Press and the United Press International. Offices of the OREGON DAILY EMERALD, the University student newspaper, are located on the third floor of Allen Hall. The Eric W. Allen Seminar Room, furnished by contributions from friends and alumni of the school, is a center for meetings of journalism seminars and student groups.

The Oregon Newspaper Publishers Association and the Oregon Association of Broadcasters have their offices in Allen Hall. The school and these associations cooperate in providing placement services for journalism graduates. The Oregon Scholastic Press also has its headquarters in Allen Hall.

Scholarships, Awards, and Financial Aid. For scholarships established specifically for students of journalism, see pages 95-96; for journalism prizes and awards, see page 101.

The interest from a \$15,000 endowment fund, bequeathed to the University by the late Mrs. C. S. Jackson, widow of the founder of the *Oregon Journal*, provides no-interest loans to men students majoring in journalism.

LOWER-DIVISION COURSES

J 224, 225, 226. **Introduction to Journalism.** 2 hours each term.

Required of prejournalism majors; open to nonmajors. Survey of journalistic fields; instruction in the fundamentals of reporting, copyediting, advertising, and technical processes. The terms need not be taken in sequence. Nelson, staff.

UPPER-DIVISION COURSES

J 321. **Mechanics of Publishing.** 3 hours.

Printing processes and machinery, including their history; recognition of type faces, typographical display, copy fitting; typesetting machines, stereotyping, letterpress, offset, rotogravure, engraving; paper and ink; relationship of mechanical to business and editorial departments. Lectures and laboratory. Webb.

J 335. **News Photography I.** 3 hours.

Instruction in use of the news camera and in the processing of film; the role of photography in journalism. Lectures and laboratory. Freemesser.

J 336. **News Photography II.** 3 hours.

Advanced techniques in camera and darkroom work; picture editing; trends in pictorial journalism. Prerequisite: J 335 or consent of instructor. Freemesser.

J 341. **Principles of Advertising.** 3 hours.

Advertising as a factor in the distributive process; the advertising agency; the "campaign"; the function of research and testing; the selection of media: newspaper, magazine, broadcasting, outdoor advertising, direct mail. Wales.

Sp 341. **Radio and Television Workshop.** 2 hours.

For description, see SPEECH.

Sp 347. **Radio and Television Script Writing.** 2 hours.

For description, see SPEECH.

J 361. **Reporting I.** 4 hours.

Basic training in news writing and reporting; coverage of city and county affairs; reporting of special news. Lectures, individual conferences, laboratory. Hulteng.

J 371. **Copy Editing I.** 3 hours.

Instruction and practice in copyreading and headline writing for the newspaper; emphasis on grammar and style. The class edits the daily teleprinter report of the Associated Press or the United Press. Lectures and laboratory. Prerequisite: J 321, J 361. Price.

J 372. **Copy Editing II.** 3 hours.

Instruction and practice in technical and subjective problems involved in evaluation, display, make-up, and processing of written and pictorial news matter under time pressure. Prerequisite: J 371. Price.

J 401. **Research.** Hours to be arranged.J 403. **Thesis.** Hours to be arranged.J 405. **Reading and Conference.** Hours to be arranged.*J 425. **Advanced Practice.** 1 to 3 hours.

Field experience in news and advertising practice. Prerequisite: consent of instructor.

J 431. **Radio-Television News I.** 3 hours.

Gathering and writing news for broadcast media. Lectures, individual conferences, and laboratory. Nestvold.

* No-grade course.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- J 407. **Seminar.** (G) Hours to be arranged.
Editorial Cartooning.
Industrial Editing.
Market Research.
Documentary News Film.
Picture Editing.
- J 421. **Newspaper Management.** (G) 3 hours.
Management problems of the newspaper; plant and equipment; personnel; administration and coordination of editorial, advertising, and mechanical departments; business office operations. Webb.
- J 424. **The Community Newspaper.** (G) 3 hours.
The weekly, semiweekly, and small daily newspaper in America; historical development and social role, past and present; problems of news and editorial policy peculiar to this distinctive form of journalism.
- J 432. **Radio-Television News II.** (G) 3 hours.
Advanced aspects of the preparation, reporting, and broadcasting of radio-television news. Special emphasis on the building of news programs. Lectures and laboratory. Prerequisite: J 361 or J 431. Nestvold.
- J 440. **Advertising Production.** (G) 3 hours.
Instruction in the technical aspects of advertising. Printing and engraving, lithography, rotogravure, silk-screen process, paper, ink, and color. Production planning of advertising materials. Lectures and laboratory. Prerequisite: J 321, J 341. Webb.
- J 441, 442, 443. **Media of Advertising.** (G) 2 hours each term.
Examination and evaluation of the principal media of advertising, including newspapers and magazines, radio and television, outdoor, point-of-sale, direct mail; organization, operation, policy, and problems. Prerequisite: J 341. Wales.
- J 444. **Advertising Problems.** (G) 3 hours.
The student is given an opportunity to cultivate his judgment through consideration of actual marketing and merchandising problems, in the solution of which advertising may be a factor. Prerequisite: J 341. Wales.
- Sp 444. **Radio-Television Direction.** (G) 3 hours.
For description, see SPEECH.
- Sp 445. **Radio-Television Production.** (G) 3 hours.
For description, see SPEECH.
- Sp 446. **Radio-Television Programming.** (G) 3 hours.
For description, see SPEECH.
- J 445. **Advertising Agencies and Departments.** (G) 3 hours.
The role of the advertising agency in the creation of advertising materials, marketing plans, and research; structure and function of the agency; client relations; merchandising; personnel; financial operations; legal problems. The company advertising department. Wales.
- J 446, 447. **Advertising Copy and Layout.** (G) 3 hours each term.
Training and practice in the art of writing advertising copy and preparing visual presentation for various media. Study of diction, sentence structure, headlines and slogans, style, design and composition. Lectures and laboratory. Prerequisite: J 341. Nelson, Wales.
- J 450. **The Press and Society.** (g) 3 hours.
The organization and operation of American newspapers, leading national magazines, and the media of commercial broadcasting; evaluation of their functions, duties, and responsibilities in contemporary society. Not open to journalism majors. Nelson, staff.

- J 455. **Supervision of School Publications.** (G) 2-3 hours.
The teacher's role in guiding student publications in secondary schools. Nelson.
- J 459. **Publicity and Public Relations.** (G) 3 hours.
Basic techniques and methods in publicity programs for business, professional, and social organizations and interest groups; relationship of publicity to the broader concepts of public relations. Nelson.
- J 462. **Reporting II.** (G) 4 hours.
Newspaper reporting of legislative and executive governmental bodies; political news and other special news areas; civil and criminal courts and appellate procedure. Prerequisite: J 361. Price.
- J 464. **Interpretive Writing.** (G) 3 hours.
Application of advanced writing techniques in the analysis and interpretation of news for media of mass communication; literary, dramatic, and motion-picture reviewing; the editorial page. Prerequisite: J 361. Hulteng.
- J 468, 469. **Magazine Article Writing.** (G) 2 hours each term.
Study of the problems of writing and selling articles, with emphasis on the marketing of manuscripts. Conferences; individual projects stressed the second term. Nelson.
- J 470. **Magazine Editing.** (G) 3 hours.
Principles and problems of magazine editing; content selection, use of pictures, headline writing, caption writing, layout, make-up, typography; editorial responsibility. Lectures and laboratory. Nelson.
- J 483. **Public Relations Problems.** (G) 3 hours.
Principles of public relations in contemporary American society, with emphasis on individual projects; the growing need for public relations activities by profit and nonprofit institutions; techniques and methods; role of the media; ethics of public relations. Wales.
- J 485. **Law of the Press.** (G) 3 hours.
The constitutional guarantee of freedom of the press; principal Supreme Court decisions; legal status of the press as a private business and as a public utility; governmental activity toward improving the press; legal controls of publication; libel, right of privacy, copyright, contempt of court, censorship, and radio news regulation. Price.
- J 487. **History of Journalism.** (G) 3 hours.
Study of the changing character of the newspaper, with emphasis on the contributions of outstanding editors, publishers, and inventors. The evolution of freedom of the press, editorial and business standards, mechanics, and advertising practices. Price.
- J 489. **Comparative Foreign Journalism.** (G) 3 hours.
Channels of foreign news coverage, including American and foreign press associations; analysis of foreign newspapers and study of foreign press personalities; foreign correspondents; censorship. Price.
- J 494. **Journalism and Public Opinion.** (G) 3 hours.
Opinion-shaping role of major communications media; theories of public opinion and propaganda; activities of pressure groups and other organized groups. Rarick.
- J 495, 496. **Journalism and Contemporary Affairs.** (G) 2 hours each term.
Examination of current problems in journalism; evaluation of governmental and other public policies affecting the mass media; trends in mass communications. Thesis required. Hulteng.

GRADUATE COURSES

- *J 501. **Research in Journalism.** Hours to be arranged.
- *J 503. **Thesis.** Hours to be arranged.

* No-grade course.

J 505. **Reading and Conference.** Hours to be arranged.

J 507. **Seminar.** Hours to be arranged.

Public Opinion Measurement.
Communications Theory and Research Methods.
Advertising Problems.
Literature of Journalism.
The Foreign Press.
History of Journalism.
Propaganda.
The Photo Essay.

J 512. **Communication Theories and Research Methods.** 3 hours.

Selection of research problems; planning the study; field research methods, experimental methods, sampling and measurement problems; theories of communication; effects of mass communication. Rarick.

School of Law

ORLANDO J. HOLLIS, B.S., J.D., Dean of the School of Law.

LOIS I. BAKER, M.A., Law Librarian.

Professors: O. J. HOLLIS, C. G. HOWARD (emeritus), F. R. LACY, F. J. MOREAU.

Associate Professors: W. M. BASYE, C. D. CLARK, R. S. KELLEY, P. L. LARSEN, H. A. LINDE, R. S. SUMMERS.*

Special Lecturer: E. C. HARMS.

THE UNIVERSITY OF OREGON SCHOOL OF LAW, established in 1884 as a night law school in the city of Portland, was moved to the Eugene campus in 1915 and reorganized as a regular division of the University. The School of Law was admitted to the Association of American Law Schools in December 1919; the standards of the school were approved by the American Bar Association in August 1923.

Facilities. The School of Law is housed in Fenton Hall, a three-story brick structure, with a fireproof annex in which the main book collection of the Law Library is located. Fenton Hall, named in honor of the late William David Fenton, Oregon attorney and benefactor of the school, was formerly the University Library. The building was extensively remodeled in 1938 to provide a permanent home for the School of Law. A new Law Library reading room with modern facilities was provided in 1953.

The holdings of the Law Library total 57,006 volumes, including complete case reports of the National Reporter System, complete state reports from colonial times to the establishment of the Reporter System, a substantial collection of English and Canadian case law, codes and compilations of state and Federal statute law, standard legal digests and encyclopaedias, etc. Its periodical collection includes files of about 335 legal journals. An excellent collection of publications relating to Oregon territorial and state law includes an extensive file of Oregon Supreme Court briefs.

The Law Library reading rooms are adjacent to the stacks, allowing students direct and easy access to the book collections.

Admission to the School of Law. The minimum requirement for admission to the School of Law is three-fourths of the total credit required for a Bachelor of Arts or Bachelor of Science degree from the institution at which the student completes his prelegal work—but not less than 140 term hours (the requirement for a student completing his prelegal work at the University of Oregon). The minimum requirement may include no work taken by correspondence, and may include a maximum of 14 term hours in nontheory courses in military science, hygiene, domestic arts, physical education, vocal or instrumental music, or other subjects of a nontheoretical nature.

The student's prelegal program must include: (1) courses satisfying all lower-division requirements of the University; (2) the basic college course in accounting (Ac 211, 212, 213 or equivalent); (3) a minimum of 36 term hours of credit in courses in the general field of social science. An applicant who has a baccalaureate degree need not comply with requirement (1) above.

For admission to the School of Law, a student must have, for all prelegal work, a cumulative grade-point average of at least 2.25 (computed in accordance

* On leave of absence 1963-64.

with the system of grade-point-average determination used by the University of Oregon). This requirement applies to all applicants, including those who hold degrees.

Applicants for admission to the School of Law must take the uniform Law School Admission Test administered by the Educational Testing Service, and have a report of the test score sent to the School of Law prior to the first day of June preceding the fall term for which admission is sought. Inquiries concerning the dates, places, and fee for the Law School Admission Test should be addressed directly to the Educational Testing Service, 20 Nassau Street, Princeton, N.J.

All students intending to enter the School of Law must file a formal application for admission with the dean of the school, from whom official application forms may be obtained. Applications should be filed before the first day of May preceding the fall term in which the student intends to enroll.

A student intending to transfer to the University of Oregon from another institution and to enter the School of Law must also submit, to the dean of the school, complete records of all school work beyond the eighth grade. For failure to submit complete records, the University may cancel the student's registration. This regulation applies to work taken at other law schools, whether or not the student wishes to transfer credit.

Admission to the School of Law is restricted to students who are candidates for a professional law degree. Students are admitted to the professional study of law only at the opening of the fall term of each academic year.

Prelegal Program. Students pursuing prelegal studies at the University of Oregon are enrolled in the College of Liberal Arts during the three years of the required preparatory program. They are, however, assigned academic advisers from the faculty of the School of Law. The student is allowed considerable freedom of choice in selecting his courses, as long as his program provides a substantial cultural background. The prelegal adviser, after considering the student's high-school record and any available evidence of his native abilities, assists him in working out a program that will provide such a background. The student's program should include courses which will enable him to meet all lower-division requirements by the end of the second year of his prelegal studies.

Law students may qualify for a nonprofessional baccalaureate degree after the satisfactory completion of prelegal requirements and one year of professional work in the School of Law, provided that they have satisfied all general University requirements for such a degree. For a nonprofessional degree, the major requirement in law is 36 term hours (unweighted) in professional courses. The dean of the School of Law will not recommend a student for the B.A. or B.S. degree with a major in law who has been awarded, or is a candidate for, either of these degrees with a major in another field.

Registration and Fees. Law students register and pay their fees at the times set in the University calendar for registration. Law students pay the regular fees prescribed for all students. Nonresident law students who hold a bachelor's degree from an accredited college or university are not required to pay the nonresident fee.

Curriculum and Degrees. The School of Law offers a standard professional curriculum leading to the Bachelor of Laws or Doctor of Jurisprudence degree. A total of three years of resident professional study in the University of Oregon or another law school of recognized standing is required for a law degree, of which, normally, the two last years must be in residence in the University of Oregon. The curriculum is arranged, as far as possible, to present the fundamental topics of the law during the first year, and the more specialized subjects during the second and third years.

Since the school owes its primary responsibility to the people of the state of Oregon, special emphasis is placed on Oregon substantive law and on Oregon procedure. Courses based upon the common law are organized to provide the student a thorough foundation in the fundamental principles of the common law and an understanding of the modification of these principles in Oregon by judicial decisions and statutes.

In the list of courses on pages 331-335, elective courses are indicated with an asterisk (*). All other courses are required. The school reserves the right to make any desirable or necessary changes in courses as listed and described.

The School of Law reserves the right to withhold recommendation for the granting of a degree to any student who, in the opinion of the faculty of the school, does not possess the character and abilities essential to the maintenance of the public trust in the legal profession. Regular class attendance is required of students in the School of Law. Credit for any course may be denied for irregular attendance. Classes are regularly scheduled Monday through Saturday.

An honor system, which has been in operation in the School of Law for more than thirty-five years, is applicable to all students in the school. The system is explained to first-year students at an assembly at the opening of the fall term of each year.

The requirements for the LL.B. and J.D. degrees are as follows :

Bachelor of Laws. Students who have met the requirements for admission to the School of Law, and who have successfully completed courses in law aggregating 123 hours and have otherwise satisfied the requirements of the University and the School of Law, will be granted the degree of Bachelor of Laws (LL.B.). For the LL.B. degree the student must have a minimum grade-point average of 2.00 over the full three years of his work in the School of Law.

Doctor of Jurisprudence. The degree of Doctor of Jurisprudence (J.D.) will be granted to students who, in addition to satisfying the requirements for an LL.B. degree :

(1) Obtain (at least one year before completing work for the law degree) the Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration, or an equivalent degree from this University or some other institution of recognized collegiate rank.

(2) Earn a minimum grade-point average of 3.00 in the School of Law.

(3) Complete 3 term hours in Thesis (L 503), involving the preparation, under the direction of the faculty of the School of Law, of a thesis or series of legal writings of high merit.

(4) Comply with such other requirements as the law faculty may from time to time impose.

Transferred Credit. A student as a general rule may transfer not to exceed one year of credit earned in another law school of recognized standing, provided that, at the time he was admitted to the law school from which he wishes to transfer credit, he could have met the then-existing admission requirements of the University of Oregon School of Law. In exceptional cases only, a student may be permitted to transfer not to exceed two years of credit. The right to reject any and all such credit is reserved.

Application for admission by a student who has attended another law school will not be considered unless: (1) the school from which transfer is sought is on the list of schools approved by the American Bar Association and is a member of the Association of American Law Schools; (2) the student is eligible for re-admission in good standing to the school previously attended; and (3) the student's cumulative grade-point average for all professional law courses completed is at least 2.00, when computed on the basis of the system of grade-point-average

determination used by the University of Oregon. Transferred credit will be accepted, however, only if the student's professional law-school record is of high quality.

In determining whether a student who has transferred credit from another law school has satisfied the 2.00 grade-point-average requirement for the LL.B. degree, only grades earned at the University of Oregon will be considered.

In determining whether a student who has transferred credit from another law school has satisfied the 3.00 grade-point-average requirement for the J.D. degree, the following rules are applied: (1) If the grades earned elsewhere, when expressed in terms of the University grading system, are not equivalent to a grade-point average of 3.00, then both the grades earned elsewhere and the grades earned at the University will be considered in determining whether the student has a minimum average of 3.00. (2) If the grades earned elsewhere, when expressed in terms of the University grading system, are equal to or better than a grade-point average of 3.00, then only the grades earned at the University will be considered in determining whether the student has a minimum average of 3.00.

Oregon Law Review. The OREGON LAW REVIEW is published quarterly under the editorship of the faculty of the School of Law, with the assistance of a student editorial staff, as a service to the members of the Oregon bar and as a stimulus to legal research and productive scholarship on the part of students. The LAW REVIEW has been published continuously since 1921.

Legal Aid. Members of the third-year law class each year have the opportunity to participate on a voluntary, noncredit basis in the legal-aid program operated by the Lane County Bar Association. For several years the voluntary cooperation of third-year students has been 100 per cent.

Oral Case Analysis Contest. Law students entering the Lane County Bar Association Oral Case Analysis Contest are afforded the unique opportunity of discussing a recent case or legal topic of interest with an audience composed entirely of lawyers. Any registered law student may enter the contest. The Lane County Bar Association offers each year cash prizes of \$65, \$40, and \$25 to the three students judged to have made the best presentations at the weekly luncheon meetings of the bar association.

Order of the Coif. The Order of the Coif, national law-school honor society, maintains a chapter in the University of Oregon School of Law. The Order of the Coif was founded to encourage high scholarship and to advance the ethical standards of the legal profession. Members are selected by the faculty during the spring term each year from the ten per cent of the third-year class who rank highest in scholarship. Character, as well as scholarship, is considered in selecting members.

Scholarships and Awards. For scholarships and fellowships established specifically for students in the School of Law, see pages 96-97. For prizes and awards for law students, see pages 101-102.

Placement. The School of Law maintains its own placement service for its graduates, under the personal direction of the dean of the school. Individual attention is given to the wishes of each graduate concerning his placement. No substantial problem in finding suitable opportunities to practice law has been experienced since the depression days of the 1930s. During the last few years, graduates of the school going into law offices and government positions have received starting salaries ranging from \$450 to \$550 a month. A very large proportion of the school's graduates enter the private practice of law.

FIRST-YEAR COURSES

L 411, 412, 413. **Contracts.** 3 hours fall, 2 hours winter, 3 hours spring.

Formation of simple contracts; consideration; third-party beneficiaries; as-

- signments; the Statute of Frauds; performance and breach; illegality; discharge. Patterson, Goble, and Jones, *Cases on Contracts* (4th ed.). Summers.
- L 414, 415, 416. **Property.** 3 hours each term.
Possession as a concept in acquisition, retention, transfer, and loss of chattels. Requisites of valid acquisition and transfer of nonderivative and derivative titles to land; descriptions; covenants of title; fixtures. Landowners' incorporeal interests; easements; licenses, covenants. Creation and characteristics of common-law estates. Classification and protection of nonpossessory future interests. Class gifts; construction problems; rule against perpetuities; powers of appointment; restraints on alienation. Aigler, Smith and Tefft, *Cases on Property* (1960). Kelley.
- L 418. **Legal Bibliography.** 1 hour winter.
Legal reference materials: legislative enactments; judicial precedents; classes of law books; training in their use. Clark.
- L 419. **Civil Procedure.** 4 hours fall.
Introductory study of procedure in actions at law. The court system; methods of trial and appellate review; detailed study of common-law actions and pleadings. Sunderland, *Cases and Materials on Judicial Administration* (2nd ed.). Hollis.
- L 420, 421. **Criminal Law and Procedure.** 3 hours fall, 2 hours winter.
Source and function of criminal law; elements of specific crimes and factors limiting culpability; criminal law and its administration as a technique of social order; procedure in criminal cases; protection of individual rights by constitutional and other legal limitations on criminal law enforcement. Paulsen and Kadish, *Cases on Criminal Law*. Linde.
- L 422, 423, 424. **Torts.** 3 hours fall, 2 hours winter, 3 hours spring.
Intentional invasion of interests of personality and property; negligence and causation; plaintiff's conduct as a bar to recovery; liability without legal fault; fraud and deceit; defamation; malicious prosecution; interference with advantageous relations. Smith and Prosser, *Cases on Torts* (3rd ed.). Lacy.
- L 427. **Agency.** 3 hours spring.
Nature of agency; creation; agent's duty to principal; rights of agent against principal; claims of third persons; ratification; undisclosed principal; termination. Latty and Frampton, *Basic Business Associations: Cases, Text and Problems* (1963). Larsen.
- L 429. **Equity.** 4 hours spring.
General nature and availability of equitable remedies; historical background; specific performance of contracts; injunctions; interests typically protected by courts of equity. Chafee and Re, *Cases on Equity* (4th ed.). Summers.

SECOND-YEAR COURSES

- L 434. **Secured Land Transactions.** 4 hours fall.
Vendor-purchaser and mortgage law; emphasis on functional comparison of land sale contracts, mortgages, and deeds of trust as real property security devices in the market place. Chafee and Re, *Cases on Equity* (4th ed.); Osborne, *Cases on Property Security* (2nd ed.). Clark.
- L 435, 436. **Commercial Transactions.** 3 hours fall, 4 hours winter.
Uniform Commercial Code: sales, secured transactions, commercial paper, documents of title; commercial insurance. Summers.
- *L 440. **Insurance.** 3 hours spring.
The insurance business; insurable interest; coverage of contract as to event and insured; subrogation; warranties, representations, and concealment. Lacy.
- *L 441. **Land and Water Resources.** 3 hours.
The legal aspects of problems arising in land, timber, minerals, and water utilization, with special attention to the effect of Federal, state, and local legislation on such problems. Clark.

* Elective courses.

*L 444. **Restitution.** 3 hours spring.

Historical background; availability and operation of quasi contracts and other remedies for unjust enrichment; restitution of benefits tortiously acquired or conferred upon unenforceable contracts or because of mistake or duress. Dawson and Palmer, *Cases on Restitution*. Lacy.

*L 446. **Domestic Relations and Persons.** 3 hours spring.

Nature of marriage; annulment; divorce; adoption; legal incidents of status of husband and wife and parent and child. Ploscowe and Freed, *Family Law: Cases and Materials* (1963). Larsen.

L 447, 448. **Partnerships and Corporations.** 4 hours fall, 3 hours winter.

A comparative study of partnerships, corporations, and other business associations in launching the enterprise and in transactions prior to formation; management, control, and transfer of control in a going concern; managers' benefits and hazards; asset distributions to members; reorganization of a solvent enterprise; solvent dissolution. Baker and Cary, *Cases on Corporations* (3rd abridged ed.); Reuschlein, *Cases on Partnerships and Unincorporated Businesses*. Basye.

L 449, 450. **Constitutional Law.** 3 hours each term, fall and winter.

The Federal system under the Constitution of the United States; judicial review in constitutional cases; national and state control over the economy under the commerce clause; the power to tax and spend and other powers of Congress; national power in international relations; guarantees of individual liberty by limitations on governmental power; constitutional issues in state courts. Barrett, Bruton and Honnold, *Cases on Constitutional Law* (2nd ed.). Linde.

L 453. **Code Pleading.** 4 hours spring.

Pleading under the codes and the Federal rules of civil procedure; parties; joinder of causes; the pleadings; objections to pleadings; amendments. Cleary, *Cases on Pleading* (2nd ed.). Hollis.

L 454, 455. **Trusts and Estates.** 3 hours winter, 4 hours spring.

First term: execution and construction of testamentary and trust instruments; resulting and constructive trusts. Second term: administration of decedents' and fiduciary estates; law of intestate succession. Palmer and Wellman, *Trusts and Succession*. Kelley.

L 457. **Legal Writing I.** 1 hour.

Preparation, under the supervision of a member of the faculty, of a manuscript in the form of a "Recent Case" note suitable for submission to the Board of Editors of the OREGON LAW REVIEW.

THIRD-YEAR COURSES

L 458, 459. **Conflict of Laws.** 3 hours each term, fall and winter.

Theoretical basis of decision; jurisdiction; foreign judgments; right under foreign law in torts, contracts, sales, security transactions, business organizations, family law. Cheatham, Griswold, Reese, and Rosenberg, *Cases on Conflict of Laws* (5th ed.). Hollis.

L 460, 461. **Trial Practice.** 3 hours each term, winter and spring.

Jurisdiction; venue; process; judgments; juries; introduction of evidence; exceptions; findings; verdicts; motions after verdict. Moot court jury trial spring term. McBaine, *Cases on Trial Practice* (3rd ed.). Hollis.

L 462. **Creditors' Rights.** 4 hours.

Remedies of and priorities between unsecured creditors; exemptions, fraudulent conveyances; general assignments and creditors' agreements; bankruptcy.

*L 471. **Legislation.** 3 hours spring.

The legislative process; the lawyer's role in policy formulation and law making in contrast to litigation; drafting; presentations before legislative com-

* Elective courses.

mittees and other law-making bodies; lobbying and its regulation; legislative history and the interpretation of statutes. Linde.

*L 476. **Labor Law.** 3 hours spring.

The law of labor-management relations; common-law background and modern development; Federal and state regulation of collective bargaining, strikes, and picketing, and of specific employment conditions and practices; the N.L.R.B. and other agencies of labor-law administration. Linde.

L 477. **The Legal Profession.** 1 hour winter.

Organization of bench and bar; functions of the legal profession in the administration of justice; canons and other standards of professional ethics. Cheatham, *Cases on the Legal Profession* (2nd ed.). Linde.

L 478, 479. **Evidence.** 3 hours each term, fall and winter.

Presumptions; burden of proof; judicial notice; hearsay, opinion, and character evidence; admissions; real evidence; best-evidence rule; parole-evidence rule; witnesses. Ladd, *Cases on Evidence* (2nd ed.). Lacy.

*L 481. **Trade Regulation.** 4 hours.

A survey of the common law governing restraints of trade and monopoly; a case study of the effect of the major Federal legislation (Sherman, Clayton, Robinson-Patman, Federal Trade Commission, and Lanham Acts) in the anti-trust and unfair-competition areas; common-law and Federal trade-mark protection. Handler, *Cases on Trade Regulation* (3rd ed.). Kelley.

L 482, 483. **Federal Taxation.** 3 hours each term, fall and winter.

What is income and whose income is it under the Federal income tax; deductions and credits; when is it income or deductible—accounting problems; capital gains and losses; income-tax problems in corporate distributions and reorganization; the Federal estate tax—concepts of gross estate, valuation, deductions, credits, and computation of tax; the Federal gift tax; collection of Federal taxes, transferee liability, and criminal penalties. Griswold, *Cases and Materials on Federal Taxation* (5th ed.). Basye.

*L 484. **Administrative Law.** 4 hours.

The administrative process; delegation of administrative functions and legislative and executive control of agency action; formulation and enforcement of the administrative program; procedural standards of administrative action; the nature and scope of judicial review. Linde.

*L 485. **Future Interests and Estate Planning.** 4 hours.

Recognition and solution of practical problems in lifetime and testamentary disposition of property; development of the law of future interests within the overall framework of estate planning. Individual student assignment of a practical problem in preparing a family estate plan, including the drafting of necessary legal instruments. Casner, *Estate Planning* (3rd ed.). Basye.

*L 487. **Law of Municipal Corporations.** 3 hours spring.

The nature, constitution, powers, and liabilities of municipal corporations. Stason and Kauper, *Cases and Materials on the Law of Municipal Corporations* (3rd ed.). Harms.

L 488. **Legal Writing II.** 1 hour fall.

Preparation, under the supervision of a member of the faculty, of a manuscript in the form of a "Note and Comment" suitable for submission to the Board of Editors of the OREGON LAW REVIEW.

*L 501. **Research.** Hours to be arranged.

Open to third-year students, by special arrangement only. The student works under the supervision of the instructor in whose field the problem is selected. Not more than 3 hours per term or a total of 9 term hours of credit may be earned.

*L 503. **Thesis.** Hours to be arranged.

A maximum total of 3 hours of credit may be earned.

* Elective courses.

***L 507. Seminar.** Hours to be arranged.

Seminars offered in the following subjects as student interest and other conditions may make the instruction feasible:

Business Planning Problems. Basye.
Copyright, Trade Mark, and Patent Law.
International Law. Linde.
Jurisprudence. Linde or Summers.

* Elective courses.

Medical School

DAVID W. E. BAIRD, M.D., LL.D., Dean of the Medical School.

CHARLES N. HOLMAN, M.D., Associate Dean of the Medical School; Medical Director of Hospitals and Clinics.

WILLIAM A. ZIMMERMAN, B.S., Assistant Dean for Business Affairs.

JOSEPH J. ADAMS, B.B.A., Assistant Dean for Institutional Relations.

CAROLINE O. ANDERSON, B. S., Registrar.

BERTHA B. HALLAM, B.A., Librarian.

THE UNIVERSITY OF OREGON MEDICAL SCHOOL, located in Portland, was chartered in 1887, as Oregon's second medical school. The first, the medical department of Willamette University, was merged with the University of Oregon Medical School in 1913. The campus is a 101-acre tract overlooking the city in Sam Jackson Park. Located on the same campus are the University of Oregon Dental School and the University of Oregon School of Nursing.

The Medical School offers a standard curriculum in medicine, leading to the M.D. degree, a special five-year combined medical and graduate program leading to the M.S. and M.D. degrees, graduate studies in the basic sciences leading to the M.S. and Ph.D. degrees, programs in medical technology leading to the B.S. and M.S. degrees, a two-year program in radiologic technology, an internship in hospital dietetics, and training in occupational therapy, cytotechnology, and orthoptic technique. The school's internship and residency programs provide more than 170 appointments to qualified physicians. Extensive postgraduate programs are conducted for physicians and medical technologists.

The Medical School's hospitals and clinics, located on the campus, provide teaching laboratories for clinical studies; 13,000 patients receive medical services and treatment annually in the school's hospitals; recorded visits to the school's outpatient clinics total 200,000 each year. The Medical School's research program is supported through funds provided by the state and Federal governments and by foundations and private donors; research grants total more than \$4,600,000 annually.

Curriculum in Medicine. The curriculum in medicine leading to the M.D. degree requires a minimum of three years of premedical studies, followed by four years of work at the Medical School.

A student entering the Medical School without a Bachelor of Arts or Bachelor of Science degree must complete the work required for one of these degrees at the University of Oregon or at the institution at which he received his premedical preparation, before entering upon the work of the third year in the Medical School.

The University of Oregon and most of the colleges and universities of the Pacific Northwest recognize credit earned by a student during his first two years at the Medical School as credit earned in residence toward the bachelor's degree.

A suggested premedical curriculum for students planning to enter the Medical School is presented on pages 190-191 of this Catalog.

Curriculum in Medical Technology. The curriculum in medical technology leading to the bachelor's degree is a four-year program, including three years of work on the Eugene campus of the University, followed by one year at the Medical School. See page 190 of this Catalog.

Medical School Catalog. A separate catalog, containing detailed information concerning the curriculum in medicine, may be obtained on request.

School of Music

ROBERT M. TROTTER, Ph.D., Dean of the School of Music.

MAX D. RISINGER, M.A., Assistant Dean of the School of Music.

Professors: E. A. CYKLER, GEORGE HOPKINS, R. E. NYE, JANE THACHER (emeritus), R. M. TROTTER, R. S. VAGNER.

Associate Professors: EXINE A. BAILEY, F. W. BITTNER, GEORGE BOUGHTON, J. M. GUSTAFSON, J. R. HLADKY, HOMER KELLER, I. D. LEE, M. D. RISINGER.

Assistant Professors: R. G. CUNNINGHAM, MILTON DIETERICH, PAUL EARLS, JOHN HAMILTON, LAWRENCE MAVES, N. E. WILSON, W. C. WOODS.

Instructors: GABRIEL CHODOS, WALTER MARTIN, W. R. MERCER, P. B. MOORE, WILLIAM ROST, RICHARD TROMBLEY, DOROTHY WILSON.

Assistants: DAVID COOK, ARTHUR DIMOND, MARGARET GATES, DEAN KENNEDY, GARY MARTIN, GEORGE MOWRY, DON PORTER, BARBARA POSSMAN, LARRY SOWELL, ROBERT WARE.

IN THE SCHOOL OF MUSIC, students learn by performing and by listening to music, by analyzing musical style, and by examining the historical contexts—artistic, philosophical, social, political, technological—in which our musical heritage has developed. Courses and curricula are planned to provide a vital unity of musical education and technical training through emphasis on the juncture where ideas and understanding meet direct experience of musical beauty.

The school recognizes two basic obligations: (1) the preparation of professional musicians for careers as performers, teachers, composers, scholars, and critics; (2) as a part of the University's program of liberal education, instruction in the history and understanding of music for all students and instruction in musical performance for students interested in performance as an avocation.

A department of music was established at the University of Oregon in 1886. The School of Music was organized in 1902, and was admitted to membership in the National Association of Schools of Music in 1928; the standards of the school are in accordance with the standards set by the association.

Instruction for Nonmajors. The following courses offered by the School of Music are planned especially for nonmajor students who have had little or no previous musical instruction: Introduction to Music and Its Literature (Mus 201, 202, 203); Music Fundamentals (Mus 321, 322); Listening with Understanding (Mus 450); The Music of Bach and Handel (Mus 451); The Classic Symphony and Sonata (Mus 452); Introduction to Opera (Mus 453); Introduction to Twentieth-Century Music (Mus 454).

Nonmajor students who meet proficiency requirements may also enroll for private performance instruction and for work in several ensemble groups, including band, orchestra, chorus, chamber ensemble, and opera workshop.

Admission to Major Curricula. The major curricula in music are organized on an upper-division and graduate basis. Preparation for the major consists of two years of work in the College of Liberal Arts, under the guidance of a faculty adviser from the School of Music. The lower-division program includes introductory work in music history, theory, and performance, in addition to studies in the arts and sciences providing a broad intellectual basis for advanced work in the music major.

It is important that high-school students planning to major in music acquire, before entering the University, a thorough knowledge of standard musical sym-

bols and terminology, some knowledge of the piano keyboard, considerable proficiency in performance, and as wide an acquaintance as possible with great music.

During registration week, all new students are given auditions to determine their eligibility for private performance studies and examinations in basic musical grammar and keyboard knowledge to test their aptitude and readiness for introductory theoretical studies (information concerning these examinations may be obtained from the School of Music office). Exceptionally well-prepared and gifted students may be granted advanced placement or exemption from certain introductory studies on the basis of the examinations.

Because the upper-division program is planned in continuity with basic courses taken during the first two years, students planning to major in music at the University of Oregon are strongly advised to enter the University as freshmen. Students transferring from other institutions with preprofessional preparation differing from the University pattern may, however, be admitted to the professional curriculum if they show satisfactory proficiency by examination.

The proficiency examinations are required of all students, including transfers and students who have taken their lower-division work at the University, before admission to upper-division major programs (information concerning these examinations may be obtained from the School of Music office).

Facilities. The School of Music is housed in a building complex designed for instruction, practice, and performance—including an auditorium seating 600 persons, rehearsal rooms, studio-offices, classrooms, and more than fifty practice rooms. The school's equipment includes a two-manual Wittmayer concert harpsichord, a two-manual Schlicker organ, a four-manual Reuter organ, and a number of Steinway grand pianos. The University Theater in Villard Hall provides facilities for operas and other stage productions.

The music holdings of the University Library include a large collection of scores, complete critical editions of the works of the great composers, standard reference works, and extensive collections of periodicals, recordings, and books on music. The music collection is supported by gifts from Phi Beta and Mu Phi Epsilon and a bequest from the late Matthew H. Douglas, former University librarian. Through acquisitions under the Farmington Plan, the Library has a particularly strong and growing collection of contemporary foreign books on music.

Musical Organizations. The University Symphony Orchestra, the University Singers, the University Chorale, University bands, and the Opera Workshop offer membership and performance opportunities to all qualified students. Collegium Musicum, a vocal-instrumental group, provides opportunity for the study of mediaeval, Renaissance, and baroque music. The work of these organizations is planned to complement the theoretical and historical courses offered by the school.

Concerts and Recitals. Frequent concerts and recitals are presented on the campus throughout the year, by visiting artists, members of the faculty of the School of Music, and advanced music students. Regularly scheduled concerts include performances by artists of international fame sponsored by the Eugene-University Civic Music Association and by the University Trio, three artist members of the School of Music faculty. Music majors are required to attend at least thirty campus musical events each year during their residence.

Music Fees. Music students pay special fees, in addition to regular registration fees, for private performance instruction. These fees are due at the time of registration each term.

Fees for private instruction in piano, voice, violin, cello, organ, and harpsichord are: one half-hour lesson a week, \$30.00 per term; two half-hour lessons a week, \$50.00 per term.

Fees for private instruction in wind and percussion instruments are: one half-hour lesson a week, \$20.00 per term; two half-hour lessons a week, \$40.00 per term.

Fees for the use of practice rooms, paid by all students enrolled for private instruction, are: \$4.00 per term for one hour a day (\$2.50 for rooms without a piano); \$7.00 per term for two hours (\$5.00 without a piano); \$10.00 per term for three hours; \$12.00 per term for four hours. The organ practice fee is \$10.00 per term for one hour a day.

Curricula in Music

THE SCHOOL OF MUSIC offers undergraduate curricula leading to the Bachelor of Arts and Bachelor of Music degrees and graduate work leading to the Master of Arts and Master of Music degrees.

In the undergraduate program, the candidate for the B.A. degree takes approximately one-third of his work in music and two-thirds in fields outside the school. B.A. candidates are advised to plan their programs to broaden their understanding of music in its relations to other humanistic fields; studies in art, philosophy, history, languages and literature, speech and drama, and the dance are especially recommended.

The curricula leading to the B.Mus. degree are more rigorously professional; the student takes approximately two-thirds of his work in the School of Music and one-third in fields outside the school.

The programs outlined below show only the minimum requirements; additional studies may be required in the light of individual needs.

Lower-Division Major Requirements. Completion of the following lower-division work in music is required for admission to all upper-division degree programs:

	First Year	Term Hours
Music Theory I (Mus 121, 122, 123).....		12
Ensemble (selected from Mus 195, Mus 196, Mus 197).....		3
Performance Studies (Private Instruction) (Mus 190).....		3
	Second Year	
Music Theory II (Mus 221, 222, 223).....		9
Keyboard Harmony (Mus 224, 225, 226).....		3
History of Music (Mus 204, 205, 206).....		9
Ensemble (selected from Mus 195, Mus 196, Mus 197).....		3
Performance Studies (Private Instruction).....		3

All entering students are required to pass a test in piano proficiency or enroll in Basic Piano (Mus 50) until they have attained the required proficiency. The test must be passed before enrollment in Music Theory II.

History of Western Civilization (Hst 101, 102, 103) *or* Problems of Philosophy (Phl 201), Elementary Ethics (Phl 202), Elementary Aesthetics (Phl 204) is recommended for the satisfaction of the social science group requirement; General Psychology (Psy 201, 202), Psychology of Adjustment (Psy 204), with laboratory (Psy 208, 209, 210), is recommended for the satisfaction of the science group requirement.

Candidates for the B.A. degree and voice majors working toward the B.Mus. degree must acquire proficiency in French, German, or Italian equivalent to that expected after two years of college study of the language.

Aesthetics (Phl 204) and either Introduction to the History of Art (AA 204, 205, 206) or World Literature (Eng 107, 108, 109) are required for all candidates for the B.A. degree.

All candidates for the B.Mus. degree specializing in performance must, during their lower-division years, attain performance proficiency equivalent to that required for the completion of Mus 290.

Upper-Division Major Requirements. Completion of the following upper-division work is required for all candidates for a bachelor's degree with a major in music:

	Term Hours
Music before 1600 (Mus 360), Music from 1600 to 1750 (Mus 361), Avant-garde Music in the 20th Century (Mus 362).....	9
Music Literature (400 level).....	3
Form & Analysis (Mus 330, 331, 332).....	6
Upper-division music electives.....	9

All candidates for the B.A. degree must, in addition, complete a senior project demonstrating a satisfactory level of achievement as performer, scholar, or composer.

During their upper-division years, candidates for the B.Mus. degree in all specialties must, in addition: (1) complete a minimum of 12 term hours in private performance study on a major instrument or in voice and achieve a proficiency equivalent to that required for the completion of Mus 290; (2) complete a minimum of 3 term hours of work with an ensemble group. Additional requirements in the several specialties are as follows:

Performance. (1) Achievement of proficiency on a major instrument or in voice equivalent to that required for the completion of Mus 490; (2) senior recital.

Music Theory. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434); (2) Composition (Mus 340, 341, 342); (3) Instrumentation and Orchestration (Mus 336, 337, 338); (4) upper-division theory or history courses, 6 term hours; (5) senior lecture-recital.

Composition. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434); (2) Composition (Mus 340, 341, 342), Composition (Mus 440, 441, 442); (3) Instrumentation and Orchestration (Mus 336, 337, 338); (4) senior presentation of an original work.

School Music, All Fields. (1) Satisfaction of education requirements for an Oregon secondary-teaching certificate (see page 288); (2) 6 term hours selected from Choral Conducting (Mus 385, 386), Instrumental Conducting (Mus 387, 388); (3) class instruction in techniques (voice, 3 term hours; instrumental, 3 term hours) (Mus 392); (4) Special Teaching Methods (MuE 408), 3-4 term hours; (5) ensemble (Mus 395, Mus 396, Mus 397, or Mus 398), 3 term hours.*

School Music, Choral-General. (1) Choral Arranging (Mus 439); (2) Teaching of Music (MuE 317, 318, 319).

School Music, Elementary Choral. (1) Choral Arranging (Mus 439); (2) Teaching of Music (MuE 317, 318); (3) Choral Materials for Schools (MuE 444); (4) Teaching Language Arts in the Elementary School (Ed 332).

School Music, Instrumental. (1) Instrumentation and Orchestration (Mus 336, 337); (2) Instrumental Techniques (Class Instruction) (Mus 392), 6 term hours; (3) The General Music Program (MuE 426); (4) Special Teaching Methods (MuE 408), 3 hours; † (5) of the 12 term hours in private performance studies required of all B.Mus. candidates, 9 hours in Mus 390 or Mus 391.

School Music, Instrumental-Choral. (1) Instrumentation and Orchestration (Mus 336, 337); (2) The General Music Program (MuE 426); (3) Instrumental Techniques (Class Instruction) (Mus 392), 6 hours; (4) Special Teaching Methods (MuE 408), 2 hours; † (5) achievement of proficiency in piano or voice and in a string or wind instrument equivalent to that required for the completion of Mus 290.

* In addition to ensemble requirement for all B.Mus. candidates.

† In addition to special-methods requirement for all school-music specialists.

Minimum Requirements for Music Teaching. The minimum subject requirements for certification as a teacher of music in Oregon high schools, established by the Oregon State Department of Education, are as follows: for a basic certificate, granted after four years of college work, a *basic norm*—42 term hours, including work in each of the following areas: theory, composition, and keyboard harmony, music literature and history, conducting, analysis, and performance studies; for a standard certificate, granted after five years of college work, a *standard norm*—60 term hours, including the basic-norm requirement.

The norm requirements listed above will be mandatory after July 1, 1965. The minimum subject requirements for students who qualify for certification before this date are published in the 1962-63 University Catalog, page 264.

Honors. See HONORS COLLEGE, pp. 120-123.

Minor for Elementary Teachers. Majors in elementary education may, in consultation with advisers in the School of Music, arrange a minor in music, including selected courses in addition to work required for elementary teacher certification.

Graduate Work. The School of Music offers graduate work leading to the master's degree in the following fields: music theory, composition, performance (instrumental and vocal), and school music. The following degrees are granted:

Master of Arts—historical and theoretical studies, school music.

Master of Music—music theory, composition, performance, school music.

Candidates for the Doctor of Education degree in the School of Education may choose music education as a field of major specialization.

Application for admission to graduate study in the School of Music must be made both to the University Director of Admissions and to the dean of the School of Music. Two copies of a transcript of the student's previous college work must be submitted with the application, one to the Director of Admissions and one to the dean.

During fall-term registration week, all entering graduate students in music, including graduates of the University of Oregon, are required to take a series of examinations to test the adequacy of their preparation for graduate study. Deficiencies shown by the examinations must be remedied, through the auditing of undergraduate courses or by independent study, before the student is admitted to full graduate standing and candidacy for a graduate degree.

Music

LOWER-DIVISION COURSES

*Mus 50. **Basic Piano.** 1 hour any term (3 hours maximum credit.)

Classroom instruction for music majors who receive a low rating on a test of keyboard proficiency, and for other students ineligible for piano instruction at the level of Mus 190.

*Mus 51. **Basic Voice.** 1 hour any term (3 hours maximum credit.)

Classroom instruction for students ineligible for voice instruction at the level of Mus 190.

Mus 121, 122, 123. **Music Theory I.** 4 hours each term.

Study of diatonic functional triadic harmony, including modulation to related keys, secondary dominants, two-part counterpoint. Written work correlated with sight singing, analysis, aural comprehension, and keyboard application. Chodos, Dieterich, Earls, Maves, Rost.

* No-grade course.

Mus 190. Performance Studies (Private Instruction). 1-4 hours any term.

Individual instruction in the technical and stylistic aspects of artistic solo performance. Students specializing in performance normally enroll for two half-hour lessons a week (2 term hours of credit) in their major instrument each term during their undergraduate years. Maximum credit in performance studies for nonmajors, 12 term hours; for candidates for B.A. degree with a major in music, 24 term hours, including not more than 12 hours during freshman and sophomore years. Information concerning required levels of proficiency at each level (Mus 190 through Mus 590) may be obtained in the School of Music office. Prerequisite: audition.

Piano—Bittner, Chodos, Hopkins, Woods.	Viola—Boughton.
Voice—Bailey, Martin, N. E. Wilson.	Cello—Hladky.
Organ—Hamilton.	String Bass—Hladky.
Harpsichord—Hamilton.	Woodwind Instruments— Cunningham, Trombley, Vagner.
Violin—Boughton, Maves.	Brass Instruments—Lee, Rost.
	Percussion Instruments—Mercer.

Mus 195. Band. 1 hour each term (6 hours maximum credit).

Fall: marching band, laboratory band; winter and spring: concert band, symphonic band. No prerequisites for marching band; audition required for laboratory, concert, and symphonic band. Lee, Vagner.

Mus 196. Orchestra. 1 hour each term (6 hours maximum credit).

Prerequisite: audition; consent of instructor. Boughton.

Mus 197. Chorus. 1 hour each term (6 hours maximum credit).

Prerequisite: audition; consent of instructor. Risinger, Wilson, Gustafson.

Mus 201, 202, 203. Introduction to Music and Its Literature. 3 hours each term.

Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles. For nonmajors; music majors enroll in Mus 204, 205, 206.

Mus 204, 205, 206. History of Music. 3 hours each term.

Fall: basic stylistic concepts; the classical period through Beethoven. Winter: the romantic period through Brahms and Mahler. Spring: conservative trends in the twentieth century. Primarily for music majors. Not open to students who have had Mus 201, 202, 203. Prerequisite: Mus 121, 122, 123.

Mus 221, 222, 223. Music Theory II. 3 hours each term.

Harmonic, melodic, rhythmic, and basic formal practices since 1700. Written work correlated with sight singing, analysis, and aural comprehension. Prerequisite: Mus 123 or equivalent. Bittner, Earls, Maves.

Mus 224, 225, 226. Keyboard Harmony. 1 hours each term.

Keyboard application of the theoretical principles studied in Mus 221, 222, 223; exercises in figured-bass realization, modulation, transposition, and score reading; development of extempore playing. To be taken concurrently with Mus 221, 222, 223. Prerequisite: Mus 123 or equivalent; satisfactory rating in test of keyboard proficiency. Earls.

Mus 290. Performance (Private Instruction). 1-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 190. For further information, see Mus 190.

UPPER-DIVISION COURSES

Mus 321, 322. Music Fundamentals. 2 hours each term.

Study of musical notation and terminology; rudiments of sight singing and ear training; introduction to simple melodic and rhythmic instruments. Designed to provide students without previous musical training with some insight into musical language and basic performance skills. Not open to music majors. Required in the elementary education program and for majors in recreation leadership and in camping and outdoor education. 1 recitation; 1 two-hour laboratory. Gustafson, Nye, staff.

Mus 330, 331, 332. **Form and Analysis.** 2 hours each term.

Stylistic analytical technique, including formal structures and harmonic, melodic, and rhythmic practices, applied to compositions from representative periods and media. Prerequisite: Mus 223. Earls.

Mus 333, 334, 335. **Counterpoint I.** 2 hours each term.

Techniques of two- and three-voice contrapuntal writing as exemplified in sixteenth-, eighteenth-, and twentieth-century practice. Prerequisite: Mus 223. Keller.

Mus 336, 337, 338. **Instrumentation and Orchestration.** 2 hours each term.

Study of the instruments of the orchestra and band; the practical art of scoring for various instrumental choirs and large ensembles. Prerequisite: Mus 223. Keller.

Mus 340, 341, 342. **Composition I.** 2 hours each term.

Composition in the smaller forms for piano, voice, and small ensembles. Prerequisite: Mus 223. Keller.

Mus 360. **Music Before 1600.** 3 hours.

Plainsong; sacred and secular monody and polyphony through Lassus, the Gabriellis, Dowland, and Gibbons; instrumental music of the sixteenth century; music of the Reformation. Primarily for music majors. Prerequisite: Mus 206. Hamilton.

Mus 361. **Music from 1600 to 1750.** 3 hours.

Analysis of representative works from Monteverdi to Domenico Scarlatti. Differentiation of musical styles; various national schools; performance practices and musical thought; development of forms and procedures that continue into the twentieth century, such as opera, concerto, fugue, sonata, etc. Primarily for music majors. Prerequisite: Mus 360. Hamilton.

Mus 362. **Avant-garde Music in the Twentieth Century.** 3 hours.

The concept of newness in music viewed historically and in the styles of representative composers from Satie and Debussy to Stockhausen and Cage. Primarily for music majors. Prerequisite: Mus 361. Hamilton, staff.

Mus 385, 386. **Choral Conducting.** 2 hours each term.

Study of conducting techniques, with emphasis on practical application to choral organizations; score reading; analysis and interpretation of choral literature. Conducting experience with laboratory chorus. Prerequisite: Mus 223; consent of instructor. Gustafson, Risinger.

Mus 387, 388. **Instrumental Conducting.** 2 hours each term.

Baton techniques, with emphasis on practical application to instrumental organizations; score reading; general problems of the conductor of larger instrumental ensembles. Conducting experience with laboratory ensembles. Prerequisite: Mus 223; consent of instructor. Lee, Vagner.

Mus 390. **Performance Studies (Private Instruction).** 2-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 290. For further information, see Mus 190.

Mus 391. **Performance Studies (Secondary Instrument).** 2 hours any term.

Prerequisite: successful completion of Mus 290. For instructors, see Mus. 190.

Mus 392. **Instrumental Techniques (Class Instruction).** 1 hour any term.

Elementary instruction in orchestral instruments and voice. Primarily for majors in school music, instrumental option. 2 recitations.

Violin and Viola. Boughton.	Oboe and Bassoon. Cunningham.
Clarinet and Saxophone. Vagner, Cunningham.	Flute. Trombley.
Trumpet and Trombone. Lee.	French Horn. Lee.
Cello and String Bass. Hladky.	Percussion Instruments. Mercer.
	Voice. Gustafson.

Mus 394. **Chamber Ensemble.** 1 hour each term (6 hours maximum credit).

Study of masterpieces of music through small group rehearsal. For stringed-

- instrument and wind-instrument players, pianists, and singers. Prerequisite: audition.
- Mus 395. **Band.** 1 hour each term (6 hours maximum credit).
Fall: marching band, laboratory band; winter and spring: concert band, symphonic band. Prerequisite: marching band, upper-division standing; laboratory, concert, and symphonic band, upper-division standing and audition. Lee, Vagner.
- Mus 396. **Orchestra.** 1 hour each term (6 hours maximum credit).
Prerequisite: upper-division standing: audition. Boughton.
- Mus 397. **Chorus.** 1 hour each term (6 hours maximum credit).
Prerequisite: upper-division standing; audition. Gustafson, Risinger, Wilson.
- Mus 398. **Opera Workshop.** 1 hour each term (6 hours maximum credit).
Study of traditional and contemporary operatic literature through analysis, rehearsal, and performance of complete operas and excerpts; training in stage movement, diction, and rehearsal techniques. Prerequisite: upper-division standing; consent of instructor. Wilson.
- Mus 405. **Reading and Conference.** Hours to be arranged.
Prerequisite: consent of dean.
- Mus 417, 418, 419. **Advanced Harmony.** 2 hours each term.
Study of the harmonic practices of the late nineteenth and the twentieth centuries. Prerequisite: Mus 335.
- Mus 490. **Performance Studies (Private Instruction).** 2-4 hours any term.
Prerequisite: proficiency required for satisfactory completion of Mus 390; consent of instructor. For further information, see Mus 190.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Mus 408. **Seminar.** (G) Hours to be arranged.
- Mus 433, 434. **Counterpoint II.** (G) 2 hours each term.
Writing of instrumental polyphony, based on the style of J. S. Bach; study of invertible counterpoint and other contrapuntal techniques, with application in the canon, two- and three-part invention, and fugue. Prerequisite: Mus 335. Earls.
- Mus 436, 437. **Advanced Orchestration.** (G) 2 hours each term.
Continuation of Mus 338. Emphasis on the scoring of original work and on the arranging of major works from other media; study of various styles of scoring by master composers. Prerequisite: Mus 338. Keller.
- Mus 438. **Band Arranging.** (G) 3 hours.
Scoring for larger combinations of wind instruments, including the concert band, the marching band, and the stage band. Prerequisite: Mus 337. Rost, Vagner.
- Mus 439. **Choral Arranging.** (G) 3 hours.
Techniques of arranging for various types of choral groups, both accompanied and a cappella. Prerequisite: Mus 223. Dieterich.
- Mus 440, 441, 442. **Composition II.** (G) 2 hours each term.
Composition in larger forms for large instrumental combinations. Prerequisite: Mus 342. Keller.
- Mus 450. **Listening with Understanding.** (g) 3 hours, fall or winter.
Introduction to basic concepts of a rational approach to music listening; collateral reading; class study of selected masterpieces; laboratory. Trotter.
- Mus 451. **The Music of Bach and Handel.** (g) 3 hours, winter.
Theatrical, churchly, and chamber styles in Germany, France, and Italy, as represented by selected masterpieces of Bach and Handel; concerto grosso, dance suite, organ chorale, cantata, oratorio, and mass. Collateral reading;

laboratory. Prerequisite: Mus 203 or Mus 450. Offered alternate years. Trotter.

Mus 452. **The Classic Symphony and Sonata.** (g) 3 hours spring.

The classic symphony and sonata as developed by Haydn, Mozart, and Beethoven; elements of style in the Viennese classic period, and its legacy in the nineteenth century. Collateral reading; laboratory. Prerequisite: Mus 203 or Mus 450. Offered alternate years. Trotter.

Mus 453. **Introduction to Opera.** (g) 3 hours winter.

The fusion of theatrical and musical modes of dramatic expression; class study of such masterpieces as *Le nozze di Figaro*, *Carmen*, *Otello*, *Tristan und Isolde*, *Wozzek*, *Pelleas et Mélisande*, *The Rake's Progress*. Collateral reading; laboratory. Prerequisite: Mus 203 or Mus 450. Offered alternate years. Trotter.

Mus 454. **Introduction to Twentieth-Century Music.** (g) 3 hours spring.

Evolution and revolution in musical style since Debussy and Mahler; study of selected masterpieces by such composers as Stravinsky, Bartok, Schoenberg, Copland, and Varèse. Collateral reading; laboratory. Prerequisite: Mus 203 or Mus 450. Offered alternate years. Trotter.

Mus 455, 456, 457. **Orchestral Literature.** (G) 2 hours each term.

Major types of orchestral music, from the eighteenth to the twentieth century; dance suite, symphony, tone poem, descriptive suite; pieces for string orchestra. Prerequisite: Mus 361.

Mus 458. **Organ Literature.** (G) 3 hours.

The organ in church and concert; organ repertoire from the fifteenth century to the present. Prerequisite: Mus 361. Hamilton.

Mus 459. **Wind-Instrument Literature.** (G) 3 hours.

Survey of literature for woodwinds and brass instruments from the sixteenth century to post-World War II; emphasis on style as it affects performance and on the development of bases for critical judgment. Prerequisite: Mus 361. Vagner.

Mus 460. **Song Literature.** (G) 3 hours.

Solo songs with accompaniment; the lute air and Purcell; the nineteenth-century art song in Germany and France; twentieth-century British, American, and continental song literature; development of bases for sound critical judgment through study of text, voice, and accompaniment. Prerequisite: Mus 361. Bailey, Wilson.

Mus 461, 462, 463. **Chamber-Music Literature.** (G) 2 hours each term.

Basic literature of the string quartet and other ensembles using piano and strings; emphasis on style as it affects performance and on the development of bases for critical judgment. Prerequisite: Mus 361. Boughton, Hladky.

Mus 464, 465, 466. **Piano Literature.** (G) 2 hours each term.

Solo sonatas, character pieces, the dance suite, theme and variations, from Bach to the present; original works for four hands and for two pianos; keyboard idioms and musical styles; development of bases for sound critical judgment. Prerequisite: Mus 361. Woods.

Mus 467, 468, 469. **Church Music Literature.** (G) 2 hours each term.

The functions of music in the worship service; liturgies of the Western church; hymnology; history of church and organ architecture; repertoire and style in choir and solo performance. Prerequisite: Mus 361. Wilson.

Mus 485, 486. **Advanced Conducting.** (G) 2 hours each term.

Prerequisite: Mus 386 or Mus 388; consent of instructor. Ringer, Vagner.

Mus 493. **Collegium Musicum.** (G) 1 hour each term.

Study of music literature of the mediaeval, Renaissance, and baroque periods through rehearsals and extensive sight reading; vocal and instrumental repertoire. Trombley.

GRADUATE COURSES

- *Mus 501. **Research.** Hours to be arranged.
- *Mus 503. **Thesis.** Hours to be arranged.
- Mus 505. **Reading and Conference.** Hours to be arranged.
- Mus 507. **Seminar.** Hours to be arranged.
Composition.
Music History.
Music Theory.
- Mus 511, 512. **Introduction to Graduate Study.** 3 hours each term.
Methods of research and use of bibliographical materials in music. Trombley.
- Mus 533, 534. **Twentieth-Century Counterpoint.** 2 hours each term.
Techniques of present-day contrapuntal practice; application in larger contrapuntal forms. Prerequisite: Mus 434. Earls.
- Mus 540, 541, 542. **Composition for Electronic Media.** 3 hours each term.
Electronic-music instruments and techniques; creative use of sound generators and tape-recording equipment. Prerequisite: graduate standing; consent of instructor. Keller, Hunter.
- Mus 590. **Performance Studies (Private Instruction).** 2-4 hours any term.
Prerequisite: proficiency required for satisfactory completion of Mus 490; sufficient talent to justify the undertaking of graduate studies in performance. For instructors, see Mus 190.

Music Education

UPPER-DIVISION COURSES

- MuE 317. **Teaching of Music: Elementary School.** 3 hours.
Survey of methods and materials used in the teaching of vocal music in the schools, with emphasis on supervision. Gustafson, Nye.
- MuE 318. **Teaching of Music: Junior High School.** 3 hours.
Continuation of MuE 317. Gustafson, Nye.
- MuE 319. **Teaching of Music: Senior High School.** 3 hours.
Continuation of MuE 318. Gustafson, Nye.
- MuE 383. **Music Methods for Elementary Teachers.** 3 hours.
Methods of teaching music activities in elementary schools. Required for students preparing for elementary-school teaching. Prerequisite: Mus 321, 322 or consent of instructor. Gustafson, Nye.
- MuE 405. **Reading and Conference.** Hours to be arranged.
Prerequisite: consent of dean.
- MuE 408. **Special Teaching Methods.** 1-3 hours any term.
Parallels student teaching in the elementary and secondary schools. Observation, reports, and conferences on materials and procedures used in music teaching. Instrumental: Cunningham, staff; vocal: Gustafson, staff.
- *Ed 415. **Student Teaching: Grades 1-6.** 3-15 hours.
- *Ed 416. **Student Teaching: Junior High School.** 3-15 hours.
- *Ed 417. **Student Teaching: Senior High School.** 3-15 hours.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- MuE 407. **Seminar.** (G) Hours to be arranged.

* No-grade course.

- MuE 426. The General Music Program.** (G) 3 hours.
The general music class in elementary and secondary schools; organization, content, and teaching procedures. Gustafson.
- MuE 444. Choral Materials for Schools.** (G) 2 hours.
Repertoire for choral groups in secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Risinger.
- MuE 445. String Materials for Schools.** (G) 2 hours.
Repertoire for orchestra and other stringed-instrument groups in elementary and secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Boughton.
- MuE 446. Wind-Instrument Materials for Schools.** (G) 2 hours.
Repertoire for bands and other wind-instrument groups in elementary and secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Cunningham, Lee, Wagner.

GRADUATE COURSES

- *MuE 501. **Research.** Hours to be arranged.
- *MuE 503. **Thesis.** Hours to be arranged.
- MuE 505. **Reading and Conference.** Hours to be arranged.
- MuE 507. **Seminar.** Hours to be arranged.
- MuE 532. **Basic Concepts in the Teaching of Music.** 3 hours.
Problems and issues in the teaching of music at all levels. Prerequisite: consent of instructor. Gustafson, Nye.
- MuE 533. **Music in the Elementary School.** 3 hours.
Theory, supervision, curriculum, materials, and procedures of vocal-music teaching in the elementary school. Gustafson, Nye.
- MuE 534. **Music in the Junior High School.** 3 hours.
Continuation of MuE 533. Gustafson, Nye.
- MuE 535. **Music in the Senior High School.** 3 hours.
Curricula, organization, methods, and materials in senior high-school music, both vocal and instrumental. Gustafson, Nye.
- MuE 536. **Administration of School Music.** 3 hours.
Principles underlying a sound policy in the administration of school music programs; budgets, personnel, curriculum, facilities, public relations. Gustafson, Nye.
- MuE 537. **Comparative Music Pedagogy.** 3 hours.
Comparative study of the teaching of school music in different cultures, designed to provide the basis for critical judgment of curricula and methods. Cykler.

*No-grade course.

School of Nursing

JEAN E. BOYLE, M.N., Director of the School of Nursing.

THE UNIVERSITY OF OREGON has offered professional instruction in nursing in Portland since 1919; a degree curriculum was established in 1926. Until 1932 the program in nursing was administered through the Portland Division of the School of Sociology and the Portland School of Social Work. When the social-work program was discontinued in 1932, instruction in nursing was transferred to the University of Oregon Medical School, where it was offered through the Department of Nursing Education. A graduate program, leading to the Master of Science degree, was established in 1955. In the fall of 1960, the department was reorganized as the University of Oregon School of Nursing.

The School of Nursing offers two curricula which lead to the Bachelor of Science degree—one for basic students with no previous preparation in nursing and one for registered nurses from diploma schools of nursing. These programs include preparation for beginning positions in public health nursing. An advanced curriculum leading to the Master of Science degree provides graduate study and advanced professional education.

The first year of the basic degree program is offered on the Eugene campus of the University of Oregon (see pages 191-192) and by other accredited colleges and universities. The following three years of the basic program and all other nursing programs of the School of Nursing are offered on the campus of the University of Oregon Medical School in Portland. The School of Nursing utilizes the teaching resources of the hospitals and clinics of the Medical School, the Division of Continuing Education of the Oregon State System of Higher Education and Portland State College.

Upper-division courses in public health nursing are offered on the Eugene campus for senior students in the School of Nursing who are assigned to health agencies in Eugene for clinical experience.

The programs of the School of Nursing are accredited by the National Accreditation Service and the Oregon State Board of Nursing; the school is a member of the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing.

Detailed information concerning the School of Nursing is published in a separate catalog, copies of which will be furnished by writing to: Director, University of Oregon School of Nursing, 3181 S.W. Sam Jackson Park Road, Portland, Oregon.

Department of Military and Air Science

EMBERT A. FOSSUM, B.A., Colonel, U.S. Army; Head of Department; In Charge of Army R.O.T.C. Program.

JOHN W. KOCHER, M.Crim., Lt. Colonel, U.S. Air Force; In Charge of Air Force R.O.T.C. Program

THE DEPARTMENT OF MILITARY AND AIR SCIENCE is organized as a regular instructional division of the University. The department consists of a U. S. Army Instructor Group, Senior Division Reserve Officers' Training Corps, offering instruction in military science, and a unit of the Air Force Reserve Officers' Training Corps, offering instruction in air science.

The mission of the Department of Military and Air Science is to select and prepare students, through a program of instruction at the University of Oregon, to serve as commissioned officers in the United States Army or the United States Air Force, and to promote a better understanding of problems and policies of national security. The program includes a two-year Basic Course and a two-year Advanced Course.

Basic Course. The two-year Basic Course is a lower-division (freshman and sophomore) elective for men students who are under 23 years of age on first enrollment in the University and who are citizens of the United States. Students who are members of any of the reserve forces of the armed services or who have served on active duty in any of the armed services should check with the Department of Military and Air Science concerning their eligibility to take the Basic and Advanced Courses. Applicants who wish to take the Basic and Advanced Courses must meet prescribed physical standards. A student accepted for enrollment in the Basic Course may be deferred from the draft; acceptance for enrollment in the Advanced Course carries automatic deferment.

Advanced Course. The third and fourth years of military instruction, plus a summer training period, constitute the Advanced Course. Completion of the Advanced Course and academic requirements for graduation qualifies the student for appointment as a commissioned reserve officer.

The summer training period is conducted at one of the regular installations of the Army or Air Force, and provides application of theory and familiarization with weapons, operations, organizational methods, and installational activities. The training is normally taken in the summer between the junior and senior years.

Students enrolled in the Advanced Course are paid commutation in lieu of subsistence for a total period not to exceed 595 days (the current rate is 90 cents a day). All payments are in addition to benefits received by veterans under the G.I. Bill of Rights. Advanced Course students are issued all required textbooks and uniforms. Students attending summer camp are rationed and quartered, are paid at the rate for enlisted men and airmen of the first grade, and receive a travel allowance of 5 cents a mile to and from camp.

Admission to Advanced Course. Selection for enrollment in the Advanced Course is made from among applicants who meet certain minimum requirements. For eligibility, the student must:

- (1) Be accepted by the University of Oregon as a regularly enrolled student.
- (2) Be selected for advanced training by R.O.T.C. and University officials with the concurrence of the President of the University of Oregon.
- (3) Be able to complete all requirements for appointment as a second lieutenant before reaching 28 years of age. (If scheduled for Air Force flight training, the student must be able to complete all requirements for appointment as a reserve officer before reaching the age of 26 years, 6 months.)
- (4) Have successfully completed such survey or general screening tests as may be prescribed.
- (5) Have completed, or received a waiver of, Basic Course requirements.
- (6) Be a citizen of the United States.
- (7) Be physically qualified for appointment as a commissioned officer.
- (8) Execute a written agreement with the United States government to complete the Advanced Course, including attendance at summer camp, and to satisfy the service obligation after graduation.

Relation of R.O.T.C. to Selective Service. Enrollment in the R.O.T.C. does not waive the requirements for registration under the Universal Military Training and Service Act of 1951; all students who are 18 years of age must register with their local draft boards. Students who can qualify as prospective candidates for the Advanced Course may be granted R.O.T.C. deferment after completion of one term of the Basic Course. R.O.T.C. deferment continues through the completion of the Advanced Course and of academic requirements for a bachelor's degree, provided the student remains in good standing. Students receiving R.O.T.C. deferment are required to satisfy their service obligation as commissioned officers after graduation and appointment.

Military Science

Professor: COLONEL E. A. FOSSUM.

Assistant Professors: MAJOR W. J. GOTSCHALL, CAPTAIN K. W. CHAMPION, CAPTAIN H. C. TODD.

Administrative Specialist: MASTER SERGEANT J. N. BARNETT.

Technical Specialists: MASTER SERGEANT L. M. O'DONNELL, STAFF SERGEANT J. W. THOMPSON.

THE MILITARY SCIENCE PROGRAM has as its principal objective the production of junior officers who, by their education, training, and inherent qualities, are capable of filling positions of leadership in the active and reserve components of the United States Army. For students who take only the Basic Course, a second objective is to provide a broad concept of the role and problems of the United States Army and the part it plays in national defense.

Students who complete the Advanced Course, receive a baccalaureate degree from the University, and qualify for designation as distinguished military graduates may apply for appointment as commissioned officers in the regular Army.

Flight Training. A program of flight training is offered, without charge, to selected students who are enrolled in Military Science IV (Mil 411, 412, 413) or have completed Military Science IV and are still enrolled in the University as undergraduates. Information concerning eligibility requirements may be obtained in the Army R.O.T.C. office.

LOWER-DIVISION COURSES

Mil 111, 112, 113. **Military Science I.** 1 hour each term.

Organization of the Army and the Army R.O.T.C.; individual weapons and marksmanship; United States Army and national security; counterinsur-

gency ; leadership laboratory. Students enrolled must also take a course within the general academic area of effective communications, general psychology, science comprehension, or political institutions and political development which carries 2 or more term hours of credit and satisfies the University group requirement.

Mil 211, 212, 213. **Military Science II.** 1 hour each term.

Map and aerial photograph reading ; American military history ; introduction to basic tactics and techniques ; counterinsurgency ; leadership laboratory.

UPPER-DIVISION COURSES

Mil 311, 312, 313. **Military Science III.** 4 hours each term.

Leadership ; military teaching principles ; branches of the Army ; small-unit tactics and communications ; counterinsurgency ; precamp orientation ; leadership laboratory.

Mil 411, 412, 413. **Military Science IV.** 4 hours each term.

Operations ; logistics ; Army administration ; military law ; the role of the United States in world affairs ; counterinsurgency ; service orientation ; leadership laboratory.

Air Science

Professor : LIEUTENANT COLONEL J. W. KOCHER.

Assistant Professors : CAPTAIN G. C. FOX, CAPTAIN J. W. KENNY, FIRST LIEUTENANT W. E. CUNLIFFE.

Administrative Specialists : TECHNICAL SERGEANT V. B. THORNTON, STAFF SERGEANT L. L. TURNER, STAFF SERGEANT C. B. WOOD, AIRMAN FIRST CLASS G. F. McCAULEY.

THE AIR SCIENCE CURRICULUM has been designed to prepare students to assume the duties and responsibilities of junior officers in the Air Force. It consists of two major activities : (1) leadership laboratory ; (2) classroom instruction.

The leadership laboratory provides the student with guided learning experiences in the application of leadership principles. All air science students are required to take one hour of leadership laboratory each week.

Air science students in the Basic Course must also satisfy the following classroom requirements :

(1) During the fall and winter terms of the first year and during the spring term of the second year—any regular University course, carrying 2 or more term hours of credit, which satisfies the University group requirements for the bachelor's degree and contributes to the professional education of an Air Force officer.

(2) During the spring term of the first year and the fall and winter terms of the second year—classroom instruction by members of the Air Science faculty.

Air science students in the Advanced Course must also satisfy the following classroom requirements :

(1) Throughout the two years of the Advanced Course, classroom instruction by the air science faculty.

(2) In addition, two courses in the departments of Political Science and Geography during the fourth year.

Between the junior and senior years, students attend a four-week summer camp.

During the senior year, students programmed for Air Force pilot training take flight training at a local F.A.A.-approved civilian flying school. The purpose is to provide flight instruction of sufficient scope to qualify the student in the basic principles of flying in aircraft of 65-200 horsepower. Flight training includes solo flying by the students.

The student qualifies for appointment as a commissioned reserve officer upon completion of the Advanced Course and the award of the baccalaureate degree. Students designated as distinguished military graduates may apply for appointment in the regular Air Force.

LOWER-DIVISION COURSES

AS 121. Air Science I. 1 hour fall.

Organization for national security; introductory survey of current aerospace systems and craft and their characteristics, nuclear weapons, current propulsion systems, defensive, strategic, and tactical operations and counterinsurgency; leadership laboratory. 2 lectures; 1 hour leadership laboratory.

AS 122. Air Science I. 1 hour winter.

Space environment, orbits and trajectories, space vehicle systems, propulsion and power sources, instrumentation and communication, guidance and control, ground support systems, manned space flight, space operations, present and future developments in astronautics; contemporary military thought; leadership laboratory. 2 lectures; 1 hour leadership laboratory.

AS 123. Air Science I. 1 hour spring.

Leadership laboratory, 1 hour a week. Students enrolled must also take a course which satisfies the University group requirement (see pages 71-72), contributes to the professional education of an Air Force officer, and carries 2 or more term hours of credit.

AS 221, 222. Air Science II. 1 hour each term, fall and winter.

Leadership laboratory, 1 hour a week. Students enrolled must also take a course which satisfies the University group requirement (see pages 71-72), contributes to the professional education of an Air Force officer, and carries 2 or more term hours of credit.

AS 223. Air Science II. 1 hour spring.

Examination of the factors of aerospace power; modern applications of the principles of war; major ideological conflicts and defense of the free world. Introduction to the Air Force as a profession, including professional, personal, and educational aspects and opportunities as they apply to the young officer. 2 lectures; 1 hour leadership laboratory.

UPPER-DIVISION COURSES

AS 311, 312, 313. Air Science III. 3 hours each term.

Growth and development of aerospace power. Nature of war; development of air power in the United States; mission and organization of the Defense Department; Air Force concepts, doctrine, and employment; astronautics and space operations; the future development of aerospace power. The United States space programs; vehicles, systems, and problems in space exploration. 3 class hours a week, 1 hour supervised research; 1 hour leadership laboratory.

AS 411, 412, 413. Air Science IV. 2 hours each term.

Weather and navigation; global relations of special interest to the Air Force officer, with emphasis on international relations and political geography; briefing for commissioned service. 2 lectures; 1 hour leadership laboratory.

Summer Sessions

PAUL B. JACOBSON, Ph.D., Director of Summer Sessions.

SUMMER SESSIONS, including an eight-week session and a full eleven-week term, supplement the regular sessions of the University. The summer program includes both undergraduate and graduate courses; special attention is given to the needs of teachers in the public schools.

Formal admission to the University is not required for enrollment in summer courses. However, credit for summer work will not be counted toward a degree from the University until the student qualifies for admission in accordance with regular procedures (see pages 65 ff).

A high-school graduate who does not qualify for admission to freshman standing on the basis of his high-school grade average or his score on a standard college aptitude test may qualify by demonstrating his ability to do University work through the successful completion of a full load of study in the summer session (see pages 65-66).

Detailed announcements of summer courses are published in a special Summer Session Catalog, issued annually in February. Copies will be furnished on request to the director of summer sessions.

Division of Continuing Education

JAMES W. SHERBURNE, Ph.D., Vice-Chancellor for Continuing Education.
DANIEL W. FULLMER, Ph.D., Director of Development and Evaluation.
WILLIAM R. BARROWS, B.A., Manager for Business Affairs.
RALPH W. STEETLE, M.A., Associate Dean ; Director of Divisional Relations.
R. DUANE ANDREWS, Ph.D., Director of Continuation Centers.
VIRON A. MOORE, Ed.D., Director of State-Wide Services.
LUKE F. LAMB, Ed.D., Director of Educational Media.
THOMAS DAHLE, Ph.D., Head of Eugene Continuation Center.

THE DIVISION OF CONTINUING EDUCATION of the State System of Higher Education administers adult-education and cultural programs and manages the state-wide extension of the instructional and service resources of the State System and its institutions. Higher-educational programs are offered for all residents of Oregon who are capable of profiting from this instruction.

Regularly organized courses are offered in many Oregon communities through continuation centers with offices on the campuses of the several institutions of the State System and in Salem.

The Office of State-Wide Services offers correspondence and televised courses and special programs for business, industry, and government agencies and educational programs in international affairs and alcohol studies.

The Office of Educational Media operates educational radio and television networks, including two radio stations and two television stations, with studios located in Eugene, Corvallis, Salem, and Portland, and provides audio-visual services for schools, colleges, and community groups. Audio-visual libraries are located in Corvallis, Ashland, La Grande, and Portland.

The headquarters of the Division of Continuing Education are located at 1633 S.W. Park Ave., Portland, Oregon.

Summary of Enrollment and Degrees Granted 1962-63

ENROLLMENT BY CLASS AND MAJOR, REGULAR SESSIONS, 1962-63

Division	Sp	Fr	So	Jr	Sr	Gr	Total
College of Liberal Arts:							
Lower Division	195	2,239	2,473	.....	.....	.....	4,907
Anthropology	7	8	41	56
Biology	33	16	97	146
Chemistry	15	17	70	102
East Asian Studies	5	4	.....	9
Economics	47	32	70	149
English	104	63	142	309
Foreign Languages	49	42	57	148
General Arts & Letters	10	5	.....	15
General Science	23	24	.....	47
General Social Science	67	38	.....	105
Geography	13	11	20	44
Geology	9	5	22	36
History	111	75	100	286
Mathematics	62	45	76	183
Medical Technology	38	27	11	.....	.....	76
Philosophy	11	8	20	39
Physics	17	8	45	70
Political Science	61	33	53	147
Pre dentistry	1	66	76	22	3	2	170
Prelaw	135	121	30	3	2	291
Pre medicine	4	132	128	39	20	5	328
Pre nursing	79	18	4	.....	1	102
Psychology	43	28	77	148
Sociology	64	60	66	190
Speech	30	24	39	93
Total, College of Liberal Arts	200	2,689	2,843	887	572	1,005	8,196
School of Architecture & Allied Arts	137	228	79	444
School of Business Administration	196	152	136	484
School of Education	175	129	327	631
School of Health, Phys. Ed. & Recreation	7	84	124	56	43	90	404
School of Journalism	38	26	27	91
School of Law	16	103	119
School of Music	31	29	51	111
Interdisciplinary Studies	50	50
Total, Eugene campus	207	2,773	2,967	1,520	1,195	1,868	10,530
Dental School (Portland)	*366
Medical School (Portland)	*395
School of Nursing (Portland)	*390
Total, University of Oregon	11,681

* Enrollment at the Dental School, the Medical School, and the School of Nursing is for the full school year, all sessions.

**ENROLLMENT BY PROFESSIONAL OBJECTIVE, EUGENE CAMPUS,
REGULAR SESSIONS, 1962-63**

Field	Men	Women	Total
Liberal arts & interdisciplinary studies	2,996	2,268	5,264
Architecture & allied arts	647	256	903
Business administration	1,054	191	1,245
Dentistry	164	6	170
Education	303	885	1,188
Health, physical education & recreation	217	187	404
Journalism	155	130	285
Law	384	26	410
Medicine	295	33	328
Music	115	116	231
Nursing	2	100	102
Total	6,332	4,198	10,530

ENROLLMENT BY SEX, ALL SESSIONS, 1962-63

Session	Men	Women	Total
Summer Session at Eugene, 1962	2,038	1,588	3,626
Fall term at Eugene, 1962-63	5,763	3,858	9,621
Winter term at Eugene, 1962-63	5,399	3,586	8,985
Spring term at Eugene, 1962-63	5,033	3,440	8,473
Net total, regular sessions at Eugene, 1962-63	6,332	4,198	10,530
Net all sessions, Portland schools, 1962-63	668	483	1,151
Net total, all sessions, University of Oregon, 1962-63	8,361	5,878	14,239

SUMMARY OF DEGREES GRANTED, 1962-63

Advanced degrees:		
Doctor of Philosophy		39
Doctor of Business Administration		3
Doctor of Dental Medicine		65
Doctor of Education		28
Doctor of Jurisprudence		2
Doctor of Medicine		68
Master of Arts		142
Master of Science		175
Master of Business Administration		11
Master of Education		195
Master of Fine Arts		8
Master of Landscape Architecture		1
Master of Music		17
Total, advanced degrees		754
Bachelor's degrees:		
Bachelor of Arts		371
Bachelor of Science		776
Bachelor of Architecture		25
Bachelor of Business Administration		26
Bachelor of Education		16
Bachelor of Interior Architecture		2
Bachelor of Landscape Architecture		2
Bachelor of Laws		21
Bachelor of Music		16
Total, bachelor's degrees		1,255
Total, degrees granted		2,009

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