

UNIVERSITY OF OREGON
168
REGULAR SESSION

Mary Everett

EUGENE, OREGON

c/o
9.19.73
1.31.74

CATALOG ISSUE
1971-72

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OREGON STATE SYSTEM OF HIGHER EDUCATION

UNIVERSITY OF OREGON BULLETIN

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**UNIVERSITY
OF OREGON
REGULAR
SESSION**

1971-72 CATALOG

EUGENE, OREGON

1745-1935

Table of Contents

	Page
OREGON STATE SYSTEM OF HIGHER EDUCATION	5
State System of Higher Education	5
State Board of Higher Education	6
Officers of Administration	7
ACADEMIC CALENDAR, 1971-72	9
UNIVERSITY STAFF	10
Officers of Administration	10
University Faculty	11
GENERAL INFORMATION	78
History of the University	78
Income	79
Campuses	79
Libraries	80
Museums and Collections	84
Official Publications	85
ACADEMIC REGULATIONS	87
Admission	87
Entrance Examinations	90
Degrees	90
Group Requirement	93
Honors	94
Academic Procedure	94
Tuition, Fees and Deposits	98
STUDENT LIFE AND WELFARE	104
Office of Student Services	104
New Student Week	105
Student Living	106
Student Health Center	109
Financial Aid	110
Erb Memorial Union	113
GRADUATE SCHOOL	114
Advanced Degrees	114
General Regulations	115
Degree Requirements	119
Fellowships	125
Graduate Work in Portland	126
Research Institutes	126
HONORS COLLEGE	132
COLLEGE OF LIBERAL ARTS	138
Interdepartmental Courses	139
Anthropology	142
Art History	148
Asian Studies	148
Biology	149
Chemistry	157
Classics, and Chinese and Japanese	163
Comparative Literature	169
Computer Science	170
Dentistry, Preparatory	172
Economics	173
English	178
General Arts and Letters	188
General Science	188
General Social Science	189
Geography	189
Geology	194
German and Russian	198
History	207
Home Economics	213
Industrial and Labor Relations	215
Latin American Studies	216
Linguistics	217

COLLEGE OF LIBERAL ARTS (continued)	Page
Mathematics	218
Medical Technology	226
Medicine, Preparatory	227
Nursing, Preparatory	227
Pharmacy, Preparatory	228
Philosophy	229
Physics	233
Political Science	237
Psychology	246
Religious Studies	255
Romance Languages	257
Sociology	266
Speech	274
SCHOOL OF ARCHITECTURE AND ALLIED ARTS	288
Architecture	290
Landscape Architecture	296
Urban Planning	298
Fine and Applied Arts	301
Art History	310
Art Education	312
Institute for Community Art Studies	315
COLLEGE OF BUSINESS ADMINISTRATION	316
UNDERGRADUATE SCHOOL OF BUSINESS	318
Accounting and Quantitative Methods	320
Finance and Business Environment	323
Marketing, Insurance, and Transportation	327
Personnel and Industrial Management	333
Business Education and Secretarial Science	336
GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS	338
WALLACE SCHOOL OF COMMUNITY SERVICE AND PUBLIC AFFAIRS	353
DENTAL SCHOOL	362
COLLEGE OF EDUCATION	363
Counseling	366
Curriculum and Instruction	368
Educational Administration	378
Educational Foundations	382
Educational Psychology	384
Higher Education	387
Special Education	388
SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION	392
Physical Education	396
Dance	404
Health Education	406
Recreation and Park Management	409
SCHOOL OF JOURNALISM	414
SCHOOL OF LAW	426
SCHOOL OF LIBRARIANSHIP	434
MEDICAL SCHOOL	439
SCHOOL OF MUSIC	440
Music	444
Music Education	451
SCHOOL OF NURSING	454
DEPARTMENT OF MILITARY SCIENCE AND AEROSPACE STUDIES	455
Military Science	456
Aerospace Studies	457
CONTINUING EDUCATION	459
SUMMER SESSION	460
ENROLLMENT AND DEGREES, 1969-70	461
INDEX	463

Oregon State System of Higher Education

The Oregon State System of Higher Education was 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. Member 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 University 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 offices in Ashland, Corvallis, Eugene, La Grande, Monmouth, Portland, Salem, and Roseburg.

An interinstitutional booklet, *Your Education*, which outlines the curricula of the several institutions and contains other information, is available. For a copy, write to Division of Publications, P.O. Box 3175, Eugene, Oregon 97403.

State Board of Higher Education

	Term Expires
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CHARLES R. HOLLOWAY, JR., Portland.....	1973
ELIZABETH H. JOHNSON, Redmond.....	1974
GEORGE H. COREY, Pendleton.....	1975
JOHN W. SNIDER, Medford.....	1975
PHILIP A. JOSS, Portland.....	1976
GEORGE LAYMAN, Newberg.....	1976
ROBERT D. HOLMES, Portland.....	1977
LORAN L. STEWART, Eugene.....	1977

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Office of State Board of Higher Education
Post Office Box 3175
Eugene, Oregon 97403

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

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President, University of Oregon

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Dean, Dental School

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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 1971

S	M	T	W	T	F	S
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5	6	7	8	9	10	11
12	13	14	15	16	17	18
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October 1971

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31						

November 1971

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December 1971

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26	27	28	29	30	31	

January 1972

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23	24	25	26	27	28	29
30	31					

February 1972

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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

Fall Term, 1971-72

August 15, *Sunday*.....Last day to apply
for fall-term admission

September 21-25, *Tuesday to Saturday*.....New
Student Week

September 23-34, *Thursday to*
Friday.....Registration

September 27, *Monday*.....Classes begin

September 27, *Monday*.....Last day for
payment of fees without penalty

October 8, *Friday*.....Last day for
fall-term registration

October 15, *Friday*.....Last day to change courses

November 25-28, *Thursday to Sunday*
Thanksgiving vacation

December 10, *Friday*.....Fall-term graduation
convocation

December 13-18, *Monday to Saturday*.....Fall-
term examinations

Winter Term, 1971-72

January 3-4, *Monday to Tuesday*.....Registration

January 5, *Wednesday*.....Classes begin

January 5, *Wednesday*.....Last day for
payment of fees without penalty

January 14, *Friday*.....Last day for
winter-term registration

January 21, *Friday*.....Last day to change courses

March 10, *Friday*.....Winter-term graduation
convocation

March 13-18, *Monday to Saturday*.....Winter-
term examinations

Academic Calendar

March 1972

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 1972

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

May 1972

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 1972

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 1972

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 1972

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, 1971-72

March 27-28, *Monday to Tuesday*..... Registration

March 29, *Wednesday*..... Classes begin

March 29, *Wednesday*..... Last day for
payment of fees without penalty

April 7, *Friday*..... Last day for
spring-term registration

April 14, *Friday*..... Last day to change courses

May 29, *Monday*..... Memorial Day, holiday

June 5-10, *Monday to Saturday*..... Spring-
term examinations

June 10, *Saturday*..... Alumni Day

June 11, *Sunday*..... Commencement Day

Summer Session, 1972

June 19, *Monday*..... Registration

June 20, *Tuesday*..... Classes begin

June 21, *Wednesday*..... Last day for payment
of summer-term fees without penalty

June 30, *Friday*..... Last day for summer-term
registration

July 3, *Monday*..... Independence Day, holiday

July 7, *Friday*..... Last day to change courses

August 11, *Friday*..... Eight-week session ends

August 12, *Saturday*..... Summer-term
graduation convocation

September 1, *Friday*..... Eleven-week session ends

Fall Term, 1972-73

August 15, *Tuesday*..... Last day to apply for
fall-term admission

September 19-23, *Tuesday to Saturday*
New Student Week

September 21-22, *Thursday to Friday*
Registration

September 25, *Monday*..... Classes begin

University of Oregon

Officers of Administration

ROBERT D. CLARK, Ph.D. President
 RAY HAWK, D.Ed. Dean of Administration; Director of University Relations
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 JOHN E. LALLAS, Ed.D. Assistant to the President; Director, Office of
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 FREDERICK A. CUTHBERT, M.L.D. Dean, School of Architecture and Allied Arts
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 Education, and Recreation
 ROBERT D. GILBERTS, Ph.D. Dean, College of Education
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 PAUL B. JACOBSON, Ph.D. Dean, Summer Session
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 BURTON MOYER, Ph.D. Dean, College of Liberal Arts
 LAWRENCE W. ROSS, JR., J.D. Acting Director, Honors College
 EUGENE F. SCOLES, J.D., LL.M., J.S.D. Dean, School of Law
 NORMAN D. SUNDBERG, Ph.D. Dean, Wallace School of Community Service
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 LEONA E. TYLER, Ph.D. Dean, Graduate School

VERNON L. BARKHURST, M.A. Director of Admissions
 H. PHILIP BARNHART, B.S. Director of Dormitories
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 LELAND C. LORANGE Acting Director of Physical Plant
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 RICHARD C. REYNOLDS, M.Ed. Director of Erb Memorial Union
 DONALD E. RHOADES, M.A. Associate Dean for Student Administrative Services
 NORVAL J. RITCHEY, M.S. Athletic Director
 SHIRLEY J. WILSON, M.A. Associate Dean of Students

University Faculty*

- MAX G. ABBOTT, Ph.D., Professor of Education; Director, Center for Advanced Study of Educational Administration.
B.S. (1949), M.S. (1951), Utah State; Ph.D. (1960), Chicago. At Oregon since 1966.
- DAVID J. ABEL, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1962), Iowa State; M.D. (1966), Iowa. At Oregon since 1969.
- KEITH A. ACHESON, Ed.D., Associate Professor of Education.
B.S. (1948), M.Ed. (1951), Lewis and Clark; Ed.D. (1964), Stanford. At Oregon since 1967.
- JOAN R. ACKER, Ph.D., Assistant Professor of Sociology.
B.A. (1946), Hunter; M.A. (1948), Chicago; Ph.D. (1967), Oregon. At Oregon since 1964.
- MARTIN H. ACKER, Ph.D., Professor of Education.
B.A. (1943), Brooklyn; M.A. (1953), Ph.D. (1963), New York University. At Oregon since 1961.
- J. MARK ACKERMAN, Ph.D., Adjunct Assistant Professor of Psychology.
B.A. (1964), Pomona; M.A. (1967), Ph.D. (1968), Colorado. At Oregon since 1970.
- SANDRA M. ACKINCLOSE, M.A., Instructor in Physical Education.
B.S. (1961), Wittenberg; M.A. (1967), Xavier. At Oregon since 1967.
- JOEL W. ADKINS, Ph.D., Assistant Professor of Psychology.
A.B. (1959), M.A. (1960), San José State; Ph.D., (1966), California at Los Angeles. At Oregon since 1966.
- JACK D. ADLER, D.Ed., Golf Coach, with the Rank of Associate Professor; Associate Professor of Physical Education.
B.A. (1951), M.S., (1960), Washington; D.Ed. (1967), Oregon. At Oregon since 1966.
- C. MELVIN AIKENS, Ph.D., Assistant Professor of Anthropology.
B.A. (1960), Utah; M.A. (1962), Ph.D. (1966), Chicago. At Oregon since 1968.
- GERALD S. ALBAUM, Ph.D., Associate Professor of Marketing.
B.A. (1954), M.B.A. (1956), Washington; Ph.D. (1962), Wisconsin. At Oregon since 1969.
- ROBERT C. ALBRECHT, Ph.D., Associate Professor of English.
B.A. (1955), Illinois; M.A. (1957), Michigan; Ph.D. (1962), Minnesota. At Oregon since 1967.
- BARBARA B. ALDAVE, J.D., Assistant Professor of Law.
B.S. (1960), Stanford; J.D. (1966), Berkeley. At Oregon since 1970.
- GUSTAVE ALEF, Ph.D., Professor of History.
B.A. (1949), M.A. (1950), Rutgers; M.A. (1952), Ph.D. (1956), Princeton. At Oregon since 1956.
- †HENRY A. ALEXANDER, JR., Ph.D., Associate Professor of Philosophy.
B.A. (1947), Princeton; M.A. (1951), Ph.D. (1955), California. At Oregon since 1964.
- CLIFFORD V. ALLEN, M.D., Professor of Clinical Pathology (Radioisotopes) and Radiation Therapy, Medical School; Chairman of Department of Radiation Therapy.
M.D. (1933), Iowa. At Oregon since 1955.

* 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 in this list; for complete lists of the faculties of these schools, see the school catalogs.

† On leave of absence, spring term, 1970-71.

RICHARD F. ALLEN, Ph.D., Assistant Professor of English.

B.A. (1957), Yale; M.A. (1959), Miami; Ph.D. (1968), Pittsburgh. At Oregon since 1968.

JOSEPH M. ALLMAN, Ph.D., Associate Professor of Political Science.

B.A. (1960), Antioch; M.A. (1966), Michigan State; Ph.D. (1968), Michigan State. At Oregon since 1966.

HARRY ALPERT, Ph.D., Dean of Faculties; 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.,** Assistant Professor of English.

B.S. (1935), Ph.D. (1959), Missouri; M.A. (1942), Columbia. At Oregon since 1960.

ARTHUR VON KROGH ANDERSON, M.F.A., Visiting Assistant Professor of Architecture.

B.Arch. (1956), Pennsylvania State; M.F.A. (1958), Princeton. At Oregon since 1970.

†**FRANK W. ANDERSON, Ph.D.,** Professor of Mathematics.

B.A. (1951), M.S. (1952), Ph.D. (1954), Iowa. At Oregon since 1957.

THOMAS E. ANDERSON, J.D., M.L.S., Assistant Law Librarian; Assistant Professor of Library Administration.

B.A. (1958), M.J. (1962), Berkeley; J.D. (1967), Hastings; M.L.S. (1968), Berkeley. At Oregon since 1968.

FRED C. ANDREWS, Ph.D., Professor of Mathematics.

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. At Oregon since 1948.

ROMAN R. ANDRUS, Ph.D., Associate Professor of Marketing; Head, Department of Marketing, Insurance, and Transportation.

B.S. (1958), Brigham Young; M.S. (1959), Ph.D. (1965), Columbia. At Oregon since 1966.

PATRICIA ARIENT, B.A., Instructor in Special Education.

B.A. (1970), Illinois. At Oregon since 1970.

HAROLD ARKOWITZ, Ph.D., Assistant Professor of Psychology.

B.A. (1962), New York University; M.A. (1964), Ph.D. (1968), Pennsylvania. At Oregon since 1968.

FRANK H. ARNOLD, M.S., Assistant Basketball Coach, with the Rank of Assistant Professor; Instructor in Physical Education.

B.S. (1956), Idaho State; M.S. (1960), Brigham Young. At Oregon since 1966.

VIRGINIA A. ARVIDSON, M.A., Instructor in Physical Education.

B.A. (1962), M.A. (1969), Oregon. At Oregon since 1969.

GORDON P. ASHBY, M.B.A., Computer Systems Program Supervisor, Computer Operations, with the Rank of Associate Professor.

B.S. (1959), Oregon State; M.B.A. (1961), California at Los Angeles. At Oregon since 1966.

FRED ATTNEAVE III, Ph.D., Professor of Psychology.

B.A. (1942), Mississippi; Ph.D. (1950), Stanford. At Oregon since 1958.

CURTIS E. AVERY, M.A., Director, E. C. Brown Trust, with the Rank of Professor.

B.A. (1925), Pomona; M.A. (1928), Yale. At Oregon since 1946.

SHELDON B. AVERY, Ph.D., Assistant Professor of History.

B.A. (1960), Brooklyn College; M.A. (1967), Ph.D. (1970), Oregon. At Oregon since 1970.

* On sabbatical leave, spring term, 1970-71.

† On sabbatical leave 1970-71.

- MICHAEL R. AYERS, Ph.D., Visiting Lecturer in Philosophy.
B.A. (1958), M.A. (1965), Ph.D. (1965), Cambridge. At Oregon since 1970.
- JORGE R. AYORA, Ph.D., Assistant Professor of Spanish.
B.A. (1962), M.A. (1964), Washington; Ph.D. (1969), Vanderbilt. At Oregon since 1970.
- JAY H. BACKSTRAND, Visiting Assistant Professor of Art.
At Oregon since 1970.
- *DAVID A. BAERNCOFF, Ph.D., Associate Professor of Business Statistics.
A.B. (1942), Indiana; M.A. (1956), Ph.D. (1961), Stanford. At Oregon since 1958.
- EXINE A. BAILEY, M.A., Professor of Music (Voice).
B.S. (1944), Minnesota; M.A. (1945), Diploma (1951), Columbia. At Oregon since 1951.
- J. EDWIN BAILEY, B.A., Assistant University Editor Emeritus (Instructor).
B.A. (1923), Montana. At Oregon since 1938.
- MICHAEL D. BAIRD, M.D., Professor of Medicine, Medical School; Medical Director and Administrator, Hospitals and Clinics.
B.S. (1954), Reed; M.S., M.D. (1957), Oregon. At Oregon since 1961.
- ANDREW S. BAJER, D.Sc., Professor of Biology.
M.A. (1949), D.Sc. (1956), Cracow. At Oregon since 1964.
- RALPH B. BAKER, M.F.A., Associate Professor of Art.
B.A. (1956), M.F.A. (1964), Washington. At Oregon since 1970.
- WALLACE S. BALDINGER, Ph.D., Professor 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.
- JOHN E. BALDWIN, Ph.D., Professor of Chemistry.
A.B. (1959), Dartmouth; Ph.D. (1963), California Institute of Technology. At Oregon since 1968.
- ROLAND C. BALL, Ph.D., Associate Professor of English.
B.A. (1939), Swarthmore; M.A. (1941), Cornell; Ph.D. (1953), California. At Oregon since 1952.
- THOMAS O. BALLINGER, M.A., Professor of Art.
B.A. (1949), M.A. (1951), New Mexico. At Oregon since 1952.
- JAMES R. BALLOU, B.S., Assistant Professor of Aerospace Studies.
B.S. (1960), Wisconsin. At Oregon since 1969.
- HARMON B. BARASCH, M.S., Instructor, Project Newgate.
B.A. (1962), B.D. (1965), Berkeley; M.S. (1970), Oregon College of Education. At Oregon since 1970.
- VERNON L. BARKHURST, M.A., Director of Admissions, with the Rank of Professor; Associate Dean of Students.
B.A. (1949), M.A. (1950), Oregon. At Oregon since 1959.
- BRUCE A. BARNES, Ph.D., Associate Professor of Mathematics.
B.A. (1960), Dartmouth; Ph.D. (1964), Cornell. At Oregon since 1966.
- EUGENE B. BARNES, Ph.D., Head Acquisition Librarian; Professor of Library Administration.
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.
- RALPH J. BARNHARD, M.S., Senior Instructor in Chemistry.
B.S. (1959), Otterbein; M.S. (1965), Oregon. At Oregon since 1966.

* On leave of absence 1970-71.

- H. PHILIP BARNHART, B.S., Director of Dormitories; Director of Foods, Student Union, with the Rank of Professor.
B.S. (1947), Pennsylvania State. At Oregon since 1949.
- RICHARD B. BARRAR, Ph.D., Professor of Mathematics.
B.S. (1947), M.S. (1948), Ph.D. (1952), Michigan. At Oregon since 1967.
- FRANCIS J. BARRY, LL.B., Professor of Law.
B.A. (1934), California at Los Angeles; LL.B. (1941), Loyola. At Oregon since 1969.
- ROLAND BARTEL, Ph.D., Professor of English; Head of Department.
B.A. (1947), Bethel; Ph.D. (1951), Indiana. At Oregon since 1951.
- GARY E. BARTLETT, M.A., Recreation Coordinator, Erb Memorial Union, with the Rank of Instructor.
B.A. (1966), Central Washington; M.A. (1968), Iowa. At Oregon since 1968.
- WENDELL M. BASYE, LL.B., Professor of Law.
A.B. (1941), Nebraska; LL.B. (1947), Virginia. At Oregon since 1957.
- BARBARA D. BATEMAN, Ph.D., Professor of Education.
B.S. (1954), Washington; M.A. (1958), San Francisco State; Ph.D. (1962), Illinois. At Oregon since 1966.
- EUGENIO BATISTA, M.F.A., Lecturer in Architecture.
Dip. (1924), Havana; M.F.A. (1930), Princeton. At Oregon since 1962.
- GRACIELA G. BATISTA, M.A., Instructor in Spanish.
B.S. (1940), Havana; M.A. (1967), Oregon. At Oregon since 1970.
- GEORGE E. BATTERSON, M.A., Educational Adviser and Professor of General Education, Dental School; Chairman of Department.
B.A. (1936), M.A. (1936), Oregon. At Oregon since 1946.
- EUGENE W. BAUER, B.S., Assistant Dean for Business Affairs, Dental School (Associate Professor).
B.S. (1958), Lewis and Clark. At Oregon since 1947.
- W. SCOTT BAUMAN, D.B.A., C.F.A., Professor of Finance; Head, Department of Finance and Business Environment.
B.B.A. (1953), M.B.A. (1954), Michigan; D.B.A. (1961), Indiana; C.F.A. (1967). At Oregon since 1966.
- Z. DIANE BAXTER, M.A., Instructor in Physical Education.
B.S. (1956), Western Illinois; M.A. (1960), Colorado State. At Oregon since 1967.
- FRANK L. BAYNES, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1947), Purdue; M.D. (1950), Cincinnati. At Oregon since 1968.
- EDWIN F. BEAL, Ph.D., Professor of Management.
B.A. (1931), Ohio Wesleyan; M.S. (1951), Ph.D. (1953), Cornell. At Oregon since 1959.
- CHANDLER B. BEALL, Ph.D., Professor of Romance Languages; Director of Comparative Literature Program.
Dip. (1921), Sorbonne; A.B. (1922), Ph.D. (1930), Johns Hopkins. At Oregon since 1929.
- JACOB BECK, Ph.D., Professor of Psychology.
B.A. (1950), Yeshiva; M.A. (1951), Ph.D. (1957), Cornell. At Oregon since 1966.
- NORMAN L. BECK, B.A., Systems Development Programmer, with the Rank of Instructor.
B.A. (1968), Oregon. At Oregon since 1968.
- PRISCILLA E. BECK, B.A., Instructor in Spanish.
B.A. (1961), Mount Holyoke. At Oregon since 1966.
- WESLEY C. BECKER, Ph.D., Professor of Special Education.
B.A. (1951), M.A. (1953), Ph.D. (1955), Stanford. At Oregon since 1970.
- JOHN YI BECKWITH, B.A., Instructor in Education.
B.A. (1968), Loyola. At Oregon since 1970.

- JOHN FRED BEEBE, Ph.D., Associate Professor of Russian.
B.A. (1946), Wabash; M.A. (1954), Indiana; Ph.D. (1958), Harvard. At Oregon since 1968.
- GLENN T. BEELMAN, M.A., Senior Instructor in Mathematics; Assistant to the Department Head.
B.S. (1938), South Dakota State; A.M. (1962), George Washington. At Oregon since 1966.
- GEORGE F. BEISSE, M.A., Instructor in Computer Science.
B.A. (1964), Western Washington State; M.A. (1969), Oregon. At Oregon since 1969.
- GEORGE N. BELKNAP, M.A., University Historian, with the Rank of 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.
- LOUIS A. BELLISIMO, Senior Instructor in Physical Education.
At Oregon since 1965.
- GEORGE A. BELTRAN, M.A., Assistant Professor of Journalism.
B.S. (1966), M.A. (1970), Oregon. At Oregon since 1969.
- JAMES S. BENNETT, D.M.D., Associate Professor of Dentistry; Chairman, Department of Gerodontology, Dental School.
B.A. (1952), Reed; D.M.D. (1958), M.S. (1961), Oregon. At Oregon since 1961.
- CLARK T. BENSON, Ph.D., Assistant Professor of Mathematics.
B.S. (1961), California Institute of Technology; Ph.D. (1965), Cornell. At Oregon since 1967.
- FRANCIS A. BENSON, D.Ed., Director of Clinical Services, with the Rank of Associate Professor.
L.C.S.T. (1951), London; M.A. (1961), Iowa; D.Ed. (1966), Oregon. At Oregon since 1966.
- JOHN A. BENSON, JR., M.D., 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.
- ROBERT M. BERDAHL, Ph.D., Assistant Professor of History.
B.A. (1959), Augustana; M.A. (1961), Illinois; Ph.D. (1965), Minnesota. At Oregon since 1967.
- DONALD L. BERGER, B.Arch., Assistant Professor of Interior Architecture.
B.Arch. (1954), North Dakota State. At Oregon since 1969.
- NORMAN A. BERGMAN, M.D., Professor of Anesthesiology, Medical School; Chairman of Department.
B.A. (1949), Reed; M.D. (1951), Oregon. At Oregon since 1970.
- *PETER BERGQUIST, Ph.D., Associate Professor of Music (Bassoon, Music History, Music Theory).
B.S. (1958), Mannes College of Music; M.A. (1960), Ph.D. (1964), Columbia. At Oregon since 1964.
- SIDNEY A. BERNHARD, Ph.D., 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 Emeritus of Sociology.
B.A. (1927), Willamette; M.A. (1933), Oregon; Ph.D. (1940), Stanford. At Oregon since 1946.

* On sabbatical leave, winter and spring terms, 1970-71.

ARTHUR E. BERWICK, M.S., Lecturer in Health Education.

B.S. (1947), Oregon State; M.S. (1968), Oregon. At Oregon since 1969.

STANFORD N. BETTIS, Editor of Old Oregon, with the Rank of Instructor.

At Oregon since 1969.

KATHLEEN M. BEYER, M.A., Instructor in Computer Science.

B.A. (1964), Oregon; M.A. (1967), Boston University. At Oregon since 1969.

WENDELL T. BEYER, Ph.D., Assistant Professor of Computer Science.

B.A. (1962), M.A. (1964), Oregon; Ph.D. (1969), Massachusetts Institute of Technology. At Oregon since 1969.

GERALD O. BIERWAG, Ph.D., Professor of Economics.

B.A. (1958), Idaho; Ph.D. (1962), Northwestern. At Oregon since 1962.

DAVID E. BILDERBACK, Ph.D., Visiting Assistant Professor of Biology.

B.S. (1965), Ph.D. (1968), Oregon. At Oregon since 1970.

EDWIN R. BINGHAM, Ph.D., Professor of History.

B.A. (1941), M.A. (1942), Occidental; Ph.D. (1951), California at Los Angeles. At Oregon since 1949.

RANDI M. BIRN, Ph.D., Associate Professor of Romance Languages.

Cand. Philol. (1960), Oslo; Ph.D. (1965), Illinois. At Oregon since 1965.

RAYMOND F. BIRN, Ph.D., Associate Professor of History.

A.B. (1956), New York University; M.A. (1957), Ph.D. (1961), Illinois. At Oregon since 1961.

LEE P. BISHOP, Lecturer in Journalism.

At Oregon since 1969.

HERBERT BISNO, M.S.W., Professor of Sociology and Social Welfare; Professor of Community Service.

B.A. (1946), Wisconsin; M.S.W. (1951), California; R.S.W. (1951), State of California. At Oregon since 1952.

LARRY A. BISSETT, B.Arch., University Planner, Office of Planning and Institutional Research, with the Rank of Assistant Professor.

B.Arch. (1956), Oregon. At Oregon since 1967.

BRUCE R. BITTLE, M.S., Acting Instructor in Education.

B.S. (1968), M.S. (1969), Oregon. At Oregon since 1970.

FRANCIS W. BITTNER, M.A., Professor of Music (Piano, Music Theory).

B.Mus. (1936), Cincinnati Conservatory of Music; M.A. (1943), New York University. At Oregon since 1946.

CHRISTOPHER M. BLACK, Ph.D., Visiting Assistant Professor of Classics.

B.A. (1963), California at Riverside; M.A. (1964), Ph.D. (1966), Pennsylvania. At Oregon 1966-69 and since 1971.

MARGARET D. BLAGO, B.A., Assistant to the Director of Student Services Research, with the Rank of Assistant Professor.

B.A. (1951), Linfield. At Oregon since 1960.

H. RICHARD BLANK, Ph.D., Associate Professor of Geology.

B.S. (1948), Southwestern University (Texas); M.S. (1950), Ph.D. (1959), Washington. At Oregon since 1968.

MARY DALE BLANTON, M.S., Instructor in Recreation Management.

B.S. (1963), Georgia; M.S. (1970), Oregon. At Oregon since 1970.

*ALFRED BLOOM, Ph.D., Associate Professor of Religious Studies.

A.B. (1951), Eastern Baptist Seminary; B.D. (1953), S.T.M. (1953), Andover Newton; Ph.D. (1963), Harvard. At Oregon since 1961.

VIRGIL C. BOEKELHEIDE, Ph.D., Professor of Chemistry; Head of Department.

A.B. (1939), Ph.D. (1943), Minnesota. At Oregon since 1960.

* On leave of absence 1970-71.

- BORIS E. BOGATZ, Ph.D., Assistant Professor of Education.
B.A. (1961), M.A. (1964), Trenton State; Ph.D. (1970), Oregon. At Oregon 1967-69 and since 1970.
- GERALD K. BOGEN, D.Ed., Special Assistant to the President for Student Services, with the Rank of Professor; Associate Professor of Education.
B.A. (1959), Western Washington; M.S. (1961), D.Ed. (1963), Oregon. At Oregon since 1961.
- JUDITH R. BOGEN, M.Ed., Assistant Dean of Students, with the Rank of Instructor.
B.A. (1959), Western Washington State; M.A. (1961), Oregon. At Oregon since 1970.
- SAM BOGGS, JR., Ph.D., Associate Professor of Geology.
B.S. (1956), Kentucky; Ph.D. (1964), Colorado. At Oregon since 1965.
- LLOYD M. BOND, M.F.A., Visiting Professor of Landscape Architecture.
B.L.A. (1949), Oregon; M.F.A. (1970), Harvard. At Oregon 1959-64, and since 1969.
- JACQUELINE R. BONNER, M.S., Supervisor, Reading and Study Skills Center, with the Rank of Assistant Professor.
B.S. (1950), Oregon State; B.Ed. (1961), Eastern Oregon; M.S. (1963), M.S. (1968), Oregon. At Oregon since 1970.
- HOWARD T. BONNETT, JR., Ph.D., Associate Professor of Biology.
B.A. (1958), Amherst; Ph.D. (1964), Harvard. At Oregon since 1965.
- JAMES R. BOOTH, M.S., Senior Instructor in Education; VISTA Evaluation Officer.
B.S. (1952), Boston University; M.S. (1956), William and Mary. At Oregon since 1962.
- JOHN W. BORCHARDT, Ph.D., Associate Professor of Physical Education; Director of Intramural Sports.
B.S. (1940), LaCrosse Teachers; M.A. (1951), Ph.D. (1966), Iowa. At Oregon since 1948.
- *CONSTANCE BORDWELL, M.A., Assistant Professor of English.
B.A. (1931), Oregon; M.A. (1932), Washington State; Dip. in Linguistics (1970), University College, London. At Oregon 1947-49 and since 1958.
- JAMES L. BOREN, Ph.D., Assistant Professor of English.
B.A. (1965), San Francisco State; M.A. (1967), Ph.D. (1970), Iowa. At Oregon since 1970.
- BERGE A. BORREVIK, JR., M.S., Instructor in Physical Education.
B.S. (1958), M.S. (1962), Oregon. At Oregon since 1967.
- GEORGE G. BOUGHTON, Mus.M., Professor of Music (Violin).
B.F.A. (1940), Mus.M. (1943), South Dakota. At Oregon since 1945.
- WILLIAM J. BOWERMAN, M.S., Professor of Physical Education; Head Track Coach; Assistant Athletic Director.
B.S. (1933), M.S. (1951), Oregon. At Oregon since 1948.
- ARTHUR L. BOWERS, B.A., Director of Student Services Research, with the Rank of Associate Professor.
B.A. (1964), Oregon. At Oregon since 1967.
- C. A. BOWERS, Ph.D., Associate Professor of Education; Head, Department of Educational Foundations.
B.S. (1958), Portland State; Ph.D. (1962), Berkeley. At Oregon since 1967.
- ROBERT L. BOWLIN, Ed.D., Dean of Student Personnel Services, with the Rank of Professor; Associate Professor of Education.
B.S. (1953), M.A. (1958), California State Polytechnic; Ed.D. (1964), Oregon. 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.

* On leave of absence, 1970-71.

- EARL W. BRABANDT, Ed.D.**, Assistant Professor of Education.
B.A. (1957), California at Los Angeles; M.S. (1959), Southern California; Ed.D. (1969), Colorado State. At Oregon since 1970.
- THOMAS A. BRADY, JR., Ph.D.**, Assistant Professor of History.
B.A. (1959), Notre Dame; M.A. (1963), Columbia; Ph.D. (1968), Chicago. At Oregon since 1967.
- DONALD R. BREakey, Ph.D.**, Adjunct Instructor, Project Newgate.
B.S. (1950), Willamette; M.S. (1952), Michigan State; Ph.D. (1961), Berkeley. At Oregon since 1970.
- QUIRINUS BREEN, Ph.D.**, Professor Emeritus of History.
A.B. (1920), Calvin; Ph.D. (1931), Chicago. At Oregon since 1938.
- LESLIE T. BREIDENTHAL, D.M.A.**, Associate Professor of Music (Voice).
B.S. (1948), M.A. (1949), Columbia; D.M.A. (1965), Michigan. At Oregon since 1967.
- EUGENE H. BRESSLER, M.L.A.**, Visiting Assistant Professor of Landscape Architecture.
B.L.A. (1968), Syracuse; M.L.A. (1970), Harvard. At Oregon since 1970.
- EDGAR W. BREWER, M.A.**, Associate Professor of Community Services and Public Affairs.
B.A. (1940), Washington; M.A. (1948), Chicago. At Oregon since 1967.
- RUTH M. BREWER, M.S.**, Instructor in Community Service and Public Affairs; Instructor in Education.
B.S. (1941), Washington; M.S. (1968), Oregon. At Oregon since 1968.
- DAVID BRINKS, Ed.D.**, Director, University Counseling Center, with the Rank of Professor; Associate Professor of Education.
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.**, Professor of Architecture.
B.Arch. Engr. (1950), Oklahoma State. At Oregon since 1953.
- JACQUELINE S. BROCKWAY, M.S.**, Senior Instructor in Education; Assistant Director, DeBusk Center.
B.S. (1940), Oregon State; M.S. (1966), Oregon. At Oregon since 1966.
- DONALD W. BRODIE, LL.B.**, Associate Professor of Law.
B.A. (1958), Washington; LL.B. (1961), New York University. At Oregon since 1967.
- 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.**, Associate University Physician, with the Rank of Professor.
B.S. (1940), Brigham Young; M.D. (1943), Northwestern; M.S. (1949), Minnesota. At Oregon since 1955.
- JEAN A. BROTSMAN, B.S.L.S.**, Senior Catalog Librarian; Assistant Professor of Library Administration.
B.A. (1941), Akron University; B.S.L.S., (1942), North Carolina. At Oregon since 1968.
- CHARLES C. BROWN, B.S.**, Instructor in Education.
B.S. (1961), Portland State. At Oregon 1968-69, and since 1970.
- DOROTHY V. BROWN**, Assistant Registrar, with the Rank of Instructor.
At Oregon since 1966.
- STANLEY A. BROWN, M.D.**, Associate University Physician with the Rank of Professor.
B.S. (1948), Willamette; M.D. (1952), Oregon. At Oregon since 1967.
- WARREN B. BROWN, Ph.D.**, Associate Professor of Management; Head, Department of Personnel and Industrial Management.
B.S. (1955), Colorado; M.S. (1957), Stanford; M.S. (1959), Ph.D. (1962), Carnegie Institute of Technology. At Oregon since 1967.

- PHILIP L. BROWNING, Ph.D., Associate Director, Training, Research and Training Center in Mental Retardation, with the Rank of Assistant Professor.
B.A. (1962), Howard Payne College (Texas); M.A. (1966), Texas Technological College; Ph.D. (1969), Wisconsin. At Oregon since 1968.
- CLIFFORD E. BRUBAKER, Ph.D., Assistant Professor of Physical Education.
B.S. (1961), M.A. (1964), Ball State; Ph.D. (1968), Oregon. At Oregon since 1966.
- ROBERT J. BRUCKNER, D.D.S., Associate Dean for Academic Affairs, Dental School; Professor of Dentistry, Department of Pathology; Clinical Professor of Dentistry, Medical School.
D.D.S. (1944), Maryland; M.S. (1948), Western Reserve. At Oregon since 1959.
- JOSEPH BRUNON, M.Arch., Visiting Assistant Professor of Architecture.
B.Arch. (1961), Toronto; M.Arch. (1965), Massachusetts Institute of Technology. At Oregon since 1970.
- *STANLEY W. BRYAN, M.Arch., Reg. Archt., Professor of Architecture.
B.Arch. (1947), Washington; M.Arch. (1948), Massachusetts Institute of Technology. At Oregon 1949-50 and since 1955.
- GEORGE C. BUCHAN, M.D., Professor of Pathology, Medical School; Head of Division of Neuropathology.
M.D. (1958), McGill. At Oregon since 1965.
- PAUL E. BUCKNER, M.F.A., Associate Professor of Sculpture.
B.A. (1959), Washington; M.F.A. (1961), Claremont. At Oregon since 1962.
- MARTHA BULLARD, B.S., Instructor in Education.
B.S. (1969), Oregon. At Oregon since 1970.
- ROBERT B. BURCKEL, Ph.D., Assistant Professor of Mathematics.
B.S. (1961), Notre Dame; M.A. (1964), Ph.D. (1968), Yale. At Oregon since 1966.
- JOHN C. BURG, M.S., Senior Instructor in Physics.
B.S. (1959), M.S. (1963), Oregon. At Oregon since 1965.
- †JACK W. BURGNER, M.A., Professor of Art.
B.S. in Ed. (1948), Eastern Illinois; M.A. (1949), Colorado State College. At Oregon since 1954.
- J. GAIL BURKART, M.L.S., Librarian, School of Architecture and Allied Arts; Instructor in Library Administration.
B.A. (1969), M.L.S. (1970), Rutgers. At Oregon since 1970.
- DOROTHY A. BURNS, Ed.D., Director, Tongue Point Job Corps Center, with the Rank of Professor.
B.A. (1942), Indiana State; B.S. (1944), Illinois; M.A. (1962), San Diego State; Ed.D. (1964), Oregon.
- RUTH K. BURNS, M.B.A., Assistant Director of Financial Aid; Assistant Dean of Students, with the Rank of Instructor.
B.A. (1939), Oregon; M.B.A. (1941), Northwestern. At Oregon since 1969.
- ELIZABETH C. BUTTERBAUGH, M.A., Instructor in Dance.
B.A. (1962), Butler; M.A. (1967), Ohio State. At Oregon since 1968.
- JOSEPH K. BYRNE, J.D., Professor of Aerospace Studies.
J.D. (1947), Baylor. At Oregon since 1969.
- WILLIAM E. CADBURY, Ph.D., Associate Professor of English.
B.A. (1956), Harvard; M.S. (1957), Ph.D. (1961), Wisconsin. At Oregon since 1961.
- CAROL DAVID CALDER, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1960), Texas Agricultural and Mechanical; M.D. (1964), Texas. At Oregon since 1970.
- THOMAS W. CALMUS, Ph.D., Assistant Professor of Finance.
B.A. (1957), Sacramento State; Ph.D. (1966), California. At Oregon since 1967.

* On sabbatical leave 1970-71.

† On sabbatical leave, spring term, 1970-71.

- JOHN R. CAMPBELL, M.D., Associate Professor of Pediatric Surgery, Medical School; Head of Division.
B.A. (1954), M.D. (1958), Kansas. At Oregon since 1967.
- *MALCOLM B. CAMPBELL, M.Arch., Assistant Professor of Architecture.
B.Arch. (1956), Michigan; M.Arch. (1965), California. At Oregon since 1965.
- ROBERT CAMPBELL, Ph.D., Professor of Economics.
A.B. (1947), Berkeley; B.S. (1950), U.S. Merchant Marine Academy; Ph.D. (1953), Berkeley. At Oregon since 1952.
- DOROTHY N. CANDLAND, Ed.D., 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; Chairman of Department of Operative Dentistry.
B.S. (1938), Utah State; D.M.D. (1943), North Pacific. At Oregon since 1966.
- THOMAS CAPPUCCIO, M.A., Assistant Professor of Art.
B.F.A. (1965), Pratt Institute; M.A. (1968), Brooklyn College. At Oregon since 1970.
- J. SPENCER CARLSON, M.A., Registrar, with the Rank of Professor; Associate Professor of Psychology.
B.S. (1935), Oregon; M.A. (1937), Minnesota. At Oregon since 1947.
- †RICHARD O. CARLSON, Ed.D., Professor of Education; Research Associate, Institute for Community Studies.
B.S. (1951), M.S. (1955), Utah; Ed.D. (1957), California. At Oregon since 1963.
- CARL W. CARMICHAEL, Ph.D., Associate Professor of Speech.
B.A. (1961), Westminster; M.A. (1962), Louisiana State; Ph.D. (1965), Iowa. At Oregon since 1965.
- LINDA M. CARNINE, A.M., Instructor in Special Education.
B.A. (1967), Lewis and Clark; A.M. (1969), Illinois. At Oregon since 1970.
- GEORGE C. CARROLL, Ph.D., Assistant Professor of Biology.
B.A. (1962), Swarthmore; Ph.D. (1966), Texas. At Oregon since 1967.
- JAMES K. CARROLL, M.A., Instructor in Speech.
B.A. (1963), M.A. (1969), Michigan State. At Oregon since 1969.
- SISTER MARGARET M. CARROLL, M.A., Instructor in Physical Education.
B.S. (1944), Miami (Ohio); M.A. (1953), Iowa. At Oregon since 1970.
- ROBERT J. CARSON, M.D., Lecturer in Health Education.
B.A. (1945), Reed; M.D. (1947), Oregon. At Oregon since 1966.
- GINO A. CASAGRANDE, M.A., Instructor in Romance Languages.
B.S. (1955), M.A. (1966), California. At Oregon since 1965.
- LEONARD J. CASANOVA, Ph.B., Associate Director of University Relations, with the Rank of Professor.
Ph.B. (1927), Santa Clara. At Oregon since 1951.
- LAUREL CASE, M.D., Associate Professor of Family Practice, Medical School; Head of Division.
M.D. (1949), Kansas. At Oregon since 1969.
- †RICHARD W. CASTENHOLZ, Ph.D., Professor of Biology.
B.S. (1952), Michigan; Ph.D. (1957), Washington State. At Oregon since 1957.
- RICHARD P. CHANEY, B.A., Assistant Professor of Anthropology.
B.A. (1963), Indiana. At Oregon since 1968.
- NORMAN L. CHAPMAN, B.S., Assistant Football Coach, with the Rank of Assistant Professor; Instructor in Physical Education.
B.S. (1958), Oregon. At Oregon since 1966.

* On leave of absence 1970-71.

† On sabbatical leave 1970-71.

- WERRETT W. CHARTERS, JR., Ph.D., Professor of Education; Research Associate, Center for the Advanced Study of Educational Administration.
B.A. (1944), DePauw; Ph.D. (1952), Michigan. At Oregon since 1966.
- 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.
- ULYSSES CHENG, Instructor in Education.
At Oregon since 1970.
- RONALD L. CHERRY, M.L.L., Law Librarian; Associate Professor of Law and Library Administration.
B.A. (1959), LL.B. (1961), Iowa; M.L.L. (1967), Washington. At Oregon since 1969.
- DIANE J. CHEZ, M.L.S., Catalog Librarian; Instructor in Library Administration.
B.A. (1967), M.L.S. (1970), Oregon. At Oregon since 1970.
- *ROGER P. CHICKERING, Ph.D., Assistant Professor of History.
B.A. (1964), Cornell; M.A. (1965), Ph.D. (1968), Stanford. At Oregon since 1968.
- DELBERT R. CHINBURG, M.M., Instructor, Project Newgate.
B.A. (1950), Wyoming; M.M. (1955), Oregon. At Oregon since 1970.
- TING-LI CHO, M.C.P., Associate Professor of Urban Planning.
B.Arch. (1946), Shanghai; M.Arch. (1951), Chicago; M.C.P. (1955), Pennsylvania. At Oregon 1957-62 and since 1970.
- NED J. CHRISTENSEN, Ph.D., Director, Speech and Hearing Center; Associate Professor of Speech.
B.A. (1954), M.A. (1955), Brigham Young; Ph.D. (1959), Pennsylvania State. At Oregon since 1962.
- RODNEY E. CHRISTENSEN, M.S., Social Science Librarian; Instructor in Library Administration.
B.S. (1956), M.S. (1957), Northern Illinois; M.S. (1967), Southern California. At Oregon since 1967.
- 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.M., Professor of Law.
B.A. (1952), LL.B. (1954), Kansas; LL.M. (1959), Columbia. At Oregon since 1962.
- LLOYD T. CLARK, J.D., Instructor in Education.
B.A. (1966), J.D. (1969), Oregon. At Oregon since 1970.
- ROBERT D. CLARK, Ph.D., President; Professor of Speech.
A.B. (1931), Pasadena College; M.A. (1935), Ph.D. (1946), Southern California; LL.D. (1968), Santa Clara. At Oregon 1943-64, and since 1969.
- 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.
- MARK M. CLARKE, M.F.A., Assistant Director, Exhibitions, Museum of Art, with the Rank of Senior Instructor.
B.F.A. (1959), Oregon State; M.F.A. (1965), Oregon.
- C. KEITH CLAYCOMB, Ph.D., Professor of Biochemistry, Dental School; Chairman of Department.
B.S. (1947), M.S. (1948), Ph.D. (1951), Oregon. At Oregon since 1951.
- BARTON E. CLEMENTS, Ed.D., Director, DeBusk Memorial Center, with the Rank of Associate Professor.
B.S. (1957), Eastern Oregon; M.Ed. (1962), Oregon; Ed.D. (1964), Arizona State. At Oregon since 1965.
- JOSEPH A. COBB, Ph.D., Assistant Professor of Special Education.
B.A. (1956), Harvard; M.A. (1967), Ph.D. (1969), Oregon. At Oregon since 1970.

* On leave of absence 1970-71.

- STANLEY N. COHEN, Ph.D., Associate Professor of Education.
A.B. (1954), Berkeley; M.A. (1961), Ph.D. (1970), Southern California. At Oregon since 1970.
- DAVID L. COLE, M.S., Assistant Professor of Anthropology; Curator of Archaeology, Museum of Natural History.
B.S. (1952), M.S. (1954), Oregon. At Oregon since 1959.
- RALPH O. COLEMAN, JR., Ph.D., Associate Professor of Speech Pathology and Audiology.
B.S. (1954), Oregon State; M.S. (1960), Oregon; Ph.D. (1963), Northwestern. At Oregon since 1968.
- JOHN B. COLLINS, M.G.A., Assistant Professor of Public Affairs.
B.A. (1959), Swarthmore; M.G.A. (1962), Pennsylvania. At Oregon since 1967.
- RICHARD C. COLLINS, Ph.D., Associate Professor of Public Affairs and Administration.
B.A. (1960), Wisconsin State; Ph.D. (1963), Colorado. At Oregon since 1968.
- ELIZABETH A. COLTON, B.A., Instructor in Special Education.
B.A. (1968), Michigan State. At Oregon since 1970.
- *FREDERICK M. COMBELLACK, Ph.D., Professor of Greek Literature; Head, Department of Classics, and Chinese and Japanese.
B.A. (1928), Stanford; Ph.D. (1936), California. At Oregon since 1937.
- CHARLES E. COMBS, M.A., Visiting Instructor in Speech.
B.A. (1963), M.A. (1968), San Jose State. At Oregon since 1970.
- 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.
- EATON H. CONANT, Ph.D., Associate Professor of Management; Director, Institute of Industrial and Labor Relations.
B.S. (1956), M.S. (1958), Ph.D. (1960), Wisconsin. At Oregon since 1966.
- CLIFFORD L. CONSTANCE, M.A., Registrar Emeritus, with the Rank of Professor.
B.A. (1925), M.A. (1929), Oregon. At Oregon since 1931.
- PETER J. CONWAY, B.A., Assistant Professor of Military Science.
B.A. (1964), Sacramento State. At Oregon since 1969.
- DOLORES M. COOK, M.A., Instructor in Special Education.
B.A. (1965), California at Davis; M.A. (1970), Illinois. At Oregon since 1970.
- JOHN W. COOK, Ph.D., Associate Professor of Philosophy.
B.A. (1953), Minnesota; Ph.D. (1960), Nebraska. At Oregon since 1963.
- STANTON A. COOK, Ph.D., Associate Professor of Biology.
A.B. (1951), Harvard; Ph.D. (1960), California. At Oregon since 1960.
- ROBERT S. COOKE, Ph.D., Assistant Professor of Chemistry.
B.A. (1966), Wesleyan; Ph.D. (1970), California Institute of Technology. At Oregon since 1970.
- HENRY F. COOPER, M.A., Senior Instructor in Romance Languages.
B.A. (1950), Willamette; M.A. (1956), Middlebury. At Oregon since 1960.
- PAUL R. COUEY, M.A., Lecturer in Journalism.
B.A. (1966), New Mexico; M.A. (1967), Missouri. At Oregon since 1970.
- FREDERICK F. COWAN, Ph.D., Professor of Pharmacology, Dental School; Chairman of Department.
B.S. (1955), George Washington; Ph.D. (1959), Georgetown. At Oregon since 1966.
- HAL E. COWAN, B.A., Director of Athletic News Bureau, with the Rank of Instructor.
B.A. (1964), Linfield. At Oregon since 1967.

* On sabbatical leave, winter and spring terms, 1970-71.

- RICHARD W. COWGER, D.Ed., Instructor, Project Newgate.
B.Mus.Ed. (1950), Oberlin; M.Ed. (1964), Willamette; D.Ed. (1968), Oregon. At Oregon since 1970.
- BERND CRASEMANN, Ph.D., Professor of Physics.
A.B. (1948), California at Los Angeles; Ph.D. (1953), Berkeley. At Oregon since 1953.
- JOHN W. CRAWFORD, M.A., Dean of the School of Journalism; Professor of Journalism.
B.A. (1935), Northwestern; M.A. (1958), Michigan State. At Oregon since 1969.
- 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.
- 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.
- JAMES E. CROSSON, Ed.D., Associate Professor of Education; Acting Director, Special Education Regional Resource Center.
B.S. (1959), M.S. (1960), Kansas State College of Pittsburg; D.Ed. (1966), Oregon. At Oregon since 1966.
- CALVIN CRUMBAKER, Ph.D., Professor Emeritus of Economics.
B.S. (1911), Whitman; M.A. (1927), Washington; Ph.D. (1930), Wisconsin. At Oregon since 1930.
- PAUL L. CSONKA, Ph.D., Assistant Professor of Physics; Research Associate, Institute of Theoretical Science.
Ph.D. (1963), Johns Hopkins. At Oregon since 1968.
- ROBERT G. CUNNINGHAM, Mus.M., Associate Professor of Music (Woodwind Instruments, Music Education).
B.M. (1950), Eastman School of Music; Mus.M. (1952), Oregon. At Oregon since 1954.
- DAVID J. CURLAND, M.A., Senior Instructor in Romance Languages.
B.A. (1950), California at Los Angeles; M.A. (1963), Oregon. At Oregon since 1966.
- CHARLES W. CURTIS, Ph.D., Professor of Mathematics; Head of Department.
B.A. (1947), Bowdoin; M.A. (1948), Ph.D. (1951), Yale. At Oregon since 1963.
- ELBERT R. CURTIS, M.S., Colonel, U.S. Army; Professor of Military Science; Head, Department of Military Science and Aerospace Studies.
A.B. (1959), San Francisco State; M.S. (1965), George Washington. At Oregon since 1967.
- KENNETH CUSHMAN, M.S., Director of Institutional Relations, Dental School (Assistant Professor).
B.S. (1945), Northwestern; M.S. (1952), Oregon. At Oregon since 1969.
- FREDERICK A. CUTHBERT, M.L.D., Dean, School of Architecture and Allied Arts; Professor of Landscape Architecture and Urban Planning.
A.B. (1926), M.L.D. (1928), Michigan. At Oregon since 1932.
- JEAN V. CUTLER, Ph.D., Associate Professor of Speech.
B.A. (1955), Lynchburg; M.A. (1959), Ph.D. (1962), Illinois. At Oregon since 1962.
- EDMUND CYKLER, Ph.D., Associate Dean, School of Music; Professor of Music (Music History, Music Education).
B.A. (1926), California; Ph.D. (1928), Charles (Czechoslovakia). At Oregon since 1947.
- DONALD J. DAGG, B.A., Adjunct Instructor, Project Newgate.
B.A. (1957), Seattle. At Oregon since 1970.
- THOMAS L. DAHLE, Ph.D., Director of Continuing Education; Associate Director of Summer Sessions; Adjunct Professor of Speech.
B.S. (1938), M.S. (1949), Wisconsin; Ph.D. (1954), Purdue. At Oregon since 1963.
- RUDY DAM, Senior Instructor in Biology.
At Oregon since 1968.

- JESSICA H. DANIEL, Ph.D., Assistant Professor of Special Education.
B.A. (1964), Fayetteville State; M.A. (1967), Ph.D. (1969), Illinois. At Oregon since 1970.
- FRANCIS E. DART, Ph.D., Professor of Physics.
A.B. (1937), Oberlin; M.S. (1939), Notre Dame; Ph.D. (1947), Cornell. At Oregon since 1949.
- JEROME J. DASSO, Ph.D., Associate Professor of Real Estate.
B.S. (1951), Purdue; M.B.A. (1952), Michigan; M.S. (1960), Ph.D. (1964), Wisconsin; A.I.P. (1969), American Institute of Planners. At Oregon since 1966.
- KENNETH K. DATE, B.B.A., Assistant Professor of Military Science.
B.B.A. (1962), Hawaii. At Oregon since 1969.
- WILLIAM E. DAVIE, Ph.D., Assistant Professor of Philosophy.
B.A. (1964), Washington; Ph.D. (1969), Berkeley. At Oregon since 1968.
- JAMES C. DAVIES, Ph.D., Professor of Political Science.
A.B. (1939), Oberlin; Ph.D. (1952), Berkeley. At Oregon since 1963.
- BETTY N. DAVIS, M.D., Associate University Physician, with the Rank of Professor.
B.A. (1940), Linfield; M.D. (1943), Oregon. At Oregon since 1969.
- GARY K. DAVIS, B.S., Instructor in Education.
B.S. (1965), Townson State (Md.). At Oregon since 1970.
- KAREN L. DAVIS, M.A., Instructor in Special Education.
B.A. (1967), Syracuse; M.A. (1970), Illinois. At Oregon since 1970.
- RICHARD M. DAVIS, Ph.D., Professor of Economics.
A.B. (1939), Colgate; M.A. (1941), Ph.D. (1949), Cornell. At Oregon since 1954.
- ROBYN M. DAWES, Ph.D., Associate Professor of Psychology.
B.A. (1958), Harvard; M.A. (1960), Ph.D. (1963), Michigan. At Oregon since 1967.
- GEORGE L. DAWSON, J.D., Assistant Professor of Law; Assistant Dean of the School of Law.
A.B. (1966), Princeton; J.D. (1969), Chicago. At Oregon since 1970.
- FABER B. DECHAIINE, Ph.D., Professor of Speech; Director, University Theater.
B.S. (1952), Oregon; M.A. (1953), Michigan State; Ph.D. (1963), Minnesota. At Oregon since 1964.
- LESLIE E. DECKER, Ph.D., Professor of History.
B.A. (1951), Maine; M.A. (1952), Oklahoma State; Ph.D. (1961), Cornell. At Oregon since 1969.
- EDNA P. DEHAVEN, Ph.D., Assistant Professor of Education.
B.S. (1951), Oregon College of Education; M.Ed. (1962), Ph.D. (1969), Oregon. At Oregon since 1969.
- JOHN E. S. DE JUNG, Ed.D., Professor of Education.
B.A. (1951), Montana; M.A. (1954), Ed.D. (1957), Syracuse. At Oregon since 1964.
- WILLIAM S. DELLINGER, M.S., Assistant Professor of Physical Education; Associate Track Coach.
B.S. (1956), M.S. (1961), Oregon. At Oregon since 1967.
- EVERETTE E. DENNIS, M.A., Visiting Assistant Professor of Journalism.
B.S. (1964), Oregon; M.A. (1966), Syracuse. At Oregon since 1970.
- CHANDRAKANT M. DEO, Ph.D., Assistant Professor of Mathematics.
M.S. (1961), Nagpur; Ph.D. (1965), California. At Oregon since 1966.
- RICHARD H. DESROCHES, Ph.D., Associate Professor of Romance Languages.
A.B. (1947), Clark; Ph.D. (1962), Yale. At Oregon since 1957.
- STEVEN E. DEUTSCH, Ph.D., Associate Professor of Sociology.
B.A. (1958), Oberlin; M.A. (1959), Ph.D. (1964), Michigan State. At Oregon since 1966.

- 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, Senior Instructor in Chemistry.
At Oregon since 1962.
- SAMUEL N. DICKEN, Ph.D., Professor of Geography.
B.A. (1924), Marietta; Ph.D. (1930), California. At Oregon since 1947.
- MILTON DIETERICH, M.Mus., Assistant Professor Emeritus of Music.
B.Mus. (1923), Grinnell; M.Mus. (1941), Eastman School of Music. At Oregon since 1946.
- JEROME K. DIETHELM, M.L.Arch., Visiting Associate Professor of Architecture.
B.Arch. (1962), Washington; M.L.Arch. (1964), Harvard. At Oregon since 1970.
- PETER O. DIETZ, Ph.D., Associate Professor of Finance.
A.B. (1957), Dartmouth; M.B.A. (1958), Ph.D. (1965), Columbia. At Oregon since 1969.
- ANTONIO DIEZ, Acting Assistant Director for Statewide Services, Museum of Art, with the Rank of Instructor.
B.Arch. (1970), Oregon. At Oregon since 1970.
- EDWARD DILLER, D.M.L., Associate Professor of Germanic Languages.
B.A. (1953), California at Los Angeles; M.A. (1954), Los Angeles State; D.M.L. (1961), Middlebury. At Oregon since 1965.
- G. BURNETTE DILLON, M.A., Instructor in Music.
B.A. (1966), California State at Long Beach; M.A. (1969), Fresno State. At Oregon since 1970.
- EUGENE W. DILS, Ed.D., Director of Placement, Associate Dean of Students, with the Rank of Professor.
B.A. (1928), Washington State; M.A. (1945), Washington; Ed.D. (1952), Stanford. At Oregon since 1958.
- HENRY F. DIZNEY, Ph.D., Professor of Education.
B.S. (1954), Southeast Missouri State; M.Ed. (1955), Wayne State; Ph.D. (1959), Iowa. At Oregon since 1967.
- LLOYD J. DOLBY, Ph.D., Professor of Chemistry.
B.S. (1956), Illinois; Ph.D. (1959), California. At Oregon since 1960.
- PHILIP H. DOLE, M.S., Reg. Archt., Professor of Architecture.
B.Arch. (1949), Harvard; M.S. (1954), Columbia; Reg. Archt. (1958), State of New York. At Oregon since 1956.
- GUY F. DOLL, M.Ed., Instructor in Education.
B.A. (1957), Ottawa; M.Ed. (1962), Ottawa. At Oregon since 1970.
- DIANE F. DONASH, B.S., Instructor in Special Education.
B.S. (1970), Illinois. At Oregon since 1970.
- ROBERT M. DONNELLY, M.A., Librarian, Dental School (Assistant Professor).
B.S. (1950), Arizona State; M.A. (1962), Denver. At Oregon since 1964.
- MARIAN C. DONNELLY, Ph.D., Associate Professor of Art History.
B.A. (1946), A.M. (1948), Oberlin; Ph.D. (1956), Yale. At Oregon since 1966.
- ROBERT G. DONNELLY, B.S., Assistant Tennis Coach; Equipment Manager, with the Rank of Instructor.
B.S. (1968), Oregon. At Oregon since 1970.
- RUSSELL J. DONNELLY, Ph.D., Professor of Physics; Head of Department.
B.Sc. (1951), M.Sc. (1953), McMaster; M.S. (1953), Ph.D. (1956), Yale. At Oregon since 1966.
- VERNON R. DORJAHN, Ph.D., 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 Radiologic Diagnosis, 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.

A.B. (1925), Delaware; A.M. (1927), Ph.D. (1932), Harvard. At Oregon since 1947.

M. FRANCES DOUGHERTY, Ph.D., Professor of Dance; Head of Department.

B.A. (1935), M.A. (1940), Colorado State College; Ph.D. (1959), New York University. At Oregon since 1959.

BENJAMIN E. DOWNS, Instructor in Special Education.

At Oregon since 1970.

ERNEST H. DRAPELA, M.S., Visiting Lecturer in Recreation Management.

B.S. (1958), Oregon College of Education; B.S. (1960), M.S. (1969), Oregon. At Oregon since 1970.

GORDON A. DUDLEY, M.A., Assistant Professor of Education.

B.A. (1956), Kalamazoo; M.A. (1959), Colorado. At Oregon since 1967.

PAUL S. DULL, Ph.D., Professor of History.

B.A. (1935), Ph.D. (1940), Washington. At Oregon since 1946.

DON E. DUMOND, Ph.D., Associate Professor of Anthropology.

B.A. (1949), New Mexico; M.A. (1957), Mexico City College; Ph.D. (1962), Oregon. At Oregon since 1962.

CHARLES T. DUNCAN, M.A., Associate Dean of Faculties; Professor of Journalism.

A.B. (1936), M.A. (1946), Minnesota. At Oregon 1950-62 and since 1965.

JAMES O. DUNCAN, M.S., Research Assistant, Counseling Center, with the Rank of Instructor.

B.S. (1961), Liberia; M.S. (1966), Syracuse. At Oregon since 1970.

K. WRIGHT DUNKLEY, M.S., Associate Professor of Dance.

B.S. (1956), Ricks; M.S. (1961), Utah. At Oregon since 1964.

JAMES N. DUNN, M.D., Associate University Physician, with the Rank of Professor.

B.S. (1928), Oregon State; M.D. (1932), Oregon. At Oregon since 1971.

WILLIAM B. DUNSETH, M.B.A., Executive Director of Development, with the Rank of Professor.

B.A. (1942), Park College, Mo.; M.B.A. (1947), Minnesota. At Oregon since 1968.

JANE B. DURNELL, M.L.S., Reference Librarian; Instructor in Library Administration.

B.A. (1938), Iowa; M.L.S. (1968), Oregon. At Oregon since 1968.

DONALD M. DUSHANE, M.A., Dean of Student Administrative Services (Professor); Lecturer in Political Science.

B.A. (1927), Wabash; M.A. (1937), Columbia. At Oregon since 1948.

*ROBERT R. DVORAK, M.Arch., Visiting Assistant Professor of Architecture.

B.Arch. (1961), Illinois; M.Arch. (1967), California. At Oregon since 1967.

†MICHAEL N. DYER, Ph.D., Assistant Professor of Mathematics.

B.A. (1960), Rice; Ph.D. (1965), California at Los Angeles. At Oregon since 1967.

EDWIN G. EBBIGHAUSEN, Ph.D., Professor of Physics and Astronomy.

B.S. (1936), Minnesota; Ph.D. (1940), Chicago. At Oregon since 1946.

*FRANK B. EBERSOLE, Ph.D., Professor of Philosophy.

A.B. (1941), Heidelberg, Ohio; Ph.D. (1947), Chicago. At Oregon since 1961.

M. KATHERINE G. EATON, M.S., Social Science Librarian; Instructor in Library Administration.

B.A. (1944), Minnesota; M.S. (1952), M.S. (1968), Oregon. At Oregon since 1970.

LOYAL D. EDIGER, Ph.D., Adjunct Assistant Professor of Speech.

B.A. (1963), Tabor (Kans.); M.S. (1966), Ph.D. (1969), Utah. At Oregon since 1970.

PAUL EDLUND, B.Arch., Visiting Lecturer in Architecture.

B.Arch. (1956), Oregon. At Oregon since 1968.

* On leave of absence 1970-71.

† On leave of absence, winter term, 1970-71.

- 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.
- MILES J. EDWARDS, M.D., Associate Professor of Medicine, Medical School;
Head of Division of Chest Diseases.
B.A. (1951), Willamette; M.S., M.D. (1956), Oregon. At Oregon since 1964.
- MARY B. EHLERS, Ph.D., Visiting Assistant Professor of Mathematics.
B.A. (1964), Western Washington State; M.A. (1966), Ph.D. (1969), Washington State.
At Oregon since 1970.
- TERRY L. EIDELL, Ed.D., Associate Professor of Education; Head, Department of
Educational Administration; Research Associate, Center for the Advanced
Study of Educational Administration.
B.S. (1957), Lock Haven State; M.Ed. (1961), D.Ed. (1965), Pennsylvania State. At
Oregon since 1967.
- ALAN L. ELIASON, M.B.A., Assistant Professor of Management.
B.M.E. (1962), M.B.A. (1965), Minnesota. At Oregon since 1970.
- JAMES H. ELLINGWOOD, M.A., Assistant Professor of Speech.
B.A. (1963), M.A. (1965), San Francisco State. At Oregon since 1968.
- LEONARD H. ELWELL, Ph.D., Professor of Physiology, Dental School; Chairman
of Department.
A.B. (1935), Kalamazoo; M.S. (1937), Kansas State; M.S. (1941), Ph.D. (1951), Michi-
gan. At Oregon since 1959.
- SIEGFRIED E. ENGELMANN, B.A., Associate Professor of Special Education.
B.A. (1955), Illinois. At Oregon since 1970.
- RICHARD M. ENRIGHT, B.S., Assistant Football Coach, with the Rank of Associate
Professor.
B.S. (1957), Southern California. At Oregon since 1970.
- KENNETH A. ERICKSON, Ed.D., Professor of Education; Director, Bureau of
Educational Research and Service.
B.S. (1941), Oregon; M.A. (1948), Ed.D. (1953), Washington State. At Oregon since
1967.
- ALICE H. ERNST, M.A., Associate Professor Emeritus of English.
B.A. (1912), M.A. (1913), Washington. At Oregon since 1924.
- SUE H. ERP, M.S., Acting Instructor in Education.
B.S. (1949), Arkansas; M.S. (1970), Oregon. At Oregon since 1970.
- VERNON K. ESPESETH, Ph.D., Associate Professor of Education; Coordinator,
Training Program, Special Education.
B.S. (1955), North Dakota State Teachers; M.S. (1961), North Dakota; Ph.D. (1965),
Wisconsin. At Oregon since 1964.
- RACHEL K. ESPEY, R.D.H., Associate Professor of Dental Hygiene, Dental School;
Chairman of Department.
R.D.H. (1952), State of Oregon. At Oregon since 1954.
- ARTHUR A. ESSLINGER, Ph.D., Dean of the School of Health, Physical Education,
and Recreation; Professor of Physical Education; Acting Head, Department
of Men's Physical Education.
B.S. (1931), M.S. (1932), Illinois; Ph.D. (1938), Iowa. At Oregon since 1953.
- ORVAL ETTER, J.D., Associate Professor of Public Affairs and Administration
Programs.
B.S. (1937), J.D. (1939), Oregon. At Oregon 1939-45, 1960-65, and since 1967.
- ROBERT W. EVANS, B.S., Instructor in Education.
B.S. (1965), Oregon. At Oregon since 1970.
- EUGENE EVONUK, Ph.D., Professor of Physical Education.
B.S. (1952), M.S. (1953), Oregon; Ph.D. (1960), Iowa. At Oregon since 1967.
- JACK D. EWAN, M.S., Associate Professor of Journalism.
B.S. (1948), M.S. (1964), Northwestern. At Oregon since 1964.

- BEVERLY I. FAGOT, Ph.D., Assistant Professor of Psychology; Director of Academic Advising.
B.A. (1960), Occidental; Ph.D. (1967), Oregon. At Oregon since 1965.
- ROBERT F. FAGOT, Ph.D., Professor of Psychology; Head of Department.
B.S. (1946), Massachusetts Institute of Technology; Ph.D. (1956), Stanford. At Oregon since 1956.
- RONALD G. FAICH, Ph.D., Assistant Professor of Sociology.
B.S. (1961), M.S. (1964), Ph.D. (1969), Wisconsin. At Oregon since 1969.
- EFFIE L. FAIRCHILD, M.S., Assistant Professor of Recreation Management.
B.S. (1955), Florida Southern; M.S. (1958), Springfield (Mass.). At Oregon since 1970.
- G. RALPH FALCONERI, Ph.D., Associate Professor of History.
B.A. (1949), Nevada; M.A. (1958), Ph.D. (1967), Michigan. At Oregon since 1963.
- CHARLES W. FARMER, M.A., Assistant Professor of Music (Piano, Music History).
B.A. (1962), Long Beach State; M.A. (1968), Berkeley. At Oregon since 1965.
- JANE M. FARRAND, B.A., Counselor, Student Services, with the Rank of Instructor.
B.A. (1968), Minnesota. At Oregon since 1969.
- THOMAS J. FAWKES, M.F.A., Assistant Professor of Art.
B.F.A. (1963), Rochester Institute of Technology; M.F.A. (1965), Cranbrook Academy of Art. At Oregon since 1968.
- MICHAEL S. FEIDER, A.M.L.S., Science Librarian; Instructor in Library Administration.
B.A. (1964), Drake; M.S. (1968), Iowa State; A.M.L.S. (1970), Michigan. At Oregon since 1970.
- CAROLINE J. FELLER, M.L.S., Assistant Professor of Librarianship.
B.A. (1957), Sarah Lawrence; M.L.S. (1958), Columbia. At Oregon since 1966.
- THOMAS FENDER, JR., B.S., Instructor, Project Newgate.
B.S. (1961), New York at Oswego. At Oregon since 1970.
- JOHN C. FENTRESS, Ph.D., Assistant Professor of Psychology and Biology.
B.A. (1961), Amherst; Ph.D. (1965), Cambridge. At Oregon since 1967.
- *ROBERT R. FERENS, M.Arch., Professor of Architecture.
Dip. Arch. (1941), B. Arch. (1942), Pratt Institute; M.Arch. (1948), Massachusetts Institute of Technology. At Oregon since 1948.
- GARY W. FERRINGTON, M.S., Senior Instructor in Art Education and Education.
B.S. (1964), Portland State; M.S. (1967), Southern California. At Oregon since 1967.
- RICHARD J. FIELD, Ph.D., Visiting Assistant Professor of Chemistry.
B.S. (1963), Massachusetts; M.S. (1964), Holy Cross; Ph.D. (1968), Rhode Island. At Oregon since 1970.
- ELIZABETH FINDLY, A.M.L.S., Professor of Librarianship.
A.B. (1929), Drake; B.S. in L.S. (1934), Illinois; A.M.L.S. (1945), Michigan. At Oregon since 1934.
- DAVID J. FINLAY, Ph.D., Associate Professor of Political Science.
B.A. (1956), Willamette; M.A. (1958), Ph.D. (1962), Stanford. At Oregon since 1965.
- RONALD L. FINLEY, M.Ed., Assistant Professor of Physical Education; Wrestling Coach.
B.S. (1964), M.Ed. (1967), Oregon State. At Oregon since 1970.
- GUNILLA K. FINROW, M.Arch., Visiting Lecturer in Architecture.
M.Arch. (1967), Berkeley. At Oregon since 1970.
- JERRY V. FINROW, M.Arch., Director, Center for Environmental Research; Assistant Professor of Architecture.
B.Arch. (1964), Washington; M.Arch. (1968), Berkeley. At Oregon since 1968.

* On leave of absence 1970-71.

- MICHAEL B. FISH, M.A., Visiting Assistant Professor of Chinese.
B.A. (1965), Knox; M.A. (1968), Indiana. At Oregon since 1970.
- WILLIAM FISCHER, B.A., Adjunct Instructor, Project Newgate.
B.A. (1966), Eastern Washington State. At Oregon since 1970.
- BARBARA G. FISHER, M.A., University Archivist; Associate Professor of Library Administration.
B.A. (1944), Beaver; M.A. (1953), Pennsylvania. At Oregon since 1967.
- CALVIN W. FISK, B.S., Assistant to the Dean of the Graduate School and Coordinator of Graduate Student Financial Aid Programs, with the Rank of Associate Professor.
B.S. (1947), Pacific. At Oregon since 1968.
- JOSEPH R. FISZMAN, Ph.D., Associate Professor of Political Science; Acting Co-director, Institute for Comparative Experimental Research in Behavioral Systems.
B.A. (1948), St. John's (Shanghai); M.A. (1956), Emory; Ph.D. (1964), Michigan State. At Oregon since 1959.
- MARILYN L. FITCH, M.P.E., Instructor in Physical Education.
B.S. (1964), Massachusetts; M.P.E. (1968), Idaho State. At Oregon since 1969.
- H. CLINE FIXOTT, D.M.D., Professor of Dentistry, Dental School; Chairman, Department of Radiology.
D.M.D. (1938), North Pacific. At Oregon since 1946.
- WILLIAM E. FLINN, J.D., Instructor in Business Law.
B.A. (1964), San Jose State; J.D. (1967), Oregon. At Oregon since 1970.
- JOHN M. FOSKETT, Ph.D., Professor of Sociology.
A.B. (1932), M.A. (1935), Ph.D. (1939), California. At Oregon since 1946.
- FREDERICK R. FOSMIRE, Ph.D., Professor of Psychology.
B.A. (1948), M.A. (1949), Ph.D. (1952), Texas. At Oregon since 1958.
- EMBERT A. FOSSUM, B.A., Director, Alumni Relations, with the Rank of Assistant Professor; Associate Director, University Relations.
B.A. (1933), Oregon. At Oregon since 1968.
- DAVID G. FOSTER, M.F.A., Professor of Art.
B.A. (1951), Illinois Institute of Technology; M.F.A. (1957), Oregon. At Oregon since 1957.
- GREGORY L. FOWLER, Ph.D., Visiting Assistant Professor of Biology.
B.A. (1956), M.S. (1960), Wichita State; Ph.D. (1967), Brown. At Oregon since 1970.
- GLENDA A. FOX, M.S., Instructor in Special Education.
B.S. (1965), M.S. (1968), Illinois. At Oregon since 1970.
- PETER W. FRANK, Ph.D., Professor of Biology.
B.A. (1944), Earlham; Ph.D. (1951), Chicago. At Oregon since 1957.
- BROWNELL FRASIER, B.A., Associate Professor Emeritus of Interior Design.
B.A. (1921), Oregon. At Oregon since 1931.
- WALTER FREAUFF, M.A., Associate Dean of Students, with the Rank of Associate Professor; Associate Director of Financial Aids.
B.A. (1950), M.A. (1952), Oregon. At Oregon since 1957.
- E. COSTON FREDERICK, Ph.D., Associate Professor of Education.
B.S. (1951), State Teachers (Pa.); Ed.M. (1958), Temple; Ph.D. (1968), Syracuse. At Oregon since 1967.
- JEAN D. FREEMAN, B.S., Acting Instructor in Education.
B.S. (1968), Oregon. At Oregon since 1970.
- ROBERT S. FREEMAN, Ph.D., Associate Professor of Mathematics.
B.A.E. (1947), New York University; Ph.D. (1958), California. At Oregon since 1967.
- BERNARD L. FREEMESSER, M.S., Professor of Journalism.
B.A. (1950), San Diego State; M.S. (1952), Oregon. At Oregon since 1955.

- GERALD L. FREI, M.S., Head Football Coach, with the Rank of Professor ; Assistant Professor of Physical Education.
B.S. (1948), M.S. (1950), Wisconsin. At Oregon since 1955.
- COLETTE M. FREITAG, Instructor in French.
At Oregon since 1965.
- ROBERT P. FRIEDMAN, Ph.D., Professor of Speech.
B.A. (1948), North Carolina; M.A. (1950), Ph.D. (1954), Missouri. At Oregon since 1965.
- ARTHUR W. FRISCH, Ph.D., M.D., Professor of Microbiology, Medical School ; Chairman of Department.
B.A. (1931), M.A. (1933), Ph.D. (1935), M.D. (1937), Wisconsin. At Oregon since 1946.
- PAUL FRISHKOFF, Ph.D., Assistant Professor of Accounting.
B.A. (1960), Swarthmore; M.B.A. (1962), Chicago; C.P.A. (1964), State of California; Ph.D. (1970), Stanford. At Oregon since 1967.
- DAVID B. FROHNMEYER, J.D., Assistant Professor of Law ; Special Assistant to the President.
A.B. (1962), Harvard; B.A. (1964), Oxford; J.D. (1967), Berkeley; M.A. (1969), Oxford. At Oregon since 1971.
- ARTHUR E. FRY, D.D.S., Professor of Dentistry, Dental School ; Chairman of Department of Oral Diagnosis.
D.D.S. (1940), Iowa. At Oregon since 1953.
- GERALD W. FRY, M.P.A., Visiting Lecturer in International Development.
B.A. (1964), Stanford; M.P.A. (1966), Princeton. At Oregon since 1970.
- HELEN J. FRYE, M.A., Instructor in Business Law.
B.A. (1953), M.A. (1961), LL.B. (1966), Oregon. At Oregon since 1970.
- SALLY FULLERTON, Ph.D., Assistant Professor of Community Service.
B.S. (1956), Oregon State; M.A. (1960), Cornell; Ph.D. (1970), Oregon. At Oregon since 1966.
- EMIL D. FURRER, M.D., Associate Professor of Health Education.
B.A. (1926), M.D. (1929), Oregon. At Oregon since 1947.
- RICHARD P. GALE, Ph.D., Assistant Professor of Sociology.
B.A. (1960), Reed; M.A. (1962), Washington State; Ph.D. (1968), Michigan State. At Oregon since 1967.
- 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.
- FEDERICO GARZA, Adjunct Instructor in Education.
At Oregon since 1970.
- CLIFTON L. GASS, M.S., Instructor in Biology.
B.A. (1964), M.A. (1967), Chico State; M.S. (1969), Oregon. At Oregon since 1969.
- LEONARD R. GEDDES, Ph.D., Assistant Professor of Philosophy.
B.A. (1960), British Columbia; M.A. (1962), North Carolina; Ph.D. (1968), California at San Diego. At Oregon since 1967.
- JANE GEHRING, M.S., Associate Professor of Art.
B.S. (1940), Michigan State Teachers (Ypsilanti); M.S. (1960), Oregon. At Oregon since 1958.
- L. RICHARD GESER, Ph.D., Associate Professor of Physical Education.
B.S. (1951), M.S. (1952), Springfield (Mass.); Ph.D. (1965), Oregon. At Oregon since 1967.
- ROBERT W. GETTY, B.S., Audiovisual Librarian; Instructor in Library Administration.
B.S. (1958), Oregon. At Oregon since 1969.
- 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.

- ANDREW GIANOPOULOS, B.S., Head Resident, Dormitories, with the Rank of Instructor.
B.S. (1970), Oregon. At Oregon since 1970.
- ALEX J. GILANDAS, M.S., Head Resident, Dormitories, with the Rank of Instructor.
B.S. (1968), M.S. (1969), Oregon. At Oregon since 1970.
- JAMES H. GILBERT, Ph.D., Professor Emeritus of Economics.
B.A. (1903), Oregon; Ph.D. (1907), Columbia. At Oregon since 1907.
- ROBERT D. GILBERTS, Ph.D., Dean of the College of Education; Professor of Education.
B.S. (1950), Wisconsin State; M.S. (1955), Ph.D. (1961), Wisconsin. At Oregon since 1970.
- WILMOT G. GILLAND, M.F.A., Associate Professor of Architecture.
A.B. (1955), M.F.A. (1960), Princeton. At Oregon since 1969.
- JOHN F. GILLHAM, M.L.A., Associate Professor of Landscape Architecture.
B.L.A. (1962), M.L.A. (1966), Oregon. At Oregon since 1967.
- PHILIP C. GILMORE, M.F.A., Assistant Professor of Architecture.
B.Arch. (1948), M.F.A. (1956), Oregon. At Oregon since 1960.
- SUSAN K. GILMORE, Ph.D., Associate Professor of Education; Counselor.
B.A. (1956), Whitworth; M.S. (1962), Ph.D. (1966), Oregon. At Oregon since 1964.
- MARVIN D. GIRARDEAU, Ph.D., Professor of Physics; Research Associate, Institute of Theoretical Science.
B.S. (1952), Case Institute of Technology; M.S. (1954), Illinois; Ph.D. (1958), Syracuse. At Oregon since 1963.
- SYLVIA B. GIUSTINA, M.A., Instructor in Italian.
B.A. (1956), Marylhurst; M.A. (1966), Oregon. At Oregon since 1968.
- ELLIOTT B. GLEASON, B.S., Field Counselor, Project Newgate, with the Rank of Instructor.
B.S. (1949), Berkeley. At Oregon since 1970.
- MARVIN E. GLOEGE, M.A., Assistant Professor of Urban Planning.
B.A. (1954), M.A. (1958), Washington. At Oregon since 1966.
- RONALD B. GLOEKLER, M.A., Assistant Professor of Speech.
B.A. (1966), M.A. (1968), San Jose State. At Oregon since 1969.
- *ELIZABETH G. GLOVER, M.S., Assistant Professor of Physical Education.
B.S. (1959), Tufts; M.S. (1963), Woman's College, North Carolina. At Oregon since 1964.
- TED G. GOERTZEL, Ph.D., Assistant Professor of Sociology.
B.A. (1964), Antioch; M.A. (1966), Ph.D. (1970), Washington University (St. Louis). At Oregon since 1968.
- †LEWIS R. GOLDBERG, Ph.D., Professor of Psychology.
A.B. (1953), Harvard; M.A. (1954), Ph.D. (1958), Michigan. At Oregon since 1960.
- PATRICK F. GOLDEN, M.D., Adjunct Associate Professor of Psychology.
B.S. (1955), Holy Cross; M.D. (1964), Marquette. At Oregon since 1970.
- DANIEL GOLDRICH, Ph.D., Professor of Political Science.
B.A. (1955), Antioch; M.A. (1957), Ph.D. (1959), North Carolina. At Oregon since 1963.
- STEVEN GOLDSCHMIDT, J.D., Assistant Professor of Education; Director, Lincoln County Project.
B.A. (1966), Oregon; J.D. (1969), Berkeley. At Oregon since 1969.
- GERSHAM GOLDSTEIN, LL.M., Visiting Professor of Law.
B.B.A. (1959), City College of New York; LL.B. (1962), Pennsylvania; LL.M. (1964), New York University. At Oregon since 1970.

* On sabbatical leave 1970-71.

† On leave of absence 1970-71.

- *HENRY N. GOLDSTEIN, Ph.D., Associate Professor of Economics.
B.A. (1950), North Carolina; M.A. (1953), Ph.D. (1967), Johns Hopkins. At Oregon since 1967.
- GORDON G. GOLES, Ph.D., Associate Professor of Chemistry and Geology.
A.B. (1956), Harvard; Ph.D. (1961), Chicago. At Oregon since 1966.
- ROBERT T. GOLLY, M.S., Assistant Professor of Aerospace Studies.
B.S. (1956), Wisconsin State; M.S. (1967), Air Force Institute of Technology. At Oregon since 1970.
- PETER B. GONTRUM, Ph.D., Associate Professor of Germanic Languages.
A.B. (1954), Haverford; M.A. (1956), Princeton; Ph.D. (1958), Munich. At Oregon since 1961.
- DANIEL N. GORDON, Ph.D., Assistant Professor of Sociology.
B.A. (1961), Johns Hopkins; M.S., (1964), Ph.D. (1967), Wisconsin. At Oregon since 1969.
- NORMAN A. GOSCH, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1958), M.D. (1962), Nebraska. At Oregon since 1965.
- AMIT GOSWAMI, D.Phil., Associate Professor of Physics; Research Associate, Institute of Theoretical Science.
B.S. (1955), M.S. (1960), D.Phil. (1964), Calcutta. At Oregon since 1968.
- JEFFRY L. GOTTFRIED, B.S., Instructor in Biology.
B.S. (1969), Oregon. At Oregon since 1970.
- THOMAS P. GOVAN, Ph.D., Professor of History.
B.S. (1928), Georgia Institute of Technology; M.A. (1934), Emory; Ph.D. (1937), Vanderbilt. At Oregon since 1967.
- GRACE GRAHAM, Ed.D., Professor of Education.
B.A. (1933), M.A. (1936), South Carolina; Ed.D. (1952), Stanford. At Oregon since 1954.
- A. RICHARD GRANT, LL.B., Assistant Professor of Business Law.
B.B.A. (1960), Portland; M.B.A. (1961), Northwestern; LL.B. (1964), Willamette. At Oregon since 1968.
- PHILIP GRANT, Ph.D., Professor of Biology.
B.S. (1947), College of City of New York; M.A. (1949), Ph.D. (1952), Columbia. At Oregon since 1966.
- PHILIP G. GRANT, M.A., Acting Assistant Professor of Anthropology.
B.A. (1964), Stanford; M.A. (1968), Berkeley. At Oregon since 1969.
- BRYAN J. GRAY, M.S., Instructor in Health Education.
B.P.E. (1965), British Columbia; M.S. (1966), Oregon. At Oregon since 1969.
- JANE GRAY, Ph.D., Curator of Paleobotany, Museum of Natural History; Associate Professor of Biology.
B.A. (1951), Radcliffe; Ph.D. (1958), Berkeley. At Oregon since 1963.
- CAROLYN K. GREEN, M.A., Instructor in Special Education.
B.A. (1965), M.A. (1967), Illinois. At Oregon since 1970.
- MARVIN GREENBAUM, Ph.D., Adjunct Associate Professor of Psychology.
B.A. (1949), M.A. (1951), Ph.D. (1955), Syracuse. At Oregon since 1967.
- *STANLEY B. GREENFIELD, Ph.D., Professor of English.
B.A. (1942), Cornell; M.A. (1947), Ph.D. (1950), Berkeley. At Oregon since 1959.
- †THELMA GREENFIELD, Ph.D., Associate 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.

* On leave of absence 1970-71.

† On sabbatical leave 1970-71.

- LUCILE GREGERSON, M.Ed., Associate Professor of Nursing; Coordinator, Graduate Nursing Programs.
B.S. (1944), Boston; M.Ed. (1950), Oregon. At Oregon since 1961.
- CLARK GRIFFITH, Ph.D., Professor of English.
A.B. (1947), Central College (Mo.); M.A. (1948), Southern Methodist; Ph.D. (1952), Iowa. At Oregon since 1970.
- O. HAYES GRIFFITH, Ph.D., Associate Professor of Chemistry; Research Associate, Institute of Molecular Biology.
A.B. (1960), California at Riverside; Ph.D. (1964), California Institute of Technology. At Oregon since 1965.
- GARY O. GRIMM, M.A., Outdoor Program Coordinator, Erb Memorial Union, with the Rank of Instructor.
B.A. (1963), M.A. (1965), Idaho State. At Oregon since 1968.
- HERBERT E. GRISWOLD, M.D., Professor of Medicine, Medical School; Head of Division of Cardiology.
B.A. (1939), Reed; M.S. (1943), M.D. (1943), Oregon. At Oregon since 1949.
- JOSEPH R. GRODIN, Ph.D., Visiting Professor of Law.
B.A. (1951), Berkeley; LL.B. (1954), Yale; Ph.D. (1959), London. At Oregon since 1970.
- ROGER D. GROSS, M.A., Visiting Lecturer in Speech.
B.A. (1957), Oregon; M.A. (1958), Minnesota. At Oregon since 1970.
- MYRON A. GROVE, Ph.D., Professor of Economics; Head of Department.
B.S. (1957), M.S. (1959), Oregon; Ph.D. (1964), Northwestern. At Oregon since 1963.
- M. ROBERTS GROVER, JR., M.D., Associate Dean of the Medical School; Professor of Medicine.
B.A. (1950), Bowdoin; M.D. (1954), Cornell; M.S. (1956), Oregon. At Oregon since 1958.
- *MYRON A. GURAN, B.Arch., Assistant Professor of Architecture.
A.B. (1962), B.Arch. (1964), Pennsylvania. At Oregon since 1967.
- JOHN M. GUSTAFSON, Ph.D., Associate Professor of Music (Music Education).
A.B. (1947), Augustana; M.Mus. (1951), Michigan; Ph.D. (1956), Florida State. At Oregon since 1956.
- FRANKLIN B. HAAR, Ph.D., Professor of Health Education; Head of Department.
B.P.E. (1928), Springfield; M.A. (1933), Ph.D. (1946), Pittsburgh. At Oregon since 1949.
- THOMAS O. HACKER, B.Arch., Assistant Professor of Architecture.
B.A. (1964), B.Arch. (1970), Pennsylvania. At Oregon since 1970.
- WILLIE B. HACKETT, M.B.A., Associate Professor of Real Estate.
A.B. (1955), L.S.B. (1958), Michigan; M.B.A. (1968), Berkeley. At Oregon since 1969.
- DEMETRIOS M. HADJIMARKOS, D.D.S., Professor of Dentistry, Dental School; Chairman, Department of Preventive Dentistry.
D.D.S. (1931), Athens; M.S.D. (1943), Northwestern; M.P.H. (1946), Harvard. At Oregon since 1953.
- DONALD R. HAGUE, Ph.D., Assistant Professor of Biology.
B.S. (1953), Franklin and Marshall, Ph.D. (1966), Oregon. At Oregon since 1966.
- WALTHER L. HAHN, Ph.D., Associate Professor of Germanic Languages.
Dip. (1949), Teachers College, Berlin; M.A. (1954), Rice; Ph.D. (1956), Texas. At Oregon since 1961.
- JOHN A. HAISLIP, Ph.D., Associate Professor of English.
B.A. (1950), Ph.D. (1965), Washington. At Oregon since 1966.
- JOANNE V. HALGREN, M.L., Science Librarian; Instructor in Library Administration.
B.A. (1966), George Fox; M.L. (1967), Washington. At Oregon since 1967.

* On leave of absence, 1970-71.

ROBERT C. HALL, Associate Professor Emeritus of Journalism.

At Oregon since 1917.

WALTER B. HALL, D.D.S., Associate Professor of Dentistry, Dental School; Chairman, Department of Periodontology; Associate Clinical Professor of Dental and Oral Medicine, Medical School.

B.A. (1953), Cornell; D.D.S. (1957), Maryland; M.S.D. (1962), Washington. At Oregon since 1963.

RICHARD W. HALLER, Ph.D., Assistant Professor of Psychology.

B.A. (1963), Michigan State; Ph.D. (1969), Stanford. At Oregon since 1967.

ANDREW S. HALPERN, Ph.D., Associate Professor of Education; Director of Research, SRS Project.

B.A. (1961), Carleton (Minn.); M.A. (1963), Yale; Ph.D. (1966), Wisconsin. At Oregon since 1970.

ROY K. HALVERSON, Ph.D., Associate Professor of Journalism.

B.S. (1957), M.S. (1963), Wisconsin; Ph.D. (1970), Illinois. At Oregon since 1966.

JOHN HAMILTON, D.M.A., Associate Professor of Music (Organ, Harpsichord, Music History).

A.B. (1946), California; M.Mus. (1956), D.M.A. (1966), Southern California. At Oregon since 1959.

SUSANN G. HANDY, B.A., Lecturer in English.

B.A. (1961), Texas. At Oregon since 1965.

WILLIAM J. HANDY, Ph.D., Professor of English; Associate Dean, College of Liberal Arts.

B.A. (1947), M.A. (1949), Ph.D. (1954), Oklahoma. At Oregon since 1965.

ARTHUR M. HANHARDT, JR., Ph.D., Associate Professor of Political Science.

B.A. (1953), Rochester; M.A. (1958), Colgate; Ph.D. (1963), Northwestern. At Oregon since 1963.

ALLEN M. HANLEY, B.A., Assistant Professor of Chinese.

B.A. (1962), Washington. At Oregon since 1969.

WILLIAM S. HANNA, JR., Ph.D., Associate Professor of History.

A.B. (1949), M.A. (1954), Ph.D. (1959), California at Berkeley. At Oregon since 1965.

FREDERICK T. HANNAFORD, Reg. Archt., Professor Emeritus of Architecture.

B.A. (1924), Washington State; Reg. Archt. (1931), State of Florida. At Oregon since 1946.

STEPHEN R. HANNING, M.A.R., Counselor, Office of Student Services, with the Rank of Assistant Professor.

B.A. (1965), Miami; M.A.R. (1969), Yale. At Oregon since 1969.

JOHN H. HANSEN, Ph.D., Associate Professor of Education; Assistant Chairman, Department of Curriculum and Instruction.

B.S. (1959), M.S. (1961), Ph.D. (1964), Wisconsin. At Oregon since 1963.

SALLY L. HANSEN, M.S., Adjunct Assistant Professor of Home Economics.

B.S. (1960), M.S. (1963), Wisconsin. At Oregon since 1965.

HOWARD K. HARKER, M.L.S., Adjunct Assistant Professor of Librarianship.

B.S. (1957), Utah; M.L.S. (1967), Oregon. At Oregon since 1971.

FRANK W. HARMON, Ed.D., Visiting Associate Professor of Special Education.

B.S. (1952), M.S. (1956), Utah; Ed.D. (1964), Columbia. At Oregon since 1970.

EDWARD C. HARMS, JR., B.S., LL.B., Special Lecturer in Law.

B.S. (1947), LL.B. (1949), Oregon. At Oregon since 1958.

DAVID C. HARPER, M.S.W., Adjunct Assistant Professor of Community Service.

B.S. (1961), Lakeland (Wis.); M.S.W. (1963), Washington. At Oregon since 1970.

ROBERT S. HARRIS, M.F.A., Professor of Architecture; Head of Department.

B.A. (1957), Rice; M.F.A. (1960), Princeton. At Oregon since 1967.

- WILLIAM H. HARRIS, D.Ed.**, Associate Professor of Education.
B.A. (1949), Willamette; B.S. (1951), M.S. (1953), Eastern Oregon; D.Ed. (1967), Oregon. At Oregon since 1969.
- DAVID K. HARRISON, Ph.D.**, Professor of Mathematics.
B.A. (1953), Williams; Ph.D. (1956), Princeton. At Oregon since 1963.
- THOMAS R. HART, Ph.D.**, Professor of Romance Languages.
B.A. (1948), Ph.D. (1952), Yale. At Oregon since 1964.
- DALE S. HARWOOD, JR., D.B.A.**, Professor of Accounting.
B.S. (1948), Oregon State; D.B.A. (1957), Washington. At Oregon since 1958.
- LARRY J. HASKELL, B.S.**, Instructor, Tongue Point Job Corps Center.
B.S. (1966), Oregon College of Education. At Oregon since 1969.
- WILLIAM M. HATCH, M.A.**, Instructor in History.
B.A. (1963), Whitworth; M.A. (1966), Washington. At Oregon since 1970.
- EMMANUEL S. HATZANTONIS, Ph.D.**, Associate 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.
- CLAUS C. HAUBOLDT**, Superintendent of University Press, with the Rank of Assistant Professor.
At Oregon since 1968.
- ERIC HAUGHTON, Ed.D.**, Assistant Professor of Education.
B.A. (1957), Western Ontario; M.A. (1962), Toronto; Ed.D. (1968), Kansas. At Oregon since 1967.
- WILLIAM H. HAVENS, M.L.A.**, Associate Professor of Landscape Architecture.
B.L.A. (1962), Berkeley; M.L.A. (1965), Harvard. At Oregon since 1967.
- RAY HAWK, D.Ed.**, Dean of Administration; Director of University Relations; Professor of Education.
B.S. (1947), M.S. (1948), D.Ed. (1949), Oregon. At Oregon since 1950.
- DELBERT I. HAWKINS, Ph.D.**, Assistant Professor of Marketing.
B.B.A. (1966), M.B.A. (1967), Ph.D. (1969), Texas. At Oregon since 1970.
- ARTHUR W. HAWN, M.A.**, Assistant Professor of Interior Architecture.
B.A. (1961), M.A. (1964), Washington State. At Oregon since 1967.
- WALLACE S. HAYDEN, B.Arch.**, Reg. Archt., Professor of Architecture.
B.Arch. (1928), Oregon; Reg. Archt. (1935), State of Oregon. At Oregon since 1930.
- TERRIE C. HAYES, M.A.**, Instructor in Dance.
B.A. (1966), Colorado College; M.A. (1969), Oregon. At Oregon since 1969.
- MARY A. HAZZLE, B.S.**, Instructor in Education.
B.S. (1970), Oregon. At Oregon since 1970.
- ARTHUR C. HEARN, Ed.D.**, Professor of Education.
A.B. (1934), M.A. (1937), Ed.D. (1949), Stanford. At Oregon since 1950.
- LINDA S. HEARN, M.A.**, Assistant Professor of Dance.
B.S. (1962), M.A. (1965), Texas Woman's University. At Oregon since 1965.
- GARY P. HEER, M.S.W.**, Adjunct Instructor in Community Service.
B.S. (1966), Mt. Angel; M.S.W. (1969), Portland State. At Oregon since 1970.
- THOMAS L. HEFLIN, M.S.**, Acting Instructor in Education.
B.S. (1964), M.S. (1966), San Jose State. At Oregon since 1970.
- ROBERT L. HEILMAN, M.A.**, Computer Systems Development Programmer, with the Rank of Associate Professor.
B.S. (1962), Pittsburgh; M.A. (1964), Oregon. At Oregon since 1967.
- ALFRED HEILPERN, M.L.**, Acquisition Librarian; Senior Instructor in Library Administration.
B.A. (1956), M.L. (1957), Washington. At Oregon since 1957.

- M. CHARLENE HEIMBIGNER, M.S., Instructor in Biology.
B.S. (1963), Washington State; M.S. (1967), Oregon. At Oregon since 1967.
- J. RICHARD HEINZKILL, M.L.S., Humanities Librarian; Assistant Professor of Library Administration.
B.A. (1955), St. John's (Minn.); M.L.S. (1964), Michigan. At Oregon since 1967.
- CHRISTOPHER M. HENDY, M.A., Instructor in Physical Education.
Dip. (1961), Poitiers; Ed. Cert. (1963), Oxford; M.A. (1964), Oregon. At Oregon since 1970.
- CHARLES W. HENS, M.A., Adjunct Assistant Professor of Music Education; Co-Director, German Music Center.
B.A. (1966), M.A. (1969), Oregon. At Oregon since 1970.
- WILMA M. HENS, M.A., Adjunct Assistant Professor of Music Education.
M.A. (1969), Oregon. At Oregon since 1969.
- EDWARD HERBERT, Ph.D., Professor of Chemistry.
B.S. (1948), Connecticut; Ph.D. (1953), Pennsylvania. At Oregon since 1963.
- ROBERT T. HERBERT, Ph.D., Associate Professor of Philosophy.
B.A. (1952), M.A. (1954), Ph.D. (1962), Nebraska. At Oregon since 1966.
- REX H. HERRON, Adjunct Instructor, Project Newgate.
At Oregon since 1970.
- WESLEY D. HERVEY, Ph.D., Visiting Associate Professor of Speech.
B.A. (1949), California at Santa Barbara; M.A. (1951), Hawaii; Ph.D. (1969), Oregon. At Oregon 1966-68 and since 1969.
- RICHARD J. HIGGINS, Ph.D., Associate Professor of Physics.
B.S. (1960), Massachusetts Institute of Technology; Ph.D. (1965), Northwestern. At Oregon since 1965.
- DAVID A. HILL, Ph.D., Visiting Assistant Professor of Mathematics.
B.S. (1966), Chicago; M.S. (1968), Ph.D. (1970), Oregon. At Oregon since 1970.
- JAMES E. HILL, M.S., Director, Upward Bound, with the Rank of Assistant Professor.
B.S., (1969), M.S. (1970), Oregon. At Oregon since 1969.
- RICHARD J. HILL, Ph.D., Professor of Sociology.
A.B. (1950), M.A. (1951), Stanford; Ph.D. (1955), Washington. At Oregon since 1970.
- SYLVIA I. BELTON HILL, M.S., Assistant Professor of Education.
B.S. (1963), Howard; M.S. (1967), Oregon. At Oregon since 1967.
- CLARENCE A. HINES, D.Ed., Professor Emeritus of Education.
B.A. (1925), Drury College (Mo.); M.A. (1929), Missouri; D.Ed. (1950), Oregon. At Oregon 1958-69, and since 1970.
- CARL W. HINTZ, Ph.D., University Librarian; Dean of Libraries, Oregon State System of Higher Education; 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.
- DOUGLAS L. HINTZMAN, Ph.D., Assistant Professor of Psychology.
B.A. (1963), Northwestern; Ph.D. (1967), Stanford. At Oregon since 1969.
- ERNEST H. HIXON, D.D.S., Professor of Dentistry, Dental School; Head of Department of Orthodontics; Clinical Professor of Dental and Oral Medicine, Medical School.
D.D.S. (1945), M.S. (1949), Iowa. At Oregon since 1961.
- J. ROBERT HLADKY, A.Mus. D., Professor of Music (Violoncello, Music History); Member, University Trio.
B.Mus. (1950), Oklahoma State; M.Mus. (1952), A.Mus.D. (1959), Eastman School of Music. At Oregon since 1961.
- GEORGE M. HODGE, JR., M.S., Professor of Architecture; Assistant to the Dean of the School of Architecture and Allied Arts.
B.S. (1949), M.S. (1950), Illinois. At Oregon since 1964.

- 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.
- CHARLES J. HOFF, M.A., Instructor in Anthropology.
B.S. (1961), M.A. (1968), Pennsylvania State; Dipl. Hum. Biol. (1968), Oxford. At Oregon since 1970.
- PAUL S. HOLBO, Ph.D., Associate Professor of History.
B.A. (1951), Yale; M.A. (1955), Ph.D. (1961), Chicago. At Oregon since 1959.
- ORLANDO J. HOLLIS, J.D., Distinguished Professor of Law.
B.S. (1926), J.D. (1928), Oregon. At Oregon since 1928.
- JOHNNY C. HOLLOWAY, B.S., Director, Office of Supportive Services, with the Rank of Assistant Professor.
B.S. (1969), Oregon. At Oregon since 1969.
- PATRICIA S. HOLLOWAY, M.Ed., Instructor in Special Education.
M.F.A. (1966), M.Ed. (1970), Illinois. At Oregon since 1970.
- CHARLES N. HOLMAN, M.D., Dean of the Medical School; Professor of Medicine.
B.A. (1931), M.D. (1936), Oregon. At Oregon since 1937.
- DONALD HOLMES, M.A., Adjunct Instructor, Project Newgate.
B.A. (1964), Linfield; M.A. (1967), Western Washington State. At Oregon since 1970.
- WILLIAM T. HOLSER, Ph.D., Professor of Geology.
B.S. (1942), M.S. (1946), California Institute of Technology; Ph.D. (1950), Columbia. At Oregon since 1970.
- DENNIS C. HOLT, M.A., Visiting Instructor in Philosophy.
B.A. (1967), Oregon; M.A. (1970), Cornell. At Oregon since 1970.
- MICHAEL H. HOPEWELL, M.B.A., Acting Assistant Professor of Finance.
B.A. (1963), M.B.A. (1967), Washington. At Oregon since 1969.
- GEORGE HOPKINS, B.A., Professor Emeritus of Piano.
Teachers Cert. (1918), Peabody Conservatory; B.A. (1921), Oregon. At Oregon 1919-23 and since 1925.
- ROBERT D. HORN, Ph.D., Professor Emeritus of English.
B.A. (1922), M.A. (1924), Ph.D. (1930), Michigan. At Oregon since 1925.
- BARBARA J. HORNE, M.S., Instructor in Education.
B.S. (1965), M.S. (1969), Oregon. At Oregon since 1970.
- A. WESLEY HORTON, Ph.D., Professor of Environmental Medicine and Biochemistry; Medical School; Acting Head of Division of Environmental Medicine.
B.S. (1940), M.S. (1947), Ph.D. (1948), Yale. At Oregon since 1962.
- PAUL HORWITZ, Ph.D., Visiting Assistant Professor of Physics.
A.B. (1960), Harvard; M.A. (1963), Columbia; Ph.D. (1967), New York University. At Oregon since 1970.
- LARRY L. HORYNA, M.A., Assistant Professor of Education.
B.S. (1964), Oregon; M.A. (1968), Central Michigan. At Oregon since 1970.
- MICHAEL C. HOSOKAWA, D.Ed., Assistant Professor of Health Education.
B.A. (1962), Colorado State; M.Ed. (1963), Oregon State; D.Ed. (1969), Oregon. At Oregon 1967-68 and since 1969.
- JAMES M. HOTCHKISS, Ph.D., Associate Professor of Education.
B.A. (1953), Wichita; Ph.D. (1966), Southern California. At Oregon since 1966.
- THOMAS HOVET, JR., Ph.D., Professor of Political Science.
A.B. (1948), Washington; M.A. (1949), New York University; Ph.D. (1954), New Zealand. At Oregon since 1965.
- CHARLES G. HOWARD, A.B., J.D., Professor Emeritus of Law.
A.B. (1920), J.D. (1922), Illinois. At Oregon since 1928.
- HARRISON M. HOWARD, Senior Instructor in Biology.
At Oregon since 1968.

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 1961.

JANE YEN-CHENG HSU, B.A., Senior Catalog Librarian; Bibliographer, Orientalia Collection; Senior Instructor in Library Administration.

B.A. (1946), Gingling Girls' College (Nanking). At Oregon since 1956.

HARLOW E. HUDSON, Assistant Professor of Architecture.

At Oregon 1938-47 and since 1960.

CARL L. HUFFAKER, Ph.D., Professor Emeritus of Education.

B.S. (1915), Chicago; M.A. (1922), Ph.D. (1923), Iowa. At Oregon since 1927.

MARGARET E. HUGHES, B.S., Librarian, Medical School; (Professor).

B.S. (1937), Minnesota. At Oregon since 1946.

RAY E. HULL, D.Ed., Assistant Professor of Curriculum and Instruction.

B.S. (1958), M.S. (1962), Oregon State; D.Ed. (1969), Oregon. At Oregon since 1970.

*JOHN L. HULTENG, M.S., Professor of Journalism.

Ph.B. (1943), North Dakota; M.S. (1947), Columbia. At Oregon since 1955.

DWIGHT H. HUMPHREY, M.A., Catalog Librarian; Senior Instructor in Library Administration.

A.B. (1934), B.S. in L.S. (1939), M.A. (1951), Southern California. At Oregon since 1963.

CAROLE G. HUNTER, B.S., Instructor in Special Education.

B.S. (1970), Illinois. At Oregon since 1970.

DONALD L. HUNTER, B.S., Head, Audiovisual Media Center, Library; Associate Professor of Library Administration.

B.S. (1945), Nebraska. At Oregon since 1946.

THOMAS L. HUNTER, Instructor in Special Education.

At Oregon since 1970.

ERNEST A. HURLEY, D.M.D., Director of Student Affairs, Dental School; Associate Professor of Dentistry.

D.M.D. (1951), Oregon. At Oregon since 1951.

ROBERT I. HURWITZ, Ph.D., Assistant Professor of Music (Music Theory).

A.B. (1961), Brooklyn; M.M. (1965), Ph.D. (1970), Indiana. At Oregon since 1965.

TYRA T. HUTCHENS, M.D., Professor of Clinical Pathology and Radiation Therapy (Radioisotopes), Medical School; Chairman of Department of Clinical Pathology.

B.S. (1943), M.D. (1945), Oregon. At Oregon since 1953.

RAY HYMAN, Ph.D., Professor of Psychology.

A.B. (1950), Boston; M.A. (1952), Ph.D. (1953), Johns Hopkins. At Oregon since 1961.

JOSEPH A. HYNES, JR., Ph.D., Associate Professor of English.

A.B. (1951), Detroit; A.M. (1952), Ph.D. (1961), Michigan. At Oregon since 1957.

RICHARD C. INGRAHAM, Ph.D., Associate Professor of Community Service and Public Affairs.

B.A. (1963), Nebraska; M.A. (1965), Ph.D. (1967), Missouri. At Oregon since 1969.

CHARLES C. IRBY, M.A., Visiting Assistant Professor of Geography.

B.A. (1966), Sacramento State; M.A. (1968), California at Davis. At Oregon since 1971.

DONALD C. IVERSON, Ph.D., Instructor in Health Education.

B.S. (1967), North Dakota; M.S. (1969), Ph.D. (1970), Oregon. At Oregon since 1970.

EVAN A. IVERSON, Ph.D., Associate Professor of Public Affairs; Research Associate, Bureau of Governmental Research and Service, with the Rank of Professor.

B.S. (1943), Utah State; M.A. (1945), California; Ph.D. (1956), Utah. At Oregon since 1967.

* On leave of absence, fall and winter terms, 1970-71.

- JAY M. JACKSON, Ph.D., Professor of Sociology.
B.A. (1948), M.A. (1950), McGill; Ph.D. (1953), Michigan. At Oregon since 1963.
- MURIEL K. JACKSON, M.S., Assistant to the President, with the Rank of Assistant Professor.
B.A. (1950), Keuka (New York); M.S. (1952), Columbia. At Oregon since 1969.
- *ROBERT M. JACKSON, Ph.D., Assistant Professor of Romance Languages.
A.B. (1963), Dartmouth; A.M. (1964), Ph.D. (1968), Harvard. At Oregon since 1969.
- RUTH F. JACKSON, M.A., Senior Instructor in English.
B.A. (1929), M.A. (1933), Oregon. At Oregon since 1955.
- JOHN B. JACOBS, Ph.D., Assistant Professor of Mathematics.
B.S. (1965), Michigan; M.S. (1966), Ph.D. (1969), Illinois. At Oregon since 1969.
- GERALD D. JACOBSON, M.S.W., Visiting Lecturer in Recreation.
B.A. (1959), M.S.W. (1961), Washington. At Oregon since 1966.
- JON L. JACOBSON, J.D., Assistant Professor of Law.
B.A. (1961), J.D. (1963), Iowa. At Oregon since 1968.
- LEONARD D. JACOBSON, M.D., Adjunct Associate Professor of Health Education.
B.A. (1937), M.D. (1941), Oregon. At Oregon since 1962.
- PAUL B. JACOBSON, Ph.D., Dean of Summer Session; Professor Emeritus of Education.
B.A. (1922), Luther (Iowa); M.A. (1928), Ph.D. (1931), Iowa. At Oregon since 1947.
- HAROLD W. JAMES, B.A., Acting Assistant Professor of Education.
B.A. (1956), San Francisco State. At Oregon since 1968.
- ROBERT C. JAMES, M.F.A., Professor of Art; Head, Department of Fine and Applied Arts.
A.B. (1952), California at Los Angeles; M.F.A. (1955), Cranbrook Academy. At Oregon since 1955.
- STANLEY L. JAMES, M.D., Adjunct Associate Professor of Physical Education.
B.A. (1953), M.D. (1962), Iowa. At Oregon since 1970.
- MARVIN M. JANZEN, M.S., Assistant Professor of Community Services and Public Affairs; Assistant Professor of Education.
B.S. (1949), Oregon State; M.S. (1964), Oregon. At Oregon since 1967.
- THOMAS W. JERNSTEDT, B.S., Instructor in Physical Education; Administrative Assistant, Athletic Department.
B.S. (1967), Oregon. At Oregon since 1969.
- BERTRAM E. JESSUP, Ph.D., Professor Emeritus 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.
- NATALIA JIMENEZ, M.Ed., Instructor in Special Education.
B.A. (1968), Oxford; M.Ed. (1970), Illinois. At Oregon since 1970.
- CARL L. JOHANNESSEN, Ph.D., Professor of Geography.
B.A. (1950), M.A. (1953), Ph.D. (1959), California. At Oregon since 1959.
- THEODORE B. JOHANNIS, JR., Ph.D., Professor of Sociology; Professor of Family Studies, Wallace School of Community Service and Public Affairs; Director, E. C. Brown Center for Family Studies.
B.A. (1948), M.A. (1948), Washington State; Ph.D. (1955), Florida State. At Oregon since 1953.
- BENTON JOHNSON, Ph.D., Professor of Sociology.
B.A. (1947), North Carolina; M.A. (1953), Ph.D. (1954), Harvard. At Oregon since 1957.
- CARL L. JOHNSON, Ph.D., Professor of Romance Languages.
B.A. (1924), M.A. (1925), Iowa; Ph.D. (1933), Harvard. At Oregon since 1935.

* On leave of absence, spring term, 1970-71.

- DONALD N. JOHNSON, B.A., Associate Director, Bureau of Governmental Research and Service, with the Rank of Professor.
B.A. (1946), Reed. At Oregon since 1959.
- GLORIA E. JOHNSON, Ph.D., Assistant Professor of English.
B.A. (1944), Barnard; M.A. (1946), Ph.D. (1954), Columbia. At Oregon since 1959.
- KAYE D. JOHNSON, B.A., Instructor, Bureau of Governmental Research and Service.
B.A. (1967), Oregon. At Oregon since 1970.
- LEROY JOHNSON, JR., Ph.D., Associate Professor of Anthropology; Curator of Ethnology, Museum of Natural History.
B.A. (1958), M.A. (1961), Texas; Ph.D. (1966), California at Los Angeles. At Oregon since 1965.
- LYMAN T. JOHNSON, M.A., Associate Professor of Architecture.
B.A. (1957), M.A. (1959), California at Los Angeles. At Oregon since 1966.
- STEPHEN M. JOHNSON, Ph.D., Assistant Professor of Psychology.
B.A. (1964), Pittsburgh; M.A. (1966), Ph.D. (1968), Northwestern. At Oregon since 1968.
- FAITH E. JOHNSTON, M.S., Assistant Professor of Home Economics.
B.S. (1929), Kansas State College (Pittsburg); M.S. (1933), Kansas State. At Oregon since 1947.
- JAMES O. JOHNSTON, Ph.D., Assistant Professor of Education.
B.S. (1951), M.S. (1963), Ph.D. (1965), Oklahoma State. At Oregon since 1967.
- CATHERINE M. JONES, Ed.D., Associate Professor of Business Education.
B.A. (1937), Iowa State Teachers; M.S. (1945), Oregon; M.Bus.Ed. (1952), Ed.D (1964), Colorado. At Oregon since 1946.
- HOLWAY R. JONES, M.A., Head Social Science Librarian; Associate Professor of Librarianship.
B.A. (1948), B.L.S. (1951), M.A. (1957), California. At Oregon since 1963.
- JOHN E. JONES, M.S., C.A.S., Assistant Director for Administration, Center for Advanced Study of Educational Administration, with the Rank of Associate Professor.
B.S. (1957), Cortland; M.S. (1965), C.A.S. (1968), Syracuse. At Oregon since 1968.
- JUDSON H. JONES, M.A., Visiting Lecturer in Community Service and Public Affairs.
B.A. (1961), Boston; M.A. (1969), Oregon. At Oregon since 1970.
- RICHARD R. JONES, M.A., Adjunct Associate Professor of Psychology.
B.A. (1957), M.A. (1961), Maine. At Oregon since 1971.
- RICHARD T. JONES, M.D., Ph.D., Professor of Biochemistry, Medical School; Chairman of Department.
B.S. (1953), M.S., M.D. (1956), Oregon; Ph.D. (1961), California Institute of Technology. At Oregon since 1961.
- WILLIAM C. JONES, Ph.D., Professor Emeritus of Political Science.
A.B. (1926), Whittier; M.B.A. (1929), Southern California; Ph.D. (1940), Minnesota. At Oregon since 1941.
- ELLIS B. JUMP, D.M.D., Ph.D., Professor of Anatomy, Dental School; Chairman of Department; Professor of Anatomy, Medical School.
A.B. (1932), Dartmouth; D.M.D. (1936), Harvard; Ph.D. (1944), Chicago. At Oregon since 1947.
- PAUL JUSWIGG, Instructor in Russian.
At Oregon since 1969.
- JONATHAN K. KAHANANUI, B.Arch., Visiting Lecturer in Architecture.
B.S. (1947), B.S. (1948), B.Arch. (1954), Oregon. At Oregon since 1968.
- MARJORIE L. KALMAN, M.Ed., Instructor in Special Education.
B.S. (1968), M.Ed. (1969), Illinois. At Oregon since 1970.

- PAUL E. KAMBLY, Ph.D., Professor of Education; Assistant Dean, College of Education.
B.Ed. (1930), Illinois State Normal; M.S. (1934), Ph.D. (1939), Iowa. At Oregon since 1946.
- EDWARD W. KAMMERER, M.Mus., Instructor in Music (Brass Instruments).
B.Mus. (1964), M.Mus. (1965), Oregon. At Oregon since 1970.
- GEORGE G. KAUFMAN, Ph.D., John B. Rogers Professor of Finance.
B.A. (1954), Oberlin; M.A. (1955), Michigan; Ph.D. (1962), Iowa. At Oregon since 1970.
- M. ALLAN KAYS, Ph.D., Associate Professor of Geology.
B.A. (1956), Southern Illinois; M.A. (1958), Ph.D. (1960), Washington University. At Oregon since 1961.
- JOHN F. W. KEANA, Ph.D., Assistant Professor of Chemistry.
B.A. (1961), Kalamazoo; Ph.D. (1965), Stanford. At Oregon since 1965.
- SUE B. KEANA, B.A., Systems Programmer, Computer Operations, with the Rank of Instructor.
B.A. (1966), Oregon. At Oregon since 1969.
- LUCY C. KEATING, M.S., Instructor in Education.
B.S. (1968), M.S. (1969), Oregon. At Oregon since 1970.
- STEVEN W. KEELE, Ph.D., Assistant Professor of Psychology.
B.S. (1962), Oregon; M.S. (1965), Ph.D. (1966), Wisconsin. At Oregon since 1968.
- HERMAN KEHRLI, M.A., Associate Professor Emeritus of Political Science; Director Emeritus, Bureau of Governmental Research and Service, with the Rank of Professor.
B.A. (1923), Reed; M.A. (1933), Minnesota. At Oregon since 1933.
- C. RICHARD KEIL, Ph.D., Assistant Professor of Speech; Director of Forensics.
B.A. (1960), California State (Los Angeles); M.A. (1965), Ph.D. (1969), Southern California. At Oregon since 1970.
- ROBERT E. KEITH, M.Arch., Associate Director of Urban Planning Program, Bureau of Governmental Research and Service, with the Rank of Professor.
B.S. (1944), Kansas State; M.Arch. (1951), Oregon. At Oregon since 1963.
- HOMER T. KELLER, M.M., Professor of Music (Composition, Music Theory).
B.M. (1937), M.M. (1938), Eastman School of Music. 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.
- EDWARD C. KEMP, JR., M.L.S., Acquisition Librarian; Associate Professor of Library Administration.
A.B. (1951), Harvard; M.L.S. (1955), California. At Oregon since 1955.
- *JAMES C. KEMP, Ph.D., Associate Professor of Physics.
A.B. (1955), Ph.D. (1960), California. At Oregon since 1961.
- ROBERT E. KEMPER, D.B.A., Assistant Professor of Librarianship; Director, Library Research and Information Center.
B.A. (1958), Western State; M.A. (1963), Denver; D.B.A. (1967), Washington. At Oregon since 1966.
- GORDON L. KENSLE, Ed.D., Associate Professor of Art Education; Associate Professor of Education; Research Associate, Institute for Community Art Studies.
B.F.A. (1949), M.F.A. (1951), Art Institute of Chicago; Ed.D. (1964), Stanford. At Oregon since 1966.
- LORNA L. KENT, M.L.S., Reference Librarian; Instructor in Library Administration.
B.A. (1963), Nebraska Wesleyan; M.L.S. (1969), Rutgers. At Oregon since 1970.

* On sabbatical leave 1970-71.

- JOHN E. KERRIGAN, M.A., Acting Associate Professor of Public Affairs and Administration.
B.A. (1956), Loras College (Iowa); B.S. (1958), M.A. (1960), Iowa. At Oregon since 1971.
- CAROLIN S. KEUTZER, Ph.D., Assistant Professor of Psychology; Counselor, University Counseling Center.
B.A. (1958), M.A. (1963), Ph.D. (1967), Oregon. At Oregon since 1967.
- JAMES KEZER, Ph.D., Professor of Biology.
B.A. (1930), Iowa; M.S. (1937), Ph.D. (1948), Cornell. At Oregon since 1954.
- CHULSOON KHANG, Ph.D., Associate Professor of Economics.
B.A. (1959), Michigan State; M.A. (1962), Ph.D. (1965), Minnesota. At Oregon since 1966.
- J. EDWARD KIDDER, Ph.D., Visiting Professor of Oriental Art.
B.A. (1943), Maryville (Tenn.); M.A. (1949), Ph.D. (1955), New York University. At Oregon since 1970.
- R. ALAN KIMBALL, Ph.D., Assistant Professor of History.
B.A. (1961), Kansas; M.A. (1963), Ph.D. (1967), Washington. At Oregon since 1967.
- DANIEL P. KIMBLE, Ph.D., Professor of Psychology.
B.A. (1956), Knox; Ph.D. (1961), Michigan. At Oregon since 1963.
- ROBERT E. KIME, Ph.D., Professor of Health Education.
B.S. (1954), M.S. (1958), Wisconsin State (La Crosse); Ph.D. (1963), Ohio State. At Oregon since 1963.
- CHARLES B. KIMMEL, Ph.D., Assistant Professor of Biology.
B.A. (1962), Swarthmore; Ph.D. (1966), Johns Hopkins. At Oregon since 1969.
- GERALD A. KING, JR., B.A., Instructor in Sociology.
B.A. (1961), Texas Christian. At Oregon since 1966.
- MARCIA J. KING, M.S., Instructor in Home Economics.
B.S. (1958), Walla Walla; M.S. (1962), Loma Linda (Calif.). At Oregon since 1970.
- NICHOLAS W. KIRINCICH, M.S., Assistant Professor of Aerospace Studies.
B.S. (1964), Newark College of Engineering; M.S. (1966), St. Mary's (Texas). At Oregon since 1970.
- WILLIAM L. KIRTNER, Ph.D., Director of Training, University Counseling Center, with the Rank of Associate Professor.
A.B. (1950), M.A. (1955), Ph.D. (1959), Chicago. At Oregon since 1968.
- JOANNE M. KITCHEL, B.A., Director, Office of Federal Relations, with the Rank of Assistant Professor.
B.A. (1950), Oregon. At Oregon since 1966.
- LAURENCE R. KITTLEMAN, JR., Ph.D., Curator of Geology, Museum of Natural History; Associate Professor of Sedimentology.
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.
- *ALBERT R. KITZHABER, Ph.D., Professor of English; Associate Dean of the Graduate School.
B.A. (1939), Coe; M.A. (1941), Washington State; Ph.D. (1953), Washington. At Oregon since 1962.
- ANNABEL R. KITZHABER, M.A., Lecturer in English.
B.A. (1938), Idaho; M.A. (1940), Washington State. At Oregon since 1963.
- WILLIAM KLEINSASSER, M.F.A., Reg. Archt., Associate Professor of Architecture.
A.B. (1951), M.F.A. (1956), Princeton. At Oregon since 1965.
- PAUL L. KLEINSORGE, Ph.D., Professor of Economics.
A.B. (1927), Ph.D. (1939), Stanford; M.B.A. (1929), Harvard. At Oregon since 1948.

* On sabbatical leave 1970-71.

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., Professor of Public Affairs and Administration; Professor of Political Science; Head of Department.

B.S. (1947), M.A. (1948), Minnesota; Ph.D. (1958), Michigan. At Oregon 1961-68, and since 1969.

CHARLES E. KLOPFENSTEIN, Ph.D., Assistant Professor of Chemistry; Director of Laboratories.

B.A. (1962), Ph.D. (1966), Oregon. At Oregon since 1966.

DANIEL L. KNAPP, Ph.D., Assistant Professor of Sociology.

B.A. (1962), M.A. (1967), Ph.D. (1970), Oregon. At Oregon since 1969.

ERNESTO R. KNOLLIN, M.A., Professor Emeritus of Physical Education.

B.A. (1914), M.A. (1929), Stanford. At Oregon since 1929.

RICHARD M. KOCH, Ph.D., Associate Professor of Mathematics.

B.A. (1961), Harvard; Ph.D. (1964), Princeton. At Oregon since 1966.

*THOMAS KOENIG, Ph.D., Associate Professor of Chemistry.

B.S. (1959), Southern Methodist; Ph.D. (1963), Illinois. At Oregon since 1963.

ROBERT D. KOLER, M.D., Professor of Medicine, Medical School; Head of Division of Medical Genetics.

B.A. (1945), M.D. (1947), Oregon. At Oregon since 1953.

THOMAS KOPLIN, Ph.D., Professor of Economics.

B.A. (1947), Oberlin; Ph.D. (1952), Cornell. At Oregon since 1950.

ENDRE KÖRÖS, Visiting Professor of Chemistry.

Dip. (1949), Budapest. At Oregon since 1970.

GERALD D. KRANZLER, Ed.D., Associate Professor of Education.

B.S. (1956), Jamestown College; M.Ed. (1959), Ed.D. (1964), North Dakota. At Oregon since 1967.

LAVERNE KRAUSE, B.S., Associate Professor of Art.

B.S. (1946), Oregon. At Oregon since 1966.

MELVIN A. KRAUSE, M.S., Assistant Professor of Physical Education; Head Baseball Coach.

B.S. (1951), M.S. (1958), Oregon. At Oregon since 1970.

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., 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; Professor of Library Administration.

B.A. (1932), Iowa; B.S. in L.S. (1933), A.M. (1935), Illinois. At Oregon since 1941.

WILLIAM W. KRIPPAEHN, M.D., Kenneth A. J. Mackenzie Professor of Surgery, Medical School; Chairman of Department.

B.S. (1943), Washington; M.D. (1946), Oregon. At Oregon since 1953.

NORMA J. KRUGER, M.S., Placement Counselor, University Placement Service, with the Rank of Assistant Professor.

B.S. (1946), Wisconsin State (LaCrosse); M.S. (1966), Oregon. At Oregon since 1969.

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, 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.

* On sabbatical leave 1970-71.

- HERBERT B. LAFFITTE, D.D.S., Professor of Peridontology, Dental School; Chairman of Department.
D.D.S. (1944), Minnesota; B.S.D. (1956), Baylor. At Oregon since 1969.
- RAMON F. LA GRANDEUR, M.Ed., Professor of Education.
B.S. (1951), Washington; M.Ed. (1958), D.Ed. (1966), Oregon. At Oregon since 1971.
- ARMANDO LAGUARDIA, B.A., Assistant Professor of Education.
B.A. (1969), Oregon. At Oregon since 1970.
- JOHN E. LALLAS, Ed.D., Assistant to the President; Director, Office of Planning and Institutional Research, with the Rank of Professor; Professor of Education.
B.A. (1947), Washington; B.A. (1952), Western Washington; Ed.D. (1956), Stanford. At Oregon since 1957.
- WAYNE D. LANCE, Ed.D., Director, Special Education Instructional Materials Center for Handicapped Children and Youth, with the Rank of Professor; Associate Professor of Education.
B.A. (1953), M.A. (1960), Redlands; Ed.D. (1964), George Peabody. At Oregon since 1967.
- WILLIAM C. LANDERS, B.S., Director of Public Relations, Athletic Department, with the Rank of Associate Professor.
B.S. (1954), Oregon. At Oregon 1957-65, and since 1969.
- 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.
- ROBERT G. LANG, D.Phil., Assistant Professor of History.
A.B. (1955), Columbia; D.Phil. (1963), Oxford. At Oregon since 1964.
- VINCENT LANIER, Ed.D., Professor of Art Education; Head of Department; Professor of Education.
B.A. (1947), M.A. (1948), Ed.D. (1954), New York University. At Oregon since 1966.
- LARRY D. LARGE, M.A., Associate Dean of Students, with the Rank of Assistant Professor.
B.S. (1964), Portland State; M.A. (1970), Oregon. At Oregon since 1965.
- ALLAN R. LARRABEE, Ph.D., Assistant Professor of Chemistry.
B.S. (1957), Bucknell; Ph.D. (1962), Massachusetts Institute of Technology. At Oregon since 1966.
- DOMINIC A. LARUSSO, Ph.D., Professor of Speech.
B.A. (1950), M.A. (1952), Washington; Ph.D. (1956), Northwestern. At Oregon since 1968.
- CATHERINE M. LAURIS, B.A., Acting Editor, University of Oregon Books, with the Rank of Instructor.
B.A. (1940), Oregon. At Oregon since 1966.
- PATRICIA A. LAWRENCE, Ph.D., Associate Professor of Art History.
B.A. (1956), M.A. (1957), Ph.D. (1962), California. At Oregon since 1962.
- VERLYN L. LAYMAN, M.A., Adjunct Associate Professor, Project Newgate.
B.A. (1960), Walla Walla; M.A. (1961), Andrews (Mich.). At Oregon since 1970.
- JOHN V. LEAHY, Ph.D., Associate Professor of Mathematics.
B.A. (1960), Ph.D. (1965), Pennsylvania. At Oregon since 1966.
- ROBERT W. LEARY, Ph.D., Adjunct Associate Professor of Psychology.
A.M. (1948), A.B. (1944), Stanford; Ph.D. (1956), Wisconsin. At Oregon since 1970.
- DONALD M. LEE, B.S., Complex Director, Dormitories, with the Rank of Assistant Professor.
B.S. (1956), Oregon. At Oregon since 1969.
- IRA D. LEE, M.M.E., Professor of Music (Trombone, Music Education); Director, Brass Choir, High-School Music Summer Session.
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., Associate Professor of Physics.

B.A. (1951), Reed; M.S. (1957), Idaho; Ph.D. (1961), Wisconsin. At Oregon since 1961.

CHARLEY A. LEISTNER, Ph.D., Professor of Speech; Head of Department; Director, Committee on Discussion and Debate.

B.A. (1949), Georgetown College; M.A. (1950), Baylor; Ph.D. (1958), Missouri. At Oregon since 1962.

JAMES B. LEMERT, Ph.D., Associate Professor of Journalism.

A.B. (1957), M.J. (1959), California; Ph.D. (1964), Michigan State. At Oregon since 1967.

HERBERT C. LEMON, M.D., Associate University Physician, with the Rank of Professor.

B.A. (1952), M.D. (1960), Nebraska. At Oregon since 1964.

EDWARD L. LENCH, M.B.A., Assistant Director, Computing Center, with the Rank of Associate Professor.

B.S. (1948), Washington; M.B.A. (1962), Michigan State. At Oregon since 1970.

WILLIAM C. LEONARD, M.S., Head, Graphic Arts Service; Instructor in Library Administration.

B.S. (1965), M.S. (1970), Oregon. At Oregon since 1968.

ALBERT LEONG, Ph.D., Assistant Professor of Slavic Languages.

B.A. (1961), M.A. (1966), Ph.D. (1970), Chicago. At Oregon since 1966.

ESTHER J. LEONG, Ph.D., Assistant Professor of Art History.

B.A. (1962), M.A. (1964), Ph.D. (1970), Chicago. At Oregon since 1966.

JEAN R. LEPPALUOTO, Ph.D., Assistant Professor of Education.

B.A. (1961), Oregon; M.A. (1966), Ph.D. (1970), Berkeley. At Oregon since 1970.

WOLFGANG A. LEPPMANN, Ph.D., Professor of Germanic Languages.

B.A. (1948), M.A. (1949), McGill; Ph.D. (1952), Princeton. At Oregon 1954-68 and since 1969.

†DON S. LEVI, Ph.D., Assistant Professor of Philosophy.

B.A. (1956), Wisconsin; M.A. (1961), Ph.D. (1964), Harvard. At Oregon since 1964.

JAMES P. LEVINE, Ph.D., Associate Professor of Political Science.

B.A. (1963), M.A. (1966), Ph.D. (1968), Northwestern. At Oregon since 1968.

PETER M. LEWINSOHN, Ph.D., Professor of Psychology.

B.S. (1951), Allegheny; M.A. (1953), Ph.D. (1955), Johns Hopkins. At Oregon since 1965.

HOWARD P. LEWIS, M.D., Laurence Selling Professor of Medicine, Medical School; Chairman of Department.

B.S. (1924), Oregon State; M.D. (1930), Oregon. At Oregon since 1932.

‡MORLAN M. LEWIS, B.A., Lecturer in Health Education.

B.A. (1958), California at Santa Barbara. At Oregon since 1971.

PAUL M. LEWIS, M.A., Acting University Editor, with the Rank of Assistant Professor; Lecturer in Romance Languages.

B.J. (1948), Missouri; M.A. (1961), Oregon. At Oregon since 1966.

EDWARD LICHTENSTEIN, Ph.D., Associate Professor of Psychology.

B.A. (1956), Duke; M.A. (1957), Ph.D. (1961), Michigan. At Oregon since 1966.

MARVIN E. LICKY, Ph.D., Associate Professor of Psychology.

A.B. (1959), Oberlin; M.A. (1962), Ph.D. (1965), Michigan. At Oregon since 1967.

MARTIN S. LILLY, Ed.D., Assistant Professor of Education.

B.A. (1966), Bellarmine (Kentucky); M.A. (1967), Ed.D. (1969), Peabody (Tennessee). At Oregon since 1969.

* On sabbatical leave, winter and spring terms, 1970-71.

† On leave of absence 1970-71.

‡ Resigned, Dec. 2, 1970.

HEROLD S. LILLYWHITE, Ph.D., Director of Speech and Hearing Clinic, Medical School; Professor of Speech Pathology.

B.S. (1932), Utah State Agricultural; M.A. (1939), Minnesota; Ph.D. (1943), New York University. At Oregon since 1968.

NANCY M. LINDBURG, M.F.A., Instructor, Project Newgate.

B.A. (1956), Mills; M.F.A. (1958), Cranbrook Academy of Art. At Oregon since 1970.

HANS A. LINDE, J.D., Professor of Law.

B.A. (1947), Reed; J.D. (1950), California. At Oregon 1954 and since 1959.

JERZY LINDERSKY, Ph.D., Visiting Professor of History.

M.A. (1955), Ph.D. (1960), Cracow. At Oregon since 1971.

RICHARD W. LINDHOLM, Ph.D., Dean of the College 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, with the Rank of Professor.

B.S. (1932), Oregon. At Oregon since 1932.

STEPHEN A. LIPTON, B.A., Instructor in Education.

B.A. (1967), Minnesota. At Oregon since 1970.

MARY E. LITCHMAN, Special Assistant to the Foreign Student Adviser, with the Rank of Lecturer.

At Oregon since 1969.

RICHARD A. LITTMAN, Ph.D., Professor of Psychology.

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; Senior Instructor in Library Administration.

B.A. (1952), Colorado State College of Education; M.A. (1956), Denver. At Oregon since 1961.

ROBIN B. LODEWICK, M.L.S., Catalog Librarian; Senior Instructor in Library Administration.

B.A. (1959), Brooklyn; M.L.S. (1961), Rutgers. At Oregon since 1961.

HENRY L. LOEB, Ph.D., Professor of Mathematics.

B.S. (1949), Wisconsin; M.A. (1958), Columbia; Ph.D. (1965), California at Los Angeles. At Oregon since 1966.

FRANCISCO LOERA, Assistant Dean of Students, with the Rank of Instructor.

At Oregon since 1967.

JOANNA LOFGREN, B.A., Instructor, Tongue Point Job Corps Center.

B.A. (1968), Marylhurst. At Oregon since 1968.

ALFRED L. LOMAX, M.A., Professor Emeritus of Business Administration.

B.B.A. (1923), Oregon; M.A. (1927), Pennsylvania. At Oregon since 1919.

AVARD C. LONG, M.D., Director, Student Health Center; Associate, University Physician, with the Rank of Professor.

B.Sc. (1938), New Hampshire; M.Sc. (1940), Cornell; M.D., C.M. (1944), McGill. At Oregon since 1965.

RICHARD J. LONG, M.S., Reference Librarian; Instructor in Library Administration.

B.S. (1949), Pennsylvania State; M.S. (1966), Oregon. At Oregon since 1966.

MARY N. LONGLAND, M.A., Assistant Dean of Students, with the Rank of Assistant Professor.

B.A. (1964), Springfield (Mass.); M.A. (1967), Denver. At Oregon since 1970.

JOSEPH LO PICCOLO, Ph.D., Assistant Professor of Psychology.

B.A. (1965), California at Los Angeles; M.S. (1967), Ph.D. (1969), Yale. At Oregon since 1969.

NANCY A. LORENCE, B.A., Instructor in Education.

B.A. (1970), Eastern Oregon College. At Oregon since 1970.

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., Professor of Education; Head, Counseling Department.

B.S. (1952), Oregon; M.A. (1956), Ph.D. (1958), Iowa. At Oregon 1962-64, and since 1965.

GLEN A. LOVE, Ph.D., Associate Professor of English; Associate Dean, Graduate School.

B.A. (1954), M.A. (1959), Ph.D. (1964), Washington. At Oregon since 1965.

LYOYD L. LOVELL, Ph.D., Associate Professor of Education.

B.A. (1947), Lawrence; M.S. (1951), Minnesota; Ph.D. (1955), Cornell. At Oregon since 1959.

RONALD J. LOVINGER, M.L.A., Associate Professor of Landscape Architecture.

B.F.A. (1961), Illinois; M.L.A. (1963), Pennsylvania. At Oregon since 1965.

RAYMOND N. LOWE, Ed.D., Professor of Education.

B.S.Ed. (1940), Massachusetts State (Fitchburg); M.A. (1948), Ed.D. (1951), Northwestern. At Oregon since 1955.

FRANKLIN LOWENTHAL, Ph.D., Assistant Professor of Mathematics.

B.S. (1959), City College of New York; M.S. (1962), Ph.D. (1965), Stanford. At Oregon since 1965.

DOUGLAS H. LOWNDES, Ph.D., Assistant Professor of Physics.

B.S. (1961), Stanford; Ph.D. (1968), Colorado. At Oregon since 1970.

WILLIAM G. LOY, Ph.D., Assistant Professor of Geography.

B.A. (1958), Minnesota; M.S. (1962), Chicago; Ph.D. (1967), Minnesota. At Oregon since 1967.

KUO HWA LU, Ph.D., Professor of Biostatistics, Dental School; Chairman of Department.

B.S. (1945), National Central University, Chungking; M.S. (1948), Ph.D. (1951), Minnesota. At Oregon since 1960.

ERNEST H. LUND, Ph.D., Associate Professor of Geology.

B.S. (1944), Oregon; Ph.D. (1950), Minnesota. At Oregon since 1957.

PETER A. LUNDT, Ph.D., Assistant Professor of Economics.

B.A. (1964), Kansas; Ph.D. (1968), Wisconsin. At Oregon since 1968.

CHRIS J. LUNESKI, Ph.D., Associate Professor of Accounting; Head, Department of Accounting and Quantitative Methods.

A.B. (1956), Johns Hopkins; M.A. (1959), Ph.D. (1965), Minnesota. At Oregon since 1961.

RICHARD M. LYONS, M.F.A., Assistant Professor of English.

B.A. (1957), Brooklyn; M.F.A. (1962), Iowa. At Oregon since 1969.

*ARTHUR E. MACE, Ph.D., Professor of Business Statistics.

B.A. (1938), Amherst; Ph.D. (1947), Chicago. At Oregon since 1964.

JACK P. MADDEX, JR., Ph.D., Assistant Professor of History.

B.A. (1963), Princeton; Ph.D. (1966), North Carolina. At Oregon since 1966.

BRUNO V. MADRID, M.Mus., Senior Instructor in Dance.

B.Mus. (1955), Santo Tomas; M.Mus. (1963), Oregon. At Oregon since 1965.

GLENN A. MADSEN, M.A., Instructor in Education.

B.S. (1958), Northern Montana; M.A. (1962), San Francisco State. At Oregon since 1967.

* On sabbatical leave 1970-71.

- NORBERT W. MAERTENS, Ph.D., Associate Professor of Education.
B.S. (1958), Mankato State; M.A. (1960), Ph.D. (1967), Minnesota. At Oregon since 1967.
- ELIZABETH A. MAGERL, B.S., Instructor in Special Education.
B.S. (1968), Illinois. At Oregon since 1970.
- GERALD D. MAHAN, Ph.D., Associate Professor of Physics; Research Associate, Institute of Theoretical Science.
A.B. (1959), Harvard; Ph.D. (1964), California. At Oregon since 1967.
- PATRICIA R. MAHAN, M.S., Instructor in Special Education.
B.S. (1965), Bloomsburg State (Pa.); M.S. (1968), Bucknell. At Oregon since 1970.
- PETER A. MAHER, B.A., Counselor, Counseling Center, with the Rank of Instructor.
B.A. (1961), Walla Walla. At Oregon since 1969.
- DAVID B. MAHLER, Ph.D., Professor of Dental Materials Science, Dental School; Chairman of Department.
B.S. (1944), M.S. (1948), Ph.D. (1956), Michigan. At Oregon since 1956.
- EUGENE A. MAIER, Ph.D., Professor of Mathematics.
B.A. (1950), M.A. (1951), Ph.D. (1954), Oregon. At Oregon since 1961.
- DEIRDRE D. MALARKEY, M.L.S., Reference Librarian; Instructor in Library Administration.
B.A. (1957), Reed; M.L.S. (1968), Oregon. At Oregon since 1970.
- STODDARD MALARKEY, Ph.D., Associate Professor of English.
A.B. (1955), Reed; M.Ed. (1960), Oregon State; Ph.D. (1964), Oregon. At Oregon 1961-64, and since 1965.
- GREGORY P. MALTBY, Ed.D., Assistant Professor of Education.
B.S. (1955), M.S. (1956), Illinois State; Ed.D. (1966), Illinois. At Oregon since 1966.
- URIEL V. MANION, M.B.A., Acting Assistant Professor of Management.
A.B. (1947), Central Methodist (Mo.); M.B.A. (1957), Stanford. At Oregon since 1970.
- *THOMAS W. MAPP, LL.B., Professor of Law.
B.A. (1950), Rochester; LL.B. (1956), Illinois. At Oregon since 1964.
- MARGARET MARKLEY, A.B., B.S. in L.S., Senior Catalog Librarian; Assistant Professor of Library Administration.
A.B. (1933), Southwest Missouri State; B.S. in L.S. (1941), Illinois. At Oregon since 1945.
- †ELISABETH A. MARLOW, Ph.D., Assistant Professor of Romance Languages.
Diplôme (1953), Ecole de Hautes Etudes Commerciales (Paris); M.A. (1958), Ph.D. (1966), Oregon. At Oregon since 1958.
- JOHN W. MARSHALL, B.S., Freshman Football Coach, with the Rank of Acting Instructor.
B.S. (1969), Oregon. At Oregon since 1969.
- GARY M. MARTIN, Ph.D., Associate Professor of Music (Music Education); Director, German Center for International Music.
B.A. (1961), M.A. (1963), Adams State College; Ph.D. (1965), Oregon. At Oregon since 1966.
- GENE E. MARTIN, Ph.D., Professor of Geography; Head of Department.
B.A. (1949), M.A. (1952), Washington; Ph.D. (1955), Syracuse. At Oregon since 1956.
- ‡WALTER T. MARTIN, Ph.D., Professor of Sociology.
B.A. (1943), M.A. (1947), Ph.D. (1949), Washington. At Oregon since 1947.
- DAVID S. MARTINEZ, Lecturer, High-School Equivalency Program.
At Oregon since 1970.
- CHARLES F. MASON, Ph.D., Professor of Psychology.
B.A. (1942), Iowa State; M.S. (1947), Ph.D. (1950), Purdue. At Oregon since 1970.

* On leave of absence 1970-71.

† On sabbatical leave, winter and spring terms, 1970-71.

‡ On sabbatical leave, winter term, 1970-71.

- GEORGIA MASON, M.S., Acting Curator of the Herbarium, with the Rank of Assistant Professor.
B.A. (1941), Montclair State (N.J.); M.S. (1960), Oregon State. At Oregon 1961-62 and since 1970.
- JOSEPH D. MATARAZZO, Ph.D., Professor of Medical Psychology, Medical School; Chairman of Department.
B.A. (1946), Brown; M.S. (1950), Ph.D. (1952), Northwestern. At Oregon since 1957.
- THEODORE K. MATTHES, Ph.D., Associate Professor of Mathematics.
B.S. (1955), California Institute of Technology; Ph.D. (1960), Columbia. At Oregon since 1962.
- BRIAN W. MATTHEWS, Ph.D., Associate Professor of Physics; Research Associate, Institute of Molecular Biology.
B.S. (1959), Ph.D. (1964), Adelaide.
- ESTHER E. MATTHEWS, Ed.D., Professor of Education.
B.S. (1940), Massachusetts State; M.Ed. (1943), Ed.D. (1960), Harvard. At Oregon since 1966.
- JAMES M. MATTIS, J.D., Legal Consultant, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
B.A. (1964), Central Washington State; J.D. (1967), Washington. At Oregon since 1967.
- ROBERT H. MATTSON, D.Ed., Assistant to the President; Head, Department of Special Education; Professor of Education; Acting Associate Dean, College of Education.
B.A. (1949), Montana; M.A. (1950), Iowa; D.Ed. (1959), Oregon. At Oregon since 1957.
- BETH E. MAVEETY, Ph.D., Visiting Assistant Professor of German.
B.A. (1937), M.A. (1966), San Jose State; Ph.D. (1969), Oregon. At Oregon since 1970.
- STANLEY R. MAVEETY, Ph.D., Associate Professor of English; Director, Graduate Studies Program.
B.S. (1943), Northwestern; M.A. (1950), Columbia; Ph.D. (1956), Stanford. At Oregon since 1955.
- LAWRENCE C. MAVES, JR., M.Mus., Associate Professor of Music (Violin); Director, University Symphony; Member, University Trio.
B.Mus. (1954), M.Mus. (1959), Oregon; Diploma (1958), Juilliard School of Music. At Oregon since 1958.
- DONALD M. MAYNARD, JR., Ph.D., Professor of Biology.
A.B. (1951), Harvard; Ph.D. (1955), California at Los Angeles. At Oregon since 1970.
- EDITH A. MAYNARD, Ph.D., Adjunct Professor of Biology.
B.A. (1952), Mt. Holyoke (Mass.); Ph.D. (1958), California at Los Angeles. At Oregon since 1970.
- ROBERT M. MAZO, Ph.D., Professor of Chemistry; Associate Dean of the Graduate School; Research Associate, Institute of Theoretical Science.
B.A. (1952), Harvard; M.S. (1953), Ph.D. (1955), Yale. At Oregon since 1962.
- KATHLEEN M. McADAM, M.A.L.S., Social Science Librarian; Instructor in Library Administration.
B.A. (1961), Immaculate Heart (Calif.); M.A.L.S. (1970), Rosary (Ill.). At Oregon since 1970.
- ALEXANDER R. MCBIRNEY, Ph.D., Professor of Geology; Head of Department.
B.S. (1946), U.S. Military Academy (West Point); Ph.D. (1961), California at Berkeley. At Oregon since 1965.
- FRANKLIN L. MCCARTHY, M.B.A., Acting Assistant Professor of Accounting.
A.B. (1959), Hope College; M.B.A. (1962), Chicago. At Oregon since 1967.
- DONALD MCCARTY, B.A., Coordinator, Student Conduct Program, with the Rank of Assistant Professor.
B.A. (1958), California at Riverside. At Oregon since 1958.
- YOKO M. McCLAIN, M.A., Instructor in Japanese.
B.A. (1956), M.A. (1967), Oregon. At Oregon since 1968.

- JOEL W. McCLURE, JR., Ph.D., Professor of Physics.
B.S. (1949), M.S. (1951), Northwestern, Ph.D. (1954), Chicago. At Oregon 1954-56 and since 1961.
- ROBERT R. MCCOLLOUGH, M.A., M.S., Head Humanities Librarian; Professor of Librarianship.
B.A. (1940), M.A. (1942), Wyoming; M.S. (1950), Columbia. At Oregon since 1950.
- BAYARD H. MCCONNAUGHEY, Ph.D., Associate Professor of Biology.
B.A. (1938), Pomona; M.A. (1941), Hawaii; Ph.D. (1948), California. At Oregon since 1948.
- DAVID J. MCCOSH, Professor Emeritus of Art.
Grad. (1927), Art Institute of Chicago. At Oregon since 1934.
- GEORGE S. MCCOWEN, JR., Ph.D., Instructor, Project Newgate.
B.A. (1957), University of the South; M.A. (1958), Ph.D. (1966), Emory. At Oregon since 1970.
- REYBURN R. MCCREADY, M.A., Senior Reference Librarian; Acting Head of Division; Assistant Professor of Library Administration.
B.A. (1950), John Brown; M.A. (1961), Denver. At Oregon since 1961.
- BETTY F. McCUE, Ph.D., Professor of Physical Education; Head, Department of Physical Education for Women.
B.S. (1945), Pittsburgh; M.S. (1948), MacMurray; Ph.D. (1952), Iowa. At Oregon since 1968.
- HARRIET K. McCUNE, M.S., Instructor in Home Economics.
B.S. (1961), Pennsylvania State; M.S. (1969), Oregon State. At Oregon since 1969.
- *DAVID K. McDANIELS, Ph.D., Professor of Physics.
B.S. (1951), Washington State; M.S. (1958), Ph.D. (1960), Washington. At Oregon since 1963.
- JUNE K. McFEE, Ed.D., Associate Professor of Art Education and Education; Director, Institute for Community Art Studies.
B.A. (1939), Washington; M.Ed. (1954), Central Washington; Ed.D. (1957), Stanford. At Oregon since 1965.
- MALCOLM McFEE, Ph.D., Assistant Professor of Anthropology.
B.A. (1956), San Jose State; M.A. (1958), Ph.D. (1962), Stanford. At Oregon since 1965.
- DONALD F. MCGAVERN, M.S., Instructor in Physical Education; Diving Coach.
B.A. (1964), Oklahoma Baptist; M.S. (1966), Oregon. At Oregon since 1967.
- A. DEAN MCKENZIE, Ph.D., Associate Professor of History of Art.
B.A. (1952), San Jose State; M.A. (1955), California; Ph.D. (1965), New York University. At Oregon since 1966.
- DONNA M. MCKENZIE, B.S., Acting Instructor in Education.
B.S. (1969), Oregon. At Oregon since 1969.
- LORAIN MCKENZIE, B.A., Instructor in Home Economics.
B.A. (1947), Washington State. At Oregon since 1967.
- BRUCE MCKINLAY, M.A., Research Associate, Bureau of Governmental Research and Service, with the Rank of Associate Professor.
B.S. (1958), M.A. (1967), Oregon. At Oregon since 1968.
- RICHARD T. McLAIN, M.A., Professor of Community Service.
B.A. (1956), Portland; M.A. (1961), Notre Dame. At Oregon since 1970.
- WALTER N. McLAUGHLIN, B.S., C.P.A., Business Manager, with the Rank of Professor.
B.S. (1949), Oregon; C.P.A. (1954), State of Oregon. At Oregon since 1954.
- JAMES M. McLEOD, Ed.D., Assistant Professor of Education.
B.A. (1955), Portland; M.Ed. (1964), D.Ed. (1966), Oregon. At Oregon since 1968.

* On sabbatical leave 1970-71.

- JOHN C. McMANUS, M.A., Associate Professor of Music (Clarinet, Music Education).
B.M.E. (1943), Northwestern; M.A. (1950), Columbia. At Oregon since 1967.
- ADELL McMILLAN, M.S., Associate Director, Erb Memorial Union, with the Rank of Associate Professor; Assistant Professor of Leisure and Cultural Services Administration.
B.A. (1955), Whitman; M.S. (1963), Oregon. At Oregon since 1955.
- CORINNE C. McNEIR, M.S. in L.S., Documents Librarian; Associate Professor of Library Administration.
B.A. (1930), Rice; M.S. in L.S. (1957), Louisiana State. At Oregon since 1961.
- WALDO F. McNEIR, Ph.D., Professor of English.
B.A. (1929), Rice; M.A. (1932), Ph.D. (1940), North Carolina. At Oregon since 1961.
- RICHARD D. McQUEEN, M.A., Counselor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1961), M.A. (1965), Oregon. At Oregon since 1965.
- JAMES R. McWILLIAMS, Ph.D., Assistant Professor of Germanic Languages.
B.A. (1951), M.A. (1957), Ph.D. (1963), California. At Oregon since 1960.
- PAUL B. MEANS, Ph.D., Professor Emeritus of Religion.
B.A. (1915), Yale; B.Litt. (1923), Oxford; Ph.D. (1935), Columbia. At Oregon since 1941.
- JERRY F. MEDLER, Ph.D., Assistant Professor of Political Science.
B.A. (1963), Northwestern; M.A. (1965), Ph.D. (1966), Oregon. At Oregon since 1968.
- MARGO MELNICOVE, M.A., Instructor in Special Education.
B.S. (1968), Northwestern; M.A. (1969), Illinois. At Oregon since 1970.
- JAMES D. MEINERT, M.Ed., Associate Director of Admissions, with the Rank of Assistant Professor.
B.S. (1965), M.Ed. (1967), Oregon. At Oregon since 1970.
- JOHN R. MENNINGER, Ph.D., Assistant Professor of Biology; Research Associate, Institute of Molecular Biology.
B.A. (1957), Ph.D. (1964), Harvard. At Oregon since 1966.
- FREDRIC R. MERRILL, J.D., Assistant Professor of Law; Assistant Dean, School of Law.
B.A. (1959), Michigan; J.D. (1961), Michigan. At Oregon since 1970.
- RALPH G. MERRILL, D.D.S., Associate Professor of Oral Surgery, Dental School; Chairman of Department; Chief of Dental Services in Hospitals and Clinics.
D.D.S. (1959), Washington; M.Sc.D. (1963), Boston. At Oregon since 1968.
- ROBERT J. MERTZ, Ph.D., Assistant Professor of Speech; Media Research Director, Division of Broadcast Services and Televised Instruction.
B.A. (1960), M.A. (1962), Oregon; Ph.D. (1966), Michigan State. At Oregon since 1966.
- KENNETH T. METZLER, M.S.J., Assistant Professor of Journalism.
B.S. (1956), Oregon; M.S.J. (1967), Northwestern. At Oregon since 1960.
- MARY CLAIRE MEYER, M.A., Head Circulation Librarian; Assistant Professor of Library Administration.
B.A. (1959), M.A. (1961), Minnesota. At Oregon since 1961.
- MARGARET F. MEYN, M.D., Adjunct Assistant Professor of Librarianship.
A.B. (1940), B.S. (1942), Missouri; M.D. (1943), Washington University (St. Louis); M.L.S. (1969), Oregon. At Oregon since 1969.
- *RAYMOND F. MIKESSELL, Ph.D., W. E. Miner Professor of Economics.
B.A. (1935), M.A. (1935), Ph.D. (1939), Ohio State. At Oregon since 1957.
- FRED N. MILLER, M.D., Professor Emeritus of Health Education.
B.A. (1914), M.A. (1916), Lafayette; M.D. (1924), Chicago. At Oregon since 1925.

* On sabbatical leave, spring term, 1970-71.

JAMES A. MILLER, A.Mus.D., Associate Professor of Music (Voice).

B.A. (1952), Goshen; M.Mus. (1956), A.Mus.D. (1963), Michigan. At Oregon since 1965.

MYRA S. MILLER, B.A., Assistant Professor of Community Service Field Instruction.

B.A. (1937), Washington; Dip. (1939), New York School of Social Work. At Oregon since 1967.

DARRELL M. MILLNER, B.S., Assistant Director, Teacher Corps, with the Rank of Instructor.

B.S. (1969), California State at Pomona. At Oregon since 1970.

THOMAS J. MILLS, M.S., Assistant Dean of Students, International Students, with the Rank of Assistant Professor.

B.A. (1963), Washington State; M.S. (1967), Oregon. At Oregon 1967-68 and since 1970.

DONNA J. MINICH, M.S., Instructor in Education.

B.S. (1968), Indiana (Pa.); M.S. (1970), Bucknell. At Oregon since 1970.

SHIRLEY G. MINOR, B.A., Program Evaluator, with the Rank of Instructor.

B.A. (1969), Oregon. At Oregon since 1970.

WILLIAM H. MITCHEL, D.P.A., Professor of Public Affairs and Administration.

B.A. (1941), M.A. (1962), Berkeley; M.P.A. (1965), D.P.A. (1968), Southern California. At Oregon since 1970.

JOYCE M. MITCHELL, Ph.D., Associate Professor of Political Science.

B.A. (1952), Pomona; M.A. (1954), California at Los Angeles; Ph.D. (1964), California. At Oregon since 1960.

WILLIAM C. MITCHELL, Ph.D., Professor of Political Science.

B.A. (1950), Michigan State; M.A. (1951), Illinois; Ph.D. (1960), Harvard. At Oregon since 1960.

ARTHUR MITTMAN, Ph.D., Professor of Education; Head, Department of Educational Psychology.

B.A. (1947), M.S. (1950), Ph.D. (1958), Iowa. At Oregon since 1963.

FRED J. MOHR, B.A., Research Programs Coordinator, Office of Planning and Institutional Research, with the Rank of Associate Professor.

B.A. (1956), Oregon. At Oregon since 1962.

ERNEST G. MOLL, A.M., Professor Emeritus of English.

A.B. (1922), Lawrence; A.M. (1923), Harvard. At Oregon since 1928.

WILLIAM MONTAGNA, Ph.D., D.Sc., Professor of Experimental Biology, Medical School; Head of Division.

B.A. (1936), Ph.D. (1944), Cornell; D.Sc. (1960), Bethany. At Oregon since 1963.

KIRT E. MONTGOMERY, Ph.D., Associate Professor of Speech.

A.B. (1930), Carroll; M.A. (1939), Ph.D. (1948), Northwestern. At Oregon 1941-43 and since 1945.

RICHARD D. MOORE, M.D., Professor of Pathology, Medical School; Chairman of Department.

M.D. (1947), Western Reserve. At Oregon since 1969.

CARLISLE MOORE, Ph.D., Professor of English.

B.A. (1933), M.A. (1934), Ph.D. (1940), Princeton. At Oregon since 1946.

FULLER MOORE, M.Arch., Assistant Professor of Architecture.

B.Arch. (1964), M.Arch. (1969), Virginia Polytechnic. At Oregon since 1969.

JAMES A. MOORE, M.D., Associate University Physician, with the Rank of Professor.

B.S. (1938), North Dakota State; B.M. (1943), M.D. (1944), Northwestern. At Oregon since 1968.

JOSEPHINE S. MOORE, B.S., Director of News Bureau, with the Rank of Associate Professor.

B.S. (1931), Oregon. At Oregon since 1946.

ROBERT T. MORALES, Instructor in Education.

At Oregon since 1970.

MICHAEL J. MORAVCSIK, Ph.D., Professor of Physics; Director, Institute of Theoretical Science.

A.B. (1951), Harvard; Ph.D. (1956), Cornell. At Oregon since 1967.

CAROLYN V. MORIMITSU, M.A., Instructor in Special Education.

B.A. (1969), M.A. (1970), Illinois. At Oregon since 1970.

KATHRYN A. MORIMITSU, B.A., Instructor in Special Education.

B.A. (1969), Illinois. At Oregon since 1970.

ICHIKO MORITA, M.A., Instructor in Japanese.

B.A. (1954), Okayama; M.A. (1964), Chicago. At Oregon since 1969.

JAMES R. MORITA, Ph.D., Assistant Professor of Japanese.

B.A. (1954), Okayama; M.A. (1959), M.A. (1960), Michigan; Ph.D. (1968), Chicago. At Oregon since 1969.

ROBERT W. MORRIS, Ph.D., Professor of Biology.

A.B. (1942), Wichita; M.S. (1948), Oregon State; Ph.D. (1954), Stanford. At Oregon since 1955.

VICTOR P. MORRIS, Ph.D., H. T. Miner Professor Emeritus of Business Administration.

B.A. (1915), M.A. (1920), Oregon; Ph.D. (1930), Columbia. At Oregon 1919-20 and since 1926.

PERRY D. MORRISON, D.L.S., Acting Dean, School of Librarianship; Professor of Librarianship.

A.B. (1942), M.A. (1947), Whittier; B.L.S. (1949), D.L.S. (1961), California. At Oregon 1949-63 and since 1967.

ISABELLE A. MOSER, M.A., Acting Instructor in Education.

B.A. (1964), M.A. (1964), British Columbia. At Oregon since 1970.

ANDREW F. MOURSUND, Ph.D., Professor of Mathematics.

B.A. (1923), M.A. (1927), Texas; Ph.D. (1932), Brown. At Oregon since 1931.

DAVID G. MOURSUND, Ph.D., Associate Professor of Computer Science and Mathematics; Head, Department of Computer Science.

B.A. (1958), Oregon; M.S. (1960), Ph.D. (1963), Wisconsin. At Oregon since 1967.

EARL E. MOURSUND, M.Arch., Reg. Archt., Associate Professor of Architecture.

B.S. (1949), Texas; M.Arch. (1951), Cranbrook Academy; Reg. Archt. (1951), State of Texas. At Oregon since 1955.

JANET P. MOURSUND, Ph.D., Assistant Professor of Community Service.

B.A. (1958), Knox; M.S. (1963), Ph.D. (1963), Wisconsin. At Oregon since 1967.

LULU V. MOURSUND, M.A., Instructor in Mathematics.

Ph.B. (1929), M.A. (1930), Brown. At Oregon 1956-57 and since 1961.

BURTON J. MOYER, Ph.D., Dean of the College of Liberal Arts; Professor of Physics.

A.B. (1933), Seattle Pacific; Ph.D. (1939), Washington. At Oregon since 1971.

JOHN T. MUIR, M.S., Adjunct Instructor in Community Service and Public Affairs.

B.S. (1969), M.S. (1970), Oregon College of Education. At Oregon since 1970.

CORLEE MUNSON, Ph.D., Associate Professor of Physical Education.

B.A. (1948), Colorado State College; M.S. (1956), Washington; Ph.D. (1966), Iowa. At Oregon since 1959.

FREDERICK W. MUNZ, Ph.D., Associate Professor of Biology.

B.A. (1950), Pomona; M.A. (1952), Ph.D. (1958), California at Los Angeles. At Oregon since 1959.

GORDON J. MURPHY, M.S., Senior Instructor in Biology; Assistant to Department Head.

B.S. (1953), M.S. (1958), Oregon State. At Oregon 1962-64, and since 1965.

- NEIL D. MURRAY, M.Ed., Assistant Director for Programs, Erb Memorial Union, with the Rank of Assistant Professor.
B.A., B.Ed. (1964), M.Ed. (1967), Western Washington. At Oregon since 1968.
- ERNEST MUSTER, Senior Instructor in Architecture.
B.S. (1936), Tech. Fachschule, Blankenburg (Germany); M.S. (1944), Swiss Fed. Dept. of Higher Prof. Educ. At Oregon since 1961.
- LEW B. MYERS, M.D., Assistant Professor of Education.
B.S. (1955), Oregon State; M.S. (1960), M.D. (1960), Oregon. At Oregon since 1966.
- DAVID C. NECHAK, M.F.A., Visiting Assistant Professor of Art.
B.S. (1965), M.F.A. (1970), Oregon. At Oregon since 1971.
- LUCILLE R. NEEDHAM, M.S., Instructor in Business Administration.
B.S. (1945), M.S. (1948), Oregon. At Oregon 1946-55, 1960, and since 1963.
- ROY PAUL NELSON, M.S., Professor of Journalism.
B.S. (1947), M.S. (1955), Oregon. At Oregon since 1955.
- *KARL J. NESTVOLD, M.S., Assistant Professor of Journalism.
B.S. (1954), Wyoming; M.S. (1960), Oregon. At Oregon since 1961.
- FRANCES S. NEWSOM, M.A., Architecture and Allied Arts Librarian; Senior Instructor in Library Administration.
B.A. (1928), Oregon; M.A. (1953), Denver. At Oregon since 1950.
- JAN M. NEWTON, M.S., Instructor in Economics.
B.S. (1964), Oregon State; M.S. (1968), Oregon. At Oregon since 1970.
- BARBARA L. NICHOLLS, M.A., Lecturer in English.
M.A. (1957), Chicago. At Oregon 1968-69 and since 1970.
- ROGER A. NICHOLLS, Ph.D., Professor of Germanic Languages; Head, Department of German and Russian.
B.A. (1949), Oxford; Ph.D. (1953), California. At Oregon since 1963.
- MARGARET A. NIELSEN, M.A., Research Assistant, Bureau of Educational Research and Service, with the Rank of Instructor.
A.B. (1928), Nebraska; M.A. (1931), Northwestern. At Oregon since 1965.
- ORVILLE C. NIGHT PIPE, Instructor in Education.
At Oregon since 1970.
- IVAN M. NIVEN, Ph.D., Professor of Mathematics.
B.A. (1934), M.A. (1936), British Columbia; Ph.D. (1938), Chicago. At Oregon since 1947.
- C. MAX NIXON, B.F.A., Professor of Applied Design.
B.F.A. (1939), Kansas. At Oregon 1956-57 and since 1958.
- ROSIE L. NOEL, Instructor in Academic and Career Guidance.
At Oregon since 1970.
- IRA G. NOLT, Ph.D., Assistant Professor of Physics.
B.S. (1960), Franklin and Marshall; Ph.D. (1967), Cornell. At Oregon since 1970.
- GLENN L. NORRIS, M.S., Instructor in Physical Education.
B.S. (1962), M.S. (1964), Oklahoma State. At Oregon since 1968.
- WALLIS C. NOSLER, B.B.S., Assistant Dean of Students, with the Rank of Instructor.
B.B.S. (1960), Oregon. At Oregon since 1962.
- AARON NOVICK, Ph.D., Professor of Biology.
B.S. (1940), Ph.D. (1943), Chicago. At Oregon since 1959.
- EDWARD NOVITSKI, Ph.D., Professor of Biology.
B.S. (1938), Purdue; Ph.D. (1942), California Institute of Technology. At Oregon since 1958.

* On sabbatical leave 1970-71.

RICHARD M. NOYES, Ph.D., Professor of Chemistry.

A.B. (1939), Harvard; Ph.D. (1942), California Institute of Technology. At Oregon since 1958.

ROBERT E. NYE, Ph.D., Professor of Music (Music Education).

B.E. (1932), State Teachers College (Milwaukee, Wisconsin); M.A. (1942), Ph.D. (1949), Wisconsin. At Oregon since 1950.

VERNICE T. NYE, M.A., Associate Professor of Education.

B.S. (1944), Florence State Teachers (Alabama); M.A. (1948), George Peabody. At Oregon since 1956.

EDNA R. O'CONNOR, M.Ed., Instructor in Special Education.

B.S. (1969), Norfolk State (Va.); M.Ed. (1970), Illinois. At Oregon since 1970.

VERLIN H. ODELL, M.Ed., Placement Counselor, University Placement Service, with the Rank of Associate Professor.

B.S. (1947), Upper Iowa University; M.Ed. (1954), Oregon. At Oregon since 1965.

GERALD G. OHLSEN, Ph.D., Visiting Associate Professor of Physics.

B.S. (1955), Oregon; M.A. (1957), Ph.D. (1960), Stanford. At Oregon since 1970.

FRANK S. OKADA, B.F.A., Associate Professor of Art.

B.F.A. (1957), Cranbrook Academy of Art. At Oregon since 1969.

CAROLINE R. OKEDARA, M.A., Acting Assistant Professor of Curriculum and Instruction.

B.S. (1964), Alaska; M.S. (1967), M.A. (1969), Oregon. At Oregon since 1969.

MARK F. OLDHAM, B.A., Instructor in Community Service and Public Affairs.

B.A. (1970), Oregon. At Oregon since 1970.

LOUIS A. OLIVIER, M.A., Instructor in Romance Languages.

B.A. (1962), M.A. (1963), Utah. At Oregon since 1966.

RICHARD W. OLMSTED, M.D., Professor of Pediatrics, Medical School; Chairman of Department.

B.A. (1941), Dartmouth; M.D. (1944), Harvard. At Oregon since 1962.

DOUGLAS OLSON, Ph.D., Assistant Professor of Business Statistics.

B.S., B.A. (1962), Florida; M.B.A. (1964), Ph.D. (1968), California at Los Angeles. At Oregon since 1970.

GUHLI J. OLSON, M.S., R.N., Associate Professor of Nursing.

B.S. (1936), Battle Creek; M.S. (1947), Western Reserve; R.N. (1936), State of Ohio. At Oregon since 1942.

*EVA M. O'NEIL, D.Ed., Senior Instructor in Education.

B.S. (1929), Idaho; M.Ed. (1954), D.Ed. (1970), Oregon. At Oregon since 1964.

JOHN M. ORBELL, Ph.D., Associate Professor of Political Science.

B.A. (1957), M.A. (1960), New Zealand; Ph.D. (1965), North Carolina. At Oregon since 1967.

WILLIAM N. ORR, Ph.D., Assistant Professor of Geology.

B.S. (1961), Oklahoma; M.A. (1963), California; Ph.D. (1967), Michigan State. At Oregon since 1967.

HENRY OSIBOV, D.Ed., Associate Professor of Education; Assistant to the Dean of Faculties.

B.A. (1939), Western Washington; M.Ed. (1950), D.Ed. (1961), Oregon. At Oregon since 1965.

HAROLD T. OSTERUD, M.D., Professor of Public Health and Preventive Medicine, Medical School, Chairman of Department.

B.S. (1944), Randolph Macon; M.D. (1947), Medical College of Virginia; M.P.H. (1951), North Carolina. At Oregon since 1961.

JACK C. OVERLEY, Ph.D., Associate Professor of Physics.

B.S. (1954), Massachusetts Institute of Technology; Ph.D. (1961), California Institute of Technology. At Oregon since 1968.

* On sabbatical leave, winter term, 1970-71.

- HAROLD J. OWEN, M.Mus., Associate Professor of Music (Composition, Music Theory).
B.Mus. (1955), M.Mus. (1957), Southern California. At Oregon since 1966.
- THOMAS G. OWEN, M.S., Visiting Instructor in Physics.
B.S. (1964), M.S. (1968), Oregon State. At Oregon since 1970.
- ANTHONY M. OWENS, M.S., Instructor in Physical Education.
B.S. (1968), M.S. (1970), Oregon. At Oregon since 1971.
- *ANGELA JUNG PALANDRI, Ph.D., Associate Professor of Chinese.
B.A. (1946), Catholic University, Peking; M.A. (1949), M.L.S. (1954), Ph.D. (1955), Washington. At Oregon 1954-56 and since 1962.
- GUIDO A. PALANDRI, B.L.S., Senior Catalog Librarian; Associate Professor of Library Administration.
B.A. (1949), Oregon; B.L.S. (1954), California. At Oregon 1954-56 and since 1960.
- THEODORE W. PALMER, Ph.D., Associate Professor of Mathematics.
B.A. (1958), M.A. (1958), Johns Hopkins; A.M. (1959), Ph.D. (1966), Harvard. At Oregon since 1970.
- EARL M. PALLETT, Ph.D., Appeals Officer, with the Rank of Professor.
B.S. (1921), M.S. (1922), Wisconsin; Ph.D. (1931), Oregon. At Oregon 1927-53 and since 1969.
- KWANGJAI PARK, Ph.D., Assistant Professor of Physics.
B.A. (1958), Harvard; Ph.D. (1965), California. At Oregon since 1966.
- RICHARD B. PARKER, Ph.D., Professor of Microbiology, Dental School; Chairman, Division of Oral Biology, Associate Professor of Microbiology, Medical School.
B.S. (1950), M.S. (1952), Ph.D. (1956), Oregon State. At Oregon since 1959.
- ROBERT S. PARKER, M.A., Assistant Coordinator, Urban Planning, Bureau of Governmental Research and Service, with the Rank of Associate Professor.
B.A. (1948), Reed; M.A. (1950), Washington. At Oregon since 1966.
- †WILLIAM H. PARKS, Ph.D., Assistant Professor of Finance.
B.A. (1957), M.A. (1960), Ph.D. (1967), Michigan State. At Oregon since 1965.
- GRETHE J. PARR, Catalog Librarian; Instructor in Library Administration.
At Oregon since 1969.
- CECIL B. PASCAL, Ph.D., Associate Professor of Classics.
B.A. (1949), M.A. (1950), California at Los Angeles; M.A. (1953), Ph.D. (1956), Harvard. At Oregon since 1960.
- GERALD R. PATTERSON, Ph.D., Professor of Education.
B.S. (1949), M.A. (1951), Oregon; Ph.D. (1956), Minnesota. At Oregon since 1957.
- CLYDE P. PATTON, Ph.D., Professor of Geography.
A.B. (1948), M.A. (1950), Ph.D. (1953), California. At Oregon since 1958.
- HUIBERT PAUL, M.L.S., Acquisition Librarian; Senior Instructor in Library Administration.
B.A. (1963), Sophia (Tokyo); M.L.S. (1965), California. At Oregon since 1965.
- KENNETH H. PAUL, M.A., Assistant Professor of Art.
B.A. (1961), M.A. (1965), Wyoming. At Oregon since 1970.
- RICHARD C. PAULIN, M.A., Acting Director, Museum of Art, with the Rank of Professor; Assistant Professor of Art Education.
A.B. (1951), DePauw; M.A. (1958), Denver. At Oregon since 1967.
- HAROLD D. PAXTON, M.D., Professor of Neurosurgery, Medical School; Head of Division.
M.D. (1948), Johns Hopkins. At Oregon since 1956.

* On sabbatical leave 1970-71.

† On leave of absence, fall term, 1970-71.

- ARTHUR PEARL, Ph.D., Professor of Education; Professor of Community Service and Public Affairs.
A.B. (1947), M.A. (1949), Ph.D. (1960), California at Berkeley. At Oregon since 1965.
- ANTHONY A. PEARSON, Ph.D., Professor of Anatomy, Medical School; Chairman of Department.
B.S. (1928), Furman; M.A. (1930), Ph.D. (1933), Michigan. At Oregon since 1946.
- ARNO L. PETERSON, M.B.A., C.P.A., Assistant Professor of Accounting.
B.S. (1937), M.B.A. (1949), Oregon; C.P.A. (1955), State of Oregon. At Oregon since 1946.
- *ANIELA E. PELCH, M.S., Assistant Professor of Home Economics.
B.S. (1952), M.S. (1954), Arizona. At Oregon since 1964.
- 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 Information and Publications, with the Rank of Professor; Associate Director, University Relations.
B.S. (1947), Oregon; Cert. (1948), Grenoble. At Oregon since 1961.
- JOHN W. PERRIN, Ph.D., Assistant Professor of History.
B.A. (1956), M.A. (1957), Michigan State; Ph.D. (1964), Wisconsin. At Oregon since 1964.
- LOIS N. PERSON, M.S., Assistant Professor of Home Economics.
B.S. (1948), North Dakota State; M.S. (1950), Cornell. At Oregon since 1959.
- DONALD W. PETERSON, M.S., Head Resident, Dormitories, with the Rank of Instructor.
B.S. (1960), South Dakota; M.S. (1965), Springfield College (Massachusetts). At Oregon since 1969.
- WARNER L. PETICOLAS, Ph.D., Professor of Chemistry.
B.S. (1950), Texas Technological; Ph.D. (1954), Northwestern. At Oregon since 1966.
- †DONALD L. PETING, M.Arch., Associate Professor of Architecture.
B.Arch. (1962), Illinois; M.Arch. (1963), California. At Oregon since 1963.
- MICHAEL R. PHILPOTT, Ph.D., Assistant Professor of Chemistry; Research Associate, Institute of Theoretical Science.
B.S. (1961), Ph.D. (1964), University College (London). At Oregon since 1965.
- PASQUALE M. PICCIONI, B.Arch., Assistant Professor of Architecture.
B.Arch. (1960), Pennsylvania. At Oregon since 1968.
- RICHARD C. PICKERING, M.F.A., Visiting Assistant Professor of Fine and Applied Arts.
B.A. (1964), Arizona State; M.F.A. (1970), Oregon. At Oregon since 1971.
- PHILIP K. PIELE, Ph.D., Assistant Professor of Education; Director, ERIC Clearinghouse on Educational Management.
B.A. (1957), Washington State; M.S. (1963), Ph.D. (1968), Oregon. At Oregon since 1967.
- LAWRENCE C. PIERCE, Ph.D., Assistant Professor of Political Science.
B.A. (1959), Yale; M.P.A. (1965), Ph.D. (1970), Cornell. At Oregon since 1969.
- IONE F. PIERRON, M.S., Associate Professor of Librarianship.
B.A. (1936), Puget Sound; B.A. in Lib. (1937), Washington; M.S. (1960), Oregon. At Oregon since 1948.
- JOAN M. PIERSON, M.A., Instructor in English.
B.A. (1950), M.A. (1952), Oregon. At Oregon 1966-68 and since 1969.
- PEARL H. PIERSON, M.D., Associate University Physician, with the Rank of Professor.
A.B. (1950), M.D. (1953), Indiana. At Oregon since 1969.

* On leave of absence 1970-71.

† On sabbatical leave, winter and spring terms, 1970-71.

- STANLEY A. PIERSON, Ph.D.**, Associate Professor of History; Head of Department.
B.A. (1950), Oregon; A.M. (1951), Ph.D. (1957), Harvard. At Oregon since 1957.
- BERNARD PIROFSKY, M.D.**, Professor of Medicine, Medical School; Head of Division of Immunology and Allergy.
A.B. (1946), M.D. (1950), New York University. At Oregon since 1956.
- LARRY J. PITMAN, M.A.**, Assistant Dean of Students, International Students, with the Rank of Assistant Professor.
B.A. (1962), University of the Pacific (California); M.A. (1968), Oregon State. At Oregon since 1969.
- HELMUT R. PLANT, Ph.D.**, Assistant Professor of German.
B.A. (1957), Fairmont; M.A. (1961), Ph.D. (1964), Cincinnati. At Oregon since 1966.
- GEORGE M. PLATT, LL.B.**, Professor of Law.
B.S. (1948), LL.B. (1956), Illinois. At Oregon since 1966.
- GUNTIS PLESUMS, M.Arch.**, Reg. Archt., Assistant Professor of Architecture.
B.Arch. (1961), Minnesota; M.Arch. (1964), Massachusetts Institute of Technology. Reg. Archt. (1969), State of New York. At Oregon since 1969.
- JOHN W. POE, M.A.**, Head Resident, Dormitories, with the Rank of Instructor.
B.S. (1960), M.A. (1963), Kansas State. At Oregon since 1969.
- KENNETH POLK, Ph.D.**, Associate Professor of Sociology.
B.A. (1956), San Diego State; M.A. (1957), Northwestern; Ph.D. (1961), California at Los Angeles. At Oregon since 1960.
- EARL POMEROY, Ph.D.**, Beekman Professor of Northwest and Pacific History.
B.A. (1936), San Jose State; M.A. (1937), Ph.D. (1940), California. At Oregon since 1949.
- CAROLINE H. POMMARANE, B.S.**, Registrar, Medical School, with the Rank of Associate Professor.
B.S. (1928), Nebraska. At Oregon since 1943.
- JUDSON S. POND, Ph.D.**, Senior Instructor in Chemistry.
B.M.E. (1943), B.B.A. (1955), Ph.D. (1964), Minnesota. At Oregon since 1968.
- PATRICIA B. POND, M.A.**, Assistant Professor of Librarianship; Assistant Professor of Education.
B.A. (1952), College of St. Catherine; M.A. (1955), Minnesota. At Oregon since 1967.
- DONALD R. PORTER, D.D.S.**, Professor of Dentistry, Dental School; Chairman, Department of Pedodontics; Clinical Professor of Dental and Oral Medicine, Medical School.
D.D.S. (1951), M.S. (1953), Michigan. At Oregon since 1953.
- KENNETH W. PORTER, Ph.D.**, Professor of History.
B.A. (1926), Sterling; M.A. (1927), Minnesota; Ph.D. (1936), Harvard. At Oregon 1951-52 and since 1958.
- MARVIN G. PORTER, Ph.D.**, Instructor in English.
B.A. (1961), M.A. (1962), North Texas State; Ph.D. (1969), Oregon. At Oregon since 1967.
- MICHAEL I. POSNER, Ph.D.**, Professor of Psychology.
B.S. (1957), M.S. (1959), Washington; Ph.D. (1962), Michigan. At Oregon since 1965.
- OTTO P. POTICHA, B.S.**, Visiting Lecturer in Architecture.
B.S. (1958), Cincinnati; Reg. Archt., Indiana, Oregon. At Oregon since 1964.
- JOHN L. POWELL, Ph.D.**, Professor of Physics.
B.A. (1943), Reed; Ph.D. (1948), Wisconsin. At Oregon since 1955.
- PERRY J. POWERS, Ph.D.**, Professor of Romance Languages; Head of Department.
B.A. (1941), Oregon; Ph.D. (1947), Johns Hopkins. At Oregon since 1946.
- HERBERT J. PREHM, Ph.D.**, Professor of Education.
B.S. (1959), Concordia Teachers' College (Illinois); M.S. (1962), Ph.D. (1964), Wisconsin. At Oregon since 1965.

EDWARD T. PRICE, Ph.D., Professor of Geography.

B.S. (1937), California Institute of Technology; Ph.D. (1950), California. At Oregon since 1963.

JESSIE L. PUCKETT, M.S., Associate Professor of Physical Education.

B.S. (1931), M.S. (1937), Oregon. At Oregon since 1952.

RICHARD H. PUCKETT, Ph.D., Visiting Professor of Economics.

B.A. (1958), Colorado; M.S. (1960), Oklahoma State; Ph.D. (1966), Maryland. At Oregon since 1966.

*H. CHARLES PYRON, Ph.D., Associate Professor of Management.

B.A. (1959), M.A. (1960), Redlands; Ph.D. (1963), Purdue. At Oregon since 1965.

JAMES V. RADOSTITZ, Senior Instructor in Physics; Director of Science Services.

At Oregon since 1966.

RICHARD L. RAGATZ, Ph.D., Associate Professor of Urban Planning; Head, Department of Urban Planning.

B.A. (1961), M.C.P. (1963), Berkeley; Ph.D. (1969), Cornell. At Oregon since 1969.

GEORGE S. RALPH, M.S., Counselor, University Counseling Center, with the Rank of Assistant Professor.

B.A. (1959), Los Angeles State; M.S. (1969), Oregon. At Oregon since 1969.

HOWARD L. RAMEY, M.F.A., Placement Counselor, University Placement Service, with the Rank of Associate Professor.

B.A. (1948), Oregon; M.F.A. (1950), Yale. At Oregon since 1951.

MARJORY RAMEY, B.A., Complex Director, Dormitories, with the Rank of Assistant Professor.

B.A. (1947), Oregon. At Oregon since 1962.

KENNETH D. RAMSING, D.B.A., Associate Professor of Management.

B.S. (1960), Oregon State; M.B.A. (1962), D.B.A. (1965), Oregon. At Oregon since 1962.

RICHARD J. RANKIN, Ph.D., Professor of Education.

B.A. (1953), M.A. (1954), Ph.D. (1957), California. At Oregon since 1966.

ROBERT P. RAUS, Re.D., Assistant Professor of Recreation Management.

B.A. (1957), Baylor; M.R.E. (1959), Southwestern Baptist Theological Seminary; M.S. (1963), Re.D. (1967), Indiana. At Oregon since 1969.

MALCOLM D. RAY, M.S., Acting Assistant Professor of Community Service and Public Affairs; Acting Director, Office of Career Counseling and Advising.

B.A. (1961), Berkeley; M.S. (1967), Oregon. At Oregon since 1968.

PHILLIP D. RAY, B.S., Registrar, Dental School (Instructor).

B.S. (1967), Portland State. At Oregon since 1967.

GEORGE W. RAYFIELD, Ph.D., Associate Professor of Physics.

B.S. (1958), Stanford; M.S. (1964), Ph.D. (1964), California. At Oregon since 1967.

DEAN F. REA, M.A., Associate Professor of Journalism.

B.A. (1949), Southwest Missouri State; B.J. (1950), M.A. (1951), Missouri. At Oregon since 1966.

JOHN L. REAVIS, B.A., Instructor in Classics.

B.A. (1960), Oregon. At Oregon since 1966.

DEAN M. REGENOS, M.A., Visiting Assistant Professor of English.

B.A. (1961), Montana; M.A. (1969), Syracuse. At Oregon since 1969.

CHARLES M. REICH, Ph.D., Associate Professor of Recreation Management.

B.S. (1952), Lock Haven State; M.S. (1958), Ph.D. (1965), Pennsylvania State. At Oregon since 1967.

GERALD M. REICHER, Ph.D., Assistant Professor of Psychology.

A.B. (1963), California; Ph.D. (1968), Michigan. At Oregon since 1967.

* On sabbatical leave 1970-71.

RICHARD W. REID, B.A., Acting Assistant Professor of English.

B.A. (1959), Minnesota. At Oregon since 1967.

JAMES E. REINMUTH, Ph.D., Assistant Professor of Quantitative Analysis.

B.A. (1963), Washington; M.S. (1965), Ph.D. (1969), Oregon State. At Oregon since 1967.

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

B.A. (1936), Reed; M.A. (1938), Ph.D. (1942), Oregon. At Oregon since 1946.

STEVEN F. RENDALL, Ph.D., Assistant Professor of Romance Languages.

B.A. (1961), Colorado; Ph.D. (1967), Johns Hopkins. At Oregon since 1967.

EDWARD R. REUTER, Ph.D., Associate Professor of Physical Education.

B.S. (1948), Washington State; M.S. (1949), Ph.D. (1957), Illinois. At Oregon since 1958.

DARWIN R. REVEAL, B.S., Business Manager, Dental School (Assistant Professor).

B.S. (1960), Portland State. At Oregon since 1964.

JOHN S. REYNOLDS, M.Arch., Reg. Archt., Assistant Professor of Architecture.

B.Arch. (1962), Illinois; M.Arch. (1967), Massachusetts Institute of Technology. At Oregon since 1967.

NANCY L. REYNOLDS, M.Ed., Counselor, University Counseling Center, with the Rank of Instructor.

B.Ed. (1962), M.Ed. (1967), Western Washington State. At Oregon since 1969.

RICHARD C. REYNOLDS, M.Ed., Director of Erb Memorial Union, with the Rank of Professor.

B.S. (1955), M.Ed. (1958), Oregon. At Oregon since 1967.

ROBERT REYNOLDS, M.Ed., Instructor in Special Education.

B.A. (1967), Suffolk (Mass.); M.Ed. (1969), Illinois. At Oregon since 1970.

STEPHEN C. REYNOLDS, Ph.D., Assistant Professor of Religious Studies.

B.A. (1958), Princeton; M.A. (1963), Ph.D. (1966), Harvard. At Oregon since 1966.

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.

DONALD E. RHOADES, M.A., Associate Dean for Student Administrative Services; Professor of Education.

B.A. (1947), Morningside College (Iowa); M.A. (1950), Iowa. At Oregon since 1969.

JAMES L. RICE, Ph.D., Assistant Professor of Russian.

A.B. (1960), Harvard; M.A. (1964), Ph.D. (1965), Chicago. At Oregon since 1967.

KARLA S. RICE, M.A., Assistant Professor of Physical Education.

B.S. (1962), Central Michigan; M.A. (1965), Michigan State. At Oregon since 1967.

STUART U. RICH, D.B.A., 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.

LARRY E. RICHARDS, Ph.D., Assistant Professor of Business Statistics.

B.A. (1962), M.B.A. (1963), Washington; Ph.D. (1969), California at Los Angeles. At Oregon since 1966.

W. DWAIN RICHINS, Ph.D., Associate Professor of Business Economics; Associate Dean of Students.

B.A. (1936), Brigham Young; M.B.A. (1938), Louisiana State; Ph.D. (1950), Washington. At Oregon since 1949.

WILLIAM A. RICHTER, D.M.D., Professor of Dentistry, Dental School; Chairman Crown and Bridge Department.

D.M.D. (1952), M.S. (1964), Oregon. At Oregon since 1962.

NORMAN H. RICKLES, D.D.S., Professor of Dentistry, Dental School; Chairman, Department of General and Oral Pathology; Professor of Pathology, Medical School.

D.D.S. (1947), Washington; M.S. (1951), California. At Oregon since 1956.

- WILLIAM K. RIKER, M.D., Professor of Pharmacology, Medical School ; Chairman of Department.
B.A. (1949), Columbia; M.D. (1953), Cornell. At Oregon since 1969.
- CHARLES L. RIMPLEY, M.S., Instructor in Computer Science.
B.A. (1960), Berkeley; M.S. (1967), California State at Hayward. At Oregon since 1968.
- *DAVID N. RINEHART, B.Arch., Associate Professor of Architecture.
B.A. (1951), Indiana; B.Arch. (1957), Pennsylvania. At Oregon since 1966.
- BERNICE M. RISE, A.B., B.S. in L.S., Reader's Consultant and Browsing Room Librarian Emeritus (Assistant Professor).
B.A. (1923), Oregon; B.S. in L.S. (1928), Columbia. At Oregon since 1923.
- MAX D. RISINGER, M.A., Professor of Music (Music Education) ; Director University Choral Organizations.
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.S. (1929), Ph.D. (1931), Michigan. At Oregon since 1945.
- NORVAL J. RITCHEY, M.S., Director of Athletics, with the Rank of Associate Professor; Assistant Professor of Physical Education.
B.S. (1953), M.S. (1956), Oregon. At Oregon since 1956.
- MILDRED C. ROBECK, Ph.D., Professor of Education.
B.A. (1951), M.Ed. (1954), Ph.D. (1958), Washington. At Oregon since 1967.
- †WILLIAM J. ROBERT, LL.M., Professor of Business 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., Assistant Football Coach, with the Rank of Assistant Professor; Instructor in Physical Education.
B.S. (1960), Oregon. At Oregon since 1960.
- SHIRLEY J. ROBINSON, B.A., Instructor in Special Education.
B.A. (1969), Illinois. At Oregon since 1970.
- JACK ROCHE, B.S., Assistant Football Coach, with the Rank of Professor; Assistant Professor of Physical Education; Associate Baseball Coach.
B.S. (1940), Santa Clara. At Oregon since 1951.
- HELEN M. ROCKETT, M.A., Lecturer in English.
B.A. (1961), M.A. (1963), Oklahoma. At Oregon since 1967.
- WILLIAM ROCKETT, Ph.D., Assistant Professor of English.
B.A. (1961), M.A. (1963), Oklahoma; Ph.D. (1969), Wisconsin. At Oregon since 1966.
- ROY H. RODGERS, Ph.D., Associate Professor of Sociology; Head of Department.
B.A. (1951), Wheaton; M.A. (1957), North Carolina; Ph.D. (1962), Minnesota. At Oregon since 1963.
- LYNN S. RODNEY, Ph.D., Professor of Recreation Management; Head, Department of Recreation and Park Management; Chairman, Leisure Services Administration.
B.A. (1936), M.A. (1938), Washington State; Ph.D. (1955), Michigan. At Oregon since 1955.
- M. MARGARET ROGERS, M.S., Instructor in Education.
B.A. (1955), Western Washington State; M.S. (1968), Oregon. At Oregon since 1969.
- RICHARD B. ROMM, B.A., Assistant Director of Dormitories, with the Rank of Instructor.
B.A. (1958), California at Santa Barbara. At Oregon since 1965.
- HUCK J. RORICK, M.Arch., Visiting Assistant Professor of Architecture.
B.Arch. (1966), M.Arch. (1967), Berkeley. At Oregon since 1970.

* On leave of absence 1970-71.

† On sabbatical leave 1970-71.

HARRY E. RORMAN, M.A., Instructor, Project Newgate.

B.A. (1969), M.A. (1969), Oregon College of Education. At Oregon since 1970.

ROBERT L. ROSE, Ph.D., Assistant Professor of Education.

B.A. (1960), M.Ed. (1966), Eastern Washington State; Ph.D. (1969), Oregon. At Oregon since 1970.

STANLEY L. ROSE, Ph.D., Assistant Professor of Romance Languages.

B.A. (1958), Arizona; M.A. (1960), Ph.D. (1969), Wisconsin. At Oregon since 1965.

EDWARD E. ROSENBAUM, M.D., Clinical Professor of Medicine, Medical School; Acting Head of Division of Rheumatology.

B.S. (1936), M.D. (1938), Nebraska; M.S. (1947), Minnesota. At Oregon since 1948.

J. CARLYLE ROSS, M.A., Assistant Head, Audiovisual Media Center; Assistant Professor of Library Administration.

B.A. (1944), Washington; M.A. (1969), Appalachian State (North Carolina). At Oregon since 1969.

KENNETH A. ROSS, Ph.D., Professor of Mathematics.

B.S. (1956), Utah; M.S. (1958), Ph.D. (1960), Washington. At Oregon since 1964.

LAWRENCE W. ROSS, JR., J.D., Associate Professor of Business Law; Acting Director of Honors College.

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, Department of Art History; Historian of Architecture.

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 Emeritus of Art.

B.A. (1927), Oregon; M.F.A. (1939), Southern California. At Oregon since 1920.

MARY L. ROTHBART, Ph.D., Adjunct Assistant Professor of Psychology.

B.A. (1962), Reed; Ph.D. (1967), Stanford. At Oregon since 1970.

MYRON ROTHBART, Ph.D., Assistant Professor of Psychology.

B.A. (1962), Reed; Ph.D. (1966), Stanford. At Oregon since 1969.

RONALD J. ROUSSEVE, Ph.D., Associate Professor of Education; Associate Professor of Community Service Programs.

B.S. (1953), M.A. (1954), Xavier; Ph.D. (1958), Notre Dame. At Oregon since 1968.

J. DAVID ROWE, B.A., Planning Consultant, Bureau of Governmental Research and Service, with the Rank of Professor.

B.A. (1955), Park. At Oregon since 1959.

WILLIAM N. ROY, M.F.A., Instructor in Sculpture.

B.F.A. (1965), Miami; M.A. (1968), M.F.A. (1968), Iowa. At Oregon since 1968.

ALFRED P. RUBIN, M.Litt., Professor of Law.

B.A. (1952), J.D. (1957), Columbia; M.Litt. (1963), Cambridge. At Oregon since 1967.

PAUL P. RUDY, Ph.D., Assistant Professor of Biology; Director, Oregon Institute of Marine Biology.

B.A. (1955), M.A. (1959), Ph.D. (1966), California at Davis. At Oregon since 1968.

WALLACE M. RUFF, M.S., Professor of Landscape Architecture; Head, Department of Landscape Architecture.

B.S. (1934), Florida; M.S. (1950), California. At Oregon since 1952.

PHILIP J. RUNKEL, Ph.D., Professor of Psychology; Research Associate, Center for the Advanced Study of Educational Administration.

B.S. (1939), Wisconsin State (Stevens Point); M.A. (1954), Ph.D. (1956), Michigan. At Oregon since 1964.

BRENT M. RUTHERFORD, Ph.D., Assistant Professor of Political Science; Research Associate, Center for the Advanced Study of Educational Administration.

B.A. (1964), Bradley; M.A. (1967), Ph.D. (1968), Northwestern. At Oregon since 1969.

* On sabbatical leave, fall term, 1970-71.

*BRUCE P. RYAN, Ph.D., Associate Professor of Speech.

B.S. (1953), Southern Oregon; M.A. (1957), Western Michigan; Ph.D. (1964), Pittsburgh. At Oregon since 1965.

C. BRYAN RYAN, M.F.A., Professor of Art.

B.S. (1939), M.F.A. (1940), Oregon. At Oregon since 1946.

WILLIS C. RYGG, Director of Special Services, with the Rank of Instructor, Tongue Point Job Corps Center.

At Oregon since 1965.

BURTON E. SABOL, M.A., Acting Assistant Professor of English.

B.A. (1959), Cornell; M.A. (1961), Chicago. At Oregon since 1967.

R. BRADLEY SACK, M.D., Sc.D., Associate Professor of Medicine, Medical School; Head of Division of Infectious Diseases.

B.S. (1956), Lewis and Clark; M.S., M.D. (1960), Oregon; Sc.D. (1968), Johns Hopkins. At Oregon since 1969.

BARBARA T. SALISBURY, M.A., Visiting Lecturer in English.

B.A. (1958), M.A. (1964), Washington. At Oregon since 1969.

*RALPH J. SALISBURY, M.F.A., Associate Professor of English.

B.A. (1949), M.F.A. (1951), Iowa. At Oregon since 1960.

CHRISTOPHER L. SALTER, M.A., Visiting Assistant Professor of Geography.

B.A. (1961), Oberlin; M.A. (1967), Berkeley. At Oregon since 1970.

H. ROYCE SALTZMAN, D.M.A., Professor of Music (Church Music); Director, University Chorale.

B.A. (1950), Goshen; M.Mus. (1954), Northwestern; D.M.A. (1964), Southern California. At Oregon since 1964.

C. GARTH SAMPSON, D.Phil., Assistant Professor of Anthropology.

B.A. (1962), Cape Town; B.A. (1965), Cambridge; D.Phil. (1969), Oxford. At Oregon since 1970.

ROY J. SAMPSON, Ph.D., Professor of Transportation.

B.S. (1946), Tennessee Polytechnic; M.B.A. (1948), Ph.D. (1951), California. At Oregon since 1959.

JACK T. SANDERS, Ph.D., Associate Professor of Religious Studies.

B.A. (1956), Texas Wesleyan; B.D. (1960), Emory; Ph.D. (1963), Claremont. At Oregon since 1969.

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.

ABDUL Q. SARKER, Ph.D., Lecturer in Physics.

B.S. (1956), M.S. (1959), Pakistan; Ph.D. (1963), Birmingham (England). At Oregon since 1969.

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; Director of Child Study Clinic; Clinical Professor of Dentistry, Medical School.

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.

ERIC SCHABTACH, B.S., Senior Instructor in Biology; Director, Electron Microscope Facility.

B.S. (1963), McGill. At Oregon since 1969.

DONALD D. SCHADE, B.S., University Budget Officer, with the Rank of Associate Professor.

B.S. (1952), Oregon. At Oregon since 1968.

* On leave of absence 1970-71.

BENSON SCHAEFFER, Ph.D., Assistant Professor of Psychology.

B.A. (1962), M.A. (1964), Ph.D. (1969), California. At Oregon since 1966.

WALTER E. SCHAFER, Ph.D., Associate Professor of Sociology; Associate Professor of Community Service and Public Affairs; Director of Research and Special Programs, Wallace School.

B.A. (1961), M.A. (1962), Ph.D. (1965), Michigan. At Oregon since 1965.

BRADLEY T. SCHEER, Ph.D., Professor of Biology.

B.S. (1936), California Institute of Technology; Ph.D. (1940), California. At Oregon since 1950.

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

A.B. (1948), Temple; M.A. (1949), Ph.D. (1951), Princeton. At Oregon since 1958.

*RICHARD G. SCHLAADT, Ed.D., Associate Professor of Health Education.

B.S. (1957), Lewis and Clark; M.S. (1958), Illinois; Ed.D. (1966), Oregon State. At Oregon since 1967.

†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.

RICHARD C. SCHMIDT, M.A., Acting Assistant Professor of Anthropology.

B.A. (1965), M.A. (1966), Washington University (St. Louis). At Oregon since 1969.

CLARENCE W. SCHMINKE, Ph.D., Acting Associate Dean of the College of Education; 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 of Library Administration.

B.S. (1938), B.S. in L.S. (1939), Illinois. At Oregon since 1947.

RICHARD A. SCHMUCK, Ph.D., Professor of Educational Psychology; Research Associate, Center for the Advanced Study of Educational Administration.

B.A. (1958), M.A. (1959), Ph.D. (1962), Michigan. At Oregon since 1967.

IRA SCHNEIDERREIT, Instructor in Chinese.

Dip. (1964), Taiwan. At Oregon since 1970.

LOIS M. SCHREINER, M.L.S., Reference and Social Science Librarian; Instructor in Library Administration.

B.S. (1968), M.L.S. (1969), Oregon. At Oregon since 1970.

EUGENE F. SCOLES, J.S.D., Dean of the School of Law; Professor of Law.

B.A. (1943), J.D. (1945), Iowa; LL.M. (1949), Harvard; J.S.D. (1955), Columbia. At Oregon since 1968.

KENNETH W. SCOOPMIRE, B.S., Pharmacist, Student Health Service, with the Rank of Assistant Professor.

B.S. (1952), Idaho State. At Oregon since 1965.

ALAN F. SCOTT, M.D., Adjunct Assistant Professor of Psychology.

B.S. (1959), M.D. (1961), Oregon. At Oregon since 1969.

FRANCES G. SCOTT, Ph.D., Director, Center for Gerontology; Professor of Education; Professor of Community Service and Public Affairs.

B.A. (1953), M.A. (1954), Texas; Ph.D. (1960), California at Los Angeles. At Oregon since 1962.

GARY H. SEARL, M.S., Instructor in Geography.

B.B.A. (1959), M.S. (1966), Oregon. At Oregon since 1968.

GEORGE SEDDON, Ph.D., Visiting Associate Professor of Geology.

B.A. (1948), Melbourne; B.S. (1963), West Australia; M.S. (1964), Ph.D. (1966), Minnesota. At Oregon since 1970.

* On leave of absence 1970-71.

† On sabbatical leave, winter and spring terms, 1970-71.

- KAREN M. SEIDEL, B.A., Assistant Planner, Bureau of Governmental Research and Service, with the Rank of Instructor.
B.A. (1957), Knox. At Oregon since 1966.
- GEORGE G. SEIFERT, M.S., Instructor in Physical Education; Assistant Football Coach.
B.S. (1963), M.S. (1966), Utah. At Oregon since 1967.
- GARY M. SEITZ, Ph.D., Assistant Professor of Mathematics.
A.B. (1964), M.A. (1965), Berkeley; Ph.D. (1968), Oregon. At Oregon since 1970.
- *LESTER G. SELIGMAN, Ph.D., Professor of Political Science.
B.A. (1939), Ph.D. (1947), Chicago. At Oregon since 1953.
- ROSE MARIE SERVICE, M.A., Social Science Librarian; Assistant Professor of Library Administration.
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.B. (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.
- LAWRENCE M. SHADBOLT, JR., M.C.P., Assistant Planner, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
B.S. (1964), Oregon; M.C.P. (1968), Berkeley. At Oregon since 1969.
- LESLIE L. D. SHAFFER, Ph.D., Associate Professor of Management.
B.A. (1935), California; M.S. (1960), Ph.D. (Illinois). At Oregon since 1965.
- EVELYN SHATTUCK, M.S.N., Associate Professor of Nursing; Coordinator, Basic Nursing Programs.
B.S. (1940), M.S.N., (1947), Washington.
- WILMA K. SHAW, M.A., Instructor in Education.
B.A. (1967), Queens College (N.Y.); M.A. (1968), Colorado State. At Oregon since 1970.
- ALYCE R. SHEETZ, M.S., Assistant Professor of Journalism; Publications Editor.
B.S. (1940), M.S. (1963), Oregon. At Oregon since 1969.
- GUY SHELLNBARGER, M.Ed., Supervisor of Student Teaching, College of Education, with the Rank of Professor.
B.S. (1936), M.Ed. (1953), Oregon. At Oregon since 1965.
- GEORGE SHEPHERD, Ed.D., Associate Professor of Education.
B.A. (1955), M.A. (1958), Colorado State College (Greeley); Ed.D. (1965), Illinois. At Oregon since 1965.
- JOHN R. SHEPHERD, Ph.D., Professor of Speech; Director, Division of Broadcast Services and Televised Instruction.
B.A. (1946), M.A. (1947), Stanford; Ph.D. (1952), Southern California. At Oregon since 1957.
- WILLIAM C. SHEPPARD, JR., Ph.D., Assistant Professor of Psychology.
B.A. (1964), M.A. (1965), Ph.D. (1967), Michigan. At Oregon since 1967.
- PETER R. SHERMAN, M.S., Senior Instructor in Mathematics.
B.S. (1947), M.S. (1949), Oregon; B.D. (1952), Pacific School of Religion. At Oregon since 1960.
- RONALD E. SHERRIFFS, Ph.D., Associate Professor of Speech.
B.A. (1955), M.A. (1957), San Jose State; Ph.D. (1964), Southern California. At Oregon since 1965.
- IRMA Z. SHERWOOD, Ph.D., Assistant Professor of English.
A.B. (1940), Barnard; M.A. (1942), Ph.D. (1945), Yale. At Oregon 1946-48, 1954-55, 1962-64, and since 1965.

* On leave of absence, fall term, 1970-71.

† On sabbatical leave, fall and winter terms, 1970-71.

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; Professor of Biology.

B.S. (1947), M.S. (1950), Oregon; Ph.D. (1953), California. At Oregon since 1947.

STEPHEN C. SHUCARD, Ph.D., Assistant Professor of Classics.

B.A. (1962), Brooklyn; Ph.D. (1968), Illinois. At Oregon since 1967.

BEN H. SHUFORD, M.B.A., Instructor in Business Administration.

B.S. (1959), Los Angeles State; M.B.A. (1965), California State at Fullerton. At Oregon 1968-69 and since 1970.

DONALD L. SHUTT, M.Ed., Adjunct Instructor in Education.

B.S. (1964), M.Ed. (1965), Oregon. At Oregon since 1970.

BARRY N. SIEGEL, Ph.D., Professor of Economics; Associate Dean of the College of Liberal Arts.

B.A. (1951), Ph.D. (1957), California. At Oregon since 1961.

*ALLAN J. SIERADSKI, Ph.D., Assistant Professor of Mathematics.

B.S. (1962), Dayton; M.S. (1964), Ph.D. (1967), Michigan. At Oregon since 1967.

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 since 1941.

MARCIA J. SIGLER, M.L.S., Senior Catalog Librarian; Assistant Professor of Library Administration.

B.A. (1944), Ohio Wesleyan; B.S. (1956), M.L.S. (1958), Berkeley. At Oregon since 1969.

HELEN SIMMONS, Ph.D., Assistant Professor of Education.

B.A. (1955), M.A. (1957), British Columbia; Ph.D. (1969), Oregon. At Oregon since 1968.

ANN G. SIMONDS, Ph.D., Assistant Professor of Anthropology.

B.A. (1959), Ph.D. (1964), California. At Oregon since 1966.

PAUL E. SIMONDS, Ph.D., Associate Professor of Anthropology.

B.A. (1954), 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.

†WILLIAM T. SIMPSON, Ph.D., Professor of Chemistry; Research Associate, Institute of Theoretical Science and Institute of Molecular Biology.

A.B. (1943), Ph.D. (1948), California. At Oregon since 1963.

SUSAN K. S. SIMS, M.A., Instructor in English.

B.A. (1967), M.A. (1968), Oregon. At Oregon since 1969.

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.

BECKY L. SISLEY, M.S.P.E., Assistant Professor of Physical Education.

B.A. (1961), Washington; M.S.P.E. (1964), North Carolina (Greensboro). At Oregon since 1965.

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

A.B. (1950), Harvard; Ph.D. (1954), California. At Oregon since 1963.

RICHARD L. SLEETER, M.D., Assistant Dean, Medical School; Professor of Pediatrics; Director of Crippled Children's Division.

B.A. (1940), Oregon; M.D. (1943), Washington University. At Oregon since 1953.

* On leave of absence, fall term, 1970-71.

† On sabbatical leave 1970-71.

‡ On leave of absence 1970-71.

CLARENCE SLOAT, Ph.D., Associate Professor of English.

B.A. (1958), M.A. (1960), Idaho State; Ph.D. (1966), Washington. At Oregon since 1966.

WALTER W. SLOCUM, M.L.S., Acquisition Librarian; Instructor in Library Administration.

B.S. (1960), M.L.S. (1968), Oregon. At Oregon since 1969.

ALFRED G. SMITH, Ph.D., Professor of Anthropology; Professor of Community Service and Public Affairs.

A.B. (1943), Michigan; M.A. (1947), Ph.D. (1956), Wisconsin. At Oregon since 1962.

DONALD L. SMITH, B.Arch., Visiting Lecturer in Architecture.

B.Arch. (1960), Oregon. At Oregon since 1970.

DONALD T. SMITH, M.A., M.S., Assistant University Librarian; Professor of Library Administration.

B.A. (1949), M.A. (1950), Wesleyan; M.S. (1951), Columbia. At Oregon since 1963.

EVERETT G. SMITH, JR., Ph.D., Associate Professor of Geography.

B.A. (1953), M.A. (1956), Illinois; Ph.D. (1962), Minnesota. At Oregon since 1965.

HOWARD N. SMITH, M.S., Instructor in Education.

B.S. (1952), M.S. (1956), Oregon. At Oregon since 1970.

JAMES F. SMITH, Ph.D., Visiting Associate Professor of Mathematics.

A.B. (1954), Bellarmine (N.Y.); M.S. (1957), Ph.D. (1959), Catholic University of America. At Oregon since 1970.

NORMAN R. SMITH, Ph.D., Associate Professor of Marketing.

B.A. (1948), Alberta; M.A. (1957), Ph.D. (1965), Michigan State. At Oregon since 1962.

RACHEL D. SMITH, M.L.S., Adjunct Assistant Professor of Librarianship.

B.A. (1959), Bethany Nazarene (Okla.); M.L.S. (1964), Oklahoma. At Oregon since 1970.

RICHARD A. SMITH, M.S., Associate Professor of Architecture.

B.Arch. (1956), Michigan; M.S. (1962), Minnesota. At Oregon since 1962.

RICHARD J. SMITH, Ph.D., Associate Professor of Physical Education; Gymnastics Coach.

B.S. (1949), M.Ed. (1953), Springfield; Ph.D. (1968), Oregon. 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 W. SMITH, Ph.D., Professor of History.

B.A. (1937), Chicago; M.A. (1940), Ph.D. (1942), California at Los Angeles. At Oregon since 1947.

SANDRA K. SMITH, B.S., Instructor, Tongue Point Job Corps Center.

B.S. (1967), Lincoln. At Oregon since 1969.

SHARRON L. SMITH, M.A., Head Resident, Dormitories, with the Rank of Instructor.

B.A. (1959), Knox; M.A. (1966), Bradley. At Oregon since 1969.

†WARREN E. SMITH, Ed.D., Professor of Health Education.

B.S. (1941), Oregon; M.A. (1947), Michigan; Ed.D. (1957), Stanford. At Oregon since 1963.

KENNETH D. SMYTH, M.D., Associate Professor of Orthopedics in Physical Medicine, Medical School; Head of Division of Physical Medicine and Rehabilitation; Assistant Professor of Otolaryngology.

B.A. (1947), College of Idaho; M.D. (1953), Oregon. At Oregon since 1967.

WILLIAM E. SNELL, M.D., Professor of Orthopedics, Medical School; Head of Division.

B.S. (1943), M.D. (1954), Oregon. At Oregon since 1951.

* On leave of absence 1970-71.

† On sabbatical leave, fall and winter terms, 1970-71.

- BRUCE F. SNYDER, B.S., Assistant Football Coach, with the Rank of Instructor.
B.S. (1963), Oregon. At Oregon since 1967.
- MARSHALL L. SNYDER, Ph.D., Professor of Bacteriology, Dental School; Chairman of Department; Professor of Microbiology, Medical School.
Ph.B. (1930), Brown; M.S. (1932), Ph.D. (1935), Colorado. At Oregon since 1946.
- JUDITH B. SOBRÉ, Ph.D., Assistant Professor of Art History.
B.A. (1962), New York University; M.A. (1964), Ph.D. (1969), Harvard. At Oregon since 1968.
- 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., Associate 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.
- WOLFGANG F. SOHLICH, M.A., Assistant Professor of Romance Languages.
B.A. (1959), Johns Hopkins; M.A. (1968), Emory. At Oregon since 1970.
- FRED M. SORENSON, D.M.D., Professor of Dentistry, Dental School; Director, Dental Clinics.
B.S. (1951), Utah; D.M.D. (1958), M.S. (1963), Oregon. At Oregon since 1959.
- LLOYD R. SORENSON, Ph.D., Professor of History.
B.A. (1938), North Dakota; M.A. (1945), Ph.D. (1947), Illinois. At Oregon since 1947.
- EDMUND F. SOULE, Ph.D., Music Librarian; Assistant Professor of Library Administration.
B.Mus. (1939), M.A. (1946), Pennsylvania; B.Mus. (1948), Yale; Ph.D. (1956), Eastman; M.A. in L.S. (1966), Denver. At Oregon since 1966.
- NORMAN E. SOWELL, B.S., Assistant Professor of Military Science.
B.S. (1964), Oregon. At Oregon since 1969.
- JOYCE T. SPENCE, Ph.D., Assistant Professor of Special Education.
B.A. (1964), Wyoming; M.A. (1966), Appalachian State (N.C.); Ph.D. (1970), Connecticut. At Oregon since 1970.
- VERNON S. SPRAGUE, Ph.D., Professor of Physical Education; Special Assistant to the Dean.
B.S. (1937), Oregon; M.A. (1942), Ph.D. (1951), Michigan. At Oregon since 1946.
- 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.
- JOHN M. STAMM, Ph.D., Assistant Professor of Education.
B.S. (1965), Concordia Teachers (Ill.); M.S. (1967), Ph.D. (1970), Wisconsin. At Oregon since 1970.
- LARRY W. STANDIFER, B.A., Instructor in Physical Education; Athletic Trainer; Physical Therapist.
B.A. (1955), Willamette. At Oregon since 1968.
- THAD C. STANFORD, M.D., Instructor, Project Newgate.
A.B. (1954), M.D. (1958), Michigan. At Oregon since 1970.
- DAVID R. STANNARD, M.S., Associate Professor of Art.
B.A. (1948), Redlands; M.S. (1966), Oregon State. At Oregon since 1965.
- LLOYD W. STAPLES, Ph.D., Professor of Geology.
A.B. (1929), Columbia; M.S. (1930), Michigan; Ph.D. (1935), Stanford. At Oregon since 1939.

- *D. GLENN STARLIN, Ph.D., Professor of Speech; Associate Dean of the College of Liberal Arts.
B.A. (1938), Idaho; M.A. (1939), Ph.D. (1951), Iowa. At Oregon since 1947.
- ALBERT STARR, M.D., Professor of Cardiopulmonary Surgery, Medical School; Head of Division.
B.A. (1946), M.D. (1949), Columbia. At Oregon since 1957.
- SUSAN C. STEARNS, B.A., Instructor in Special Education.
B.A. (1969), Illinois. At Oregon since 1970.
- VICTOR STEINHARDT, M.A., Assistant Professor of Music (Piano, Music Theory).
B.M. (1964), Mount St. Mary's (Cal.); M.A. (1967), California at Los Angeles. At Oregon since 1968.
- ALAN L. STEPHENSON, Ph.D., Visiting Assistant Professor of Religious Studies.
B.B.A. (1957), Oklahoma; Th.M. (1964), Ph.D. (1971), Claremont. At Oregon since 1970.
- THEODORE STERN, Ph.D., Professor of Anthropology; Head of Department; Consultant in Ethnology, Museum of Natural History.
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.
- RICHARD C. STEVENSON, Ph.D., Assistant Professor of English.
A.B. (1961), A.M. (1963), Ph.D. (1969), Harvard. At Oregon since 1968.
- ARTHUR B. STILLMAN, M.B.A., Professor Emeritus of Business Administration.
B.A. (1928), Oregon; M.B.A. (1937), Washington. At Oregon since 1922.
- NONDA P. STONE, M.Ed., Acting Assistant Head, Department of Special Education; Director of Practicum Program, with the Rank of Associate Professor; Senior Instructor in Education.
B.S. (1945), Oregon College of Education; M.Ed. (1955), Oregon. At Oregon since 1965.
- CHARLES J. STOUT, D.M.D., Professor of Dentistry, Dental School; Chairman, Department of Prosthetics.
B.S. (1943), Ouachita; B.A. (1947), D.M.D. (1947), Oregon. At Oregon since 1955.
- MARLISS G. STRANGE, M.A., Lecturer in English.
B.A. (1955), M.A. (1957), Washington. At Oregon since 1968.
- WILLIAM C. STRANGE, Ph.D., Associate Professor of English.
B.A. (1952), Whitman; M.A. (1953), Montana; Ph.D. (1963), Washington. At Oregon since 1960.
- G. DOUGLAS STRATON, Ph.D., Professor of Religious Studies; Head of Department.
A.B. (1938), Harvard; B.D. (1941), Andover Newton; Ph.D. (1950), Columbia. At Oregon since 1959.
- RONALD J. STRATTEN, B.S., Assistant Football Coach, with the Rank of Instructor.
B.S. (1964), Oregon. At Oregon since 1968.
- KARL D. STREIFF, M.A., Associate Dean of Students, with the Rank of Professor; Director of Financial Aid.
B.A. (1943), Michigan State; M.A. (1961), Michigan. At Oregon since 1969.
- GEORGE STREISINGER, Ph.D., Professor of Biology; Co-Chairman of Department; Research Associate, Institute of Molecular Biology.
B.S. (1950), Cornell; Ph.D. (1954), Illinois. At Oregon since 1960.
- HAROLD K. STROM, Ph.D., Associate Professor of Transportation; Director, Transport and Logistics Research Center and Center for International Business Studies.
B.A. (1957), M.B.A. (1958), Washington; Ph.D. (1964), California at Los Angeles. At Oregon since 1965.
- JOHN W. STRONG, J.D., Professor of Law.
A.B. (1957), Yale; J.D. (1962), Illinois. At Oregon since 1969.

* On sabbatical leave, spring term, 1970-71.

- GEORGE W. STRUBLE, Ph.D., Associate Professor of Computer Science; Director, Computing Center.
A.B. (1954), Swarthmore; M.S. (1957), Ph.D. (1961), Wisconsin. At Oregon since 1961.
- EMORY F. SUMMERS, M.A., Associate Professor of Physical Education; Tennis Coach.
B.A. (1957), California; M.A. (1963), University of the Pacific. At Oregon since 1967.
- NORMAN D. SUNDBERG, Ph.D., Dean of the Wallace School of Community Service and Public Affairs; Professor of Community Service and Public Affairs; Professor of Psychology.
B.A. (1947), Nebraska; M.A. (1949), Ph.D. (1952), Minnesota. At Oregon since 1952.
- RALPH C. SUNDERLAND, B.S., Chief Budget Officer, with the Rank of Professor.
B.S. (1957), Oregon State. At Oregon since 1966.
- JOHN E. SUTTLE, Ed.D., Professor of Education.
B.S. (1948), Ed.D. (1960), Texas; M.Ed. (1952), Colorado. At Oregon since 1959.
- PAUL SWADENER, D.B.A., Associate Dean, College of Business Administration; Associate Professor of Business Administration.
B.S. (1960), M.B.A. (1962), D.B.A. (1968), Indiana. At Oregon since 1965.
- KENNETH C. SWAN, M.D., Professor of Ophthalmology, Medical School; Chairman of Department.
B.A. (1933), M.D. (1936), Oregon. At Oregon since 1944.
- PETER N. SWAN, LL.B., Associate Professor of Law.
B.S. (1958), LL.B. (1961), Stanford. At Oregon since 1970.
- 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.
- SHIRLEY F. SWENSON, M.A., Research Assistant, Bureau of Governmental Research and Service, with the Rank of Instructor.
A.B. (1948), M.A. (1964), Western Michigan. At Oregon since 1967.
- DONALD F. SWINEHART, Ph.D., Professor of Chemistry.
B.S. (1939), Capital; M.S. (1941), Ph.D. (1943), Ohio State. At Oregon since 1946.
- ROBERT A. SYLWESTER, Ed.D., Associate Professor of Education.
B.S. (1949), Concordia Teachers (Nebraska); M.Ed. (1953), D.Ed. (1961), Oregon. At Oregon since 1968.
- ALBERT J. SZYMANSKI, B.A., Instructor in Sociology.
B.A. (1964), Rhode Island. At Oregon since 1970.
- MIYAKO TAKENO, M.S., Catalog Librarian, Bibliographer, Orientalia Collection; Senior Instructor in Library Administration.
B.A. (1953), Tokyo; M.A. (1963), Washington; M.S. (1966), Oregon. At Oregon since 1966.
- GERALDINE E. TALLEY, M.S., Instructor in Special Education.
B.S. (1969), Wilberforce; M.S. (1970), Illinois. At Oregon since 1970.
- STEPHEN JEN-YAO TANG, M.S., Visiting Professor of Architecture.
B.S. (1942), M.S. (1944), Illinois. At Oregon since 1969.
- ROBERT F. TATE, Ph.D., Professor of Mathematics.
M.S. (1949), North Carolina; B.A. (1944), Ph.D. (1952), California at Berkeley. At Oregon since 1965.
- *JAMES N. TATTERSALL, Ph.D., Professor of Economics.
B.A. (1954), M.A. (1956), Ph.D. (1960), Washington. At Oregon since 1957.
- DONALD S. TAYLOR, Ph.D., Professor of English.
B.A. (1947), M.A. (1948), Ph.D. (1950), Berkeley. At Oregon since 1968.

* On sabbatical leave 1970-71.

NATHANIEL TEICH, Ph.D., Assistant Professor of English.

B.S. (1960), Carnegie Institute of Technology; M.A. (1962), Columbia; Ph.D. (1970), California at Riverside. At Oregon since 1969.

SANFORD S. TEPPER, Ph.D., Professor of Biology; Co-Chairman of Department.

B.S. (1938), College of City of New York; M.S. (1939), Cornell; Ph.D. (1950), California. At Oregon since 1955.

LOUIS G. TERKLA, D.M.D., Dean of the Dental School; Professor of Dentistry, Medical School; Head of Division.

D.M.D. (1952), Oregon. At Oregon since 1952.

SHIRLEY M. TERREBERRY, Ph.D., Associate Professor of Community Service.

B.A. (1951), M.A. (1954), Wayne State; M.S.W. (1966), Ph.D. (1968), Michigan. At Oregon since 1968.

ROBERT C. TERWILLIGER, Ph.D., Assistant Professor of Biology; Assistant Director, Oregon Institute of Marine Biology.

B.A. (1962), Bowdoin; M.A. (1964), Ph.D. (1967), Boston. At Oregon since 1969.

MARY L. TETERS, Instructor in Education.

At Oregon since 1970.

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., Map Librarian; Assistant Professor of Library Administration.

B.A. (1940), Swarthmore; M.A. (1940), B.S. in L.S. (1952), Minnesota. At Oregon since 1952.

J. FRANK THIBEAU, B.A., Assistant Planner, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.

B.A. (1959), Portland State. At Oregon since 1965.

FRANCIS C. THIEMANN, Ph.D., Associate Professor of Education; Research Associate, Center for the Advanced Study of Educational Administration.

B.A. (1950), Seattle; M.Ed. (1963), Washington; Ph.D. (1968), Oregon. At Oregon since 1970.

*STAFFORD G. THOMAS, M.Ed., Assistant to the Dean of the College of Education, Federal Projects, with the Rank of Associate Professor.

B.S. (1955), Southern Oregon; M.Ed. (1963), Oregon. At Oregon since 1965.

ANDREW THOMPSON, Ph.D., Counselor, University Counseling Center, with the Rank of Associate Professor; Assistant Professor of Education.

B.A. (1956), M.A. (1959), Ph.D. (1963), Minnesota. At Oregon since 1965.

CHARLES H. THORMAN, Ph.D., Visiting Assistant Professor of Geology.

B.S. (1958), Redlands; M.S. (1960), Ph.D. (1962), Washington. At Oregon since 1968.

JOHN D. THORPE, B.S., Director of Married Student Housing, with the Rank of Assistant Professor.

B.S. (1950), Oregon. At Oregon since 1962.

CLARENCE E. THURBER, Ph.D., Professor of International and Public Affairs; Deputy Director, Institute of International Studies and Overseas Administration.

B.A. (1943), Ph.D. (1961), Stanford. At Oregon since 1966.

†HERBERT W. TITUS, LL.B., Professor of Law.

B.A. (1959), Oregon; LL.B. (1962), Harvard. At Oregon since 1966.

J. BARRE TOELKEN, Ph.D., Associate Professor of English.

B.S. (1958), Utah State; M.A. (1959), Washington State; Ph.D. (1964), Oregon. At Oregon 1960-64 and since 1966.

* Resigned, Jan. 1, 1971.

† On leave of absence 1970-71.

- KENNETH C. TOLLENAAR, M.A., Director, Bureau of Governmental Research and Service, with the Rank of Professor.
B.A. (1950), Reed; M.A. (1953), Minnesota. At Oregon since 1966.
- SAUL TOOBERT, Ph.D., Associate Professor of Education; Associate Director, University Counseling Center.
B.A. (1947), California; Ph.D. (1965), Oregon. At Oregon since 1963.
- MAXINE J. TOWLE, M.S., Instructor in Education.
B.S. (1968), Wisconsin State; M.S. (1969), Oregon. At Oregon since 1970.
- RICHARD TROMBLEY, M.Mus., Associate Professor of Music (Flute, Music History).
B.S. (1961), Juilliard; M.Mus. (1962), Manhattan School of Music. At Oregon since 1963.
- ROBERT M. TROTTER, Ph.D., Dean of the School of Music; Professor of Music (Theory, Music History).
B.Mus. (1943), Northwestern; M.A. (1947), Chicago; Ph.D. (1957), Southern California. At Oregon since 1963.
- DONALD R. TRUAX, Ph.D., Professor of Mathematics.
B.S. (1951), M.S. (1953), Washington; Ph.D. (1955), Stanford. At Oregon since 1959.
- RICHARD M. TRUMBULL, B.A., Instructor, Volunteers in Service to America.
B.A. (1966), Grinnell. At Oregon since 1969.
- MONTE E. TUBB, M.Mus., Associate Professor of Music (Composition, Musicianship).
B.A. (1956), Arkansas; M.Mus. (1960), Indiana. At Oregon since 1966.
- PAUL E. TUCKER, M.Ed., Instructor in Education.
B.S. (1962), Southern Oregon; M.Ed. (1967), Oregon. At Oregon since 1967.
- DONALD S. TULL, Ph.D., Professor of Marketing.
B.S. (1948), M.B.A. (1949), Ph.D. (1956), Chicago. At Oregon since 1967.
- GEORGE S. TURNBULL, M.A., Professor Emeritus of Journalism.
A.B. (1915), M.A. (1932), Washington. At Oregon since 1917.
- GENEVIEVE G. TURNPISEED, 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., Dean of the Graduate School; Professor of Psychology.
B.S. (1925), M.S. (1939), Ph.D. (1941), Minnesota. At Oregon since 1940.
- RICHARD L. UNRUH, M.Arch., Assistant Professor of Architecture.
B.A. (1952), Willamette; B.Arch. (1956), Massachusetts Institute of Technology; M.Arch. (1963), Pennsylvania. At Oregon since 1963.
- DEANORVAL UNTHANK, JR., B.Arch., Visiting Lecturer in Architecture.
B.Arch. (1952), Oregon. At Oregon since 1965.
- BANKS UPSHAW, B.Arch., Planning Office Architect, with the Rank of Assistant Professor.
B.Arch. (1956), Oklahoma. At Oregon since 1969.
- ALVIN W. URQUHART, Ph.D., Associate Professor of Geography.
B.A. (1953), M.A. (1958), Ph.D. (1962), California at Berkeley. At Oregon 1960-61 and since 1963.
- *MICHAEL UTSEY, B.Arch., Instructor in Architecture.
B.Arch. (1967), Texas. At Oregon since 1967.
- ROBERT S. VAGNER, M.Mus., Professor of Music (Clarinet); Director, University Bands.
B.A. (1935), M.A. (1938), Colorado State College; M.Mus. (1942), Michigan. At Oregon since 1950.
- JAMES M. VAN BUSKIRK, Ph.D., Associate Professor of Mathematics.
B.S. (1954), Wisconsin State (Superior); M.S. (1955), Ph.D. (1962), Wisconsin. At Oregon since 1962.

* On leave of absence 1970-71.

- STANLEY C. VANCE, Ph.D., H. T. Miner Professor of Business Administration.
B.A. (1937), St. Charles; M.A. (1944), Ph.D. (1950), Pennsylvania. At Oregon since 1960.
- DONALD R. VAN HOUTEN, Ph.D., Assistant Professor of Sociology; Assistant Head of Department.
B.A. (1958), Oberlin; Ph.D. (1967), Pittsburgh. At Oregon since 1968.
- DONALD P. VAN ROSSEN, Ph.D., Associate Professor of Physical Education; Swimming Coach, with the Rank of Associate Professor.
B.S. (1953), M.Ed. (1954), Ph.D. (1968), 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., Clinical Professor of Dental and Oral Medicine, Medical School.
D.D.S. (1928), California. At Oregon since 1959.
- DOMINICK R. VETRI, L.L.B., Assistant Professor of Law.
B.S. (1960), Newark College of Engineering; LL.B. (1964), Pennsylvania. At Oregon since 1967.
- DENNIS L. VETRUS, B.A., Assistant Director of Dormitories, with the Rank of Assistant Professor.
B.A. (1961), Denver. At Oregon since 1963.
- KENNETH D. VIEGAS, M.S.W., Director of Community Service; Assistant Professor of Community Service.
B.S. (1956), Oregon; M.S.W. (1963), California. At Oregon since 1967.
- ANDREW M. VINCENT, Professor Emeritus of Art.
Grad. (1929), Chicago Art Institute School. At Oregon since 1929.
- PETER H. VON HIPPEL, Ph.D., Professor of Chemistry; Director, Institute of Molecular Biology.
B.S. (1952), M.S. (1953), Ph.D. (1955), Massachusetts Institute of Technology. At Oregon since 1967.
- MAX WALES, M.A., Professor of Journalism.
B.A. (1933), Washburn; M.A. (1956), Iowa. At Oregon since 1957.
- HILL M. WALKER, Ph.D., Associate Professor of Education.
B.A. (1962), Eastern Oregon; M.A. (1964), Ph.D. (1967), Oregon. At Oregon since 1967.
- JAMES G. WALKER, M.S., Visiting Lecturer in Recreation.
B.S. (1961), M.S. (1966), Oregon. At Oregon 1967-68 and since 1969.
- LAWRENCE L. WALKER, M.L.A., Assistant Professor of Landscape Architecture.
B.L.A. (1964), Oregon; M.L.A. (1967), Harvard. At Oregon since 1967.
- LUISE E. WALKER, M.S., Head Science Librarian; Associate Professor of Library Administration.
A.B. (1951), Washington; A.M.L.S. (1955), Michigan; M.S. (1961), State University of New York, College of Forestry. At Oregon since 1967.
- CARL J. WALLEN, Ed.D., Associate Professor of Education.
A.B. (1956), California at Santa Barbara; M.A. (1960), San Francisco State; Ed.D. (1962), Stanford. At Oregon since 1967.
- GREGORY H. WANNIER, Ph.D., Professor of Physics.
Ph.D. (1935), Basel. At Oregon 1959 and since 1961.
- LEWIS E. WARD, JR., Ph.D., Professor of Mathematics.
A.B. (1949), California; M.S. (1951), Ph.D. (1953), Tulane. At Oregon since 1959.
- PAUL R. WASHKE, Ph.D., Professor Emeritus of Physical Education.
A.B. (1927), Western State Teachers (Michigan); A.M. (1929), Michigan; Ph.D. (1943) New York University. At Oregon since 1930.
- GEORGE B. WASSON, B.Mus., Assistant Dean of Students, with the Rank of Instructor.
B.Mus. (1969), Oregon. At Oregon since 1969.

ROBERT F. WATKINS, D.M.D., Associate Professor of Dentistry, Dental School; Chairman, Department of Endodontics.

D.M.D. (1949), Oregon. At Oregon since 1949.

CLARICE H. WATSON, M.S., Librarian, Educational Resources Informational Center, with the Rank of Instructor.

B.A. (1946), Iowa; M.S. (1967), Oregon. At Oregon since 1966.

*DONALD A. WATSON, Ph.D., Professor of Finance; Director, Bureau of Business and Economic Research.

B.A. (1947), M.A. (1948), Ph.D. (1951), Iowa. At Oregon since 1956.

EDWARD G. WATSON, M.A., Associate Planner, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.

B.A. (1943), Reed; M.A. (1948), Washington. At Oregon since 1962.

MARSHALL D. WATTLES, Ph.D., Associate Dean of Faculties; 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., Senior Instructor in Education; Coordinator, DeBusk Center.

B.S. (1957), Southern Oregon; M.S. (1963), Oregon. At Oregon since 1963.

A. KINGSLEY WEATHERHEAD, Ph.D., Professor of English.

M.A. (1949), Cambridge; M.A. (1949), Edinburgh; Ph.D. (1958), Washington. At Oregon since 1960.

INGRID A. WEATHERHEAD, M.A., Instructor in Norwegian.

B.A. (1950), M.A. (1951), Puget Sound. At Oregon 1962-63 and since 1969.

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; Chairman, Department of Continuing 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.

ANN T. WEICK, M.S.W., Instructor in Community Service and Public Affairs.

B.A. (1963), Oregon; M.S.W. (1967), Berkeley. At Oregon since 1970.

DANIEL F. WEILL, Ph.D., Associate Professor of Geology; Director, Center for Volcanology.

B.A. (1956), Cornell; M.S. (1958), Illinois; Ph.D. (1962), California. At Oregon since 1966.

ROBERT L. WEISS, Ph.D., Professor of Psychology; Director, Clinical Training Program.

B.A. (1952), Ph.D. (1958), State University of New York at Buffalo. At Oregon since 1966.

STACEY L. WENDLER, Instructor in Education.

B.Ed. (1970), Oregon. At Oregon since 1970.

ROGER WERTHEIMER, Ph.D., Visiting Assistant Professor of Philosophy.

B.A. (1963), Brandeis; M.A. (1967), Ph.D. (1969), Harvard. At Oregon since 1971.

EDWARD N. WEST, M.S., Adjunct Assistant Professor of Community Service.

B.S. (1964), M.S. (1969), Oregon. At Oregon since 1970.

WILLIAM B. WESTCOTT, D.M.D., Associate Dean for Administrative Affairs, Dental School; Professor of Dentistry, Department of Pathology; Professor of Pathology, Medical School.

D.M.D. (1951), M.S. (1962), Oregon. At Oregon since 1953.

* On sabbatical leave 1970-71.

- JAMES K. WESTHUSING, M.S., Visiting Lecturer in Geology.
B.S. (1954), M.S. (1959), Oregon. At Oregon since 1970.
- ARNOLD M. WESTLING, B.S., Planning and Public Works Consultant, Bureau of Governmental Research and Service, with the Rank of Professor.
B.S. (1943), Washington. At Oregon since 1947.
- JAMES A. WESTON, Ph.D., Associate Professor of Biology.
B.A. (1958), Cornell; Ph.D. (1963), Yale. At Oregon since 1970.
- SHEILA B. WHEELER, B.S., Program Consultant, Erb Memorial Union, with the Rank of Instructor.
B.S. (1968), Fisk. At Oregon since 1968.
- FRANKLIN S. WHICHER, M.S., Catalog Librarian; Instructor in Library Administration.
B.A. (1955), M.S. (1961), Illinois. At Oregon since 1966.
- DOUGLAS G. WHITE, M.S., Instructor in Health Education.
B.S. (1963), M.S. (1966), Oregon. At Oregon since 1969.
- JANET L. WHITE, M.S.W., Assistant Professor of Community Service.
B.S. (1942), Lock Haven (Pa.); M.S.W. (1954), Pennsylvania. At Oregon since 1969.
- W. ED WHITELAW, Ph.D., Associate Professor of Economics; Research Associate, Bureau of Governmental Research and Service.
B.A. (1963), Montana; Ph.D. (1968), Massachusetts Institute of Technology. At Oregon since 1967.
- VIRGINIA J. WHITFIELD, Ed.D., Associate Professor of Music.
B.Mus. (1934), M.Mus. (1946), Colorado; Ed.D. (1962), California at Los Angeles. At Oregon since 1965.
- BARBARA G. WICKELGREN, Ph.D., Assistant Professor of Psychology.
A.B. (1963), Radcliffe; Ph.D. (1966), Massachusetts Institute of Technology. At Oregon since 1969.
- WAYNE A. WICKELGREN, Ph.D., Professor of Psychology.
A.B. (1960), Harvard; Ph.D. (1962), Berkeley. At Oregon since 1969.
- GEORGE WICKES, Ph.D., Visiting Professor of English.
B.A. (1944), Toronto; M.A. (1949), Columbia; Ph.D. (1954), California. At Oregon since 1970.
- GOLDA P. WICKHAM, B.S., Dean of Women and Associate Dean of Students Emeritus (Professor).
B.S. (1931), Oregon. At Oregon since 1944.
- THOMAS B. WIENS, B.A., Assistant Professor of Economics.
B.A. (1964), Yale. At Oregon since 1970.
- 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.
- 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.S. (1921), M.A. (1932), Oregon; Ph.D. (1934), Marburg. At Oregon since 1935.
- EMMETT R. WILLIAMS, M.A., Assistant Director of Financial Aid; Assistant Dean of Students, with the Rank of Associate Professor.
B.S. (1953), M.A. (1969), Oregon. At Oregon since 1968.
- JEROLD A. WILLIAMS, M.L.S., Adjunct Assistant Professor of Librarianship.
B.S. (1953), M.S. (1960), Oregon; M.L.S. (1968), Washington. At Oregon since 1970.
- WILLIAM B. WILLINGHAM, M.A., Program Director, PL-3, with the Rank of Assistant Professor.
B.A. (1957), M.A. (1963), Indiana. At Oregon since 1965.

- NEIL E. WILSON, Ph.D., Professor of Music (Voice); Director, Chamber Choir.
B.F.A. (1952), M.Mus. (1955), New Mexico; Ph.D. (1967), Indiana. At Oregon since 1961.
- PAUL F. WILSON, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1944), M.D. (1947), Oregon. At Oregon since 1967.
- SHIRLEY J. WILSON, M.A., Associate Dean of Students, with the Rank of Professor.
B.A. (1952), Whitman; M.A. (1957), Stanford. At Oregon since 1969.
- DONALD E. WIMBER, Ph.D., Professor of Biology.
B.A. (1952), San Diego State; M.A. (1954), Ph.D. (1956), Claremont. At Oregon since 1963.
- WILLIS L. WINTER, Ph.D., Associate Professor of Journalism.
B.S. (1950), Berkeley; M.S. (1957), Oregon; Ph.D. (1968), Illinois. At Oregon since 1968.
- ARTHUR J. T. D. WISDOM, M.A., Professor of Philosophy.
B.A. (1923), M.A. (1934), Cambridge. At Oregon since 1968.
- JOHN R. WISH, Ph.D., Associate Professor of Marketing.
B.S. (1956), M.B.A. (1962), Ohio State; Ph.D. (1967), Michigan State. At Oregon since 1966.
- HERBERT P. WISNER, M.A., Instructor in Biology.
B.A. (1949), M.A. (1950), Syracuse. At Oregon since 1966.
- *HARRY F. WOLCOTT, Ph.D., Associate Professor of Education and Anthropology; Research Associate, Center for the Advanced Study of Educational Administration.
B.S. (1951), California; M.A. (1959), San Francisco State; Ph.D. (1964), Stanford. At Oregon since 1964.
- NOLA L. WOLF, M.A., Assistant Documents Librarian; Senior Instructor in Library Administration.
B.A. (1960), Colorado State (Fort Collins); M.A. (1967), Denver. At Oregon since 1967.
- JERRY M. WOLFE, M.A., Instructor in Mathematics.
B.S. (1966), Oregon State; M.A. (1969), Washington. At Oregon since 1970.
- *RAYMOND G. WOLFE, JR., Ph.D., 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 Pathology and Audiology.
B.S. (1935), Oregon State; M.A. (1938), Michigan; Ph.D. (1946), Southern California. At Oregon since 1942.
- MABEL A. WOOD, M.S., Professor Emeritus of Home Economics.
B.S. (1925), Oregon State; M.S. (1930), Columbia. At Oregon since 1932.
- JANET G. WOODRUFF, M.A., Professor Emeritus of Physical Education.
B.S. (1926), M.A. (1929), Columbia. At Oregon since 1929.
- JEAN M. WOODS, Ph.D., Assistant Professor of Germanic Languages.
B.A. (1948), Wellesley; M.A. (1965), Ph.D. (1968), Oregon. At Oregon since 1965.
- WILLIAM C. WOODS, M.M., Associate Professor of Music (Piano, Music History); Member, University Trio.
B.M. (1948), M.M. (1949), Southern California. At Oregon since 1950.
- EDNA P. WOOTEN, Ph.D., Professor of Physical Education.
B.S. (1945), M.A. (1946), Ph.D. (1961), Ohio State. At Oregon since 1965.

* On sabbatical leave 1970-71.

- CHARLES R. B. WRIGHT, Ph.D., Associate Professor of Mathematics.
B.A. (1956), M.A. (1957), Nebraska; Ph.D. (1959), Wisconsin. At Oregon since 1961.
- IRWIN I. WRIGHT, B.S., Director of Physical Plant Emeritus (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.
- MARJORIE B. WRIGHT, M.S.W., Assistant Professor of Community Service and Public Affairs.
Ph.B. (1956), DePaul; M.S.W. (1961), Illinois. At Oregon since 1970.
- WILLIAM S. WRIGHT, M.A., Instructor in Education.
B.A. (1965), Kansas Wesleyan; M.A. (1967), Colorado State. At Oregon since 1970.
- BOB L. WYNIA, M.S., Assistant Professor of Public Affairs; Grant and Conference Officer, Wallace School of Community Service and Public Affairs.
B.S. (1963), Oregon College of Education; M.S. (1964), Pennsylvania State. At Oregon since 1968.
- 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.
- HILDA YEE YOUNG, M.Ed., Personnel Manager, Dormitories, with the Rank of Senior Instructor.
B.Ed. (1958), M.Ed. (1960), Hawaii. At Oregon since 1962.
- JAMES R. YOUNG, Ph.D., Assistant Professor of Education.
B.A. (1965), M.Ed. (1966), Brigham Young; Ph.D. (1970), George Peabody. At Oregon since 1970.
- PHILIP D. YOUNG, Ph.D., Associate Professor of Anthropology.
B.A. (1961), Ph.D. (1968), Illinois. At Oregon since 1966.
- LOIS J. YOUNGEN, M.A., Assistant Professor of Physical Education.
B.S. (1955), Kent; M.A. (1957), Michigan State. At Oregon since 1960.
- JAN ZACH, Professor of Art.
At Oregon since 1958.
- M. GEORGE ZANINOVICH, Ph.D., Associate Professor of Political Science.
B.A. (1953), M.A. (1959), Ph.D. (1964), Stanford. At Oregon since 1966.
- L. HARMON ZEIGLER, Ph.D., Professor of Political Science; Research Associate, Center for the Advanced Study of Educational Administration.
B.A. (1957), Emory; M.A. (1958), Ph.D. (1960), Illinois. At Oregon since 1964.
- CALVIN J. ZIGLER, M.A., Instructor in Education.
B.A. (1954), M.A. (1955), Denver. At Oregon since 1968.
- ROBERT L. ZIMMERMAN, Ph.D., Assistant Professor of Physics; Research Associate in Physics.
B.A. (1958), Oregon; Ph.D. (1963), Washington. At Oregon since 1967.
- WILLIAM A. ZIMMERMAN, B.S., Associate Dean for Business Affairs, Medical School (Professor).
B.S. (1939), Oregon. At Oregon since 1940.
- DAVID A. ZUMWALT, M.S., Assistant Dean of Students, with the Rank of Instructor.
B.S. (1966), Oregon State; M.S. (1970), Oregon. At Oregon since 1970.
- ARNULF ZWEIG, Ph.D., Associate Professor of Philosophy; Head of Department.
B.A. (1952), Rochester; Ph.D. (1960), Stanford. At Oregon since 1956.

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, the School of Librarianship in 1966, and the School of Community Service and Public Affairs in 1967.

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, 1961-1968; Charles E. Johnson, acting president, 1968-1969; N. Ray Hawk, acting president, 1969; Robert D. Clark, since 1969.

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.

University of Oregon Development Fund. An integrated and continuing program to obtain financial support of the academic work of the University from private donors is operated through the University of Oregon Development Fund, a nonprofit organization incorporated under the laws of the state of Oregon. The fund is administered through a Board of Directors, including alumni, faculty members, students, and other friends of the institution. Information concerning the program and concerning University needs for which private support is essential may be obtained from William B. Dunseth, Director of the Fund.

Campuses

THE MAIN CAMPUS of the University of Oregon is located in Eugene (population 76,346), 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 240 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, Hendricks Hall, and Susan Campbell Hall.

A new quadrangle to the west includes Commonwealth Hall, the Computing Center, and the Law Center, 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, the Music Building, and the Clinical Services 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. More recent additions in this area are the Science Building, Emerald Hall (a temporary structure housing administrative and student-affairs offices), the Donald M. Erb Memorial Union, several dormitories, and the Student Health Center.

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 row-house apartments occupying a 30-acre tract about six blocks southwest of the campus. A permanent housing project for married students has been 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 a 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
RONALD L. CHERRY, LL.B., M.L.L.	Law Librarian
*ELIZABETH FINDLY, A.M.L.S.	Head Reference Librarian
DON L. HUNTER, B.S.	Head, Audiovisual Media Center
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
R. R. MCCREADY, M.A.	Acting Head Reference Librarian
CLAIRE MEYER, M.A.	Head Circulation Librarian
MARTIN SCHMITT, B.S., B.S. in L.S.	Curator of Special Collections
LUISE E. WALKER, A.M.L.S., M.S.	Head Science Librarian
JEAN A. BROTSMAN, B.A., B.S. in L.S.	Senior Catalog Librarian
JANE Y. C. HSU, B.A.	Senior Catalog Librarian; Bibliographer, Orientalia Collection
MARGARET MARKLEY, A.B., B.S. in L.S.	Senior Catalog Librarian
GUIDO A. PALANDRI, B.A., B.L.S.	Senior Catalog Librarian
MARCIA J. SIGLER, M.L.S.	Senior Catalog Librarian

* On leave of absence 1970-71.

THOMAS E. ANDERSON, M.L.S., J.D.	Assistant Law Librarian
JANET W. BURKART, M.L.S.	Architecture and Allied Arts Librarian
DIANE J. CHEZ, M.L.S.	Catalog Librarian
RODNEY E. CHRISTENSEN, M.S.	Social Science Librarian
JANE B. DURNELL, M.L.S.	Reference Librarian
KATHERINE G. EATON, M.S.	Social Science Librarian
MICHAEL S. FEIDER, M.S., A.M.L.S.	Science Librarian
BARBARA FISHER, M.A.	University Archivist
ROBERT W. GETTY, B.S.	Audiovisual Librarian
JOANNE V. HALGREN, M.L.	Science Librarian
ALFRED HEILPERN, M.L.	Acquisition Librarian
J. RICHARD HEINZKILL, A.M.L.S.	Humanities Librarian
DWIGHT H. HUMPHREY, B.S. in L.S., M.A.	Catalog Librarian
EDWARD C. KEMP, M.L.S.	Acquisition Librarian
LORNA L. KENT, M.L.S.	Reference Librarian
WILLIAM C. LEONARD, B.S.	Graphic Artist
ROBERT R. LOCKARD, M.A.	Social Science Librarian
ROBIN B. LODIEWICK, M.L.S.	Catalog Librarian
RICHARD J. LONG, M.S.	Reference Librarian
KATHLEEN M. McADAM, M.A.	Social Science Librarian
R. R. MCCREADY, M.A.	Reference Librarian
CORINNE McNEIR, M.S. in L.S.	Documents Librarian
DEIRDRE D. MALARKEY, M.L.S.	Reference Librarian
FRANCES NEWSOM, M.A.	Architecture and Allied Arts Librarian
GRETHE PARR, Dipl.	Catalog Librarian
HUIBERT PAUL, M.L.S.	Acquisition Librarian
J. CARLYLE ROSS, M.A.	Assistant Head, Audiovisual Media Center
LOIS M. SCHREINER, M.L.S.	Reference and Social Science Librarian
ROSE MARIE SERVICE, M.A.	Social Science Librarian
EDMUND F. SOULE, B.M., Ph.D.	Music Librarian
MIYAKO TAKENO, M.A., M.S.	Catalog Librarian; Bibliographer, Orientalia Collection
EDWARD P. THATCHER, M.A.	Map Librarian
FRANKLIN SCOTT WHICHER, M.S.	Catalog Librarian
NOLA L. WOLF, M.A.	Assistant Documents Librarian
ROBERT M. DONNELL, M.A.	Dental School Librarian
MARGARET E. HUGHES, B.S.	Medical School Librarian

THE SERVICES of the University of Oregon Library are organized in broad subject divisions: Social Science, Science, Humanities, and General Reference. Each of the divisions has its own reading areas, 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 Audiovisual Media Center, which provides facilities for the production, preservation, and use of recordings, slides, films, and similar materials, and by the Special Collections Division, 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 as follows:

General Library	990,005
Law Library	70,887
Total Eugene Campus	1,060,892

Medical School Library	122,314
Dental School Library	13,072
Total	1,196,278

Other materials in the University Library include: 129,556 government documents; 87,258 maps; 24,647 microfilms; 225,394 other microforms; 188,978 photos, pictures, and prints; 16,453 sound recordings; 102,885 slides; 716 filmstrips; 728 motion picture films; 108,996 uncataloged pamphlets; and 1,195,993 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 and tape collections of music, poetry, plays, and speeches. The room has 72 individual listening positions with earphones, a group listening room for 70 persons, and 6 booths.

The Pauline Potter Homer Collection of fine editions, illustrated books, books with fine bindings, and examples of the work of private presses, honors a former member of the University Library staff.

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 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 Adelaide Church Memorial Room, a "browsing room" for recreational reading in the Erb Memorial Union, is operated as a department of the University Library.

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

The Law Library, housed in the Law Center, 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 encyclopedias, etc. Its periodical collection includes more than 400 titles. An excellent collection of publications relating to Oregon territorial and state laws includes an extensive file of Oregon Supreme Court briefs.

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 General 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. The Reserve Book Room is open on Mondays, Tuesdays, Wednesdays, and Thursdays from 8:00 a.m. to 1:00 a.m.; on Fridays and Saturdays from 8:00 a.m. to 10:00 p.m.; on Sundays from 10:00 a.m. to 10:00 p.m. In addition, the Reserve Book Room is open until 1:00 a.m. on the two Fridays and Saturdays preceding final examinations. The General Library is open until 10:00 p.m. on the two Saturdays preceding final examinations, and opens at 10:00 a.m. on Sunday of examination week. During vacation periods the Library is open from 8:00 a.m. to 5:00 p.m., Monday through Friday. 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 students and staff members of the Oregon State System of Higher Education (OSSHE), and may be granted to other persons upon application.

Library Fines and Charges. The following regulations govern Library fines and charges in all Oregon State System of Higher Education libraries except the Medical School and the Dental School libraries:

(1) A fine of 25 cents per day is charged for each overdue book, recording, or other Library material other than reserve books and material circulated by special permission (maximum, \$10.00 each item).

(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 an hour or fraction thereof (maximum, \$10.00 each item), until the material 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) Borrowers losing Library materials are charged: (a) the replacement cost of the material, (b) the amount of fine incurred up to the time the material is reported missing (maximum, \$10.00 each item), and (c) a service charge of \$3.00 for each title. A charge to be determined by the librarian will be made for the repair or replacement of mutilated library materials.

(5) 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 may be made. In cases where a replacement has been ordered, any refunds to the borrower are at the discretion of the librarian.

(6) The State System libraries will honor each other's faculty and student identification cards for the purpose of borrowing library materials subject to the lending library's circulation policies. Any fines or charges accrued by faculty and students from other State System libraries shall be submitted to the head librarian of their home institution for routine billing in accordance with the procedure of the home institution.

Instruction. The University offers a service course, Use of the Library (Lib 127), to acquaint students with library resources and their use.

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 libraries of the State System are in ready communication with each other via telephone. The library facilities of the several institutions are coordinated through a dean of libraries. The current dean is also the librarian of the University of Oregon.

Museums and Collections

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

Museum of Art

RICHARD C. PAULIN, M.A. Acting Director
 MARK CLARKE, M.F.A. Assistant Director (Exhibitions)
 ANTONIO DIEZ Acting Assistant Director (for Statewide Services)

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. Among the other permanent and growing collections are the Shiomi Collection of Oriental Art, the Rolf and Alice Klep Collection (Oriental and Contemporary Northwest), the Haseltine Collection of Contemporary Pacific Northwest Art, the Widmer Collection of Contemporary American and European art, a collection of over 450 works of the Northwest painter Morris Graves, an American print collection and an extensive collection of paintings, graphics, sculpture, and decorative arts from all cultures and periods.

The Museum of Art maintains an extensive exhibitions program, including traveling exhibitions and those organized by the museum. The Friends of the Museum, organized in 1964 and whose membership is open to the public, supports the museum's varied activities, including a state-wide services program, acquisitions, lectures, publications, and rental-sales gallery.

The museum is open to the public Tuesday through Sunday, 12 noon until 5 p.m.

Museum of Natural History

J. ARNOLD SHOTWELL, Ph.D. Director; Curator of Fossil Vertebrates
 DAVID L. COLE, M.S. Curator of Archaeology
 JANE GRAY, Ph.D. Curator of Palaeobotany
 LEROY JOHNSON, JR., Ph.D. Curator of Ethnology
 LAURENCE R. KITTLEMAN, Ph.D. Curator of Geology
 GEORGIA MASON, M.S. Acting Curator of the Herbarium
 THEODORE STERN, Ph.D. Consultant in Ethnology

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, Leach, 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.

Miniature Wagon Museum

*IVAN L. COLLINS.....Director

The Miniature Wagon Museum, located in Erb Memorial Union, houses more than sixty miniatures of wagons, carriages, and other horse-drawn equipment used in America in the nineteenth and early twentieth centuries. The miniatures are authentic reproductions one-eighth actual size. Many of the wagons are displayed in recreated historical settings, including recorded sound effects of the era.

Reference works, photographs, and other research materials are available for study. Museum hours: Monday through Saturday, 9:00 a.m. to 5:00 p.m.; Sunday, 1:00 p.m. to 6:00 p.m.

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.

* Deceased, Feb. 17, 1971.

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 a student editorial staff, with the assistance of a faculty editorial adviser, 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 and Economic 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.

Northwest Review. The NORTHWEST REVIEW, issued three times a year, is devoted to creative writing, art, criticism, and comment; the work of Pacific Northwest contributors is particularly welcome.

Northwest Folklore. NORTHWEST FOLKLORE, published semiannually, publishes research articles and notes, with special reference to the folklore of the Pacific Northwest.

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.

Governmental Research Bulletins. The publications of the Bureau of Governmental 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.

Bulletin of the Museum of Natural History. The BULLETIN is published irregularly by the Museum of Natural History in order to increase the knowledge and understanding of the natural history of Oregon.

Academic Regulations

Admission

TO BE ADMITTED to the University of Oregon a student 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 send to the Office of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) 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. Undergraduate students (except foreign students) seeking admission must submit their applications to the Office of Admissions not later than thirty days prior to the start of the term to which admission is sought.

Students (except foreign students) planning to enter the University in the fall term should send their applications for admission to the Office of Admissions not later than August 15.

An undergraduate applicant who is not a citizen of the United States and who does not possess a visa, must file his application and available supporting credentials by the preceding May 1 if seeking admission to summer session or the fall term. If he seeks admission to winter term he must apply by the preceding October 15; for admission to spring term he must apply by the preceding January 15.

If a student fails to submit the required documents in complete and satisfactory form, his admission and registration may be canceled. All records submitted, filed, and accumulated in the Admissions and Registrar's Offices become the property of the University.

Nonresident Student Quotas

The Oregon State Board of Higher Education, which establishes undergraduate admission standards for all institutions of the Oregon State System of Higher Education, has, in response to direction by the 1969 Oregon Legislature, imposed strict enrollment quotas for *nonresident* undergraduate students. Prospective *nonresident* students are cautioned that the University of Oregon must apply much higher standards than the minimum standards outlined below in order to stay within the prescribed enrollment figures.

Experience indicates that a *nonresident* freshman applicant with at least a "B" average in high-school subjects and who has scored a combined total of 1,000 points on the Scholastic Aptitude Test, will be among those considered for admission. Similarly, a *nonresident* transfer student, whose eligibility will be judged on his college record, can expect serious consideration for acceptance if he has a cumulative grade-point average of at least 3.00.

Nonresident applicants lacking the evidence of academic achievement cited above should consult with the Director of Admissions before making application. Borderline cases will be given a careful review in which both objective and subjective criteria will be considered before a decision is reached.

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 (890) on the College Entrance Examination Board Scholastic Aptitude Test; *or* (3) achieve a GPA of 2.00 on either nine term hours of a structured program or twelve term hours of elective course work in a regular, accredited collegiate summer session. The structured nine-unit load must include a course in English composition and two or more courses from the fields of humanities, 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 *or* a satisfactory score (880) on the Scholastic Aptitude Test.

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. (See "Nonresident Student Quotas," page 87.)

Early Admission. A high-school student who is a resident of Oregon, and has either a cumulative GPA of 2.25 *or* a Scholastic Aptitude Test score of 890 at the end of the first half of his senior year 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 if his grade-point average computed on seven semesters of high-school work and his Scholastic Aptitude Test score combined place him within the enrollment quota for nonresident freshmen. Enrollment in the University after early admission is contingent on graduation from high school.

Credentials. A student applying for admission to freshman standing must send to the Office of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) 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 (4) certified results of the Scholastic Aptitude Test.* See also ENTRANCE EXAMINATIONS, page 90.

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 137.

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 depart-

* 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. 08540, or Box 1025, Berkeley, Calif. 94701.

ment 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; non-resident students—a GPA of 2.25. (See "Nonresident Student Quotas," page 87.) Students who present fewer than 12 term hours of collegiate credit must 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.

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.

Usually, no advanced standing is granted at entrance for work done in non-accredited collegiate institutions. This policy, however, is subject to modification based on the recommendations contained in the *Report of Credit Given by Educational Institutions*, published by the American Association of Collegiate Registrars and Admissions Officers. Validating examinations may be required.

Transfer students must send to the Office of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); and (3) complete official records of all school work beyond the eighth grade. 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.

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

An applicant may experience difficulty in obtaining complete and official credentials to document his application. When such deficiencies or irregularities of credentials prevent proper classification, the Director of Admissions may admit the applicant as a special student.

The Director may also, with the concurrence of the Admissions Policy Committee, admit as a special student an undergraduate who is a resident of Oregon and who does not meet regular admission requirements. Exceptions to admission requirements for nonresident undergraduates require the approval of an inter-institutional faculty committee. Special-student status is not granted to an upper-division applicant, either resident or nonresident, who has a GPA deficiency.

A special student should qualify for regular standing as soon as possible, by satisfactory University work and by the removal of any entrance deficiencies. 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, how-

ever, 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 he is 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 114 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 determination of eligibility for enrollment, the University requires all entering freshman students (including transfer students with less than twelve units) to submit certified scores on the College Entrance Examination Board Scholastic Aptitude Test prior to enrolling.

A student who has studied a foreign language for two or more years in high school is encouraged to take the College Board Achievement Test in that language (preferably the composite test given in May). The test score is used for placement if the language is to be studied in college, or for possible waiver of the language requirement for a degree. Because test scores are needed at the time of registration, the test should be taken well in advance of the intended date of matriculation. Arrangements can be made, however, for test administration just prior to, or during, the enrollment period.

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 109-110). A form for the physical examination report is sent to students with the Notice of Admission. This form is to be completed by a physician chosen by the student, who provides the report to the University Student Health Service. Transfer students may request a release of health records (the release form is sent with the Notice of Admission) from a prior school, provided the earlier physical examination is less than five years old.

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., D.A. (English).

Architecture and Allied Arts—B.A., B.S., B.Arch., B.I.Arch., B.L.A., B.F.A., M.A., M.S., M.Arch., M.F.A., M.L.A., M.U.P., Ph.D. (art history).

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

Community Service and Public Affairs—B.A., B.S.

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., J.D.

Librarianship—M.L.S.

Medicine—M.A., M.S., Ph.D., M.D.

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

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 are as follows:

- (1) Written English: English Composition (Wr 121, 323), 6 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.) Prerequisite to this course, for freshmen with low ratings on the entrance placement examination, may be Corrective English (Wr 10) offered through the Division of Continuing Education.
- (2) Physical education: 5 terms in activity courses (normally MPE 121-199, WPE 121-199, and CPE 121-199, taken before the end of the sophomore year) unless excused. (One or more terms of this requirement may be waived on the basis of proficiency examinations. 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.)
- (3) Health education: HE 150 or HE 250 (normally taken before the end of the sophomore year). (This requirement may be waived on the basis of a proficiency examination.)
- (4) Group requirement—see page 93.
- (5) Credit in upper-division courses: minimum, 62 term hours.
- (6) Credit in the major:
 - (a) Minimum: 36 term hours, including at least 24 hours in upper-division courses.
 - (b) Any additional requirements of the major school or department (satisfaction must be certified by the dean or department head).
- (7) Credit in residence: minimum, 45 term hours of the last 60 presented for the degree. Only University of Oregon work completed on the Eugene campus of the University or at the Medical School or the Dental School in Portland may be counted for the satisfaction of this requirement. Work in Continuing Education courses is not work in residence.†

* Term-hour requirement contingent upon approval by the Board of Higher Education.

† For students officially enrolled in the School of Nursing, residence with respect to a degree in nursing may include any work taken in any branch of the State System of Higher Education (including the Division of Continuing Education), provided that (1) the work is required in degree programs in the School of Nursing and (2) is not concurrently offered by the School of Nursing.

- (8) For the B.A. degree, language and literature courses*: 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.†
- (9) For the B.S. degree, science or social science courses‡: 36 term hours.
- (10) 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) Performance (individual study) in music: maximum for all students except music majors, 12 term hours; maximum for music majors toward the B.A. degree, 24 term hours—of which not more than 12 hours may be taken in the student's freshman and sophomore years.
- (11) 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.F.A., B.I. Arch., or B.L.A. degree: minimum, 220 term hours.
- (12) Academic performance:
 - (a) Ninety pass-differentiated term hours (graded A, B, or C) of which a minimum of 45 must be earned in residence.
 - (b) Satisfactory completion of 85 per cent of all work graded A, B, C, P, or N taken at the University of Oregon.

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 beyond 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.

* 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, Classics, and Chinese and Japanese, English, German and Russian, Romance Languages, Speech.

Social Science: General Social Science, Anthropology, Economics, Geography, History, Home Economics, Philosophy, Political Science, Psychology, Religious Studies, Sociology.

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

† 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 appropriate department, 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.

‡ See note (*) above.

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, at least four weeks in advance of the expected graduation date; late application will delay graduation. All University academic and financial obligations must be satisfied before any degree will be conferred.

Group Requirement

TO PROMOTE breadth of liberal education, all candidates for a bachelor's degree are required to take work in each of three groups—arts and letters, social science, and science—as listed below, in courses, numbered 100-499, exclusive of courses numbered 400-410.

Majors in liberal arts: six courses of at least 3 hours each in each of the three groups—arts and letters, social science, and science—for a total of 54 hours.

Majors in professional schools: twelve courses of at least 3 hours each in arts and letters, social science, and science, for a total of 36 hours. At least 9 hours must be taken in each of the three groups.

Arts and Letters Group

General Arts and Letters, *Art, Classics, and Chinese and Japanese, †English, German and Russian, ‡Music, §Philosophy, Romance Languages, Speech, Writing.

Social Science Group

General Social Science, Anthropology, Economics, Geography, History, ||Philosophy, Political Science, **Psychology, Religion, Sociology.

* Courses which satisfy this requirement: Survey of Visual Arts (ArH 201, 202, 203); History of Western Art (ArH 204, 205, 206); History of Oriental Art (ArH 207, 208, 209).

† English Composition (Wr 121) and English Composition (Wr 323) are used to satisfy the written-English requirement, and cannot be used to satisfy the Arts and Letters group requirement.

‡ Courses which satisfy this requirement: Introduction to Music and Its Literature (Mus 201, 202, 203); History of Music (Mus 204, 205, 206).

§ Courses which satisfy this requirement: Elementary Aesthetics (Phl 222); History of Ancient Philosophy (Phl 301, 302, 303); History of Modern Philosophy (Phl 304, 305, 306); Plato (Phl 411); Aristotle (Phl 413); Descartes (Phl 416); Locke (Phl 419); Leibniz (Phl 423); Berkeley (Phl 425); Hume (Phl 427); Kant (Phl 429, 430); Philosophy in Literature (Phl 431, 432); Kierkegaard (Phl 438); Philosophy of Religion (Phl 439, 440); Aesthetics (Phl 441, 442, 443); Wittgenstein (Phl 447, 448).

|| Courses which satisfy this requirement: Elementary Ethics (Phl 201); Introduction to Theory of Knowledge (Phl 202); Introduction to Metaphysics (Phl 203); Introduction to Philosophy (H.C.) (Phl 207, 208, 209); Elementary Logic (Phl 221); Social and Political Philosophy (Phl 307, 308, 309); Theory of Knowledge (Phl 321, 322); Ethics (Phl 323, 324); Philosophy of Language (Phl 325, 326); Introduction to Philosophy of Science (Phl 339, 340); Metaphysics (Phl 350, 351); Analytic Philosophy (Phl 453, 454); History of Logic (Phl 455, 456); Philosophy of Mind (Phl 458, 459); Symbolic Logic (Phl 461, 462); Philosophy of Mathematics (Phl 463); Logical Theory (Phl 465); Problems in Philosophy of Science (Phl 468).

** Courses which satisfy this requirement: Learning and Perception (Psy 214); Development and Social Behavior (Psy 215); Personality and Individual Differences (Psy 216); Principles and Methods of Psychological Assessment (Psy 421); Theories of Personality (Psy 435); Personality Research (Psy 436); Social Psychology (Psy 437); Group Consultation (Psy 439); Human Conflict and Accord (Psy 440); Group and Individual Differences (Psy 441); Psychology of Work (Psy 449); Abnormal Psychology (Psy 450); Developmental Psychology (Psy 460); Developmental I: Psychobiological (Psy 461); Developmental II: Learning and Perception (Psy 462); Developmental III: Socialization (Psy 463).

Science Group

Computer Science, General Science, Biology, Chemistry, Geology, Mathematics, Physics, *Psychology.

Honors

THE UNIVERSITY OF OREGON offers special programs of study as a challenge to students of superior scholastic ability, and provides official recognition in the Commencement Program 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 132 ff.

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.

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), Pi Kappa Lambda (music), 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 105). 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 fall 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.

* Courses which satisfy this requirement: Sensation and Perception (Psy 211); Learning, Thinking, and Conditioning (Psy 212); Introduction to Physiological Psychology (Psy 213); Introduction to Experimental Psychology (H.C.) (Psy 217, 218, 219); Quantitative Methods in Psychology (Psy 324); Introduction to Mathematical Psychology (Psy 420); Thinking (Psy 426); Brain Mechanisms of Behavior (Psy 451); Motivation (Psy 465); Comparative Psychology (Psy 470); Animal Behavior (Psy 475); Sensory Processes (Psy 485); Psychology of Learning (Psy 490); Psychology of Perception (Psy 492); Human Performance (Psy 494); Conditioning and Learning (Psy 495); Human Learning and Cognition (Psy 496); History and Systems of Psychology (Psy 499).

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.

Students planning to register in a term of the regular academic year after absence of a term or more or after attending only a summer session must notify the Registrar's Office by filing a re-enrollment card several 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.

Students planning to register in a summer session should file, well in advance, a form stating this intent and supplying identifying and statistical information. This form is available in the Summer Session Bulletin and from the Summer Session and Registrar's Offices.

All regular students are required to file official transcripts of any academic work taken at other institutions since their first enrollment in the University; a student's official records must be kept complete at all times. Exceptions are made only for "special" and "provisional" students who are formally admitted under individual arrangements, and for summer "transient" students, who are not formally evaluated and admitted. Any failure to file all required records is considered a breach of ethics, and may result in the cancellation of admission, registration, and credits.

The Student Health Center requires that all regular-session students returning after more than one year's absence be cleared through that office.

Students who need to be registered at the same time in more than one unit of the State System (e.g., the University and the Division of Continuing Education) may accomplish this without paying excess fees, under the provisions for "concurrent enrollment." The necessary forms and instructions are available in the Registrar's Office.

Academic Advising

Academic advising is regarded by the University as an extension of the teaching function and, therefore, as an important responsibility of the faculty. Academic advisers attempt to communicate to students, particularly freshmen, the meaning of higher education and its significance to the student. Advisers also explain University academic requirements and assist individual students in building programs which satisfy these requirements.

The Office of Academic Advising coordinates a general program of advising in which each student is assigned a faculty adviser, normally one who teaches in the student's major field. The student must have his first-term program in the University signed by his adviser, and should consult with his adviser whenever he has academic problems.

Advisers for all students who have chosen a field of major study are assigned by major schools and departments; advisers for other students, by the Office of Academic Advising.

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 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.
- 300-499. Upper-division courses.
 - 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 to be 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 or service-course* 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 to be 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†

Grades. Student work is graded as follows: A, exceptional; B, superior; C, satisfactory; P, satisfactory or better; N, unsatisfactory; I, incomplete; W, withdrawn; X, no grade reported by instructor; Y, no basis for grade. Students ordi-

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

† Subject to modification. Present grading system contingent upon approval by the Board of Higher Education.

narily receive one of the four passing grades or N. 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 I 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.

Pass-undifferentiated. Under certain conditions, student work may be entered in University records with a grade of "pass" (P) or "no pass" (N). Credits with a grade of P are granted: (1) for courses offered only on a no-grade basis and so designated in the Catalog and Time Schedule; (2) for any University course at the option of the student, provided that the pass-undifferentiated option is not contrary to the policy of the division offering the course; (3) for courses in which the student receives credit by examination (including advanced-placement credit and credit through examinations administered by the University); (4) for work taken at another collegiate institution, in cases where the Director of Admissions is unable to evaluate the specific quality of the work in terms of the University grading system. A student who wishes to exercise the pass-undifferentiated option in any course must do so at the time of registration, or within the period allowed for changes. Acceptability of credit earned with a mark of P toward the satisfaction of major requirements is determined by the school, department, or committee directing the major program.

Grade-Point Average. For the convenience of students desiring such information, the Registrar will record the following numerical equivalents with pass-differentiated grades: A, 4 points per term hour; B, 3 points per term hour; C, 2 points per term hour; however, the University will no longer compute a grade-point average to determine eligibility for graduation.

Credit by Examination

On petition to the Academic Requirements Committee, a student may be permitted to take examinations in undergraduate courses in which he is not enrolled, and receive credit in the courses on the basis of successful performance in the examinations. The rules governing credit by examination are as follows:

(1) The student's petition must have the approval of the dean or head of the division offering the course.

(2) Arrangements for the examination must be completed at least one month before the examination date.

(3) The student must pay, in advance, a special examination fee of \$5.00 per credit hour.

(4) A student is allowed only one opportunity to qualify for credit by examination in any given course.

(5) Credit by examination is recorded with a mark of "pass" (P), and may not be counted toward the satisfaction of the residence requirement.

(6) Credit by examination may be earned only in courses whose content is identified by title in the University of Oregon Catalog; credit by examination may not be earned for research (401), thesis (403), reading and conference (405), or seminars (407), in laboratory courses or courses including laboratory work, or in courses in which practice is an essential part.

(7) A student may not receive credit by examination in courses (a) in which he has previously enrolled and failed, at the University of Oregon or elsewhere; (b) which would substantially duplicate credit which he has already received; (c) which are more elementary than courses in which he has previously received credit; or (d) which are the lower-division level in his native language other than English.

Students may also receive credit by examination in certain courses through the Advanced Placement Program (see pages 88 and 137). Honors College students who have prepared for comprehensive honors examinations through independent study may receive credit in honors courses on the basis of these examinations (see page 132).

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 University. In general, profitable and creditable work means substantial progress toward meeting graduation requirements. Any term or cumulative record which is considered unsatisfactory 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.

Tuition, Fees, and Deposits

WHEN THIS CATALOG WAS PRINTED, the Oregon State Board of Higher Education had not yet determined the exact charges for tuition and fees for the 1971-72 academic year. Tentative estimates are indicated below. The final tuition and fee schedule will be published in a supplementary notice and included in the Time Schedule of Classes.

Tuition and regular fees are paid by all students under the usual conditions of undergraduate or graduate study, and are payable in full at the time of term registration. Special fees are paid under the special conditions indicated.

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

Payment of the stipulated tuition and fees entitles students enrolled for academic credit to 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 Center; use of gymnasium equipment (including gymnasium suits and laundry service); a subscription to the student daily newspaper; 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.*

Tuition and Fee Policies. Regular charges paid by students enrolled in the institutions of the Oregon State System of Higher Education include (1) tuition and (2) health service, incidental, and building fees.

* Special fees, in addition to regular tuition, are charged for individual instruction in musical performance. See SCHOOL OF MUSIC.

(1) Tuition, based on the budgeted average cost of instruction, varies among several classifications of students: resident undergraduate students, not more than 25 per cent of cost; nonresident undergraduate students, 100 per cent of cost; graduate students, not more than 20 per cent of cost. Standard tuition charges, fixed in accordance with these percentages, are paid by University students registered for normal programs: 12 to 21 term hours for undergraduates, 9 to 16 term hours for graduates.

Undergraduate students registered for less than 12 term hours pay, per hour, one-twelfth of the tuition for normal programs in their resident-nonresident classification, with a minimum charge of two-twelfths of normal tuition. Graduate students registered for less than 9 term hours pay, per hour, one-ninth of the tuition for normal programs with a minimum charge of two-ninths of normal tuition.

Undergraduate students registered for more than 21 term hours pay, in addition to normal tuition, one-twelfth of normal tuition in their resident-nonresident classification for each hour in excess of this maximum. Graduate students registered for more than 16 term hours pay, in addition to normal tuition, one-ninth of normal tuition for each hour in excess of this maximum.

(2) Health service, incidental, and building fees are uniform for all students, except that students registered for less than seven term hours will pay one-half of the uniform fee charges. Students registered for seven to eleven term hours will pay proportionately increasing amounts according to a schedule recommended by the University and approved by the State Board of Higher Education.

Regular Tuition and Fees

Undergraduate Students. Undergraduate students who are residents of Oregon and are registered for 12 to 21 term hours during the regular 1971-72 academic year will pay tuition and fees estimated tentatively at a total of \$169 a term or \$507 for the three-term academic year.

Undergraduate students who are not residents of Oregon and are registered for 12 to 21 term hours during the regular 1971-72 academic year will pay tuition and fees estimated tentatively at a total of \$535 a term or \$1,605 for the three-term academic year. For regulations governing the assessment for nonresident tuition, see pages 102-103.

At the time this Catalog was printed, it was not possible to estimate the tuition and fee charges for undergraduate students registered for less than (1-11 term hours) or more than (22 or more term hours) normal programs during 1971-72; these charges will, however, be determined in accordance with the tuition and fee policies stated above.

Graduate Students. Graduate students enrolled for a total of 9 to 16 term hours during the regular 1971-72 academic year will pay tuition and fees estimated tentatively at a total of \$223 a term or \$669 for the three-term academic year.

Graduate students employed for at least .15 FTE as teaching or research fellows will pay reduced tuition and fees estimated at a total of \$52 a term or \$156 for the three-term academic year.

At the time this Catalog was printed, it was not possible to estimate the tuition and fee charges for graduate students registered for less than (1-8 term hours) or more than (17 or more term hours) normal programs during 1971-72; these charges will, however, be determined in accordance with the tuition and fee policies stated above.

Foreign Students. A full-time foreign student, while pursuing without interruption the degree program for which he initially enrolled, pays the regular tuition

and fees (undergraduate nonresident or graduate) in effect at the time of his enrollment in 1970-71 or his later initial enrollment. *A foreign student is defined as a citizen of a foreign country who enters the United States on a student visa or similar entry permit for the purpose of attending an institution of higher education.*

Concurrent Enrollment. The State Board of Higher Education has authorized concurrent enrollment by undergraduate students, graduate students, and teaching and research fellows appointed to positions of .15 F.T.E. or more in the various institutions and the Division of Continuing Education. Information concerning procedures for concurrent enrollment may be obtained from the Registrar's Office or from Division of Continuing Education centers and regional offices.

Advance-Registration Deposit

An advance-registration deposit of \$75.00 is required of nonresident freshman students, nonresident undergraduate transfer students, graduate students, and law students *admitted to the University for fall term, 1971-72.* The deposit confirms intent to enroll for the fall term, 1971-72, and is applied toward the student's tuition and fees at the time of registration.

Deposit Schedule. The deposit must be submitted as specified in the categories below:

(1) Nonresident freshman students and nonresident undergraduate transfer students—within two weeks of admission or by May 1, whichever is later.

(2) Graduate students—by July 1 or within two weeks of admission if after July 1.

(3) Law students—within two weeks of admission or as stated in the letter of admission.

Deposit Refund. The deposit is refundable or nonrefundable as specified in the categories below:

(1) Nonresident freshman students and nonresident undergraduate transfer students—if written notice of cancellation is received in the Office of Admissions in Emerald Hall by no later than August 1.

(2) Graduate students—if written notice of cancellation is received in the Office of the Graduate Dean, Chapman Hall, by no later than August 1.

(3) Law students—nonrefundable.

In circumstances beyond the student's control, a request for refund of a forfeited deposit will be considered by an appeals committee.

Deposit Waiver. The deposit may be waived as specified in the categories below:

(1) Nonresident freshman and nonresident undergraduate transfer students—when a governmental or private agency is providing support equivalent to nonresident tuition and fees, and verifiable evidence of this has been filed in the University's Business Office by the date the deposit is due.

(2) Graduate students—when the student has been granted a financial award of \$75 or more by a branch of the University.

(3) Law students—not applicable.

General Deposit

All persons who enroll for academic credit (except staff members) must make a general deposit of \$25.00, payable at the time of registration. The deposit is required for protection of the University against loss of or damage to 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 Center 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:

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

With the approval of the Budget Office (Johnson Hall) for academic staff and the Personnel Office (Emerald Hall) for civil service staff, 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.....Same as regular resident student

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.

Application Fee\$10.00

See page 87. A second application fee is not required of a student who re-enters the University after having taken course work at another institution.

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. *The late-registration fee is paid by part-time as well as full-time students.*

Change-of-Program Fee.....\$1.00

A student may be required to pay this fee for each change in his official program.

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, \$5.00

A student pays a fee of \$5.00 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.....\$2.00

For a transcript of his University academic record, a student pays a fee of \$2.00 for the first copy and \$1.00 each for additional copies furnished at the same time. The University reserves the right to withhold transcripts for persons who have financial obligations to the institution that have not been met.

Check Irregularity Penalty.....\$5.00

Penalty assessed when a check in payment for institutional charges is returned because of irregularity for which the student is responsible (NSF, illegible signature, etc.)

Charge for Replacement of Identification Card	\$4.00
Placement Service Fee	See page 105
Music Course Fees	SCHOOL OF MUSIC
Library Fines and Charges	See page 83

Refunds

Fee Refunds. Fee refunds may be made only to a student withdrawing from the University or reducing his course schedules to part-time status for reasons beyond the student's control. Withdrawal does not automatically result in a refund, for which a specific written request must be made. 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 following the term of withdrawal.

(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.

(3) No refunds will be made for any amount less than \$1.00.

(4) Refunds of incidental fees are subject to return of Certificate of Registration and Student Athletic Card.

General Deposit Refund. The \$25.00 general deposit, less any deductions which may have been made, is refundable within the term following withdrawal, if a request is made in writing to the Business Office. Otherwise an automatic refund is made during the summer following the close of the academic year.

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 in any institution of higher learning in the state of Oregon.

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.

A student who has been classified as a nonresident may be considered for reclassification 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 an emancipated 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 an entire year 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

Student Personnel Services

ROBERT L. BOWLIN, D.Ed.	Dean of Student Personnel Services
W. DWAIN RICHINS, Ph.D.	Associate Dean of Students; Graduate Students
DONALD B. MCCARTY, B.A.	Coordinator, Student Conduct Program
PHILIP N. BARNHART, B.A.	Student Prosecutor
STEVEN P. CHEZ, B.S.	Student Prosecutor
RANDOLPH L. FURMAN, B.A.	Minor Court Adviser
JAMES C. TAIT, B.S.	Student Defender
DAVID BRINKS, Ed.D.	Director of Counseling Center
SAUL TOOBERT, Ph.D.	Associate Director of Counseling Center
W. A. BROOKSBY, M.D.	Psychiatric Consultant, Counseling Center
SUSAN K. GILMORE, Ph.D.	Counselor, Counseling Center
CAROLIN S. KEUTZER, Ph.D.	Counselor, Counseling Center
WILLIAM L. KIRTNER, Ph.D.	Counselor, Counseling Center
GEORGE S. RALPH, M.S.	Counselor, Counseling Center
ANDREW THOMPSON, Ph.D.	Counselor, Counseling Center
JACQUELINE BONNER, M.S.	Supervisor, Reading-Study Skills Center
DAISY REED, M.A.	Instructor, Reading-Study Skills Center
NANCY L. REYNOLDS, M.Ed.	Instructor, Reading-Study Skills Center
KARL D. STREIFF, M.A.	Director, Office of Financial Aids
WALTER FREAUFF, M.A.	Associate Director, Office of Financial Aids
RUTH K. BURNS, M.B.A.	Assistant Director, Office of Financial Aids
EMMETT R. WILLIAMS, M.Ed.	Assistant Director, Office of Financial Aids
KENNETH S. GHENT, Ph.D.	Foreign Student Adviser
STEPHEN R. HANNING, M.A.	Counselor, Foreign Student Office
MARY E. LITCHMAN	Assistant to Foreign Student Adviser
LARRY J. PITMAN, M.A.	Assistant Foreign Student Adviser
SHIRLEY J. WILSON, M.A.	Associate Dean of Students
LARRY D. LARGE, M.A.	Associate Dean of Students
JUDITH R. BOGEN, M.Ed.	Assistant Dean of Students
JANE M. FARRAND, B.A.	Assistant Dean of Students
FRANCISCO LOERA, M.A.	Assistant Dean of Students
MARY N. LONGLAND, M.A.	Assistant Dean of Students
THOMAS J. MILLS, M.S.	Assistant Dean of Students
W. CLAIRE NOSLER, B.B.A.	Assistant Dean of Students
GEORGE B. WASSON, B.Mus.	Assistant Dean of Students
DAVID A. ZUMWALT, M.S.	Assistant Dean of Students

Student Administrative Services

DONALD M. DUSHANE, M.A.	Dean of Student Administrative Services
DONALD E. RHOADES, M.A.	Associate Dean, Student Administrative Services
VERNON L. BARKHURST, M.A.	Director of Admissions
JAMES MEINERT, M.Ed.	Assistant Director of Admissions
EUGENE W. DILS, Ed.D.	Director, University Placement Service
NORMA J. KRUGER, M.S.	Placement Counselor
VERLIN H. ODELL, M.Ed.	Placement Counselor
HOWARD L. RAMEY, M.F.A.	Placement Counselor
J. SPENCER CARLSON, M.A.	Registrar
DOROTHY V. BROWN	Assistant Registrar
ARTHUR L. BOWERS, B.S.	Director, Student Services Research
MARGARET BLAGO, B.A.	Assistant Director, Student Services Research

THE UNIVERSITY OF OREGON offers to students an integrated program of counseling and assistance under the direction of the Dean of Student Personnel Services. His staff has responsibility for counseling, financial aids, conduct program, assistance to foreign students, advising student organizations, and other aspects of student welfare.

University Counseling Center. The University Counseling Center provides facilities for testing and counseling University students. Counseling is available for vocational decision making, academic planning, premarriage and marriage counseling, and for other personal concerns. The center offers group as well as individual counseling. In addition, human relations groups are available. Counseling services are available without fee. A fee of \$7.50 is charged for educational and vocational testing for the Reading-Study Skills Center.

Reading-Study Skills Center. The Reading-Study Skills Center, operating in conjunction with the Counseling Center, provides an opportunity for scientific diagnosis and correction of student reading difficulties. Primary emphasis is on improvement of reading rate and comprehension. This noncredit, nongraded developmental program is tailored to individual needs.

Speech and Hearing Center. The Speech and Hearing Center provides diagnosis, consultation, and treatment in connection with speech and hearing problems of University students. Students may be referred to the Speech and Hearing Center either by the Counseling Center or by faculty advisers, or they may come to the center without a referral.

Foreign Student Adviser. A member of the staff of Student Personnel Services 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, graduate students whose undergraduate work was at another institution, 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

AN ORIENTATION PROGRAM for new students is held the week before the beginning of fall term. Emphasis is upon the student's role and responsibilities in higher education. Academic advisers are available, and information about university services is provided.

Complete information about the program of orientation is sent to new students upon their acceptance for admission.

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 (Robert S. Bean, Carson, Virgil D. Earl, James W. Hamilton, Joshua J. Walton, and John Straub). Dormitory living is intended to be a part of the academic environment of the University. All dormitories have double and single rooms (single rooms are available upon request) and may be used to house men or women. All dormitories are equipped with lounges, dining rooms (men and women dine together in all dining halls), and recreational areas.

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. They should write to the Housing Office, Carson Hall, University of Oregon, Eugene, Oregon 97403 to request a dormitory application card, then mail the card, with a \$50 deposit, to the Housing Office.

Contract Required. Housing is granted only to those students who agree to room and board in a dormitory throughout the entire school year.

Dormitory Facilities. The following services are available to dormitory residents:

(1) Food service: 20 meals each week except during scheduled vacations (no meals are served Sunday evenings); (2) bed linens (sheets, pillow and case, mattress pad and cover, one blanket); (3) draperies, desk lamp, study chair, mirror, wastebasket, water glass; (4) recreation: color television sets, ping-pong tables, vending machines, basketball standards, tennis courts; (5) coin-operated washers, dryers (free of charge), ironing boards (without irons); (6) locked storage space for luggage, trunks, etc.; (7) telephone: floor phones are provided, and students may order a private telephone for an additional charge.

Dormitory Living Expenses. Board and room costs in University dormitories (exclusive of \$3 for student-government hall dues each term) are: (1) multiple-occupancy room: \$432 for the fall term, \$288 for the winter term, and \$240 for the spring term—a total of \$960 for the academic year; (2) single-occupancy room: \$540 for the fall term, \$360 for the winter term, and \$300 for the spring term—a total of \$1,200 for the academic year.

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 cancelled in writing by August 1 for fall term or 14 calendar days before the term begins for winter and spring, \$40 of the \$50 room deposit will be refunded (\$10 will be retained as a processing fee). The entire room deposit will be forfeited if notice of cancellation is received after this time. If a student withdraws from the University during the year, the \$50 deposit will be returned within six weeks after any charges or damages have been deducted. If there are no charges against the student's account, he may have the \$50 applied to his next year's reservations. The \$50 deposit will be refunded if admission to the University is not granted.

While remaining in the University, a student may be released from his contract by the payment of \$1.00 a day for the remaining days in the year and the forfeiture of the \$50 deposit.

Fraternities and Sororities

Fraternities and sororities provide small group living accommodations for University students. The cost of living in a fraternity is approximately the same as in a dormitory. The cost of sorority affiliation averages \$100 more a year than for a dormitory.

Inquiries concerning selection of members and affiliation with a national fraternity or sorority may be directed either to the Interfraternity Office or the Panhellenic Office, Emerald Hall, University of Oregon. Full information concerning rush is forwarded to new students in the summer after they have received formal notice of admission to the University.

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

Cooperative Houses

The cooperative houses at the University of Oregon are financially independent of the University. Cooperative living functions on the principles of shared responsibility for the operation and maintenance of houses, commitment to and respect for the personal welfare of individual members, encouragement of intellectual development, provision for diverse leisurely pursuits, and emphasis on friendly fellowship with students of varying backgrounds. Cooperative housekeeping enables students to save about \$20 per month on room and board costs.

University House and Parr Tower are for women; Philadelphia House and Campbell Club are for men. Inquiries concerning application for admission may be made directly to the houses or to Student Personnel Services, Emerald Hall.

Housing for Student Families

Housing for student families is provided in 655 furnished and unfurnished apartments owned and operated by the University. The units include a wide variety of accommodations. The rents range from \$47.50 to \$91.00 per month. Application should be made to the University Housing Office, Carson Hall.

Applicants are required to submit a confidential financial statement. Those

applicants with net income low enough to qualify for financial aid will have priority above other applicants. Assignments are made on a priority basis with graduate assistants having first priority, then graduate students, and finally, undergraduates in descending order of class standing. Any remaining available housing will be assigned on the basis of academic class priority and the date of application.

The estimated maximum net incomes allowable for housing assignments for 1971-72 are the same as those used for student loan eligibility and are as follows, based on a twelve-month period: (1) husband and wife, no children, \$5,050; (2) husband and wife, 1 child, \$6,000; (3) husband and wife, 2 children, \$6,450; (4) husband and wife, 3 children, \$7,150.

To be eligible for married-student housing, students must be enrolled for a minimum of course work as follows: graduate fellows holding half-time appointments, 6 term hours; graduate fellows holding one-third-time appointments, 9 term hours; other graduate students, 9 term hours; undergraduates, 12 term hours. Graduate students holding appointments for more than half-time are not eligible.

Occupancy is restricted to members of one family only.

Maximum tenant occupancy is restricted to the following: 1-bedroom apartments—2 adults and 1 child under the age of one year; 2-bedroom apartments—2 adults and 2 children over the age of one year and 1 child under the age of one year.

Housing Information

Students at the University may select their own living arrangements, including University dormitories, cooperative houses, sororities and fraternities, or private housing. Students who intend to reside in University dormitories should write well in advance of the opening of the fall term to the University Housing Office to make reservations and receive information about dormitory administrative procedures.

The University believes that students, especially those who are in their first year on campus, will benefit in many ways from living in University dormitories. The dormitories are close to the central campus, have regularly prepared and balanced meal service, and have available personal counseling services and academic guidance.

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 residence halls. The amount of 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)	\$ 136.00	\$ 408.00
Institutional fees (nonresident)	469.00	1,407.00
Deposit (refundable fall term only)	25.00	25.00
Books, supplies, etc.	75.00	200.00
Board and room	400.00	925.00
Incidentals (not including travel and clothing)	110.00	330.00
Total (Oregon residents)	\$ 746.00	\$1,888.00
Total (nonresidents)	\$1,079.00	\$2,887.00

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 Center

A. C. LONG, M.D.....	Director of Student Health Center
DAVID J. ABEL, M.D.....	Associate University Physician
FRANK L. BAYNES, M.D.....	Associate University Physician
W. A. BROOKSBY, M.D.....	Associate University Physician
STANLEY A. BROWN, M.D.....	Associate University Physician
C. D. CALDER, M.D.....	Associate University Physician
BETTY N. DAVIS, M.D.....	Associate University Physician
NORMAN A. GOSCH, M.D.....	Associate University Physician
HERBERT C. LEMON, M.D.....	Associate University Physician
JAMES A. MOORE, M.D.....	Associate University Physician
P. H. PIERSON, M.D.....	Associate University Physician
PAUL F. WILSON, M.D.....	Associate University Physician

THROUGH THE STUDENT HEALTH CENTER the University strives to safeguard the health of its students. This is accomplished through health education, medical treatment of disease, and limited psychiatric and counseling services.

The student health services in the institutions in the Oregon State System of Higher Education are supported by student registration fees and such charges as are necessary. Every student registered for credit is entitled to the services of the Student Health Center. The facilities and services of the Student Health Center are available during regular school terms only.

The Student Health Center facility consists of an out-patient department, a 44-bed infirmary, including a modern isolation unit of four private beds, and the necessary laboratory and administrative facilities. In general, medical services offered include: (1) general medical attention and treatment, including minor surgery (major surgery and other procedures requiring general anesthesia, intensive medical care, and specialists' services are referred); (2) 15-day infirmary care in the Student Health Center facility during one academic year if recommended by a Health Center physician; (3) 24-hour limited emergency service during regular school terms (major emergencies are referred to the general hospital located near the campus); (4) routine laboratory procedures, including X-ray and clinical laboratory; (5) a pharmacy; (6) limited psychiatric and counseling services on an out-patient basis, supervised by a psychiatrist; (7) limited physical therapy.

Visits to the Student Health Center are by appointment, except for emergencies. An appointment can be made by telephone or by a visit to the Student Health Center. Appointments are not necessary for the Saturday morning clinic.

Charges are made against the breakage deposit for prescriptions, X-ray, laboratory procedures, and services, such as immunizations and physical therapy, but every attempt is made to keep these as low as possible.

All expenses of, or connected with, surgical operations or specialized services must be borne by the student. This includes the services of a special nurse, where deemed necessary, and medical or surgical specialists who see patients in consultation in the Student Health Center or elsewhere. Under no circumstances will the Health Center pay or be responsible for bills from private physicians or private hospitals. Ambulance service is not available through the Student Health Center; the expense of such service must be borne by the patient.

The privileges of the Health Center are not available to members of the faculty.

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 within six months of registration unless there is a history of a previous positive test, in which case a chest X-ray is required; and (3) proof, to the satisfaction of the University physician, of (a) immunization against smallpox and (b) diphtheria-tetanus immunization within ten years unless medically contraindicated.

If the student is enrolled in the University at the close of a five-year period following his entrance physical examination, a second examination may be required; a second examination may be required after a shorter interval, at the discretion of the University physician. The physical examination, immunization, and tuberculin test requirements apply to students returning to the University after a period of absence. These students should consult the Student Health Center concerning possible deficiencies.

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 at the University. This does not exempt them from the physical examination or the intradermal tuberculin test. However, the student may choose to have a chest X-ray in lieu of the skin test but must have an annual chest X-ray report to remain in school.

Financial Aid

THE OFFICE of Financial Aids will assist students who need financial aid to meet the normal costs of college attendance by helping them to secure part-time employment, loans, scholarships, and grants.

Entering freshmen who are residents of Oregon may obtain an application form from high-school counselors. A single application will permit the student to be considered for all University-administered financial aid. It must be accompanied by the filing of a Parents' Confidential Statement to the College Scholarship Service. Nonresident entering freshmen, and all other students, may apply at the Office of Financial Aids, Emerald Hall.

Student Employment

Many students earn a large part of their expenses by work in the summers and during the academic year. The University offers assistance to those seeking part-time and vacation jobs through its Student Employment Service located in Susan Campbell Hall. No student should expect to obtain employment by correspondence. Most job opportunities are not listed until the opening of the fall term, and many commitments for employment are made only after personal interviews with prospective employers.

College Work-Study Program. Federal funds are provided to the University under the College Work-Study Program to promote part-time employment for students from low-income families and in need of earnings from such employment to continue their education.

Full-time summer employment under this program is also possible, both on the campus and elsewhere.

Loans

Funds held in trust by the University and funds from Federal and state governments make possible substantial financial aid to students through loans.

University Trust Loan Funds. Funds held in trust by the University provide for regular long-term loans for periods of up to two years at a time and for emergency loans of small amounts for periods of up to ninety days. These funds are governed by uniform principles and policies. 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.

Limited assistance is available through emergency loans to help students meet short-term University-related expenses for a period of not more than ninety days. In no instance may this assistance exceed term tuition and fees.

Long-term loans permit borrowing up to a maximum of two years. Limits are: freshmen, \$200; sophomores, \$400; juniors, \$600; seniors and graduates, \$800. Interest is four per cent per year.

National Defense Student Loans. Under the National Defense Education Act of 1958, long-term postgraduate repayment loans are available to students who qualify. The amount of the award is determined by individual need, but will not exceed \$1,000 for an academic year. Repayment begins ten months after termination of full-time enrollment. Three per cent interest is charged.

Guaranteed Student Loans. Banks and other lenders provide low-cost long-term loans to students through a system of reserve funds held by state agencies or by private nonprofit agencies for the guarantee of such loans against loss by the lender. The interest rate on these loans is generally seven per cent. Borrowers who qualify may apply to have the interest paid by the Federal government until repayment begins.

Further information about financial assistance through loans, and application forms for loans, may be obtained from the Office of Financial Aids, Emerald Hall.

Scholarships

Financial assistance through scholarships is provided through state funds and agencies, through University gifts and endowments, and through private donors. Such aid recognizes academic ability and promise and is usually awarded only to those who, in addition, show need for financial help in order to meet normal college costs.

Application for state scholarships and for all scholarships which are administered by the University is made on the form furnished by the Oregon State Scholarship Commission. Entering freshmen obtain and file applications through their high school. Enrolled students obtain and file applications through the Office of Financial Aids of the University. Applications must be filed before March 1 for the following academic year. A single application indicating proposed attendance at the University assures consideration for every scholarship for which the student may be eligible. Some awards listed below require special application as indicated.

State Scholarships

State Partial Tuition and Fee Scholarships for Oregon Residents. By state law, the Oregon State Scholarship Commission annually awards partial

tuition and fee scholarships equal in number to $2\frac{1}{2}$ per cent of the enrollment in the institutions of the State System of Higher Education. Approximately one-half of these scholarships are awarded to entering freshmen, who are eligible to apply if they are in the upper half of their high-school class. The remainder of the awards go to enrolled students who are eligible for consideration if their cumulative and previous-term GPA is 2.50 or better. These awards are made for one year at a time and pay a portion of the total registration fees only; the recipient must pay the remainder of the fees from his own funds.

State District and County Scholarships. The Oregon State Scholarship Commission awards annually one four-year scholarship for each Oregon county and for each state legislative seat. The value of these is the same as that of State Partial Tuition and Fee Scholarships. Entering freshmen make application for these awards on forms supplied by the scholarship commission through Oregon high-school principals.

State Cash Scholarships. A limited number of four-year cash scholarships, with a maximum value of \$500 per year, 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 at any accredited institution of higher education in the state of Oregon. Entering freshmen obtain application forms from the office of their high-school principal and the completed forms are transmitted by the high school to the office of the scholarship commission.

State Fee Scholarships for Nonresident Students. State law authorizes the Oregon State Scholarship Commission to award a limited number of scholarships annually to residents of the United States who are not residents of Oregon, for study in the institutions of the State System of Higher Education. At the University, these scholarships vary in amount from a portion of to the entire nonresident fee. Application is made to the Office of Financial Aids, Emerald Hall.

State Fee Scholarships for Foreign Students. A limited number of scholarships are awarded annually to students from foreign countries attending institutions of the State System of Higher Education. These awards are in variable amounts related to the fees charged by the institution and the need for funds by the student. Application is made to the Office of Foreign Student Adviser, University of Oregon, Emerald Hall.

University Scholarships

Income from dedicated endowment funds, gifts to special funds and to the Development Fund make possible the award of approximately 200 scholarships annually. As noted above, the completion of a single application gives a student consideration for any of these awards for which he is eligible.

Private Scholarships

Each year several hundred students attend the University with financial help through awards made to them by companies, foundations, trusteeships, lodges and clubs, and private individuals. Funds for many of these awards are sent to the University Business Office where they are held in trust for the student to help him meet his college expenses as they occur during the year.

Most of these awards are made to entering freshmen and application must be made directly to the donor. Students interested in these scholarships should consult their high-school principals and senior counselors who have details and applications.

Opportunity Grants

The program of Educational Opportunity Grants established by the Higher Education Act of 1965 provides for cash awards of up to \$1,000 per academic year to students with exceptional financial need who require such assistance to attend college. An Opportunity Grant may not be more than half the financial assistance being received by the student and thus may require application for and acceptance of other assistance. The amount of the grant will depend upon the personal financial position of the student and his family and upon the need for additional funds to meet the costs of attending college. Eligible students who are accepted for enrollment and who are offered financial assistance which includes an Educational Opportunity Grant can expect to have such assistance continued for up to four years of undergraduate study provided they maintain good academic standing, make normal and expected progress toward a degree, and complete any required applications or reports.

Erb Memorial Union

RICHARD C. REYNOLDS, M.Ed.....	Director
ADELL McMILLAN, M.S.....	Associate Director
NEIL MURRAY, M.Ed.....	Assistant Director for Programs
GARY BARTLETT, M.A.....	Program Consultant
SHEILA WHEELER, B.S.....	Program Consultant
GARY GRIMM, M.A.....	Program Consultant

THE DEPARTMENT of the Erb Memorial Union and Educational Activities is responsible for the development and coordination of programs and services affecting campus life. The departmental staff is located in the Erb Memorial Union building, as are the ASUO and other recognized campus organizations. Programs and services are designed to: (1) complement the offerings of the academic disciplines; (2) help the student relate his educational experience to other aspects of his life; (3) cooperate with academic and administrative departments to provide an effective student voice in curricular and administrative matters; (4) encourage participation in the off-campus community; (5) offer opportunities for the development of creative talents and encourage appreciation of the arts; (6) foster leisure-time skills and interests; (7) emphasize democratic principles and develop organizational skills, and (8) develop a feeling of identification with the University.

The Union building provides meeting rooms, lounges, eating facilities, art exhibition areas, student offices, and recreational facilities for use by all members of the University community.

The 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

LEONA E. TYLER, Ph.D., Dean of the Graduate School.

GLEN LOVE, Ph.D., Associate Dean of the Graduate School.

ROBERT M. MAZO, Ph.D., Associate Dean of the Graduate School.

W. DWAIN RICHINS, Ph.D., Associate Dean of Graduate Students.

CALVIN W. FISK, B.S., Assistant to the Dean.

FREDERICK S. WILHELM, B.S., Administrative Officer.

Graduate Council

FRANCIS J. REITHEL (chairman), FRED C. ANDREWS, H. HARRISON CLARKE,
ROBERT S. HARRIS, GENE E. MARTIN, ARTHUR MITTMAN, ROY H. RODGERS,
DONALD A. WATSON.

THE PRIMARY AIM 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 approval of research by members of its faculty and the University's interdisciplinary research institutes (see pages 126-131).

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, library science, medical sciences (at the Medical School in Portland), music, and nursing (at the School of Nursing in Portland). The degrees granted are listed below with the departments offering programs of study leading to advanced degrees.

College of Liberal Arts: Anthropology—M.A., Ph.D.; Biology—M.A., M.S., Ph.D.; Chemistry—M.A., M.S., Ph.D.; Classics—M.A.; Comparative Literature—M.A., Ph.D.; Computer Science—M.A., M.S.; Economics—M.A., M.S., Ph.D.; English—M.A., M.F.A., D.A., Ph.D.; Geography—M.A., M.S., Ph.D.; Geology—M.A., M.S., Ph.D.; Germanic Languages—M.A., Ph.D.; History—M.A., Ph.D.;

Mathematics—M.A., M.S., Ph.D.; Philosophy—M.A., Ph.D.; Physics—M.A., M.S., Ph.D.; Political Science—M.A., M.S., Ph.D.; Psychology—M.A., M.S., Ph.D.; Romance Languages—M.A., Ph.D.; Russian—M.A.; Sociology—M.A., M.S., Ph.D.; Speech—M.A., M.S., M.F.A., Ph.D.

School of Architecture and Allied Arts: Architecture—M.Arch.; Art Education—M.A., M.S., Ph.D.; Art History—M.A., Ph.D.; Fine and Applied Arts—M.A., M.S., M.F.A.; Landscape Architecture—M.L.A.; Urban Planning—M.U.P.

College of Business Administration: Accounting and Quantitative Methods—M.A., M.S., M.B.A., D.B.A.; Finance and Business Environment—M.A., M.S., M.B.A., D.B.A.; Marketing, Insurance and Transportation—M.A., M.S., M.B.A., D.B.A.; Personnel and Industrial Management—M.A., M.S., M.B.A., D.B.A.

College of Education: Counseling—M.A., M.S., M.Ed., D.Ed., Ph.D.; Curriculum and Instruction—M.A., M.S., M.Ed., D.Ed., Ph.D.; Educational Administration—D.Ed., Ph.D.; Educational Foundations—D.Ed., Ph.D.; Educational Psychology—M.A., M.S., M.Ed., D.Ed., Ph.D.; Higher Education—D.Ed., Ph.D.; Special Education—M.A., M.S., M.Ed., D.Ed., Ph.D.

School of Health, Physical Education and Recreation: Health Education—M.A., M.S., D.Ed., Ph.D.; Physical Education—M.A., M.S., D.Ed., Ph.D.; Recreation and Park Management—M.A., M.S., D.Ed., Ph.D.

School of Journalism: Journalism—M.A., M.S.

School of Librarianship: Library Science—M.L.S.

School of Music: Music—M.A., M.Mus., D.M.A.

Interdisciplinary Studies: Asian Studies—M.A., M.S.; Dance—M.A., M.S.; Industrial and Labor Relations—M.A., M.S.; International Studies—M.A., M.S.; Juvenile Correction—M.A., M.S.; Linguistics—M.A., M.S.; Public Affairs—M.A., M.S.; Teaching—M.A., M.S.

Dental School: Dental Surgery—D.D.S.; Dental Sciences—M.S.

Medical School: Medicine—M.D.; Medical Sciences—M.S., Ph.D.

School of Nursing: Nursing—M.S.

General Regulations

STUDENTS WISHING to earn a graduate degree at the University must be admitted to the Graduate School in accordance with the procedures described below.

Admission to the Graduate School. To be admitted to the Graduate School for the purpose of seeking an advanced degree, a student must be a graduate of an accredited four-year college or university and must also be accepted by the professional school or major department in which he proposes to study.* This acceptance is subject to the approval of the dean of the Graduate School. The schools and departments of the University determine their own specific requirements for graduate admission, with which the student should familiarize himself before applying. Initial admission may be either conditional or full. If a student who has been conditionally admitted has not been granted full admission after he has completed 36 term hours of graduate course work, the Graduate School will inquire of his school or department as to the reason and recommend that a decision on the student's status be made as soon as possible.

* Students from unaccredited institutions or from those which offer the equivalent of baccalaureate instruction but not the degree itself may be admitted under special procedures if they are accepted by a school or department.

Former University of Oregon students must be formally admitted to the Graduate School in the same way as students from other colleges and universities. A student who wishes to change his major must be formally admitted to the school or department in which he wishes to work for a degree.

An applicant should address inquiries concerning graduate admission to the department or school in which he plans to study, not to the Graduate School or the Office of Admissions.

Documents Supporting Application. An applicant for admission to the Graduate School 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 department or school in which the applicant plans to study and the other to the Office of Admissions. The individual school or department may require other materials, such as scores on the Graduate Record Examination or Miller Analogies Test, or letters of recommendation. The applicant should ascertain from the school or department what additional material, if any, is expected.

Admission to the University for Post-Baccalaureate Study. An Oregon resident who holds a bachelor's degree or its equivalent and who wishes (1) to earn another undergraduate degree or (2) to take additional undergraduate or graduate work for professional or cultural reasons, without entering a degree or certification program, must submit the first two copies of this application form, and an official transcript of all previous college work, both undergraduate and graduate, to the Office of Admissions, University of Oregon, Eugene, Oregon 97403. The third copy should be kept by the applicant.

Admission to post-baccalaureate status is usually made for a specific term or program but for no more than an academic year. A satisfactory grade record is a factor in determining re-enrollment privileges during an academic year. Graduate credits earned by post-baccalaureate students are so recorded on these students' transcripts by the Registrar's Office, but may not be applied toward an advanced degree at the University of Oregon. Post-baccalaureate status may not be used to gain entry to Graduate School programs.

Continuous Enrollment. A student who has been admitted to the Graduate School to work toward an advanced degree or to pursue a specific program of graduate course work with a nondegree objective must enroll continuously in the University from the time he first registers until he has completed all requirements for his degree or other program. (Registration in extension courses taken in the Division of Continuing Education does not satisfy the continuous enrollment requirement.)

In any term in which the student is making use of University services or facilities, he must enroll for a minimum of 3 term hours of graduate course work and pay the appropriate fees. Ordinarily the student is expected to take this work in residence, but he may register by proxy for course work to be taken *in absentia*, when, for example, he is living elsewhere and writing his thesis or dissertation, and sending chapters of it to his adviser for criticism.

If the student interrupts his program of graduate study for one or more terms (excluding summer term), he must register for on-leave status to insure that a place will be kept open for him by the Graduate School and his school or department when he returns. When the student registers for on-leave status, he is not required to pay fees, but he is not permitted to place any demands on University staff or facilities while he is on leave. If the student fails to register for on-leave status when he interrupts his program, it will be assumed that he has decided to discontinue his graduate program, and his Graduate School standing will be cancelled. In this event, if he should later wish to return he must apply for permission to re-register in the Graduate School and is subject to quota limitations in effect for the term requested.

On-leave status is granted for a stated period of time, normally not to exceed one calendar year. During the time graduate programs are subject to enrollment limitations, a leave of absence in excess of one year will not be granted. If the student's request for on-leave status is denied, he must submit a "Permission to Re-register" form for the term when he intends to return. Students who are able to pursue their master's degree work only in the summer term must apply for leave status for each ensuing school year; they may request extensions of leave up to but not beyond the seven-year limitation on credit earned toward a master's degree (see "Time Limit," page 119).

A student may not apply for on-leave status unless he is a graduate student in good standing in the school or department to which he has been admitted.

If a student has completed all degree requirements but so late in the term that the degree cannot be awarded until the following term, he need not register for further course work to qualify for the degree but he must register for on-leave status in the term when he expects to receive the degree.

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 and who has a cumulative GPA of 3.00 or higher in the field in which he proposes to do his graduate work may petition the dean of the Graduate School to reserve credit in specified graduate courses. A graduate adviser, assigned to him by his school or department, must endorse his petition and help him begin planning his graduate work. A "Reservation of Graduate 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 more than a total of 15 credits in a 45-hour master's degree program, nor for courses taken during a period of more than three terms. Approval of a petition to reserve graduate credit does not necessarily mean that the graduate credits reserved will be accepted in a particular advanced degree program.

Course Registration Requirements. All graduate students using campus facilities or studying under the supervision of a member of the faculty are required to register for a minimum of 3 term hours of course work. This rule applies also to students taking comprehensive or final examinations for advanced degrees. If all requirements, including examinations, have been met in the term before that in which the degree is awarded, the student should register only for on-leave status and need not pay any fees.

Students working for a master's degree with thesis are required to register for a minimum of 9 term hours in Thesis (503) before completing the program for the degree. With school or department approval, up to 3 of the 9 hours of thesis required for the master's degree and up to 6 of the 18 required for the doctorate may be in Research (501) instead.

Graduate students holding half-time teaching or research appointments are required to enroll in a minimum of 6 term hours of graduate course work; students holding three-tenths appointments must enroll in a minimum of 9 term hours.

Students who do not hold graduate teaching or research appointments are not limited in the number of graduate-credit hours for which they may register in a term of the academic year, except for summer term, and except as they may be affected by the regulations under "Residence Requirement" for the master's degree (see page 119, below).

All students enrolling in the summer session are limited in the number of graduate credit hours for which they may register. In the eight-week term, the maximum is 13 term hours; in the eleven-week term, the maximum is 16.

A student holding a half-time graduate teaching or research appointment may register for a maximum of 12 graduate-credit hours in any one term of the academic

year; a student holding a three-tenths graduate teaching or research appointment may register for a maximum of 15.

(Faculty and staff members wishing to take graduate courses should refer to the University's Administrative Manual for information about maximum hours and permission to enroll.)

Graduate students and advisers are reminded that various agencies and offices, both on and off campus, have their own course-load requirements. For example, a graduate student who has a loan must register for the number of hours to meet the loan agency requirements. The Registrar's Office cannot certify a student for registration except for the hours indicated on his official registration card. The above stated minimum requirements of the Graduate School do not affect the student's responsibility to register for the number of hours he must take to meet the criteria of the agencies to which he may be obligated.

Grade Requirement. To qualify for an advanced degree, a graduate student is required to earn at least a B grade-point average in graduate courses taken in his degree program at the University. 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 that the student's degree program is terminated, and he is dropped from the Graduate School and from further work in an advanced degree program in that department or school. Of the 45 credit hours the Graduate School requires for a master's degree, at least 24 must be in pass-differentiated University courses.

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

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 or as graduate service courses, or, in certain circumstances, as part of an interdisciplinary master's program (see pages 120-121). 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.

Joint-Campus Graduate Courses. Graduate students registered at the University of Oregon may, with the consent of their advisers, take courses carrying graduate credit at any of the other institutions in the Oregon State System of Higher Education. Students register for these courses with the University of Oregon Registrar. Grades are transmitted by the instructor to the University Registrar and recorded on the student's University of Oregon transcript.

Tuition, Fees, and Deposits. Regular tuition and fees for graduate students, both residents of Oregon and nonresidents, enrolled for a total of 9 to 16 term hours of work are estimated tentatively at \$223 a term or \$669 for the three-term academic year. Students holding graduate or research appointments or fellowships which involve teaching or research duties pay reduced tuition and fees estimated at \$52 a term or \$156 for the three-term academic year. For a statement regarding students registered for less than normal programs, see "Tuition, Fees, and Deposits" under ACADEMIC REGULATIONS.

Graduate students must make a \$25.00 general deposit once each year at the time of first registration, as a protection to the University against the loss of or damage to institutional property.

A new graduate student, who has not been previously enrolled in the University of Oregon, pays a \$10.00 application fee; this fee, which is not refundable, must be sent to the Office of Admissions with the student's application for admission. In some departments a student who is applying for a teaching or research fellowship may defer formal application for admission and payment of the application fee until negotiations for the fellowship are completed; in others, he must be formally admitted before his application is considered. During the period of time that the Graduate School is operating under an enrollment limitation, an advance registration deposit may be required. The amount of the deposit and the time of payment will be furnished with the advance notice of admission.

A special fee of \$20.00 is paid by all students who are granted doctor's degrees, to cover the cost of reproduction of their theses on microfilm or microcards.

Degree Requirements

Master of Arts, Master of Science

Credit Requirements. For a master's degree, the student must complete an integrated program of study totaling not less than 45 term hours in courses approved for graduate credit, at least 24 of these hours being in pass-differentiated University courses. Integration may be achieved either through a departmental major or through a program of interdisciplinary studies (see pages 120-121). For the master's degree with a departmental major, a minimum of two-thirds of the work (30 term hours) ordinarily must be in the major. A student earning a second master's degree in a different field is required to take not less than 30 term hours in his new major.

Residence Requirement. The minimum residence requirement for the master's degree is 30 term hours of work on the Eugene campus or at the Medical School, Dental School, or School of Nursing in Portland. Master's degree work must extend over a minimum of three terms if the individual has less than 12 hours of transfer credit, or a minimum of two terms if 12 to 15 hours are approved for transfer. The residence requirement for the M.F.A. degree in studio arts is two academic years (six terms).

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 or doctoral degree under the following conditions: (1) the total of transferred credit may not exceed 15 term hours in a 45-hour master's-degree program; (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, B, or P. Graduate credit is not allowed for correspondence courses.

Distinction Between the M.A. and M.S. Degrees. For the M.A. degree, the student must show a competence in one foreign language; the level of proficiency and the method of determining that level are decided by his school or major department. There is no language requirement for the M.S. and professional degrees unless specified by the school or department.

Course Requirements. For the M.A. or M.S. degree with a departmental major, at least 9 term hours in 500-599 courses are required.

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

Examinations. Qualifying and final examinations may be required in any field at the discretion of the department or school. The conduct and content of these examinations are departmental or school responsibilities.

Thesis. In some fields, all candidates for the master's degree are required to present a thesis; in others the thesis is optional or not required.

A student who writes a thesis should apply to his school or department for information on the various steps involved and the minimal standards expected. The student should also call at the Graduate School to obtain a current copy of the *Style Manual for Theses and Dissertations*, which sets forth the requirements governing format, number of copies required, abstracts, etc. Copies of theses will not be accepted by the Graduate School unless they meet the standards of form and style specified in the *Style Manual*.

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.

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.

ISt 505. **Reading and Conference.** Hours to be arranged.

Public Affairs.

Industrial Relations.

ISt 507. **Seminar.** Hours to be arranged.

Public Affairs.

Industrial Relations.

Higher Education.

International Studies.

Juvenile Correction.

The established interdisciplinary programs approved by the Graduate Council are listed below. A student interested in one of these programs should direct his inquiry to the chairman, whose name is also listed: International Studies, John Gange; Asian Studies, Allen Hanley and James R. Morita; Juvenile Correction, Kenneth Polk; Public Affairs, Richard C. Collins; Industrial and Labor Relations, Eaton H. Conant; Dance, M. Frances Dougherty; Linguistics, Clarence D. Sloat.

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 Lloyd R. Sorenson, 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

* No-grade course.

one of the University's programs of interdisciplinary studies. The student is expected to have satisfied the requirements for the Oregon Basic Teacher's Certificate. He must have a reasonable background of undergraduate study in the field 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:

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), 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: computer science, English, foreign languages, geography, history, mathematics, and school librarianship.

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 must include work in at least three of the following fields: anthropology, economics, geography, history, political science, psychology, and sociology. A program in science must include work in at least three of the following fields: 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 remaining courses may include, with some restrictions, both the 400 (G) and 400 (g) series. The student's program must be planned to provide well-rounded knowledge, and must not be made up of scattered, unrelated courses.

A student electing either option 1 or option 2 must have had at least 18 term hours of undergraduate course work in the subject field involved. A student electing option 3 must have had at least 12 term hours of undergraduate course work in each of the three subject fields 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.

Inquiries about the interdisciplinary programs for teachers in history, computer science, English, school librarianship, mathematics, geography, and foreign languages should be directed to the chairmen of these academic departments. Inquiries about programs in other areas should be directed to Lloyd R. Sorenson, Department of History.

Master of Business Administration

The requirements for the degree of Master of Business Administration are listed under COLLEGE 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 discretion of the faculty of the College 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 30 term hours of graduate work on the University campus.

Master of Fine Arts

The degree of Master of Fine Arts is granted for attainments and proven creative ability in the arts. It is currently offered by the Department of Fine and Applied Arts, the Department of English, and the Department of Speech. 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. Inquiries about additional departmental requirements for the degree should be addressed to the department concerned.

Every candidate for the M.F.A. degree must submit an extended creative work or project of high professional character. If the work is a verbal composition, the candidate must deposit with the Graduate School three clear copies that have been approved by the candidate's adviser and major department.

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 Library Science

The requirements for the degree of Master of Library Science are listed under SCHOOL OF LIBRARIANSHIP.

Master of Music

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

Master of Urban Planning

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

Doctor of Philosophy

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.

It is recommended that a student not take all his undergraduate and all his Ph.D. work at the University of Oregon.

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 academic year (three consecutive terms) must be spent in continuous residence on the Eugene campus of the University of Oregon or at the University of Oregon Medical School in Portland.

Language Requirement. Knowledge of a foreign language or of other specialized disciplines such as computer science or statistics may be required by individual schools or departments as part of a Ph.D. program. For information on such requirements, the student should consult the school or department directly.

Comprehensive Examinations. The student working toward the Ph.D. degree must pass a group of comprehensive examinations (oral or written or both). These examinations are expected to cover major areas in the student's program of graduate study and may cover any supporting area if the school or department

wishes. The student will be held responsible not merely for material directly covered in the graduate courses he has taken, but also for additional independent study in his field, with the object of demonstrating a comprehensive and integrated command of his discipline.

Advancement to candidacy is contingent upon passing these examinations. The student is not eligible to take the examinations until he has satisfied substantially all other requirements except the completion of the dissertation and the final examination.

Within two weeks after the student has passed his comprehensive examinations, his school or department will submit a report to the dean of the Graduate School recommending advancement to candidacy. The date of advancement is that on which the recommendation is received by the Graduate School.

Advisory Committee. The advisory committee of the candidate for the Ph.D. degree determines the amount of work the student is to do for his degree, in light of his background and objectives. This committee is appointed by the head of the department or dean of the school in which the student is working. Its membership need not be approved by the Graduate School. The committee normally is made up of four members, with the student's adviser serving as chairman. It may or may not have an outside member, depending on the wishes of the department or school, which also may determine the time when the committee is to be appointed.

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 office of the Graduate School. Copies of the thesis will not be accepted by the Graduate School unless they meet satisfactory standards of form and style. The student should obtain from the Graduate School a copy of the *Style Manual for Theses and Dissertations*, which defines these standards. Seven copies of an abstract of the approved thesis (not longer than 600 words) must be filed in the office of the Graduate School four weeks before the examination.

Final Examination Committee. The doctoral candidate's final examination committee must approve his dissertation and conduct his final oral examination. This committee normally is composed of the members of the advisory committee (see above), with the chairman being the candidate's dissertation adviser. It must include at least three members from the graduate faculty of the candidate's major department or school, as well as an additional member not affiliated with that department or school. This member is regarded as the representative of the Graduate School. If he is nominated from the University of Oregon faculty, he must be a member of a different school or department from that of the candidate and represent a different discipline. If he is nominated from the faculty of another university or from professional life, he may (but need not) represent the same discipline as that of the candidate.

The membership of the committee must be proposed to the dean of the Graduate School at least four weeks before the date of the final examination. The dean officially appoints the committee, after approving its membership. The dean may appoint additional members; or the school or department may nominate additional

members, including representatives of supporting or related disciplines, subject to the dean's approval.

Final Examination. The final examination for a doctoral degree (whether Ph.D. or professional doctorate) must be taken not later than three calendar years after advancement to candidacy. Failure to complete requirements for the degree within this period will invalidate the student's comprehensive examinations.

The final examination for the Ph.D. degree may be written in part but must include an oral examination of at least two hours' duration. The oral examination is open to all members of the faculty and to advanced graduate students. The date of the oral examination must be publicly announced by the Graduate School at least one week before it is held.

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 Arts

The requirements for the degree of Doctor of Arts are listed under ENGLISH.

Doctor of Business Administration

The requirements for the degree of Doctor of Business Administration are listed under COLLEGE 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, physical education, and recreation. 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.

With the exceptions indicated in this section, the general requirements with respect to 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 in the College of Education 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 substantially all of the course work in his program, and (3) received the consent of his adviser to take the examinations. Students interested in the D.Ed. degree in the School of Health, Physical Education, and Recreation must meet requirements established by that school.

Doctor of Musical Arts

General Requirements. The degree of Doctor of Musical Arts in pedagogy has as its objective the preparation of college teachers of music who are qualified in two or more areas. Students will elect either music education, history and musicianship or performance as a primary area, with a supporting area chosen from

among the following : performance, history and musicianship, composition, or music education.

Language Requirement. All students seeking the D.M.A. degree must demonstrate a reading knowledge of German. Students electing vocal pedagogy as either a primary or a supporting area within performance must meet the equivalent of the language requirement for the Master of Music degree: two years of one language and one year of each of two other languages, one of these three being German.

Residence. At least three years of full-time work beyond the bachelor's degree are required, of which at least one academic year (three consecutive terms beginning in the fall term) must be spent in continuous residence on the Eugene campus of the University of Oregon.

Comprehensive Examination. The student is required to pass two comprehensive examinations, one each in his primary and supporting areas. These comprehensive written 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) secured the approval of his dissertation proposal by his dissertation advisory committee, (4) received the approval of his adviser to take the examination, and (5) satisfied the language requirement.

Advancement to Candidacy. Advancement to candidacy is based on successful completion of foreign language and comprehensive examinations, approval of the student's dissertation proposal by his dissertation advisory committee, and the recommendation of his adviser that he be advanced to candidacy.

The Dissertation. Students whose primary area is music education must present a dissertation which reveals a mastery of the subject and is written in creditable literary style. Copies of the dissertation must be distributed by the student to the members of his examining committee, in accordance with the procedure outlined for the Ph.D. degree.

Students whose primary area is performance must submit a doctoral document consisting of recorded and written sections. Recordings of three public performances will form one section of the document. The written part together with at least one performance will focus upon a particular aspect of the candidate's performance area. These recorded and written documents constitute the candidate's doctoral dissertation. The three public performances may take a variety of forms and will be subject to approval of the candidate's committee. The first public performance will normally be given prior to the comprehensive examinations. The written document will be submitted to the candidate's committee no later than two weeks prior to the final oral examination.

Final Examination. The final examination is an oral examination at which the candidate is expected to defend his dissertation and to show a satisfactory knowledge of his major area. The examining committee consists of the candidate's advisory committee, including at least one member from a school or department other than the School of Music, subject to the approval of the dean of the Graduate School.

Fellowships

TEACHING AND RESEARCH fellowships are available to well-qualified graduate students. Applications should be made before March 1.

All persons holding these positions must enroll in the Graduate School, and are expected to enter a program leading to an advanced degree.

Teaching Fellowships. Nearly all schools and departments award graduate teaching fellowships. Stipends range from \$2,300 to \$6,000 for an academic year. Graduate students holding appointments at 30 per cent of full time or less may register for a maximum of 15 term hours. Those holding half-time appointments may register for a maximum of 12 hours. Tuition for graduate teaching fellows is waived.

Research Fellowships. A number of departments and schools employ graduate students to work on research projects under the supervision of faculty members for up to 15 hours a week. Funds come from research grants and contracts. Stipends, fees, and enrollment limitations are about the same as for graduate students with teaching fellowships. Tuition is generally waived for graduate research appointments. It is sometimes possible to extend these fellowships through the summer, thus increasing the total stipend.

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 endowed foundations. The University participates in the National Defense Education Act Program, Experienced Teacher Fellowship Program, NSF Traineeship Program, and the NSF Summer Traineeship Program. Information concerning these programs may be obtained in the office of the Graduate School.

Postdoctoral Fellowships. The University of Oregon participates in several postdoctoral fellowship programs and provides facilities for postdoctoral study under faculty supervision.

Loans. Graduate students are eligible for loans from University loan funds (see page 111) and from funds available under the National Defense Education Act. The University also participates in United Student Aid Fund, Inc.

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.

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.

Research Institutes

SEVERAL INTERDISCIPLINARY INSTITUTES administered through the Graduate School provide opportunities for graduate training and research in

addition to those offered by the schools and departments. Institute staff members hold joint appointments in related teaching departments. Graduate students who intend to do thesis research in one of the institutes must satisfy the graduate degree requirements of the related department through which they will receive their degree.

Students who wish to work in any of the institute fields may obtain detailed information concerning the programs and available financial aid from the institute directors.

Institute of Molecular Biology

PETER H. VON HIPPEL, Ph.D., Director of Institute of Molecular Biology; Professor of Chemistry.

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

O. HAYES GRIFFITH, Ph.D., Associate Professor of Chemistry.

BRIAN W. MATTHEWS, Ph.D., Associate Professor of Physics.

JOHN R. MENNINGER, Ph.D., Assistant Professor of Biology.

AARON NOVICK, Ph.D., Professor of Biology.

WILLIAM T. SIMPSON, Ph.D., Professor of Chemistry.

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

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

ASSOCIATES

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

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

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

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

The Institute of Molecular Biology offers the facilities, support, and research guidance necessary for investigations of biological problems at the molecular level. The approach is interdisciplinary, with the techniques of biology, chemistry, and physics all being brought to bear as appropriate. Problems under active investigation include: spectroscopic studies of compounds of biological interest, determinations of the three-dimensional atomic structures of proteins and nucleic acids, the role of solvent in determining macromolecular structure and stability, mechanisms of enzyme catalysis, membrane structure and function, protein-nucleic acid interactions, mechanisms and regulation of protein and nucleic acid synthesis, the molecular basis of mutation and recombination, and the molecular basis of genetic expression.

Staff members hold joint appointments in the science departments at the University. Research scientists are encouraged to visit the institute for varying periods. Graduate awards are given by the institute and fellowships from the National Institutes of Health are administered under the program.

Institute of Theoretical Science

MICHAEL J. MORAVCSIK, Ph.D., Director of Institute of Theoretical Science; Professor of Physics.

RICHARD B. BARRAR, Ph.D., Professor of Mathematics.

PAUL L. CSONKA, Ph.D., Assistant Professor of Physics.

ROBERT S. FREEMAN, Ph.D., Associate Professor of Mathematics.

MARVIN D. GIRARDEAU, Jr., Ph.D., Professor of Physics.
AMIT GOSWAMI, Ph.D., Associate Professor of Physics.
GERALD D. MAHAN, Ph.D., Associate Professor of Mathematics.
ROBERT M. MAZO, Ph.D., Professor of Chemistry.
MICHAEL R. PHILPOTT, Ph.D., Assistant Professor of Chemistry.
WILLIAM T. SIMPSON, Ph.D., Professor of Chemistry.
ROBERT L. ZIMMERMAN, Ph.D., Assistant Professor of Physics.

ASSOCIATES

JOEL W. MCCLURE, Ph.D., Professor of Physics.
JOHN L. POWELL, Ph.D., Professor of Physics.
GREGORY H. WANNIER, Ph.D., Professor of Physics.

The Institute of Theoretical Science provides a center for interdisciplinary research in overlapping areas of theoretical physics, theoretical chemistry, and mathematics.

Current research is centered in the areas of statistical mechanics, chemical physics, theory of solids and liquids, nuclear theory, elementary particle theory, and applied and applicable mathematics.

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

Computing Center

GEORGE W. STRUBLE, Ph.D., Director of Computing Center; Associate Professor of Computer Science.
EDWARD L. LENCH, M.B.A., Assistant Director, Computing Center.
RICHARD W. HALLER, Ph.D., Research Associate; Assistant Professor of Psychology.
GORDON P. ASHBY, M.B.A., Computer Systems Programming Supervisor; Instructor in Computer Science.
ROBERT L. HEILMAN, M.A., Computer Systems Programmer; Instructor in Computer Science.
TERRY L. LIITTSCHWAGER, Research Assistant.
NORMAN L. BECK, B.A., Computer Systems Programmer.
WENDELL T. BEYER, Ph.D., Research Associate; Assistant Professor of Computer Science.
KATHLEEN BEYER, M.A., Research Assistant.
FRED BEISSE, Research Assistant; Instructor in Computer Science.

The Computing Center provides computing facilities for the University, serving instructional, research, and administrative needs. Facilities include an IBM System 360/50H and a PDP-10/50 computer, with peripheral data-processing equipment. A documents room includes a library of manuals and documentation on programs and equipment. Applied programming and card punching services are available, and the staff provides consulting assistance and tutorials on elementary and advanced topics concerning the use of computers.

Institute of International Studies and Overseas Administration

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

GENE E. MARTIN, Ph.D., Associate Director, Institute of International Studies and Overseas Administration; Professor of Geography.

GORDON E. RECKORD, Research Associate, Institute of International Studies and Overseas Administration; Visiting Professor of Geography.

CLARENCE E. THURBER, Ph.D., Deputy Director of Institute of International Studies and Overseas Administration; Professor of International and Public Affairs.

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 cooperates with major departments in supervising 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 fellowships are available in the institute; research and research training bases have been established in many foreign countries.

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 supports the program of the Oregon High School International Relations League.

Institute for Community Studies

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

MAX G. ABBOTT, Ph.D., Director, Center for the Advanced Study of Educational Administration; Professor of Education.

WALTER T. MARTIN, Ph.D., Director, Center for Ecological Studies; Professor of Sociology.

PHILIP K. PIEL, Ph.D., Director, Educational Resources Information Center; Associate Professor of Education.

The Institute for Community Studies conducts and encourages research in the behavioral and social sciences, education, and related areas. Most projects carried on under the auspices of the institute have a community orientation, focusing on the structure and functioning of the community as a social and political

system. Emphasis is on the policy-formulation processes in the economy, government, education, and other institutional areas of the community.

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 Center for the Advanced Study of Educational Administration, a division of the institute, was established in 1964 with funds granted by the Research and Development Center Program of the United States Office of Education. The program of the center is concerned with the organizational and administrative implications of instructional changes in elementary and secondary schools.

Under contract with the United States Office of Education the Institute has operated a unit of the Educational Resources Information Center since 1966. This unit, the ERIC Clearinghouse on Educational Administration, receives, processes, stores, and produces documents in the field of educational administration and distributes them to nationwide audiences.

The Center for Ecological Studies was established in 1967 in order to conduct research on ecological and demographic factors in social organization.

As divisions of the institute, centers draw upon the services of staff members and graduate students in the behavioral sciences and in the field of education.

Bureau of Business and Economic Research

*DONALD A. WATSON, Ph.D., Director, Bureau of Business and Economic Research; Professor of Business Economics.

JEANNETTE F. LUND, M.A., Research Assistant.

The Bureau of Business and Economic Research conducts and encourages research in business, economics, and related fields. Studies undertaken by the bureau or for which it provides assistance in research design and facilities are financed through University funds and through grants from foundations, government agencies, and the business community.

The bureau publishes the *Oregon Business Review* monthly, the *Oregon Economic Statistics* annually, and occasional monographs reporting the results of business and economic research.

Institute of Industrial and Labor Relations

EATON H. CONANT, Ph.D., Director of Institute of Industrial and Labor Relations; Associate Professor of Management.

PAUL L. KLEINSORGE, Ph.D., Associate Director; Professor of Economics.

The Institute of Industrial and Labor Relations conducts a program of research, public service, and graduate study in the field of industrial relations; see COLLEGE OF LIBERAL ARTS for information on graduate study. The institute supervises an interdisciplinary graduate-study program leading to the Master of Arts or Master of Science degree. Research fellowships are available for graduate students. The institute's research program includes studies in manpower resources, labor mobility, wage structures, personnel problems, management and labor organizations, labor legislation, and collective bargaining. The approach is interdisciplinary, involving the cooperative efforts of scholars in the several social sciences and related professional schools.

* On sabbatical leave 1970-71.

The institute also sponsors programs in labor education and management, including regular campus courses, special seminars, and conferences, and provides an information service on problems of industrial relations.

Institute of Marine Biology

PAUL P. RUDY, Ph.D., Director of Institute of Marine Biology, Assistant Professor of Biology.

ROBERT C. TERWILLIGER, Ph.D., Assistant Director of Institute of Marine Biology, Assistant Professor of Biology.

ASSOCIATES

BAYARD H. MCCONNAUGHEY, Ph.D., Associate Professor of Biology.

GEORGE H. DERSHAM, Ph.D., Acting Assistant Professor of Biology.

PETER W. FRANK, Ph.D., Professor of Biology.

BYRON E. LIPPERT, Ph.D., Visiting Assistant Professor of Biology.

The Institute of Marine Biology is situated on about 85 acres of property along Coos Bay at Coos Head, on the Oregon Coast. The many different marine environments in that area provide the institute with an ideal situation for the study of marine organisms. The institute offers a full program of summer study, and facilities for individual research are available throughout the year. The training deals principally with living marine organisms and is a strong complement to the work of a traditional campus course. Advanced students may undertake specialized work or research on an individual basis.

Current research is centered in the areas of the physiology of salt and water balance, biochemistry of respiratory pigments, and marine ecology.

Honors College

BURTON J. MOYER, Ph.D., Dean of the College of Liberal Arts.

LAWRENCE W. ROSS, JR., J.D., Acting Director of the Honors College.

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 or who have engaged in sustained creative scholarly work with a minimum of supervision. Students who lack evidence of high scholastic achievement and creativity are occasionally admitted to the Honors College on the strength of exceptionally high academic ability and promise. A limited number of transfer students whose previous college record is outstanding may also be admitted.

Freshmen 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. Honors College information and application forms may be obtained from the Honors College office.

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 first three 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).*
- (d) Science—Physical Science (Honors College) (GS 204, 205, 206); *or* Biological Science (Honors College) (Bi 104, 105, 106); *or* General Geology (Geol 201, 202, 203); *or* General Chemistry (Ch 204, 205, 206); *or* Introduction to Experimental Psychology (Honors College) (Psy 217, 218, 219).
- (e) Philosophy—Introduction to Philosophy (Honors College) (Phl 207, 208, 209).
- (f) Mathematics—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 may retake, without penalty, any comprehensive examination he has failed to pass. 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. The student's adviser may waive one of the six core areas for a major in liberal arts, or two of the core areas for a major in a professional school, if he judges this necessary for the student's proper educational advancement.

(3) Honors work in English composition—Honors Composition (Wr 230), 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, each colloquium focusing for one term on a common topic outside the students' major fields. All colloquia are graded on a pass-undifferentiated basis.

(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). The pass-undifferentiated grading option is acceptable in the Honors College wherever it is not in conflict with departmental major requirements.

Honors College freshmen may at their option participate in a freshman colloquium dealing with special topics.

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 and literature, and opportunities for work in departmental honors seminars, research projects, and reading and conference.

The Honors College student takes approximately one-half 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 under-

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

graduate programs of the divisions. The special requirements of the several divisions for majors enrolled in the Honors College are listed below. In general these requirements supplement those required of all regular students majoring in the department.

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 Science. A minimum of 36 pass-differentiated upper-division hours in science, including 9 hours at the 400 level in one science which are acceptable for a departmental major or 9 hours at the 300 level which are required for a departmental major. A senior comprehensive examination is required.

General Social Science. (1) Of the 36 upper division hours required of all majors, at least 18 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, for a maximum of 6 term hours.

Architecture and Allied Arts. Colloquium, honors reading and conference.

Asian Studies. Senior honors thesis utilizing materials in a foreign language germane to the region with which the thesis is concerned. A maximum of 6 hours of credit for thesis is allowed. (The final oral examination will cover the thesis.)

Biology. Honors thesis based on original observations or experiments, for which credit may be obtained under Bi 401 (eight hours of which will satisfy major requirements for two 400 level courses). A maximum of 4 hours of credit for thesis is allowed. (Honors students may be admitted to graduate courses in the department.) Bi 104, 105, 106 is not intended for students majoring in biology, pre-medicine, pre-dentistry, or in other fields related to biology.

Business Administration. Major programs developed in consultation with the Undergraduate School of Business honors adviser. Ordinarily, the student writes an honors thesis during his senior year for 3-9 term hours of credit.

Chemistry. (1) Ch 204, 205, 206, Ch 207, 208, 209 and Mth 204, 205, 206 in the freshman year; (2) Ch 334, 335, 336, Ch 340, 341, 342 in the sophomore year; (4) research (3 credits) and honors thesis (3 credits) in the senior year.

Classics, and Chinese and Japanese. (1) Normally, in the junior year, seminar in the literature of the student's principal language (3 hours); (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee (6 hours).

Community Service and Public Affairs. Students in the Honors College should complete the usual requirements for a major in the School of Community Service and Public Affairs, plus a senior thesis or another independent project. SSc 201, 202, 203 will fulfill the basic requirements in the disciplines involved.

Economics. (1) Honors sections of Ec 201, Ec 202, 203; (2) Intermediate Economic Analysis (Ec 375, 376, 377); (3) 18 term hours of work in courses in economics numbered 400 or above (these courses are in addition to those listed in (4) and (5) below); (4) honors seminar (Ec 407) in fall and winter terms of senior year; (5) honors essay (Ec 401) in spring term of senior year; (6) Introduction to Econometrics (Ec 393, 394) or Introduction to Statistical Theory (Mth 441, 442) or Econometrics (Ec 493).

Education. (1) Honors section of CI 405; (2) reading and conference, 3 term hours, culminating in an essay.

English. Three term hours in honors seminars in junior year, followed by 6 term hours of independent study in a literary period, type, etc., culminating in a scholarly or critical honors essay.

Geography. (1) Geog 481, Geog 482, Geog 488, 489; (2) Geog 421, 422, 423; (3) Geog 491, 492, 493; (4) junior and senior honors seminars; (5) at student's option, senior honors thesis. Recommended: Geol 101, 102, 103.

Geology. (1) Year sequence in calculus or statistics; (2) Geol 201, 202, 203, 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.

German and Russian. (1) Normally, in the junior year, seminar in the literature of the student's principal language; (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee, for 3 term hours of credit.

History. Complete requirements for a major in history, including (1) senior honors essay, 7 term hours; (2) oral examination over two of the following fields; (a) Greece and Rome, (b) mediaeval Europe, (c) Renaissance and Reformation, (d) Europe 1500-1789, (e) Europe since 1789, (f) United States, (g) Far East, (h) Latin America.

Journalism. (1) J 485, J 487; (2) senior thesis (J 403), 6 term hours; (3) examination before faculty committee on thesis and professional course work.

Mathematics. (1) Mth 204, 205, 206 (preferably honors section); (2) Mth 415, 416, 417, Mth 431, 432, 433; (3) an oral examination, ordinarily in the senior year, covering advanced topics assigned by the student's adviser.

Medicine. (1) Three years of work in the Honors College, including the premedical program outlined on page 227, or equivalent; (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) Senior honors essay, following intensive study of some aspect of philosophy either in connection with a senior seminar or, when recommended, on a tutorial basis, with 9 term hours of credit; (2) a comprehensive written examination.

Physics. Maximum of 18 term hours of credit in independent study (independent research and a thesis are required).

Political Science. (1) Complete requirements for political science major (see departmental requirements). SSc 201, 202, 203 may be used for the three-course introductory sequence requirements, but students are strongly advised to take PS 100 and PS 207, PS 208; (2) honors thesis during senior year (maximum credit, 9 term hours) to include PS 405 (3 hours) and PS 403 (6 hours). All 9 hours are to be prearranged with the thesis adviser. (The 9 hours of work on the thesis will count toward the total departmental requirement for graduation.)

Psychology. (1) A seminar (Psy 407 or Psy 507); (2) honors thesis. (It

is strongly recommended that honors students take Psy 217, 218, 219 in the sophomore year and Mth 425, 426 or Mth 441, 442, 443 in the junior year.

Romance Languages. (1) Normally, in the junior year, a year's sequence of Honors College seminars in the literature of the student's principal language (2 credits per term); (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee (2 credits per term).

Sociology. (1) Soc 327, Soc 370, Soc 371; (2) honors thesis involving sociological analysis (maximum credit, 9 term hours). The thesis examination includes examination of the candidate's knowledge of the relevant related literature.

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 (6 term hours of credit).

Independent Study

In addition to its regular program, the Honors College administers a program of undergraduate independent study leading to the degree of Bachelor of Arts (Honors College). Students enrolled in this program are designated independent scholars. Total enrollment of independent scholars is at present limited to twenty students who must be currently enrolled in the Honors College.

A student is admitted to the status of independent scholar on nomination by a member of the faculty, with the approval of the director of the Honors College and the head of an academic department, the chairman of a committee on interdisciplinary studies, or the dean of a professional school. Nomination is based solely on evidence of creative or scholarly originality and ability to work independently toward a creative or scholarly goal. Such evidence is not limited to academic records or credits and grades.

An independent scholar is exempt from all requirements of courses, credits, and grades. He plans an individual program of studies directed to a creative or scholarly goal, with the advice of a committee of three members of the faculty appointed by the director of the Honors College, and pursues his studies under the supervision of this committee. The scholar remains in good standing so long as his committee chairman reports, at the end of each term, that he is making satisfactory progress toward his goal. If a student changes his status from that of an independent scholar to that of a regular University student, his committee will recommend a transfer of credits to his record equivalent to the work he has completed satisfactorily as an independent scholar.

An independent scholar pays the regular fee for a full-time student. He may attend any University course without formal registration, provided the consent of the instructor is obtained. If he wishes to have his work in any course recorded with grade and credit, he must register for the course and satisfy normal course requirements. An independent scholar's work is recorded in the Registrar's Office under the course entry, Independent Study (HC 402), with a designation of his area of study.

On the satisfactory completion of his program, an independent scholar is granted the B.A. (Honors College) degree on the recommendation of the director of the Honors College and the head of an academic department, the chairman of a committee on interdisciplinary studies, or the dean of a professional school. The recommendation is based on the following criteria:

(1) Completion of work equivalent to twelve terms of study toward the scholar's goal, either in a regular curriculum or as an independent scholar under the supervision of a committee. (2) Evidence of his accomplishment in the form of creative or scholarly productions in the sciences, humanities, or arts. (3) An

examination to determine his general scholarly equipment and accomplishment in fields relevant to his area of interest. The examiners include the chairman of the scholar's study committee and representatives of appropriate departments, schools, or interdisciplinary committees.

While not restricted to any specific courses or topics, all programs of independent study maintain the spirit of a broadly based liberal education which characterizes the Honors College.

A student who wishes to change from independent status to regular status must submit a petition to the Academic Requirements Committee to obtain credit for work completed in Independent Study (HC 402).

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 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. Information concerning advanced placement may be obtained from the Counseling Center office.

College of Liberal Arts

BURTON J. MOYER, Ph.D., Dean of the College of Liberal Arts.

PAUL S. HOLBO, Ph.D., Associate Dean.

BARRY N. SIEGEL, Ph.D., Associate Dean.

LAWRENCE W. ROSS, JR., Ph.D., Acting Director of the Honors College.

GLENN STARLIN, Ph.D., Associate Dean.

BEVERLY I. FAGOT, Ph.D., Director of Academic Advising; Assistant Dean.

THE COLLEGE OF LIBERAL ARTS gives form to man's study of his world, his history, and himself. Programs centered in the three great disciplines of the natural sciences, the social sciences, and the humanities emancipate his mind and extend that knowledge which is indispensable to the good life of free men.

The instructional divisions of the college are: Anthropology, Biology, Chemistry, Classics, and Chinese and Japanese, Computer Science, Economics, English, Geography, Geology, German and Russian, History, Home Economics, Mathematics, Philosophy, Physics, Political Science, Psychology, Religious Studies, Romance Languages, Sociology, and Speech. All disciplines, except Computer Science, Home Economics and Religious Studies, offer major curricula leading to baccalaureate degrees; all other disciplines, except Chinese and Japanese, offer curricula leading to graduate degrees.

Also administered through the college are special programs in African studies, Asian studies, comparative literature, general arts and letters, general science, general social science, industrial and labor relations, Latin American studies, and Russian and East European studies; preparatory programs in dentistry, medical technology, medicine, nursing, and pharmacy; and the Museum of Natural History.

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 120 or 200 to 220, in satisfaction of the general University lower-division group requirement (for a complete statement of the regulations governing this requirement, and a list of group courses, see pages 93-94).

(2) In addition, two sequences in liberal arts courses numbered from 100 to 120, 200 to 220, 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. (For a list of group courses see pages 93-94).

(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.

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 page 137.

Interdepartmental Courses

Arts and Letters*

LOWER-DIVISION COURSES

AL 101, 102, 103. **Literature (Honors College).** 3 hours each term.

Intensive study of selected works of Occidental literature. Gontrum, G. Johnson, Pascal, Powers, Stevenson, Wegelin.

AL 150, 151, 152. **Classical Elements of English.** 1 hour each term.

Classical components of the English language; Anglicization of the Latin alphabet and transliteration of the Greek alphabet. Shucard.

AL 230, 231, 232. **Survey of the Performing Arts.** 3 hours each term.

A concurrent study of the arts of dance, music, and theater, with special emphasis on the artistic contribution of the performer. Interrelations among the performing arts. The physical limitations of the forms; period and stylistic influences; temperament and personality as a factor in interpretation. Lectures and discussion; performances by visiting artists.

UPPER-DIVISION COURSES

AL 301, 302, 303. **Introduction to Japanese Literature.** 3 hours each term.

Historical survey of Japanese literature from the Eighth Century to the present. Analysis and appreciation of major works, authors, and genres, such as the *Manyōshū*, *The Tale of Genji*, Saikaku, and the *Haiku*. All readings in English. J. Morita.

AL 304, 305, 306. **Literature of the Ancient World.** 3 hours each term.

Fall: Homer to Aeschylus; winter: Sophocles to Plutarch; spring: Latin literature from Plautus to Apuleius. Lectures and readings in English. Special attention to influence of Greek and Latin writers on English literature. Combellack, Pascal, Reavis.

AL 307, 308, 309. **Introduction to Chinese Literature.** 3 hours each term.

Chinese literature from the origins to modern period, with special emphasis on the poetry of the Tang and Sung, Yuan drama, and the classical and modern novel. All readings in English. Hanley.

AL 310, 311, 312. **Introduction to Germanic Literature.** 3 hours each term.

In English. Lectures and assigned readings covering the whole range of German literature. Diller.

* For major program in general arts and letters, see page 188.

AL 313, 314, 315. Introduction to Russian Literature. 3 hours each term.

Russian literature from origins to 1917, with special emphasis on Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Readings in English; Russian majors do selected readings in the original. Leong, Rice.

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. Pascal, Reavis.

AL 340, 341, 342. Russian Culture and Civilization. 3 hours each term.

The comparative aesthetics and development of art, film, music, and literature within the context of Russian intellectual history. Leong.

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 405. Reading and Conference. (g) Hours to be arranged.

AL 407. Seminar. (g) Hours to be arranged.

AL 420. Modern Russian Novel. (g) 3 hours.

Development of modern Russian novel, with emphasis on minor prose masters. Readings in English; Russian majors do selected readings in the original. Leong, Rice.

AL 421. Modern Russian Short Story. (G) 3 hours.

Development of Russian short story. All readings in English; Russian majors do selected readings in the original. Rice.

AL 422. Modern Russian Poetry. (G) 3 hours.

Detailed study of Russian symbolism, acmeism, and futurism. All readings in English; Russian majors do selected readings in the original. Leong.

AL 423. Modern Russian Drama. (G) 3 hours.

Evolution of Russian drama. All readings in English; Russian majors do selected readings in the original. Leong, Rice.

AL 424. Dostoevsky. (G) 3 hours.

Dostoevsky's intellectual and artistic development. *The House of the Dead*, *Notes from the Underground*, *Crime and Punishment*, *The Idiot*, *The Brothers Karamazov*, and other works. Readings in English; Russian majors do selected readings in the original. Leong, Rice.

AL 425. Tolstoy. (G) 3 hours.

Development and context of Tolstoy's art; analysis of *War and Peace*, *Anna Karenina*; representative short novels, stories, plays, and essays. Readings in English; Russian majors do selected readings in the original. Leong.

AL 426. Gogol. (G) 3 hours.

Comprehensive study of Gogol's works; critical analysis of *Evenings on a Farm near Dikan'ka*, *Mirgorod*, Petersburg tales, *Dead Souls*, *The Inspector General* and other plays. Readings in English; Russian majors do selected readings in the original. Rice.

AL 427. Turgenev. (G) 3 hours.

Literary development and context of Turgenev's art; analysis of novels (*Rudin*, *A Nest of Gentlefolk*, *On the Eve*, *Fathers and Sons*, *Smoke*, *Virgin Soil*), stories, plays, and critical essays. Readings in English; Russian majors do selected readings in the original. Rice.

AL 428. Chekhov. (G) 3 hours.

Critical study of Chekhov's art; structure, style, and development of representative prose fiction and plays, including *The Seagull*, *Uncle Vanya*, *The*

Three Sisters, The Cherry Orchard. Readings in English; Russian majors do selected readings in the original. Rice.

AL 429. **Soviet Russian Literature.** (G) 3 hours.

Major developments in Russian literature since 1917; theory and practice of "socialist realism"; readings in English; Russian majors do selected readings in the original. Leong.

AL 430, 431, 432. **The Chinese Classics.** (g) 3 hours each term.

A comprehensive study of the Confucian and Taoist canons which introduces the student to the major sources of Chinese thought and culture. The readings will be in English; Chinese majors will do selected readings in the original. Fish, Hanley.

AL 450, 451. **Descriptive Linguistics.** (g) 3 hours each term.

Study of the general internal structure of languages. Prerequisite: senior or graduate standing, three years of college language study.

AL 460, 461, 462. **The Chinese Classics.** (g) 3 hours each term.

A comprehensive study of the Confucian and Taoist canons which introduces the student to the major sources of Chinese thought and culture. The readings are in English; and Chinese majors do selected readings in the original. Fish, Hanley.

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. Beall.

GRADUATE COURSES

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

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.

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.

General Science†

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.

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.

GS 210. **Fundamentals of Evolution.** 3 hours.

Historical development of evolutionary thought; evidence of evolution from the fossil record, comparative anatomy and physiology; functional systems as evidence of adaptations; Mendel and the genetic mechanisms of evolution. Evidence of modern microevolution.

* No-grade course.

† For major program in general science, see page 188.

General Social Science*

LOWER-DIVISION COURSES

SSc 104, 105, 106. **Social Science and Social Policy.** 3 hours each term.

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 pre-requisite requirement for upper-division courses in anthropology, geography, political science, psychology, and sociology.

UPPER-DIVISION COURSE

SSc 321, 322, 323. **Man and His Environment.** 3 hours each term.

The crisis in man's relationship to his environment. Irreversible changes in the environment; population problems; value systems and environmental quality; problems of environmental pollution.

Anthropology

Professors: THEODORE STERN (department head), H. G. BARNETT, L. S. CRESSMAN (emeritus), V. R. DORJAHN, A. G. SMITH.

Associate Professors: D. E. DUMOND, P. E. SIMONDS, P. D. YOUNG.

Assistant Professors: C. M. AIKENS, R. P. CHANEY, D. L. COLE, P. G. GRANT, LEROY JOHNSON, MALCOLM MCFEE, C. G. SAMPSON, R. C. SCHMIDT, ANN SIMONDS, ROBERT TONKINSON.

Instructor: CHARLES J. HOFF.

Fellows: R. J. DARE, M. R. EWART, J. L. FAGAN, M. R. FELDESMAN, D. J. FINKEL, MARGARET HACKER, L. H. KEELEY, S. E. KERSTEIN, DAVID MAYFIELD, D. S. MOSER, R. F. NOLAND, A. E. PENNER, M. R. PETTIGREW, D. M. ROTH, P. S. SMITH, R. L. SMITH, R. A. STEPHENSON, R. A. WALKE.

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 courses: (1) 9 term hours in General Anthropology (Anth 101, 102, 103); (2) 9 term hours in physical anthropology at the 300-499 level; (3) 9 term hours in cultural anthropology at the 300-499 level; (4) one 9-hour sequence in archaeology at the 300-499 level; (5) three electives (9 term hours) at the 400 level.

Of the 45 term hours in anthropology, 36 term hours must be graded. 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. Students planning to do graduate work are advised, but not required, to take two years of German and two years of a second foreign language, preferably French, Spanish, or Russian. Preparation in statistics is also desirable. For further information consult the Graduate Statement issued by the department.

The department offers graduate work leading to the Master of Arts and Doctor of Philosophy degrees. Graduate instruction includes work in the fields of

* For major program in general social science, see page 189.

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.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in anthropology must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in anthropology required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the anthropology faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

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. Need not be taken in sequence. 2 lectures, 1 discussion period. Aiken, Grant, Hoff, A. Simonds, P. Simonds.

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. McFee.

GS 210. Fundamentals of Evolution. 3 hours.

For description, see page 141.

UPPER-DIVISION COURSES

Anth 301, 302, 303. Society and Culture. 3 hours each term.

An introductory course in cultural anthropology for upper-division students. Peoples from different parts of the world are examined in detail, with emphasis on comparative social organization. Not open to students who have taken Anth 207, 208, 209, Anth 326, 327, 328, or a comparable course in cultural anthropology. Prerequisite: upper-division standing. Tonkinson.

Anth 320. Human Ecology. 3 hours.

Human evolution, ecology, and adaptation; cultural, demographic, and biological modes of adaptation. Prerequisite: 9 term hours in anthropology, or Bi 101, 102, 103, or consent of instructor. Hoff.

Anth 321. Palaeoanthropology. 3 hours.

Fossil evidence of human evolution; man's place among the primates; variability of populations of fossil hominids. Prerequisite: 9 term hours in anthropology or consent of instructor. P. Simonds.

Anth 322. Biology of Living Human Populations. 3 hours.

Genetic and biological structure of human populations; population dynamics and causes of diversity; analysis of genetically differentiated human populations and their geographic distribution. Prerequisite: 9 hours in anthropology or consent of instructor. Hoff.

Anth 323. Laboratory in Physical Anthropology I. 2 hours.

Optional laboratory for students enrolled in Anth 320, 321, or 322. Human and nonhuman primate osteology and osteometry; anthropometry; fundamentals of dissection and primate anatomy. Grant.

Anth 324. Laboratory in Physical Anthropology II. 2 hours.

Optional laboratory work for students enrolled in Anth 320, 321, or 322. Introduction to human biometry: selected techniques and analytical designs used to measure morphological, physiological, and biochemical parameters in human populations. Hoff.

Anth 326, 327, 328. Comparative World Ethnography. 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: upper-division standing. Young.

Anth 401. Research. Hours to be arranged.**Anth 403. Thesis.** Hours to be arranged.**Anth 405. Reading and Conference.** Hours to be arranged.***Anth 409. Supervised Tutoring Practicum.** 1-3 hours any term.**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. Sampson.

Anth 414. Race and Culture. (G) 3 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) 3 hours.

Methods of child rearing, education, and social control among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

Anth 416. History of Anthropology. (G) 3 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. Barnett, 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: 9 hours in anthropology or consent of instructor. McFee, Stern, Young.

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: 9 hours in anthropology or consent of instructor. Tonkinson.

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

* No-grade course.

West Africa; spring: the problems of modern Africa. Prerequisite: 9 hours in anthropology or consent of instructor. Dorjahn.

Anth 434, 435, 436. Peoples of the Near East. (G) 3 hours each term.

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: 9 hours in anthropology or consent of instructor.

Anth 437. Peoples of Interior Asia. (G) 3 hours.

Cultures of Interior Asia: paleo-Siberians, Mongols, Manchus, Kirghiz, Kazaks, and other peoples of Asiatic Russia. Prerequisite: 9 hours in anthropology or consent of instructor.

Anth 438, 439, 440. Peoples of Southern and Eastern Asia. (G) 3 hours each term.

Introduction to the cultures of India and Pakistan, China, and Southeast Asia; development of distinctive culture configurations; interrelationships of culture; impact of westernization; ethnic and linguistic factors. Fall: South Asia; winter: the Chinese culture sphere; spring: Southeast Asia. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.

Anth 441, 442, 443. Linguistics. (G) 3 hours each term.

Nature and forms of language; the relation of language and culture; linguistic structure and change. Sound patterning (phonetics and phonemics) and grammatical structuring (morphology and syntax). Techniques of linguistic recording and analysis, working with a native speaker. Prerequisite: senior standing; Anth 207, 208, 209 or two years of a foreign language; consent of instructor. Schmidt, Smith, Stern.

Anth 444. Religion and Magic of Primitives. (G) 3 hours.

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. McFee, Stern.

Anth 445. Folklore and Mythology of Primitives. (G) 3 hours.

Unwritten literature as an expression of the imaginative and creative thought of primitive people. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

Anth 446. Art Among Primitives. (G) 3 hours.

The artist and aesthetic expression among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, 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. Communication and Culture. (G) 3 hours each term.

How people interact through verbal and nonverbal signals, codes, messages, and networks; an integration of anthropology with information theory and social psychology. Prerequisite: 9 hours in anthropology or consent of instructor. Smith.

Anth 475. Primate Behavior. (G) 3 hours.

Ecology and ethology of free-ranging primates. Classification, distribution, and ecological relationships of the living primates; social structure and social organization of a variety of species. Materials are drawn primarily from field studies; secondarily from laboratory studies. Prerequisite: upper division standing or consent of instructor. Simonds.

Anth 476. Primate Anatomy. (G) 3 hours.

Comparative functional anatomy of the primates. Emphasis upon bone-muscle relationships of the locomotor and masticatory skeleton. Comparison of living and fossil primates, including man. Prerequisite: Anth 101 or consent of instructor. Grant.

Anth 477. Principles of Taxonomy. (G) 3 hours.

Historical development of taxonomy; methods and principles of evolutionary classification; numerical phenetics and taxonomic theory; primate and hominid classification. Prerequisite: Anth 320, Anth 321, Anth 502 or consent of instructor. Simonds.

Anth 478. Laboratory in Primate Anatomy. (G) 2 hours.

Optional laboratory for students enrolled in Anth 476. Primate osteology and myology; dissection of specimens; individual projects. 2 three-hour laboratory periods. Prerequisite: consent of instructor. Grant.

Anth 479. Paleoprimatology. (G) 3 hours.

The fossil record and theoretical implications of the Cenozoic primates with special reference to their various adaptations: locomotion, special senses, dentition. The evolution of hominid characteristics is traced as far as possible. Prerequisite: Anth 320 or consent of instructor. Grant, Simonds.

GRADUATE COURSES

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

Anth 502. Research Methods in Anthropology. Hours to be arranged.

Orientation of graduate students to basic research tools, particularly the explicit inductive methods of statistical and other types of formal analysis needed to formulate and conduct research. Three terms are required of majors in the first year of graduate study. Chaney.

***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 of Archaeology. Aikens, Dumond.

Anthropological Theory. Barnett, Chaney.

Field Methods in Ethnology. Barnett.

The Negro in the New World. Dorjahn.

Cross-Cultural Studies. Chaney.

Primate Behavior. Simonds.

Fossil Man. Simonds.

Evolution and Race. Simonds.

* No-graduate course.

Primitive Primates. Simonds.

Modern Mexico. Dumond.

Archaeology of the Circumpolar Region. Dumond.

Archaeology of Western North America. Aikens, Cole, Cressman, Dumond.

Old World Prehistory. Sampson.

Problems of Modern Africa. Dorjahn.

West African Ethnology. Dorjahn.

Reservation Indians. McFee.

Modern Latin America. Young.

*Anth 509. **Supervised Tutoring Practicum.** Hours to be arranged.

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 transition from food-gathering to food-producing economies, and from egalitarian to state-level societies. Prerequisite: graduate standing in the social sciences. Aikens.

Anth 514. **Primitive Social Organization.** 3 hours.

Primitive social organization, with particular reference to kinship and sodalities. Prerequisite: graduate standing in social science. Chaney.

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. **Speciation and Natural Selection.** 3 hours.

An in-depth analysis of the environmental and biological phenomena leading to the multiplication of species; the genetic basis of selection; examination of theoretical and mathematical explanations of evolutionary theory. Prerequisite: consent of instructor. Hoff.

Anth 521. **Functional Anatomy.** 3 hours.

Comparative functional studies of primates and other animals. Principles of animal mechanics. Students will be expected to engage in individual research projects. 2 three-hour laboratory periods. Prerequisite: Anth 476, or Bi 391, 392, or consent of instructor. Grant.

Anth 522. **Comparative Morphology and Human Evolution.** 3 hours.

Principles of comparative morphology and comparative morphology of the primates. Application to the study of the primate fossils implicated in the evolution of man. Prerequisite: consent of instructor. Grant.

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. Aikens, Dumond.

Anth 530, 531, 532. **Cultural Ecology.** 3 hours each term.

Interrelationships of environment, technology, and social organization. In second and third terms, preparation and comparative analysis of case reports. Dumond.

* No-grade course.

Art History

THE UNIVERSITY offers a comprehensive program of studies in the history of art through the Department of Art History in the School of Architecture and Allied Arts. All courses in the department are open to nonmajors.

Asian Studies

THE ASIAN STUDIES PROGRAM aims at providing the student with a basic understanding of the civilizations of Asia, particularly of China and Japan. The curriculum is administered by an interdisciplinary Asian studies committee.

The major in Asian studies leads to the Bachelor of Arts degree. The student is required to complete 45 term hours of work from the courses listed below to obtain a degree in Asian studies. This work must include courses in the history of China and Japan. In addition, the student is required to complete two years of study of either the Chinese or Japanese language.

Anthropology. Peoples of Southern and Eastern Asia (Anth 438, 439, 440).

Architecture. Special Studies: Japanese Architecture (Arch 401, 501).

Art History. History of Oriental Art (ArH 207, 208, 209); Seminar: Ming Painting (ArH 407, 507); Seminar: Ching Painting (ArH 407, 507); Seminar: Indian Art (ArH 407, 507); Seminar: Chinese Art (ArH 407, 507); Seminar: Himalayan Art (ArH 407, 507); Japanese Art (ArH 446, 447, 448); Chinese Art (ArH 461, 462, 463).

Community Service and Public Affairs. Seminar: Southeast Asia Development (CSPA 407); Seminar: Development of India (CSPA 407).

Economics. Economic Development (Ec 459).

Geography. Geography of Asia (Geog 203); Geography of East Asia (Geog 451); Geography of Southeast Asia (Geog 455).

History. Far East in Modern Times (Hst 391, 392, 393); Seminar: China (Hst 407); Colloquium: Ideology of Mao Tse-tung (Hst 408, 508); Seminar: Modern Sino-Japanese Relations (Hst 407); Colloquium: Feudalism in East Asia (Hst 408, 508); History of Japan (Hst 497, 498, 499); History of China (Hst 494, 495, 496); Seminar: East Asian History (Hst 507); Seminar: East Asian Historiography (Hst 507); Colloquium: Japanese History (Hst 508); Colloquium: Chinese History (Hst 508); Japanese Political Evolution Since 1912 (Hst 591).

Chinese. First-Year Chinese (OL 50, 51, 52); Second-Year Chinese (OL 101, 102, 103); Introduction to Chinese Literature (AL 307, 308, 309); Readings in Modern Chinese Literature (OL 321, 322, 323); Chinese Composition and Conversation (OL 330, 331, 332); Reading and Conference (OL 405); Proseminar in Chinese Literature (OL 409); Literary Chinese (OL 414, 415, 416); Advanced Readings in Modern Chinese Literature (OL 420, 421, 422); Tang Poetry (OL 423, 424, 425); The Chinese Classics (AL 430, 431, 432); Chinese Bibliography (OL 453).

Japanese. First-Year Japanese (OL 60, 61, 62); Second-Year Japanese (OL 104, 105, 106); Introduction to Japanese Literature (AL 301, 302, 303); Readings in Modern Japanese Literature (OL 324, 325, 326); Japanese Composition and Conversation (OL 327, 328, 329); Proseminar in Japanese Literature (OL 408); Literary Japanese (OL 411, 412, 413); Advanced Readings in Modern Japanese Literature (OL 417, 418, 419); Japanese Poetry (OL 433, 434, 435); Japanese Bibliography (OL 450).

Political Science. Southern Asia in Modern Times (PS 337); Southern Asia in Modern Times (PS 338); Government and Politics of the Far East: China (PS 460, 461); Seminar: Comparative Communist Systems (PS 507); Seminar: Comparative Community Politics (PS 507); Seminar: Comparative Labor Movements (PS 507).

Religious Studies. Religions of Mankind (R 302); Oriental Philosophies of Religion (R 430, 431, 432); Seminar: Religions of Japan (R 407).

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Study. The student may elect one of the following programs for the completion of the Master of Arts degree: (1) completion of a thesis; (2) writing two research papers; (3) passing a comprehensive examination, both written and oral. The candidate is required to demonstrate language competence equivalent to that expected after two years of college study of Chinese or Japanese.

Biology

Professors: S. S. TEPFER (co-chairman), GEORGE STREISINGER (co-chairman), A. J. BAJER,* R. W. CASTENHOLZ,† C. W. CLANCY, P. W. FRANK, PHILIP GRANT, GRAHAM HOYLE, JAMES KEZER, D. M. MAYNARD, EDITH MAYNARD, R. W. MORRIS, AARON NOVICK, EDWARD NOVITSKI, P. L. RISLEY, B. T. SCHEER, J. A. SHOTWELL, W. R. SISTROM,* A. L. SODERWALL, F. W. STAHL, D. E. WIMBER.

Associate Professors: H. T. BONNETT, S. A. COOK, JANE GRAY, B. H. MCCONAUGHEY, F. W. MUNZ, F. P. SIPE, (emeritus), J. A. WESTON.

Assistant Professors: D. E. BILDERBACK, G. C. CARROLL, J. C. FENTRESS, G. L. FOWLER, D. R. HAGUE, C. B. KIMMEL, J. R. MENNINGER, P. P. RUDY, R. C. TERWILLIGER.

Senior Instructors: RUDY DAM, H. M. HOWARD, G. J. MURPHY, ERIC SCHABTACH.

Instructors: C. L. GASS, CHARLENE HEIMBIGNER, H. P. WISNER.

Associates: JADWIGA M. BAJER, JEAN CRISEMAN, M. R. DANDO, G. H. DERSHAM, W. A. ENGSTROM, VICTOR FRIED, KIRSTEN GAUSING, CAROL GROSS, PATRICIA JOST, PHILIP KASHIN, STUART LAIKEN, JON LINDSAY, JOYCE OWEN, ELLIS RIDGWAY, MARY STAHL, PERRY STAHL, R. A. VOELKER, EVERT VOS.

Fellows: LUCILLE ADAMSON, SYLVIA BEHRENS, K. E. BROOKS, J. W. BUELL, WAYNE CHRISTENSEN, NAYLAND COLLIER, WILLIAM COPELAND, M. T. CRISTY, CAROLYN CROSS, J. D. CUBIT, ALICE DEWS, D. W. DEWS, R. E. ENNS, L. H. FIELD, JUDITH FRANCIS, A. S. GOLDBLATT, ROBERT HARRIS, J. M. HEGDE, JAMES HICKS, LAWRENCE HIPPLE, J. L. HORSTMANN, J. L. KINNEY, ERIC KOFORD, R. W. LANGFORD, P. E. LEON, ALISON LONGLEY, R. D. LONGLEY, NANCY LORR, M. C. MACLEOD, D. L. MACMILLAN, D. W. McDONALD, KEN McMILIN, PATRICIA McNEILL, J. W. B. MATES, JACK MEEKS, ANN MESSER, L. C. MEYERS, MICHAEL MUELLER, THOMAS NIESEN, LEONARD NISSENBAUM, SIGMUND NORR, L. R. NORTHRUP, T. A. PARKENING, A. W. PARKER, PORTIA PARRATT, R. F. PEAT, C. M. PETERSON, JOSEPHINE PICKFORD, BEVERLY PIERSON, L. H. PIKE, J. E. PINTAR, DAVID POLICANSKY, L. W. POWERS, G. H. ROSENKOETTER, W. L. ROTTMANN, JUDITH SCHER, ORVILLE SCOTT, GERALD SELZER, BETH SHERMAN, MARY ANN SMITH, WALTER SMITH, BEVERLY STOCKTON, DONALD STRONG, D. A. TEPFER, T. J. TOSNEY, R. S. TURNER, B. A. VITTOR, GAIL WARING, DENNIS WASBERG, WU-NAN WEN, SISTER PAULETTE WHEELER, R. L. WHITE, C. E. WICKSTROM, L. H. YAMAOKA, CAMILLA ZACK.

Assistants: EVAN BROSSARD, CAROL COGSWELL, M. R. CULBERTSON, XENIA CULBERTSON, ELIZABETH EHRLICH, PATRICIA GUSTAFSON, KARNA LEWIS, HARRIET

* On leave of absence 1970-71.

† On sabbatical leave 1970-71.

McCUNE, BETTY MOBERLY, M. W. MUMBACH, CHARLENE NADAKAVUKAREN, SALLY NICHOLS, ZDENKA POSPISIL, ANNE ROSENKOETTER, SUSAN SCHWARZ, JANE WACASTER, CHI Z. WANG, LEORA WARNER, PAMELA YOUNGDAHL.

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 students 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 major requirements in biology are: Cell Biology (Bi 301, 302, 303); Biology of Organisms (Bi 304, 305, 306); General Chemistry (Ch 104, 105, 106 or Ch 204, 205, 206); Analytical Laboratory (Ch 107, 108, 109 or Ch 207, 208, 209); mathematics through Mth 106 or Mth 200; General Physics (Ph 201, 202, 203); Organic Chemistry (Ch 331, 332); General Ecology (Bi 372); two additional terms of 400-level electives in biology. For certain students, specified 400-level courses in chemistry or psychology may be accepted in place of the required 400-level electives in biology. The two courses, Cell Biology (Bi 301, 302, 303) and Biology of Organisms (Bi 304, 305, 306), together with General Ecology (Bi 372), constitute a core curriculum in biology that conveys a body of information and thought essential to a student's understanding of modern biology regardless of his area of subsequent specialization. Students who intend to enter graduate work are urged to include calculus and two years of French, German, or Russian in their programs. The recommended program for biology majors, as well as for premedical and pre dental students, includes mathematics and General Chemistry in the freshman year, but not biology; Organic Chemistry and Bi 301, 302, 303 in the sophomore year; Bi 304, 305, 306 in the junior year, together with General Physics. Students with poor science backgrounds may take Bi 101, 102, 103 or Bi 104, 105, 106 in the freshman year, but these courses do not meet major requirements.

Premedical and pre dental students may complete major programs in biology at the same time that they are meeting admission requirements for the professional schools. Such students should make sure that their programs meet the requirements of the schools they plan to enter, as well as those of this department. Although Organic Chemistry Laboratory (Ch 337, 338) and Physics Laboratory (Ph 204, 205, 206) are not required for the biology major, they are required by most medical schools, including the University of Oregon Medical School. Students who plan to enter medical or dental school for their senior year may use courses in anatomy and physiology taken in professional school as substitutes for the two terms of electives.

Any course required for the biology major may be taken on a pass-undifferentiated basis, at the option of the student, within the limitation of the general University requirement of 90 pass-differentiated hours for the bachelor's degree. Students are advised to exercise the pass-undifferentiated option sparingly or not at all if they plan to attend medical school, dental school, or to take graduate work in biology.

Secondary-School Teaching of Biology. For certification as a teacher of biology in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in biology and the requirements for recommenda-

tion by the University of Oregon, the student should complete the major program outlined above. The mathematics and physics requirements will be liberalized for students who enter student teaching in the senior year; these students should complete Elementary Functions (Mth 105) 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 requirements for Special Secondary Methods (Ed 408). Evolution (Bi 426) is required for certification to teach in Oregon.

For further information, the student should consult the member of the biology faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Work. The department offers graduate work leading to the Doctor of Philosophy degree, and to the degrees of Master of Arts and Master of Science for students primarily interested in teaching careers in the high schools and junior colleges. The masters degrees are terminal in nature and are not normally taken before the Ph.D. degree. Candidates for higher degrees are expected to meet the equivalent of the University undergraduate major requirements before advancement to candidacy for the degree. Facilities are available for graduate study in most of the basic science areas of botany and zoology, including cytology, development, ecology, genetics, marine biology, microbiology, morphology, neurobiology, physiology (comparative, general, mammalian, and plant), and systematics. Interdisciplinary programs are offered in developmental biology, neurobiology, and molecular biology, involving the three departments of biology, chemistry, and psychology, as well as the Institute of Molecular Biology.

Institute of Marine Biology. The University operates the Oregon Institute of Marine Biology at Charleston on Coos Bay. The institute is located in a setting providing access to an unusual variety of richly populated marine and terrestrial habitats. 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 Institute of Molecular Biology. See INSTITUTE OF MOLECULAR BIOLOGY (page 127).

LOWER-DIVISION COURSES

Bi 101, 102, 103. General Biology. 4 hours each term.

Concepts in life science as a part of general education: the nature of biological inquiry; man in relation to his physical and biological environment; social and philosophical implications of biology. Lectures, laboratory, and discussion. Does not satisfy requirements for the major.

Bi 104, 105, 106. Biological Science (Honors College). 5 hours each term.

Selected studies of biological principles, with emphasis on methods of observation, comparison, analysis, experiment, and synthesis in biological science. Does not satisfy requirements for the major.

Bi 222. Genetics and Man. 3 hours.

Basic concepts of genetics, especially as they relate to man, and a discussion of related topics such as blood-group immunology, medical-legal problems, transplantation and the immune reaction, prenatal effects, genetic effects of radiation, the biology of twinning, selection in man, and sociological implications of genetic findings. Biology majors interested in this subject or students who have completed the sequence Bi 101, 102, 103 should enroll in the advanced course, Bi 424.

Bi 232. The Biology of Common and Useful Plants. 4 hours.

Survey of the origin, culture, and biology of the major groups of plants im-

portant to man; basic requirements for plant growth, principles of plant breeding and genetics, plant morphology, plant viruses, fungal diseases, herbicides and pesticides, weeds, alkaloids and drugs, soils and systems of agriculture; organic gardening, conservation of natural plant communities. 3 lectures, 1 laboratory or field trip. Intended for nonmajors; not recommended for biology majors.

Bi 272. Introduction to Ecology. 3 hours.

The energetics of organisms: the extent and efficiency of energy capture in human, plant and animal nutrition, the cycling of nutrient materials; ecological succession; species interrelations and the meaning of species diversity. Designed for nonmajors; not recommended for biology majors. Not open to students who have completed the sequence, Bi 101, 102, 103.

UPPER-DIVISION COURSES

Bi 301, 302, 303. Cell Biology. 3 or 5 hours each term.

A coherent account of what is known about the growth and replication of cells and of the chemical mechanisms underlying these processes: structure, mode of action, and duplication of genetic material; the ways in which cells obtain material and energy for growth; the relation of structure to function in a variety of types of cells. 3 lectures; 2 laboratory-discussion periods. Prerequisite: one year of general chemistry; organic chemistry and college mathematics, prerequisite or taken concurrently.

Bi 304, 305, 306. Biology of Organisms. 5 hours each term.

An integrated presentation of the biology of representatives of important animal and plant phyla, including comparative study of their morphology, anatomy, life history, physiology, and development. 3 lectures; 2 laboratory-discussion periods. Prerequisite: Bi 301, 302, 303 or consent of instructor.

Bi 321, 322. Human Physiology. 3 hours each term.

Required for majors in physical education, elective for others qualified. 2 lectures; 1 three-hour laboratory period. Prerequisite: one year of chemistry. Soderwall.

Bi 372. General Ecology. 4 hours.

A treatment of ecology at a relatively advanced level. Primarily for students majoring in biology or related areas.

Bi 376. Natural History of Oregon. 4 hours.

Plants and animals of Oregon; their identification and factors relating to their occurrence, distribution and abundance. Intended primarily for prospective elementary-school teachers planning to teach in Oregon. Murphy.

Bi 381, 382. Introduction to Bacteriology. 3 hours each term, fall and winter.

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.

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 or consent of instructor. 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.

*Bi 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

* No-grade course.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Bi 408. **Laboratory Projects.** (G) Hours to be arranged.

Special laboratory training in research methods.

Bi 414, 415. **General and Comparative Physiology.** (G) 4 hours each term.

First term: study of homeostatic mechanisms in the areas of ionic and osmotic regulation, excretion, circulation, respiration, metabolism, and body-temperature regulation. Second term: physiology of excitation, conduction, synaptic transmission, muscular contraction, sensory transduction, and reflex action in animals. 2 lectures, 6 hours of laboratory-discussion. Prerequisite: general physics, biology through Bi 305 or equivalent, and consent of instructor. Munz, Maynard.

Bi 423. **Genetics.** (G) 5 hours.

A lecture-laboratory course in general genetics at an advanced level. 3 lectures; 6-8 hours of laboratory. Prerequisite: one year of biology. 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 medical aspects of genetic disease. 3 lectures. Prerequisite: Bi 423 or equivalent and consent of instructor. Novitski.

Bi 426. **Evolution.** (G) 3 hours.

Theories of biological variation, race, and species formation. 3 lectures. Prerequisite: Bi 301, 302, 303 or equivalent; senior or graduate standing. Background in genetics essential. See also ANTHROPOLOGY.

Bi 428. **Cell Organelles.** (G) 3 hours.

Structure and function of the cell membrane, mitochondria and plastids, endoplasmic reticulum, the nucleus, lysosomes, Golgi bodies, microtubules and microfilaments, flagella, cilia, and centriole; review of techniques and tools used in ultrastructural studies. 2 lectures and conference. Bajer.

Bi 429. **Nuclear Cytology.** (G) 4 hours.

Structure and function of the nucleus and autonomously inherited cytoplasmic organelles. Behavior of chromosomes; elementary cytogenetics. Methods of study and experimental procedures. 2 lectures, 2 three-hour laboratory periods. Wimber.

Bi 432. **Mycology.** (G) 5 hours.

Structure, physiology, and classification of fungi. 3 lectures; 2 three-hour laboratory periods. Carroll.

Bi 433. **Algae.** (G) 5 hours.

Structure, cytology, life history, and ecology of representative fresh-water and marine algae. 3 lectures; 2 three-hour laboratory periods. Prerequisite: consent of instructor. Castenholz.

Bi 435. **Methods of Pollen Analysis.** (G) 3 hours spring term.

A lecture-laboratory course concerned with the morphology of pollen, techniques of collection and preparation of pollen for study, and methods of pollen analysis. 2 three-hour combined lecture and laboratory meetings each week. Offered alternate years. Gray.

Bi 436. **Cenozoic Paleobotany.** (G) 3 hours spring term.

Distribution and dispersal of angiosperms and gymnosperms from the Cretaceous to the present as deduced from the fossil record. Major emphasis on the Tertiary, with world-wide coverage, but with principal examples, where possible, drawn from the Pacific Northwest. Emphasis on biogeographical and paleoecological aspects. Offered alternate years. Gray.

Bi 438. **Systematic Botany.** (G) 5 hours.

Principles of plant classification; common plant families; collection and identification of Oregon plants.

Bi 440, 441, 442. Biology of Vascular Plants. (G) 5 hours each term.

Structure, development, function, and evolution of vascular plants. Fall: morphology, anatomy, and evolution of ferns, fern allies, and seed plants. Winter and spring: physiology, anatomy, and development of cells, tissues, and organs, including discussion of the mechanism of action and metabolism of plant growth substances, control mechanisms in growth and differentiation, water relations, ion uptake, and transport of organic molecules. 3 lectures, 2 three-hour laboratory periods. Bonnett, Hague, Tepfer.

Bi 450, 451, 452. Developmental Biology. (G) 3 hours each term.

A synthesis of current topics in the study of development, including growth, differentiation, and morphogenesis. Fall: an introduction intended for students with a background in genetics and cell biology, but who have not been exposed to the modern analysis of development. Intended only for students who have not completed Bi 304. Winter and spring: a more detailed study of selected topics, including nucleo-cytoplasmic interactions, organogenesis, cellular morphogenesis, pattern formation, cell differentiation and neoplasia. Prerequisite for Bi 451: Bi 450 or Bi 304 or their equivalent and consent of instructor. Grant, Kimmel, Weston.

Bi 453, 454. Developmental Biology Laboratory. (G) 2 hours each term.

Experience in the analysis of developing systems, with emphasis on cell and tissue culture methods in the study of differentiation, cellular interactions and morphogenesis. Discussion plus laboratory. Prerequisite: consent of instructor. Grant, Kimmel, Weston.

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: consent of instructor. Kezer.

Bi 456. Vertebrate Embryology. (G) 4 hours.

Germ cell development, fertilization, cell differentiation, morphogenesis and differentiation of organs and organ systems in vertebrate organisms. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Bi 305 or equivalent; consent of instructor. Risley.

Bi 461. Invertebrate Zoology. (G) 5 hours.

Survey of representative invertebrate groups, with emphasis on marine forms; morphology, systematics, life history, and ecology. Prerequisite: consent of instructor. McConnaughey.

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. Offered alternate years. McConnaughey.

Bi 471, 472, 473. Principles of Ecology. (G) 4 hours each term.

An integrated course for students specializing in population biology and related fields. Fall: introduction to the ecosystem, interrelations between organisms and physical environment, ecosystem energetics. Winter: population growth and structure; species interactions. Spring: community growth and structure, theories of diversity and stability. 3 lectures; field work. Prerequisite: consent of instructor. Cook, Frank.

Bi 475. Limnology. (G) 4 hours.

A study of aquatic environments, particularly those of lakes. Chemical, physical, and biological interactions in fresh-water ecosystems. 2 lectures; 2 laboratory-field periods. Prerequisite: consent of instructor. Offered alternate years. Castenholz, Frank.

Psy 475. Animal Behavior. (G) 3 hours.

For description, see page 251. May be taken for credit toward a biology major.

Bi 481, 482. Microbiology. (G) 3 hours winter, 5 hours spring.

Prerequisite: cell physiology or biochemistry or the equivalent preparation and consent of instructor. Sistrom.

Bi 487. Molecular Biology of Bacteriophage. (G) 3 hours.

Growth, mutation, recombination, and regulation of DNA, RNA, and protein synthesis in bacteriophage. 2 lectures and conference. Offered alternate years.

Bi 488. Molecular Biology of Bacteria. (G) 3 hours.

Genetics and regulation of DNA, RNA, and protein synthesis and the control of the synthesis of specific proteins in bacteria. 2 lectures and conference. Offered alternate years.

Bi 489. Membrane Structure and Function. (G) 3 hours.

Chemical composition and molecular structure of biological membranes; mechanisms of selective permeability and transport, studied with natural and artificial membranes. 2 lectures and conference.

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 palaeoecology. 2 lectures; 1 three-hour laboratory period. Prerequisite: senior standing in biology, geology, or anthropology. Shotwell.

Bi 494. Laboratory and Field Methods in Biology. (G) 4 hours, fall.

Designed primarily to meet the needs of biology teachers. Emphasis on sharpening the abilities of teachers to direct laboratory and field studies toward generating questions and answers concerning the functional relationships to be found in biological systems. Training in the collection, culturing, and utilization of field material in experimental and descriptive work in the biology teaching laboratory. Field trips are taken to explore the various kinds of habitats found in the Northwest. Students learn to design and create their own teaching tools, using photography, television, and other media. Gass.

Bi 495. History of Biological Ideas. (G) 3 hours.

Lectures, readings, and discussion of the historical origin and present status of leading biological ideas, and the contribution of biological thought to contemporary culture.

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.

Academic-Year Institute.

Animal Physiology.

Aspects of Aging.

Botany.

Cytology.

Developmental Biology.

Ecology.

Genetics.

Molecular Biology.

Plant Culture Techniques.

***Bi 509. Supervised Tutoring Practicum.** 1-3 hours any term.**Bi 510. Endocrinology Laboratory.** 1-3 hours.

Laboratory work relating to Bi 511, Bi 512, or Bi 513.

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.

* No-grade course.

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. Offered alternate years.

Bi 514. Environmental Physiology. 4 hours.

Measurement and discussion of physical parameters such as temperature, oxygen, salinity, pH, and light; their direct and indirect (regulatory) effect on physiological processes in animals. Adaptations of physiological mechanisms and their relation to survival examined by comparing the ionic regulation, circulation, respiration, metabolism, and photobiology of animals in different habitats. 2 lecture-discussion and 2 three-hour laboratory-field periods. Prerequisite: Bi 414, 415 or equivalent. Bradshaw, Morris, Rudy, staff.

Bi 516, 517. Neurobiological Basis of Behavior. 3 hours each term.

Physiology and morphology of neuromuscular systems of animals, with emphasis on comparative development and the evolution of animal behavior. Fentress, Hoyle, D. Maynard, E. Maynard.

Bi 518, 519. Neurobiology Laboratory. 3 hours each term.

Laboratory work to accompany Bi 516, 517, with emphasis on the electrical and anatomical techniques for study of nerve and muscle function. Hoyle, D. Maynard, E. Maynard.

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. 2 lectures. Prerequisite: consent of instructor. Novitski.

Bi 523, 524, 525. Principles of Microscopic Technique. 2-4 hours each term.

Procedures and techniques requisite for current microscopic research on biological materials. Fall: fixation, dehydration, infiltration, embedding, sectioning, and staining biological materials for examination with the light microscope. Winter: the light microscope on practical and theoretical levels, including brightfield optics and modifications allowing for dark field, interference, polarization, phase and differential contrast microscopy; principles and practices of scientific macrophotography, microphotography, and photomicrography. Spring: theory and application of techniques of electron microscopy, including fixation, embedding, microscope operation, negative and positive staining, metal shadowing, and freeze-etching.

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: consent of instructor. Clancy.

Bi 537, 538, 539. Advanced Systematic Botany. 3 hours each term.

Classification, distribution, and speciation of seed plants of the Pacific Northwest. Prerequisite: plant morphology and systematic botany. Not offered 1971-72.

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: consent of instructor.

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. 3 lectures. Offered alternate years. Castenholz.

Bi 551. Biology of Fishes. 4 hours.

The anatomy, development, and biology of fishes. Morris.

Bi 597, 598, 599. Advanced Biology. 3 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. Tepfer, Gass.

COURSES OFFERED ONLY IN SUMMER SESSION**Bi 407. Seminar: Biology and Survival.** 4 hours.**Bi 408. Workshop: Pre-Mortem for People.** (G) 6 hours.**Bi 417. Introduction to Mammalian Physiology.** (g) 4 hours.**Bi 439. Field Botany.** (G) 4 hours.***Bi 458. Marine Birds and Mammals.** (G) 4 hours.**Bi 459. Field Ornithology.** (G) 3 hours.***Bi 461, 462. Invertebrate Zoology.** (G) 4 hours each term.***Bi 465. Comparative Biochemistry.** (G) 8 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.**Bi 590. Recent Advances in Biology.** 4 hours.

Chemistry

Professors: VIRGIL BOEKELHEIDE (department head), J. E. BALDWIN, S. A. BERNHARD, L. J. DOLBY, EDWARD HERBERT,† L. H. KLEMM, R. M. MAZO, R. M. NOYES, W. L. PETICOLAS, F. J. REITHEL, J. A. SCHELLMAN, W. T. SIMPSON,‡ D. F. SWINEHART, P. H. VON HIPPEL, R. G. WOLFE.§

Associate Professors: G. G. GOLES, O. H. GRIFFITH, T. W. KOENIG.§

Assistant Professors: R. J. FIELD, J. F. W. KEANA, C. E. KLOPFENSTEIN, A. R. LARRABEE, M. R. PHILPOT.†

Senior Instructors: R. J. BARNHARD, GERRIT DEWILDE, J. S. POND.

Associates: S. D. ADAMSON, A. H. ANDRIST, G. B. BIRRELL, C. C. CONTAXIS, B. M. FANCONI, L. W. HAYES, G. A. HOWARD, JACQUELINE HEMMINGSON, P. C. JOST, AKINORI KUBO, NORA LAIDEN, J. L. LIPPERT, SUSAN ROTTSCHAEFER, F. C. SCHELLMAN, JIRI VANECEK, W. R. WOODWARD.

Fellows: M. AMINU, P. H. ANDERSON, G. D. ANDREWS, W. T. ANDREWS, W. C. BABCOCK, D. M. BALAKIER, M. T. BAUA, J. E. BERNARDIN, R. L. BEYER, J. S. BLAND, J. C. COLLINS, E. M. CUSTER, S. J. DEERY, J. S. DEVINNY, R. J. DINERSTEIN, S. F. DONOVAN, J. A. DUNCAN, R. B. DUVERNET, N. L. EBERHARDT, M. C. EDELSON, J. D. ENGEL, C. A. ENNS, S. C. ERFURTH, S. M. ESTVANIK, T. E. FARRIS, R. H. FLEMING, L. C. GOSULE, M. W. GRAYSTON, D. C. HARRIS, C. M. HAUG, G. W. HIBLER, H. J. HOFRICHTER, R. A. HOLLINS, J. A. BOOBLE, J. L. IVEY, W. R. JACKSON, D. E. JENSEN, A. E. JOHNSON, B. B. JOHNSON, D. S. JOHNSON, J. J. JWO, D. A. KAMP, C. M. KANESHIRO, M. S. KAPLAN, R. J. KENDALL, W. R. KESTER, E. J. KISER, R. E. KISER, J. R. KOSKINEN, M. L. LANDT, J. A. LAWSON, YOON-NI LEE, L. J. LIBERTINI, D. J.

* Offered at the Institute of Marine Biology.

† On leave of absence 1970-71.

‡ On sabbatical leave, fall and winter terms, 1970-71.

§ On sabbatical leave 1970-71.

LINDSTROM, L. F. LOWDEN, G. D. LYON, W. R. MABEY, R. E. MALONE, T. B. MARRIOTT, K. S. MARSHALL, MARILYN R. MARTIN, F. P. MASON, B. L. MC-KINNEY, R. E. MERRILL, S. J. NELSON, D. R. OLSON, J. M. OWENS, O. W. PFENNINGER, R. K. PINSCHMIDT, WILSON RADDING, RICHARD REICH, A. N. ROE, D. S. ROUSE, D. W. SCHLOSSER, P. J. SCHUBART, R. R. SCHUMAKER, P. G. SHERMAN, MITSUHIKA SHIMADA, D. L. SHORT, C. N. SKOLD, E. W. SMALL, L. A. SNYDER, S. G. STAFFORD, S. J. STAPLES, P. B. STEIN, P. N. STRONG, F. W. SUNDERMAN, P. J. TOOTHMAN, C. H. TSAI, M. E. TUTTLE, J. H. TWETO, WALTER WEN, PRAPON WILAIRAT, S. C. YEUNG, T. J. YU.

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 predental 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 department offers General Chemistry with accompanying laboratory (Ch 204, 205, 206 and Ch 207, Ch 208, Ch 209) for students intending to major in chemistry, students in the Honors College, and students in other sciences. Fall registration is open to Honors College students who have completed calculus or who are concurrently registering for calculus. Other students will be admitted by invitation only; selection is based on excellence of background in mathematics.

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 with Ch 107, Ch 108, Ch 109, followed in a subsequent year by Ch 324, or Ch 204, 205, 206 with Ch 207, Ch 208, Ch 209); a year sequence in mathematics (mathematics placement is determined by high-school records supplemented by College Board scores); 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); Calculus with Analytic Geometry (Mth 200, 201, 202), if not taken in the freshman year; German.

Junior Year. Physical Chemistry (Ch 441, 442, 443); Physical-Chemistry Laboratory (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), Principles of Chemical Thermodynamics (Ch 451), Principles of Statistical Mechanics (Ch 453), Principles of Quantum Chemistry (Ch 455), Principles of Chemical Kinetics (Ch 457), Advanced Organic Chemistry (Ch 531, 532, 533), Chemical Kinetics (Ch 541, 542, 543), Quantum Chemistry (Ch 545, 546), Statistical Thermodynamics (Ch 553, 554).

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 an average 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 receive 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.

Secondary-School Teaching in Chemistry. For certification as a teacher of chemistry in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in chemistry and the requirements for recommendation by the University of Oregon, the student is advised to take the following courses: General Chemistry (Ch 104, 105, 106); Introductory Chemistry Laboratory (Ch 107); Introductory Analytical Chemistry I (Ch 108); Introductory Analytical Chemistry II (Ch 109); Organic Chemistry (Ch 331, 332) and Introduction to Biochemistry (Ch 333), or Organic Chemistry (Ch 334, 335, 336); Introductory Organic Laboratory (Ch 337, 338); Quantitative Analysis (Ch 324). In addition, further work in Biochemistry (Ch 461, 462, 463) or Physical Chemistry (Ch 441, 442, 443) should be given serious consideration. These courses provide acquaintance with several fields of chemistry. The program does not satisfy the requirements for a bachelor's degree with a major in chemistry. Students intending to teach chemistry in secondary schools may meet the requirements for a bachelor's degree with a major in general science. Additional courses for secondary-school teachers are offered in the summer session.

Honors. See HONORS COLLEGE, pages 132 ff.

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 average \$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 geochemistry.

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. 3 lectures, 1 discussion period fall term; 2 lectures, 1 discussion period, 1 three-hour laboratory winter and spring.

Ch 104, 105, 106. **General Chemistry.** 3 hours each term.

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. 3 lectures. Prerequisite: Mth 95 or equivalent.

Ch 107. **Introductory Chemistry Laboratory.** 2 hours fall.

Experiments related to fundamental chemical principles. 1 lecture-discussion and 1 three-hour laboratory period. Must be taken concurrently with Ch 104 unless excused by laboratory instructor. Prerequisite: Mth 95 or equivalent.

Ch 108. **Introductory Analytical Chemistry I.** 2 hours winter.

Ch 109. **Introductory Analytical Chemistry II.** 2 hours spring.

The two terms' work in Ch 108 and Ch 109 covers the separation and identification of cations and anions by semi-micro methods and an introduction to volumetric analysis. Must be taken concurrently with the last two terms of Ch 104, 105, 106 unless this requirement is waived by the laboratory instructor. Prerequisite: Ch 107.

Ch 110, 111, 112. **General Chemistry Seminar.** 1 hour each term.

A study of relationships of chemistry to the concerns of liberal arts: interactions between chemical technology and science, relation of abstraction to empiricism in chemistry, and the economic and cultural consequences of chemical research. Designed for students not continuing in chemistry, but wishing to use Ch 104, 105, 106 to fulfill group requirement. May be substituted for Ch 107, 108, 109 for this purpose. Prerequisite: concurrent enrollment in Ch 104, 105, or 106.

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 to Honors College students and other well-prepared students. Selection is based chiefly on mathematics preparation. 3 lectures. Prerequisite: prior study of or concurrent registration in calculus.

Ch 207. **Semi-micro Inorganic Qualitative Analysis.** 3 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 prospective chemistry majors and Honors College students. Admission limited to selected students. 2 three-hour laboratory periods; 1 lecture period.

Ch 208. **Volumetric Analysis.** 3 hours winter.

The quantitative estimation of selected molecular species by titration procedures. Planned to accompany Ch 105 or Ch 205. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. 2 three-hour laboratory periods; 1 lecture period.

Ch 209. **Gravimetric Analysis.** 3 hours spring.

The separation and gravimetric determination of selected inorganic species. Planned to accompany Ch 106 or Ch 206. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. 2 three-hour laboratory periods; 1 lecture period.

UPPER-DIVISION COURSES

Ch 324. **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. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Ch 106 or Ch 206; Ch 109 or Ch 209.

Ch 331, 332. **Organic Chemistry.** 3 hours each term.

A study of the compounds of carbon, their structure, reactions and applications. Designed for biology majors, medical technicians, premedical and pre dental students. 3 lectures. Prerequisite: Ch 106 or Ch 206 with a grade of C or better.

Ch 333. Introduction to Biochemistry. 3 hours spring.

A study of the relationship between the covalent structure of proteins (enzymes) and nucleic acids, and their three-dimensional conformations and functions in biocatalysis and replication. 3 lectures. Prerequisite: Ch 332 or Ch 334.

Ch 334, 335, 336. Organic Chemistry. 3 hours each term.

A comprehensive study of the chemistry of the compounds of carbon. Required for chemistry majors; open to Honors College students and others desiring a more extensive coverage of organic chemistry. 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 three-hour laboratory period.

Ch 340, 341, 342. Organic Chemistry Laboratory. 3 hours each 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 by selection, and to others desiring a more intensive training in laboratory practice than is provided in Ch 337, 338. 1 lecture; 2 three-hour laboratory periods.

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 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 Chemistry Laboratory. (g) 3 hours each term.

Instrumental techniques of present-day research. An introduction to electronics and chemical instrumentation; experiments utilizing optical spectroscopy, nuclear magnetic resonance, high vacuum techniques, gas chromatography, computers, electron spin resonance, and other instrumental methods. Experiments include thermodynamic and kinetic measurements and individual research projects. Prerequisite: Ch 108; Ch 109 or Ch 208; Ch 209; Ch 441, 442, 443 (may be taken concurrently). Two 3-hour laboratory periods, one 1-hour discussion.

Ch 451. Principles of Chemical Thermodynamics. (G) 3 hours.

The laws of thermodynamics and their applications, including those to nonideal chemical systems. Prerequisite: Ch 441, 442, 443 or equivalent.

Ch 453. Principles of Statistical Mechanics. (G) 3 hours.

The molecular basis of thermodynamics. Applications to the calculations of the properties of noninteracting and weakly interacting systems. Prerequisite: Ch 441, 442, 443 or equivalent.

Ch 455. Principles of Quantum Chemistry. (G) 3 hours.

The principles of quantum mechanics and their application to problems of chemical interest, including time-dependent problems. Prerequisite: Ch 441, 442, 443 or equivalent.

Ch 457. Principles of Chemical Kinetics. (G) 3 hours.

Description and interpretation of the time evolution of chemical systems. Prerequisite: Ch 441, 442, 443 or equivalent.

Ch 461, 462, 463. Biochemistry. (G) 3 hours each term.

Emphasis on the structure and function of biological macromolecules, metabolism and metabolic control processes, protein and nucleic acid synthesis, and biological genetics. Prerequisite: Ch 104, 105, 106; Ch 331, 332, or their equivalents. Some prior exposure to calculus and physical chemistry helpful but not required.

Ch 464. Biochemistry Laboratory. (G) 4 hours winter.

Designed to illustrate approaches currently being used in research in enzyme kinetics, protein purification, protein structure, nucleic acid purification, nucleic acid structure, and in the study of protein synthesis in intact cells and cell-free systems. Two 4-hour laboratory periods and one to two hours of conference a week. Selected students may continue with projects in the spring term under Ch 409. Prerequisite: consent of instructor.

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, biochemistry, and molecular biology.

Ch 508. Special Topics in Physical Chemistry. 3 hours.

Topics of current interest reflecting research activities of the staff include:

Cosmochemistry. Goles.

Igneous Geochemistry. Goles.

Magnetic Resonance Spectroscopy. Griffith.

Nonequilibrium Thermodynamics and Statistical Mechanics. Mazo.

Diffusion-Controlled Reactions. Noyes.

Multiphoton Spectroscopy. Peticolas, Philpott.

Exciton Theory. Philpott, Simpson.

Theory of Optical Rotation. Schellman.

Theory of Unimolecular Reactions. Swinehart.

Ch 509. Special Topics in Organic Chemistry. 3 hours.

Topics include catalysis and surface chemistry, concerted cycloaddition reactions, free radical chemistry, heterocyclic chemistry, molecular calculations, molecular spectroscopy, natural products and alkaloid chemistry, and synthetic methods.

Ch 510. Special Topics in Biochemistry. 3 hours.

Topics of current interest are:

Enzyme Mechanisms. Bernhard, Wolfe.

Stability and Conformation of Macromolecules. Von Hippel.

* No-grade course.

Structure and Function of Nucleic Acids and Nucleic Acid-Protein Complexes. Von Hippel.

Lipid Metabolism. Larrabee.

Conformational Analysis of Macromolecules. Schellman.

Protein and Nucleic Acid Biosynthesis. Herbert.

Macromolecular Carbohydrates and Glycoproteins. Reithel.

Protein Subunit Equilibria and Self-Assembly Problems in Biological Structures. Reithel.

Biochemical Regulation in Higher Organisms. Herbert, Larrabee.

X-Ray Crystallography. Matthews.

Membrane Structure and Function.

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 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 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 553, 554. **Statistical Thermodynamics.** 3 hours each term, winter and spring.

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. Offered alternate years. Students may take Ph 451, 452, 453 when Ch 553, 554 are not offered.

Ch 562, 563. **Advanced Biochemistry.** 3 hours each term, winter and spring.

Enzyme kinetics and detailed consideration of glycolysis, biological oxidation, lipid metabolism, and selected biological synthesis.

Ch 564, 565. **Physical Biochemistry.** 3 hours each term, winter and spring, alternate years.

"The Physical Chemical Properties of Biological Macromolecules." Topics include the forces and interactions involved in establishing and maintaining macromolecular conformations, the physical bases of the spectroscopic, hydrodynamic, and rapid reaction techniques used in the investigation of these conformations. Prerequisite: calculus and a knowledge of the elements of thermodynamics. Offered alternate years.

COURSES OFFERED ONLY IN SUMMER SESSION

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.

Classics, and Chinese and Japanese

Professor: F. M. COMBELLACK (department head).*

Associate Professors: ANGELA J. PALANDRI,† C. B. PASCAL.

Assistant Professors: CHRISTOPHER BLACK, MICHAEL FISH, A. M. HANLEY, EDNA LANDROS (emeritus), J. R. MORITA, S. C. SHUCARD.

Instructors: YOKO McCLAIN, ICHIKO MORITA, J. L. REAVIS, IRA SCHNEIDERREIT.

Fellows: THERESA CHENG, JOSEPHINE D. LOVE, GAYLA McVEY, JOANNA ROOD, ALICE WITTENBORN.

* On sabbatical leave, winter and spring terms, 1970-71.

† On sabbatical leave 1970-71.

THE DEPARTMENT OF CLASSICS, AND CHINESE AND JAPANESE offers two distinct programs of study :

Classics. The aim of the program in classics is to equip students to deal directly with the civilizations of Greece and Rome by giving them the necessary command of Greek and Latin and providing a variety of courses covering the most important Greek and Latin poets, historians, orators, and philosophers. Courses in Greek and Roman history are offered by the Department of History and courses in ancient art and archaeology by the School of Architecture and Allied Arts.

Chinese and Japanese. The aim of the program in Chinese and Japanese is to enable a student to achieve proficiency in reading, writing, and speaking the language and to acquire a fundamental knowledge of the literature of the country.

The student considering a major in Chinese or Japanese is advised to decide on his major at the earliest possible stage of his university career so that he is able to satisfy the requirements in the usual four years of undergraduate study.

Major Requirements. Major requirements for the Bachelor of Arts degree are as follows :

Classics. 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 and should, if possible, also take some work in a modern language. Students planning to do graduate work in Classics are urged to take German.

Chinese. Thirty term hours of work in Chinese beyond the second-year sequence, including Chinese Bibliography (OL 453) and 6 term hours of Proseminar in Chinese Literature (OL 409). In addition, students are required to take Introduction to Chinese Literature (AL 307, 308, 309) and History of China (Hst 494, 495, 496). Students are also advised to take Japanese, English, or some other language and literature.

Japanese. Thirty term hours of work in Japanese beyond the second-year sequence, including Japanese Bibliography (OL 450) and 6 term hours of Proseminar in Japanese Literature (OL 408). In addition, students are required to take Introduction to Japanese Literature (AL 301, 302, 303) and History of Japan (Hst 497, 498, 499). Students are also advised to take Chinese, English, or some other language and literature.

Secondary-School Teaching of Latin. For certification as a teacher of Latin in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution in which the student completed his subject preparation.

Completion of 45 term hours of work in Latin satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon. Students planning to enter secondary-school teaching should consult the School of Education about requirements and specific recommended courses.

For permanent certification, after a fifth year of preparation, the student must complete an additional 15 term hours in linguistics, culture, and civilization. The following courses are recommended : AL 450, 451 ; Hst 411 ; Hst 412, 413.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Study. Graduate programs are offered in Classics leading to the degree of Master of Arts in (1) Greek, (2) Latin, and (3) Classics. In either (1) or (2) the student concentrates his graduate work in either Greek or Latin. In (3) the student takes graduate work in both Greek and Latin. Students

working toward a degree in either Greek or Latin will ordinarily be expected to take some work in the other language unless they have already done so. Students who have not already had a year course in ancient history will be expected to include ancient history in their graduate program. A thesis is not required for the Master of Arts degree in this department, but may be elected.

Greek

LOWER-DIVISION COURSES

CL 50, 51. **Beginning Greek.** 4 hours each term.

The fundamentals of the Attic Greek language. Shucard.

CL 52. **Introduction to Xenophon.** 4 hours.

Reading of the first four books of Xenophon's *Anabasis*. Shucard.

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. Combellaek, Pascal.

CL 103. **Introduction to Plato.** 4 hours.

Reading of the *Euthyphro*, *Crito*, and *Apology*. Combellaek, Pascal.

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 139. Combellaek, Reavis.

AL 321, 322, 323. **Classic Myths.** 1 hour each term.

For description, see page 140. Pascal, Reavis.

CL 321, 322. **Introduction to Homer.** 4 hours each term.

For description, see CL 101, 102. Not open to students who have completed that sequence. Combellaek.

CL 323. **Introduction to Plato.** 4 hours.

For description, see CL 103. Not open to students who have completed that course. Combellaek.

CL 324. **Euripides.** 3 hours.

Reading of *Alcestis* and *Electra*. Lectures on Greek stage antiquities. Combellaek.

CL 325. **Herodotus.** 3 hours.

Reading of selections from Herodotus' *History*. Study of the Ionic dialect. Combellaek.

CL 326. **Aristophanes.** 3 hours.

Reading of *The Frogs* and one or two other plays. Aristophanes as a literary critic. Lectures on Greek comedy. Combellaek.

CL 327. **Sophocles.** 3 hours.

Reading, in alternate years, of the Trojan and the Theban plays. Combellaek.

CL 328. **Demosthenes.** 3 hours.

Reading of the *De corona*. Lectures on the Attic orators. Combellaek.

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 the elegiac poets. Combellack.

GRADUATE COURSES***CL 503. Thesis.** Hours to be arranged.**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. Combellack.

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 employ-

* No-grade course.

ment 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 139. Combellack, Reavis.

- AL 321, 322, 323. **Classic Myths.** 1 hour each term.

For description, see page 140. Pascal, Reavis.

- 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 347, 348, 349. **Latin Composition.** 1 hour each term.

Survey of classical Latin syntax; extensive practice in prose composition. Designed for majors and prospective teachers. Pascal, Shucard.

- CL 361. **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 447, 448, 449. **Latin Prose Composition.** (G) 1 hour each term.

Composition of continuous Latin prose based on an intensive study of stylistic models from classical literature. Prerequisite: CL 347, 348, 349.

- 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.

- CL 464. **Horace's Satires and Epistles.** (G) 3 hours.

Reading of selections from the *Satires* and *Epistles*. Study of the Horatian technique of satire. Pascal.

- CL 465. **Ovid's Metamorphoses.** (G) 3 hours.

Reading of some of the major myths. Study of Ovid's storytelling technique. Pascal.

- CL 466. **Petronius' Cena Trimalchionis.** (G) 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, Shucard.

- CL 467. **Cicero's Philosophical Works.** (G) 3 hours.

Reading of the *Tusculan Disputations* and the *De officiis*. Cicero's role as an eclectic philosopher.

- CL 468. **Lucretius.** (G) 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.

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.

Chinese and Japanese

LOWER-DIVISION COURSES

- OL 50, 51, 52. **First-Year Chinese.** 5 hours each term.
An introduction to Mandarin: initial conversation, reading, and writing. Characters and spoken language presented concurrently throughout the year with emphasis on grammatical patterns.
- OL 60, 61, 62. **First-Year Japanese.** 5 hours each term.
An introduction to Japanese: elementary reading, writing, and conversation. Stress on grammatical patterns and the presentation of characters and the syllabary. McClain.
- OL 101, 102, 103. **Second-Year Chinese.** 5 hours each term.
The increased use of characters; designed to build fluency in reading, writing, and conversation.
- OL 104, 105, 106. **Second-Year Japanese.** 5 hours each term.
The increased use of characters and grammatical patterns; designed to build fluency in reading, writing, and conversation. I. Morita.

UPPER-DIVISION COURSES

- AL 301, 302, 303. **Introduction to Japanese Literature.** 3 hours each term.
For description, see page 139.
- AL 307, 308, 309. **Introduction to Chinese Literature.** 3 hours each term.
For description, see page 139. Palandri.
- OL 321, 322, 323. **Readings in Modern Chinese Literature.** 3 hours each term.
Study of contemporary Chinese literature to increase the reading ability of the student. Introduction to major writers. Palandri.
- OL 324, 325, 326. **Readings in Modern Japanese Literature.** 3 hours each term.
Study of contemporary Japanese literature to increase the reading ability of the student. Introduction to major writers. J. Morita.
- OL 327, 328, 329. **Japanese Composition and Conversation.** 2 hours each term.
Exercises in writing Japanese and in translating English into Japanese. Systematic review of grammar and development of conversational proficiency. Prerequisite: two years' study of Japanese or consent of instructor. McClain.
- OL 330, 331, 332. **Chinese Composition and Conversation.** 2 hours each term.
Exercises in writing Chinese and in translating English into Chinese. Systematic review of grammar and development of conversational proficiency. Prerequisite: two years' study of Chinese or consent of instructor.
- OL 405. **Reading and Conference.** Hours to be arranged.

* No-grade course.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- OL 408. **Proseminar in Japanese Literature.** (g) 2 hours.
Literary studies, with readings both in Japanese and in translation; independent research. Prerequisite: AL 301, 302, 303. J. Morita.
- OL 409. **Proseminar in Chinese Literature.** (g) 2 hours.
Independent literary studies, with readings both in Chinese and in translation. Prerequisite: AL 307, 308, 309.
- OL 411, 412, 413. **Literary Japanese.** (g) 3 hours each term.
Readings in various styles and genres of Japanese prose literature in pre-modern periods. A preparation for research. Offered alternate years. J. Morita.
- OL 414, 415, 416. **Literary Chinese.** (g) 3 hours each term.
Readings in various styles and genres of classical Chinese literature; stress on major works of different periods. A preparation for research. Offered alternate years. Hanley.
- OL 417, 418, 419. **Advanced Readings in Modern Japanese Literature.** (g) 3 hours each term.
Reading of prose works of representative modern authors, including Shoyo, Shimei, Ogai, Soseki, Akutagawa. Prerequisite: consent of instructor. McClain.
- OL 420, 421, 422. **Advanced Readings in Modern Chinese Literature.** (g) 3 hours each term.
Readings in the modern novel and short story. Emphasis on increasing the student's knowledge of the literature. Prerequisite: consent of instructor. Palandri.
- OL 423, 424, 425. **Tang Poetry.** (g) 3 hours each term.
Comprehensive study of Tang dynasty poetry: critical analysis and appreciation of works of major poets of the period including Li Po, Wang Wei, Tu Fu, Po Chu-yi, and Li Shang-yin. Prerequisite: consent of instructor. Offered alternate years. Hanley.
- AL 430, 431, 432. **The Chinese Classics.** (g) 3 hours each term.
For description, see page 141.
- OL 433, 434, 435. **Japanese Poetry.** (g) 3 hours each term.
Critical analysis and appreciation of Japanese poetry through readings of works in different forms and of different periods. Prerequisite: two years' study of language or consent of instructor. Offered alternate years. J. Morita.
- OL 450. **Japanese Bibliography.** (g) 2 hours.
Bibliography for Japanese studies: examination of basic reference works in both Western languages and Japanese and training in research methods. Prerequisite: two years' study of Japanese or consent of instructor. J. Morita.
- OL 453. **Chinese Bibliography.** (g) 2 hours.
Examination of reference works in Chinese studies, covering Western sinology and major sources in Chinese and training in research methods. Prerequisite: two years' study of Chinese or consent of instructor. Hanley, Fish.

Comparative Literature

THE UNIVERSITY OFFERS a program of graduate study in comparative literature, leading to the M.A. and Ph.D. degrees. The program is administered by a faculty committee drawn from the departments of English; Classics, and Chinese and Japanese; German and Russian; Romance Languages. Dr. Chandler B. Beall, professor of Romance languages, is chairman of the committee.

The student's program includes courses and seminars in comparative literature, and selected advanced offerings in Classical, English, German, Romance, or

Slavic literatures. Command of at least two foreign languages, ancient or modern, is required for admission.

Doctoral candidates must work in at least two literatures, one of which may be English, and must demonstrate ability to read books in two foreign languages.

COMPARATIVE LITERATURE, the official journal of the American Comparative Literature Association, is published quarterly by the University of Oregon.

Computer Science

Associate Professors: D. G. MOURSUND (department head), G. W. STRUBLE.

Assistant Professors: TERRY BEYER, CLARK BENSON.

Instructors: G. P. ASHBY, G. F. BEISSE, KATHLEEN M. BEYER, R. L. HEILMAN, C. L. RIMPLEY.*

Fellows: R. M. BRODERSEN, S. N. DUA, K. IWAHASHI, L. W. JACOBS, KARLA MARTIN, SHARON SALVETER.

COMPUTER SCIENCE courses are designed to provide applied and theoretical training in the use of computers. The introductory courses meet the needs of majors in a variety of fields. More advanced courses are offered for students seeking a career in the computer science field.

Major Programs. The Department of Computer Science offers the B.A. and B.S. degrees. Each program requires a minimum of 36 hours of work in computer science (of which at least 24 hours must be upper division), and an 18 hour upper-division minor in a field outside of computer science.

Graduate Work. The Department of Computer Science offers the M.A. and M.S. degrees. Several options are available within the framework of this 45-hour program. A special program is available for secondary-school teachers of science and mathematics. Preference for admission to the graduate program is given to students who have had previous training or experience in computing and who have demonstrated superior academic ability.

LOWER-DIVISION COURSES

CS 221. **Concepts of Computing.** 2 hours.

An introduction to the capabilities and limitations of computers, including a survey of current applications.

CS 233. **Introduction to Numerical Computation.** 4 hours.

Basic principles of computation; programming a computer using Fortran. Prerequisite: Mth 104 or equivalent.

CS 290. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES

CS 331. **Business Data Processing.** 4 hours.

Introduction to the COBOL language; fundamentals of business systems; RPG. Prerequisite: CS 233.

CS 403. **Thesis.** Hours to be arranged.

CS.405. **Reading and Conference.** Hours to be arranged.

* Deceased, Jan. 23, 1971.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

CS 407. **Seminar.** (g) Hours to be arranged.

CS 410. **Higher Level Computer Languages.** (g) Hours to be arranged.

Self-study of higher level computer languages such as SNOBOL, PL/I, LISP, SIMSCRIPT. Texts, manuals, machines, and consultant available; formal lectures few or nonexistent. Pass undifferentiated only. Prerequisite: CS 421 and CS 424 and consent of instructor.

CS 412. **Scientific Computation.** (g) 4 hours.

An introduction to computing with major emphasis upon Fortran and control of numerical errors. Not intended for students who have credit for CS 233. Prerequisite: One term of mathematics having a calculus sequence as prerequisite.

CS 421. **Fortran in an Operating Environment.** (g) 4 hours.

Capabilities and limitations of a complete Fortran IV system. Prerequisite: CS 233 or CS 412 or equivalent.

CS 423. **Programming Practicum.** (g) 4 hours.

Experience in the computer programming process. Emphasis on improving the quality of programs written. Program design, optimization, conventions, debugging, documentation; includes programming a sizeable project. Prerequisite: CS 421 and CS 424.

CS 424. **Assembly Language Programming.** (g) 4 hours.

Principles of programming in an assembly language; introduction to information processing techniques; laboratory work includes programming a variety of problems. Prerequisite: CS 233 or CS 412.

CS 425. **Assembly Language Programming.** (G) 4 hours:

A continuation of CS 424. Use of a macro language; data structures; advanced techniques for a variety of data processing problems. Prerequisite: CS 424.

CS 427, 428, 429. **Data Structures and Computer Systems.** (G) 4 hours each term.

Introduction to the relations which hold among the elements of data involved in problems, the structure of storage media and machines, the methods which are useful in representing structured data in storage, and the techniques for operating on data structures. Functional structure of computers and detailed structural analysis of operating systems. Properties and components of monitors, evolution of batch systems from sequential to multiprogramming, advances in generating systems as related to integrated hardware-software design and time sharing. Prerequisite for CS 427, CS 421 and CS 424; prerequisite for CS 428, CS 425 and CS 427; prerequisite for CS 429, CS 428.

CS 441. **Systems Programming.** (G) 4 hours.

Introduction to the structure of computer operating systems, input and output systems, and artificial translator systems. Prerequisite: CS 425.

CS 447. **Computer-Assisted Experimentation.** (g) 4 hours.

An introduction to the use of computers for data acquisition and experimental control. Prerequisite: CS 233 or CS 412 or equivalent.

CS 451. **Information Retrieval.** (G) 4 hours.

An introduction to the use of computers for storing, selecting and retrieving data. Physical storage devices, data base organization, safety and recovery, sorting and searching, privacy and security, commercial systems. Prerequisite: CS 421.

GRADUATE COURSES

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

* No-grade course.

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

CS 505. **Reading and Conference.** Hours to be arranged.

CS 507. **Seminar.** Hours to be arranged.

CS 521, 522. **Theory of Computation.** 4 hours each term.

Structure and behavior of infinite machines; formal languages and syntactic analysis; relationship between formal languages and machines; Turing machines, computability, and undecidability; computational complexity.

CS 524. **Structure of Programming Languages.** 4 hours.

Syntax and semantics of programming languages, run-time representations, and implications of the compilation process. Prerequisite: knowledge of assembly language and compiler language programming.

CS 544. **Compiler Construction.** 4 hours.

Techniques involved in the analysis of source language statements and the generation of object code. Some theory; emphasis on construction of compilers. Prerequisite: CS 425, CS 427, CS 524.

CS 571. **Artificial Intelligence.** 4 hours.

Definition of heuristic versus algorithmic methods, rationale of the heuristic approach. Basic ideas, goals of artificial intelligence. Heuristic programming techniques. Survey of representative application areas. Prerequisite: CS 427, or graduate standing and ability to program a computer, or consent of instructor.

Dentistry, Preparatory

THE COUNCIL ON DENTAL EDUCATION of the American Dental Association has established the following minimum requirements for admission to an accredited dental school: at least two years (90 term hours) of college education, including one year of English, general chemistry, biology and physics; one-half year of organic chemistry; a grade-point average of at least 2.00. Many dental schools require longer attendance in preprofessional education and a variety of additional required courses are prescribed by individual dental schools. The University of Oregon Dental School requires that predental students devote at least three years to their predental education, completing a minimum of 135 term hours of which 115 term hours, including all of the predental requirements, must be pass-differentiated. A "no pass" for all other courses will be counted as a failing grade in the computation of the overall grade-point average.

The University offers a three-year predental 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 predental 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 predental 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 91 ff.

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

* No-grade course.

recommend that their students qualify for this degree in addition to the professional degree.

Predental 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. Predental students should consult the Dental School Catalog or a predental adviser 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 95).....	12
General Chemistry (Ch 104, 105, 106).....	9
Introductory Chemistry Laboratory (Ch 107), Introductory Analytical Chemistry I (Ch 108), Introductory Analytical Chemistry II (Ch 109).....	6*
Organic Chemistry (Ch 331, 332), Introductory Organic Laboratory (Ch 337, 338)	10
General Biology (Bi 101, 102, 103) or Cell Biology (Bi 301, 302, 303).....	12-15
General Physics (Ph 201, 202, 203, Ph 204, 205, 206).....	15

Students seeking a major in biology should note that General Biology (Bi 101, 102, 103) does not meet the biology major requirement. Students intending to major in general science should take either of the following combinations for the biology segment of the program: (1) General Biology (Bi 101, 102, 103) and Cell Biology (Bi 301, 302, 303); (2) Cell Biology (Bi 301, 302, 303) and Biology of Organisms (Bi 304, 305, 306).

Dental schools recommend that the predental student, in addition to completing the basic requirements listed above, choose electives which will broaden his cultural background as well as strengthen his scientific training. Courses in the following fields are suggested: comparative anatomy, vertebrate embryology, microbiology, genetics, physical chemistry, mathematics, foreign language (completion of a second-year course), philosophy, public speaking, vocabulary for scientists, music and art appreciation, history, economics, sociology, psychology, literature, anthropology, and personnel management. Students are advised to explore their own interests and obtain the best possible general cultural education. The guidance of predental advisers in course planning is indispensable and their counsel should be sought at regular intervals.

Economics

Professors: M. A. GROVE (department head), G. O. BIERWAG, ROBERT CAMPBELL, CALVIN CRUMBAKER (emeritus), R. M. DAVIS, C. D. EDWARDS, J. H. GILBERT (emeritus), P. L. KLEINSORGE, H. T. KOPLIN, R. F. MIKESELL, V. P. MORRIS (emeritus), B. N. SIEGEL, P. B. SIMPSON, J. N. TATTERSALL,† M. D. WATTLES.

Associate Professors: H. N. GOLDSTEIN,‡ CHULSOON KHANG, R. E. SMITH,‡ W. E. WHITELAW.‡

Assistant Professors: P. A. LUNDT, T. B. WIENS.

Instructor: J. M. NEWTON.

Fellows: F. J. ABRAHAM, M. F. AYOTTE, D. C. BUNTING, G. C. BULLEN, R. V.

* Fulfills the "Quantitative Analysis" requirement of the University of Oregon Dental School.

† On sabbatical leave 1970-71.

‡ On leave of absence 1970-71.

CURTIS, T. N. HANIOTIS, J. A. HANSON, K. W. HOBEN, B. L. JACKSON, J. T. JADICK, I. J. KAYLIN, A. D. KELLEY, J. A. KOLB, J. L. MILLS, N. E. MUSSELL, F. J. POST, M. H. REDWINE, H. J. STORY, G. L. SUCHANEK, K. R. WAGNER.

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 give a substantial foundation in economics to 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:

(1) Intermediate Economic Analysis (Ec 375, 376, 377); (2) 27 term hours of work in courses in economics numbered 400 or above; (3) Introduction to Statistical Theory (Mth 441, 442), *or* Introduction to Econometrics (Ec 393, 394), *or* Econometrics (Ec 493).

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.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in economics must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in economics required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the economics faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

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 114 ff.

LOWER-DIVISION COURSES

Ec 201. **Introduction to Economic Analysis.** 3 hours.

A systematic introduction to the tools of economic analysis.

Ec 202, 203. **Special Topics in Economics.** 3 hours each term.

A selection of topics emphasizing special economic institutions and problems; applications of the tools developed in Ec 201. Prerequisite: Ec 201.

UPPER-DIVISION COURSES

Ec 321. **Money and Banking.** 3 hours fall.

Operations of commercial banks, the Federal Reserve System, and the Treasury that affect the United States monetary system.

Ec 322. Taxation and Fiscal Policy. 3 hours winter.

Principles and problems of government financing. Expenditures, revenues, debt, and financial administration.

Ec 323. 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.

Ec 375, 376, 377. Intermediate Economic Analysis. 3 hours each term.

First term: income and employment theory. Second term: theory of the consumer; theory of the firm; determination of prices in various kinds of markets. Third term: general equilibrium; welfare economics; collective choice and rules for evaluating economic policy. Prerequisite: Ec 201 or consent of instructor. Ec 375 and 376 may be taken out of sequence; Ec 376 must be taken before Ec 377.

Ec 393, 394. Introduction to Econometrics. 3 hours each term.

Survey of elementary econometric methodology and empirical work in econometrics. Covers empirical models of consumer expenditure, production, the income distribution, and aggregative behavior. Prerequisites: Ec 201 and the equivalent of college algebra, or consent of instructor.

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.

First term: nature and role of money; the commercial banking system; the Federal Reserve System; control of bank credit and the money supply; nature of liquidity; transaction velocity theories; Keynesian theories of economic fluctuations; national income accounting. Second term: business cycles in the United States; unemployment; the process of inflation; role of money supply in inflation; Phillips curves and relation of unemployment to inflation; economic models and forecasts; degrees of errors in forecasts; lags in effects of monetary policy. Third term: credit markets; relations of mortgage markets to construction; money flow studies; institutional lending policies; theories of interest; term structure of interest rates; role of interest in social investment policy; relation of interest rates to demand for cash balances. Prerequisites: Ec 201 for the first term; for the second and third terms, a knowledge of fundamentals of banking, central banks, and Keynesian economics.

Ec 414, 415, 416. Regional and Urban Economics. (G) 3 hours each term.

Economic analysis applied to regional and urban problems. Fall: regional analysis; location theory; interregional trade theory; regional growth; techniques of regional analysis. Winter: metropolitan growth and development; intra-metropolitan location of firms and households; problems of race and poverty; urban education; costs and benefits of urban public services. Spring: housing markets, urban renewal and federal housing policy; urban transportation; pollution and urban environmental quality; urban crime; normative models of the city. Prerequisite: Ec 201; Mth 104, 105, 106 or equivalent. Tattersall, Whitelaw.

Ec 417. Contemporary Economic Problems. (g) 3 hours fall.

Contemporary economic conditions and problems; analysis of economic policies and practices affecting such problems.

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. Public Finance. (G) 3 hours each term.

Fall and winter: the place of public finance in economic policy; rationale of the public sector; models of the optimal public budget; impact of the public budget on individual economic decisions; detailed consideration of the principles of taxation and expenditure; analysis and comparison of various forms of taxation; government enterprise. Spring: fiscal aspects of stabilization policy; impact of the public budget on the total levels of economic activity. Prerequisite: Ec 201. Must be taken in sequence.

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. White-law.

Ec 440, 441, 442. International Economics. (G) 3 hours each term.

First term: the nature and significance of the foreign exchange market; interaction between spot and forward markets; speculation and interest arbitrage; balance-of-payments accounting and alternative measures of payments deficits and surpluses; different ways to deal with a payments deficit. Second term: institutional arrangements to generate international liquidity; the role of the International Monetary Fund; special drawing rights; the pros and cons of flexible exchange rates; proposals to introduce moderated exchange-rate flexibility. Third term: the "pure" theory of international trade; determination of the direction of trade, international prices, and volume of goods traded; the effects of tariffs, quotas, customs unions, and common markets; the effects of free and restricted trade on economic welfare. Prerequisite: Ec 201.

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. 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. 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. 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. Smith.

Ec 454, 455, 456. Economic History of Modern Europe. (G) 3 hours each term.

The economic development and economic institutions of modern Europe. Fall: from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter: late eighteenth century to end of nineteenth century; spring: twentieth century. Lorwin.

Ec 457, 458, 459. Economic Development. (G) 3 hours each term.

First term: nature and goals of economic development; theory of economic development. Second term: inputs of economic development and the social and cultural environment. Third term: planning and policy problems of the less developed countries. Investment criteria are emphasized in this term. Prerequisite: Ec 201.

Ec 460, 461, 462. Industrial Organization and Public Policy. (G) 3 hours each term.

First term: business policies, market organization, methods of competition, and distributive relationships, with particular attention to large diversified industrial enterprises. Second term: the nature and application of the antitrust laws. Third term: unsolved problems in the relations of government to business; comparison of American and foreign policies. Either of first two terms may be taken separately—both are requisite for the third term. Edwards, Smith.

Ec 463. Economics of Regulated Industries. (G) 3 hours winter.

Analysis of economic characteristics of industries in which the decision-making process is regulated by government administration rather than by competition: a description and evaluation of administrative procedures employed. Industries covered include transportation and the production of electricity, natural gas, and crude oil. If taken together with Ec 460, 461, will be considered a part of a sequence. 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, Mth 104, 105, 106 or equivalent. Khang, Simpson.

Ec 470, 471, 472. History of Economic Thought. (G) 3 hours each term.

Man's changing conceptions of economic phenomena as a part of the history of ideas. Ec 470: various approaches to the study of the evolution of systematic thought; early economic ideas in the ancient and mediaeval world; mercantilism and the concept of an economic system. Ec 471: classical economics and the paradigm of the price system; Adam Smith, Malthus, Ricardo, Mill, and Marx, and their theories of economic development. Ec 472: the development of modern economics; emergence and evolution of the marginalist approach to microeconomic analysis; partial versus general equilibrium models; the institutionalist and Keynesian critiques of the neoclassical version of the price-system paradigm. Prerequisite: an elementary knowledge of economic concepts and relationships. Campbell, Davis.

Ec 480, 481, 482. Mathematical Economics. (G) 3 hours each term.

Ec 480: economic theory as formulated in mathematics; linear programming; positive and negative definite quadratic forms; necessary and sufficient conditions for maxima and minima of functions of n variables. Ec 481: comparative static problems; individual demand curves; Slutsky equation analysis of consumer demand; homogeneous functions; production functions; substitution of factors; general equilibrium. Ec 482: elementary growth models; turnpike theorems; stability analysis and equilibrium behavior under uncertainty with related mathematical topics of matrices, characteristic roots and differential equations. Prerequisite: Ec 201 and elementary calculus. Must be taken in sequence.

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. Simpson.

Ec 487, 488. American Economic History. (G) 5 hours each term.

First term: Pre-industrial America. Second term: the industrial and post-industrial economy. Particular attention to the influence of social and cultural forces on economic growth and development; considerable attention to the changing influence of public policy.

Ec 490, 491, 492. Development of Industrial Economies. (G) 3 hours each term.

First term: historical patterns of economic development in the major industrial nations since 1750; the United States and selected European and Asian countries. Second term: analysis of theories of economic development and of economic, social, and political factors contributing to development in the

light of historical experience; study of works involving application of quantitative techniques to historical problems. Third term: special topics in comparative and quantitative economic history to be announced in advance of the term; supervised writing of research papers. Each term may be taken as a discrete unit, though some work in economic history is desirable before taking Ec 492.

Ec 493, 494, 495. **Econometrics.** (G) 3 hours each term.

Study of regression problems in which autocorrelation, heteroskedasticity, multicollinearity, and lagged dependent variables obtain; special single-equation estimating techniques; the identification problem in simultaneous equation settings; development of simultaneous equation estimating procedures; the properties of these estimators; applications of these procedures to the problem of obtaining estimates of structural parameters in economic models containing many equations. Prerequisite: statistics, consent of instructor.

GRADUATE COURSES

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

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

Ec 505. **Reading and Conference.** Hours to be arranged.

Ec 507. **Seminar.** Hours to be arranged.

Capital Theory. Davis.

Econometrics. Bierwag, Khang.

Economic History. Tattersall.

General Equilibrium. Bierwag.

Growth and Dynamics. Koplin.

Industrial Organization and Control. Edwards, Smith.

History of Economic Thought. Campbell, Davis.

Labor Economics. Kleinsorge.

International Economics. Mikesell, Goldstein.

Macrostatics. Siegel.

Mathematical Economics. Simpson, Khang.

Money and Credit. Siegel.

Optimization Techniques. Khang.

Public Finance. Grove, Whitelaw.

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. Tattersall, Whitelaw.

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, 12 term hours in upper-division social science. Mikesell.

Ec 558, 559, 560. **Economic Analysis.** 3 hours each term.

Intensive examination of the basic principles of price and distribution theory and of income and employment analysis. Bierwag, Davis, Khang, Koplin.

English

Professors: ROLAND BARTEL (department head), S. B. GREENFIELD,† CLARK GRIF-FITH, W. J. HANDY, R. D. HORN (emeritus), A. R. KITZHABER,‡ W. F. MC-NEIR, E. G. MOLL (emeritus), CARLISLE MOORE, J. C. SHERWOOD, D. S.

* No-grade course.

† On leave of absence 1970-71.

‡ On sabbatical leave 1970-71.

TAYLOR, W. F. G. THACHER (emeritus), A. K. WEATHERHEAD, C. A. WEGELIN, GEORGE WICKES.

Associate Professors: R. C. ALBRECHT, R. C. BALL, W. E. CADBURY, ALICE H. ERNEST (emeritus), THELMA GREENFIELD,* J. A. HAISLIP, J. A. HYNES, G. A. LOVE, STODDARD MALARKEY (director of composition), S. R. MAVEETY, R. J. SALISBURY,† C. D. SLOAT, W. C. STRANGE, J. B. TOELKEN, O. M. WILLARD.

Assistant Professors: R. F. ALLEN, LUCILE ALY,‡ CONSTANCE BORDWELL,† J. L. BOREN, MARJORIE GOSS, GLORIA JOHNSON, E. D. KITTOE (emeritus), R. M. LYONS, M. G. PORTER, D. M. REGENOS, R. W. REID, G. W. ROCKETT, B. E. SABOL, IRMA SHERWOOD, HELEN SOEHREN, R. C. STEVENSON, NATHANIEL TEICH.

Senior Instructor: RUTH JACKSON.

Lecturers: SUSANN HANDY, ANNABEL KITZHABER, BARBARA NICHOLLS, JOAN H. PIERSON, HELEN ROCKETT, MARLISS STRANGE.

Fellows: MARIDEE ALLEN, J. E. AMASTAE, W. R. BATTY, J. W. BENNETT, J. R. BLACKABY, J. J. BREWER, J. J. BROSAMER, MARY COLEMAN, J. K. CRABBE, S. S. CRAWLEY, LINDA DANIELSON, C. R. DEEMER, MARY DEEMER, D. P. DEGROSS, J. P. DIONNE, M. G. DRUIAN, R. E. EMMONS, W. E. ERDMAN, J. D. FARLEY, D. M. FOLEY, MICHAEL FORESTER, R. D. FRASER, R. F. GARRATT, KAREN GRIMM, U. H. HARDT, SUSAN HUBBUCH, KAREN L. JAMES, MARY ANN JOHNSON, R. W. JOHNSON, M. P. KIEFFER, J. L. KURTZ, L. J. LAWTON, W. H. LEYDEN, C. P. LINDSAY, CAROLYN LOCHER, ELIZABETH MCMAHAN, MIRIAM MCVICKAR, BONNIE MELCHIOR, JEAN ODMARK,§ D. J. O'SHEA, J. G. PERRY, D. D. PETERSON, M. S. PIPER, ANN PRENGAMAN, PATRICIA PROBST, J. P. QUINN, J. C. RICE, M. J. ROBERTS, YVONNE ROBINSON, SHARON SANDERS, S. W. SCHOEN, ANN SCHERICH, G. E. SETTERA, R. C. SHEPARD, SUSAN SIMS, ANNE SMITH, J. M. SMITH, JACQUELINE SNYDER, JANE SOMMERS, W. E. SOMMERS, L. T. SPARKS, M. E. STARK, GERALDINE THOMPSON,|| VESTA TURNER, W. B. VOLLMER, NATALIE WANG, J. H. WHIPPLE, E. R. WIRKALA, ANNASTASIA WOLFF, KATHRYN WOOD, AGNES YAMADA.

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 the United States (Hst 201, 202, 203), History of Western Civilization (Hst 101, 102, 103), or History (Honors College) (Hst 107, 108, 109).
- (3) Introduction to Literature (Eng 104, 105, 106), World Literature (Eng 107, 108, 109), or Literature (Honors College) (AL 101, 102, 103), or Survey of English Literature (Eng 204, 205, 206); and Shakespeare (Eng 201, 202, 203).

* On sabbatical leave 1970-71.

† On leave of absence 1970-71.

‡ On sabbatical leave, spring term, 1970-71.

§ Resigned, Dec. 31, 1970.

|| Resigned, March 20, 1971.

(4) A total of 36 graded 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*).

Secondary-School Teaching of English. For certification as a teacher of English in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

Completion of the requirements for a major in English at the University satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon, provided that the student includes in his program English Composition for Teachers (Wr 411), Literary Analysis for Teachers (Eng 488), Modern English Grammar (Eng 492), work in American literature, and at least one term of speech. The Department of English will approve enrollment in student teaching only if the student's work in English courses is of high quality.

Nonmajors who plan to teach English must complete a total of 42 term hours in English and speech, including the courses listed above and work in world literature.

For permanent certification, after a fifth year of preparation, the student must take work in literary criticism, additional work in English language and grammar, and literature courses to remedy deficiencies in his undergraduate preparation. It is recommended that students complete the interdisciplinary master's program for teachers during the fifth year of preparation.

For further information, the student should consult the member of the English faculty who serves as adviser for prospective teachers.

Honors. See *HONORS COLLEGE*, pages 132 ff.

Graduate Work. The Department of English offers graduate work in English literature, American literature, and linguistics, leading to the Master of Arts, Doctor of Arts (no dissertation), 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, the Department of Classics, and Chinese and Japanese, the Department of German and Russian, and the Department of Romance Languages, offers opportunity for advanced study of several literatures in their original languages (see pages 169-170).

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.

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.

* No-grade course.

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. S. Greenfield, Griffith, staff.

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, Nicholls, H. Rockett, Teich, staff.

Eng 196. Special Problems. 2-3 hours.**Eng 201, 202, 203. Shakespeare.** 3 hours each term.

Study of the important plays—comedies, histories, and tragedies. Required for majors. T. Greenfield, Johnson, McNeir, Pierson, Reid, G. Rockett, I. Sherwood, W. Strange.

Eng 204, 205, 206. 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 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 present. I. Sherwood, staff.

Eng 253, 254, 255. Survey of American Literature. 3 hours each term.

American literature from its beginnings to the present day.

UPPER-DIVISION COURSES**Eng 300. Introduction to Literary Study.** 3 hours.

A study of the purposes and techniques of literary analysis and argument, including extrinsic and intrinsic approaches to criticism (historical, generic, formalistic, mythic, etc.) and the use of library resources. The term's work involves several written exercises reflecting different modes of investigation. Recommended for majors for the sophomore or early junior year.

Eng 301. Tragedy. 3 hours.

A study of the nature of tragedy and of tragic expression in various literary forms. G. Rockett, M. Strange.

Eng 302. Romance. 3 hours.

An introduction to critical theory of the genre; readings of narratives of adventure and quest, including works in the allegorical mode. Classical, mediaeval, and modern examples, with attention to romance elements in twentieth-century works.

Eng 303. Epic. 3 hours.

The heroic spirit in Western European literature, with emphasis on English literature. Allen, W. 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, M. Strange.

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. Horn.

Eng 310. Introduction to Black Literature. 3 hours.

A sampling of the major forms of African and Black American literatures and of relevant criticism.

Eng 321, 322, 323. **English Novel.** 3 hours each term.

From Richardson and Fielding to the present. Stevenson.

Eng 324. **American Satire.** 3 hours.

Satire in American literature; its nature, development, and significant contributions to the interpretation of American life. Love.

Eng 391, 392, 393. **American Novel.** 3 hours each term.

Development of the American novel from its beginnings to the present. Wickes.

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. S. Handy, Hynes, Moore, Sabol, Weatherhead, Wickes.

Eng 401. **Research.** Hours to be arranged.

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 409. **Workshop.** (g) Hours to be arranged.

*Eng 409. **Supervised Tutoring Practicum.** (G) 1-3 hours any term.

Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.

The development of English dramatic forms from the beginnings to Sheridan. G. Johnson.

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 417. **Introduction to Folklore and Mythology.** (G) 3 hours.

Comprehensive survey, with emphasis on genres of folk literature and their relevance to the study of literature in general. Toelken.

Eng 418. **Folklore and Mythology of the British Isles.** (G) 3 hours.

Study of motifs, symbols, themes, and genres (e.g., the ballad) that have been important in British folklore and have been drawn on in the written literature of major British authors. Toelken.

Eng 419. **American Folklore.** (G) 3 hours.

A study of native American folklore; its connections in American history and culture; its role in the development of the writings of selected American authors (e.g., Hawthorne, Melville). Toelken.

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. Boren, Toelken.

Eng 428. **Chaucer.** (G) 3 hours.

As much of Chaucer's work read as time permits. Allen, Boren, Malarkey, Toelken.

* No-grade course.

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. T. Greenfield, McNeir, Maveety.

Eng 434. **Spenser.** (G) 3 hours.

McNeir.

Eng 436. **Advanced Shakespeare.** (G) 3 hours.

Intensive study of selected plays. When offered in spring term or summer session, the course may concentrate on the plays to be presented in Ashland that summer. McNeir.

Eng 437, 438. **The Literature of the English Bible.** (G) 3 hours each term.

Study of the literary qualities of the English Bible, with some reference to its influence on English and American literature. Maveety.

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. Reid, G. Rockett.

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.

Eng 445. **Milton's Major Poems.** (G) 3 hours.

Paradise Lost, *Paradise Regained*, and *Samson Agonistes*. Maveety.

Eng 450, 451, 452. **Eighteenth-Century Literature.** (G) 3 hours each term.

Fall: Restoration; winter: primarily Swift and Pope; spring: primarily Johnson and circle. Works are studied in relation to specific literary traditions. I. Sherwood, J. Sherwood, Taylor.

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. W. Strange, Teich.

Eng 463, 464, 465. **The Victorian Poets.** (G) 3 hours each term.

Victorian poetry as a response to urbanization and the rise of industrial capitalism; emphasis on the major figures, in the light of modern critical theory. Fall: Tennyson; winter: Browning; spring: Arnold. Others: the Pre-Raphaelites, Swinburne, Meredith, Thomson, Fitzgerald, Clough, Patmore, Hopkins, Wilde, Kipling, etc. Cadbury.

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. Griffith.

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. Albrecht, W. Handy, Love, Wickes.

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. **Literary Analysis 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. Prerequisite: consent of instructor. Bartel.

Eng 491. History of the English Language. (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. Sloat, Willard.

Eng 492. Modern English Grammar. (g) 3 hours.

Comprehensive study of the grammar of modern English, for prospective teachers of English; examination of traditional, structural, and transformational theories. A. Kitzhaber, Sloat.

Eng 493. Advanced English Grammar. (g) 3 hours.

An examination of the theoretical bases of the traditionalist, structuralist, and transformationalist grammar. Prerequisite: Eng 492 or consent of the instructor. Sloat.

Eng 494. Narrative Fiction. (G) 3 hours.

The continuity and interrelationship of generic forms and thematic modes in particular works, both ancient and modern. Sabol.

Eng 495. Film as Literature [Term Subject]. (G) 3 hours any term.

Interpretation of films by means of the techniques of modern literary criticism. Typical offerings: surveys of film history; studies of particular types ("The Western"); close analyses of a few *auteurs* (recent offerings; "Antonioni and Fellini"; "Hitchcock, Hawks, and Godard"). May be repeated for credit. Cadbury.

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.** 5 hours each term.

Linguistic study; selected readings in prose and poetry, including entire *Beowulf*. Allen, S. Greenfield.

Eng 514, 515, 516. Old Icelandic. 5 hours each term.

Linguistics; selected readings in the sagas, skaldic poetry, and the *Elder Edda*. Allen.

Eng 517. Middle English. 5 hours.

The English language from the time of the Norman Conquest to the early modern period; dialectical differences. Toelken.

Eng 518. Chaucer's Troilus and Criseyde. 5 hours.

Detailed study of the poem, its sources, and its influence. S. Greenfield, Toelken.

Eng 519. The Pearl Poet. 5 hours.

Detailed study of *Pearl* and *Gawain*; collateral readings in dream visions and romances. Boren, Malarkey.

Eng 520, 521, 522. History and Structure of the English Language. 5 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. Sloat, Willard.

Eng 530, 531, 532. Shakespeare. 5 hours each term.

Fall: representative comedies of Shakespeare's early, middle, and late periods; winter: historical plays; spring: tragedies. T. Greenfield, McNeir.

* No-grade course.

Eng 535, 536, 537. **Tudor and Stuart Drama.** 5 hours each term.

Fall: beginnings through Marlowe; winter: Dekker through Jonson; spring: Webster through Ford. Shakespeare not included. T. Greenfield.

Eng 540. **Bibliography.** 3 hours fall.

Bibliography and the methods of literary research as an introduction to graduate work. Required for doctoral candidates in English. Taylor.

Eng 585. **Modern English Literary Criticism.** 5 hours.

British and American critical theory and practice, 1900 to the present. Forms a year sequence with AL 586, 587.

Eng 588, 589. **Modern Poetry.** 5 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.** 5 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 SESSION

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 improve their abilities to write clearly and effectively.

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 241, 242, 243. The department also offers a graduate program in creative writing, leading to the M.A. or M.F.A. degree.

English Composition (Wr 121, 323) is a "vertical" sequence of two courses in expository writing which must be taken in sequential order. The courses are required of all students graduating from the University. Wr 121 is to be taken by the student during his freshman year, and Wr 323 during the junior year. A student who demonstrates superior ability, through high scores on the SAT and/or subsequent examination, may be excused from all or part of the requirement. Students who receive a grade of A in Wr 121 may elect any 200- or 300-level writing course (except Honors Composition) in place of Wr 323.

Students whose placement examination indicates inadequate preparation may not register for English Composition until they either (1) pass Corrective English (Wr 10), offered through the Division of Continuing Education of the State System of Higher Education, or (2) improve their writing proficiency by private study and achieve a satisfactory score on a second English placement examination. Students failing to pass this second examination must then pass Corrective English (Wr 10) before they may register for English Composition.

LOWER-DIVISION COURSES

Wr 96. **English as a Second Language: Fundamentals of English.** 3 hours.
For description, see Wr 97. Bordwell.

Wr 97. **English as a Second Language: Directed Reading and Writing.** 3 hours.

A two-term sequence for underclassmen whose native language is not English. Basic and intermediate instruction in English listening, reading, and writing skills. Bordwell.

Wr 98. English as a Second Language: Critical Reading and Writing. 3 hours.

For description, see Wr 99. Bordwell.

Wr 99. English as a Second Language: Research Techniques. 3 hours.

A two-term sequence for upperclassmen and graduate students whose native language is not English. Advanced instruction in language and rhetorical skills. Bordwell.

Wr 120. Preparatory English Composition. 3 hours.

Fundamentals of expository prose, frequent written themes. Designed as a transitional course from high-school English to Wr 121 for students with special linguistic backgrounds. Malarkey, staff.

Wr 121. English Composition. 3 hours.

Fundamentals of expository prose; frequent written themes. Special attention to substance and structure in written discourse. Malarkey, staff.

Wr 222. English Composition. 3 hours.

Scholarly research techniques. One long research paper and several shorter, contributory papers. Prerequisite: Wr 121 and sophomore standing. Malarkey, staff.

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. 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 organization, form, and style of scientific, technical, and professional reports, articles, abstracts, summaries, memoranda, and correspondence. Kittoe.

Wr 230. Honors Composition. 3 hours.

The first term of English Composition for students in the Honors College. Soehren, staff.

Wr 231, 232. Composition Tutorial. 1 hour each term.

Tutorial instruction in English composition for students in the Honors College. Staff.

Wr 241, 242, 243. 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. Sabol.

UPPER-DIVISION COURSES

Wr 323. English Composition. 3 hours.

Advanced expository prose; frequent written themes. Special attention to the relationship between style and content in exposition. Prerequisite: Wr 121 and junior standing. Malarkey, staff.

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. Lyons, Regenos, Sabol.

Wr 328. Advanced Expository Writing. 3 hours.

Soehren.

Wr 331, 332, 333. **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. Regenos.

Wr 341, 342, 343. **Poetry Writing.** 3 hours each term.

Versé writing; study of various versé forms as media of expression. Analysis of class work. Prerequisite: consent of instructor. Haislip, Salisbury.

Wr 404. **Writing and Conference.** Hours to be arranged.

Wr 430, 431, 432. **Senior Creative Writing.** 3 hours each term.

An advanced sequence in short story, poetry, and playwriting for seniors. Prerequisite: consent of instructor and nine hours of creative writing at 300 or 400 level. Haislip, Lyons, Salisbury.

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. Haislip, Salisbury.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

*Wr 409. **Supervised Tutoring Practicum.** (G) 1-3 hours.

Wr 411. **English Composition for Teachers.** (g) 3 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, A. R. Kitzhaber.

Wr 420, 421, 422. **Novel Writing.** (G) 3 hours each terms.

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. Lyons.

Eng 494. **Narrative Fiction.** (G) 3 hours.

For description, see page 184.

GRADUATE COURSES

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

Wr 504. **Writing and Conference.** Hours to be arranged.

Rht 514. **Eighteenth-Century Rhetorical Theory.** 3 hours.

For description, see page 278.

Wr 530, 531, 532. **Graduate Creative Writing.** 3 hours each term.

A graduate level sequence for M.A. and M.F.A. candidates interested in forms other than the novel: short story, poetry, playwriting. Prerequisites: admission to the M.A. or the M.F.A. program in creative writing and consent of the instructor. Haislip, Lyons, Regenos, Salisbury.

Th 551, 552, 553. **Theory of Dramatic Production.** 3 hours each term.

For description, see page 286.

Th 564, 565. **History of the Theater.** 5 hours each term.

For description, see page 287.

COURSE OFFERED ONLY IN EXTENSION

Wr 10. **Corrective English.** No credit.

* No-grade course.

General Arts and Letters

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. Two programs are offered: one emphasizes the general study of literature in Western culture, unrestricted to a single language, and provides a suitable preparation for graduate study in comparative literature; the second emphasizes general studies in the humanities, building its course program around the interrelations of literature with the other creative arts and philosophy.

The curriculum is administered by a committee, the chairman of which is the adviser of majors in general arts and letters.

The major in general arts and letters leads to the Bachelor of Arts degree. The following course requirements for the major include the several variations between the general literature and the humanities programs. (1) An introductory literature course: World Literature (Eng 107, 108, 109) or Introduction to Literature (Eng 104, 105, 106) or Survey of English Literature (Eng 204, 205, 206) or any survey of literature in a foreign language. (2) Foreign language: (a) humanities: at least one year of work beyond the first-year college level; (b) general literature: three terms of upper-division literature courses in a foreign language. (3) (a) Humanities: 9 term hours in art or music history, or general humanities courses; (b) general literature: 9 term hours as in (3) (a) or in other literature courses. (4) 15 term hours in history or philosophy courses. (5) 18 term hours from the following: Literature of the Ancient World (AL 304, 305, 306); Dante and His Times (AL 477, 478, 479); arts and letters courses in Russian, French, German, Scandinavian, Spanish, Brazilian, Chinese, Japanese, or other literature. (6) (a) Humanities: a total of 21 additional hours in upper-division courses in literature, philosophy, the history of art or music, including one term of the special literature seminars designed for the major (AL 407); (b) general literature: a total of 21 additional hours in literature, including one term of a special literature seminar for the major.

Honors. See HONORS COLLEGE, pages 132 ff.

General Science

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 predental 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: (1) four one-year sequences, one in each of four sciences, selected from Bi 101, 102, 103, or Bi 104, 105, 106 (three terms chosen from Bi 301, 302, 303 with laboratory and Bi 304, 305, 306 may be substituted), Ch 104, 105, 106 or Ch 204, 205, 206 with laboratory, Geol 101, 102, 103 with laboratory or Geol 201, 202, 203, mathematics courses numbered 104-115 and 190-215, and Ph 201, 202, 203 with laboratory; (2) a minimum of 30 additional upper-division hours in the sciences in which one-year sequences have been taken, including not less than 9 term hours in each of two sciences. Upper-division computer science hours may be substituted for upper-division mathematics hours. The four one-year sequences and the 30 upper-division hours must be taken on a pass-differentiated basis.

For interdepartmental courses in general science, see page 141.

Honors. See HONORS COLLEGE, pages 132 ff.

Secondary-School Teaching of General Science. For certification as a teacher of general science in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

The University's major program in general science satisfies these requirements only if the four one-year sequences include one each in general biology, general chemistry, and general physics. For further information, the student should consult the adviser of general science majors.

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 at least 9 hours in four of the following fields: anthropology, economics, geography, history, philosophy, political science, psychology, religion, sociology, general social science. Thirty-six hours of the work must be upper-division (300 and 400 level). The student may take 18 of the 72 hours on a pass-no pass basis.

For interdepartmental courses in general social science, see page 142.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in general social science must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) 36 term hours of work in one field; (2) 18 term hours in a second field (including 9 upper-division hours); (3) 9 term hours in each of two additional fields; (4) at least one course in a fifth field. History must be taken as either the 36-hour or 18-hour field.

For further information, the student should consult the adviser of general social science majors.

Honors. See HONORS COLLEGE, pages 132 ff.

Geography

Professors: G. E. MARTIN (department head), S. N. DICKEN, C. L. JOHANNESSEN, C. P. PATTON, E. T. PRICE, G. E. RECKORD.

Associate Professors: E. G. SMITH, A. W. URQUHART.

Assistant Professors: C. C. IRBY, W. G. LOY, C. L. SALTER.

Instructor: G. H. SEARL.

Fellows: E. B. BENTLEY, D. R. BROWNRIE, W. T. DACODAG, G. D. DIXON, M. F. DORAN, E. W. R. ENGELMANN, L. A. FERRATÉ, R. D. FUSCH, A. A. GALLUP, P. C. JOHNSON, G. A. KLEE, J. S. LEEPER, S. L. ROTH, T. E. TETZLAFF, J. C. TOWLE, R. D. WHITE.

THE DEPARTMENT OF GEOGRAPHY serves: (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, biogeography, and geomorphology; (3) regional geography; and (4) techniques and methodology, including cartography, the interpretation of aerial photographs, and field geography.

Major Curriculum in Geography. A total of 45 term hours in geography courses, including 36 hours in upper-division courses, is required for a major in geography. It is recommended that the student emphasize one of the following in his program: (1) urban studies, (2) physical geography, (3) cultural geography, (4) cartography, (5) Latin American studies, (6) preparation for public-school teaching. In consultation with his adviser he should plan a program appropriate to his emphasis, choosing from such fields as anthropology, biology, economics, geology, history, planning, political science, and sociology. Whatever the emphasis, the program should also include some work in each of the major areas of geographic instruction: physical geography, cultural geography, regional geography, and geographic methods.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in geography must complete a program selected from the fields of American, European, or world history, political science, economics, and sociology or anthropology. The program must include 36 term hours in approved geography courses, 18 term hours in a second social science, and courses in the fields mentioned above.

For further information, the student should consult the member of the geography faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Study. The department offers graduate work leading to the M.A. and Ph.D. degrees. It also supervises those students wishing to obtain an interdisciplinary master's degree with a major emphasis in geography. This degree requires 36 hours of course work in geography and 9-15 hours in education. 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. For general requirements for graduate degrees, see pages 119 ff. Further information on graduate programs can be obtained from the department of geography.

LOWER-DIVISION COURSES

Geog 101. **The Natural Environment.** 3 hours.

An introductory physical geography of the earth with special emphasis on vegetation, landforms, climate, and soils.

Geog 103. Landscape, Environment, and Culture. 3 hours.

An introductory cultural geography that focuses on the characteristics of landscape, the alteration of the environment, and the ways in which various cultural groups use, evaluate, and modify the landscapes and environments they occupy.

Geog 105. Urban Environment. 3 hours.

An introduction to the concepts of geography and techniques of geographic analysis through the examination of urban locations and patterns.

Geog 201. Geography of Europe. 3 hours.

An introduction to geography through the study of the physical and cultural processes that have shaped the rural and urban landscapes of Europe.

Geog 202. Geography of Latin America. 3 hours.

An introductory geography focusing on the ways in which major cultural groups have modified the environments of Latin America throughout history.

Geog 203. Geography of Asia. 3 hours.

An introduction to the major physical and cultural realms of Asia, excluding Soviet Asia.

Geog 204. Geography of the Soviet Union. 3 hours.

Natural regions, major population groups and the economic development of the U.S.S.R.

Geog 205. Geography of Africa. 3 hours.

Systematic physical and cultural geography of Africa.

Geog 280. Reading and Interpretation of Maps. 3 hours.

Introduction to the interpretation of physical and cultural features on maps. Critical analysis of cartographic styles employed by atlas and map makers.

UPPER-DIVISION COURSES**Geog 301. Geography of Oregon. 3 hours.**

The nature of Oregon: its natural and human resources, changing patterns of settlement, urbanization and economic development, and problems of environmental use. Martin.

Geog 302. Eastern North America. 3 hours.

Growth of major regions from Atlantic colonies. Agriculture, industry, population, and metropolitan centers. Price.

Geog 303. The American West. 3 hours.

Areas of attraction and aversion. Forest, grass, minerals, soil, water, climate, scenery, desert, and wilderness. Price.

Geog 401. Research. Hours to be arranged.**Geog 405. Reading and Conference. Hours to be arranged.****Geog 407. Seminar. Hours to be arranged.**

Aerial Geography. Loy.
Mathematics in Geography. Patton.
Undergraduate Major Seminar. Martin.
Eugene-Springfield Metropolitan Area.
Geography as a Profession. Reckord.
Urban Ecology. Irby.

Geog 409. Supervised Tutoring Practicum. 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 observation and recording of features of the land-

* No-grade course.

scape, air photo interpretation, mapping, landforms and vegetation analysis. Second term: urban field analysis, research design. Third term: individual project; data gathering and analysis, report writing. Prerequisite: 9 hours of geography.

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.

Geographic patterns of economic activity and processes influencing the organization of economic space. Prerequisite: 6 hours in lower-division geography courses or consent of the instructor.

Geog 435, 436. Urban Geography. (G) 3 hours each term.

Urbanization throughout the world; the structure of urban settlements; cities as regional centers, physical places, and homes for people; geographic problems in major urban environments. Prerequisite: 6 hours in lower-division geography courses or consent of instructor. Smith.

Geog 451. Geography of East Asia. (G) 3 hours.

The geography of China, Japan, Korea, Taiwan, and Hong Kong. A focus on the cultural and physical processes that have created the distinctive East Asian cultural landscape. Prerequisite: 6 hours of lower-division geography or consent of instructor.

Geog 453. Cultural Geography of Africa. (G) 3 hours.

Study of African cultural landscape. Prerequisite: 6 hours of lower-division geography or consent of instructor. Urquhart.

Geog 455. Geography of Southeast Asia. (G) 3 hours.

The geography of peninsular and insular Southeast Asia. A focus on the cultural and physical processes which have created the distinctive Southeast Asian cultural landscape. Prerequisite: 6 hours of lower-division geography or consent of instructor.

Geog 461. The South American Tropics. (G) 3 hours.

The Andes and the Amazon: an analysis of tropical highland and tropical lowland environments in terms of their settlement history, present use, and future potential. Prerequisite: Geog 101, Geog 202, or consent of instructor. Martin.

Geog 462. Southern South America. (G) 3 hours.

Settlement geography of Chile and Argentina. Emphasis on agricultural systems, resource utilization, population characteristics, patterns of settlement, industrialization, and urbanization. Prerequisite: Geog 101, Geog 202 or consent of instructor. Martin.

Geog 463. Geography of Middle America. (G) 3 hours.

Physical and historical cultural processes that have shaped the landscapes of Mexico, Central America, and the Caribbean Islands. Prerequisite: 6 hours of lower-division geography or consent of instructor. Johannessen.

Geog 471. Geography of Western Europe. (G) 3 hours.

Natural environments, cultural groups, and distinctive regional landscapes of western Europe. Prerequisite: Geog 101, Geog 201 or consent of instructor. Patton.

Geog 472. Mediterranean Landscapes. (G) 3 hours.

The Mediterranean environments. Imprint of culture groups on the landscape. Geographic problems of the area. Prerequisite: 6 hours of lower-division geography or consent of instructor. Loy.

Geog 481. Geomorphology. (G) 3 hours.

Systematic study of the land-forming processes in the physical landscape with emphasis on fluvial processes. Maps and air photos as primary tools of geo-

morphic investigation. Prerequisite: Geology 101, 102, or Geology 201, 202, or consent of instructor. Loy.

Geog 482. Climatology. (G) 3 hours.

Elements of climate: the heat and water balance at the surface of the earth, atmospheric processes that affect climate, factors of climatic change. Prerequisite: 6 hours of lower-division geography or consent of instructor. Patton.

Geog 484. Aerial Photo Interpretation and Remote Sensing. (G) 3 hours.

Introduction to the use of aerial photographs and other forms of imagery. Prerequisite: 9 hours of geography. Loy.

Geog 485, 486. Cartography. (G) 3 hours each term.

Introduction to map design and construction. First term: elementary map construction, map design, and map projections. Second term: advanced map construction, preparation of graphs and diagrams, and a final individual project. Prerequisite: 9 hours of geography. Loy.

Geog 487. World Regional Climatology. (G) 3 hours.

Problems in climatic classification. Description and explanation of the distribution of climates on the surface of the earth. Prerequisite: Geog 482 or consent of instructor. Patton.

Geog 488, 489. Biogeography. (G) 3 hours each term.

Relation of plants and animals to the environment; distribution of individual species; historical changes in plant distribution; aerial photo interpretation and mapping of vegetation; domestication of plants and animals. Johannessen.

Geog 491, 492, 493. Cultural Geography. (G) 3 hours each term.

The cultural landscape; origin and spread of ways of living; treatment of culture by geographers. Prerequisite: 9 hours of geography. Urquhart, Price.

GRADUATE COURSES

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

*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.

Quantitative Methods in Geography. Patton.

Linguistic Geography of Europe. Patton.

Plant and Animal Domestication. Johannessen.

Pre-Columbian Transoceanic Diffusion. Johannessen.

The Latin American City. Martin.

The West African City. Urquhart.

The North American City. Smith.

Landscape and Environment. Urquhart.

Oregon Environment and Settlement. Martin.

Rural Settlement. Price.

Historical Geography of North America. Price.

Land Use. Smith.

Fluvial Processes. Loy.

Glacial Geomorphology. Loy.

Coastal Geomorphology. Loy.

Terrain Representation. Loy.

Geographic Education. Searl.

Geog 509. **Supervised Tutoring Practicum.** 1-3 hours any term.

Geog 555. **History of Geographic Thought.** 3 hours.

Development of concepts of the earth and of man's relation to it; ends and means of geographic study.

* No-grade course.

Geology

Professors: A. R. MCBIRNEY (department head), E. M. BALDWIN, W. T. HOLSER, L. W. STAPLES.

Associate Professors: H. R. BLANK, JR., SAM BOGGS, JR., G. G. GOLES, M. A. KAYS, E. H. LUND, N. M. SAVAGE, D. F. WEILL.

Assistant Professors: W. N. ORR, C. H. THORMAN.

Associates: A. R. DUNCAN, RICHARD GRIEVE, JAROSLAV LEXA, TSUTOMU MURASE, MASUMI OSAWA, HARVE WAFF, HOWEL WILLIAMS.

Research Assistant: R. F. FREEMAN.

Fellows: ROBERT BEYER, BRUCE BROWN, MORRIS BROWN, MICHAEL DRAKE, ALAN EDWARDS, GINNY GROVE, LYLE HENAGE, CHONG KIM, DAVID LINDSTROM, FRED LISSNER, GORDON MCKAY, GREG MILES, THOMAS MOKLESTAD, R. R. OLSEN, FRANK RADKE, J. M. SINTON, HARRY SMITH, TERRY STEINBORN, FRED SWANSON, PAUL TRAVIS.

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 201, 202, 203); Calculus with Analytic Geometry (Mth 200, 201, 202, 203) or Analytic Geometry and Calculus (Mth 204, 205, 206); General Chemistry (Ch 104, 105, 106); Introductory Chemistry Laboratory (Ch 107); Introductory Analytical Chemistry I and II (Ch 108 and Ch 109); General Physics and General Physics Laboratory (Ph 201, 202, 203; Ph 204, 205, 206); Scientific and Technical Writing (Wr 227).

Upper Division. Mineralogy (Geol 325, 326, 327); Structural Geology (Geol 391); Principles of Stratigraphy and Sedimentation (Geol 392); Field Geology (Geol 406); Seminar (Geol 407), one term; Economic Mineral Deposits (Geol 423) or Mineral Paragenesis (Geol 461); Petrology and Petrography (Geol 414, 415, 416).

Depending on individual interests and plans for graduate study, students are expected to take additional courses outside of the department. The following are among the recommended electives: Advanced General Physics (Ph 324, 325, 326); Physical Chemistry (Ch 441, 442, 443); Fundamentals of Statistics (Mth 346) or Elements of Statistical Methods (Mth 425, 426, 427); Differential Equations (Mth 418).

Major Curriculum in Geology-Paleontology. The following courses are required for an undergraduate geology major whose interests are mainly in paleontology:

Lower Division. General Geology (Geol 201, 202, 203); College Algebra (Mth 104), Elementary Functions (Mth 105), Elements of Calculus (Mth 106); General Chemistry (Ch 104, 105, 106); Introductory Chemistry Laboratory (Ch 107); Introductory Analytical Chemistry I and II (Ch 108 and Ch 109); General Physics and General Physics Laboratory (Ph 201, 202, 203; Ph 204, 205, 206); General Biology (Bi 101, 102, 103); Scientific and Technical Writing (Wr 227).

Upper Division. Mineralogy (Geol 325, 326, 327); Paleontology (Geol 431, 432, 433); Stratigraphy and Sedimentation (Geol 392); Field Geology (Geol 406); Seminar (Geol 407), one term; Lithology (Geol 411); Structural Geology (Geol 391); and 12 term hours of work elected from: Principles of Ecology (Bi 471, 472, 473); Historical Biogeography (Bi 491, 492, 493); and Micropaleontology (Geol 440).

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Study. The department offers graduate programs leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees in geology with opportunities to specialize in geology, paleontology, geochemistry, and geophysics. 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. Laboratory equipment for advanced mineralogical and geochemical research include an electron microprobe analyser, X-ray fluorescence apparatus, a variety of spectrometric and radiochemical analytical facilities, and equipment for experimental studies of phase equilibria at high temperatures and pressures. A geophysical observatory is operated on the east side of the Cascade range in conjunction with the astronomical observatory of the physics Department. 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.

Center for Volcanology. The Department of Geology includes a Center for Volcanology; D. F. Weill, associate professor of geology, is director. Research and graduate instruction are conducted in several fields dealing with the products and processes of volcanism. The staff of the Center includes faculty and research associates whose principal interests are in the fields of igneous petrology, volcanic geology, geochemistry, and geophysics. The state of Oregon possesses a variety of volcanic features, providing exceptional opportunities for study of volcanic rocks and structures.

LOWER-DIVISION COURSES

Geol 101, 102, 103. **General Geology.** 3 hours each term.

Earth materials, processes, and landforms; the main events of the earth's history. For students not majoring in a physical science but desiring a basic understanding of the geologic environment. Requires less background in mathematics and science than Geol 201, 202, 203. 3 lectures, field trips.

Geol 104, 105, 106. **General Geology Laboratory.** 1 hour each term.

Laboratory studies of minerals, rocks, geologic maps, landforms, aerial photographs and fossils; exercises illustrating the methods by which the nature and history of the earth are studied. One 2-hour session per week.

Geol 201, 202, 203. **General Geology.** 4 hours each term.

Introductory geology for science majors and other students with backgrounds in chemistry, physics, and mathematics, including Honors College students. An introduction to materials and processes that have formed the earth and its geologic features. 3 lectures, 1 laboratory period.

Geol 291. **Rocks and Minerals.** 3 hours.

Common minerals and rocks; origin, and properties of precious, semiprecious, and ornamental stones; economically important rocks and minerals. 2 lectures; 1 three-hour laboratory period.

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 mammals. Intended for nonmajor juniors and seniors.

Geol 325, 326, 327. **Mineralogy.** 4 hours each term.

Descriptive and determinative mineralogy; geometric and X-ray crystallography; optical mineralogy. Prerequisite: Ch 104, 105, 106; Ch 107, 108, 109; Geol 101, 102 or 201, 202. Staples, Lund.

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 391. **Structural Geology.** 4 hours.

Origin, interpretation, and mapping of major and minor geologic structures. 3 lectures, 1 laboratory period. Prerequisite: Geol 201, 202.

Geol 392. **Stratigraphy and Sedimentation.** 3 hours.

Genesis and subsequent history of stratified rocks; sedimentation, induration, weathering; the methods of correlating such formations. Prerequisite: Geol 201, 202, 203. Baldwin.

Geol 401. **Research.** Hours to be arranged.

Geol 405. **Reading and Conference.** Hours to be arranged.

Geol 407. **Seminar.** Hours to be arranged.

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 326. 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 325, 326, 327. McBirney, Kays, Boggs.

Geol 421. **Engineering Geology.** (G) 3 hours.

The application of geology to engineering problems, especially those related to landslides, foundations, dams, and tunnels. Field trips. Prerequisite: Geol 325, 326, 327. Staples.

Geol 422. **Petroleum Geology.** (G) 3 hours.

Origin and accumulation of petroleum, methods of locating oil and gas, organization of exploratory programs, current economic and political factors affecting the petroleum industry. 3 lectures. Prerequisite: Geol 391, Geol 392. Boggs.

Geol 423. **Economic Mineral Deposits.** (G) 3 hours.

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: Geol 325, 326, 327. Staples.

Geol 425, 426. **Properties of Crystals.** (G) 3 hours each term.

Crystal structure and symmetry, crystal imperfections, symmetry of structures and properties; electric, magnetic, electromagnetic, thermal, and mechanical properties. Prerequisite: Geol 325, 326 or one year of college chemistry. Holser.

Geol 431, 432, 433. **Paleontology.** (G) 3 hours each term.

The systematic consideration of fossil invertebrate and vertebrate phyla with emphasis on their biostratigraphy, evolution, paleoecology, and taxonomy. 2 lectures, 1 laboratory. Prerequisite: Geol 103 or Geol 203. Orr.

Geol 451. Pacific Coast Geology. (G) 3 hours.

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 392; senior or graduate standing. Baldwin.

Geol 461. Mineral Paragenesis. (G) 3 hours.

Mineral paragenesis in response to physico-chemical conditions in the earth. Heterogeneous and homogeneous equilibria of gases, liquids, supercritical fluids and solids of fixed or variable composition in geological context. Prerequisite: Geol 325, 326, 327, general chemistry, calculus. Weill.

Geol 462. Tectonics. (G) 3 hours.

Large-scale processes of orogeny, sea-floor spreading and continental drift with emphasis on current research. Prerequisite: Geol 391, Geol 392, or consent of instructor.

Geol 463. General Geophysics and Planetology. (G) 3 hours.

Physics of the earth: gravity, geodesy, and isostasy; the geomagnetic field, paleomagnetism; electromagnetism and the earth's interior; earthquake seismology; geochronology; heat flow and thermal balance. The earth as a planet: models of its core, mantle, and crust. Earth-moon system and general planetary models. 3 lectures. Prerequisite: one year of calculus and physics, or consent of instructor. Blank.

Geol 464. Exploration Geophysics. (G) 4 hours.

Theory and application of geophysical methods used in geologic mapping and resource exploration. Gravity and magnetic surveys and their interpretation; exploration seismology; electrical and electromagnetic methods; radioactivity surveys; remote sensing. 3 lectures and 1 laboratory or field exercise. Prerequisite: one year of calculus and physics; Geol 391 or Geol 463, or consent of instructor. Blank.

Geol 470. Geochemistry. (G) 3 hours.

Introduction to the application of chemical principles of geologic processes. Distribution of the elements in the earth and the processes by which these distribution patterns evolve. Prerequisite: Geol 325, 326, 327; Ch 441, 442, 443; or consent of instructor. Gole.

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.

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.
Seismology.

Geol 511. Advanced Microscopy and Instrumentation. 4 hours.

Advanced optical mineralogy, including universal stage, immersion methods, and ore microscopy; X-ray diffraction. Prerequisite: Geol 414, 415, 416. McBirney.

Geol 514. Advanced Metamorphic Petrology. 3 hours.

The origin and genetic relations of metamorphic rocks; microscopic examination of rock suites selected for study of petrologic principles and problems. Prerequisite: Geol 415, 511. Kays.

* No-grade course.

Geol 515, 516. Advanced Igneous Petrology. 3 hours each term.

The origin and genetic relations of igneous rocks; microscopic examination of rock suites selected for study of petrologic principles and problems. Prerequisites: Geol 414, Geol 511. McBirney.

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 325.

Geol 523, 524. Advanced Sedimentary Petrology. 3 hours each term.

Application of advanced techniques to the interpretation of origin and diagenetic history of sedimentary rocks. Prerequisite: Geol 392 and statistics, or consent of instructor. Boggs.

Geol 525. Advanced Regional Stratigraphy. 3 hours.

Stratigraphic framework of the United States and other countries. Prerequisite: Geol 392. Baldwin.

Geol 531, 532. Advanced Paleontology. 3 hours each term.

Problems and application of paleontology in stratigraphy; methods of study and extraction of fossil micro-organisms; evolutionary and taxonomic theory. Prerequisite: Geol 431. Orr.

Geol 533. Micropaleontology. 3 hours.

Survey of microfossil groups; stratigraphic distribution; methods of separation from matrices; classification. One lecture; 2 laboratory periods. Prerequisite: Geol 431, 432. Orr.

Geol 561, 562, 563. Geochemistry. 3 hours each term.

Topics in theoretical and experimental petrochemistry; origin and distribution of elements. Prerequisite: calculus, physical chemistry with thermodynamics, or Geol 461, or consent of instructor. Goles, Holser, Weill.

Geol 571, 572, 573. Geophysics. 3 hours each term.

Interpretation theory. Topics in general geophysics. Prerequisite: consent of instructor.

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 391.

Geol 592. Volcanology. 2 hours.

The products and processes of volcanism, origin of magmas, eruptive mechanisms and relation of volcanism to orogeny and tectonic processes. McBirney.

COURSES OFFERED ONLY IN SUMMER SESSION**Geol 406. Field Geology.** 9 hours.

Eight-week session at beginning of summer term. Geologic field work in selected parts of Oregon. Prerequisite: Geol 201, 202, 203, consent of instructor. Kays, Boggs.

Geol 408. Workshop. (g) Hours to be arranged.**Geol 455. Studies in Physical Geology.** (g) 3 hours.**Geol 456. Regional Geology of North America.** (g) 3 hours.

German and Russian

Professors: R. A. NICHOLLS (department head), E. P. KREMER (emeritus), W. A. LEPPMANN.

Associate Professors: J. F. BEEBE, EDWARD DILLER, P. B. GONTRUM, W. L. HAHN, ASTRID M. WILLIAMS.

Assistant Professors: ALBERT LEONG, J. R. MCWILLIAMS, H. R. PLANT, J. L. RICE, JEAN M. WOODS.

Instructors: PAUL JUSWIGG, INGRID WEATHERHEAD.

Fellows: ALLAN BROWN, LIEN-SUNG CHANG, JÖRG FREY, MARION GADBERRY, R. L. GOODWIN, TERENCE LAMMERS, M. J. MEANS, J. L. MILLER, F. P. ROMERO, J. H. ROWLAND, MARILYN SCOTT-JONES, PATRICIA SCHULTHESS, LILITH SCHUTTE, C. P. STEHR, CORNELIA TASCHOW, E. F. WANIEK, D. H. WATSON.

THE DEPARTMENT OF GERMAN AND RUSSIAN offers an undergraduate program in both language and literature. The program is designed to enable the student to achieve proficiency in reading, writing, and speaking the language, and to provide a solid grounding in the literature of the country.

Requirements for Bachelor's Degree in German. A total of 36 hours in the following courses is required of all candidates for the Bachelor of Arts degree in German: Survey of German Literature (GL 301, 302, 303); Composition and Conversation (GL 334, 335, 336); Advanced German Composition and Conversation (GL 424, 425, 426); at least 9 hours from the following literature courses: German Literature of the Twentieth Century (GL 324, 325, 326); The Age of Goethe (GL 411, 412, 413); Nineteenth Century Novelle (GL 414, 415, 416).

Undergraduate students preparing for graduate work in German are advised to begin a second foreign language, and to take related courses in either English or other European literature or both, or philosophy or history.

Requirements for Bachelor's Degree in Russian. Candidates for the Bachelor of Arts degree in Russian are required to take 45 term hours of work beyond the second-year sequence (SL 101, 102, 103 or its equivalent). This work normally includes the following sequences: Third-Year Russian (SL 316, 317, 318); Introduction to Russian Literature (AL 313, 314, 315); History of Russia (Hst 447, 448, 449) or Russian Culture and Civilization (AL 340, 341, 342). In addition, 12 term hours or more are taken from the following electives in Russian literature and linguistics: Modern Russian Novel (AL 420); Modern Russian Short Story (AL 421); Modern Russian Poetry (AL 422); Modern Russian Drama (AL 423); Dostoevsky (AL 424); Tolstoy (AL 425); Gogol (AL 426); Turgenev (AL 427); Chekhov (AL 428); Soviet Russian Literature (AL 429); Seminar (SL 407); Fourth-Year Russian (SL 416, 417, 418); Structure of Russian (SL 440, 441, 442).

Students preparing for graduate work in Russian are advised to take either French or German, and to complete a balanced program of related courses in literature, history, philosophy, political science, art, and music.

Secondary-School Teaching of Foreign Languages. For certification as a teacher of German or Russian in Oregon high schools, the Oregon Board of Education requires (1) the completion of forty-five term hours of subject preparation; (2) the completion of Human Development and Learning (EPsy 326); Seminar (GL 407) or Seminar (SL 407); Student Teaching: Junior High School (CI 416) or Student Teaching: Senior High School (CI 417); and (3) the recommendation of the institution at which the student completes his subject preparation.

The Department of German and Russian will approve for student teaching only those students whose course work in the language they plan to teach is of high quality, and who have attained reasonable oral and written control of that language.

For permanent certification, after a fifth year of preparation, the student must complete an additional fifteen term hours in linguistics, culture and civilization, and phonetics. The following courses are recommended: German: German Culture and Civilization (GL 340, 341, 342), Applied German Phonetics (GL 498);

Russian: Russian Culture and Civilization (AL 340, 341, 342), Russian Phonetics (SL 324), Structure of Russian (SL 440, 441, 442); both languages: Descriptive Linguistics (AL 450, 451), Modern English Grammar (Eng 492).

It is recommended that, if possible, the student complete the five-year program for permanent certification before he begins teaching, and that, during the fifth year, he satisfy the requirements for the interdisciplinary master's degree in teaching. (See pages 120-121.)

For further information, the student should consult a member of the departmental Committee on Teacher Training.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Study. The department offers programs leading to the degrees of Master of Arts and Doctor of Philosophy in German, and Master of Arts in Russian. For the master's degree in German, work in German literature is offered, which may be supplemented by courses in Germanic philology (Middle High German, history of the German language, and others). The doctoral program may be centered on literature or on philology as the student prefers, but not on one to the exclusion of the other. Potential candidates should consult Peter B. Gontrum for information about institutional and departmental requirements.

In addition to the regular Master of Arts degree, the department offers a program in German and in Russian for a Master of Arts degree in teaching. It provides the secondary-school teacher with an opportunity to study literature at the graduate level, to achieve competence in the written and spoken language, and to study and practice methods of presenting his material. The program in German offers the student the option of an eight-week summer course in Germany to be completed immediately after the nine-month session at the University. Alternative courses will be available during the regular University summer session for students who cannot travel abroad. The program also fulfills the State of Oregon requirements for the Standard Secondary Teacher's Certificate.

The department encourages students in German to spend a year at the German Study Center in Stuttgart, operated by the Oregon State System of Higher Education. For further information, students should contact the departmental representative.

The Master of Arts program in Russian provides substantive training in Russian language, literature, and linguistics for students who wish to prepare for careers in teaching, research, translation, or government service. Creative imagination, a spirit of commitment to the Slavic field, and a knowledge of Russian sufficient for graduate work—usually three or more years of college work—are the principal prerequisites for admission. Candidates should acquire a reading knowledge of either French or German—preferably both—prior to admission or soon thereafter.

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. McWilliams, staff.

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.

GL 101, 102, 103. **Second-Year German.** 4 hours each term.

Review of grammar and composition; reading of selections from representa-

tive authors; conversation. Special section for Honors College students. Hahn, staff.

GL 121, 122, 123. **Conversational German.** 2 hours each term.

Review of the grammatical structure of the spoken language; intensive practice in audio comprehension. Practice in speaking, leading to a mastery of the basic syntactical patterns of conversational German and of a small but active vocabulary. Prerequisite: one year of college German or consent of instructor. May not be taken in place of second-year German to satisfy the language requirement. Plant.

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 representative authors. Prerequisite: two years of college German. Williams, Woods.

AL 310, 311, 312. **Introduction to Germanic Literature.** 3 hours each term.

For description, see page 139. Diller.

GL 321, 322, 323. **German for Reading Knowledge.** 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.

GL 324, 325, 326. **German Literature of the Twentieth Century.** 3 hours each term.

Introduction to the prose, poetry, and drama of the modern period. Particular attention to literary trends (naturalism, neoromanticism, expressionism, post-World War II literature) and experimental forms of the period. Emphasis on representative authors including Hauptmann, Thomas Mann, Rilke, Hesse, Kafka, Brecht. Diller, McWilliams.

GL 334, 335, 336. **German Composition and Conversation.** 3 hours each term.

Extensive practice in speaking and writing. Required of German majors. Conducted in German. Prerequisite: two years of college German.

GL 340, 341, 342. **German Culture and Civilization.** 3 hours each term.

Historical and political backgrounds of German literature and art. Prerequisite: reading knowledge of German. McWilliams.

GL 403. **Thesis.** Hours to be arranged.

GL 405. **Reading and Conference.** Hours to be arranged.

*GL 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

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. Prerequisite: Survey of German Literature.

GL 414, 415, 416. **The Nineteenth-Century German Novelle.** (G) 3 hours each term.

The theory and history of the *Novelle*. Readings of selected *Novellen* from Kleist to Fontane. Hahn.

GL 424, 425, 426. **Advanced German Composition and Conversation.** (G) 3 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 German. Normally required of German majors.

* No-grade course.

GL 498. Applied German Phonetics. (G) 3 hours.

The articulatory basis of German pronunciation; analytic comparison of the sounds of German and English; diagnosis and remedy of common errors in American pronunciation of German. Required for teacher certification and for candidates for graduate degrees in German. Prerequisite: three years of college German or consent of instructor. Plant.

GRADUATE COURSES***GL 503. Thesis.** Hours to be arranged.**GL 505. Reading and Conference.** Hours to be arranged.**GL 507. Seminar.** Hours to be arranged.***GL 509. Supervised Tutoring Practicum.** 1-3 hours any term.**GL 511, 512, 513. The German Lyric.** 5 hours each term.

Study of German lyric poetry from the eighteenth century 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. Gontz.

GL 514. Introduction to Middle High German. 5 hours.

Introduction to Middle High German grammar; emphasis on a nonhistorical description of the language of manuscripts. Plant.

GL 515, 516. Readings in Middle High German Literature. 5 hours each term.

Study of an entire work, in facsimile edition where available. Reading of manuscript and some manuscript copying. Texts will include the *Nibelungenlied*, *Iwein*, the Manesse Codex, and other works of Middle High German literature as they become available in facsimile editions. Prerequisite for either course: GL 514. Plant.

GL 517, 518, 519. German Romanticism. 5 hours each term.

Readings in the works of Tieck, F. Schlegel, Novalis, Hoffmann, Mörike, and Eichendorff. The concept of romantic poetry and its underlying philosophical ideas. The romanticists' contributions to literary criticism. Prerequisite: Survey of German Literature (GL 301, 302, 303). Hahn.

GL 520. Research Methods in German. 3 hours fall term.

Bibliography and methods of research in German literature as an introduction to graduate study. Woods.

GL 524. German Literature of the Sixteenth Century. 5 hours.

Humanism and the Reformation as reflected in German literature. The influence of Luther. Readings in works by Hans Sachs, Fischart, and Brant, as well as typical *Volksbücher*. Woods.

GL 526. German Literature 1700-1750. 5 hours.

The German Enlightenment and its relation to the Enlightenment in England and France. Readings from works by Gottsched, Klopstock, Wieland, and other typical figures of the period. Woods.

GL 527, 528, 529. Goethe. 5 hours each term.

Comprehensive examination of Goethe's works, including an intensive study of *Faust*, and Goethe's aesthetic and critical views. Leppmann.

GL 530, 531. Old High German. 5 hours each term.

Nonhistorical description of the structure of Old High German; emphasis on syntax. Some reading of manuscripts. Representative selections from Old High German literature. Plant.

GL 532. Introduction to Gothic. 5 hours.

Introduction to Gothic grammar and script. Selected readings in the Gothic Bible, comparison with West-Germanic translations of corresponding passages

* No-grade course.

of the New Testament. Of interest to students in Old English and Old Norse. Plant.

GL 533. Structure of Modern German. 5 hours.

Nonhistorical description of the structure of modern German; emphasis on syntax. Introduction to modern German dialects. "East German" and "West German." Plant.

GL 534. History of New High German. 5 hours.

Grammar, orthography, and semantics of High German prose writings from the nineteenth century back to the ninth century, based on early newspapers, pamphlets, nature treatises, and religious tracts. Readings in the seminal works of German linguistic science. Plant.

GL 536. Lessing. 5 hours.

Detailed study of Lessing's dramas, his theoretical and philosophical writings, and his contribution to German classicism.

GL 537. Sturm und Drang. 5 hours.

The dramatic works of the Storm and Stress writers, and their contribution to a new understanding of literature.

GL 538. Schiller. 5 hours.

An intensive study of Schiller as a dramatist and poet, with particular consideration also of his important critical essays.

GL 539. Introduction to Old Saxon. 5 hours.

Introduction to Old Saxon grammar, with emphasis on syntactic structures; some manuscript reading; critical translation of major portions of *Heliand* and *Genesis*. Recommended for students in Old English. Plant.

GL 540, 541, 542. German Drama of the Nineteenth Century. 5 hours each term.

Analysis of the dramas of Kleist, Büchner, Grabbe, Grillparzer, and Hebbel; special emphasis on dramatic technique and on the individual contributions of these writers to the genre. Nicholls.

GL 543, 544, 545. Contemporary German Lyric. 5 hours each term.

Fall: Rilke; winter: George and Hofmannsthal; spring: Benn, Trakl, and contemporaries. Detailed and intensive study of these writers' poetry in terms of themes, form, and imagery. Gontrum.

GL 546, 547, 548. Modern German Novel. 5 hours each term.

Detailed study of individual writers: Thomas Mann, Hesse, Kafka, Musil, Grass, Frisch, or others. Emphasis on the nature of the genre and its gradual transformation as well as on narrative style and technique. Gontrum, Diller, Nicholls.

GL 550, 551, 552. Modern German Drama. 5 hours each term.

Fall: Gerhart Hauptmann, Arthur Schnitzler; winter, Wedekind and the Expressionists; spring: Brecht, Dürrenmatt, Frisch. Intensive study of the dramatic works of these writers, particularly in terms of new dramatic techniques. Gontrum.

GL 555, 556, 557. German Novel of the Nineteenth Century. 5 hours each term.

Detailed study of the novels of Jean Paul, Mörike, Immermann, Stifter, Keller, Raabe and Fontane. Emphasis on the *Bildungs* or *Erziehungsroman* through treatment of narrative structure and technique. Hahn.

GL 558. German Lyric of the Seventeenth Century. 5 hours.

Poetry by Weckherlin, Opitz, Spee, Dach, Gryphius, and Hofmannswaldau. Poetic theory of Opitz, Harsdörffer, and other theoreticians of the period. Offered alternate years. Woods.

GL 559. German Drama and Prose of the Seventeenth Century. 5 hours.

Dramas by Gryphius, Lohenstein, and Reuter. The baroque novel and the work of Grimmelshausen. Offered alternate years. Woods.

RUSSIAN

LOWER-DIVISION COURSES

SL 50, 51, 52. **First-Year Russian.** 5 hours each term.

Elementary Russian grammar, reading, conversation, and composition. Beebe, staff.

SL 101, 102, 103. **Second-Year Russian.** 5 hours each term.

Intermediate Russian grammar, reading, conversation, and composition. Study of representative literary works. Rice, staff.

UPPER-DIVISION COURSES

AL 313, 314, 315. **Introduction to Russian Literature.** 3 hours each term.

Russian literature from origins to 1917, with special emphasis on Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, and others. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Rice.

SL 316, 317, 318. **Third-Year Russian.** 5 hours each term.

Intensive study in Russian of literary works by representative nineteenth- and twentieth-century writers, with extensive practice in speaking, writing, and comprehension. Prerequisite: two years of college Russian or equivalent. Juswigg, Leong.

SL 324. **Russian Phonetics.** 3 hours.

Scientific study of Russian sounds, rhythms, and intonation, with supervised individual practice. Beebe.

AL 340, 341, 342. **Russian Culture and Civilization.** 3 hours each term.

The comparative aesthetics and development of art, film, music, and literature within the context of Russian intellectual history. Leong.

SL 403. **Thesis.** Hours to be arranged.

SL 405. **Reading and Conference.** Hours to be arranged.

*SL 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

SL 407. **Seminar.** (G) Hours to be arranged.

SL 416, 417, 418. **Fourth-Year Russian.** (G) 5 hours each term.

Stylistic analysis of advanced Russian literary texts with extensive practice in conversation, composition, and comprehension. Prerequisite: SL 311, 312, 313 or equivalent. Juswigg, Rice.

AL 420. **Modern Russian Novel.** (G) 3 hours.

Development of modern Russian novel, with emphasis on minor prose masters. Readings in English; Russian majors do selected readings in the original. Leong, Rice.

AL 421. **Modern Russian Short Story.** (G) 3 hours.

Development of Russian short story. All readings in English, but Russian majors are expected to do selected readings in the original. Rice.

AL 422. **Modern Russian Poetry.** (G) 3 hours.

Detailed study of Russian symbolism, acmeism, and futurism. All readings in English, but Russian majors are expected to do selected readings in the original. Leong.

AL 423. **Modern Russian Drama.** (G) 3 hours.

Evolution of Russian drama. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Rice.

* No-grade course.

AL 424. Dostoevsky. (G) 3 hours.

Dostoevsky's intellectual and artistic development; context and structure of *The House of the Dead*, *Notes From the Underground*, *Crime and Punishment*, *The Idiot*, *The Brothers Karamazov*, and other works. All readings in English, but Russian majors are expected to do selected readings in the original. Leong, Rice.

AL 425. Tolstoy. (G) 3 hours.

Development and context of Tolstoy's art; analysis of *War and Peace*, *Anna Karenina*, representative short novels, stories, plays, and essays. All readings in English, but Russian majors are expected to do selected readings in the original. Leong.

AL 426. Gogol. (G) 3 hours.

Comprehensive study of Gogol's works; critical analysis of *Evenings on a Farm near Dikanka*, *Mirgorod*, Petersburg tales, *The Inspector General* and other plays, *Dead Souls*. Readings in English; Russian majors do selected readings in the original. Rice.

AL 427. Turgenev. (G) 3 hours.

Literary development and context of Turgenev's art; analysis of novels *Rudin*, *A Nest of Gentlefolk*, *On the Eve*, *Fathers and Sons*, *Smoke*, *Virgin Soil*, stories, plays, and critical essays. Readings in English; Russian majors do selected readings in the original. Rice.

AL 428. Chekhov. (G) 3 hours.

Critical study of Chekhov's art; structure, style, and development of representative prose fiction and plays, including *The Seagull*, *Uncle Vanya*, *Three Sisters*, *The Cherry Orchard*. Readings in English; Russian majors do selected readings in the original. Rice.

AL 429. Soviet Russian Literature. (G) 3 hours.

Major developments in Russian literature since 1917; theory and practice of "socialist realism"; critical analysis of representative works by Gorky, Sholokhov, Pasternak, Babel, Olesha, Mayakovsky, Bulgakov, Zoshchenko, Solzhenitsyn, and others. Readings in English; Russian majors do selected readings in the original. Leong.

SL 440, 441, 442. Structure of Russian. (G) 3 hours each term.

Phonetics, grammatical and syntactical patterns of standard contemporary Russian. Beebe.

GRADUATE COURSES***SL 503. Thesis.** Hours to be arranged.**SL 505. Reading and Conference.** Hours to be arranged.**SL 507. Seminar.** Hours to be arranged.

Russian Literary Criticism.

***SL 509. Supervised Tutoring Practicum.** 1-3 hours any term.**SL 520. Research Methods in Russian.** 5 hours.

Bibliography and research methods in the graduate study of Russian literature. Leong, Rice.

SL 521. Old Russian Literature. 5 hours.

An introductory discussion of the system of literary genres in Kievan Rus', with attention to the subsequent development of that system, its bonds with oral poetry and other aesthetic forms, and its significance for modern Russian civilization. Conducted in English with selected close readings in Old Russian. Offered alternate years. Rice.

SL 522. Russian Folklore. 5 hours.

An introductory discussion of Russian folklore, primarily verbal art, in its social and aesthetic functions, with special attention to the paradigmatic

* No-grade course.

eighteenth-century collection attributed to Kirsha Danilov and to various literary adaptations of folklore forms. Conducted in English with readings in Russian. Offered alternate years. Rice.

SL 523. Eighteenth-Century Russian Literature. 5 hours.

An introductory discussion of the refashioning of Russian poetic imagination in response to the simultaneous discoveries of classical antiquity, the Renaissance, French neoclassicism, the Enlightenment, Russian history, and new aesthetic values in the Russian vernacular and oral poetry. Conducted in English with selected close readings in Russian. Offered alternate years. Rice.

SL 524. Pushkin. 5 hours.

Detailed study of Pushkin's narrative and lyric poetry, dramas, prose fiction, folk stylizations, and *Evgenij Onegin*, with special attention to his poetics and its influence on the subsequent development of Russian literature. Conducted in English with all readings in Russian. Leong.

SL 540. Old Church Slavonic. 3 hours.

History and grammar of Old Church Slavonic; sound system, morphology, and elements of syntax. Reading of texts. Beebe.

SL 541, 542. History of Russian. 3 hours each term.

Survey of East Slavic phonology and morphology from Common Slavic to the present. Dialectal divergence in Old Russian and the modern literary languages. Dialects of East Slavic. Reading of Old and Middle Russian texts. Beebe.

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. Weatherhead.

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. Weatherhead.

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 COURSE

AL 351, 352, 353. Scandinavian Literature in Translation. 3 hours each term.

For description, see page 140. Williams.

SLAVIC

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

SL 480, 481, 482. First-Year Serbo-Croatian. (G) 4 hours each term.

Elementary Serbo-Croatian grammar, conversation, reading, and composition. Prerequisite: two years of Russian or equivalent.

SL 483, 484, 485. First-Year Polish. (G) 4 hours each term.

Elementary Polish grammar, conversation, reading, and composition. Prerequisite: two years of Russian or equivalent.

SL 486, 487, 488. **First-Year Czech.** (G) 4 hours each term.

Czech grammar, reading, and composition. Prerequisite: two years of Russian or equivalent.

SL 490, 491, 492. **First-Year Ukrainian.** (G) 4 hours each term.

Elementary Ukrainian grammar, reading, and composition. Prerequisite: two years of Russian or equivalent.

History

Professors: GUSTAVE ALEF, E. R. BINGHAM, QUIRINUS BREEN (emeritus), LESLIE DECKER, P. S. DULL, T. P. GOVAN, JERZY LINDERSKI, V. R. LORWIN, EARL POMEROY, K. W. PORTER, R. W. SMITH, L. R. SORENSON.

Associate Professors: S. A. PIERSON (department head), G. R. FALCONERI, W. S. HANNA, R. F. BIRN, P. S. HOLBO.

Assistant Professors: S. B. AVERY, R. M. BERDAHL, T. A. BRADY, ROGER P. CHICKERING,* W. M. HATCH, R. A. KIMBALL, R. G. LANG, J. P. MADDEX, J. W. PERRIN.

Fellows: H. K. ALBRECHT, D. C. ANSON, LINDA BEKES, W. H. BRENNAN, DAVID CHAFFEE, E. O. COCHRANE, STEVEN CONWAY, R. S. COWAN, W. G. CROWLEY, JANE DEDRICK, R. B. DUGDALE, J. L. FERRIN, G. G. GOLDTHWAITE, R. E. GREENSTEIN, ALBERTO HERRERA, D. E. MCAMIS, R. G. MCCAFFREY, T. B. MCROBERTS, J. F. MERRITT, D. E. NIMZ, E. W. NOLAN, D. R. NOWICKI, C. L. OBER, JEAN PROSSER, JEANNE PRYOR, J. A. QUIRIN, ROBERT RETZ, A. H. ROSS, M. R. RUDY, S. M. SMALLWOOD, P. R. VIRGADAMO, R. E. WAGERS, C. A. ZAPPIA.

THE STUDY OF HISTORY offers both a framework for a liberal education and a broad foundation for a variety of careers—teaching and research, law, journalism, foreign service, government, business, the ministry, librarianship. It provides a context of historical knowledge essential for an understanding of the contemporary world. Through analyzing interpretative studies and accounts by witnesses to historical events, the student appreciates more fully the complexity of human experience. By examining social changes in other times, he develops a broad perspective and the ability to weigh evidence and argument that free men need in a rapidly changing world.

The Department of History offers programs sufficiently structured to guide the student, yet flexible enough to encourage the development of his individual interests. To major in history, a student must have his program approved by a departmental adviser, who will be available for periodic review. He may choose one of the three options presented below.

History courses which are used to satisfy department major requirements must be taken on a pass-differentiated basis.

Option One: The General Major in History. Recommended for students who desire a balanced program of historical study; it combines a wide range of courses with specialized inquiry in seminars and colloquia. Specific requirements are as follows:

(1) Satisfaction of the University requirements for the B.A. degree.

(2) Forty-five term hours, of which 27 must be upper-division, including at least 12 hours in courses numbered 400 to 499. Students who have not taken History of Western Civilization (Hst 101, 102, 103) are required to complete 6 hours of work in history before 1800.

* On leave of absence 1970-71.

(3) Six hours of upper-division credit in each of three fields selected from the following: (a) European history before 1600, (b) European history after 1600, (c) United States history, (d) Far Eastern or Latin American history.

(4) Seminar (Hst 407) or Colloquium (Hst 408) and 2 hours in Reading and Conference (Hst 405) resulting in a research paper; or 2 hours in Hst 405 to complete a research paper written in conjunction with a 400-level course.

Option Two: The History Major with a Concentration on a Time Period, a Geographical Area, or an Important Theme. (1) Satisfaction of the University requirements for the B.A. degree.

(2) No later than the second term of his junior year, the student and his adviser will plan a program of courses in history and related fields centering upon the study of a theme, period, or area and submit it to the department for approval. A thematic approach may, for example, focus on revolutions, warfare, the city, or the development of science; a period approach may concentrate on a span of time in one country such as post-Meiji Japan or Colonial America, or in several countries as in the study of early modern Europe; an area approach may deal with the common historical problems found, for example, in Latin America, or Central and Eastern Europe, or the Atlantic community.

In these programs, courses outside of history which relate to the student's theme, period, or area will be an integral part of the program. Examples of such programs are available in the departmental office. A student pursuing a program of this kind will need the continuing guidance of a faculty member.

Option Three: The History Major with a Secondary Certificate in Social Studies. (1) Satisfaction of the University requirements for the B.A. or B.S. degree.

(2) Forty-five term hours in history of which 27 must be upper-division, including at least 12 hours in courses numbered 400-499. Upper-division courses shall be distributed as follows: (a) 9 hours in European history, (b) 9 hours in United States history, (c) 9 hours in Asian, African, or Latin American history,* (d) Seminar (Hst 407) or Colloquium (Hst 408) and 2 hours in Reading and Conference (Hst 405) resulting in a research paper; or 2 hours in Hst 405 to complete a research paper written in conjunction with a 400-level course.

(3) 24 hours in social science courses other than history, including work in economics, geography, political science, and sociology or anthropology.

(4) Courses in history and other social science should normally include work in the following: (a) the history, geography, or culture of Africa, Asia, and Latin America, (b) the principles, theory, structure, or methods of a social science discipline other than history, (c) urban problems, conditions, or developments.

(5) A 2.75 grade-point average in history and social science courses.

(6) Twenty-one hours in education to satisfy the professional requirements for the basic secondary teaching certificate.

The department will provide guidelines for the selection of courses in history and social sciences considered particularly relevant to the needs of social studies teachers.

History Scholars Program. Each year the department invites a small number of junior and senior history students (including Honors College students) to participate in the History Scholars Program. They may be enrolled for any one of the three options indicated above. As history scholars they will have an opportunity

* With the approval of the adviser, 9 hours of upper-division anthropology, geography, political science, religion, or art history courses dealing with Asia, Africa or Latin America, may be substituted for history courses in meeting this requirement and will count toward the major.

for independent study, which will usually lead to a substantial research paper or interpretative essay.

Honors. See HONORS COLLEGE, pages 132 ff.

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 114 ff. 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.
- Hst 107, 108, 109. **History (Honors College).** 3 hours each term.
Significant events, ideas, and institutions in the development of Western civilization.
- Hst 201, 202, 203. **History of the United States.** 3 hours each term.
From colonial times to the present.
- Hst 221, 222, 223. **Afro-American History.** 3 hours.
Survey of African civilizations; the slave trade; development of the blacks, free and slave, as a subculture.

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. Berdahl, Pierson.
- Hst 304, 305, 306. **English History.** 3 hours each term.
A general survey, covering political, economic, social, intellectual, and religious developments. Lang, Smith.
- Hst 307. **Radicalism in Early American History.** 3 hours.
Radical challengers of the established order in church and state: the Puritans, the eighteenth-century revolutionaries, and the nullifiers.
- Hst 308. **Radicalism in Nineteenth- and Twentieth-Century American History.** 3 hours.
The abolitionists, the communal experiments, anarchists, Marxists, and their opponents.
- Hst 321. **History of American Foreign Relations since 1945.** 3 hours.
Intensive study of American foreign relations since World War II.
- Hst 324, 325, 326. **Byzantium and the Slavs.** 3 hours each term.
Fall: from Rome to Byzantium, 284-610; winter: the Byzantine Apogee, 610-1071; spring: Byzantium and the Slavs. Alef.
- Hst 350, 351, 352. **Hispanic America.** 3 hours each term.
A survey of Hispanic America with emphasis on political and cultural history; the Spanish colonial period; the wars for independence and the early republican years; internal development of the modern states and inter-American relations.
- 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.

Hst 408. Colloquium. Hours to be arranged.

***Hst 409. Supervised Tutoring Practicum.** 1-3 hours any term.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Hst 411. History of Greece. (G) 3 hours fall.

Political, social, and cultural history of the Hellenic world from the Mycenaeans to Alexander the Great. Linderski.

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. Linderski.

Hst 414, 415, 416. History of Science. (G) 3 hours each term.

Growth of scientific ideas, the cultural and institutional context in which they have taken shape, and their relationship to other movements of thought in the history of Western culture. Fall: from the Greeks through the scientific revolution of the seventeenth century, with emphasis upon the exact sciences; winter: development of the physical sciences from the seventeenth century to the present; spring: development of the natural sciences from the seventeenth century to the present.

Hst 420. Historical Method. (G) 3 hours fall.

Introduction to methods of historical research and writing.

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. Perrin.

Hst 424, 425. Early Modern Europe. (G) 3 hours each term.

The seventeenth century (Hst 424) and the eighteenth century (Hst 425). Birn.

Hst 430, 431. Renaissance. (G) 3 hours each term, fall and winter.

Fall: the Renaissance in Italy; winter: the northern Renaissance. Brady.

Hst 432. Reformation. (G) 3 hours spring.

The Protestant and the Roman Catholic reforms of the sixteenth century. Brady.

Hst 434, 435. Western Institutions and Ideas. (G) 4 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 436, 437. History of Germany. (G) 3 hours each term.

First term: from the Peace of Augsburg (1555) to the death of Frederick the Great (1786). Second term: to the fall of Bismarck (1890). Berdahl.

Hst 438. Germany in the Twentieth Century. (G) 3 hours.

Political, socio-economic, military, diplomatic, and intellectual aspects of European history since 1900. Stresses the European responses to the two world wars and the depression. First term covers up to 1929; the second term, to the present. Chickering.

Hst 439, 440. Cultural and Intellectual History of Modern Europe. (G) 4 hours each term.

Major issues in the cultural and intellectual life of Europe since 1815. Concentration on the interaction between ontological inquiry, aesthetic expression, and social or political experience. Pierson.

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. Birn, Lorwin.

* No-grade course.

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.

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, Kimball.

Hst 450. History of Spain. (G) 3 hours.

Institutional, social, and cultural history of Spain from 711 to the present, with emphasis on the periods from Alfonso X to Philip II and from Philip V to Franco.

Hst 452, 453. The Russian Revolution. (G) 3 hours each term.

First term: the origins of the revolution; transition and instability in pre-revolutionary Russia. Second term: the consequences of the revolution; the place of the 1917 revolution in the European revolutionary tradition. Offered alternate years. Kimball.

Hst 454, 455, 456. Economic History of Modern Europe. (G) 3 hours each term.

The economic development and economic institutions of modern Europe. Fall: from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter: late eighteenth century to end of nineteenth century; spring: twentieth century. Lorwin.

Hst 457, 458, 459. The Era of American Sectional Conflict. (G) 3 hours each term.

The United States during the nineteenth century, focusing on the origins, events, and effects of the sectional conflict whose military phase was the Civil War. Fall: from Jefferson to Polk; winter: sectional crisis and civil war; spring: Reconstruction and the late nineteenth century. Maddex.

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. Smith.

Hst 464. History of Mexico. (G) 3 hours.

Political, social, economic and intellectual trends and problems from 1810 to the present.

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. Lang, Smith.

Hst 468. Victorian England. (G) 3 hours.

Social, political, economic, and intellectual history of England from 1815 to 1900. Smith.

Hst 469. Twentieth-Century England. (G) 3 hours.

Social, political, economic, and intellectual changes in Great Britain in the twentieth century. 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 472. The Negro in American History. (G) 5 hours.

Afro-American history from West Africa in the days of the slave trade to the "black revolution" of the 1960s.

Hst 473, 474, 475. American Foreign Relations. (G) 3 hours each term.

The character and consequences of American foreign policies. Fall: from the Revolution to the Civil War; winter: to World War I; spring: through World War II. Segments are independent. 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. Pre-requisite: 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. The United States in the Twentieth Century. (G) 4 hours each term.

First term: to 1933; second term: since 1933.

Hst 484, 485, 486. Early History of the American People. (G) 3 hours each term.

From the discovery of America to 1789. Hanna.

Hst 487, 488. American Economic History. (G) 5 hours each term.

The economic development of the United States. First term: pre-industrial America; second term: industrial and post-industrial economy. Decker.

Hst 491. The Era of Jefferson and Hamilton. (G) 4 hours.

The conflicting ideologies of these early leaders of the American nation, their differing political and economic theories, and their effect on subsequent developments. Govan.

Hst 492. The Era of Jackson. (G) 4 hours.

The triumph of the Jeffersonian ideology during the administrations of Andrew Jackson, and the consequences. Govan.

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. Linderski.

European History: French. Lorwin, Birn.

European History: English Eighteenth and Nineteenth Centuries. Smith.

European History: English Sixteenth and Seventeenth Centuries. Lang.

European History: Mediaeval Russia. Alef.

European History: Cultural and Intellectual. Pierson.

European History: Modern Russia. Kimball.

* No-grade course.

European History : Social and Economic. Lorwin.
 European History : German. Berdahl, Chickering.
 United States History : Colonial. Hanna.
 United States History : Early National. Govan.
 United States History : American Biography. Bingham.
 United States History : Diplomatic. Holbo.
 United States History : Economic. Decker.
 American Negro. Porter.
 U.S. Recent. Pomeroy.
 East Asian History. Falconeri, Dull.
 Latin American History.
 Historical Theory. Sorenson.

Hst 508. Colloquium. Hours to be arranged.

Ancient History. Linderski.
 Middle Ages. Perrin.
 Renaissance and Reformation. Brady.
 English Historians. Smith.
 Seventeenth-Century England. Lang.
 Mediaeval Russia. Alef.
 Byzantium. Alef.
 Modern Russia. Kimball.
 Age of Enlightenment. Birn.
 German History. Berdahl, Chickering.
 Interpretations of American History. Hanna, Porter.
 Early National. Govan.
 Southern History. Maddex.
 American Diplomacy. Holbo.
 American Economic History. Decker.
 Interpretations of Latin-American History.
 Japanese History. Dull, Falconeri.
 Chinese History.
 Historiography. Birn, Sorenson.
 History of Science.

***Hst 509. Supervisor Tutoring Practicum.** 1-3 hours any term.

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. Birn, Lorwin, Pierson.

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, Falconeri.

COURSES OFFERED ONLY IN SUMMER SESSION

Hst 418, 419. Studies in Western Civilization. (g) 3 hours each term.

Hst 490. Problems of the Pacific. (g) 3 hours.

Home Economics

Professor : MABEL A. WOOD (emeritus).

Assistant Professors : MARGARET J. WIESE (department head), SALLY L. HANSEN, FAITH JOHNSTON, ANIELA E. PELCH,† LOIS E. PERSON, FRANCES VAN-VOORHIS.

Instructors : FRANCES P. CLARK, MARCIA KING, LORRAINE MCKENZIE, HARRIET MCCUNE, HATTIE MAE NIXON.

* No-grade course.

† On leave of absence 1970-71.

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 similar. 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 and transfer to Oregon State University at the beginning of the junior year. For such a transfer, careful program planning with the Home Economics Department is essential.

Secondary-School Teaching of Home Economics. For certification as a teacher of home economics in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

The University of Oregon offers an undergraduate program which satisfies the state standard, but does not offer the additional subject preparation required for permanent certification after a fifth year of study.

For further information, the student should consult the member of the home economics faculty who serves as adviser for prospective teachers.

LOWER-DIVISION COURSES

HEc 121, 122. Clothing Construction. 2 hours each term.

HEc 121: development of methods and techniques of clothing construction for the person who wishes to sew for herself and her family. HEc 122: selection, management, and construction of own garment and child's garment, emphasizing aesthetics of dress and psychological and physical needs.

HEc 123. Clothing Construction. 3 hours spring.

Planning and constructing a lined wool suit or coat. Prerequisite: HEc 121 and 122.

HEc 127. Textiles. 3 hours any term.

Fundamental weaves, yarns, fibers, colors, and finishes; selection of fabrics in relation to use. Related government legislation.

HEc 128. Clothing Selection. 3 hours any term.

Selection of appropriate and becoming clothing for individuals, with recognition of social, economic, and design factors.

HEc 222. Family Relationships. 3 hours any term.

A course in marriage preparation and family living. Content includes decision-making, interpersonal relationships, communication, male-female life styles, and problem-solving within a family.

HEc 225. Nutrition. 3 hours any term.

Study of nutrients and their function in the body; selection of food sources for the maintenance of a high degree of vitality throughout life; current national and international problems; evaluation of nutrition information in the mass media.

HEc 226, 227, 228. Foods. 3 hours each term.

HEc 226: food preparation principles and techniques applied to fruits, vegetables, cereals, milk, eggs; meal management, including meal planning, food shopping, use of time and equipment. HEc 227: cultural aspects of foods, inter-

national cookery; the art of baking. HEc 228: advanced food preparation and meal management, emphasizing food budgets, aesthetic factors; meat, poultry, and fish; food preservation. 2 recitations, 2 two-hour laboratory periods.

HEc 250. **Meal Management for Men.** 1 hour winter and spring.

Basic food preparation principles, meal planning, and time management. Laboratory experience in the preparation of simple home and camp meals. 1 three-hour laboratory period. Open to men only.

UPPER-DIVISION COURSES

HEc 325. **Child Care.** 3 hours any term.

The preschool child studied in his family setting; current concepts of child rearing. Prenatal care; physical, motor, intellectual, emotional, and social growth studied against the background of home and family.

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 fall and spring terms.

Philosophy of homemaking; management principles applied to home living; kitchen planning; choice, use, and care of basic household equipment.

HEc 340. **Consumer Problems.** 3 hours winter term.

Emphasis on becoming informed and effective consumers; role of the consumer in the marketing system; current consumer issues; role of government in consumer welfare; available sources of information for consumers; consumer organization and its increasing importance.

HEc 405. **Reading and Conference.** Hours to be arranged.

HEc 407. **Seminar.** Hours to be arranged.

*HEc 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

HEc 430. **Personal and Family Finance.** 3 hours any term.

Management of personal and family income, including budgeting, use of consumer credit, insurance, social security, savings and investments, taxes, home ownership, and estate planning.

Industrial and Labor Relations

THE UNIVERSITY offers an interdisciplinary program of graduate study in industrial and labor relations, leading to the Master of Arts or Master of Science degree. The program is administered by the Institute of Industrial and Labor Relations (see page 130), and requires 45 term hours of work with thesis in courses approved by the Institute, or 54 hours of work without thesis.

The student's program must include work in at least three disciplines, with at least 18 term hours in one of the three disciplines, and must include a minimum of 15 term hours in 500-level courses. Prerequisite for the program are a bachelor's degree and 27 hours of prior work in the subject areas represented in the graduate program.

The following University courses are especially relevant to the graduate program in industrial and labor relations:

Economics—Regional and Urban Economics (Ec 414, 415, 416); Contemporary Economic Problems (Ec 417); The Economics of Public Policy (Ec 432, 433, 434); Labor Economics (Ec 444); Organized Labor (Ec 445); Labor Legislation (Ec 446); Collective Bargaining (Ec 447, 448, 449); Comparative Economic Systems (Ec 450, 451, 452); Industrial Organization and Public Policy (Ec 460,

* No-grade course.

461, 462); American Economic History (Ec 487, 488, 489); Development of Industrial Economies (Ec 490, 491, 492); Seminar: Labor Economics (Ec 507).

Education—Educational and Vocational Guidance (Coun 488); seminars in work evaluation, occupational information, vocational development theory.

History—American Economic History (Hst 487, 488).

Interdisciplinary Studies—Research (ISt 501); Reading in Industrial Relations (ISt 505); Seminar: Industrial Relations (ISt 507).

Journalism—Public Relations Writing (J 465); The Press and Society (J 450); Principles of Public Relations (J 459); Public Relations Problems (J 483); Journalism and Public Opinion (J 494); Seminar: Public Opinion and Propaganda (J 507).

Law—Law: Its Processes and Functions (L 430); Labor Law (L 476).

Political Science—Administrative Organization and Behavior (PS 412, 413); Public Opinion and Political Participation (PS 452, 453, 454); Democratic Institutions (PS 456); Political Behavior (PS 470); Comparative Public Policies (PS 489); Federal Welfare Policy (PS 495); Seminar: Comparative Labor Movements (PS 507); Seminar: Policy Analysis (PS 507); Seminar: Public Control of Economic Life (PS 507); Seminar: Organizational Decision Making (PS 507).

Personnel and Industrial Management—Personnel Management (PIM 412); Wage and Salary Administration (PIM 413); Problems in Personnel Management (PIM 414); Seminar: Administration of Labor Market Policy (PIM 507); Seminar: Collective Bargaining (PIM 507); Personnel Administration (PIM 534); Personnel Psychology (PIM 535); Organizational Conflict and Change (PIM 536); Theory of Business Organization (PIM 541).

Sociology—Theory of Small Groups (Soc 430); Group Dynamics (Soc 431); Sociology of Work (Soc 446); Industrial Sociology (Soc 447); Sociology of Occupations (Soc 448); Seminar: Economic Sociology (Soc 507); Seminar: Industrial Sociology (Soc 507); Seminar: Sociology of Professions (Soc 507); Theory of Organization (Soc 541).

The Institute of Industrial and Labor Relations provides advice and assistance to doctoral candidates who are interested in work in industrial relations as a minor field or as a supplement to their major program.

Latin American Studies

THE UNIVERSITY offers undergraduate and graduate programs in Latin American studies. Students enrolled in these programs complete regular major requirements in a department of the College of Liberal Arts or a professional school, with additional studies providing an emphasis on the Latin American area. An interdisciplinary committee advises students in the planning of their area studies; Clarence E. Thurber, professor of international and public affairs, is chairman of the committee.

The special requirements for a B.A. degree with emphasis on Latin American studies are: (1) two years of college study of Spanish or Portuguese or equivalent; (2) a minimum of 27 term hours in Latin American area courses, other than language, of which at least 18 term hours must be outside the student's major field.

The special requirements for an M.A. or Ph.D. degree with an emphasis on Latin American studies are: (1) competence in Spanish or Portuguese, to be demonstrated by examination; (2) a minimum of 21 term hours in graduate

courses in Latin American studies, including 9 hours in an interdisciplinary seminar; (3) a thesis on a Latin American topic, for which a maximum of 9 hours of credit may be applied toward requirement (2).

The Wallace School of Community Service and Public Affairs offers an option in Latin American studies at the undergraduate level in its major in international development. A minimum of 36 term hours in Latin American area courses is required. Clarence E. Thurber, professor of international and public affairs is the adviser for this program. The Department of Geography also offers a Latin American option at the undergraduate level. The adviser for the program is Gene E. Martin, professor of geography.

Linguistics

THE UNIVERSITY OFFERS interdisciplinary curricula in linguistics, leading to the Bachelor of Arts and Master of Arts degrees. The program is administered by an interdisciplinary committee of which Clarence Sloat, associate professor of English, is chairman.

Requirements for the Bachelor's Degree. As background for the major work, the student must take two years of either French, German, or Russian, and one year of Chinese, Czech, Greek, Japanese, Latin, Norwegian, Polish, Serbo-Croatian, or Swedish. If both the student's languages are Indo-European, they must be in different branches of the family.

The major work for the Bachelor of Arts degree includes: (1) Phonetics (SPA 370) and Speech Science (SPA 371); (2) Linguistics (Anth 441, 442, 443); (3) History of the English Language (Eng 491), Modern English Grammar (Eng 492), and Advanced English Grammar (Eng 493); (4) a seminar in linguistics, approved by the interdisciplinary committee, to be taken in the senior year; (5) at least 9 term hours selected from the following groups—not more than 6 term hours may be from group (b) and at least 3 term hours must be from group (c): (a) Mathematical Logic and Set Theory (Mth 354, 355), (b) Theory of Knowledge (Phl 321, 322), Philosophy of Language (Phl 325, 326), Philosophy of Mind (Phl 458, 459), Introduction to Philosophy of Science (Phl 339, 340), (c) Applied German Phonetics (GL 498), French Pronunciation and Phonetics (RL 331, 332, 333), Russian Phonetics (SL 324), (d) any courses numbered between 400-499 in the list of courses approved for the Master of Arts degree program (see below).

Requirements for the Master's Degree. The requirements for the Master of Arts degree include: (1) Seminar: Linguistic Analysis (AL 507) 3 terms, 5 hours each term; (2) thesis, 9 hours; (3) a three-hour terminal examination on synchronic and diachronic theory and method; (4) seven courses, comprising a minimum of 21 term hours, selected, with approval of the interdisciplinary committee, from the following, drawing from the offerings of at least two departments (if a student draws from the offerings of only two departments, he must select no fewer than three courses from each of them): Communication and Culture (Anth 456, 457, 458), Literary Chinese (OL 414, 415, 416), Readings in Mediaeval Latin (CL 511, 512, 513), Old English (Eng 511, 512, 513), Old Icelandic (Eng 514, 515, 516), Middle English (Eng 517), History and Structure of the English Language (Eng 520, 521, 522), Introduction to Middle High German (GL 514), Readings in Middle High German Literature (GL 515, 516), Old High German (GL 530, 531), Introduction to Gothic (GL 532), Structure of Modern German (GL 533), History of New High German (GL 534), Introduction to Old Saxon (GL 539), Literary Japanese (OL 411, 412, 413), Old French (RL 520, 521, 522), Vulgar Latin and Old Provençal (RL 523, 524, 525), Old Spanish (RL 535, 536, 537), Structure of Russian (SL 440, 441, 442), Old

Church Slavonic (SL 540), History of Russian (SL 541, 542), Problems in Philosophy of Science (Phl 468), Problems of Knowledge (Phl 511, 512, 513), Problems in Philosophy of Language (Phl 517, 518), Problems in Philosophy of Mind (Phl 523, 524), Thinking (Psy 426), Developmental II: Learning and Perception (Psy 462), Psychology of Learning (Psy 490), Human Performance (Psy 494), Conditioning and Learning (Psy 495), Human Learning and Cognition (Psy 496), Advanced Speech Science (SPA 472), Psychology of Speech (SPA 570), Speech and Language Development (SPA 573), relevant seminars, reading and conference (505 in any of the above-named departments), and Research (ISt 501). A maximum of 5 hours in courses 501 and 505 may be counted toward the 21-hour requirement, and 3 or more hours of coherent work under one of these numbers may be counted as one course for the seven-course requirement. To be counted at all the work must be clearly within the field of linguistics.

If a student entering the master's program has not had the following courses, he must complete them in addition to the requirements described above: (1) at least two years of college-level work in a language not native to him; (2) Linguistics (Anth 441, 442, 443) or its equivalent.

Mathematics

Professors: C. W. CURTIS (department head), F. W. ANDERSON,* F. C. ANDREWS, R. B. BARRAR, PAUL CIVIN, K. S. GHENT, D. K. HARRISON, H. L. LOEB, E. A. MAIER, A. F. MOURSUND, I. M. NIVEN, K. A. ROSS, R. F. TATE, D. R. TRUAX, L. E. WARD, JR., BERTRAM YOOD.

Associate Professors: B. A. BARNES, R. S. FREEMAN, R. M. KOCH, J. V. LEAHY, T. K. MATTHES, D. G. MOURSUND, T. W. PALMER, J. M. VAN BUSKIRK, C. R. B. WRIGHT.

Assistant Professors: C. T. BENSON, R. B. BURCKEL, C. M. DEO, M. N. DYER,† J. B. JACOBS, FRANKLIN LOWENTHAL, G. M. SEITZ, A. J. SIERADSKI.‡

Senior Instructors: G. T. BEELMAN, P. R. SHERMAN.

Instructors: LULU MOURSUND, J. M. WOLFE.

Fellows: R. A. BEKES, B. N. BRAUNSTEN, D. S. BROWDER, S. E. BROWN, W. J. CARSRUD, B. H. COPE, R. E. COWAN, R. F. DAMIANO, W. D. ELLIS, M. J. GILPIN, A. C. GRANZIN, J. J. GREENWOOD, R. D. GRISSELL, R. A. HERNANDEZ, D. D. JONES, J. E. JUILFS, R. G. KARIMPOUR, M. R. W. KERVIN, D. A. KOSTIZAK, M. A. KURDI, D. K. LEE, R. A. LINDENBERG, W. R. LINN, J. M. LOPEZ, LEWIS LUM, S. S. MITCHELL, T. L. MUNKRES, D. A. PARKER, W. L. PASCHKE, D. G. PAULOWICH, JOHN PHILLIPS, R. W. PRIELIPP, P. S. PUTTER, P. V. RAO, R. W. RYDEN, D. A. SCHOENFELD, D. J. SCHULLER, J. H. SCHULTZ, T. R. SHORE, L. D. SLINGERLAND, D. W. SNYDER, J. R. SPOONER, JONATHON STAFFORD, D. K. STEVENSON, T. A. SWANSON, F. J. TAUSSIG, W. B. WATSON.

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 as much mathematics in high school as they can work into their programs. Courses in algebra, geometry, trigonometry and more advanced topics should be included whether offered as separate courses or in unified

* On sabbatical leave 1970-71.

† On leave of absence, winter term, 1971.

‡ On leave of absence, fall term, 1970.

form. Prospective mathematics majors should arrange with the Department of Mathematics to discuss their programs with an adviser at the earliest opportunity.

Major Programs. The department offers undergraduate preparation for graduate work in mathematics, for mathematics teaching at the secondary level, and for positions in government, business, and industry requiring mathematical training. Each mathematics major's program is individually constructed in consultation with his adviser and includes a year of calculus, normally followed by Advanced Calculus with Linear Algebra (Mth 331, 332, 333). Students who have advanced-placement credit in calculus can begin University work with Topics from Calculus (Mth 215) or, in some cases, can start upper-division work at once. Majors whose high-school preparation does not qualify them to begin calculus must make up their deficiencies by enrolling in the appropriate calculus-preparatory courses.

Science Group Requirement. The department offers several one-term courses (Mth 150, 151, 152, 153, 154, 155, 156) and an Honors College sequence (Mth 190, 191, 192) specifically intended for students who do not plan to take advanced work in mathematics but who wish to satisfy all or part of the science group requirement in mathematics. These courses present ideas from areas of important mathematical activity in an elementary setting, stressing concepts more than computation. They do not provide preparation for other mathematics courses. The calculus sequences (Mth 200, 201, 202, 203 or Mth 204, 205, 206), together with the preparatory courses, College Algebra (Mth 104), Elementary Functions (Mth 105) and Preparation for Calculus (Mth 115), are recommended to students whose areas of study involve substantial use of calculus. The one-term course, Elements of Calculus (Mth 106), is intended for students with limited need for the computational techniques of calculus.

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 Calculus with Analytic Geometry (Mth 200, 201, 202) or Analytic Geometry and Calculus (Mth 204, 205, 206) or their equivalents, and at least 30 pass-differentiated term hours in upper-division mathematics and computer science courses exclusive of Mth 425, 426, 427. Not more than 15 hours selected from Mth 441, 442, 443, Mth 447, 448, 449, and not more than 12 hours of computer science, may be counted toward the minimum major requirement. Mth 331 and Mth 411 may not both be counted toward the minimum major requirement.

Students preparing for graduate work in any area of mathematics should include in their programs: Mth 331, 332, 333; Mth 412; Mth 415, 416, 417; Mth 418; and Mth 431, 432, 433. Those preparing for graduate work in statistics should also include Mth 447, 448, 449. Other courses should be selected in consultation with the student's adviser. Attainment of a reading knowledge of at least one foreign language chosen from French, German, or Russian is highly recommended.

Secondary-School Teaching of Mathematics. For certification as a teacher of mathematics in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in mathematics and the requirements for unqualified recommendation by the University of Oregon, students should satisfy the requirements for a bachelor's degree with a major in mathematics, and should include in their programs: Calculus (Mth 323), Fundamentals of Algebra (Mth 341, 342, 343), Fundamentals of Geometry (Mth 344, 345), and Fundamentals of Statistics (Mth 346). Regular session courses with similar content and special upper-division and graduate courses offered during summer sessions are acceptable substitutes for these courses.

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.

For further information, the student should consult the member of the mathematics faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

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, differential and algebraic geometry, differential equations and applied mathematics, topology, algebraic topology, topological algebra, numerical analysis, probability, and statistics. Special master's degree programs are available in mathematics teaching. Students interested in graduate work should consult the head of the department concerning departmental requirements.

Computing Center. A computing center is operated under the auspices of the Graduate School. An IBM 360/50 electronic computer is available for research and teaching. See COMPUTING CENTER, page 128, and COMPUTER SCIENCE, pages 170-172.

LOWER-DIVISION COURSES

Mth 95. 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. College Algebra. 4 hours.

Intended for students who plan to take further work in mathematics. Prerequisite: one and one-half years of high-school algebra or Mth 95.

Mth 105. Elementary Functions. 4 hours.

Trigonometric, logarithmic, and exponential functions and their graphs. Intended as preparation for Mth 200 or Mth 204. Prerequisite: Mth 104 or equivalent.

Mth 106. Elements of Calculus. 4 hours.

Concepts of differential and integral calculus of algebraic functions. A terminal course. Not open to students who have completed Mth 109, Mth 200, or Mth 204. Prerequisite: Mth 104 or equivalent.

Mth 115. Preparation for Calculus. 4 hours.

Selected topics from algebra, trigonometry, and other areas. For entering students who have had a considerable amount of high-school mathematics and whose placement scores indicate a need for a brief course in precalculus mathematics. Prerequisite: placement score just below that required for Mth 200 or consent of department.

Mth 121, 122, 123. Mathematics for Elementary Teachers. 3 hours each term.

Basic concepts of arithmetic, elementary algebra, and elementary geometry. Emphasis on the real number system and deductive processes within the system. Open only to prospective elementary teachers.

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 or equivalent.

Mth 150. Introduction to Probability. 3 hours.

An elementary survey emphasizing basic concepts, with application to problems in many fields. Prerequisite: Mth 95 or two years of high-school algebra or entrance placement for Mth 104.

Mth 151. Elementary Combinatorics. 3 hours.

Methods of enumeration; permutations and combinations; networks; elementary linear programming. Prerequisite: Mth 95 or two years of high-school algebra or entrance placement for Mth 104.

Mth 152. Mathematical Symmetry. 3 hours.

An introduction to the common mathematical symmetry properties of objects occurring in architecture, art, and the natural sciences; reflections and rotations; the concept of a group of symmetries. Prerequisite: one year of high-school geometry and Mth 95 or two years of high-school algebra or entrance placement for Mth 104.

Mth 153. Introduction to Game Theory. 3 hours.

Elements of 2-person and n-person games, with applications in economics, political science, and international affairs. Prerequisite: Mth 95 or two years of high-school algebra or entrance placement for Mth 104.

Mth 154. Mathematical Milestones. 3 hours.

An examination of several major mathematical discoveries of the eighteenth and nineteenth centuries with emphasis on particular results rather than on the overall flow of history. Prerequisite: one term of 100-level mathematics or consent of department.

Mth 155. Inequalities. 3 hours.

A study of inequalities as they arise in problems in arithmetic, geometry, and algebra. Applications to variational problems. Prerequisite: Mth 104 or equivalent.

Mth 156. Concepts of Statistics. 3 hours.

Fundamental ideas of statistics, with illustrative examples. Particular attention to correct problem formulation and correct use of definitions and notation. Intended to expose features of modern statistical thinking in a mathematically elementary atmosphere. Primarily for lower-division students. Prerequisite: Mth 95 or two years of high-school algebra or entrance placement for Mth 104.

Mth 190, 191, 192. Topics in Modern Mathematics (Honors College). 4 hours each term.

Selected topics chosen to illustrate mathematical thought and application of mathematics to contemporary problems. Does not provide preparation for calculus. Prerequisite: one and one-half years of high-school algebra or Mth 95.

Mth 200, 201, 202, 203. Calculus with Analytic Geometry. 4 hours each term.

Standard sequence for students of physical, biological, and social sciences. Prerequisite: high-school trigonometry and a high placement score; or Mth 115; or Mth 105. 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 200, 201, 202, 203. Special section for Honors College and other superior students. Prerequisite: high-school trigonometry and a high placement score; or Mth 115; or Mth 105.

Mth 215. Topics from Calculus. 4 hours fall.

For entering students whose calculus backgrounds include most but not all of a year of university calculus. Designed to produce a level of proficiency in calculus sufficient for upper-division mathematics courses. Prerequisite: consent of department.

Mth 290. Seminar. Hours to be arranged.

Topics not covered in the regular lower-division courses. For selected students.

UPPER-DIVISION COURSES

Mth 323. Calculus. 4 hours.

Foundations of the calculus. For prospective high-school teachers. Prerequisite: calculus and consent of instructor.

Mth 328. Number Theory. 3 hours.

Divisibility, congruences, number theoretic functions, Diophantine equations. Prerequisite: year sequence in calculus or consent of instructor.

Mth 331, 332, 333. Advanced Calculus with Linear Algebra. 3 hours each term.

Introduction to linear algebra. Calculus of functions of several variables from a vector viewpoint, including partial differentiation, multiple integration, and applications; includes most of the content of Mth 419, Mth 420. Prerequisite: year sequence in calculus.

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.

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.

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.

Mth 354, 355. Mathematical Logic and Set Theory. 3 hours each term.

Basic concepts of mathematical logic and set theory. Propositional calculus, predicate calculus, algebra of sets, functions and relations, cardinal numbers, ordinal numbers, point sets on the real line. Prerequisite: year sequence in calculus or consent of instructor.

Mth 403. Thesis. Hours to be arranged.**Mth 405. Reading and Conference.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****Mth 407. Seminar.** (g) Hours to be arranged.**Mth 411. Introductory Linear Algebra.** (g) 3 hours.

Computational matrix algebra. Vector spaces, systems of linear equations, matrices, determinants, characteristic roots, quadratic forms and diagonalization. Not intended for students who have credit for Mth 331. Prerequisite: Mth 202 or Mth 205, or consent of instructor.

Mth 412. Linear Algebra. (G) 3 hours.

Proofs of theorems on basis and dimension in abstract vector spaces; linear transformations, the minimal polynomial; determinant of a linear transformation; characteristic roots and vectors; orthogonal, unitary, and symmetric transformations. Prerequisite: Mth 331 or Mth 411.

Mth 413. Geometric Algebra. (G) 3 hours.

Introduction to the classical linear groups and geometries associated with them. Prerequisite: Mth 412.

Mth 414. Introduction to Hilbert Space. (G) 3 hours.

Geometry of infinite dimensional Hilbert space; bounded linear operators and their adjoints; spectral theorem for self-adjoint and unitary operators. Prerequisite: Mth 412.

Mth 415, 416, 417. 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 331 or Mth 411 or consent of instructor.

Mth 418. Differential Equations. (g) 3 hours.

Linear differential equations, applications, systems of equations. Prerequisite: Mth 331 or Mth 411.

Mth 419. Functions of Several Variables. (g) 3 hours.

Partial differentiation, multiple integrals, and other related topics. Not intended for students who have credit for Mth 332. Prerequisite: sequence in calculus.

Mth 420. Vector Analysis. (g) 3 hours.

Vector operations, divergence theorem, Stokes' theorem, applications. Not intended for students who have credit for Mth 333. Prerequisite: Mth 332 or Mth 419 or equivalent.

Mth 421, 422. Functions of a Complex Variable. (g) 3 hours each term.

Complex numbers, linear fractional transformations, Cauchy-Riemann equations, Cauchy's theorem and applications, power series, residue theorem, harmonic functions, conformal mapping, infinite products. Prerequisite: Mth 331, 332 or consent of instructor.

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 distributions; tests of significance; confidence intervals; regression; analysis of variance; correlation; nonparametric statistics. Prerequisite: Mth 95 or equivalent.

Mth 429, 430. Introduction to Numerical Analysis. (g) 3 hours each term.

Solution of nonlinear equations, and related area analysis; solutions of systems of linear and nonlinear equations; polynomial approximations; numerical differentiation and integration; numerical solution of ordinary differential equations. Prerequisite: sequence in calculus and CS 233 or CS 412.

Mth 431, 432, 433. Introduction to Analysis. (G) 3 hours each term.

A rigorous treatment of topics introduced in more elementary calculus and more advanced topics basic to the study of real and complex variables theory. Prerequisite: Mth 331, 332, 333 or consent of department.

Mth 434. Linear Computations. (G) 3 hours.

Matrix norms, solutions of linear equations, computation of eigenvalues and eigenvectors, error analysis, numerical computations. Prerequisite: Mth 331, 332, 333 and knowledge of or concurrent registration in CS 233 or CS 412.

Mth 435, 436. Numerical Analysis. (G) 3 hours each term.

More advanced than Mth 429, 430. Solution of nonlinear equations, finite difference calculus, numerical integration, matrix methods, numerical solution of differential equations, and other selected topics. Prerequisite: Mth 331, 332, 333; Mth 418 and CS 233 or CS 412.

Mth 437, 438, 439. Introduction to Topology. (G) 3 hours each term.

Elementary point-set topology with an introduction to combinatorial topology and homotopy. Prerequisite: an upper-division mathematics sequence or consent of instructor.

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 distributions, estimation and testing hypotheses, regression, correlation, analysis of variance and co-variance, nonparametric methods. Prerequisite: a sequence in calculus.

Mth 447, 448, 449. Mathematical Statistics. (G) 3 hours each term.

Probability theory and applications to the derivation of sampling distributions; best unbiased estimates; practices of maximum likelihood estimates; the

Neyman-Pearson theory of testing hypotheses: likelihood ratio tests. Prerequisite: Mth 331, 332, 333 or consent of instructor.

Mth 454, 455, 456. **Discrete Probability Theory and Application.** (G) 3 hours each term.

Discrete sample spaces, combinatorial analysis, limit theorems for discrete random variables, recurrent events, Markov chains, nonmeasure-theoretic treatment of simple stochastic processes, applications. Prerequisite: sequence in calculus or consent of instructor.

Mth 465, 466, 467. **Ordinary and Partial Differential Equations.** (g) 3 hours each term.

Selected topics in ordinary and partial differential equations. Emphasis on wave, heat, and Laplace equations; elementary Sturm-Liouville problems; orthogonal functions; mean convergence; Fourier series; Legendre polynomials; Bessel functions; Green's functions; Fourier and Laplace transforms. Prerequisite: Mth 332 or Mth 419, and Mth 418.

Mth 487, 488, 489. **Geometry.** (G) 3-4 hours each term.

Axiomatic development of absolute geometries from both the synthetic and metric points of view; Euclidean and Lobachevskian geometry; area theory; ruler and compass constructions; elements of projective geometry; subgeometries of projective geometry. Intended primarily for secondary school and prospective secondary school mathematics teachers. Prerequisite: sequence in calculus and senior or graduate standing or consent.

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.

Algebraic Geometry. Leahy.

Algebraic Topology. Dyer, Sieradski.

Applied Mathematics. Barrar, Freeman, Lowenthal.

Banach Algebras. Barnes, Palmer, Yood.

Combinatorics. Benson.

Commutative Algebra. Anderson, Harrison.

Complex Variable Theory. Koch, Lowenthal.

Differential Geometry. Koch, Leahy.

Fourier Analysis. Ross.

Function Algebras. Burckel, Civin.

Groups and Representations. Curtis, Seitz, Wright.

Harmonic Analysis. Ross.

Homological Algebra. Anderson, Harrison.

Knot Theory. Van Buskirk.

Lie Algebras and Algebraic Groups. Curtis, Jacobs.

Noncommutative Rings. Anderson, Curtis, Harrison.

Number Theory. Niven.

Numerical Analysis. Loeb, D. Moursund, Wolfe.

Probability. Truax.

Selected Topics for Mathematics Teachers. Ghent, Maier, A. Moursund.

Statistics. Andrews, Matthes, Tate, Truax.

Topics in Functional Analysis. Civin, Palmer, Ross, Yood.

Topological Semi-Groups. Ward.

Topology. Dyer, Sieradski, Van Buskirk, Ward.

Mth 521, 522, 523. **Partial Differential Equations.** 3 hours each term.

Cauchy-Kowalewsky theorem, first order systems, classification of second order equations, boundary value problems for the Laplace and Poisson equations, initial value and mixed problems for the heat and wave equations, eigenvalue problems. Prerequisite: Mth 431, 432, 433 and Mth 331 or Mth 411; Mth 421 recommended.

* No-grade course.

- Mth 531, 532, 533. **Linear Analysis in Applied Mathematics.** 3 hours each term.
Topics selected from the theory of integral equations, calculus of variations, partial differential equations, boundary value problems, linear operators, integral transforms, spectral theory distributions, eigenfunction expansions with applications. Of primary interest to physical science majors. Prerequisite: Mth 411, 418, 420 and 421 or equivalent or consent of instructor.
- Mth 541, 542, 543. **Abstract Algebra.** 3 hours each term.
Group theory, fields, Galois theory, algebraic numbers, matrices, rings, algebras.
- Mth 544, 545, 546. **Structure of Rings and Algebras.** 3 hours each term.
Topics selected from: rings with minimum condition, algebras over a commutative ring, rings without finiteness assumptions, and nonassociative rings and algebras.
- 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.
- 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.
- 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.
- 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.
- 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.
- Mth 571, 572, 573. **Topology.** 3 hours each term.
General and point set topology, introduction to algebraic topology.
- Mth 581, 582, 583. **Theory of Estimation and Testing Hypotheses.** 3 hours each term.
Uniformly most powerful tests; unbiased tests; invariant tests; minimax tests; the univariate and multivariate general linear hypothesis. Minimum variance unbiased estimation; properties of maximum likelihood estimates, Bayes estimates, and minimax estimates.
- Mth 584, 585, 586. **Theory of Probability.** 3 hours each term.
Measure and integration, probability spaces, laws of large numbers, the central limit theory, conditioning martingales, random walks.
- Mth 587, 588. **Stochastic Processes.** 3 hours each term.
- Mth 591, 592, 593. **Advanced Mathematical Statistics.** 3 hours each term.
Topics selected from: analysis of variance and design of experiments; non-parametric statistics; multivariate analysis; large sample theory; sequential analysis.
- Mth 594. **Theory of Games.** 3 hours.
The theory of games, with special emphasis on zero-sum two-person games.
- 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.

COURSES OFFERED ONLY IN SUMMER SESSION AND EXTENSION

- Mth 10. **Elements of Algebra.** No credit (extension).

Mth 457, 458, 459. **Foundations of Mathematics.** (g) 3-4 hours each term (summer session).

Mth 468, 469. **Probability and Statistics.** (g) 3-4 hours each term (summer session).

Mth 478, 479. **Algebra.** (g) 3-4 hours each term (summer session).

Mth 498, 499. **Analysis.** (g) 3-4 hours each term (summer session).

Mth 578, 580. **Algebra.** 3-4 hours each term (summer session).

Mth 589. **Geometry.** 3-4 hours (summer session).

Mth 598, 599. **Analysis.** 3-4 hours each term (summer session).

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. Minimum admission requirements to medical technology training at the Medical School are three years of college work including 24 term hours of biology including a course in bacteriology or microbiology, 24 term hours of chemistry including one full year of a general college chemistry course with lectures and laboratory, and one term of college mathematics; a course in physics is strongly recommended.

During his three years on the Eugene campus, the student must satisfy (1) all general University degree requirements for majors in professional schools 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 95)	12
Cell Biology (Bi 301, 302, 303) or General Biology (Bi 101, 102, 103)	12-15
General Chemistry (Ch 104, 105, 106)	9
Introductory Chemistry Laboratory (Ch 107)	2
Introductory Analytical Chemistry I (Ch 108)	2
Introductory Analytical Chemistry II (Ch 109)	2
Organic Chemistry (Ch 331, 332, Ch 337, 338)	10
Quantitative Analysis (Ch 324)	4
Essentials of Physics (Ph 101, 102, 103)	9
Intro. to Bacteriology (Bi 381, 382)	6
Upper-division biology	3

The curriculum for the fourth-year program at the Medical School is as follows:

	Term Hours
Fall Term	
Clinical Bacteriology (MT 410)	4
Laboratory Orientation (MT 413)	2
Clinical Biochemistry (MT 424)	5
Principles of Hematology (MT 430)	5
Radioisotope Techniques (MT 520)	1
	<u>17</u>
Winter Term	
Clinical Bacteriology (MT 411)	6
Clinical Biochemistry (MT 425)	6
Special Hematology (MT 431)	3
Radioisotope Techniques (MT 521)	1
	<u>16</u>
Spring Term	
Urinalysis (MT 414)	4
Historical Technique (MT 420)	2
Immunohematology (MT 432)	3
Applied Serology (MT 436)	4
Clinical Parasitology (MT 437)	3
Radioisotope Laboratory (MT 522)	1
	<u>17</u>

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 A. L. Soderwall, professor of biology, is chairman.

Medical schools have varying admission requirements. The requirements of the several schools are listed in *Medical School Admission Requirements*, 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 May of the calendar 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 from the Office of Admissions or from the Department of Biology.

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 may elect a departmental major in the College of Liberal Arts or may elect a more general program leading to a major in general science. In either event, the student should become familiar with the requirements of the medical schools to which he intends to apply and, in consultation with his academic adviser, arrange a program appropriate to his case. The specific requirements for each department will be found in this Catalog under the department headings; those for general science are found on pages 188-189.

Students are urged to exercise the pass-no pass option sparingly, if at all. Courses taken to satisfy the general science requirements must be graded.

Minimum requirements for admission to the University of Oregon Medical School are as follows:

- (1) General chemistry, quantitative analysis, and two terms of organic chemistry with laboratory.
- (2) Three terms of biology covering basic concepts of cell structure and function, developmental biology (embryology), and genetics.
- (3) Mathematics through an introductory course in calculus.
- (4) A year sequence in physics with laboratory, covering at least mechanics, heat, and electricity.
- (5) A year sequence in psychology, satisfying either the social science or science group requirement.

Honors. See HONORS COLLEGE, pages 132 ff.

Nursing, Preparatory

Professor: JEAN E. BOYLE (director, School of Nursing).

Associate Professor: GUHLI J. OLSON (coordinator, prenursing program).

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. The total nursing curriculum, leading to the B.S. degree, 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. Scholastic achievement is only one of the criteria for admission; therefore, attainment of a minimum 2.00 GPA does not necessarily assure admission to the School of Nursing.

(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) <i>or</i>	
General Chemistry (Ch 104, 105, 106)	12
English Composition (Wr 121)	3
Arts and letters group	9
Social science group	9
Nutrition (HEc 225)	3
Fundamentals of Speech (Rht 121)	3
Physical education	3
Electives—Background for Nursing (Nur 121) recommended	3

For the student who is a registered nurse, the length of the program will vary, depending on her previous education and the course load carried while at the University. The distribution of required courses provides a balance between general and professional education. An academic adviser will assist the student in the selection of appropriate required courses and make suggestions regarding elective courses.

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 97201.

LOWER-DIVISION COURSE

Nur 121. **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.

Pharmacy, Preparatory

THE UNIVERSITY OF OREGON offers a two-year prepharmacy program to prepare students for admission to the Oregon State University School of Pharmacy or other accredited pharmacy schools. Mr. Judson Pond, senior in-

structor in chemistry, serves as adviser to University of Oregon prepharmacy students. Information on recommended and required courses may be obtained from Mr. Pond.

Philosophy

Professors: B. E. JESSUP (emeritus), F. B. EBERSOLE,* J. A. WISDOM.

Associate Professors: ARNULF ZWEIG (department head), H. A. ALEXANDER,† J. W. COOK, R. T. HERBERT.

Assistant Professors: W. E. DAVIE, LEONARD GEDDES, D. S. LEVI,* ROGER WERTHEIMER.

Instructor: D. C. HOLT.

Lecturer: M. R. AYERS.

Fellows: J. K. BRAMANN, R. W. COLE, G. W. FOULKES, D. K. FRONEFIELD, J. T. HOPKINS, R. W. MASON, J. N. MEYER, E. A. PACHECO, T. G. PLACE, R. L. RANKIN, P. A. SCHNEIDER, D. W. TAYLOR.

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 requirements must include any three quarters from the History of Ancient Philosophy (Phl 301, 302, 303) or the History of Modern Philosophy (Phl 304, 305, 306); Symbolic Logic (Phl 461, 462) or History of Logic (Phl 455, 456); and 6 hours of courses on the works of specific authors. Courses of study must be arranged in consultation with the undergraduate major adviser.

The department also offers a graduate program leading to the Master of Arts and Doctor of Philosophy degrees. Programs are arranged in consultation with the department head.

Honors. See HONORS COLLEGE, pages 132 ff.

LOWER-DIVISION COURSES

Phl 201. Elementary Ethics. 3 hours.

An introduction to the philosophical study of morality, e.g., ethical relativism, the justification of moral judgments, the concepts of duty, right and wrong.

Phl 202. Introduction to Theory of Knowledge. 3 hours.

An introduction to philosophical analysis of problems of knowledge, e.g., empiricism, rationalism, skepticism, the problems of a priori knowledge, perception, sense-data.

Phl 203. Introduction to Metaphysics. 3 hours.

An introduction to some classical metaphysical problems, e.g., substance, universals, causality, mind and body, the nature and justification of metaphysical claims.

Phl 204. Introduction to Philosophy of Religion. 3 hours.

An introduction to the philosophical analysis and justification of religious claims and concepts, e.g., God, the soul, immortality.

Phl 205. Contemporary Moral Issues. 3 hours.

Philosophical problems connected with such topics as civil disobedience, the morality of war, abortion, conscription, compensatory justice.

* On leave of absence 1970-71.

† On leave of absence, spring term, 1971.

Phil 206. Science and Man. 3 hours.

Philosophical problems concerning the nature of scientific explanation and its implications concerning the nature of man and human actions.

Phil 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.

Phil 210. Free Will and Determinism. 3 hours.

Philosophical investigation of such topics as behaviorism, foreknowledge and free will, indeterminism and determinism, human action and responsibility.

Phil 212. Existentialism. 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 has negatively generated the existentialist rebellion.

Phil 221. 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.

Phil 222. 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.

UPPER-DIVISION COURSES**Phil 301, 302, 303. History of Ancient Philosophy.** 3 hours each term.

Survey of the history of philosophy from the pre-Socratic to the mediaeval period, with particular attention to Plato and Aristotle.

Phil 304, 305, 306. History of Modern Philosophy. 3 hours each term.

Survey of the history of western philosophy from Descartes to the twentieth century.

Phil 307, 308, 309. Social and Political Philosophy. 3 hours each term.

A survey of the major social and political theories from Plato through Marx. Inquiry into such ideas as justice, natural law, natural rights, and the social contract.

Phil 321, 322. Theory of Knowledge. 3 hours each term.

A study of the source, certainty, and limits of human knowledge as well as the ground and nature of belief. Rationalism, empiricism, and skepticism. Theories of perception. The problem of abstraction. The nature of truth. Offered alternate years.

Phil 323, 324. Ethics. 3 hours each term.

Study of the most important traditional ethical theories; modern philosophical analysis of moral terms and statements.

Phil 325, 326. Philosophy of Language. 3 hours each term.

Examination of philosophical theories of language and meaning; ideals and methods of clarification; definition analysis; philosophy as study of language. Selected readings.

Phil 339, 340. Introduction to Philosophy of Science. 3 hours each term.

Analysis of basic concepts of science such as "explanation," "chance," "causation," etc. Nature of mathematics and its relation to science.

Phil 350, 351. Metaphysics. 3 hours each term.

A critical treatment of traditional issues in metaphysics, selected from among such topics as substance, existence, time, causation, God, the nature of persons, the meaningfulness of metaphysics. Offered alternate years.

Phl 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Phl 407. **Seminar.** (G) Hours to be arranged.

Philosophy of History.
Descartes.
Berkeley.

Phl 411. **Plato.** (G) 3 hours.

Analysis of Plato's major dialogues. Offered alternate years.

Phl 413. **Aristotle.** (G) 3 hours.

Aristotle's major writings on theory of knowledge, metaphysics, and ethics. Offered alternate years.

Phl 416. **Descartes.** (G) 3 hours.

A study of Descartes' writings on method, knowledge, philosophy of mind, and metaphysics. Offered alternate years.

Phl 419. **Locke.** (G) 3 hours.

A study of Locke's accounts of knowledge, language, personal identity, substance, and his distinction between primary and secondary qualities. Offered alternate years.

Phl 423. **Leibniz.** (G) 3 hours.

A study of Leibniz's writings in logic and metaphysics. Offered alternate years.

Phl 425. **Berkeley.** (G) 3 hours.

A study of Berkeley's major writings on knowledge and perception. Offered alternate years.

Phl 427. **Hume.** (G) 3 hours.

Hume's writings on knowledge, morals, and religion. Offered alternate years.

Phl 429, 430. **Kant.** (G) 3 hours each term.

Kant's major writings in epistemology, ethics and the philosophy of religion: *Critique of Pure Reason*, *Foundations of the Metaphysics of Morals*, *Critique of Practical Reason*, *Religion Within the Limits of Reason Alone*. Offered alternate years.

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.

Phl 433, 434, 435. **Advanced Ethics.** (G) 3 hours each term.

Classical problems and authors in moral philosophy and twentieth-century controversies in ethical theory, e.g., emotivism, the naturalistic fallacy, act and rule utilitarianism, duty and supererogation. Prerequisite: Phl 323, 324 or consent of instructor.

Phl 438. **Kierkegaard.** (G) 3 hours.

An examination of Kierkegaard's major philosophical and polemical writings: *Concluding Unscientific Postscript*, *Either/Or*, *The Sickness unto Death*, *The Attack on 'Christendom'*. Offered alternate years.

Phl 439, 440. **Philosophy of Religion.** (G) 3 hours each term.

An intensive study of specific issues arising from reflection upon such topics as the nature of faith, proofs for the existence of God, the nature of divine attributes, the problem of evil, and religious ethics. Offered alternate years.

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.

Phl 447, 448. **Wittgenstein.** (G) 3 hours each term.

A study of Wittgenstein's *Tractatus Logico-Philosophicus*, *Philosophical Investigations*, and several minor works. Offered alternate years.

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 455, 456. History of Logic. (G) 3 hours each term.

A study of writers in the philosophy of logic: e.g., Plato, Aristotle, the Stoics, Ockham, Frege, Strawson. Offered alternate years.

Phl 458, 459. 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 461, 462. Symbolic Logic. (G) 3 hours each term.

A consideration of the critical results of mathematical logic; e.g., the completeness and undecidability of the predicate calculus, the essential incompleteness of elementary number theory, set and recursive function theory. Offered alternate years.

Phl 463. Philosophy of Mathematics. (G) 3 hours.

The status of mathematical theorems and formulas; truth and falsity, necessity, justification in mathematics; Hilbert's program; Frege; mathematics and the world. Offered alternate years.

Phl 465. Logical Theory. (G) 3 hours.

Formal and informal logic; proof; acceptability of logic; measuring, computing, formalizing and arguing, contradiction and paradox. Offered alternate years.

Phl 468. Problems in Philosophy of Science. (G) 3 hours.

Probability and statistics; the nature of scientific discovery; hypothetico-deductive systems; the scope of science; science and metaphysics. Prerequisite: Phl 339, 340 or consent of instructor. Offered alternate years.

Phl 480, 481, 482. Philosophy of the Social Sciences. (G) 3 hours each term.

Inquiry into the possibility of a science of society. Holism and methodological individualism; behavioralism; value-neutrality. Selected special topics, such as ideology, relativity of concepts, ethno-linguistics.

GRADUATE COURSES***Phl 501. Research.** Hours to be arranged.***Phl 503. Thesis.** Hours to be arranged.**Phl 505. Reading and Conference.** Hours to be arranged.**Phl 507. Seminar.** Hours to be arranged.

Metaphysics.

Analytic Aesthetics.

Practical Reasoning.

Philosophical Conflict.

The Later Wittgenstein.

Problems in the Philosophy of Language.

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.

Phl 514, 515, 516. Ethical Theory. 3 hours each term.

An examination of contemporary ethical theory.

Phl 517, 518. Problems in Philosophy of Language. 3 hours each term.

Analysis of current issues in the philosophy of language. Prerequisite: Phl 316, 317 or consent of instructor. Offered alternate years.

* No-grade course.

Phl 523, 524. **Problems in Philosophy of Mind.** 3 hours each term.

Examination of current literature on perception, action, intention, motives and causes, other minds. Prerequisite: Phl 449, 450 or consent of instructor. Offered alternate years.

Physics

Professors: R. J. DONNELLY (department head), S. Y. CH'EN, BERND CRASEMANN, F. E. DART, E. G. EBBIGHAUSEN, M. D. GIRARDEAU, J. W. MCCLURE, D. K. MCDANIELS,* M. J. MORAVCSIK, J. L. POWELL, G. H. WANNIER.

Associate Professors: AMIT GOSWAMI, R. J. HIGGINS, J. C. KEMP,* H. W. LEFEVRE, B. W. MATTHEWS, J. C. OVERLY, G. W. RAYFIELD.

Assistant Professors: P. L. CSONKA,† D. H. LOWNDES, KWANJAI PARK, R. L. ZIMMERMAN.

Senior Instructors: J. C. BURG, J. V. RADOSTITZ, T. G. OWEN.

Associates: R. G. CLARKSON, D. H. EHLERS, H. C. FORD, J. P. HOLDEN, I. G. NOLT, A. Q. SARKER, S. Q. WANG, PAUL ZUCKER.

Fellows: P. J. ADAMS, H. G. ALLES, K. R. AUSICH, R. L. BOWERS, DAVID BREGMAN, D. L. BRIDGES, J. S. BROOKS, C. A. BURKE, Y. K. CHANG, M. H. CHEN, JACK CHENG, Y. T. CHENG, YUN CHUNG, F. H. CLARO, J. F. DOAR, D. H. DYE, DAVID FREWEN, MIHIR GHOSH, PRANAB GHOSH, J. D. GILBERT, Y. N. GORADIA, D. O. HALL, M. B. HAXTON, D. R. HOFSTADTER, Y. P. HUNG, E. H. IZEN, B. D. JOHNSON, K. V. JOHNSON, H. D. KAEHN, J. M. KAZADI, D. W. KNEFF, PAUL KOBLAS, K. C. LAM, M. T. LUNNON, M. G. MACK, JERRY MARTYNIUK, J. L. MILICH, R. P. MITCHELL, F. A. MODINE, A. J. MORD, RANJAN RAY, P. R. RIMBEY, K. E. RITALA, J. D. RODE, R. R. RUEL, TOMAZ RUPNIK, G. C. SALZMAN, R. M. SEALOCK, FRED SEVERSON, M. P. SHARMA, NEILL SIDELL, D. A. SIMPSON, L. E. SLATER, P. W. SLAYTON, W. L. SNELL, V. SRINIVASAN, A. G. TOBIN, F. E. VIGNOLA, S. T. WANG, TA CHENG WANG, T. C. WANG, L. H. WEAVER, D. D. WEBER, R. B. WAKEFIELD, S. Y. YOON, W. Y. YU.

COURSES OFFERED by the Department of Physics are planned to provide basic training for professional physics majors, for persons who wish to obtain a broad liberal arts education centered around a major in physics, for major students in other science fields, for premedical and pre dental students, and for students planning to teach the physical sciences in the secondary schools.

Preparation for Major Work. Students planning to major in physics at the University should take as much mathematics in high school as possible. Students entering with insufficient preparation in mathematics must remedy their deficiencies in elementary courses offered by the University. Substantial preparation in English and a foreign language is expected. High-school work in chemistry and physics is desirable but not required.

Requirements for Bachelor's Degree. To qualify for a bachelor's degree with a major in physics, a student must complete 39 term hours of work in the field, including General Physics (Ph 201, 202, 203), General Physics Laboratory (Ph 204, 205, 206), and at least 24 term hours in upper-division physics courses including Elements of Classical Physics (Ph 321, 322, 323) or Advanced General Physics (Ph 324, 325, 326). All physics majors must complete a year sequence in differential and integral calculus and a year sequence in chemistry, including laboratory.

Students preparing for graduate work in physics should include in their pro-

* On sabbatical leave 1970-71.

† On leave of absence 1970-71.

grams: Structure of Matter (Ph 421, 422, 423), Electricity and Magnetism (Ph 441, 442, 443), at least a four-term sequence in advanced mathematics—Differential Equations (Mth 418) and Advanced Calculus with Linear Algebra (Mth 331, 332, 333); a year sequence in advanced mathematics, and at least one additional upper-division sequence in physics.

Science Group Requirement. Any of the following courses will satisfy the science group requirement: Essentials of Physics (Ph 101, 102, 103); Descriptive Astronomy (Ph 104, 105, 106); General Physics (Ph 201, 202, 203).

Secondary-School Teaching of Physics. For certification as a teacher of physics in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

For information concerning subject preparation required to meet state standards in physics and to obtain the recommendation of the University of Oregon, the student should consult the member of the faculty of the Department of Physics who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

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. Research in the Department of Physics currently includes theoretical and experimental work in solid state physics, nuclear physics, the physics of fluids, and atomic physics.

Entering students should consult closely with their advisers. Students showing a lack of preparation are advised to take the necessary undergraduate courses to remedy their deficiency, without graduate credit.

Course requirements for a master's degree in physics include: acceptable undergraduate preparation; two year sequences in physics, one of which must be a 500 sequence; and one of the following sequences in mathematics: Ordinary and Partial Differential Equations (Mth 465, 466, 467); Functions of a Complex Variable (Mth 421, 422), Linear Algebra (Mth 411 or Mth 412); Introduction to Analysis (Mth 431, 432, 433); Linear Algebra (Mth 412), Geometric Algebra (Mth 413), Introduction to Hilbert Space (Mth 414); Linear Analysis in Applied Mathematics (Mth 531, 532, 533); Partial Differential Equations (Mth 521, 522, 523).

LOWER-DIVISION COURSES

Ph 101, 102, 103. **Essentials of Physics.** 3 hours each term.

For students not majoring in physics, chemistry, or biology but whose major requires a sound technical knowledge of fundamental principles, and for others interested in general physics. Less mathematical preparation is required than for Ph 201, 202, 203. 3 lectures. Prerequisite: Mth 95.

Ph 104, 105, 106. **Descriptive Astronomy.** 4 hours each term.

Descriptive treatment of both the solar and stellar systems, including the earth, moon, sun, planets, comets and meteors, properties of individual stars, star clusters, bright and dark nebulae, double and multiple stars, variable stars, our galaxy, the extragalactic system, and the expanding universe. Occasional viewing of celestial objects with a telescope. A working knowledge of high-school algebra is required. 4 lectures.

Ph 201, 202, 203. **General Physics.** 4 hours each term.

First-year college physics for science majors. Two sections, four lectures. Prerequisite: for standard section, Mth 104, 105 or equivalent, or consent of instructor; for advanced section, prior study of calculus or concurrent registration in Mth 200 or Mth 204. 4 lectures.

Ph 204, 205, 206. **General Physics Laboratory.** 1 hour each term.

Planned to accompany Ph 101, 102, 103 or Ph 201, 202, 203. One 2-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 321, 322, 323. **Elements of Classical Physics.** 4 hours each term.

An intermediate treatment of mechanics, electricity and magnetism, and thermal physics. This course is especially suitable for students who plan to teach science subjects in secondary schools. 4 lectures.

Ph 324, 325, 326. **Advanced General Physics.** 4 hours each term.

Fundamental principles of Newtonian mechanics; conservation laws; small oscillations; rigid bodies; special relativity; thermodynamics and kinetic theory of gases; introduction to statistical mechanics. 4 lectures.

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.

*Ph 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ph 407. **Seminar.** (G) Hours to be arranged.

Ph 417, 418, 419. **Elements of Atomic, Nuclear, and Solid State Physics.** (G) 4 hours each term.

An introductory treatment of atomic, nuclear, and solid state physics with major emphasis upon the experimental foundation of these subjects. This course is especially suitable for students preparing for secondary-school teaching of chemistry or physics. Topics covered include relativity, atomic structure, optical and X-ray spectra, nuclear reactions, fundamental particles, particle accelerators, crystal structures, and properties of metals, insulators, and semiconductors. 4 lectures.

Ph 421, 422, 423. **Structure of Matter.** (G) 3 hours each term.

The experimental foundations of quantum physics. Atomic physics; introductory nuclear physics; solid state physics. Prerequisite: Ph 321, 322, 323, or Ph 324, 325, 326, or consent of instructor. 3 lectures.

Ph 431, 432, 433. **Optics and Atomic Spectra.** (G) 3 hours each term.

Image formation for coaxial systems, defects of images, effects of apertures, optical instruments. Interference, diffraction, polarization. Propagation of light through anisotropic media. Electromagnetic theory of reflection and refraction; absorption and dispersion; scattering; magneto- and electro-optics. Atomic energy states, vector model and quantum-mechanical description. Fine structure and hyper-fine structure, Zeeman effect. X-ray spectra. 3 lectures.

Ph 434, 435, 436. **Optics Laboratory.** (G) 1 hour each term.

Laboratory exercises in geometrical and physical optics, designed to accompany the material discussed in Ph 431, 432, 433. One 3-hour laboratory period.

Ph 441, 442, 443. **Electricity and Magnetism.** (G) 3 hours each term.

Advanced undergraduate study of electromagnetic phenomena, with primary emphasis on Maxwell's equations, electromagnetic waves and applications of wave theory to interference, diffraction, polarization, wave guides, cavities, etc. Prerequisite: Ph 321, 322, 323, or Ph 324, 325, 326. 3 lectures.

Ph 451, 452, 453. **Introduction to Quantum Mechanics.** (G) 3 hours each term.

Elementary quantum mechanics; the Schrodinger equation, wave functions and wave packets, uncertainty principle, hermitian operators, one-dimensional

* No-grade course.

problems, the WKB approximation, angular momentum and spin, the hydrogen atom, identical particles, approximate methods, elementary scattering theory. Prerequisite: Ph 321, 322, 323, or Ph 324, 325, 326 and concurrent registration in Ph 421, 422, 423, or consent of instructor. 3 lectures.

Ph 461, 462, 463. **Electronics.** (G) 3 hours each term.

An introduction to electronic circuits and techniques of special relevance to measurements in present-day experimental physics. Linear passive networks; response to DC, AC, and transient signals. Nonlinear circuit elements; tubes and transistors; introduction to their behavior and simple applications. Operational amplifiers; their use in measurement, control, and analog computing. Digital measurement techniques. Basic micro-wave techniques. Prerequisite: consent of instructor. 2 lectures, one 3-hour laboratory.

Ph 471, 472, 473. **Introduction to Theoretical Physics.** (G) 3 hours each term.

Mathematical treatment of theories of classical physics, including Lagrangian and Hamiltonian mechanics. 3 lectures.

Ph 481. **Special Relativity.** (G) 3 hours.

The Lorentz Transformation, relativistic kinematics, 4-vectors, electromagnetic fields. 3 lectures.

Ph 491. **X-Ray Crystallography.** (G) 4 hours.

X-ray diffraction. Bragg's law, crystal symmetry, the reciprocal lattice, structure factors and Fourier syntheses, the phase problem, methods of determining small and macromolecular crystal structures. Laboratory work includes manipulation and alignment of crystals, taking and analyzing X-ray photographs, and use of basic X-ray diffraction equipment. 3 lectures, 1 laboratory period. Prerequisite: general physics, calculus, consent of instructor.

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.

Advanced Quantum Theory.

Liquid Helium.

Astrophysics.

General Relativity.

Theoretical Physics.

Gravitation.

*Ph 509. **Supervised Tutoring Practicum.** 1-3 hours any term.

Ph 511, 512, 513. **Theoretical Mechanics.** 3 hours each term.

Lagrangian and Hamiltonian mechanics; small oscillations; rigid bodies; introduction to statistical mechanics. 3 lectures.

Ph 521, 522, 523. **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.

Ph 531, 532, 533. **Quantum Mechanics.** 3 hours each term.

Matter waves and Schroedinger equation; statistical interpretation; measurement process; uncertainty relations; complementarity; classical limit and WKB approximation; scattering; symmetries and conservation laws; identical particles and permutation symmetry; approximation methods; Dirac equation; field quantization and radiation theory; recent advances. Prerequisite: Ph 451, 452, 453; Ph 511, 512, 513, and Ph 521, 522, 523, or concurrent registration in the latter two. 3 lectures.

* No-grade course.

Ph 541, 542, 543. **Statistical Physics.** 3 hours each term.

Thermodynamics, statistical mechanics, kinetic theory; application to gasses, liquids, solids, atoms, molecules, and the structure of matter. 3 lectures.

Ph 551, 552, 553. **Nuclear Physics.** 3 hours each term.

Interaction of radiation with matter; detectors; accelerators; properties of nuclei; weak and electromagnetic interactions; elements of nuclear structure, including the two-nucleon system and models of complex nuclei; basic theory of nuclear reactions; subnuclear particles. Prerequisite: an introductory course in quantum mechanics, such as Ph 451, 452, 453. 3 lectures.

Ph 554, 555, 556. **Theoretical Nuclear Physics.** 3 hours each term.

Selected topics on the theory of nuclear structure and nuclear reactions. 3 lectures.

Ph 561, 562, 563. **Elementary Particle Physics.** 3 hours each term.

Intrinsic properties of elementary particles, conservation laws. Electromagnetic, strong and weak interactions of elementary particles. Fundamentals of experimental techniques used in particle physics. Field theory, S-matrix theory, group theory, and other constructs used in the theory of elementary particles. Phenomenological methods used to analyze particle reactions. Elements of scattering theory. Prerequisite: Ph 531, 532, 533, or equivalent. 3 lectures.

Ph 564, 565, 566. **Advanced Elementary Particle Physics.** 3 hours each term.

A detailed discussion of special topics in elementary particle physics, to be chosen each year from such areas as scattering theory, field theory, dispersion relations, group theoretical symmetries, current algebras, general relativity, as well as other timely subjects as they arise in current elementary particle research. Prerequisite: Ph 561, 562, 563, or consent of instructor. 3 lectures.

Ph 571, 572, 573. **Solid State Physics.** 3 hours each term.

Crystallography; thermal, electrical, optical, and magnetic properties of solids; band theory; metals, semiconductors, and insulators; defects in solids. Prerequisite: Ph 451, 452, 453. 3 lectures.

Ph 574, 575, 576. **Theory of Condensed Matter.** 3 hours each term.

Advanced statistical mechanics and many-particle quantum mechanics, with emphasis on collective effects such as superfluidity, superconductivity, and ferromagnetism. Prerequisite: Ph 531, 532, 533, Ph 541, 542, 543, and Ph 571, 572, 573. 3 lectures.

Ph 581, 582, 583. **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, Stark effect, hyperfine structure, X-ray spectra; spectral line shape; rotational, vibrational, and electronic band spectra of diatomic molecules. 3 lectures.

Ph 584, 585, 586. **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. One 3-hour laboratory period.

Political Science

Professors: JAMES KLONOSKI (department head), J. C. DAVIES, J. F. GANGE, DANIEL GOLDRICH, THOMAS HOVET, JR., W. C. MITCHELL, C. P. SCHLEICHER, L. G. SELIGMAN, L. H. ZIGLER.

Associate Professors: J. M. ALLMAN, D. F. FINLAY, J. R. FISZMAN, A. M. HANHARDT, JR., J. P. LEVINE, JOYCE MITCHELL, J. M. ORBELL, G. M. ZANINOVICH.

Assistant Professors: J. F. MEDLER, L. C. PIERCE, BRENT RUTHERFORD.

Fellows: ANITA CHAVAN, D. E. CLARK, J. J. DEMETRESCU, W. L. EUBANK, F. L. FARRAND, J. P. FREED, C. I. IGAWA, A. W. LERNER, J. R. MCCOY, C. E. MINOR, R. G. MITCHELL, DAVID NACHMIAS, R. S. OLSON, JANICE RADEMAKER, TORU UNO.

POLITICAL SCIENCE has become increasingly empirical in nature since World War II. One manifestation of this trend has been greater emphasis on field research. Students taking courses in political science now often do individual and group field research projects. The department's five-unit course curriculum stresses this kind of academic student involvement.

Undergraduate Program. 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.

The 100- and 200-level (lower-division) courses in the department are fundamental introductory courses, basic to building a major in political science.

The 300-level (upper-division) courses are designed to provide fundamental bibliographic and methodological awareness of the chief area of political science. PS 321 (formerly PS 311), Introduction to Political Analysis; PS 322 (formerly PS 312), Introduction to Comparative Politics; and PS 325 (formerly PS 320), World Politics, are conceived as primary courses, providing a useful basis for other 300- and 400-level courses.

The 400-level (also upper-division) courses are the advanced and specialized courses in the department. A variety of these courses are offered in the chief areas of political theory and methodology, comparative government and international relations. At the discretion of the instructor, there may be specific course requisites for taking certain 400-level courses. It is recommended that students have at least 15 term hours of political science courses before taking 400-level courses.

Requirements for a Political Science Major. Students majoring in political science are required to complete a minimum of 42 term hours of undergraduate political science courses. At least 30 term hours must be in upper-division courses. All courses taken for the major requirement will be graded, with the exception that 12 term hours of lower-division political science courses may be taken on a pass-no pass basis. No specific political science courses are required to be taken for the major.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in political science must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in political science required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the political science faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Work in Political Science. The department of political science offers a graduate program of studies leading to the M.A., M.S., and Ph.D. degrees. The program is designed to prepare a student for teaching, research, and governmental or other public service, as well as to enable him to understand and participate in public affairs. Regular members of the department, special lecturers, and occasional visiting faculty members offer advanced courses and seminars in most fields of political science. Joint faculty-student studies, interdepartmental research projects, and individual research are currently being conducted in such diverse areas as public administration in the United States and underdeveloped countries, political leadership, congressional voting, local community and interest-group power structures, political socialization, revolution, and communications in international relations.

Members of the faculty and their students are associated with a variety of research and study enterprises in the Institute of International Studies and Overseas Administration, the Center for the Advanced Study of Educational Administration, and the Institute for Comparative Experimental Research on Behavioral Systems. Each of these programs provides a center of interdisciplinary and interdepartmental study, focused on aspects of political science. Individual faculty research projects, financed by foundations, the government, the University, and other agencies, provide further opportunities for the student to work closely with faculty members, and to share directly in the tasks of planning, designing, and conducting systematic studies of various kinds.

The program is designed for flexibility. There are no courses specifically required (other than the Graduate School language requirement), and no designated fields of political science. A group of courses dealing with techniques of analysis is offered, but—because students enter graduate school with varying skills—no particular sequence is required. Students are encouraged to consult with their adviser and the course instructors in developing a "skill" program that meets their particular needs.

By avoiding designated "fields" the program encourages students to focus their work on the concepts, theories, and analytic techniques the various fields of political science have in common. Students will therefore define three separate areas of concentration in consultation with three separate faculty committees. Apart from the dissertation and course work, the core of the program consists of three area papers with oral examination—one bibliographic paper with oral examination at the master's level and two papers with oral examination involving extended analysis at the Ph.D. level. Students may select the subject matter of these papers according to their concentration interests, although they will be somewhat constrained by the necessity of finding a faculty committee that will work with them. They may also plan their M.A. and Ph.D. work separately or as a single unit; for example, the bibliographic paper at the master's level might provide the basis for one of the Ph.D. papers and for his dissertation.

The program is designed to insure a wide exposure to the various interests represented in the faculty. Because the committees for the two Ph.D. papers must not overlap, students are obliged to work with at least six different faculty members; if they select different committees for their three papers and dissertation they will have worked with at least twelve faculty members.

Details of the graduate program can be obtained by contacting the department.

LOWER-DIVISION COURSES

PS 100. American Governments: Concepts and Institutions. 4 hours.

Introduction to the concepts of American government, including Federalism, and separation of powers; its institutions, including the Presidency, Congress, and the Supreme Court. Allman, Levine, staff.

PS 199. Reading and Research. 1-2 hours.

Concurrent enrollment in PS 100, PS 202, PS 203, PS 205, PS 207, or PS 208 required.

PS 202. American Governments. 4 hours.

Consideration of the politics and policies of American national government, utilizing the concepts and understandings of modern political science. Levine.

PS 203. State and Local Governments. 4 hours spring.

Introduction to American state and local government with emphasis on comparative political behavior in states and communities. Zeigler, staff.

PS 205. International Relations. 4 hours.

An introduction to the intellectual tools for the analysis of relations among nations; the nature of international relations. Finlay.

PS 207. Introduction to Political Science. 4 hours.

Theories, concepts and research methods appropriate to understanding how conflicts among people are resolved; political analysis in the context of the behavioral sciences; conflict resolution, institutions, and organizations which operate to resolve conflict. Allman.

PS 208. Introduction to Political Science. 4 hours.

Processes of consensus formation and political change analyzed; types of social organization, political socialization, the political culture, voting behavior, and pathologies of mass society; strategies of change studied in the context of varying political systems and cultures. Allman.

UPPER-DIVISION COURSES**PS 321. Introduction to Political Analysis.** 5 hours fall.

Theoretical analysis of political action and systems, their nature, types, and functioning. Particular attention is paid to certain processes of action, including political socialization, the distribution of benefits and costs, integration and stability. Orbell.

PS 322. Introduction to Comparative Politics. 5 hours, winter or spring.

Analysis of major concepts and approaches in the study of comparative government and politics. Fiszman.

PS 325, 326. World Politics. 5 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 337. Southern Asia in Modern Times. 5 hours.

Historical background and contemporary political systems and major problems of India, Pakistan, and Ceylon since 1947. Schleicher.

PS 338. Southern Asia in Modern Times. 5 hours.

Historical background and contemporary political systems and major problems of Burma, Thailand, Malaysia, Singapore, Laos, Cambodia, Vietnam, the Philippines, and Indonesia. Schleicher.

PS 340. Introduction to Public Policy. 5 hours.

An introduction to policy making as it reflects the sources and means of effective political action, the political resources and patterns of power in the society. Questions of initiation and change, interest-group patterns, and modes of policy resolution are compared in various policy areas. J. Mitchell.

PS 351. Introduction to Public Administration. 5 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. Pierce.

PS 403. Thesis. Hours to be arranged.**PS 405. Reading and Conference.** Hours to be arranged.**PS 407. Seminar.** Hours to be arranged.

Field Studies in Public Administration.

Politics of Public Administration. Pierce.
 Politics of Developing Nations. Goldrich.
 Policy Analysis. J. Mitchell.
 Marxist Political Theory. Zaninovich.
 Premodern Thought. Zaninovich.
 Philosophy of Political Inquiry. Zaninovich.
 Communications and Perception. Zeigler.
 Political Organization. Zeigler.
 Public Control of Economic Life. Pierce.
 International Organization. Hovet.
 Political Economy of Aging.

*PS 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

PS 412, 413. **Administrative Organization and Behavior.** (G) 5 hours each term, winter and spring.

Theories of bureaucratic organization analyzed in different contexts; organizational theory considered, including small groups, the nature of authority, and decision making; research findings from several social sciences brought to bear; implications of large-scale organization for the individual reviewed in an attempt to understand the kinds of accommodations individuals make to complex structures. Pierce.

PS 414. **Political Parties.** (G) 5 hours.

Major theories of United States political parties; the primary function of parties in the United States as compared with other systems; socializations and recruitment, political identification, and voting behavior; party organizations. Seligman.

PS 415. **Political Parties.** (G) 5 hours.

Political parties in the context of United States Federalism, parties in the states considered comparatively; Oregon political parties in the contexts of metropolitan areas; the interrelationships of parties on several levels of government; comparison with other systems. Seligman.

PS 416. **Political Parties.** (G) 5 hours.

Parties on the national level—in Congress, the Presidency, administration, interest groups; parties and national decision-making. Emphasis is on the Presidency and political leadership. Comparison with Western Europe and developing systems. Seligman.

PS 420. **International Organization.** (G) 5 hours.

The nature and extent of the organization of interaction among nations. Focus on the United Nations, but illustrations and generalization from a wide range of regional and functional organizations including the specialized agencies. Emphasis on the processes of communication interaction and bargaining negotiation within the organization environment. Hovet.

PS 421. **International Organization.** (G) 5 hours.

The role of international organizations in the management and resolution of conflict. Specific conflict situations in the U.N., regional and functional organizations considered in attempting to assess the utility of international organizations in handling conflict and affecting integration among states. Hovet.

PS 422. **International Law.** (G) 5 hours spring.

Introduction to international public law as an aspect of international organization; international law and the political process; the International Court of Justice. Hovet.

PS 424. **Politics of Western Europe I.** (G) 5 hours.

Governmental institutions and political processes of Great Britain, France, the Federal Republic of Germany. Special attention to interest groups, parties and voting behavior in the period since World War II. Hanhardt.

* No-grade course.

PS 425. Politics of Western Europe II. (G) 5 hours.

Governmental institutions and political processes of the smaller Western European democracies: Italy, Belgium, The Netherlands, the Scandinavian countries. Hanhardt.

PS 427, 428. Government and Politics of the Soviet Union. (G) 5 hours each term, fall and winter.

Governmental institutions and political processes in the Soviet Union. Fiszman.

PS 430. Political Theory: General Issues. (G) 5 hours fall.

Various approaches suggested by selected political theorists, past and present; problem of knowledge as it relates to politics for practitioner and scientist; various modes of transmitting ideas about the nature of political experience; relation between political knowledge and political activity. Zaninovich.

PS 431. Political Theory: Nature, Community, and Authority. (G) 5 hours winter.

Assumptions about man's nature and their implications for development of political theories; growth and character of associative experience and how this conditions the nature of political order; problems and methods of legitimizing and transforming of unstructured power into prescribed authority; range of institutional forms resulting from different conceptions of the authority system. Zaninovich.

PS 432. Political Theory: Participation, Change, and Leadership. (G) 5 hours spring.

Function of participation with respect to problems of political order; various theories of citizenship, freedom, and obligation that relate to this; causes and sources of socio-political dynamics with special focus upon problems of continuity and radical change; nature of political leadership and its role in both change and stability; function of operative ideals in the structure of political order. Zaninovich.

PS 440. Comparative Foreign Policies. (G) 5 hours.

A comparative analysis of the international behavior of selected western states such as the United States, Great Britain, France, etc. Consideration of the systemic and societal variables influencing their behavior, and an analysis of the quality and content of their international behavior. Hovet.

PS 441. Comparative Foreign Policies. (G) 5 hours.

A comparative analysis of the international behavior of selected socialist states such as the Soviet Union, China, etc. Consideration of the systemic and societal variables influencing their behavior and an analysis of the quality and content of their international behavior. Hovet.

PS 442. Comparative Foreign Policies. (G) 5 hours.

A comparative analysis of the international behavior of selected developing states such as India, Nigeria, Brazil, etc. Consideration of the systemic and societal variables influencing their behavior and an analysis of the quality and content of their international behavior. Hovet.

PS 452. Public Opinion and Political Participation. (G) 5 hours.

Participation and opinions treated as independent variables; the focus is on explaining various patterns which exist; the approach is comparative and historical, emphasizing social dynamics. Topics: conceptual distinctions, political socialization, group dynamics, the social and political context, interrelations among opinions and behaviors, questionnaire construction, sampling, interview techniques, normative implications of participation. Orbell.

PS 453. Public Opinion and Political Participation. (G) 5 hours.

Participation and opinions are treated as independent variables; the focus is on the consequences of these factors on the political system and formal processes. Topics: linkage between opinions and decision making, elections, group channels, political communications, models of participation and the political system, coding, data processing, research design, political representation, democratic conflict. Orbell.

PS 454. Public Opinion and Political Participation. (G) 5 hours.

As in PS 453, participation and opinions are treated as independent variables; the concern is with the broader systemic consequences and informal processes. Topics: illegitimate forms of political participation (riots, uprisings, and demonstrations), systemic instability, antidemocratic attitudes and behavior, alienation and withdrawal, social prerequisites of democracy, methods of statistical analysis, the research process, the place of conflict in a society. Orbell.

PS 456. Democratic Institutions. (G) 5 hours.

The more typical institutions of democratic systems. W. Mitchell.

PS 457. Democratic Processes. (G) 5 hours.

Detailed attention paid to democratic processes of resource allocation, distributions of benefits, and burdens and control. W. Mitchell.

PS 458. Democracy and Public Policy. (G) 5 hours.

Historical, social, economic, and psychological conditions which have affected the development and maintenance of democratic systems. W. Mitchell.

PS 460, 461. Government and Politics of the Far East: China. (G) 5 hours each term.

The political organization of modern China and the political behavior of significant groups and elites within Communist China. The historical and ideological background, revolutions, the problems facing the present regime, the relationships with other Communist states. Special emphasis on the treatment of various classes and groups in terms of ideology as well as political practice. Fiszman.

PS 463. Government and Politics of Latin America. (G) 5 hours.

Scope of government, regimes and power structures, political ideologies of dominant and aspiring leadership groups, and external sources of influence in Latin America; sources of stability and instability in Latin American politics. Goldrich.

PS 464. Government and Politics of Latin America. (G) 5 hours.

Topics will vary; examples: comparative political development of Chile and Cuba, politics of Latin American urbanization. Goldrich.

PS 467. Federal Public Administration: The Presidency. (G) 5 hours.

The origin and basic characteristics of the Presidency in all of its parts; the contributions to its development made by particular Presidents, with a comparison of the administrations of Franklin Roosevelt and succeeding administrations; the importance of certain national events and developments in strengthening the role of the President. Klonoski.

PS 468. Federal Public Administration: Departments and Agencies. (G) 5 hours.

The American Federal-state system of government and the effects of that system on shaping the kinds of national departments and agencies that have evolved.

PS 469. Federal Public Administration: Departmental Leadership and Administration. (G) 5 hours.

Departmental administration; the role of the department head as both an administrator of far-flung operations and activities and as a program leader.

PS 470. Political Behavior. (G) 5 hours.

Political behavior of individuals examined in the light of psychological and sociological theory; types of political institutions and kinds of government adapted to the needs and behavioral tendencies of people living in modern industrial and technological society. Prerequisite: consent of instructor. Davies.

PS 475. Political Revolution. (G) 5 hours.

Analysis of causes of revolution, using historical, psychological, and sociological data to explain how violent changes in political power come about. Analysis of specific past revolutions in the search for common phenomena and general theory. Prerequisite: PS 470. Davies.

PS 476. Political Revolution: Research and Theory. (G) 5 hours.

Oral and written reports on particular revolutions or revolutions in general. Prerequisite: PS 475. Davies.

PS 478. Political Fiction. (G) 5 hours.

Analysis of a variety of novels and other literature in the light of the implications of such works for the understanding of why people act as they do in their relations to government. Davies.

PS 482. Legislative Politics. (G) 5 hours.

The study of legislative operations in various governmental settings; their functions and exercises of power, composition, decision making, and influence in the political system. J. Mitchell.

PS 483. Allocation of Justice. (G) 5 hours.

Study of the nature of justice and how it is administered by police, lawyers, district attorneys, juries, and judges. Klonoski, Levine.

PS 484. The Supreme Court in America. (G) 5 hours.

The Supreme Court is analyzed as a political body and the judicial role is studied in the context of the economic, political, social, and psychological factors that influence the Court's decisions. Levine.

PS 485. The Supreme Court in America. (G) 5 hours.

The Supreme Court's rulings on civil liberties and civil rights, freedom and equality, especially since 1953. Klonoski, Levine.

PS 488. The Policy Process. (G) 5 hours.

Systematic study of the factors involved in policy making. Sources of demands, nature of decisions, problems of effectuation, and political consequences compared in various policy areas. J. Mitchell.

PS 489. Comparative Public Policies. (G) 5 hours.

Definition and measurement of public policies for comparative purposes, in local, national, and cross-national settings. Means of assessing their relationships, purposes and impacts. Investigation of comparative theories about policymaking in terms of political, social, and environmental factors. J. Mitchell.

PS 490. Community Politics I. (G) 5 hours.

The approach is comparative, dealing with a wide range of community types with the purpose of identifying regularities in the structure and functioning of the local political system. Topics: the formal structure of city government, the informal distribution of power and influence and the relation between the two; the recruitment of local political elites, patterns of local decision making, citizen participation in community affairs, and the configurations of attitudes toward city government; metropolitan political organization; the politics of race in metropolitan areas, the political implications of black uprisings and the relation between the black and white communities. Fizman, Medler, Orbell.

PS 491. Community Politics II. (G) 5 hours.

Critical analysis of research in the area of community politics. Students are encouraged to develop and execute their own research projects. Prerequisite: PS 490. Fizman, Medler, Orbell.

PS 492. Political Decision-Making. (G) 5 hours.

Explorations of collective or public decision making involving theories of power, goals, and strategies, competition, and coalition-formation applied to a variety of political contexts. J. Mitchell, W. Mitchell.

PS 493. Political Decision-Making. (G) 5 hours.

The use of rational criteria in the analysis and evaluation of public policies. Cost benefit analysis, budgeting and economic considerations, systems analysis, allocative and distributive criteria. Pierce.

PS 494. Federal Education Policy. (G) 5 hours.

Factors in the development of education policy, with particular reference to the Federal government.

PS 495. Federal Welfare Policy. (G) 5 hours.

Factors in the development of health and welfare policy, with particular reference to the Federal government.

PS 496. National Security Policy. (G) 5 hours.

Factors in the development of national security policy, with special emphasis upon decision making, and the implications and consequences of such policies here and abroad. 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.

Africa. Finlay.

Comparative Communist Systems. Fiszman.

Comparative Community Politics. Fiszman, Medler.

Comparative Labor Movements. Fiszman.

Comparative Political Elites. Seligman.

Contemporary Political Theory. W. Mitchell.

International Politics. Schleicher.

International Relations Theory. Hovet, Finlay.

Politics of Public Administration. Pierce.

Policy Implementation Abroad. Gange.

Political Behavior. Davies.

Political Development Problems. Goldrich.

Political Revolution. Davies.

Scope and Methods of Political Science. Zeigler.

United States Foreign Policy. Schleicher.

Marxist Political Theory. Zaninovich.

Premodern Thought. Zaninovich.

Philosophy of Political Inquiry. Zaninovich.

Communication and Perception. Zeigler.

Political Organization. Zeigler.

Comparative Political Recruitment. Seligman.

Western European Politics. Hanhardt.

Orientation to Political Science. Seligman.

Political Fiction: Novels and Other Writings. Davies.

Introduction to Comparative Politics. Hanhardt.

International Organization. Hovet.

Policy Analysis. J. Mitchell.

Metropolitan Political Sociology. Orbell.

Implementing Social Change. Orbell.

Civil Liberties. Levine.

Public Control of Economic Life. Pierce.

Organizational Decision Making. Pierce.

Mathematical Theories of Politics. Medler.

Social Control in Politics. Medler.

Students and Politics. Finlay.

Public Control of Economic Life. Pierce.

Introduction to Statistics. Rutherford.

Political Socialization. Orbell.

Intermediate Statistics. Rutherford.

Intermediate Methodology. Rutherford.

Theory of Conflict and War. Finlay.

Political Economy of Aging.

PS 509. Teaching Practicum. 1-5 hours.

* No-grade course.

Psychology

Professors: R. F. FAGOT (department head), FRED ATTNEAVE, JACOB BECK, F. R. FOSMIRE, L. R. GOLDBERG,* RAY HYMAN, D. P. KIMBLE, R. W. LEEPER,† P. M. LEWINSOHN, R. A. LITTMAN, GERALD R. PATTERSON, M. I. POSNER, PHILIP RUNKEL, N. D. SUNDBERG, LEONA TYLER, R. L. WEISS, W. A. WICKELGREN.

Associate Professors: J. S. CARLSON, H. R. CROSLAND (emeritus), R. M. DAWES, MARVIN GREENBAUM, EDWARD LICHTENSTEIN.

Assistant Professors: J. W. ADKINS, HAROLD ARKOWITZ, BEVERLY FAGOT, J. C. FENTRESS, R. W. HALLER, D. L. HINTZMAN, S. M. JOHNSON, S. W. KEELE, CAROLIN KEUTZER, MARVIN LICKEY, JOSEPH LoPICCOLO, G. M. REICHER, MYRON ROTHBART, BENSON SCHAEFFER, W. C. SHEPPARD, BARBARA WICKELGREN.

Fellows: PAMELA BIRRELL, R. A. BLOCK, B. G. CORRIGAN, S. G. DANIS, VALERIA EGGLESTON, SHEILA EYBERG, R. R. FROST, D. R. GOSTNELL, SUNDRA GREGORY, P. R. HARLEY, PATRICIA HINES, F. J. JAVOREK, D. H. KILLIAN, J. M. LIBET, JEANNE MCTAVISH, K. H. MURDOFF, TERESA NEUFELD, T. M. NEWCOMB, J. PACKWOOD, JANET POLF, A. V. REED, H. W. ROGERS, K. W. ROTHSTEIN, J. T. SMITH, T. L. SMITH, NATALIE TERBOVIC, ELAINE TURNBULL, B. V. UPDYKE, JOANNE VALENTINE, HELENE WARD, G. D. WHITE, J. H. WINKELMAN, SHELDON ZACK.

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 and biological sciences and in such professional fields as education, business, law, and journalism.

Lower-Division Program. The lower-division courses are intended to facilitate the several objectives of the psychology curriculum. Three different year sequences in introductory psychology are offered: Psy 211, Psy 212, Psy 213; Psy 214, Psy 215, Psy 216; Psy 217, 218, 219 (Honors College). Any one of these sequences will provide adequate preparation for upper-division courses in psychology.

The following courses have been approved for satisfaction of social science and science group requirements:

Social Science. Learning and Perception (Psy 214); Development and Social Behavior (Psy 215); Personality and Individual Differences (Psy 216); Principles and Methods of Psychological Assessment (Psy 421); Theories of Personality (Psy 435); Personality Research (Psy 436); Social Psychology (Psy 437); Human Conflict and Accord (Psy 440); Group and Individual Differences (Psy 441); Psychology of Work (Psy 449); Abnormal Psychology (Psy 450); Developmental Psychology (Psy 460); Developmental I: Psychobiological (Psy 461); Developmental II: Learning and Perception (Psy 462); Developmental III: Socialization (Psy 463); Human Sexual Behavior (Psy 467).

Science. Sensation and Perception (Psy 211); Learning, Thinking, and Conditioning (Psy 212); Introduction to Physiological Psychology (Psy 213); Introduction to Experimental Psychology (Honors College) (Psy 217, 218, 219); Quantitative Methods in Psychology (Psy 324); Introduction to Mathematical

* On leave of absence 1970-71.

† On sabbatical leave, winter and spring terms, 1970-71.

Psychology (Psy 420); Thinking (Psy 426); Brain Mechanisms of Behavior (Psy 451); Cellular Mechanisms of Behavior (Psy 452); Higher Brain Function (Psy 453); Motivation (Psy 465); Comparative Psychology (Psy 470); Animal Behavior (Psy 475); Sensory Processes (Psy 485); Psychology of Learning (Psy 490); Psychology of Perception (Psy 492); Human Performance (Psy 494); Human Learning and Cognition (Psy 496); History and Systems of Psychology (Psy 499).

Major Requirements. The following are the requirements for an undergraduate major in psychology:

A minimum of 36 term hours in psychology courses, including at least 24 upper-division hours, is required of all psychology majors. At least 12 of the required upper-division hours must be taken at the University of Oregon. Mth 425 and/or 426 (or, alternatively, Mth 441 and/or 442) may be included in the 24-hour upper-division requirement. Of the 36 term hours used to satisfy the major requirement, at least 24 must be taken on a graded basis; a minimum grade-point average of 2.00 is required in all psychology courses.

Students who do not plan to take graduate work in psychology may arrange a program of courses which will contribute to a career in teaching, social service, or other professions. Such a program should be planned in consultation with the Department of Psychology.

Honors. See HONORS COLLEGE, pages 132 ff.

Preparation for Graduate Study. A bachelor's degree is seldom a sufficient qualification for professional work in psychology; even the simpler professional positions require at least a master's degree.

Students should not undertake graduate work unless their grades in undergraduate psychology and related courses have averaged better than B.

Prospective graduate students in psychology are advised to take only the minimum of 36 hours in psychology required for an undergraduate major (a suggested maximum is 42 hours)—leaving time for work in such related fields as anthropology, biology, chemistry, mathematics, physics, and sociology. Preparation for graduate work should include courses in quantitative methods and foreign languages. All prospective graduate students should take at least one upper-division laboratory course and are strongly urged to take at least two terms of statistics in the Department of Mathematics. A student who intends to work for a Ph.D. degree should acquire a reading knowledge of two foreign languages; languages with particular relevance for psychologists are German, French, Russian, and Japanese.

Graduate Work. The department offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. Candidates for graduate work are accepted in the following fields: general experimental, physiological and comparative, mathematical, clinical, developmental, social and personality, and assessment. The department maintains a general experimental laboratory, rat and monkey laboratories, a child-study center, and a psychological clinic.

All students applying for admission for graduate work in psychology must provide scores on the Graduate Record Examination, verbal, and quantitative scores (the score on the Miller Analogies Test is also desirable) and three letters of recommendation on special forms provided by the department. Detailed information on admission, including application forms and information on awards and assistantships, may be obtained from the Department of Psychology.

During the first year of graduate work, students acquire a broad background in psychology and an introduction to research. The student's specific program is planned to suit his prior background, current interests, and future goals. A thesis is required for all advanced degrees. Research experience is required of all Ph.D. candidates, and teaching experience is recommended. For general regulations governing graduate work at the University, see GRADUATE SCHOOL, pages 114 ff.

Clinical Program. A research-oriented approach to theories and methods of clinical psychology is followed by the Department of Psychology. A clinical psychologist, in the view of the department, is a behavioral scientist with an area of specialization in clinical psychology. As part of his graduate training, the student learns to devise approaches to clinical problems which lead to a better conceptual understanding of the phenomena under study. The program stresses a data-oriented approach to the complexities of clinical problems. During the first and second years of graduate study the student completes (1) the core program, including work in experimental psychology and quantitative methods, (2) a proseminar in clinical research topics, and (3) a clinical core sequence in assessment and in behavior change, with an associated practicum. The second-year practicum experience, as well as advanced-level clinical-research training is provided in large part through the University Psychology Clinic, a training clinic operated by the clinical staff and students.

Beyond the second year, there is considerable latitude in planning a program of study and research. The student must pass a major clinical preliminary examination (covering assessment, psychopathology, and behavior change) and a minor preliminary examination in an area selected by the student as a special interest (e.g., learning approaches to behavior change, social psychology, etc.). A one-year clinical internship, which may be taken in either the third or fourth year, is required to provide the necessary breadth of experience.

LOWER-DIVISION COURSES

Psy 211. Sensation and Perception. 4 hours fall.

Introduction to sensory and perceptual processes; demonstrations.

Psy 212. Learning, Thinking, and Conditioning. 4 hours winter.

Classical and operant conditioning; acquisition, retention, and utilization of information and behavior; demonstrations.

Psy 213. Introduction to Physiological Psychology. 4 hours spring.

Consideration of brain functions with special emphasis on problems of sensation, perception, and motivation.

Psy 214. Learning and Perception. 4 hours fall.

Perceptual processes; conditioning and learning; data and theories considered oriented toward social behavior; demonstrations.

Psy 215. Development and Social Behavior. 4 hours winter.

Species, individual, and cultural sources of social behavior; emphasis on developmental processes involved in formation of individual and social types of behavior, including attitudes and beliefs and pathologies; demonstrations.

Psy 216. Personality and Individual Differences. 4 hours spring.

Assessment, structure, function, and modification of adult personality and behavior; individual differences in various aspects of personality and behavior studies; demonstrations.

Psy 217, 218, 219. Introduction to Experimental Psychology (Honors College). 4 hours each term.

An integrated lecture-laboratory course designed to acquaint the student with the fundamental concepts and facts in perception, learning, and motivation. Open to selected students outside Honors College through permission of instructor. Enrollment limited to 20-25.

UPPER-DIVISION COURSES

Psy 324. Quantitative Methods in Psychology. 4 hours.

Methods which psychologists have devised for summarizing, describing, and interpreting information from field observations, clinical work, interviews, sensory judgments, learning trials, tests, and experiments. Lectures and supervised workshops. Fagot, Hintzman, Schaeffer.

Psy 401. **Research.** Hours to be arranged.

Psy 403. **Thesis.** Hours to be arranged.

Psy 405. **Reading and Conference.** Hours to be arranged.

*Psy 409. **Supervised Tutoring Practicum.** 1-3 hours any term.

Psy 438. **Experimental Social Psychology Laboratory.** 2 hours.

An introduction to research methods and problems in social psychology. Readings and coordinate laboratory problems include the topics of theory and research, experimental design, experimental methods, the social psychology of the individual, group influence upon individual behavior, social interaction, and group structure and membership. Students will be required to complete a minimum of two experiments either individually or with a subgroup. Prerequisite: Psy 324 and Psy 437. Rothbart.

Psy 442. **Personality and Individual Differences Laboratory.** 2 hours.

Design, conduct, and analysis of experiments in personality and developmental psychology. Prerequisite: Psy 324, Psy 421 or Psy 441, or equivalent.

Psy 493. **Laboratory in Perception.** 2 hours.

Laboratory work in design, conduct, and analysis of experiments in perception. Prerequisite: Psy 324. Attneave, Beck.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Psy 407. **Seminar.** (g) Hours to be arranged.

Opportunity for small groups of students to pursue further the subject matter of an upper-division course or to explore in depth a specific topic arising out of material covered in a course. The seminars offered vary from year to year, depending upon interests and needs of students and upon availability of faculty. Typical offerings are:

Perception. Attneave, Beck.

Thinking.

Human Performance. Posner.

Neuropsychology. Kimble, Lickey.

Psychopathology. Fosmire.

Group Processes. Fosmire.

Mathematical Models. Haller.

Motivation. Adkins.

History and Systems. Leeper.

Animal Behavior. Fentress.

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 420. **Introduction to Mathematical Psychology.** (G) 3 hours.

Mathematical theory construction in selected areas of psychology; learning, perception, measurement, social psychology, choice behavior. Prerequisite: Mth 425 or equivalent. Haller.

Psy 421. **Principles and Methods of Psychological Assessment.** (g) 3 hours.

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. Prerequisite: Psy 324 or Mth 425, or equivalent. Goldberg.

Psy 426. **Thinking.** (G) 3 hours.

Learning and use of concepts; problem solving; decision making; cognitive

* No-grade course.

development and creativity. Prerequisite: Psy 490 or equivalent, or consent of instructor. Hyman, Posner.

Psy 435. Theories of Personality. (g) 3 hours.

A description of the main phenomena of personality and a critical comparison of the outstanding conceptual systems that have been developed to account for these phenomena. Leeper.

Psy 436. Personality Research. (g) 3 hours.

A review of current areas of personality research deriving from the leading conceptual models of individual differences. The course will focus on how knowledge about personality effects is generated, examining organismic and situational influences on behavior. Topics include acquisition of personality traits, development of self-concept, interpersonal perception, studies of modeling and behavior change. Prerequisite: Psy 435 or equivalent.

Psy 437. Social Psychology. (g) 3 hours.

The relationship of the individual to his social environment, especially in his participation in small groups; social perception and motivation as shown in the acquaintance process, power and dependence, roles in the group, and the part played by the group in attitude change. Materials and issues treated in terms of basic psychological concepts. Fosmire, Rothbart.

Psy 439. Group Consultation. (G) 3 hours.

A laboratory course in the study, evaluation, and modification of group processes. Emphasis on conceptualization of problem-solving groups as parts of larger social systems, with particular attention to the analysis of constraints imposed by the larger system. Prerequisite: Psy 437, Soc 430 or Soc 431, or consent of instructor. Fosmire.

Psy 440. Human Conflict and Accord. (g) 3 hours.

The nature of interpersonal and intergroup conflict; aggression, nonviolence, social trust, conflict control procedures, personality and conflict; conflict and accord in such groups as the family and the community.

Psy 441. Group and Individual Differences. (g) 3 hours.

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. Psy 324 or equivalent recommended as preparation for this course. Goldberg.

Psy 449. Psychology of Work. (g) 3 hours.

Factors that influence man's efficiency and his motivation to work. Topics include: boredom, fatigue, aging, incentives, working environment, decision making, design of man-machine systems, achievement motivation, and social influences. Keele.

Psy 450. Abnormal Psychology. (g) 3 hours.

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. Psy 324 is recommended as preparation for this course. Fosmire, Lewinsohn, LoPiccolo.

Psy 451. Brain Mechanisms of Behavior. (g) 3 hours.

The functional organization of the mammalian brain, including that of man. Brain mechanisms of sensation, perception, arousal and vigilance, reproductive behavior, and memory. Prerequisite: previous work in biology or Psy 213. Kimble.

Psy 452. Cellular Mechanisms of Behavior. (G) 3 hours.

The physiological and biophysical properties of nerve cells which provide mechanisms underlying coordinated movement, sensation, perception, and certain aspects of motivation. Prerequisite: chemistry or physics. Lickey, B. Wickelgren.

Phy 453. Higher Brain Function. (g) 3 hours.

Concentration on the possible neural basis of higher brain functions such as

selective attention, perceptual discrimination, pattern recognition, and motor control. Emphasis on the construction of hypothetical systems of neurons which may account for the more complex cognitive and perceptual events known to exist in human behavior. Prerequisite: Psy 451 or Psy 452. Adkins.

Psy 460. Developmental Psychology. (g) 3 hours.

Survey of the development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence, maturity, and senescence. Topics include development of language and cognition, socialization, emotional development, and the development of motor capabilities. Emphasis on social influences. Intended for students not wanting the depth of Psy 461, 462, and 463.

Psy 461. Developmental I: Psychobiological. (G) 3 hours.

Early development of the young child and the young of other species. Emphasis is psychobiological. Topics covered: developmental psychophysiology, ethological approaches, behavior genetics, prenatal development, effects of early experience, and aging. Prerequisite; prior course work in physiological or comparative psychology, or the equivalent, or consent of instructor.

Psy 462. Developmental II: Learning and Perception. (G) 3 hours.

Intellectual development in children: classical and operant conditioning, memory, attention, and concept formation; perceptual, motor and language development. Prerequisite: prior course work in learning, or consent of instructor.

Psy 463. Developmental III: Socialization. (G) 3 hours.

Socialization processes in infancy, childhood, adolescence, maturity, and old age. Emphasis on the development of attachments in infants, growth of identification, conscience and morality, importance of peer groups, role of family interaction, and the development of psychopathology. Prerequisite: prior course work in personality, social, abnormal, or developmental psychology, or consent of instructor.

Psy 465. Motivation. (g) 3 hours.

Conceptions of motivation; human and animal research on instinct, arousal, motivational physiology, learned motives, conflict and stress, and organization of dispositions. Adkins, Leeper, Littman.

Psy 467. Human Sexual Behavior. (g) 3 hours.

The nature of human sexuality; hormonal, instinctual, and learned factors in sexuality; psychosexual development; frequency and significance of various types of sexual behavior; sexual inadequacy; homosexuality; sexual deviation.

Psy 470. Comparative Psychology. (g) 3 hours.

Survey of learning, motivation, and perception in selected species of animals; phylogenetic comparison and the modern viewpoint. Concurrent enrollment in Psy 471 normally required. Adkins, Kimble.

Psy 471. Laboratory in Animal Psychology. (g) 2 hours.

Laboratory experience with rats and monkeys. Prerequisite: Psy 324.

Psy 475. Animal Behavior. (G) 3 hours.

Survey of ethology plus its relation to experimental psychology and the biological sciences. Areas include: evolutionary and comparative foundations, sensory-motor integration, neural control of behavior sequences, interactions between motivational systems, neuro-behavioral development. Prerequisite: upper-division work in psychology or biology.

Psy 485. Sensory Processes. (G) 3 hours.

Cellular mechanisms of sensory reception and coding in the major mammalian sensory modalities. Prerequisite: Psy 452, Bi 414, or Psy 451. B. Wickelgren.

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. Keele, Posner, Reicher, Sheppard.

Psy 492. Psychology of Perception. (g) 3 hours.

Survey of fundamental concepts of vision, audition, somesthesia, etc. Psychophysiological factors and psychophysical methodology. Psy 324 strongly recommended as preparation. Attneave, Beck, Haller.

Psy 494. Human Performance. (g) 3 hours.

A unified approach to the complexities of skilled human performance. The capacities which man brings to the performance of motor and intellectual skills; limitations in human ability to sense, perceive, store, and transmit information; experimental analysis of the flow of information within the human nervous system; applications of performance principles to the study of man-machine systems. Prerequisite: Psy 324 or equivalent. Keele, Posner.

Psy 495. Conditioning and Learning. (G) 3 hours.

Survey of the fundamental concepts of the acquisition, maintenance, and modification of respondent and operant behavior. Students planning to take Psy 498 are advised to take Psy 495 and Psy 496 in the junior year.

Psy 496. Human Learning and Cognition. (G) 3 hours.

Rote verbal learning, coding processes in human learning, attention, memory, skills, motivational factors in learning, and concept formation. Prerequisite: Psy 495 or consent of instructor. Students planning to take Psy 498 are advised to take Psy 495 and Psy 496 in the junior year.

Psy 498. Laboratory in Learning. (g) 2 hours.

Laboratory work in design, conduct and analysis of experiments in learning. Prerequisite: Psy 324 or equivalent, Psy 495, Psy 496, or consent of instructor. Hintzman, Reicher.

Psy 499. History and Systems of Psychology. (g) 3 hours.

Survey of the development of modern psychology. Critical study of the comprehensive theoretical systems such as behaviorism, S-R psychology, Gestalt psychology, psychoanalysis, and mathematical models, developed to help deal with the methodological and substantive problems of psychology. Prerequisite: 12 hours of upper-division psychology. Leeper, Littman.

GRADUATE COURSES***Psy 501. Research.** Hours to be arranged.***Psy 502. Advanced Psychology Laboratory.** Hours to be arranged.***Psy 503. Thesis.** Hours to be arranged.***Psy 505. Reading and Conference.** Hours to be arranged.

Topics vary from year to year.

Psy 507. Seminar. Hours to be arranged.

Seminars offered vary from year to year, depending on faculty interests. Typical offerings are:

Human Performance. Keele, Posner.

Neural Basis of Learning. Lickey.

Theories of Choice Behavior. Fagot.

Inferential Processes in Perception. Beck.

Physiological Models in Motivation. Adkins.

Learning Theory Approaches to Psychopathology. Schaeffer.

Behavior Modification. Weiss, Sheppard.

Group Psychotherapy. Clinical Staff.

Milieu Therapy. Clinical Staff.

Mathematical Models.

Computer Simulation. Haller.

Animal Behavior. Fentress.

Memory. Reicher, Hintzman, W. Wickelgren.

Physiological Basis of Perception. Attneave, Kimble.

Anatomy of Memory. Kimble, Posner.

Clinical Proseminar. Clinical staff.

Personality and Aging. Sundberg.

* No-grade course.

Psy 508. Workshop: Clinical Work with Children. 1-9 hours.

Work with deviant children and their families, emphasizing the behavior modification approach. Enrollment for minimum of 3 consecutive terms. Prerequisite: course work in learning and behavior modification and consent of instructor.

Psy 509. Practicum Experience. 1-9 hours.

Supervised work in assessment and treatment coordinated with didactic clinical core courses. Prerequisite: consent of instructor.

Psy 511, 512, 513. Statistical and Quantitative Methods in Psychology. 3 hours each term.

Application of basic concepts of probability and statistics to psychological problems. Use of probability theory in psychological theory construction; application of multivariate methods; design of experiments in psychology. Prerequisite: Mth 425 or equivalent. Dawes, Fagot, Hyman.

Psy 514. Learning. 3 hours.

The capacities and functions involved in learning, storage, retrieval, and transformation of information in a variety of experimental situations. Discussion involves studies of classical and instrumental learning, skill learning, short- and long-term memory, classification and rule learning, problem solving, and language behavior. Prerequisite: Basic knowledge of experimental psychology, consent of instructor.

Psy 515. Perception. 3 hours.

Factual knowledge and theory concerning sensory function and perceptual information processing. Atneave, Beck.

Psy 516. Physiological Psychology. 3 hours.

A survey of the fundamental aspects of brain-behavior relationships. Neuron physiology, sensory systems, nonspecific afferent systems; emotion, motivation, and learning from neurophysiological viewpoint. Lectures and discussion. Adkins, Kimble, Lickey.

Psy 517. Social Psychology. 3 hours.

Current theory and research concerning the individual within a social context. Rothbart.

Psy 518. Developmental Psychology. 3 hours.

Study of the development of the child's behavior and judgment from infancy to early adolescence. Topics include the development of conceptual ability, language, affectional and social behavior, aggression, imitation, and morality. Emphasis on cognitive development viewed from both learning theory and Piagetian frameworks. Schaeffer.

Psy 519. Personality. 3 hours.

Critical consideration of personality theory and research.

Psy 520. Psychopathology. 3 hours.

Problems in the definition and measurement of deviant behavior; critical review of research literature on etiology, intervention, and outcome in psychoses, neuroses, and personality disorders. Prerequisite: Psy 450 or consent of the instructor. Fosmire, Lewinsohn.

Psy 521. History and Systems of Psychology. 3 hours.

Analysis of selected psychological problems in an historical and methodological perspective. Topics vary from year to year. Leeper, Littman.

***Psy 524, 525, 526. Proseminar in Clinical Psychology.** 1 hour each term.

Survey of current issues and problems in clinical psychology with emphasis on the application of relevant research strategies. Required of first-year graduate students in clinical psychology.

Psy 528. Assessment I: Psychological Testing. 3 hours.

Theories and methods of objective psychological test construction, emphasis-

* No-grade course.

ing logic of test construction, reliability, validity, and other psychometric problems. Prerequisite: Psy 512 or equivalent. Goldberg, Lichtenstein.

Psy 529. Assessment II: Personality Assessment. 3 hours.

Theory, methods, and related research in approaches to personality assessment, including projective and objective methods. Prerequisite: Psy 512 or equivalent and Psy 528. Lichtenstein, LoPiccolo, Weiss.

Psy 530. Assessment III: Assessment of Cognitive Functions. 3 hours.

Intensive study of selected clinical decision-making situations requiring information about cognitive functioning. Includes a practicum with neurologically damaged individuals. Prerequisite: Psy 528 and 529 or equivalent. Arkowitz, Lewinsohn.

Psy 531. Behavior Change I: Interview Therapies. 3 hours.

Comparative review of the major systems of individual psychotherapy. Required of second-year clinical graduate students; other students, consent of instructor. Arkowitz, Lichtenstein.

Psy 532. Behavior Change II: Behavior Modification. 3 hours.

Selected topics of the experimental and theoretical basis of behavior modification techniques and issues related to their application. Course goals: (1) To familiarize the student with extant procedures and their origins in experimental psychology; (2) to indicate strengths and limitations of these techniques; and (3) to suggest specific problem areas requiring research exploration. Required of second-year clinical graduate students; other students, consent of instructor. Arkowitz, Johnson, Weiss.

Psy 533. Behavior Change III: Child and Family Therapy. 3 hours.

Selected approaches to the conceptualization and modification of deviant child behaviors, particularly in the family setting; emphasis on interpersonal and operant approaches to child and family therapy. Required of second-year clinical graduate students; other students, consent of instructor. Johnson.

Psy 534. Research in Psychotherapeutic Methods. 3 hours.

Empirical and methodological contributions to the problems of evaluating behavior change in individual psychotherapy; emphasis on process variables affecting behavior change. Arkowitz, Johnson, Lichtenstein.

Psy 535. Advanced Social Psychology. 3 hours.

Social behavior in relation to current psychological theory and research. Runkel.

Psy 536. Experimental Methods in Social Psychology. 3 hours.

A critical analysis of the design and implementation of laboratory experiments concerning social behavior. Dawes.

Psy 537, 538, 539. Advanced Clinical-Research Practicum. 1-9 hours each term.

Specialized work with particular clinical problems (e.g., depression, self-control, etc.), focusing on the development of testable hypotheses about the phenomena. Students work in small teams with the clinical staff in an attempt to generate systematic assessment and treatment approaches.

Psy 543. Measurement: Theory and Application. 3 hours.

Nature of measurement; logic of measurement; the role of measurement in psychological theory; theory and application of psychological scaling methods. Prerequisite: Psy 511 or equivalent. Fagot, Dawes.

Psy 544. Choice Behavior. 3 hours.

Measurement and choice behavior; algebraic and probabilistic theories of choice for certain and uncertain outcomes. Prerequisite: Psy 543 and elementary probability theory. Fagot.

Psy 546. Multivariate Methods in Psychology. 3 hours.

Theory and application to psychology of factor analysis and other multivariate methods. Prerequisite: Psy 512 or equivalent. Dawes, Goldberg.

Psy 560. Advanced Physiological Psychology. 3 hours.

Theory of nervous-system function in learning, motivation, and perception. Detailed study of special areas. Kimble, Lickey.

Psy 566. Advanced Psychology of Perception. 3 hours.

Basic problems and phenomena of perception. Attneave, Beck.

Psy 570. Advanced Animal Psychology. 3 hours.

Special topics in animal learning, motivation, and species-comparison.

Psy 572, 573, 574. Advanced Psychology of Learning and Thinking. 3 hours each term.

Detailed study of special topics in learning, thinking, and problem solving.

Religious Studies

Professors: DOUGLAS STRATON (department head), P. B. MEANS (emeritus).

Associate Professors: ALFRED BLOOM,* J. T. SANDERS.

Assistant Professors: S. C. REYNOLDS, A. L. STEPHENSON.

THE DEPARTMENT OF RELIGIOUS STUDIES is nonsectarian in spirit, the aim being to acquaint students with the far-reaching influence of religion in the cultural history of the world. Its courses are planned in accordance with the same standards of 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.

Major in Religious Studies. An undergraduate student majoring in the Department of Religious Studies is introduced to the basic areas of this discipline: Biblical history, literature, and thought; religions of the world, including western religious thought and institutions; philosophy of religion; and ethics within a Judeo-Christian perspective. In the course of his program, beyond the basic departmental requirements as indicated below, he is expected to focus on one of these core areas for more intensive study.

Beyond the option of a general major, an elected honors program requires the writing of a senior dissertation in the field of concentration selected from among the above-named areas, and a comprehensive written examination taken in lieu of course examinations in religious studies for the last term of the candidates' senior year. A candidate for honors must meet the requirements of the Honors College program.

The staff of the department is available to advise a student who wishes to elect the independent studies program as defined by the requirements of the Honors College.

Requirements for the Departmental Major. A minimum of 45 pass-differentiated hours, including an upper-division requirement of at least 27 hours. Courses on religious studies in other departments may be taken. A major in religious studies should take 9 term hours of history of philosophy in the Department of Philosophy, or a combination of 6 hours in history of philosophy and 3 hours of Elementary Logic (Phl 221). (These recommendations in philosophy are required of honors candidates in religious studies.)

* On leave of absence 1970-71.

LOWER-DIVISION COURSES

***R 201, 202, 203. Great Religions of the World.** 3 hours each term.

Study of the Hindu-Buddhist, Confucian-Taoist, Zoroastrian, Judeo-Christian, and Islamic philosophic and religious systems. Special attention to the philosophy of these religions as shown in their classic scriptures; concluding résumé of their present organization and major sectarian divergencies; analysis of their world views and conceptions of God, man, ethics, human destiny, and salvation. Must be taken in sequence. Straton, Reynolds.

R 224, 225, 226. The Bible and Civilization. 3 hours each term.

Survey of the social and religious history of Israel and Christianity from c. 2,000 B.C. to 150 A.D. The growth of ethical and religious ideas, and the origin and teachings of major Old and New Testament books, as well as the teaching of Jesus. Must be taken in sequence. Sanders.

CL 231, 232. New Testament Readings. 4 hours each term.

For description, see page 165.

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. Bloom, Sanders.

R 321, 322, 323. History of Christian Thought and Institutions. 3 hours each term.

The course of Christian history in East and West; the relations between spirituality, doctrine, and institutional forms. Fall: from the New Testament period to the age of Justinian; winter: the Middle Ages, the schism between East and West, and the reform movement in the West; spring: the Reformation and the modern period. Reynolds.

R 324, 325. History of Eastern Orthodox Christianity. 3 hours each term.

Winter: the church in the Eastern Roman Empire and its expansion in Europe; the eastern churches and Islam. Spring: the eastern churches from the fifteenth century to the present. Prerequisite: R 321 or equivalent. Reynolds.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

R 405. Reading and Conference. (g) Hours to be arranged.**R 407. Seminar.** (g) Hours to be arranged.

Religions in Japan. Bloom.
Patristics. Reynolds.

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. Straton.

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 and sexuality, of race, of the political and economic orders; the concepts of history and human destiny in Judeo-Christian thought. Straton.

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 Philosophies of Religion and Theological Movements. (g) 3 hours each term.

Representative philosophers of religion, and theologians of the twentieth century. Attention to the traditions of naturalism, idealism, existentialism; the neo-orthodox, death of God, and situation-ethics theologies. Selected readings from Dewey, Wieman, Whitehead, Cobb, Teilhard de Chardin, Boodin, Royce, Brightman, Underhill, Radhakrishnan, the Niebuhrs, Tillich, Buber, Maritain, Barth, Bonhoeffer, Bultmann, Altizer, Fletcher, and others.

R 430, 431, 432. Oriental Philosophies of Religion. (g) 3 hours each term.

An intensive study of the history of Oriental religions and philosophical thought, and of the varied issues of the major sectarian traditions of the Orient. One of three traditions will be selected for study each year: Indian, Chinese, Japanese. Bloom.

Eng 437, 438. The Literature of the English Bible. (G) 3 hours each term.

For description, see page 183.

Phl 439, 440. Philosophy of Religion. (G) 3 hours.

For description, see page 231.

R 440. Foundations of Biblical Ethics. (g) 3 hours fall.

The basic ethical principles endorsed or proposed by biblical writers; special attention to the deuteronomic law code, the prophets, Jesus, and Paul. Prerequisite: R 224, 225, 226, or consent of instructor. Sanders.

R 441. Recent Discoveries in Biblical Studies. (g) 3 hours.

The significance for biblical studies of recently found texts, such as the Dead Sea Scrolls and the Coptic Gnostic Library, and recent archaeological discoveries. Prerequisite: R 224, 225, 226 or consent of instructor. Sanders.

R 442. Recent Developments in Biblical Theology. (g) 3 hours.

The major writings in biblical theology that have been formative for the present generation. The most recent innovations and *avant garde* positions. Prerequisite: R 224, 225, 226 or consent of instructor. Sanders.

Anth 444. Religion and Magic of Primitives. (G) 3 hours.

For description, see page 145.

Soc 461. Sociology of Religion. (G) 3 hours.

For description, see page 272.

Hst 471. Social Factors in American History. (G) 3 hours.

For description, see page 211.

Romance Languages

Professors: P. J. POWERS (department head), C. B. BEALL, D. M. DOUGHERTY, T. R. HART, C. L. JOHNSON, L. O. WRIGHT (emeritus).

Associate Professors: RANDI M. BIRN, R. H. DESROCHES, EMMANUEL HATZANTONIS.

Assistant Professors: J. R. AYORA, R. M. JACKSON,* ELISABETH MARLOW,† S. F. RENDALL, S. L. ROSE, W. F. SOHLICH.

Senior Instructors: H. F. COOPER, D. J. CURLAND.

Instructors: GRACIELA BATISTA, PRISCILLA E. BECK,‡ G. A. CASAGRANDE, COLETTE M. FREITAG, SYLVIA GIUSTINA, L. A. OLIVIER.

Lecturer: P. M. LEWIS.

* On leave of absence, spring term, 1970-71.

† On sabbatical leave, winter and spring terms, 1970-71.

‡ On leave of absence, winter term, 1970-71.

Fellows: MARY F. BERG, OHANNES BEZAZIAN, DONNA BURO, JUDITH BUSZKO, KAREN CASEY, ROBERT COCKRELL, F. A. DUMARESQ, J. H. DYE, ELIZABETH FALLOWS, JACQUELINE FLANDERS, MARESA F. GREENSTEIN, ESTER HEPPNER, A. M. HERRERA, BARRY JACKSON, PATRICIA KRIER, STEPHEN LIPMANN, ELEANOR M. NIESEN, R. A. NOTTO, M. G. OUDIN, D. J. QUINN, J. M. SOBRÉ, JUDITH STONE, THOMAS TEN EYCK, BRENDA S. THORE.

THE DEPARTMENT OF ROMANCE LANGUAGES offers instruction in French, Italian, Portuguese, and Spanish language and literature at both undergraduate and graduate levels. The major in Romance languages is a liberal arts major. While giving the necessary background for professional graduate work, it is not restricted to prospective teachers. Its purpose is to provide students with sound training in a humanistic discipline.

Undergraduate Study. Programs leading to undergraduate majors are provided in French, Italian, and Spanish. Students who major in the department are primarily concerned with Romance literatures, literary history, and criticism. Attention is given to developing the skills of understanding, speaking, and writing the modern idiom. A fully equipped laboratory furnishes a valuable adjunct to classroom exercises.

Major requirements for the Bachelor of Arts degree are as follows:

French or Italian. Thirty term hours beyond the second-year sequence—normally the survey of the literature, composition and conversation, and in any case two additional upper-division year sequences, of which one must be in literature. Additional work in the major is recommended.

Spanish. Forty-five term hours beyond the second-year sequence, distributed as follows: (1) Introduction to the Reading of Spanish Literature (RL 311); (2) three from the following: Mediaeval Spanish Literature (RL 312), The Golden Age (RL 313), Modern Spanish Literature (RL 314), Spanish-American Literature (RL 315); (3) Cervantes (RL 360); (4) five terms of Spanish or Spanish-American literature courses numbered 405 or above; (5) three terms of composition and conversation: RL 347, 348, 349 or RL 461, 462, 463, or a combination of these; (6) two terms of upper-division work in one or more related fields: e.g., art, history, philosophy, political science, etc.

Romance Languages. In addition to completing the major requirements in one language, 15 term hours beyond the second-year sequence in a second Romance language, including one upper-division sequence.

Students should also plan to include in their programs courses in other departments which have a direct bearing upon their major interests, e.g., History of France (Hst 441, 442, 443), History of Spain (Hst 450), Hispanic America (Hst 350, 351, 352), Renaissance (Hst 430, 431), Eastern Mediaeval Art (ArH 421, 422, 423), Renaissance Art (ArH 431, 432, 433), Art in Latin America (ArH 450, 451, 452), Modern Art (ArH 476, 477, 478).

Work in English literature and philosophy is strongly recommended.

Secondary-School Teaching of Foreign Languages. For basic certification as a teacher of French or Spanish in Oregon high schools, the Oregon Board of Education requires (1) the completion of 45 term hours of subject preparation, (2) the completion of Human Development (EPsy 326), Special Secondary Methods (CI 408) (3 hours), Student Teaching (CI 416 or CI 417), and 3 additional hours to be earned in courses in methods or student teaching, and (3) the recommendation of the institution at which the student completes his subject preparation.

The Department of Romance Languages approves enrollment for student teaching only for those students whose grade-point average in the language to be

taught is 3.00 or higher and who have attained adequate oral and written control of this language.

The requirements for standard certification are as follows: (1) 36 hours* of courses in secondary-school teacher preparation; (2) 60 hours* of courses in the major language and literature, including 15 hours in linguistics, civilization, and phonetics, and 15 hours in upper-division or graduate courses *beyond* the requirement for the major; (3) 45 upper-division or graduate hours *beyond* those earned for the bachelor's degree, in a program approved by the adviser.

It is recommended that, if possible, the student complete the program for standard certification before he begins teaching, and that, during the fifth year, he satisfy the requirements for the interdisciplinary master's degree in French, or for the master's degree in teaching Spanish.

For further information, the student should consult the chairman of the departmental Committee on Teacher Training, David M. Dougherty.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Study. The Department of Romance Languages offers programs of study leading to the degree of Master of Arts in French, Spanish, and Romance languages, and to the degree of Doctor of Philosophy in Romance languages. Although the student normally takes work to improve his linguistic skills, the master's degree is primarily a degree in the study of literature. Courses are offered in French, Italian, Portuguese, Peninsular and American Spanish language and literature, with major work available in French, Italian, and Peninsular Spanish. The student's program may include work in two of these fields, and must include a second field if one is Italian or Spanish American literature. The minimum requirement for this degree is the completion of 45 term hours of graduate study with grades of B or higher. The program does not include a thesis.

Interdisciplinary Master's Program in French. The department supervises an interdisciplinary program designed particularly for the preparation of secondary-school teachers. The program is described on pages 120-121 (Graduate Program for Teachers) and involves Option 2 under Section (a), i.e., 36 term hours of graduate work in French and 9 normally in education. For further information consult the director of the program, Mrs. Elisabeth Marlow.

Master of Arts in Teaching Spanish. The department offers a program of advanced study leading to the Master of Arts in Teaching Spanish, with emphasis on the preparation of secondary-school teachers. In addition to a year's study at the University, this program will include an eight-week summer term in Mexico or Spain. The program is designed to afford prospective teachers of Spanish an opportunity to achieve competence in the written and spoken language, to study literature at the graduate level, and to develop and practice methods of presenting both language and literature to secondary-school students. Completion of this course of study will fulfill the requirements for the Oregon Standard (five-year) Secondary Teacher's Certificate, but courses in civilization and phonetics, required for this certificate, should be taken prior to admission.

Doctoral Programs. Major fields for the doctoral programs are French and Hispanic languages and literatures, supplemented by offerings in Italian and Portuguese. The doctoral program must include work in a minor field and two terms in philology (prerequisite: one year college Latin or equivalent). In addition to command of the languages and familiarity with the literatures of his choice, the student is expected to develop skill in critical writing and competence in individual research. Students interested in the doctoral program should request the description of the program from the departmental secretary or consult with the director of graduate studies.

* Hours earned for the Basic Certificate may count toward these totals.

The graduate program in comparative literature is administered by a committee representing the departments of English, German and Russian, and Romance languages: it offers opportunity for advanced study of several literatures in their original languages. (See *Comparative Literature*, page 169.)

The resources of the University Library for research in French, Italian, and Spanish are fully 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.

Overseas Study. The Oregon State System of Higher Education provides opportunities for a year's undergraduate study in both France and Italy. Oregon State University sponsors a program at the University of Poitiers, France, and Portland State University a program in Pavia, Italy. Credits earned in these programs are transferable to the University of Oregon as residence credit.

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. Persons whose competence in the language already exceeds the scope of this course will not be admitted. Marlow, staff.

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. Persons whose competence in the language already exceeds the scope of this course will not be admitted.

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 and for the students who wish to concentrate on reading. Persons whose competence in the language already exceeds the scope of this course will not be admitted. Olivier, staff.

RL 201, 202, 203. **Survey of French Literature.** 3 hours each term.

French literature from the Middle Ages to the present; readings from representative authors. Three sections conducted in French. Prerequisite: two years of college French or equivalent. Desroches, Marlow, Olivier, Rendall.

UPPER-DIVISION COURSES

RL 301, 302, 303. **Literary Analysis of French Texts.** 3 hours each term.

Introduction to basic critical concepts and methods of explication; intensive analysis of selected poetry and prose. Desroches, Olivier, Rendall, Sohlich.

RL 304, 305, 306. **The French Novel.** 3 hours each term.

Study of selected novels from the seventeenth century to the present. Desroches, Rendall.

RL 321, 322, 323. **French Composition and Conversation.** 3 hours each term.

Exercises in pronunciation, comprehension, and composition. Ample opportunity for conversation. Conducted in French. Prerequisite: two years of college French or equivalent. Cooper, Marlow, Sohlich.

RL 331, 332, 333. **French Pronunciation and Phonetics.** 2 hours each term.

A thorough study of the fundamentals of French pronunciation, with special attention to each student's difficulties. Prerequisite: two years of college French or equivalent. Normally required of French majors and of candidates for teacher certification. Freitag.

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.
Each term devoted to an intensive study of a problem, author, or genre. Recent topics: fictional technique in *La Princesse de Clèves*; Corneille; La Rochefoucauld and the art of the maxim. Prerequisite: Survey of French Literature (RL 201, 202, 203).
- 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: RL 201, 202, 203. 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: RL 201, 202, 203. Birn.
- 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 321, 322, 323, or equivalent. Marlow.
- RL 435, 436, 437. **Eighteenth-Century French Literature.** (G) 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. Desroches.
- 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 and of candidates for teacher certification. Prerequisite: RL 321, 322, 323 or equivalent. Dougherty, Marlow.

GRADUATE COURSES

- *RL 503. **Thesis.** Hours to be arranged.
- RL 505. **Reading and Conference.** Hours to be arranged.
- RL 507. **Seminar.** Hours to be arranged.
Recent topics: Diderot, Preromanticism, Eighteenth-Century French Theater, Eighteenth-Century French Novel, Descartes, La Fontaine, Twentieth-Century French Theater, Twentieth-Century French Poetry, The Rhetoric of Nonfiction, Mediaeval Romance Lyric.
- 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. Dougherty.
- RL 545. **Ronsard.** 3 hours.
Study of the evolution of Ronsard's poetic genius, and of his role in acclimat-

* No-grade course.

ing classical and Italian verse in France. Particular attention to style and to characteristic Renaissance themes and motifs. Beall.

RL 546. **Molière.** 3 hours.

A critical analysis of selected plays, with emphasis on Molière's comic technique.

RL 547. **Voltaire.** 3 hours.

Study of Voltaire's satire and historical prose. Desroches.

RL 548. **Baudelaire.** 3 hours.

Study of all the works of Baudelaire. Johnson.

RL 549. **Paul Valéry.** 3 hours.

Intensive study of representative works of Paul Valéry.

RL 550, 551. **Proust.** 3 hours each term.

Detailed analysis of *A la Recherche du temps perdu*, including ideas, style, and structure. Birn.

Italian

LOWER-DIVISION COURSES

RL 70, 71, 72. **First-Year Italian.** 4 hours each term.

Grammar, pronunciation, composition, and translation of modern authors. One section each of RL 71 (winter) and RL 72 (spring) offered students showing exceptional ability in RL 70. Giustina, staff.

RL 73, 74. **First-Year Italian.** 6 hours each term, winter and spring.

Covers in two terms the work of RL 70, 71, 72. Ten Eyck.

RL 104, 105, 106. **Second-Year Italian.** 4 hours each term.

Study of selections from representative authors. Composition, pronunciation, grammar. Giustina, Hatzantonis.

RL 111, 112, 113. **Conversational Second-Year Italian.** 4 hours each term.

Fall: review of grammar. Winter and spring: intensive audio-oral practice in classroom and laboratory, to help students master everyday Italian. Designed for students planning to enroll in the Oregon State System of Higher Education Italian Studies Program at Pavia. Giustina.

UPPER-DIVISION COURSES

RL 307, 308, 309. **Survey of Italian Literature.** 3 hours each term.

Survey of Italian literature from the Middle Ages to the present; readings from representative texts. Prerequisite: two years of college Italian or equivalent. Hatzantonis.

RL 374, 375, 376. **Italian Composition and Conversation.** 3 hours each term.

Instruction in Italian grammar and current idiomatic patterns; extensive exercises in oral communication and written composition. Conducted in Italian. Prerequisite: two years of college Italian or equivalent. Millemann.

RL 377, 378, 379. **Introduction to Italian Literature.** 3 hours each term.

RL 377: methods of literary study. RL 378: analysis of poetic texts. RL 379: critical readings of prose: fiction and nonfiction. Offered alternately with RL 307, 308, 309. Casagrande, Hatzantonis.

RL 387. **Readings in Italian.** 3 hours.

Intended for students with advanced knowledge of other Romance languages or Latin who wish to acquire proficiency in reading literary texts. Students who complete this course may enroll in upper-division and graduate courses in literature. Prerequisite: consent of instructor. Hatzantonis.

RL 405. **Reading and Conference.** Hours to be arranged.

RL 408. Language Workshop. 2 hours.

Designed for special group activities, such as production of Italian plays. Prerequisite: two years of college Italian or consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**RL 407. Seminar.** (G) Hours to be arranged.**AL 477, 478, 479. Dante and His Times.** (g) 3 hours each term.

For description, see page 141.

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.

RL 483, 484, 485. Nineteenth-Century Italian Literature. (G) 3 hours each term.

Study of selected Italian authors of the romantic and post-romantic movements. Emphasis on works of Foscolo, Manzoni, Leopardi, Verga, De Sanctis, Carducci, and Pascoli. Prerequisite: RL 307, 308, 309 or consent of instructor.

RL 486, 487, 488. Twentieth-Century Italian Literature. (G) 3 hours each term.

The main trends in criticism, poetry, drama, and the novel, starting respectively with D'Annunzio, Pirandello, and Svevo to the present. Prerequisite: RL 307, 308, 309 or consent of instructor. Hatzantonis.

GRADUATE COURSES**RL 505. Reading and Conference.** Hours to be arranged.**RL 507. Seminar.** Hours to be arranged.**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. Rose.

RL 474, 475, 476. Brazilian Novel. (G) 3 hours each term.

An historical and critical study of the Brazilian novel of the nineteenth and twentieth centuries. Prerequisite: a reading knowledge of Portuguese. Rose.

RL 477, 478. Advanced Portuguese Language. (G) 3 hours each term, winter and spring.

Winter: the Portuguese verb system, language laboratory practice; spring: advanced grammar review and conversation. Rose.

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. Students whose competence in the language already exceeds the scope of this course will not be admitted. Curland, staff.

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. Students whose competence in the language already exceeds the scope of this course will not be admitted.

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 sections for Honors College students and for the students who wish to concentrate on reading. Students whose competence in the language already exceeds the scope of this course will not be admitted. Rose, staff.

UPPER-DIVISION COURSES**RL 311. Introduction to the Reading of Spanish Literature.** 3 hours.

Training of the student to read closely texts in all major genres; explicating a text; use of library facilities; introduction to critical writings. Usually taken before work in other literature courses. Curland, R. Jackson, staff.

RL 312. Mediaeval Spanish Literature. 3 hours.

Close study of *Cantar de Mio Cid*, the *Libro de buen amor*, and *La Celestina*. Topics to be discussed include: the nature of mediaeval epic; mediaeval comedy and parody; the literary tradition of courtly love. Some attention to Spanish social and intellectual history and the historical development of the Castilian language. Prerequisite: RL 311. Hart, R. Jackson, staff.

RL 313. The Golden Age. 3 hours.

Introduction to lyric poetry, prose, and theater of the Spanish Renaissance and Baroque selected generally from the works of Garcilaso de la Vega, Fray Luis de Leon, San Juan de la Cruz, *Lazarillo de Tormes*, Cervantes, Lope de Vega, Calderon, and others. Prerequisite: RL 311. Hart, R. Jackson, Powers, staff.

RL 314. Modern Spanish Literature. 3 hours.

Major themes and forms of nineteenth- and twentieth-century Spanish literature. Training in the application of basic critical concepts to selected modern works. Prerequisite: RL 311. Curland, R. Jackson, staff.

RL 315. Spanish-American Literature. 3 hours.

Introduction to the basic currents and movements in the Spanish-American novel, poetry, and short story. Readings and discussions will center almost exclusively on the nineteenth and twentieth centuries. Prerequisite: RL 311. Ayora.

RL 347, 348, 349. Spanish Composition and Conversation. 3 hours each term.

Fundamentals of pronunciation. Extensive oral and written practice. Conducted in Spanish. Prerequisite: two years of college Spanish. Ayora, Sobré.

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. Normally required of Spanish majors and of candidates for teacher certification. Prerequisite: consent of instructor. Curland.

RL 360. Cervantes. 3 hours.

Reading of *Don Quijote* and other works by Cervantes as time permits. Prerequisite: RL 311. Jackson, Powers, staff.

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 432, 433, 434. Hispanic Culture and Civilization.** (G) 3 hours each term.

Intellectual, cultural, and historical backgrounds of Hispanic literatures. Fall: the mediaeval and Golden Age periods; winter: the eighteenth and nineteenth centuries; spring: the twentieth century. Conducted in Spanish. Prerequisite: RL 304, 305, 306. Offered alternate years.

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: RL 314. Beck.

- 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. Beck.

- 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: RL 315. Ayora.

- RL 451. **Spanish Prose of the Golden Age.** (G) 3 hours.

A critical reading in several prose genres of the sixteenth and seventeenth centuries: dialogues, *libros de caballerías*, pastoral and picaresque novels, the *novela ejemplar*. Prerequisite: RL 313. Powers.

- RL 452. **Renaissance and Baroque Poetry.** (G) 3 hours.

The Petrarchism of Garcilaso and Herrera; traditional forms, especially the romance; the religious and mystic poetry of Fray Luis de León, San Juan de la Cruz; Santa Teresa. Three seventeenth-century poets: Góngora, Lope de Vega, and Quevedo. Prerequisite: RL 313. Powers.

- RL 453. **Introduction to the Drama of the Golden Age.** (G) 3 hours.

Readings in the works of Cervantes, Lope de Vega, Tirso de Molina, Ruiz de Alarcón, and Calderón de la Barca. Prerequisite: RL 313. Powers.

- RL 461, 462, 463. **Advanced Spanish Composition and Conversation.** (G) 2 or 3 hours each term.

Normally required of Spanish majors and of candidates for teacher certification. Prerequisite: RL 347, 348, 349 or equivalent. Conducted in Spanish. Ayora, Sobré.

GRADUATE COURSES

- *RL 503. **Thesis.** Hours to be arranged.

- RL 505. **Reading and Conference.** Hours to be arranged.

- RL 507. **Seminar.** Hours to be arranged.

Recent topics: Borges, Novel of Mexican Revolution, Contemporary Spanish Poetry, *Don Quijote*, "Azorín," Modern Spanish Novel, Gabriel Miró, Gil Vicente, Camões.

- 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*. Hart.

- RL 554, 555, 556. **Drama of the Golden Age.** 3 hours each term.

Interpretation and criticism of selected *comedias* of Lope de Vega, Calderón, Tirso de Molina, Ruiz de Alarcón, Augustín 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.

- RL 561, 562, 563. **Spanish-American Novel.** 3 hours each term.

Study of the novel as a literary form in Spanish America.

- RL 564. **The Enlightenment in Spain.** 3 hours fall.

Study of the several genres, especially the essay, in eighteenth-century Span-

* No-grade course.

ish literature, with special attention to: Feijóo, Jovellanos, Cadalso, Meléndez Valdés, Forner, Moratín, Torres Villarroel, and the *Fabulistas*.

RL 565. **Realismo.** 3 hours winter.

Study of the realistic and naturalistic novel in the Spanish nineteenth century, with special attention to the works of Benito Pérez Galdós.

RL 566. **Romanticismo y Costumbrismo.** 3 hours spring.

Study of the origins and manifestations of romanticism in Spain and of the tendency known as *costumbrismo*, which coincided with the romantic movement. Special attention to the works of Larra, Mesonero Romanos, and Bécquer.

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. Hart.

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. Hart.

Sociology

Professors: HARRY ALPERT, HERBERT BISNO, J. M. FOSKETT, RICHARD HILL,* JAY JACKSON, T. B. JOHANNIS, JR., BENTON JOHNSON,† W. T. MARTIN,‡ R. J. PELLEGRIN.

Associate Professors: R. H. RODGERS (department head), STEVEN DEUTSCH, KENNETH POLK, W. E. SCHAFER.

Assistant Professors: JOAN ACKER,* RONALD FAICH, RICHARD GALE, TED GOERTZEL, DANIEL GORDON, DANIEL KNAPP, A. J. SZYMANSKI, DONALD VAN HOUTEN.

Instructor: G. A. KING.

Fellows: EUNICE BAXTER, N. C. BULL, L. R. CARTER, M. R. CHASTAIN, J. W. CHERTOK, M. V. DEARMAN, MARVIN DUNN, R. D. ELDER, J. C. ELY, PETER ENGBRETSON, GARY FEUERBERG, M. A. FEUERBERG, L. A. GOODING, J. R. HARRIS, D. D. HEIMER, LEON JONES, V. S. KITE, JAMES MANNING, PAT MAZZEO, LOTANI MUKASA, CAROL OLEXA, LINDA PETERSON, J. C. PHILLIPS, DOLORES POELZER, J. M. SCHOENFELD, KAREN SKOLD, D. R. SPADY, BONNIE STEENHUIS, G. E. TESSON, L. O. B. THOMPSON, JAMES WICHT, STANLEY WOODWELL.

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 provide a basis for understanding the rapidly changing modern world; (2) to provide a useful background for students preparing to enter directly into beginning

* On leave of absence 1970-71.

† On leave of absence, fall term, 1970-71.

‡ On sabbatical leave, winter term, 1970-71.

positions in social work, personnel work, recreation, and social-studies teaching; (3) to prepare students for graduate work leading to professional careers in sociology and closely related fields.

Students who are interested in professional social work should seriously consider majoring in the School of Community Service and Public Affairs.

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. Recommendations include: (1) satisfaction of the language requirement for the B.A. degree; (2) a year sequence in one of the following fields: mathematics, history, philosophy; (3) at least one upper-division sequence in two of the following fields—anthropology, economics, political science, psychology.

Interested sophomores and juniors should inquire about the availability of undergraduate research participation fellowships.

All sociology majors and students enrolled in sociology classes at the undergraduate level are voting members of the Sociology Student Union. The purpose of the Union is to allow the student to become more involved in his education, to make his education more relevant to his own needs and to the needs of society, and to provide better communication between students and faculty.

Requirements for Bachelor's Degree. Candidates for the bachelor's degree with a major in sociology must satisfy all general requirements of the University and the College of Liberal Arts. Majors in sociology are required to complete a minimum of 42 hours of sociology. Majors are expected to complete the following courses or their equivalent: Introduction to Sociology (Soc 201) and any two courses from the 200-level group (Soc 210, Soc 211, Soc 212, Soc 213, Soc 214, Soc 215), Introduction to Social Research (Soc 327), Development of Sociology (Soc 370), and Contemporary Sociological Perspectives (Soc 371); additional courses may be suggested by the student's adviser in accordance with the student's major interests and career plans.

The department has no restriction on the number of courses in the major that may be taken on a pass-undifferentiated basis. Students are urged to make full use of the department's advising services.

The department offers courses in most of the major areas in which sociologists generally do research. Students planning to major in sociology should begin their studies with Introduction to Sociology (Soc 201), which offers a broad overview of the major concepts, methods, and findings of the field as a whole. Freshmen are permitted to register for this course. Nonmajors and those with a good high-school background in sociology may begin their studies with Principles of Sociology (Soc 300). Soon after completing this basic work the student should take Introduction to Social Research (Soc 327). Those who plan to go to graduate school should take Quantitative Methods in Sociology (Soc 326). The student will then be ready to take a wide variety of courses at both the 300 and 400 levels. It is recommended that undergraduate majors defer taking Development of Sociology (Soc 370) and Contemporary Sociological Perspectives (Soc 371) until they have had at least 21 hours of sociology.

Courses at the 200 and 300 levels are offered annually unless indicated in the course descriptions below. Many of these courses are offered several times a year and in Summer Session. Courses at the 400 and 500 levels are generally offered once a year, provided staff is available. The courses offered as Seminar (Soc 407, Soc 507) change from year to year.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools. The Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and

(2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in sociology must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in sociology required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the sociology faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Work. The graduate program of the Department of Sociology is primarily intended for studies leading to the Ph.D. degree. Although the department admits some students interested in the M.A. or M.S. degree, nearly all graduate students pursue a program leading to the doctorate in sociology.

Students seeking an advanced degree in sociology should have achieved a grade-point average of 3.00 or better in their undergraduate work in the social sciences. Entry is not restricted to those with undergraduate majors in sociology, although students without any undergraduate work in sociology have a considerably reduced chance of admission.

During their first year, all students participate in a basic program in theory and methodology. This flexible program makes the student responsible for determining the materials (papers, position statements, reports of research) to be submitted to his evaluation committee during the second year of residence. During the second year, the student defines two or three fields of specialization. By the end of the third year, the student should have taken comprehensive examinations in his fields of specialization, and should be well along on a dissertation project.

Candidates for the doctorate must demonstrate clearly their basic and serious commitment to a professional career in the social sciences. Teaching and research are two important elements in most such careers.

All doctoral candidates are expected to gain experience equivalent to an academic year as a graduate teaching fellow. Some fellows assist staff members on research projects, others assist staff members in their teaching duties, and others have full responsibility for teaching classes of their own. The normal workload for fellows is 12 hours a week.

A broad range of research is carried out in the department. Participation in a research practicum or work as a research assistant are but two of the many ways of obtaining research experience prior to embarking on the dissertation project. The doctoral dissertation must embody the results of research and show evidence of originality and ability in independent investigation. Early in their graduate work students are encouraged to begin defining the general topic to be covered in the dissertation research.

Many students receive some type of financial assistance. In addition to the graduate teaching fellowships described above, the department offers a graduate training program in methodology, with three-year fellowships available under the National Defense Education Act. In addition, some graduate students hold part-time teaching or research appointments outside of the department.

A booklet describing the graduate program may be obtained from the department. The booklet details the entire graduate program, specifies the materials needed to apply for admission to the program, and includes a listing of current staff members and their research interests. Students applying for graduate admission should submit all necessary materials by February 1, if possible, and by March 1 at the latest. Applications for the fall term received after April 1 seldom receive favorable action.

LOWER-DIVISION COURSES

Soc 201. Introduction to Sociology. 3 hours.

Introduction to the sociological perspective, with emphasis on fundamental concepts, theories, and methods of research.

Soc 210. Communities, Population and Resources. 3 hours.

Analysis of the interrelationship of population and resources in the structuring of human communities; examination of processes of community change which occur in response to major social problems, population redistribution, and resource alteration; alternatives of the traditional community. Prerequisite: Soc 201.

Soc 211. Social Deviancy and Social Control. 3 hours.

Concepts of deviance, theories explaining deviant behavior, and mechanisms for the social control of deviance. Prerequisite: Soc 201.

Soc 212. Race, Class, and Ethnic Groups in America. 3 hours.

The role played by social classes, racial, and ethnic groups in American society. Prerequisite: Soc 201.

Soc 213. Organizations and Occupations. 3 hours.

An examination of the nature and consequences of bureaucracies and bureaucratization in modern society, work and careers, technology and alienation. Prerequisite: Soc 201.

Soc 214. Socialization and Society. 3 hours.

Analysis of the nature and processes of socialization at different stages of the life cycle, the effects of socialization of the individual, and the effects of societal and cultural influences on socialization processes. Prerequisite: Soc 201.

Soc 215. Social Issues and Social Movements. 3 hours.

Contemporary social issues viewed from a sociological perspective. Poverty, racism, militarism, and other issues are related to the social structure of American society. Social movements and ideologies related to these issues are examined. Prerequisite: Soc 201.

UPPER-DIVISION COURSES

Soc 300. Principles of Sociology. 3 hours.

Fundamental concepts and empirical findings in the field of sociology. Intended primarily for nonmajors. Not open to students who have completed Soc 201.

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. Prerequisite: Soc 201 or 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 201, or Soc 300. Gale, Martin.

Soc 304. The Community. 3 hours.

Analysis of the structure and organization of human communities. Prerequisite: Soc 201 or Soc 300.

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 201 or Soc 300.

Soc 306. Social Psychology. 3 hours.

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 201 or Soc 300. Jackson, King.

Soc 326. Quantitative Methods in Sociology. 3 hours.

Construction and interpretation of tables and graphs, descriptive statistics, measures of association and contingency relationships, basic ideas of probability, and elementary statistical inference applied to nonexperimental research. Not intended for students who need a standard introductory statistics course with emphasis on probability and statistical inference or who plan to take more than one term of statistics. Prerequisite: Mth 95, Soc 201 or Soc 300. Faich, King, Polk.

Soc 327. 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: 9 hours in sociology or consent of instructor. Faich, King, Polk.

Soc 342. Social Organization. 3 hours.

Examination in depth of analytical concepts and tools and their application to theoretical materials dealing with social organization. Not offered annually. Prerequisite: 9 hours in sociology or consent of instructor.

Soc 370. Development of Sociology. 3 hours.

Starting with Plato, the major writers and ideas that have shaped contemporary sociology are analyzed, with focus on recurrent concepts and issues that continue to challenge sociological inquiry. Special attention to the ways in which social structure affects social thought and vice versa. Prerequisite: 9 hours in upper-division sociology courses. Foskett, Szymanski, Van Houten.

Soc 371. Contemporary Sociological Perspectives. 3 hours.

Introduction to the main sociological theories in current use, such as functionalism, conflict theory, balance theory, exchange theory, systems theory, human ecology, and social evolution. Prerequisite: 9 hours in sociology or consent of instructor. Foskett, Szymanski, Van Houten.

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.

Soc 406. Supervised Field Study. Hours to be arranged.

No more than three hours of Supervised Field Study may be counted toward a degree in sociology.

Soc 407. Seminar. Hours to be arranged.

Sociology of Conservation. Gale.

Sociology of Women. Acker.

Sociology of Knowledge. Goertzel.

Underdeveloped Areas. Goertzel.

Social Psychology. Jackson.

Ghettos Black and White. Gordon.

Sociology of Leisure. Johannis.

Sociology of Religion. Johnson.

Criminal Justice. Gordon.

Left Wing Movements. Szymanski.

Right Wing Movements. Szymanski.

Juvenile Delinquency. Polk.

***Soc 409. Supervised Tutoring Practicum.** 1-3 hours any term.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Soc 411, 412, 413. Sociological Research Methods. (G) 3 hours each term.

Basic methodological problems such as the nature of science, the problem of

* No-grade course.

meaning, formal and empirical systems, the use of models, causal inference under experimental and nonexperimental conditions, and field techniques of data collection. Prerequisite: Soc 326, 327; the work of each term is prerequisite to that of the following term. Faich, Hill, King, Polk.

Soc 415. Theory and Methods in Population and Ecology. (G) 3 hours.

Methodological problems and techniques in demographic and ecological analysis. Prerequisite: Soc 303 or equivalent. Martin.

Soc 423. The Family. (g) 3 hours.

The family in historical perspective. An introduction to the study of the family as a social institution and small group association. Prerequisite: 9 hours in sociology. Johannis, Rodgers.

Soc 430. Theory of Small Groups. (G) 3 hours.

A systematic review of the influential theoretical and empirical writings, classical and current, dealing with the structure and functioning of small groups. Prerequisite: Soc 306, Soc 327. King.

Soc 431. Group Dynamics. (G) 3 hours.

Analysis of the dynamics of group participation and leadership and the characteristics of effective groups. Prerequisite: Soc 430. King.

Soc 438. Social Psychology of the Family. (G) 3 hours.

The dynamics of family interaction throughout the family life cycle. Prerequisite: Soc 423 or equivalent. 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. Polk.

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. Gordon, 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 306 or Psy 215, or consent of instructor.

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.

Soc 446. Sociology of Work. (G) 3 hours.

Sociological analysis of work in pre-industrial and industrial societies; the impact of industrial systems and technology on occupational structure, labor force, labor commitment, the meaning of work, bureaucratization, and industrial organization. Prerequisite: 9 hours in sociology. Deutsch, Gale.

Soc 447. Industrial Sociology. (G) 3 hours.

The social structure of industry, the sociology of labor unionism and industrial relations, as influenced by changing political and technological factors, including a comparative analysis of industry and society and industrial relations systems in the developed and developing countries. Prerequisite: 9 hours in sociology. Deutsch, Gale.

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, Van Houten.

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 450. Sociology of Developing Areas. (G) 3 hours.

Problems of social change in underdeveloped countries; special attention to problems resulting from the process of urbanization, industrialization, and cultural modernization. Prerequisite: 9 hours in sociology. Gale, Goertzel.

Soc 451, 452. Social Stratification. (G) 3 hours.

Systematic analysis of the nature of social classes and castes, their determinants and historical development, and their consequences. Prerequisite: 9 hours in sociology. Acker.

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 201, Soc 300, or consent of instructor. Johnson.

Soc 462. Sociology of the Family. (G) 3 hours.

The family as a social institution and its relationship to other social institutions. Prerequisite: Soc 423 or equivalent. Johannis, Rodgers.

Soc 464. Systems of War and Peace. (G) 3 hours.

War and peace as functions of social structures. The present system of international threat, its supporting institutions, and the ideology of nationalism; changes in this system associated with the revolution in warfare technology. Peace systems and their social base. Prerequisite: Soc 201 or Soc 300. Goertzel.

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 in sociology. Deutsch, Goertzel.

Soc 466. Sociology of Knowledge. (G) 3 hours.

Analysis of the relationships between society and thought. Types of knowledge considered in terms of the social settings in which they were produced and received. Prerequisite: 9 hours in sociology. Goertzel, Szymanski.

Soc 467. Sociology of Social Work. (G) 3 hours.

Analysis of social welfare in terms of ideologies, structures, functions, institutional interrelationships and social change. Policy making and program outcomes are examined. A comparative approach puts social welfare in a socio-cultural context. Acker, Bisno.

Soc 490. Sociology of Leisure. (G) 3 hours.

Sociological analysis of nonwork time and leisure behavior; the relationship between patterns of use of nonwork time and leisure and other social institutions. Prerequisite: 12 hours in sociology. Johannis.

Soc 491. Sociology of Education. (G) 3 hours.

Analysis of the major functions of education for the larger society; effects of societal change on education; the school and the community; the school as a social system. Prerequisite: 9 hours in sociology. Schafer.

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.

* No-grade course.

Soc 505. **Reading and Conference.** Hours to be arranged.

Soc 506. **Supervised Field Study.** Hours to be arranged.

No more than three hours of Supervised Field Study may be counted toward a degree in sociology.

Soc 507. **Seminar.** Hours to be arranged.

Social Psychology. Jackson.

Role Theory and Research. Jackson.

Population of Underdeveloped Areas. Martin.

Internal Migration. Martin.

Sociology of Human Sexuality. King.

Scope of Sociology. King.

Theory and Method in Sociology. Foskett, King.

Economic Sociology. Deutsch.

Industrial Sociology. Deutsch.

Sociology of Education. Schafer.

Quantitative Sociology. Faich.

Sociology of Science. Alpert.

Power and Society. Goertzel.

Theory and Research in Family Sociology. Rodgers.

Socialization. Johannis.

Changing Organizations. Van Houten.

The Teaching of Sociology. Rodgers.

*Soc 509. **Supervised Tutoring Practicum.** 1-3 hours any term.

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 306 or consent of instructor. Goertzel, Szymanski.

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. Van Houten.

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.

A critical analysis of the conceptual, theoretical, and empirical problems, together with possible alternative solutions, in the area of social institutions. Prerequisite: graduate standing in sociology or consent of instructor. 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 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, Szymanski.

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 em-

* No-grade course.

phasis on the problems, concepts, and methods of sociological inquiry. Johnson, Szymanski.

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. Hill.

COURSE OFFERED ONLY IN SUMMER SESSION

Soc 508. Workshop. Hours to be arranged.

Speech

Professors: C. A. LEISTNER (department head), BOWER ALY,* R. D. CLARK, T. L. DAHLE, F. B. DECHAIENE, R. P. FRIEDMAN, E. A. KRETSINGER, D. A. LARUSSO, H. S. LILLYWHITE, H. W. ROBINSON,† J. R. SHEPHERD, GLENN STARLIN,* K. S. WOOD.

Associate Professors: C. W. CARMICHAEL, N. J. CHRISTENSEN, R. O. COLEMAN, J. V. CUTLER, W. D. HERVEY, K. E. MONTGOMERY, B. P. RYAN,‡ R. E. SHERIFFS, OTTILIE T. SEYBOLT (emeritus).

Assistant Professors: L. D. EDIGER, J. H. ELLINGWOOD, R. B. GLOEKLER, C. R. KEIL, R. J. MERTZ.

Instructors: J. K. CARROLL, C. E. COMBS.

Lecturer: R. D. GROSS.

Fellows: G. L. AUSTIN, R. L. BEDARD, J. L. CHAPMAN, R. L. CHRISTENSEN, T. W. COLE, DIANNE M. CORSO, SUSAN S. DAY, M. M. FEWEI, K. D. GRONHOVD, A. D. GROSS, LINDA C. GUTIERREZ, R. E. HENRY, P. D. HYNES, F. L. KELLEY, CAROLYN A. MARTINO, P. E. MEIER, MARILYN A. MOSES, N. R. PAGE, F. G. PEARSON, D. J. PELLMAN, G. H. RAW, MARYELLEN C. ROBERTSON, T. F. TODD, M. J. WALLINGER, W. D. WEED, F. E. WHITED, B. J. WILKINSON.

THE DEPARTMENT OF SPEECH offers major curricula leading to the Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Fine Arts (in theater), Master of Science, and Doctor of Philosophy degrees, with opportunities for study in rhetoric and public address, radio and television broadcasting, speech pathology and audiology, theater, speech education, and communication theory and research.

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 and viewing.

Practical experience in the various phases of the departmental program is provided through the University Theater, the University Symposium and forensic activities, the Division of Broadcast Services, the Speech and Hearing Center, and the Speech Science Laboratory.

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 12 term hours in upper-division courses in related fields.

* On sabbatical leave, spring term, 1971.

† On sabbatical leave 1970-71.

‡ On leave of absence 1970-71.

(b) A maximum of 60 term hours of work in speech is recommended 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, including a minimum of 40 term hours in speech courses, at least 24 of which must be in upper-division courses.

(3) Concentration in at least one of these fields: rhetoric and public address, broadcast communication, speech pathology and audiology, theater. Undergraduate programs should be developed in conference with an adviser in the field of emphasis. The minimum requirements in each of the four fields are listed before course listings below.

Secondary-School Teaching of Speech and Drama. For certification as a teacher of speech and drama in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

For information concerning subject preparation required to meet state standards in speech and drama and to obtain the recommendation of the University of Oregon, the student should consult the member of the faculty of the Department of Speech who serves as adviser for prospective teachers.

Certification as a Speech Correctionist. For certification as a speech correctionist eligible to work in the public schools of Oregon, the student must have the recommendation of the institution in which he completes his program and must satisfy minimum requirements established by the Oregon Board of Education. For further information concerning certification the student should consult with the director of the speech pathology and audiology area.

Honors. See HONORS COLLEGE, pages 132 ff.

Graduate Program. Information on graduate requirements, see GRADUATE SCHOOL.

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 Forensic Quarterly* and related books, distribution of discussion and debate materials, and maintenance of a forensics library.

Rhetoric and Public Address

The Department of Speech, through its rhetoric and public address program, seeks to give its undergraduate students a knowledge and appreciation of and a competence for speech making and other forms of human communication.

Students develop abilities in the various forms of public speaking and discussion, and study the theories of rhetoric and communication. They develop competence in using the tools of communication research, gain a knowledge of the role of speech making in history, and become familiar with collateral material in and outside the field of speech.

In addition to all bachelor's degree requirements of the University, the following minimum requirements are specified for students with a major emphasis in rhetoric and public address: Fundamentals of Speech (Rht 121, 122, 123); Public Discussion (Rht 221 or 331); Theory and Literature of Rhetoric (Rht 301, 302, 303); Interpretation (Th 229 or Th 324); The Logic of Argument (Rht 321); Persuasion (Rht 322); Group Communication (Rht 323); Introduction to Speech Pathology and Audiology (SPA 221); History and Criticism of Classical

Speeches (Rht 421); History and Criticism of British Speeches (Rht 422); History and Criticism of American Speeches (Rht 423); Ethics and Freedom of Speech (Rht 424); Speech Communication Research (Rht 431); Radio, Television, and the Public (BC 448); Survey of Dramatic Art (Th 367); 6 term hours of upper-division courses in either literature or history; and 12 upper-division hours of courses in a single related field (but not necessarily in one department) outside the Department of Speech.

All courses in rhetoric and public address are available on a pass-undifferentiated basis. However, students majoring in the program must take all Speech Department courses required for their major on a pass-differentiated basis.

LOWER-DIVISION COURSES

Rht 121, 122, 123. **Fundamentals of Speech.** 3 hours each term.

Projects in extempore speaking and analysis of the process of communication. Rht 121, 122: emphasis on message construction, organization, audience motivation, language, persuasion, and the preparation and presentation of speeches. Rht 123: emphasis on participation and analysis of interaction in the small group.

Rht 221. **Public Discussion.** 2 hours any term.

Preparation of speeches for delivery before public audiences in conjunction with the University's forensic program. Keil.

Rht 235. **Great Speeches.** 3 hours fall and winter.

Systematic study of selected speeches of British and American orators. Aly, Friedman.

UPPER-DIVISION COURSES

Rht 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. LaRusso.

Rht 321. **The Logic of Argument.** 3 hours.

The study of principles of reasoning and evidence, particularly as they apply to oral discourse. Includes theory and practice. Carmichael, Friedman, Keil.

Rht 322. **Persuasion.** 3 hours.

The study of motivation and audience adaptation, particularly as they apply to oral communication. Includes theory and practice. Carmichael, Keil.

Rht 323. **Group Communication.** 3 hours.

Study of interaction in group communication. Emphasis upon verbal and nonverbal factors relevant to group problem solving. Carmichael, Keil.

Rht 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. Keil.

Rht 405. **Reading and Conference.** Hours to be arranged.

Rht 407. **Seminar.** Hours to be arranged.

Rht 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. Montgomery.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Rht 409. **Practicum.** (G) Hours to be arranged.

Supervised laboratory work of a project nature, including the preliminary study, development, and execution of major artistic or public service experiments.

Rht 417. Rhetorical Theory: 400 B.C.-400 A.D. (G) 3 hours.

Development of rhetoric from its birth in Sicily, through its maturation in Greece, to its modification in Rome. Prerequisite: Rht 301, 302, 303 or consent of instructor. LaRusso.

Rht 418. Directing the Forensic Program. (G) 3 hours.

Problems and procedures in directing a forensic program at the high-school and college and university levels. Keil.

Rht 421. History and Criticism of Classical Speeches. (G) 3 hours.

Rhetorical criticism of selected Greek and Roman speeches. Prerequisite: Rht 301 or equivalent. Aly.

Rht 422. History and Criticism of British Speeches. (G) 3 hours.

Rhetorical criticism of selected British speeches. Prerequisite: Rht 301 or equivalent. Aly, LaRusso.

Rht 423. History and Criticism of American Speeches. (G) 3 hours.

Rhetorical criticism of selected American speeches. Prerequisite: Rht 301 or equivalent. Aly, Leistner.

Rht 424. Ethics and Freedom of Speech. (G) 3 hours.

Study of different positions on the ethics of persuasion; history and development of freedom of speech in the United States. Friedman.

Rht 430. Quantitative Methods in Speech. (G) 3 hours.

Empirical and experimental methods of research in speech communication. Introduction to the experimental method, frequently used statistics, experimental design, problems in empirical research, and philosophical problems in quantitative research. Carmichael.

Rht 431. Speech Communication Research. (G) 3 hours.

Survey of the experimental literature relevant to speech communication. Includes studies of models of the communication process, audience variables, message variables, speaker variables, and the teaching of speech. Carmichael.

Rht 432. Speech Communication and the Group Process. (G) 3 hours.

Survey and analysis of small-group literature relevant to speech communication. Major areas: group formation, group tasks, group effectiveness and efficiency, status problems, leadership, problem-solving and conflict resolution, communication in discussion, social power and social control, organizational techniques and problems. Carmichael.

Rht 434. Nonverbal Communication. (G) 3 hours.

Aspects of the nonverbal dimensions of interpersonal communications. Psycholinguistic, psychiatric, kinesic, and perceptual theories of Hall, McLuhan, Birdwhistell, Ruesch, and others, with emphasis upon their contributions to the isolation and developments of the factors of time, space, form, material, and action. LaRusso.

Rht 435. Public Address. (G) 3 hours spring.

Theory of speechmaking, with study of the texts of speeches by modern orators; practice in preparation of speeches adapted to the professional requirements of students. Prerequisite: consent of instructor. Aly.

GRADUATE COURSES***Rht 501. Research.** Hours to be arranged.***Rht 503. Thesis.** Hours to be arranged.**Rht 505. Reading and Conference.** Hours to be arranged.**Rht 507. Seminar.** Hours to be arranged.

Introduction to Graduate Study.
Problems of Teaching Speech.
History of Speech Education.

* No-grade course.

British Oratory from 1867.
 Backgrounds of Black Protest Rhetoric.
 Rhetoric of Black Power.
 Persuasion.
 Theory of Argumentation.
 Communication and Language.
 Contemporary Public Address.

Rht 509. **Practicum.** Hours to be arranged.
 For description, see Rht 409.

Rht 513. **Rhetorical Theory: 1450-1600.** 3 hours.

Major rhetorical works and movements during the Renaissance. The metamorphosis of rhetorical theory as it relates to the philosophy, religion, education, and politics of the period. Valla, Donne, Cavalcanti, Erasmus, Vives, Ramus, Bacon, Patrizi, Wilson, and others are considered. Prerequisite: Rht 411 or consent of instructor. LaRusso.

Rht 514. **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. LaRusso.

Rht 515. **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.

Rht 520. **American Public Address to 1850.** 3 hours.

The role of rhetoric in public issues through the Compromise of 1850. Aly.

Rht 521. **American Public Address, 1850-1912.** 3 hours.

The role of rhetoric in public issues from 1850 to the Wilsonian era. Leistner.

Rht 522. **American Public Address from 1912.** 3 hours.

The role of rhetoric in recent United States history. Friedman.

Rht 523. **Documentary Research in American Public Address.** 3 hours.

A study of the problems in the use of original sources with primary attention to those especially applicable to research in public address. Aly, Friedman.

Rht 530. **Attitude Formation and Change.** 3 hours.

Survey and analysis of research in speech communication relevant to attitude formation, change, measurement, and definition. Prerequisite: Rht 430 or consent of the instructor. Carmichael.

Broadcast Communication

Courses in broadcast communication are designed to develop an awareness of the social and ethical responsibility of the broadcaster, as well as to provide basic knowledge and skill in production, programming, and performance.

In addition to all bachelor's degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in broadcasting: Fundamentals of Speech (Rht 121, 122); Interpretation (Th 229) or Elements of Acting (Th 251); Fundamentals of Broadcasting (BC 241); Principles of Advertising (J 341); Radio and Television Workshop (BC 341); Television Workshop (BC 344, 345); Radio and Television Script Writing (BC 347, 348); Radio-Television Production (BC 444); Radio-Television Direction (BC 445); Radio-Television Programming (BC 446); Radio and Television and the Public (Sp 448); Theory of Mass Communication (BC 433). At least one term must be elected from each of the following sequences: Appreciation of Drama (Th 267, 268, 269); Survey of the Visual Arts (ArH 201, 202, 203), or History of Western Art (ArH 204, 205, 206), or History of Oriental Art (ArH 207, 208, 209); and Introduction to Music and

Its Literature (Mus 201, 202, 203). A year's sequence of courses must be completed from either Theory and Literature of Rhetoric (Rht 301, 302, 303); Introduction to Music and Its Literature (Mus 201, 202, 203); *or* Survey of Visual Arts (ArH 201, 202, 203), *or* History of Western Art (ArH 204, 205, 206), *or* History of Oriental Art (ArH 207, 208, 209). In addition, a minimum of 9 term hours in basic psychology is required. At least 9 hours of the 18-hour requirement outside the department will be selected from the area of visual communication.

All courses in broadcast communication are available on a pass-undifferentiated basis. However, students majoring in the program must take all broadcast communication courses required for their major on a graded basis.

LOWER-DIVISION COURSE

BC 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. Kretsinger, Starlin, Sherriffs.

UPPER-DIVISION COURSES

BC 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. Carroll, Kretsinger, Sherriffs.

J 341. **Principles of Advertising.** 3 hours.

For description, see SCHOOL OF JOURNALISM.

BC 342, 343. **Radio Workshop.** 2 hours each term.

Theory and practice of radio broadcasting. Prerequisite: BC 341. Shepherd.

BC 344, 345. **Television Workshop.** 2 hours each term.

Theory and practice of television broadcasting. Prerequisite: BC 341. Carroll, Kretsinger, Sherriffs.

BC 347, 348. **Radio and Television Script Writing.** 3 hours each term.

Radio and television writing techniques; theory and practice in the writing of all major continuity types. Offered fall and winter terms only. Prerequisite: junior standing. Kretsinger, Starlin.

J 361. **Reporting I.** 4 hours.

For description, see SCHOOL OF JOURNALISM.

BC 372. **Staging and Lighting for Television.** 2 hours.

Theory and practice of identifying and controlling the visual factors in television production. The interdependence of the direction, quality, and intensity of light, the shape, surface, and composition of the objects lighted, and the camera position and lens setting is explored through group exercises and individual projects. Prerequisite: BC 345 or consent of instructor. Sherriffs.

BC 405. **Reading and Conference.** Hours to be arranged.

J 407. **Seminar.** Hours to be arranged.

Television problems. Radio-television station policies.

BC 407. **Seminar.** Hours to be arranged.

BC 409. **Practicum.** 1 hour.

Supervised laboratory work of a project nature including the preliminary study, development, and execution of major artistic or public service experiments. Prerequisite: consent of instructor. Carroll.

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.

BC 433. Theory of Mass Communication. (G) 4 hours.

The development of mass communication systems, with special emphasis on the role of the broadcast media in complex modern societies. The structure and functions of mass media considered in relation to several theories of mass communication. Analysis of the social context within which mass communication occurs. Mertz.

BC 444. 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: consent of instructor. Shepherd.

BC 445. 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: BC 444, consent of instructor. Shepherd, Sherriffs.

BC 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. Kretsinger.

BC 448. Radio and Television and the Public. (G) 3 hours.

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. Kretsinger, Starlin.

BC 449. Government Regulation of Broadcasting in the United States. (G) 3 hours.

A systematic analysis of the Federal statutes and local franchises which act to regulate broadcasting in the United States. Emphasis on the concept and practice of broadcasting in the "public interest, convenience, or necessity" as reflected by Federal agencies and in the decisions of the United States Supreme Court. Prerequisite: BC 448 or consent of instructor. Sherriffs.

BC 470. Methods of Instruction by Television. (G) 4 hours.

Intensive study of the development of the theory and practice of televised instruction. Studio exercises designed to explore effective instructional techniques based upon current theories of learning and the achievement of behavioral objectives. 2 lectures and 1 laboratory. Prerequisite: consent of instructor. Carroll.

J 485. Law of the Press. (G) 3 hours.

For description, see SCHOOL OF JOURNALISM.

GRADUATE COURSES

BC 501. Research.** Hours to be arranged.BC 503. Thesis.** Hours to be arranged.**BC 505. Reading and Conference.** Hours to be arranged.**BC 507. Seminar.** Hours to be arranged.

Introduction to Graduate Study.
Problems of Education by Television.
British Broadcasting.
Research in Broadcasting.
Mass Media and Special Audiences.

BC 509. Practicum. 1 hour.

For description, see BC 409. Carroll.

* No-grade course.

J 512. Communication Research Methods. 3 hours.

For description, see SCHOOL OF JOURNALISM.

J 520. Public Relations Planning and Administration. 3 hours.

For description, see SCHOOL OF JOURNALISM.

BC 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. Shepherd, Starlin.

BC 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, Mertz.

Speech Pathology and Audiology

The objectives of the program in this area are: (1) to provide students with a knowledge of the scientific aspects of speech and hearing; (2) to provide knowledge concerning the symptoms, diagnosis, and treatment of the various types of speech and hearing disorders; (3) to provide, along with study courses, the opportunity for extensive supervised clinical practice; (4) to give the student an understanding of linguistic functions as a form of human behavior and to relate this knowledge to his liberal studies.

Undergraduate work given in this area is not intended to be terminal for professional work. Students completing the degree program may be recommended and certified for professional employment for a limited period, but completion of a fifth-year planned program is required for continued employment.

In addition to all bachelor's degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in speech pathology and audiology: Phonetics (SPA 370); Speech Science (SPA 371); Advanced Speech Science (SPA 472); Visual Language and Lip Reading (SPA 473); Methods in Public School Speech Therapy (SPA 474); Functional Speech Disorders (SPA 481); Organic Speech and Language Disorders (SPA 482); Speech Therapy Procedures (SPA 483); Fundamentals of Audiology (SPA 487); Audiological Assessment (SPA 488); Audiological Rehabilitation (SPA 489); Practicum (SPA 409), a minimum of 6 term hours. In addition, a minimum of 9 term hours in general psychology and a minimum of 9 term hours in other areas of speech are required. The required 18 upper-division term hours in courses from other departments which are substantially related or complementary to the major program are usually selected from education, psychology, sociology, and anthropology.

Students majoring in this area are expected to have adequate speech ability or to achieve adequate speech performance before graduation.

Courses for which the student receives graduate credit are pass-differentiated. SPA 97, 98, SPA 130, SPA 221, SPA 370, and SPA 371 may be taken by majors or nonmajors on a pass-undifferentiated basis. All other courses are pass-differentiated for majors.

LOWER-DIVISION COURSES

SPA 97, 98. Spoken English for the Foreign Student. 3 hours each term.

A phonetic approach to English conversation, vocabulary building, perception and practice for those whose native tongue is not English. Two hours of language laboratory each week in addition to the regular class meetings. Admission to SPA 98 by permission of instructor. Montgomery.

SPA 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.

SPA 221. Introduction to Speech Pathology and Audiology. 3 hours.

The incidence and nature of speech disorders; types of therapies; the speech and hearing processes; speech improvement; development of speech in the individual.

UPPER-DIVISION COURSES**SPA 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.

SPA 371. Speech Science. 3 hours.

A study of the anatomy, psychology, and physics of speech. Wood.

SPA 405. Reading and Conference. 1-3 hours.

Limited to seniors who have demonstrated superior ability.

SPA 407. Seminar. Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****SPA 409. Clinical Practicum.** (G) Hours to be arranged.

Supervised clinical work with speech-defective children and adults enrolled for counseling, testing, and treatment in the Speech and Hearing Clinic or other campus or community centers where work can be supervised; group discussion of case histories and techniques. Maximum credit: 9 hours. Prerequisite: SPA 370, SPA 371, SPA 481, SPA 482, SPA 488 or consent of staff.

SPA 472. Advanced Speech Science. (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: SPA 370, SPA 371 or consent of instructor. Wood.

SPA 473. Visual Language and Lip Reading. (G) 3 hours.

Methods of teaching lip-reading to the deaf and hard of hearing; the nature of visual communication; teaching approaches at the pre-school, school, and adult levels; research studies concerning lip reading; and relationships of lip reading to other aspects of audiological rehabilitation and training. Prerequisite: SPA 370, SPA 371. Christensen.

SPA 474. Methods in Public School Speech Therapy. (G) 3 hours.

A study of public school speech therapy and speech improvement programs, their organization, administration, and techniques at various grade levels; surveying needs; referrals and selection of cases; integration of speech therapy with classroom work; interprofessional relationships; equipment and space planning; case reports and record keeping; cooperation with other agencies in the community. Hervey.

SPA 481. Functional Speech Disorders. (G) 3 hours.

The incidence, nature, and correction of articulatory disorders, stuttering, and other speech defects associated with emotional disturbances. Hervey.

SPA 482. Organic Speech and Language Disorders. (G) 3 hours.

Speech difficulties due to oro-facial abnormality, injury or disease, and mental retardation. Christensen.

SPA 483. Speech Therapy Procedures. (G) 3 hours.

Methods and procedures basic to the correction of the various types of speech and voice disorders; individual and group techniques; methods of motivating revision of deviant speech behavior. Hervey.

SPA 487. Fundamentals of Audiology. (G) 3 hours.

Basic neurology and anatomy of the ear; psychophysics of hearing; causes, types, and symptomatology of hearing impairments; introduction to hearing measurement. Christensen.

SPA 488. Audiological Assessment. (G) 3 hours.

Pure tone, air and bone-conduction audiometry; interpretation of audiograms; speech audiometry. Christensen.

SPA 489. Audiological Rehabilitation. (G) 3 hours.

Rehabilitation of hearing impairments; use of amplification; auditory training; psychology of deafness. Christensen.

GRADUATE COURSES***SPA 501. Research.** Hours to be arranged.***SPA 503. Thesis.** Hours to be arranged.**SPA 505. Reading and Conference.** Hours to be arranged.**SPA 507. Seminar.** Hours to be arranged.

Behavior Modification in Speech Therapy.

SPA 509. Practicum. Hours to be arranged.**SPA 570. Psychology of Speech.** 3 hours.

Study of speech and language in relationship to other aspects of individual behavior; contributions from various disciplines for the understanding of speech behavior. Hervey.

SPA 571. Auditory Disorders. 3 hours.

Advanced study of the etiology, symptomatology, audiometric findings and rehabilitation of hearing loss caused by peripheral, central, and functional impairments; differential diagnosis of auditory disorders in children and their related communication problems. Christensen.

SPA 572. Disorders of Articulation. 3 hours.

Advanced study of the nature of articulation and articulatory problems in children and adults including delayed speech development; evaluation of techniques in testing; evaluation of materials and procedures used in therapy; study of current research findings; demonstration with clinical cases. Hervey.

SPA 573. Speech and Language Development. 3 hours.

Emergence and development of normal speech and language in the individual; acquisition of phonetic and grammatical elements; tests of psycholinguistic abilities; factors which facilitate and those which retard speech and language development; research methods. Wood.

SPA 574. Adult Aphasia. 3 hours.

The nature of aphasic disturbance; diagnosis and treatment of the impairment of motor and auditory speech as a result of cardiovascular accident; language assessment in aphasic cases; family counseling; methods of therapy; case demonstrations and studies. Wood.

SPA 575. Stuttering. 3 hours.

The etiology, symptomatology, diagnosis, and treatment of stuttering behavior; demonstrations of case study and treatment. Wood.

SPA 576. Voice Disorders. 3 hours.

Functional and organic disorders of the voice; examination techniques available to the speech pathologist; rehabilitation of laryngectomized patients; corrections of problems in pitch, quality, and intensity. Christensen.

SPA 577. Cleft Palate and Speech. 3 hours.

Congenital cleft palate and cleft lip; methods of surgical repair and implications for speech therapy; related oro-facial abnormalities; speech-rehabilitation and family counseling; somatopsychological problems. Christensen, Hervey.

SPA 578. Diagnostic Procedures in Speech Pathology. 3 hours.

Rationale and use of the major instruments, procedures, and materials used

* No-grade course.

in conducting diagnostic work in cases of speech disorders; organizing diagnostic data and writing the clinical report. Wood.

COURSES OFFERED ONLY IN SUMMER SESSION AND EXTENSION

SPA 392. Principles and Techniques of Speech Correction. 3 hours (extension and summer sessions).

SPA 490. Lip Reading for the Deaf and Hard-of-Hearing. (G) 3 hours (extension).

SPA 491. Advanced Language Development for the Deaf. (G) 3 hours (extension).

SPA 492. Voice and Speech for the Deaf. (G) 3 hours (extension).

Theater

The theater program is basically oriented toward the liberal arts-humanistic pattern. Some specific courses are preprofessional in nature and provide a vocational level of competence in teaching and in some aspects of commercial theater.

The specific fields of study within the area include: acting, directing, design, costume, lighting, history, stagecraft, dramatic literature, interpretation, and theory. The courses in these fields of study are available to both majors and nonmajors.

In addition to all bachelor's degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in theater: Theater Principles (Th 261, 262, 263); 6 term hours of work selected from Production Workshop (Th 264, 265, 266) and Costume Workshop (Th 325); Elements of Acting (Th 251); Movement for Actors (CPE 124 or CPE 324); either Technique of Acting: Voice (Th 351) or Technique of Acting: Characterization (Th 352); Play Direction (Th 364); Survey of Dramatic Art (Th 367, 368, 369). A minimum of 15 term hours in courses in the Department of Speech, but outside the theater area, is required. It is recommended that the total 15 term hours not be concentrated in any one of the outside areas.

All courses in theater are available on a pass-undifferentiated basis.

LOWER-DIVISION COURSES

Th 229. Interpretation. 2 hours.

The application of the principles of oral reading to literature.

AL 230, 231, 232. Survey of the Performing Arts. 3 hours each term.

For description, see page 139.

Th 251. Elements of Acting. 3 hours.

Elementary principles of acting technique. Must be taken concurrently with Movement for Actors (CPE 124 or CPE 324).

Th 252. Makeup. 1 hour.

The history, purpose, and techniques of application of theatrical makeup; the use of makeup in the various theatrical media, with emphasis on stage and television performers. Gloekler.

Th 255. History of Motion Picture. 3 hours.

Study of the history of the motion picture as an art form. Robinson.

Th 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.

Th 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: Th 261, 262, 263, or concurrent registration.

Th 267, 268, 269. **Appreciation of Drama.** 2 hours each term.

Study of design, acting, and playwriting, for the purpose of achieving a better appreciation of the drama.

UPPER-DIVISION COURSES

Wr 331, 332, 333. **Play Writing.** 3 hours each term.

For description, see page 187.

Th 324. **Advanced Interpretation.** 3 hours.

Instruction in the discovery and oral expression of meaning and feeling in prose, poetry, and dramatic literature. DeChaine.

Th 325. **Costume Workshop.** 3 hours.

Instruction in the art and craft of stage costuming; practical experience in the design, construction, and maintenance of theatrical costumes. Gloekler.

Th 351. **Technique of Acting: Voice.** 3 hours.

Problems in the use of voice in dramatic roles. Cutler, DeChaine.

Th 352. **Technique of Acting: Characterization.** 3 hours.

Problems in the analysis and presentation of characters. Cutler, DeChaine.

Th 353. **Advanced Acting.** 3 hours.

Advanced problems in acting technique: study, rehearsal, and performance. Prerequisite: Th 251, Th 351, Th 352; consent of instructor. Cutler, DeChaine, Robinson.

Th 364. **Play Direction.** 3 hours.

Sources of dramatic material, choice of plays, casting and rehearsal of players, production organization. DeChaine, Robinson, Cutler.

Th 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.

Th 367, 368, 369. **Survey of Dramatic Art.** 3 hours each term.

Development of the theater: primitive, pre-Grecian, ancient European, European Renaissance, precursory elements of the new stagecraft, Asiatic subcontinent, Asiatic mainland, Pacific islands.

Th 405. **Reading and Conference.** Hours to be arranged.

Th 407. **Seminar.** Hours to be arranged.

Th 409. **Practicum.** Hours to be arranged.

Supervised laboratory work of a project nature, including the preliminary study, development, and execution of major artistic or public service experiments.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.

For description, see page 182.

Eng 420, 421, 422. **Modern Drama.** (G) 3 hours each term.

For description, see page 182.

Th 460. **Advanced Play Direction.** (G) 3 hours.

Advanced theory and practice in direction of plays for public performance. Prerequisite: Th 364 or consent of instructor. Cutler, DeChaine, Robinson.

Th 461. Introduction to Scene Design. (G) 3 hours.

Basic principles and techniques of theatrical design for the school and community theater. Prerequisite: Th 261, 262, 263 or consent of instructor.

Th 462. Advanced Technical Practice in Staging. (G) 3 hours.

Principles and techniques of historical scene painting and equipment; analysis of paints; metal working and twentieth-century synthetic materials in the theater; modern theatrical innovation in stage equipment. Prerequisite: Th 261, 262, 263 or consent of instructor.

Th 467. Lighting for the Stage. (G) 3 hours.

The functions of lighting on the stage. The qualities of light, lighting.

GRADUATE COURSES***Th 501. Research.** Hours to be arranged.***Th 503. Thesis.** Hours to be arranged.**Th 505. Reading and Conference.** Hours to be arranged.**Th 507. Seminar.** Hours to be arranged.

Introduction to Graduate Study.

Interpretation.

Cinematography.

Theater Structure.

Theater Management.

Producing the New Play.

Advanced Technical Practice.

Classical Theater.

Advanced Acting.

Twentieth-Century Scenic Aesthetics.

Th 509. Practicum. Hours to be arranged.

For description, see Th 409.

Th 520. History of the American Theater. 3 hours.

Readings, reports, projects, and discussions concerning significant events in the theater in the United States, from its beginnings to the present. Prerequisite: consent of instructor. Cutler.

Th 530. Continental Theater. 3 hours.

Major developments and experiments in the drama and theater production of Europe, Great Britain, and Russia from Buchner to Artaud. Cutler.

Th 531. Avant Garde Theater. 3 hours.

New forms, styles, treatments of mood, and expressions of ideas and emotions as they are or may be manifest in literary, dramatic, and theatrical elements and conditions of production. Prerequisite: Th 530 or consent of instructor. Cutler.

Th 532. Theater of Ibsen. 3 hours.

The modern Dano-Norwegian theater, with special emphasis on the work of Henrik Ibsen; influence on European and American theater.

Th 533. Theater of Strindberg. 3 hours.

The modern Swedish theater, with special emphasis on the work of August Strindberg; influence on European and American theater. DeChaine.

Th 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, Robinson.

Th 562. Styles in Scene Design. 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: Th 461.

* No-grade course.

Th 563. **Advanced Problems of Scene Design.** 3 hours.

Selected problems in the design of dramatic productions. Prerequisite: Th 461, Th 562, consent of instructor.

Th 564, 565. **History of the Theater.** 5 hours each term.

Components of the theater during the golden ages of dramatic art: the ancients, European Renaissance, Asiatic, eighteenth- and nineteenth-century Europeans.

Th 568. **Advanced Stage Lighting.** 3 hours.

Theories and methods of lighting stage production. Prerequisite: Th 467 or consent of instructor.

School of Architecture and Allied Arts

FREDERICK A. CUTHBERT, M.L.D., Dean of the School of Architecture and Allied Arts.

GEORGE M. HODGE, JR., M.S., Assistant to the Dean.

FRANCES S. NEWSOM, M.A., Architecture and Allied Arts Librarian.

Architecture

Professors: R. S. HARRIS (department head), G. F. ANDREWS, J. L. BRISCOE, S. W. BRYAN,* PHILIP DOLE, R. R. FERENS,† F. T. HANNAFORD (emeritus), W. S. HAYDEN, G. M. HODGE, JR., S. J. Y. TANG.

Associate Professors: BROWNELL FRASIER (emeritus), J. K. DIETHELM, W. G. GILLAND, L. T. JOHNSON, T. W. KLEINSASSER, E. E. MOURSUND, D. L. PETING,‡ D. N. RINEHART,† R. A. SMITH.

Assistant Professors: A. K. ANDERSON, D. L. BERGER, JOSEPH BRUNON, M. B. CAMPBELL,† R. R. DVORAK,† J. V. FINROW, P. C. GILMORE, M. A. GURAN,† T. W. HACKER, A. W. HAWN, H. E. HUDSON, E. F. MOORE, P. M. PICCIONI, GUNTIS PLESUMS, J. S. REYNOLDS, HUCK RORICK, R. L. UNRUH.

Senior Instructor: ERNEST MUSTER.

Instructor: D. M. UTSEY.†

Lecturers: EUGENIO BATISTA, PAUL EDLUND, GUNILLA FINROW, J. K. KAHANANUI, DONALD SMITH, O. T. POTICHA, D. N. UNTHANK.

Fellows: R. S. CHRISTOFFER, G. E. HAYCOCK, SAMIR HOSNI, T. C. HUBKA, MICHAEL KOZAK, J. S. M. SADEK, H. M. SHARKAWY.

Landscape Architecture

Professors: W. M. RUFF (department head), L. M. BOND, G. S. JETTE.

Associate Professors: J. F. GILLHAM, W. H. HAVENS, R. J. LOVINGER.

Assistant Professors: E. H. BRESSLER, L. L. WALKER.

Fellows: J. D. EMERY, R. M. LONGCORE, J. KIN YU MA.

Urban Planning

Associate Professors: R. L. RAGATZ (department head), TING-LI CHO.

Assistant Professor: M. E. GLOEGE.

Fellows: J. L. HEWITT, D. C. PETREQUIN, P. K. WATT.

Fine and Applied Arts

Professors: R. C. JAMES (department head), D. G. FOSTER, D. J. MCCOSH (emeritus), C. M. NIXON, C. B. RYAN, A. M. VINCENT (emeritus), JAN ZACH.

Associate Professors: R. B. BAKER, P. E. BUCKNER, LAVERNE KRAUSE, FRANK OKADA, VICTORIA ROSS (emeritus), J. V. SOEDER, D. R. STANNARD.

* On sabbatical leave 1970-71.

† On leave of absence 1970-71.

‡ On sabbatical leave, winter and spring terms, 1970-71.

Assistant Professors: THOMAS CAPPUCCIO, T. J. FAWKES, DAVID NECHAK, KENNETH PAUL, R. C. PICKERING.

Instructor: W. N. ROY.

Fellows: L. J. ALPERT, P. O. BEHYMER, S. S. BRONZAN, K. M. BROWN, P. B. CRAYCROFT, C. R. HAWLEY, T. L. HOBBS, W. N. JOHNSON, M. R. KAUL, A. KLUBER, F. J. LOOPSTRA, J. T. MCVICKER, S. J. NOAH, K. R. O'CONNELL, D. L. PRICE, V. L. STANFORD, A. R. STAPLES.

Art History

Professors: M. D. ROSS (department head), W. S. BALDINGER, J. E. KIDDER.

Associate Professors: MARIAN C. DONNELLY, PATRICIA LAWRENCE, A. D. MCKENZIE.

Assistant Professors: ESTHER J. LEONG, JUDITH B. SOBRÉ.

Fellows: C. A. ANSON, G. L. FULLER, NARUMOL DILOKWANICH.

Art Education

Professors: VINCENT LANIER (department head), T. O. BALLINGER, J. W. BURGNER.

Associate Professors: JANE GEHRING, G. L. KENSLER, JUNE MCFEE.

Assistant Professor: R. C. PAULIN.

Instructor: G. W. FERRINGTON.

Fellows: R. T. BENSON, F. G. CHALMERS, L. D. CROMWELL, S. K. JONES, J. E. SIMPSON, P. F. SCHELLIN.

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 the University Cooperative Store.

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, painting, graphic arts, sculpture, ceramics, weaving, art education, and art history. Graduate programs may emphasize either creative work or technical, theoretical, and historical studies. Graduate work in the school is governed by the regulations of the Graduate School and by special requirements of the School of Architecture and Allied Arts. The following graduate degrees are granted:

Doctor of Philosophy—in history of art. Reading knowledge of both French and German required. For general requirements, see pages 122-124.

Master of Architecture—execution of a creative architectural project of comprehensive scope, or research, with emphasis on the investigation of environmental design problems; elective studies in relevant academic and professional disciplines. Students are admitted on presentation of documents showing potential for academic-professional performance.

Master of Landscape Architecture—for creative work in landscape design or research relating to the urban region, or other studies dealing with specific phases of work in landscape architecture. Students applying for admission may be requested by the department head to submit samples of design work or other material for which he has been responsible.

Master of Urban Planning—a thesis usually required, but with appropriate education and professional experience the student may, with approval of the faculty, elect to take additional course work in lieu of the written thesis.

Master of Fine Arts—for creative work only, requiring completion of a terminal creative project in painting, graphic arts, mural design, sculpture, or applied design. The M.F.A. degree may also be awarded upon completion of a project involving work in more than one of these fields. The candidate may be required to hold a comprehensive public showing of his work. Two examples of each student's work may be retained by the School of Architecture and Allied Arts.

Master of Arts—for graduate study in the history of art. Reading knowledge of French or German required; both highly desirable. Written thesis required.

Master of Science or Master of Arts—for programs of graduate study in art education on the elementary and secondary levels.

Candidates for the Doctor of Philosophy or Doctor of Education degree in the School of Education may elect art education as a major field.

Architecture

THE CURRICULUM IN ARCHITECTURE, leading to the degree of Bachelor of Architecture, is a five-year program. The program is designed to allow considerable flexibility in the establishment of study sequences according to the indi-

vidual student's interests and needs, and in recognition of diverse opportunities in the profession. The curriculum identifies three interrelated areas of study as follows:

Interconnections. To develop the relationships between the study of environment within the department and the concerns of other areas in the School of Architecture and Allied Arts, in the University, and in the community; examination of environmental issues, identification of human and material resources, and exploration of relational patterns. Courses are open to nonmajors.

Design Area. To provide opportunities to engage in comprehensive and integrative design of the physical environment.

Subject Area. To allow access to basic knowledge in the fields of environmental design and the development of "professional" skills. Research on specific environmental topics.

Degree Requirements. Candidates for the Bachelor of Architecture degree must satisfy the following requirements:

(1) *Interconnections*—9 term hours: Environment and Communication (Arch 221), Environment and Cultural Milieu (Arch 222), Environment and Life Support (Arch 223).

(2) *Design Area*—45 term hours: Architectural Design (Arch 180), Architectural Design (Arch 380).

(3) *Subject Area*—70 term hours: Introduction to Environmental Control Systems (Arch 321), Environmental Control Systems (Arch 322, 323), Surveying for Architects (Arch 324), Introduction to Architectural Media (Arch 333), Architectural Media (Arch 334, 335), Site Analysis (Arch 341), Construction Processes (Arch 351), Introduction to Structures (Arch 365), Theory of Structures I (Arch 366, 367), Structure Systems (Arch 372, 373), Special Issues in Design (Arch 390), Research Methods (Arch 411), Construction Communications (Arch 417, 418, 419), Building Construction and Materials (Arch 420, 421, 422), Theory of Structures II (Arch 465, 466, 467), Ethics and Practice (Architecture) (Arch 429), Architecture as Amenity (Arch 541), Architecture as Form (Arch 542), Theory of Structures III (Arch 565, 566, 567), Architecture Workshop (Arch 499), History of Architecture I (ArH 337, 338, 449), History of Architecture II (ArH 437, 438, 439), City Planning I (UP 353, 354, 355).

Additional courses offered in other departments may be approved by the Department of Architecture faculty as satisfying subject area requirements.

(4) *Electives*—48 term hours. A minimum of 18 term hours must be taken outside of the School of Architecture and Allied Arts.

The following special courses may be offered for interconnection, subject, or design areas of study: Special Studies (Arch 401), Architectural Education (Arch 414), Thesis (Arch 403), Reading and Conference (Arch 405), Seminar (Arch 407), Special Studies (Arch 501), Thesis (Arch 503), Reading and Conference (Arch 505), Seminar (Arch 507).

Majors may take any graded course on either a pass-differentiated or pass-undifferentiated basis.

Graduate work is offered in architecture, leading to the Master of Architecture degree. For requirements, see page 290.

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 College 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 construction-processes area of architecture. For requirements, see page 328.

LOWER-DIVISION COURSES

***Arch 180. Architectural Design.** 5 hours.

Execution of design projects and exercises intended to familiarize the student with fundamental concepts of environmental design. Students are encouraged to develop habits of problem formulation and sound bases for value judgments; the release of the student's potential creative capacities is a primary concern of the course. Cannot be repeated for credit.

***Arch 221. Environment and Communication.** 3 hours.

The message content of the natural and man-made environment; design decisions which affect both the supporting and enhancing functions of such communication. Open to nonmajors.

***Arch 222. Environment and Cultural Milieu.** 3 hours.

Human institutions and their patterns of change examined from the perspective of the environmental designer; impact of physical environment and of ideas about it on social organization and cultural evolution. Open to nonmajors.

***Arch 223. Environment and Life Support.** 3 hours.

Appraisal of the life-support relationships of man, natural environments, and man-altered environments from the perspective of the environmental designer; emphasis on the built environment at a technological extension of man. Open to nonmajors.

UPPER-DIVISION COURSES

Arch 321. Introduction to Environmental Control Systems. 4 hours.

Studies of sound, light, heat, moisture, air motions, fluids, electricity; their natural and man-altered characteristics, their effects upon human behavior, the mechanical equipment by which they are manipulated, and their influences upon the environmental design process and product. Open to nonmajors.

Arch 322, 323. Environmental Control Systems. 3 hours each term.

Further studies of the subject matter presented in Arch 321, with opportunities for investigation and design of the control systems. A working knowledge of algebra, trigonometry, and general physics is necessary. Prerequisite: Arch 321.

Arch 324. Surveying for Architects. 2 hours 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.

***Arch 333. Introduction to Architectural Media.** 4 hours any term.

Exploration of media as means of perceiving and discovering qualities and characteristics of the physical environment. Development of techniques and skills in abstracting information for communication, study, and projection.

***Arch 334, 335. Architectural Media.** 3 hours each term.

Exploration and development of study media in organizing information, expressing ideas, and creating images of place and sequence.

Arch 341. Site Analysis. 3 hours.

Study of comprehensive site characteristics, including topography, soil condition, microclimate, vegetation, wildlife, and adjacent man-made systems.

Arch 351. Construction Processes. 3 hours.

Analysis of distinctive construction procedures; techniques, materials, and management operations.

* No-grade course.

Arch 365. Introduction to Structures. 4 hours fall term.

Development of the basic understanding of the behavior of structural elements and systems; model analysis of structural phenomena; study of force systems.

Arch 366, 367. Theory of Structures I. 4 hours each term.

Application of mathematics and mechanics to the design of building structures of wood and steel construction. Analysis of simple elements and systems; the relationship of structural design to architectural design. Prerequisite: Arch 365; mathematics through trigonometry and physics recommended.

Arch 372, 373. Structure Systems. 3 hours each term.

Development of structure concepts through observation, laboratory investigation, and graphic analysis. Prerequisite: Arch 365.

***Arch 380. Architectural Design.** 5 hours any term.

Design projects requiring comprehensive and integrative study. A wide range of project options varying in complexity and in central focus are identified each term. Individual criticism, group discussions, lectures, and seminars by visiting specialists, review of projects. Prerequisite: Arch 180. May be repeated for credit.

***Arch 390. Special Issues in Design.** Hours to be arranged.

Studio-based investigations of special aspects of architecture.

Arch 401. Special Studies. Hours to be arranged.***Arch 403. Thesis.** Hours to be arranged.

Students may propose studies in interconnection, design, or subject areas. Faculty approval required.

Arch 405. Reading and Conference. Hours to be arranged.**Arch 407. Seminar.** Hours to be arranged.**Arch 417, 418, 419. Construction Communications.** 3 hours each term.

Examination of the information required for communication of the construction processes in building. Study of current conventions and the investigation of new techniques for information processing.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**Arch 411. Research Methods.** (G) 3 hours.

Introduction to research methodology, with special emphasis on problems in environmental research.

Arch 414. Architectural Education. (G) 3 hours.

Comparative study of methodologies in architectural education; examination of existing curricula and identification of new opportunities for curricular development.

Arch 420, 421, 422. Building Construction and Materials. (g) 3 hours each term.

Methods and techniques of construction, building materials, contract documents including specifications, and estimating the cost of labor and materials.

***Arch 429. Ethics and Practice (Architecture).** (G) 2 hours fall or spring.

Problems of professional ethics, business relations, office management, etc. Open only to fifth-year students.

Arch 465, 466, 467. Theory of Structures II. (G) 3 hours each term.

The theory, design, communication, and construction processes of reinforced concrete building systems. Prestressed concrete design principles, effects of wind and seismic forces on structures. Prerequisite: Arch 366, 367.

Arch 499. Architecture Workshop. (G) 2-4 hours any term.

Investigation of visual and tactile effects in architecture through experimental construction and demonstration; construction of full-scale mockups representing three-dimensional architectural space; integrated study of visual perception phenomena, light behavior, color influence, and perspective effect.

* No-grade course.

GRADUATE COURSES

*Arch 501. **Special Studies.** Hours to be arranged.

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

Open only to master's degree candidates.

Arch 505. **Reading and Conference.** Hours to be arranged.

Arch 507. **Seminar.** Hours to be arranged.

Arch 541. **Architecture as Amenity.** 2-4 hours.

The effect of social theory on the planning and design of buildings for human use; concepts of social amenity as a factor in the architectural environment; direct relations of the field of architecture with the humanities and the sciences.

Arch 542. **Architecture as Form.** 2-4 hours.

Review of activity-space-structure interdependencies; analysis of change and growth processes and their impact on form.

Arch 565, 566, 567. **Theory of Structures III.** 4 hours each term.

Advanced studies in structural-design methodology and criteria; intensive coverage of theoretical analysis; design and evaluation of structural systems. Prerequisite: Arch 465, 466, 467.

Interior Architecture

The curriculum in interior architecture leading to the degree of Bachelor of Interior Architecture is a five-year program. Because of the diversity of opportunities in the profession the program is designed to allow students and their advisers considerable flexibility in the establishment of study sequences which satisfy individual interests and needs. The flexibility of the program allows students to extend their study to the allied disciplines of architecture, landscape architecture, urban planning, and fine and applied arts.

After two years of lower-division course work, the occasional student who does not intend to practice professionally may request consent of the faculty for admission to a two-year, upper-division program leading 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.

	Term Hours
Architectural Design (Arch 180).....	5
Environment and Communication (Arch 221).....	3
Environment and Cultural Milieu (Arch 222).....	3
Environment and Life Support (Arch 223).....	3
Introduction to Architectural Media (Arch 333).....	4
Elements of Interior Design (Arch 224).....	2
Interior Design (Arch 288).....	5
Design electives.....	5

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 of their portfolios. It is recommended that the student participate in two annual interior-design field trips prior to graduation.

* No-grade course.

The following courses are required in the three-year upper-division program:

Third Year	Term Hours
Interior Design (Arch 388).....	15
Materials of Interior Design (Arch 330, 331, 332).....	9
Art & architecture electives.....	8
History of Architecture I (ArH 337, 338, 339)	9
Landscape Structures (LA 366).....	3
Fourth Year	
Interior Design (Arch 388).....	15
History of Interior Architecture (ArH 443, 444, 445)	6
Furniture & Accessories (Arch 424).....	3
Custom Cabinet & Furniture Design (Arch 425).....	5
Art & architecture electives.....	9
Working Drawings in Interior Architecture (Arch 462, 463).....	6
Fifth Year	
Interior Design (Arch 488).....	10
Office Practice (Interior) (Arch 530).....	3
Specification Documents in Interior Design (Arch 449).....	1
Art & architecture electives.....	9

LOWER-DIVISION COURSES

Arch 224. **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 consent of instructor. Hawn.

*Arch 287. **Introduction to Interior Design.** 5 hours.

Introduction to the field of interior design. Relation to architecture and allied arts; laboratory study of the elements and principles of design with emphasis on color for interiors.

*Arch 288. **Creative Problems in Interior Design.** 5 hours.

A series of creative problems in interior design relating to the planning processes by which interior spaces and forms are studied and executed. Prerequisite: Arch 224.

UPPER-DIVISION COURSES

Arch 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. Berger.

*Arch 388. **Interior Design.** 1-8 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: Arch 288.

Arch 401. **Special Studies.** Hours to be arranged.

Arch 405. **Reading and Conference.** Hours to be arranged.

Arch 407. **Seminar.** Hours to be arranged.

Arch 462, 463, 464. **Working Drawings in Interior Architecture.** 3 hours each term.

Preparation of working drawings for projects in interior design. For professional majors only. Berger.

*Arch 488. **Interior Design Terminal Project.** 5 hours.

Student-initiated studies in interior design for the terminal project. Emphasis on comprehensive and integrative study. Two terms required. Prerequisite: 20 term hours in Arch 388.

* No-grade course.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Arch 424. **Furniture and Accessories.** (G) 3 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. Johnson.

Arch 425, 426. **Custom Cabinet and Furniture Design.** (G) 5 hours each term.

Projects involving the design of custom furniture, preparation of detailed shop drawings, shop procedure. Prerequisite: Arch 424 and 15 hours in Arch 388 or Arch 380. Open to nonmajors with consent of instructor.

Arch 449. **Specification Documents in Interior Design.** (G) 1 hour.

Information required in preparing specification documents as related to the process of constructing and furnishing of interior space. Offered alternate years.

GRADUATE COURSES

*Arch 501. **Special Studies.** Hours to be arranged.Arch 505. **Reading and Conference.** Hours to be arranged.Arch 507. **Seminar.** Hours to be arranged.Arch 530. **Office Practice (Interior).** 3 hours.

Ethics and office procedure for the interior designer in private practice; trade contracts, discounts, interprofessional relations; sources of materials. Offered alternate years.

*Arch 588. **Advanced Interior Design.** 1-12 hours any term.

Studio-based investigations of special aspects of interior design. Prerequisite: fifth-year or graduate standing, consent of instructor.

Landscape Architecture

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
Architectural Design (Arch 180).....	5
Environment and Communication (Arch 221).....	3
Environment and Cultural Milieu (Arch 222).....	3
Environment and Life Support (Arch 223).....	3
Surveying for Architects (Arch 324).....	2
Survey of the Visual Arts (ArH 201, 202, 203).....	9
Second Year	
Introduction to Architectural Media (Arch 333).....	4
Architectural Media (Arch 334, 335).....	6
Landscape Maintenance (LA 357, 358, 359).....	6
Plant Materials (LA 326, 327, 328).....	9
City Planning I (UP 353).....	3
Landscape Design (LA 289).....	6

The program provides the student with a broad educational background, together with technical studies essential for the professional practice of landscape architecture. Professional landscape architecture courses are supplemented by courses in art, architectural design, construction, and urban 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

* No-grade course.

School of Architecture and Allied Arts. Opportunities are provided for collaboration on design problems by landscape architecture 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, subdivisions, golf courses, and planned civic developments—and for study of the use of varying plant materials under conditions of climate, soil, and exposure.

Students planning a 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 (LA 389)	12
Plant Composition (LA 430, 431, 432)	9
Landscape Construction I (LA 360, 361, 362)	9
Landscape Structures (LA 366)	3
Special Studies: Delineation (LA 401)	2-6
Fourth Year	
Seminar: Landscape Design Theory (LA 407)	3
Landscape Design (LA 489)	12
Landscape Field Practice (LA 459)	3
Landscape Construction II (LA 460, 461)	6
History & Literature of Landscape Architecture (ArH 453, 454)	6
City planning electives	6
Fifth Year	
Landscape Design (LA 589)	24
Ethics & Practice (Landscape) (LA 433, 434, 435)	3
The Urban Region (LA 513)	9

During the three upper-division years, the student must complete 6 term hours of work in sculpture or painting, 3 term hours of speech, and 9 term hours of electives outside of the school.

Two annual landscape design field trips are required prior to graduation.

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. For requirements, see page 290.

LOWER-DIVISION COURSE

*LA 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 with consent of instructor.

UPPER-DIVISION COURSES

LA 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. Walker.

LA 357, 358, 359. **Landscape Maintenance.** 2 hours each term.

Cultivation of landscape plant materials; maintenance problems in relation to landscape architecture. Ruff.

LA 360, 361, 362. **Landscape Construction I.** 1-3 hours each term.

Elementary problems in the construction of landscape features. Prerequisite: Arch 324. Gillham.

LA 366. **Landscape Structures.** 3 hours.

The design and construction of simple wood and masonry landscape structures.

* No-grade course.

***LA 389. Landscape Design.** 1-8 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.

LA 401. Special Studies. Hours to be arranged.

LA 405. Reading and Conference. Hours to be arranged.

LA 407. Seminar. Hours to be arranged.

Landscape Design Theory.

LA 483. Plants for Interiors. 1 hour.

Ornamental plants suitable for interior spaces; care and maintenance; projects in growing plants under greenhouse and other conditions. Open to nonmajors. Ruff.

***LA 489. Landscape Design.** 1-10 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.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

LA 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

***LA 430, 431, 432. Plant Composition.** (G) 3-6 hours each term.

Design of plantings of trees, shrubs, and flowers. Lectures, field trips, and drafting. Prerequisite: LA 326, 327, 328. Ruff.

LA 433, 434, 435. Ethics and Practice (Landscape). (G) 1 hour each term.

Professional ethics, office management, and principles of superintendence. Havens, Jette, Ruff.

LA 459. Landscape Field Practice. (G) 3 hours.

Problems in making surveys, calculating grading, road layout, and siting. Gillham.

LA 460, 461. Landscape Construction II. (G) 3 hours each term.

Advanced problems in landscape construction; retaining walls, drainage, irrigation; specification writing. Ruff.

GRADUATE COURSES

***LA 501. Special Studies.** Hours to be arranged.

Urban Planning

THE DEPARTMENT OF URBAN PLANNING offers a graduate program leading to the Master of Urban Planning degree. A primary factor relating to the development of man's culture has been his anticipation of, and preparation for, the future. In this context, a contemporary profession called urban planning has evolved. In recent years, the central focus of urban planning has shifted from an emphasis on the public guidance and control of the physical form of communities to a broader concern with issues of urban and regional development such as poverty, race, decision making, economic development, public participation, and environmental quality. Urban planning is basically concerned with the rational guid-

* No-grade course.

ance of future community change. Planners formulate alternative solutions to community problems and assist in effecting the solutions.

Seventy-two term hours of work in courses at the 400 and 500 level are usually required for the degree of Master of Urban Planning. Thirty-six term hours must be taken in the Department of Urban Planning; the remaining 36 hours may be taken in the department or in other departments. Students are expected to enroll for six regular-session terms. A three-month, noncredit internship is recommended during the summer between the first and second years in the program unless the student has already had equivalent experience.

The requirements for the M.U.P. degree are as follows: (1) 6 hours of Introduction to Urban Planning (UP 510); (2) 2 hours of Synthesis (UP 599); and (3) 12 hours of Thesis (UP 503) or Terminal Project (UP 509); (4) 16 additional hours in urban planning; (5) 36 hours of electives selected by the student and his adviser.

It is recommended that electives be chosen from the following: statistics, research methods, economics, geography, sociology, real estate, political science, public administration, architecture, and landscape architecture.

Recognizing that the field of urban planning requires extension into many areas of concern, the program offers the student an opportunity to emphasize his special interests and develop his professional capacities. A student may choose to pursue a generalized program and develop competence as a general practitioner in urban and regional land-use planning and implementation. Or he may choose to develop a specialty by focusing on some specific area in the planning process. The program attempts to provide some structure for the student's education, but at the same time, allow a high degree of flexibility in regard to personal goals and interests. Regardless of the selected emphasis, the student should be prepared to become involved in the basic issues of our society and to commit himself to a professional career through that involvement.

Applicants must have received a bachelor's degree or its equivalent from a recognized college or university. The department makes no restriction as to undergraduate background.

UPPER-DIVISION COURSES

UP 350. **Survey of Urban Planning.** 3 hours.

A concise survey of urban planning for students seeking an introduction to the field. Review of the origins and evolution of urban planning and the development of methodologies utilized in solving the social, economic, governmental, and environmental problems accompanying urbanization. Consideration of perspectives and performances of the urban-planning profession and a critical appraisal of the role of the urban planner. Ragatz.

GRADUATE COURSES

*UP 501. **Special Studies.** Hours to be arranged.

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

UP 505. **Reading and Conference.** Hours to be arranged.

UP 507. **Seminar.** Hours to be arranged.

UP 508. **Community Planning Workshop.** 2-6 hours any term.

Intended to provide the student with experience in working with local government, planning agencies, or citizens' groups on plans, programs, or issues related to urban planning. Students perform planning studies for a particular organization under faculty supervision. Work may be performed on either a team or individual basis. May be repeated for a maximum of three terms. Open only to majors or with consent of instructor. Gloege.

*UP 509. **Terminal Project.** Hours to be arranged.

* No-grade course.

UP 510. Introduction to Urban Planning. 6 hours.

A broad overview of major fundamentals involved in the urban-planning profession which relates the need for planned change to the concept of urbanization and its explanation, extent, and resulting forms. Integrated analysis of concepts and functions of the planning process as they relate to the social, economic, political, and environmental parameters of the community. Designed to provide students a perspective for defining academic and professional goals in urban planning. Seminars and field trips. Open only to majors.

UP 515. Planning Theory. 3 hours.

Examination of the fundamental bases and logic of the planning process and its basic terms and concepts; review of the major contributions to urban planning's search for a theory; the relationship of planning to the political process and rational decision making; the place of the ideal community in planning theory. Open only to majors or with consent of instructor. Ragatz.

UP 521. Planning Administration. 3 hours.

A study of the urban-planning function in local government; organization and activities of local, metropolitan, regional, and state planning agencies; current trends in the planning process as they affect local planning administration. Open only to majors or with consent of instructor. Gloege.

UP 522. The Community General Plan. 3 hours.

A study of the community general plan; its uses, content, adoption procedure, relation to plan implementation, and place in the urban-planning process. Prerequisite: UP 521 or consent of instructor. Gloege.

UP 523. Plan Implementation. 3 hours.

A study of methods used in implementing the plans of local, regional, and metropolitan planning agencies. Emphasis is placed on ordinances, policies, and programs related to land use. Prerequisite: UP 521, UP 522, or consent of instructor. Gloege.

UP 530. Planning Analysis I. 3 hours.

Introduction to theoretical bases and applications of research methods and techniques used in the planning process. Exploration of the nature and relevance of the scientific method for urban planning; discussion of the treatment, organization and validity of data used by planners; relationship of quantitative analysis to planning standards and measures, long-range inference, and policy formation. Open only to majors or with consent of instructor. Cho.

UP 531. Planning Analysis II. 3 hours.

Advanced course in research methods and techniques used in urban planning. Collecting, analyzing, forecasting and application of population, employment, economic base, land use, and transportation information. Discussion of budget, time, uncertainty of data, and other limitations imposed upon research activity. The use of computers and models in planning. Prerequisite: UP 530 or consent of instructor. Cho.

UP 540. Land-Use Planning I. 3 hours.

Introduction to land-use planning activities in urbanized areas. Explores traditional and contemporary concepts relating to the functions, distribution, and relationships of various land uses, including residential, commercial, industrial, recreational, transportation, and public facilities. Examples of plans for specific areas such as central business districts and urban renewal projects are discussed. Analysis of the new town concept. Seminars and studio assignments. Open only to majors or with consent of instructor. Cho.

UP 541. Land-Use Planning II. 3 hours.

Advanced application of principles and concepts of physical planning and design problems. Evaluation of the social, economic, fiscal, and physical consequences of alternative land use development patterns. Investigation of the sources of basic information for physical design, the formulation of a physical design program, the preparation of solutions to problems and presentation techniques. Seminars and studio assignments. Prerequisite: UP 540 or consent of instructor. Cho.

UP 545. Urban Design. 2 hours.

Advanced discussion of the role of urban design in the planning process. Investigation of historical and contemporary thought on the visual aspects of cities, including evaluation of technological and cultural influences on urban design, perception of urban form, and aesthetic qualities of physical environments. Current urban-design theories and examples of successful innovations. Methods of effecting urban design through public policy decisions. Open only to majors or with consent of instructor. Cho.

UP 550. Social Issues in Planning. 3 hours.

Intended to sensitize the student to the theory and workings of the societal context in which planners operate. Review of modes of citizen participation in public decision making, advocacy planning, and participatory democracy in terms of the community planning and development processes. Examination of techniques and methods for planning social services. Open only to majors or with consent of instructor. Ragatz.

UP 555. Housing and Urban Renewal. 3 hours.

A survey of American housing and its formative processes as they relate particularly to community welfare. The relationship of housing to urbanism and planning; the functioning of housing markets and the housebuilding industry; housing controls; and the use of various methods and programs for improving housing in the community. Open only to majors or with consent of instructor. Ragatz.

UP 560. Environmental Issues in Planning. 3 hours.

A study of the natural and man-made environment with which the urban planner should be concerned. Emphasis on environmental problems and the planner's role in the search for their solution. Seminars and field study. Open only to majors or with consent of instructor. Gloege.

UP 599. Synthesis. 2 hours.

Intended to integrate various perspectives and backgrounds developed by urban planning students during their graduate education. A means of assisting the student to develop a personal philosophy applicable to his future role in urban planning; also intended to provide a basis for defining and outlining further research to be conducted prior to graduation. Open only to majors.

Fine and Applied Arts

THE DEPARTMENT OF FINE AND APPLIED ARTS consists of six curricular areas: painting and printmaking, sculpture, graphic design, ceramics, weaving, and jewelry and metalsmithing. The lower-division courses throughout the department are designed to serve both those students who elect to do major work in the department and nonmajors seeking studio work to serve as a part of a liberal education.

The department offers, in each of its curricular areas, two undergraduate degrees: a four-year program leading to the B.A. or B.S. degree and a program, usually taking five years, leading to the degree of Bachelor of Fine Arts. The general departmental requirements for the B.A. and B.S. degrees are 72 term hours, including 9 hours of art history.

The requirements for the B.F.A. degree are as follows: (1) completion of a five-year program totaling 220 term hours of credit; (2) satisfaction of all University requirements for a bachelor's degree; (3) satisfaction of the major requirements of one of the departmental curricular areas for a four-year baccalaureate program and, in addition, in the fifth year, 23 term hours of studio work, 9 term hours in art history, and 4 term hours of Terminal Creative Project (Art 498). Students who have completed a comparable four-year curriculum in art at another institution may be admitted to the fifth year B.F.A. program; such B.F.A. candidates must, however, satisfy the University's 45 term-hour residence requirement for all undergraduate degrees.

General Lower-Division Courses. Drawing (Art 291) and Basic Design (Art 295) are designed as introductory courses, preparatory to further work in the department. For descriptions, see course listings.

Painting and Printmaking

Opportunities are offered for participation in a variety of conceptual and technical experiences in creative visualization in painting and printmaking. Both the painting and the printmaking options are designed to meet the needs of those students wishing to do creative work as a part of a liberal education and those desiring preparation for more advanced professional study.

The following lower-division courses in art are required as preparation for a major in painting or printmaking:

	Term Hours
Lower-division art history	9
Basic Design (Art 295).....	4
Drawing (Art 291).....	4
Painting (Art 290) (for the printmaking option only 4 hours of Art 290 are required).....	8

The upper-division major program in painting and printmaking leading to either the B.A. or B.S. degree includes the following requirements:

Upper-division drawing.....	6
Composition and Visual Theory (Art 392).....	6
Upper-division painting (painting option).....	12
Upper-division printmaking (printmaking option).....	16
Drawing or printmaking electives.....	6
Selected theory courses.....	6
Studio electives, outside painting and printmaking curriculum.....	11

Fifth-year requirements for the B.F.A. degree are outlined in the general departmental statement.

Graduate work leading to the degree of Master of Fine Arts is offered in the field of painting and printmaking. For requirements, see page 290.

LOWER-DIVISION COURSES

Art 290. Painting. 2-3 hours any term.

A two-part course. Part A is for beginners and explores basic visual elements and their application to painting as a means of expression. Part B introduces concepts and their application to various painting media. Both parts taught each term. Prerequisite to Part B: 4 hours of Part A. Baker, Fawkes, Krause, Okada, Ryan.

Art 291. Drawing. 1-3 hours any term.

A beginning two-part course in observation, selection, and recording of significant elements in various drawing media. Both parts taught each term. Baker, Okada, Roy.

Art 292. Water Color. 2-3 hours.

Basic instruction in the use of water media, with particular attention to the limitations and capabilities of these media. Fawkes, Krause, Soeder.

***Art 295. Basic Design.** 2 hours each term.

Programming of information and processes invested in the act of designing; exercises in understanding the syntax of problem posing. Open to nonmajors. Special section for Honors College students. Baker, Cappuccio, Fawkes.

***Art 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.

* No-grade course.

UPPER-DIVISION COURSES

Art 349. Fundamentals of Printmaking. 3 hours.

Printmaking techniques in silk-screen, relief-printing, etching, photosensitive, and lithographic techniques. Krause, Paul.

Art 381. Water Color. 2-3 hours.

Instruction in visual and manual understanding of the media, with emphasis on transparency and fluidity. Special attention to notation of transitory conditions of light and atmosphere. Prerequisite: Art 291 or Art 292. Fawkes, Soeder.

Art 390. Painting. 2-4 hours any term.

Advanced study of painting concepts and technical processes. Independent initiative is encouraged. Prerequisite: 8 hours of lower-division painting or the equivalent. Fawkes.

Art 391. Drawing. 1-4 hours any term.

Continued study in observation related to visual and spatial phenomena. Prerequisite: 4 hours of Art 291. Fawkes, Soeder.

Art 392. Composition and Visual Theory. 2-4 hours any term.

A three-term sequence concerned with visual theory and its relation to visual, tactile, kinetic, and mnemonic characterization. Prerequisite: 4 term hours of Art 295 or Art 291, or consent of instructor. Ryan.

Art 401. Special Studies. Hours to be arranged.**Art 405. Reading and Conference.** Hours to be arranged.**Art 407. Seminar.** Hours to be arranged.**Art 481. Water Color.** 2-4 hours spring.

Advanced study in selected water media. Prerequisite: Art 381 or consent of instructor. Okada, Soeder.

Art 482. Anatomy for Artists. 2-4 hours winter.

Study of the principles and formation of the skeletal and muscular structure of the human figure. Prerequisite: Art 290 or Art 291.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 480. Lithography. (g) 2-4 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. Prerequisite: Art 349 or consent of instructor. Paul.

Art 483. Intaglio Printing Methods. (G) 2-4 hours any term.

Etching, dry point, engraving, aquatint, soft ground relief etching and collograph. Plate-making and hand printing of editions. Prerequisite: Art 349 or consent of instructor. Krause, Paul.

Art 490. Advanced Painting. (g) 2-4 hours any term.

Advanced study in the use of various media to characterize observation of a variety of subject matter, including still life, landscape, and figure. Prerequisite: 6 term hours of Art 390 or equivalent. Okada, Soeder.

Art 491. Advanced Drawing. (g) 1-4 hours any term.

Advanced work in the use of drawing as a conceptual and technical tool for revealing information from various sources, including still life, landscape, and figure. Prerequisite: 6 term hours of Art 391. Fawkes, Ryan, Soeder.

Art 492. Composition and Visual Theory. (G) 2-4 hours any term.

A study of light, color, surface, and visual processes as related to painting and visual communication. Baker.

Art 498. Terminal Creative Project. (G) Hours to be arranged.

Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

*Art 501. **Special Studies.** Hours to be arranged.

Art 505. **Reading and Conference.** Hours to be arranged.

Art 507. **Seminar.** Hours to be arranged.

Art 509. **Terminal Creative Project.** Hours to be arranged.

Art 580. **Graduate Studies in Print Making.** Hours to be arranged.

Advanced independent work in woodblock, etching, silk-screen, lithograph, collograph, and photo methods of printmaking. Prerequisite: consent of instructor. Krause, Paul.

Art 590. **Graduate Studies in Painting.** Hours to be arranged.

Work at an advanced level with problems of color and form, techniques, and processes. Fawkes, Okada, Ryan, Soeder.

Art 591. **Graduate Studies in Drawing.** Hours to be arranged.

Work at an advanced level with problems of form, technique, processes, and visual theories. Fawkes, Okada, Ryan, Soeder.

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
Lower-division art history.....		9
Elementary Sculpture (Art 293).....		9
Drawing (Art 291) or Painting (Art 290).....		9

The upper-division major program in sculpture, leading to a bachelor's degree, includes the following required courses:

Third Year		
Techniques of Sculpture (Art 393).....		15
Art electives		9
Fourth Year		
Advanced sculpture courses.....		15
Seminar: Sculpture (Art 407).....		6

Fifth-year requirements for the B.F.A. degree are outlined in the general departmental statement.

Graduate work leading to the degree of Master of Fine Arts is offered in the field of sculpture. For requirements, see page 290.

LOWER-DIVISION COURSE

Art 293. **Elementary Sculpture.** 2-4 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. Buckner, Roy, Zach.

* No-grade course.

UPPER-DIVISION COURSES

Art 393. Techniques of Sculpture. 2-6 hours any term.

An intermediate course designed to give the student an opportunity to expand his vocabulary in sculpture through investigations into methods and materials. Working in plaster, modeling, mold making, stone and wood carving, construction, life sculpture, and work with new media are explored. Prerequisite: Art 293 and instructor's consent. Buckner, Roy.

Art 401. Special Studies. Hours to be arranged.

Prerequisite: consent of instructor.

Art 405. Reading and Conference. Hours to be arranged.

Prerequisite: consent of instructor.

Art 407. Seminar. Hours to be arranged.

Prerequisite: consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 489. Advanced Metal Casting. (G) 3 hours.

Basic principles of ferrous and nonferrous metal casting in lost wax and sand; experimental use of polystyrene and other casting methods. Design and operation of furnaces and ovens. Buckner.

Art 494. Advanced Sculpture. (G) 2-4 hours any term.

Coordination of sculpture with related fields of architectural, landscape, interior, and industrial design. Buckner, Zach.

Art 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 Art 293, three terms of Art 255.

Art 498. Terminal Creative Project. (G) Hours to be arranged.

Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

***Art 501. Special Studies.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 505. Reading and Conference. Hours to be arranged.

Prerequisite: consent of instructor.

Art 507. Seminar. Hours to be arranged.

Prerequisite: consent of instructor.

Art 509. Terminal Creative Project. Hours to be arranged.**Art 594. Graduate Studies in Sculpture.** Hours to be arranged.

Work at the graduate level in the problems of forms and their relationship to space. Studio research into traditional and contemporary concepts to find personal expression. Prerequisite: consent of instructor.

Graphic Design

The program in graphic design provides a design foundation in visual communication. Through an interdisciplinary approach, the student has the opportunity to acquire technical information and design experience fundamental to contemporary graphic-communication media.

Lower-division courses required as preparation for a major in graphic design are:

	Term Hours
Art history	9
Drawing (Art 291) or Basic Design (Art 295).....	6

* No-grade course.

The upper-division major program in graphic design, leading to either the B.A. or B.S. degree, includes the following requirements:

	Term Hours
Upper-division graphic-design courses.....	24
Art electives or University workshop courses related to graphic design.....	33

Fifth-year requirements for the B.F.A. degree are outlined in the general departmental statement.

Graduate work leading to the degree of Master of Fine Arts is offered in the field of graphic design. For requirements, see page 290.

UPPER-DIVISION COURSES

***Art 382. Calligraphy and Letter Design.** 2 hours.

Pen and ink letter forming to gain understanding of the visual structure of the alphabet, letterspaces, and pages. Study of legibility and letter contrast through calligraphy experience. Cappuccio.

Art 383. The Graphic Symbol. 2 hours.

Studies in symbolic communication with phonogram, monogram, and logogram. Exploration in the graphic evolution of symbols. Prerequisite: Art 382. Foster.

Art 401. Special Studies. Hours to be arranged.

Prerequisite: consent of instructor.

Art 405. Reading and Conference. Hours to be arranged.

Prerequisite: consent of instructor.

Art 407. Seminar. Hours to be arranged.

Prerequisite: consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 493. Visual Continuity. (G) 1-3 hours any term.

Study of the problems of image sequence and continuity in printed material, display, photography, and film. Prerequisite: Art 295 or consent of instructor. Open to nonmajors. Foster.

Art 495. Cinemagraphics. (G) 2-4 hours any term.

Study of moving imagery, both diagrammatic and photographic; use of film in visual communication. Prerequisite: Art 492 or Art 493. Foster.

Art 498. Terminal Creative Project. (G) Hours to be arranged.

Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

***Art 501. Special Studies.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 505. Reading and Conference. Hours to be arranged.

Prerequisite: consent of instructor.

Art 507. Seminar. Hours to be arranged.

Art 509. Terminal Creative Project. Hours to be arranged.

Art 592. Graduate Studies in Visual Theory and Design. Hours to be arranged.

Advanced problems in visualization and design theory. Foster.

Ceramics

The undergraduate program in ceramics is centered around those processes and principles which constitute the craft aspect of ceramics. Individual students arrange their specific programs in conference with instructors.

* No-grade course.

Lower-division courses required as preparation for a major in ceramics :

	Term hours
Art history	9
Drawing (Art 291) or Basic Design (Art 295).....	6
Ceramics (Art 255).....	9

The upper-division major program in ceramics, leading to either the B.A. or B.S. degree, includes the following requirements :

Upper-division ceramics courses.....	24
Art electives	24

Fifth-year requirements for the B.F.A. degree are outlined in the general departmental statement.

Graduate work leading to the degree of Master of Fine Arts is offered in the field of ceramics. For requirements, see page 290.

LOWER-DIVISION COURSE

Art 255. **Ceramics.** 2-4 hours any term.

Introduction to ceramics with emphasis on pottery. Instruction offered in hand construction, throwing, glazing, and firing. Open to nonmajors. James, Standard.

UPPER-DIVISION COURSES

Art 401. **Special Studies.** Hours to be arranged.

Prerequisite : consent of instructor.

Art 405. **Reading and Conference.** Hours to be arranged.

Prerequisite : consent of instructor.

Art 407. **Seminar.** Hours to be arranged.

Prerequisite : consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 455. **Advanced Ceramics.** (G) 2-4 hours any term.

Advanced studio work on individual projects. Study of clay and glaze materials and kiln construction. Effect of kiln atmosphere on body and glaze. Students assume responsibility for firing their own work. 30 term hours required for majors. Prerequisite : 6 term hours in Art 255. James.

Art 498. **Terminal Creative Project.** (G) Hours to be arranged.

Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

*Art 501. **Special Studies.** Hours to be arranged.

Prerequisite : consent of instructor.

Art 505. **Reading and Conference.** Hours to be arranged.

Prerequisite : consent of instructor.

Art 507. **Seminar.** Hours to be arranged.

Prerequisite : consent of instructor.

Art 509. **Terminal Creative Project.** Hours to be arranged.

Jewelry and Metalsmithing

The degree program in jewelry and metalsmithing is planned to provide practical experiences in the design and techniques of fabricating, casting, stone setting, metal forming, and forging.

* No-grade course.

Lower-division courses required as preparation for a major in jewelry and metalsmithing are:

	Term Hours
Lower-division art history.....	9
Drawing (Art 291)	6
Lower-division jewelry and metalsmithing.....	6

The upper-division major program in jewelry and metalsmithing, leading to either the B.A. or B.S. degree, includes the following requirements:

Upper-division jewelry and metalsmithing.....	30
Art theory	6
Art electives	15

Fifth-year requirements for the B.F.A. degree are outlined in the general departmental statement.

Graduate work leading to the degree of Master of Fine Arts is offered in the field of jewelry and metalsmithing. For requirements, see page 290.

LOWER-DIVISION COURSE

Art 257. **Jewelry and Metalsmithing.** 2-4 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.

UPPER-DIVISION COURSES

Art 401. **Special Studies.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 405. **Reading and Conference.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 407. **Seminar.** Hours to be arranged.

Prerequisite: consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 457. **Advanced Jewelry and Metalsmithing.** (G) 2-4 hours any term.

Art 498. **Terminal Creative Project.** (G) Hours to be arranged.

Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

*Art 501. **Special Studies.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 505. **Reading and Conference.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 507. **Seminar.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 509. **Terminal Creative Project.** Hours to be arranged.

Weaving

The degree program in weaving is concerned with the design variables pertaining to textiles. Samplers and projects deal with both practical and visual aspects.

* No-grade course.

Lower-division courses required as preparation for a major in weaving are:

	Term Hours
Lower-division art history.....	9
Painting (Art 290).....	6
Lower-division weaving.....	6

The upper-division major program in weaving, leading to either the B.A. or B.S. degree, includes the following requirements:

Upper-division weaving.....	30
Art theory	6
Art electives	15

Fifth-year requirements for the B.F.A. degree are outlined in the general departmental statement.

Graduate work leading to the degree of Master of Fine Arts is offered in the field of weaving. For requirements, see page 290.

LOWER-DIVISION COURSE

Art 256. **Weaving.** 2-4 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.

UPPER-DIVISION COURSES

Art 401. **Special Studies.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 405. **Reading and Conference.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 407. **Seminar.** Hours to be arranged.

Prerequisite: consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 456. **Advanced Weaving.** (G) 2-4 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.

Art 458. **Textile Printing.** (G) 2-4 hours.

Advanced problems in design and color, applied to standard textiles. Technique in pattern design and yardage printing. Silk screen, block print, etc.

Art 498. **Terminal Creative Project.** (G) Hours to be arranged.

Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

*Art 501. **Special Studies.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 505. **Reading and Conference.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 507. **Seminar.** Hours to be arranged.

Prerequisite: consent of instructor.

Art 509. **Terminal Creative Project.** Hours to be arranged.

* No-grade course.

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; (3) a major curriculum in the history of art; and (4) graduate studies leading to the M.A. and Ph.D. degrees.

The art-history major combines historical study with the opportunity for 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).....	6
History of Western Art (ArH 204, 205, 206) or Survey of Visual Arts (ArH 201, 202, 203).....	9
Two years of French or German.....	24

The upper-division major program in art history, leading to the degree of Bachelor of Arts, includes the following required courses:

Third Year

History of art (selected).....	18
Language or literature.....	9
Electives (recommended: philosophy, history, anthropology, literature).....	18

Fourth Year

History of art (selected).....	18
Language or literature.....	9
Electives (recommended: philosophy, history, anthropology, literature, music, speech, art studio courses).....	18

The major requirement of 36 upper-division hours in art history must include a year's sequence of 9 term hours in at least two of the following areas: ancient, mediaeval, or Renaissance art.

Subject to the general University requirements for graded courses, a student not majoring in art history may elect to take any course offered by the department under the pass-undifferentiated option. A student with a major in art history must take the required 36 hours of upper-division work on a pass-differentiated basis.

LOWER-DIVISION COURSES

*ArH 201, 202, 203. **Survey of the Visual Arts.** 3 hours each term.

Cultivation of understanding and intelligent enjoyment of the visual arts through a study of historical and contemporary works; consideration of motives, media, and forms. Baldinger.

*ArH 204, 205, 206. **History of Western 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. Special section for Honors College students. Donnelly, Lawrence, McKenzie.

ArH 207, 208, 209. **History of Oriental Art.** 3 hours each term.

An historical survey of the visual arts of Greater India, China, and Japan, from prehistoric to modern times; selected works of painting, sculpture, architecture, and other arts studied in relation to the culture in which they were produced. Leong.

* Students are not permitted to enroll for both ArH 201, 202, 203 and ArH 204, 205, 206.

UPPER-DIVISION COURSES

ArH 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. Ross, Lawrence.

ArH 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. Sobré.

ArH 401. **Special Studies.** Hours to be arranged.

ArH 405. **Reading and Conference.** Hours to be arranged.

ArH 407. **Seminar.** Hours to be arranged.

ArH 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. Hawn.

ArH 453, 454. **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 ArH 439. Offered in alternate years. Ross.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

ArH 411, 412, 413. **Early Mediterranean Art.** (G) 3 hours each term.

Fall: the Bronze Age in the Aegean; winter: Greek, Etruscan, and Near-Eastern art to c.625 B.C.; spring: Greek and Etruscan art, c.625-c.480 B.C. Offered in alternate years with ArH 414, 415, 416. Lawrence.

ArH 414, 415, 416. **Greek and Roman Art.** (G) 3 hours each term.

Fall: Classical Greek and Etruscan art, c.480-c.375 B.C.; winter: Hellenistic Greek and Etruscan art, republican Roman art; spring: imperial Roman art, to Constantine the Great. Offered in alternate years with ArH 411, 412, 413. Lawrence.

ArH 421, 422, 423. **Eastern Mediaeval Art.** (G) 3 hours each term.

Fall: Early Christian and Byzantine art from the second century to 726 A.D.; winter: later Byzantine art, 843-1453 A.D.; spring: mediaeval Russian art. Offered in alternate years with ArH 424, 425, 426. McKenzie.

ArH 424, 425, 426. **Western Mediaeval Art.** (G) 3 hours each term.

Fall: early mediaeval art in Western Europe to the eleventh century; winter: Romanesque art; spring: Gothic art. Offered in alternate years with ArH 421, 422, 423. McKenzie.

ArH 431, 432, 433. **Renaissance Art.** (G) 3 hours each term.

Origin and development of Renaissance art in Italy in the fifteenth and sixteenth centuries. Offered in alternate years with ArH 434, 435, 436. Sobré.

ArH 434, 435, 436. **Northern European Art 1400-1600.** (G) 3 hours each term.

Painting, sculpture, and graphic arts in the Netherlands, France, and Germany. Offered in alternate years with ArH 431, 432, 433. Sobré.

ArH 437, 438, 439. **History of Architecture II.** (G) 3 hours each term.

Descriptive and critical analysis of architecture from the Renaissance in Italy to the present day. Evolution of modern architecture. Ross.

ArH 440, 441, 442. **American Architecture.** (G) 3 hours each term.

History of architecture in the United States from the Colonial era to the present. Seminar discussions and research. Students wishing to devote addi-

tional time to the Pacific Northwest or other special regions may enroll also under ArH 401. Donnelly, Ross.

ArH 446, 447, 448. **Japanese Art.** (G) 3 hours each term.

Epochs of art in Japan, including architecture, landscape design, sculpture, and painting, from prehistoric time to the present. Baldinger.

ArH 450, 451, 452. **Art in Latin America.** (G) 3 hours each term.

Fall: pre-Columbian art in the Mexican, Mayan, and Andean regions; winter: art in the Spanish and Portuguese colonies; spring: nineteenth- and twentieth-century art. Offered in alternate years. Ross.

ArH 461, 462, 463. **Chinese Art.** (G) 3 hours each term.

Origin and development of the major Chinese arts, including bronzes, sculpture, and painting, from the Shang through the Ch'ing dynasties. Leong.

ArH 464. **Russian Art.** (G) 3 hours.

Russian art and architecture from the end of the Middle Ages to the twentieth century. McKenzie.

ArH 476, 477, 478. **Modern Art.** (G) 3 hours each term.

Intensive study of the development of art in the nineteenth and early twentieth centuries. Prerequisite: ArH 201, 202, 203 or ArH 204, 205, 206. Baldinger.

GRADUATE COURSES

*ArH 501. **Special Studies.** Hours to be arranged.

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

ArH 505. **Reading and Conference.** Hours to be arranged.

ArH 507. **Seminar.** Hours to be arranged.

ArH 507. **Seminar.** Hours to be arranged.

Ancient Near Eastern Art. Lawrence.

Aegean Bronze Age Art. Lawrence.

Greek Art. Lawrence.

Roman Art. Lawrence.

Early Mediaeval Art. McKenzie.

Gothic Painting. McKenzie.

Early Russian Painting. McKenzie.

Mediaeval Serbian Art. McKenzie.

Renaissance Art. Sobré.

Spanish Art. Sobré.

Scandinavian Art. Donnelly.

Chinese Art. Leong.

Indian Art. Baldinger.

Himalayan Art. Ballinger.

American Architecture. Donnelly, Ross.

Islamic Architecture. Ross.

Prints and Drawings.

History of Film and Photography.

ArH 511, 512, 513. **The Art Museum.** 3 hours each term.

Theories and techniques in the operation of art museums. Paulin, staff.

ArH 514. **Art History Bibliography.** 1 hour.

Introduction to the bibliography of art history. Required for graduate students in art history. Lawrence.

Art Education

THE CURRICULUM IN ART EDUCATION leads to the B.S. or B.A. degree and fulfills requirements for basic certification for the teaching of art in the state of Oregon. The program is designed to prepare students for teaching art in junior

* No-grade course.

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. 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 (Art 295).....	6
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206) or History of Oriental Art (ArH 207, 208, 209)	9
* Human Development & Learning (EPsy 326)	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:

Introduction to Art Education (ArE 324)	3
Children's Art Lab. (ArE 325)	3
Methods of Teaching Art in the Secondary School (ArE 326)	3
Art Curriculum in the Secondary Schools (ArE 327)	3
Student Teaching: Junior High (CI 416)	5
Student Teaching: Senior High (CI 417)	5
Current Problems in Art Education (ArE 414)	3
Art electives chosen from: drawing, painting, lithography, water color, composition and visual theory, visual continuity, sculpture, ceramics, weaving, printmaking or jewelry	36-42
History of art	9

A fifth year of preparation is required for permanent teacher certification in Oregon. Students working toward the completion of fifth-year requirements are advised individually concerning the selection of courses.

UPPER-DIVISION COURSES

†Art 321, 322. **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. Burgner, Gehring.

ArE 323. **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 Board of Education methods-course requirement. Prerequisite: Art 321, 322 or consent of instructor. Burgner, Gehring.

ArE 324. **Introduction to Art Education.** 3 hours.

A lecture-laboratory course investigating the theoretical, historical, psychological, and sociological foundations of art education. Ballinger.

ArE 325. **Children's Art Laboratory.** 3 hours.

Work with children in a supervised art laboratory; designed for students preparing for art teaching at both the elementary and secondary levels. Required of all art education majors. Burgner.

ArE 326. **Methods of Teaching Art in the Secondary School.** 3 hours.

A lecture-laboratory course on methods and materials for teaching art in the junior and senior high schools. Observation in the public schools or its equivalent will be required. Prerequisite: ArE 324, 325. Kensler.

* Education course required for certification by the Oregon State Department of Education.

† No grade course.

ArE 327. Art Curriculum in the Secondary Schools. 3 hours.

A lecture-laboratory course on curriculum development in art for the junior and senior high schools. Observations in the public schools or its equivalent will be required. Prerequisite: ArE 326. Gehring.

ArE 401. Special Studies. Hours to be arranged.**ArE 405. Reading and Conference.** Hours to be arranged.**ArE 407. Seminar: Student Teaching.** 1 hour any term.***CI 416. Student Teaching: Junior High School.** 5 to 15 hours any term.***CI 417. Student 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. Maximum credit, 10 hours for two terms. Permission for student teaching must be obtained from the art-education division.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**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: Art 321, 322, previous teaching experience, or consent of instructor. Burgner.

ArE 414. Current Problems in Art Education. (G) 3 hours.

Examination of current problems in art education and research in the field. Their relation to methods and curriculum. Prerequisite: Ed 416, 417. Lanier, Ballinger.

ArE 415. The Role of Art Criticism in Art Education. (G) 3 hours.

Theory and practice of art criticism; development of ability to make a critical analysis of student work. Paulin.

ArE 430. Art in Special Education: The Mentally Retarded Child. (G) 3 hours.

A theoretical examination of art experiences as a contributing factor in the learning process of the child diagnosed as mentally retarded. Some laboratory activity with appropriate art materials. Ballinger.

ArE 492. Teaching Art History in Secondary School. (G) 3 hours winter.

Elective one-term course for seniors and graduate students in art education. Critical examination of problems involved the teaching of art history in the general art program in junior and senior high schools. Investigation of traditional teaching methodology of art history as opposed to alternate possibilities. Techniques of offering content and subject material through exploratory inquiry and the use of a variety of visual media. Prerequisite: 9 term hours of art history.

GRADUATE COURSES**†ArE 501. Special Studies.** Hours to be arranged.**†ArE 503. Thesis.** Hours to be arranged.**ArE 505. Reading and Conference.** Hours to be arranged.**ArE 507. Seminar.**

Art in Society. McFee.
Newer Media in Art Education. Lanier.
Supervision. Burgner.
Comparative Art Education. Gehring.
Behavioral Objectives. Kensler.
Issues in Art Education. Lanier, McFee.

* Education courses required for certification by the Oregon State Department of Education.

† No-grade course.

ArE 512. Research Methodology in Art Education. 3 hours spring.

Study of the fundamental methodologies of scientific inquiry with attention to their application to research in art education. The scientific bases of research; classifications of research; methodologies used in descriptive, analytical, and experimental research. Development of research proposals and critique research reports.

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.

ArE 545. Foundations of Art Education. 3 hours fall.

Review and analysis of social and behavioral aspects of individual and group differences in the production of art and learning about art as a basis for education in the visual arts.

ArE 566. Curriculum Development in Art Education. 3 hours winter.

Curriculum development in the visual arts in terms of individual and sub-cultural differences between students. Prerequisite: ArE 545 or equivalent with consent of instructor.

Institute for Community Art Studies

JUNE K. MCFEE, Ed.D.	Director
GORDON L. KENSLER, Ed.D.	Research Associate
DONALD B. DRISCOLL	Research Assistant

THE INSTITUTE FOR COMMUNITY ART STUDIES is a research and public service organization concerned with public understanding and appreciation of the arts, including architecture, community design, the natural and man-made landscape, the fine arts, and the traditional and experimental crafts.

Research is concerned with decision making in the arts, behavioral and aesthetic foundations of theoretical design, educational processes in the arts, and art as a means of social communication and cultural transmission.

Public service activities are focused on the development and evaluation of general education programs in the different aspects of the arts in the schools and communities of the state.

College of Business Administration

RICHARD W. LINDHOLM, Ph.D., Dean of the College of Business Administration.
PAUL SWADENER, D.B.A., Associate Dean, College of Business Administration.
HAROLD K. STROM, Ph.D., Director, Center for International Business Studies;
Director, Transport and Logistics Research Center.
STUART U. RICH, D.B.A., Director of Forest Industries Management Center.
DONALD A. WATSON, Ph.D., Director of Bureau of Business and Economic
Research.

Accounting and Quantitative Methods

Professors: D. S. HARWOOD, JR., C. E. KELLY (emeritus), A. E. MACE, A. B.
STILLMAN (emeritus).
Associate Professors: D. A. BAERNCOFF,* C. J. LUNESKI (department head),
J. W. SOHA.
Assistant Professors: P. M. FRISHKOFF, F. L. MCCARTHY, A. L. PEITERSON, J. E.
REINMUTH, L. E. RICHARDS.
Fellows: LYNDA G. BEAN, J. L. DAVIS, R. T. OWEN, A. C. SHIVES, D. L. TANG.

Finance and Business Environment

Professors: W. S. BAUMAN (department head), G. S. KAUFMAN, R. W. LIND-
HOLM, V. P. MORRIS (emeritus), W. J. ROBERT, D. A. WATSON.†
Associate Professors: P. O. DIETZ, W. D. RICHINS, L. W. ROSS, JR.
Assistant Professors: T. W. CALMUS, A. R. GRANT, M. H. HOPEWELL, W. H.
PARKS.
Fellows: J. D. BARNES, M. M. KINGMAN, THEODOR KOHERS, MARVIN MCCLAY,
D. W. MILLER, ROBERT OLSEN, P. J. ROBINSON, J. W. WANGSNES.

Marketing, Insurance, and Transportation

Professors: N. H. COMISH (emeritus), A. L. LOMAX (emeritus), S. J. RICH, R. J.
SAMPSON, D. S. TULL.
Associate Professors: R. R. ANDRUS (department head), G. S. ALBAUM, J. J.
DASSO, W. B. HACKETT, N. R. SMITH, H. K. STROM, P. S. SWADENER, J. R.
WISH.
Assistant Professor: D. I. HAWKINS.
Fellows: C. E. BRUNNER, D. W. LEISTER, R. L. SCHILL.

Personnel and Industrial Management

Professors: S. C. VANCE, E. F. BEAL.
Associate Professors: W. B. BROWN (department head), E. H. CONANT, CATH-
ERINE JONES, H. C. PYRON, K. D. RAMSING, F. J. SEUBERT, L. L. D. SHAFFER.
Assistant Professors: A. L. ELIASON, U. V. MANION.
Fellows: W. D. ENGS, D. L. HELMICH, HAROLD KNUDSEN, H. L. PARSONS, G. W.
RODICH, B. L. SCOTT, T. F. WATTLE, RICHARD WHITYCOMBE.

* On leave of absence 1970-71.

† On sabbatical leave 1970-71.

Business Education

Instructor : L. R. NEEDHAM.

Fellow : BARBARA H. COCKRELL.

THE COLLEGE 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. Leaders of today must be capable of continued adjustment to changing conditions in the firm and in the social, economic, and political environment within which the firm operates.

To insure such an education for its students, the college requires that undergraduate majors take a minimum of 40 per cent of their work in the liberal arts and sciences. Within the college, professional courses relate new insights and developments in the social and natural sciences to the needs of firms and organizations in meeting their responsibilities to the public and to their owners, employees, and customers.

Although the college 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 college is offered in two schools : the Undergraduate School of Business and the Graduate School of Management and Business. The Graduate School of Management and Business operates under the general direction of the Graduate School of the University.

The College of Business Administration was established in 1914 as the School of Commerce; the name was changed to School of Business Administration in 1921; the present name was adopted in 1967. Its undergraduate program was accredited in 1923, and its M.B.A. program in 1962, by the American Association of Collegiate Schools of Business.

The following business honorary and professional societies have active chapters at the University: Alpha Kappa Psi, men's professional business fraternity; Beta Gamma Sigma, business administration scholastic honorary; Beta Alpha Psi, accounting; Delta Nu Alpha, transportation; Phi Chi Theta, business women; Pacific Northwest Personnel Managers Association.

The college maintains a student exchange program with a foreign school of business.

Bureau of Business and Economic Research. The Bureau of Business and Economic Research works closely with the College of Business Administration in many programs of mutual interest. Its activities are described on page 130.

Forest Industries Management Center. The major activities of the Forest Industries Management Center include instruction, research, and industry conferences. Introductory training is provided to undergraduate students interested in job opportunities in forest products companies (lumber, plywood, pulp and paper).

At the graduate level, the center offers work leading to the M.B.A. degree with a major in forest industries management. This program, which supplements the regular core curriculum in business administration, is open to students with undergraduate degrees in forestry.

Center for International Business Studies. The Center for International Business Studies (CIBS) has three chief objectives: (1) to encourage greater interest in world affairs and international business problems among all students of business administration; (2) to stimulate faculty and student research in international aspects of business and related areas; and (3) to develop among students and faculty a greater awareness of the influence of the world cultural fabric on business and economics. Programs to carry out these objectives include:

(1) The European Exchange Program in Business Administration, in cooperation with The Netherlands School of Business, Breukelen, The Netherlands.

(2) The encouragement and development of interdisciplinary study programs. Students working for any business degree may specialize in international business.

(3) A program of conferences, special lectures, and individual research in international business. The CIBS is in contact with other organizations and agencies specializing in international business, such as the Council for International Progress in Management, the Organization for Economic Cooperation and Development, and the European Association of Management Training Centers.

The undergraduate major option in international business is described on page 329.

Transport and Logistics Research Center. The Transport and Logistics Research Center fosters research in the areas of transport and physical distribution management (logistics), and encourages education in the field by involving students in research and bringing them into closer contact with industry. The center also conducts executive development programs for industry and government practitioners in the fields of transport and logistics management.

The college has conducted an academic program in transportation and related areas since 1919, and is one of the few colleges of business administration offering a major academic program in this field. The undergraduate program is described on page 328.

Conferences and Lectures. Frequent conferences on general and specialized business problems are sponsored each year by the College of Business Administration, with the cooperation of business leaders of the Pacific Northwest. These conferences are usually open to students in the college.

Leaders in various fields of business are regularly invited to the campus to discuss new developments and professional opportunities with undergraduate and graduate students.

Undergraduate School of Business

TO EARN A DEGREE in the Undergraduate School of Business, a student must complete one of the major options offered by the four departments of the school.

Accounting and Quantitative Methods—accounting; quantitative methods.

Finance and Business Environment—finance; business environment.

Marketing, Insurance, and Transportation—marketing; risk and insurance; transportation, traffic management, and utilities; real estate; business and construction, international business.

Personnel and Industrial Management—operations management; personnel; organization and management; business teacher education; office administration.

Degrees. The College of Business Administration offers undergraduate major work leading to the Bachelor of Business Administration, Bachelor of Science, and Bachelor of Arts degrees in each of the school's four departments.

Degree Requirements. To qualify for a bachelor's degree from the College of Business Administration the student must complete, in addition to the general University requirements (pages 91-92), all of the following:

(1) *Conceptual Tools Core* (43 term hours of work).

	Term Hours
9 term hours of economics including 6 hours of Intermediate Economic Analysis (Ec 375, 376) or equivalent	9
Financial Accounting (Ac 221) or equivalent	3
Work in symbolic language and quantitative methods courses including: 4 term hours of introductory calculus (Mth 106, Mth 109, Mth 200, Mth 204, or equivalent); 3 term hours of computer programming; 3 term hours of introductory business statistics (QM 232 or equivalent); 3 term hours of symbolic language or quantitative methods courses, such as mathematics, computer science, logic, or statistics	13
9 term hours of behavioral science (sociology, psychology, and anthropology) courses	9
English Composition (Wr 121)	3
Fundamentals of Speech (Rht 121)	3
Business law (FBE 226 or equivalent)	3
	43

Business Environment (FBE 125), is not required but is recommended as an elective to freshman business students.

(2) *Residence Requirement.* After he has completed the conceptual tools core, each student must take 45 term hours of upper-division work in business on campus. Upper-division work taken before completion of the conceptual tools core does not satisfy this requirement. Upper-division work taken at another institution does not satisfy this requirement unless the course is taken under the instruction of a College of Business Administration faculty member acting as an exchange professor at that institution. Lower-division work does not satisfy this requirement.

(3) *40 Per Cent of Work in Business and Economics.* Students must take at least 72 term hours of work in business and economics courses.

(4) *40 Per Cent of Work Outside of Business and Economics.* Students must take at least 72 term hours of work outside of business and economics courses.

(5) *Upper-Division Core.* The following courses are required:

	Term Hours
Managerial Accounting (Ac 323)	3
Financial Management (FBE 322)	3
Marketing Systems and Demand Analysis (MIT 323)	3
Organization and Interpersonal Relations (PIM 321)	3
One of the following: Business Enterprise and Social Responsibility (FBE 434); Business Policies (PIM 453)	3
	15

(6) *Major Option in the College of Business Administration.* Each student must complete the requirements of one of the major options as specified in the departmental listings, pages 320-337.

Student Advising. The College of Business Administration maintains an advising service for the business student. Information and advice about the student's status with respect to requirements for the degree are handled through the office of the Undergraduate School of Business. At the beginning of each term specially selected faculty and graduate students work with students to discuss requirements and plan programs. The student also has a faculty adviser who works with him concerning content of specific courses and programs that will help attain career objectives. Naming of faculty advisers is handled through the office of the Undergraduate School of Business.

The student is strongly advised to notify the office of the Undergraduate School of Business of his intent to study business and to maintain an up-to-date transcript file in that office. During the term in which the student gains senior standing, he should notify the Undergraduate School of Business of his intent to graduate with a degree in business, specifying the term in which he expects to be

granted the degree. When the student does this, his file will be checked thoroughly and he will be notified in writing of his status with respect to the requirements for the degree. He can then plan his last year so that all requirements can be completed in time for graduation.

Accounting and Quantitative Methods

PROGRAMS IN ACCOUNTING are designed to prepare students for careers in industrial, professional, and governmental accounting. The quantitative methods option is designed to provide students with an understanding of the theory and techniques of quantitative analysis as a basis for administrative decision-making.

Accounting. The major curriculum in accounting is 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. Requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Financial Accounting (Ac 222)	3
Asset Valuation & Income Measurement (Ac 350, Ac 351)	6
Principles of Cost Accounting (Ac 360)	3
Corporate Accounts & Statements (Ac 352)	3
Elementary Inference in Business Statistics (QM 333)	3
Federal Income Tax (Ac 411)	3
Quantitative Methods (QM 432 or QM 434) or Seminar: Sampling (QM 407)	3
Accounting Verification (Ac 440)	3
Special Topics in Accounting (Ac 450)	3
Cost Analysis (Ac 460)	3
	33

In addition to the specific courses listed above, accounting majors are required to complete:

(1) One year (12 term hours) of college mathematics during their lower-division years, the mathematics sequence to start at the highest possible level. Mth 104 or Mth 107 is the typical starting level, but students who can start at a higher level are required to do so. Courses in computing and mathematics of finance, or their equivalents, may not be counted toward satisfaction of this requirement.

(2) A one-year sequence (9 term hours) in economics or 9 term hours in a behavioral science at the upper-division level (courses numbered 300 and above). Courses in cultural anthropology, psychology, and sociology are included in the behavioral science category; courses in other fields may be included by petition through departmental advisers.

Quantitative Methods. The major program in quantitative methods is designed to prepare the student for a career in business research; primary emphasis is on the application of modern statistical and quantitative methods to business problems. Majors in quantitative methods must complete work in basic mathematics through calculus (equivalent of Mth 200, 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 general business requirements of the school, are as follows:

	Term Hours
Elementary Inference in Business Statistics (QM 333)	3
Quantitative Analysis for Business Decisions (QM 432)	3
Applied Analysis of Variance (QM 433)	3
Principles of Cost Accounting (Ac 360)	3

	Term Hours
Applied Regression Analysis (QM 434)	3
Intermediate Economic Analysis (Ec 375, 376)	6
Minimum of 6 term hours selected from electives listed below	6
	27

ELECTIVES

Business Fluctuations and Planning (FBE 466)	3
Cost Analysis (Ac 460)	3
Industrial Dynamics (QM 421)	3
Financial Analysis (FBE 459)	3
Marketing Research (MIT 415)	3
Operations Research Techniques (PIM 428)	3
Intermediate Economic Analysis (Ec 377)	3
National Income & Business Cycles (Ec 483, 484, 485)	9
Introductory Linear Algebra (Mth 411)	3
Introduction to Statistical Theory (Mth 441, 442, 443)	9

Accounting

LOWER-DIVISION COURSES

Ac 221. **Financial Accounting.** 3 hours.

Description and derivation of the major financial statements prepared by accountants; the accounting rationale; primary emphasis placed on reports to stockholders and other investors. Intended both as an introduction to other courses and as a one-term terminal course in financial accounting. Special section for Honors College students. Prerequisite: sophomore standing.

Ac 222. **Financial Accounting.** 3 hours.

Continuation of Ac 221. Problems faced by the financial accountant in determining figures to be reported for monetary and nonmonetary assets; related problems in reporting ownership interests; analysis of financial statements. Required for all accounting majors. Special section for Honors College students. Prerequisite: Ac 221.

UPPER-DIVISION COURSES

Ac 323. **Managerial Accounting.** 3 hours.

Introduction to the development, presentation, and interpretation of accounting data to aid management in planning and controlling operations. Special section for Honors College students. Prerequisite: Ac 221.

Ac 350, 351. **Asset Valuation and Income Measurement.** 3 hours each term.

Review of financial statements provided to investors; review of accounting recording and reporting techniques and procedures. Examination of basic accounting principles and concepts underlying asset valuation and income determination. Prerequisite: Ac 222.

Ac 352. **Corporate Accounts and Statements.** 3 hours.

Accounting principles and procedures involved in determining, measuring, reporting, and managing corporate equities. Prerequisite: Ac 351.

Ac 360. **Principles of Cost Accounting.** 3 hours.

Continuation of Ac 323. Development, presentation, and interpretation of cost information for management; methods of data collection and display; problems of cost allocation; cost-price nexus; standard costs for control; capacity-overhead issues. Prerequisite: one year of college mathematics, BS 232, Ac 323.

Ac 407. **Seminar.** Hours to be arranged.Ac 460. **Cost Analysis.** 3 hours.

Quantitative methods applied to cost analysis; differential costs; complex mix-and-yield cost variances; time-preference and capital budgeting; project selection involving internal and external constraints; operations research and critical path methodologies as they pertain to cost matters. Prerequisite: Ac 360, CS 233, senior standing.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT*(For 500 courses, open only to graduate students, see pages 344-345.)***Ac 411. Federal Income Tax. (G) 3 hours.**

Designed for accounting majors and other majors alike. Intended to develop an understanding of the broad rules of income taxation, some familiarity with income tax procedures, and an awareness of the complexities and uncertainties inherent in our tax laws. Emphasis on tax planning rather than tax practice. Prerequisite: Ac 323.

Ac 412. Federal Income Tax Procedures. (G) 3 hours.

Professional study and analysis of Federal and Oregon income tax structures and of the problems of determining income tax liabilities; determination of taxable income and computation of taxes for individuals, partnerships, corporations, estates, and trusts; introduction to tax research. Prerequisite: Ac 411.

Ac 420, 421. Management Information Systems. (G) 3 hours each term.

Study and analysis of information models for the management of complex organizations; secondary research on problems arising from indiscriminate mechanization of natural systems; generalized definitions of management information; adjustment to particularized definitions; total-systems flow charting; primary research into particularized information systems. Prerequisite: computer course work or experience with mechanized mass-data systems; senior standing or consent of instructor.

Ac 430. Fund Accounting. (G) 3 hours.

Financial administration and external review of government and nonprofit entities, emphasizing the use of fund accounting in planning, budgeting, and controlling the operations of such agencies. Consideration of alternative budgeting systems, including line-item, performance, and planning-programming-budgeting-systems, and the financial aspects of such systems; applications of analytical techniques to planning and reviewing governmental programs; and alternative auditing concepts and their application to nonprofit entities. Requires no previous background in accounting.

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 360, senior standing.

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, senior standing.

Ac 480, 481. Advanced Accounting Problems. (G) Hours to be arranged.

Problems in professional examinations given by the American Institute of Certified Public Accountants; emphasis on problem analysis and development of working papers. Prerequisite: consent of instructor.

Quantitative Methods

LOWER-DIVISION COURSE**QM 232. Introduction to Business Statistics. 3 hours.**

Elementary statistics as a tool for business decision-making. Introduction to probability, discrete and continuous distributions, sampling distributions, and a preview of problems of inference. Prerequisite: Mth 109 or equivalent.

UPPER-DIVISION COURSES

QM 333. Elementary Inference in Business Statistics. 3 hours.

Applications of statistical inference to business situations; sampling and its role in estimation and hypothesis testing; simple linear regression analysis and correlation. Special section for Honors College students. Prerequisite: Mth 109, QM 232 or equivalent.

QM 407. Seminar. Hours to be arranged.

Independent Study.
Multivariate Methods.
Applied Sampling Techniques.

QM 432. Quantitative Analysis for Business Decisions. 3 hours.

Uses of subjective probability and utility theory in dealing with conditions of risk and uncertainty in business situations; elementary mathematical models of business behavior. Prerequisite: one year of college mathematics; QM 232, QM 333 or equivalent.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 344-345.)

QM 420. Dynamic Systems. (G) 3 hours.

Fundamental concepts in the analytical study of dynamic processes and systems. Difference equations which have important applications in the simulation of industrial and economic systems. Prerequisite: Mth 106 or Mth 109 or equivalent.

QM 421. Industrial Dynamics. (G) 3 hours.

Analysis of information-decision systems in business organizations; development of competence in modeling the dynamic operation of such systems, in performing simulation experiments, and in analyzing results. Prerequisite: one year of college mathematics; consent of instructor.

QM 433. Applied Analysis of Variance. (G) 3 hours.

Design of comparative experiments in business administration; models and methods for analysis of variation in measurement data; weighing of evidence from comparative business experiments. Prerequisite: one year of college mathematics; QM 232, QM 333 or equivalent.

QM 434. Applied Regression Analysis. (g) 3 hours.

Survey of graphical and numerical procedures for curve fitting based on the classical method of least squares; application of regression procedures in the analysis of measurement data and in the elucidation of underlying relationships governing business and economic behavior. Prerequisite: one year of college mathematics; QM 232, QM 333 or equivalent.

QM 440. Time-Dependent Processes. (G) 3 hours.

An analysis of time-dependent processes in business and management; forecasting, especially economic forecasting as related to demand analysis and security price movements; smoothing of errors in a quality control system; renewal theory; waiting line theory. Prerequisite: QM 232, QM 333 and one year of calculus, or consent of instructor.

Finance and Business Environment

THE PROGRAMS offered by the Department of Finance and Business Environment are designed (1) to prepare students for careers in the field of finance and (2) to provide a course of study in the broad area of business environment. The department offers two major options: finance and business environment.

Finance. The finance curriculum is designed to impart an understanding of the various areas and principles of finance and to provide students with a body of

specialized knowledge and analytical techniques. Courses are offered in the areas of financial institutions, financial management, and investments. The courses provide a fundamental understanding of the application of business analysis and decision-making to the solution of problems of business management, business finance, investments, and financial institutions, with special attention to the relation of financial policies and operations to the functioning of business firms within the economic system. The major requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Financial Accounting (Ac 222)	3
Financial Institutions (FBE 321)	3
Introduction to Investments (FBE 363)	3
Elementary Inference in Business Statistics (QM 333)	3
Problems in Financial Management (FBE 480)	3
Minimum of 9 term hours selected from electives listed below	9
	24
ELECTIVES	
Analysis Financial Institutions (FBE 450)	3
Taxation & Business Policy (FBE 323)	3
Real Estate Finance (FBE 440)	3
Financial Analysis (FBE 459)	3
Commercial Bank Management (FBE 460)	3
Investment Management (FBE 464)	3
Intro. to Real Estate (MIT 331)	3
Risk and Insurance (MIT 354)	3
International Finance Management (FBE 474)	3
Business Fluctuations and Planning (FBE 466)	3
Computer science (CS 421, or CS 424)	3
Business Insurance and Risk Management (MIT 455)	3
One of the following:	
Accounting (Ac 350, 351, or 352)	3
One of the following: Quantitative Analysis for Business Decisions (QM 432), Applied Analysis of Variance (QM 433), or Applied Regression Analysis (QM 434)	3

Business Environment. The business environment curriculum is designed to enable the student to gain a perspective of the administrative decision-making process and an understanding of the relationships between the business firm and the economic, legal, social, ethical, and political environment in which it functions. The business environment program stresses the working relationships existing in a business firm. Through case method courses, visitations to business firms, part-time employment in a business firm, and the utilization of visiting businessmen, the student is brought to understand and appreciate the environment which he will encounter as a member of a business organization.

The major requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Financial Institutions (FBE 321)	3
Law of Administrative Agencies (FBE 420)	3
Business Enterprise and Social Responsibility (FBE 434)	3
Business Fluctuations and Planning (FBE 466)	3
Business Policies (PIM 453)	3*
Minimum of 9 term hours from the electives listed below	9
	24
Electives	
Analysis of Consumer Behavior (MIT 341)	3
Democratic Institutions (PS 456)	5
Cases in Forest Industries Management (MIT 470)	3
Taxation and Business Policy (FBE 323)	3
Business History (PIM 480)	3
Seminar: Visitations (FBE 407), or Seminar: Small Business Administration (MIT 407)	3
Seminar: Business Internship (FBE 407)	3
*Elementary Inference in Business Statistics (QM 333)	3

* Strongly recommended.

LOWER-DIVISION COURSES

FBE 125. Environment of Business. 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. Not open to upper-division majors in business.

FBE 226. Introduction to Law. 3 hours.

Forms and functions of the law in society. Examination of the American legal environment: structure of the courts; trial and appellate procedure; origin of rules; methods of legal reasoning; roles of trial participants. Emphasis on the law of contracts, including appropriate references to the Uniform Commercial Code. Prerequisite: sophomore standing.

UPPER-DIVISION COURSES

FBE 321. Financial Institutions. 3 hours.

Study of the structure and functions of financial institutions. Survey of monetary policy and its relationship to individual banks and the banking system; analysis of the nature and functions of money and credit and the interrelationship of money, credit, and the price level; analysis of the sources and uses of funds by financial institutions; the economic role of these institutions. Prerequisite: 9 hours of economics.

FBE 322. Financial Management. 3 hours.

Policies and practices required to plan and control the sources and uses of a firm's funds; emphasis on formulation, implementation, and modification of corporate financial policies; management of liquid assets; selection among alternative investment opportunities; funds acquisition; dividend policies; determination of the optimal debt-equity mix. Economic, accounting, and statistical tools and concepts studied and related to the decision-making process. Prerequisite: Ac 323.

FBE 323. Taxation and Business Policy. 3 hours.

Emphasis on the importance of the type of tax used to realize government revenue goals. New approaches to taxation of the business firm are considered as well as the impact of the current tax system on business decisions, efficiency of resource use, and the international balance of payments. Prerequisite: Ec 203.

FBE 326. Law of Business Organization. 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 investment securities. Prerequisite: FBE 226.

FBE 363. Introduction to Investments. 3 hours.

Study of the economic and investment environment as it relates to security investment decisions; appraisal of investment characteristics; introductory investment analysis of various stocks and bonds. The determination of investment objectives and the execution of portfolio policies for various types of individual and institutional investors. Prerequisite FBE 322, or 15 hours of economics.

FBE 407. Seminar. Hours to be arranged.

Business Internship.
Business Visitations.
Foreign Commercial Law.

FBE 418. Law of Business Transactions. 3 hours.

Study of the several fields of law related to business: negotiable instruments; sales of personal property; security devices for credit transactions. Prerequisite: FBE 226.

FBE 420. Law of Administrative Agencies. 3 hours.

Study of the broad aspects of governmental regulation of business and con-

stitutional limitations upon such regulation. Particular treatment is given to the law of administrative agencies and to some specific areas of regulation, including business combinations and pricing policies.

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. Prerequisite: senior standing.

FBE 440. Real Estate Finance. 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; installment land contracts and trust deeds; legal aspects of real estate lending. Prerequisite: MIT 331 or consent of instructor.

FBE 450. Analysis of Financial Institutions. 3 hours.

Legal, economic, social, and political environmental shifts and their impact on the growth and development of financial institutions. Study of trends and analysis of operations of particular financial institutions. The impact of financial institutions on the direction and quantity of savings and investment in the United States and foreign countries. Prerequisite: FBE 321.

FBE 459. Financial Analysis. 3 hours.

Analysis of the financial aspects of complex business problems; diversified reading in the literature in the field; concepts of interest and opportunity cost; time value of money and valuation of various income streams; methods of evaluating and ordering investment alternatives; concepts of certainty, certainty-equivalence, and uncertainty related to financial decision making. Prerequisite: FBE 322.

FBE 460. Commercial Bank Management. 3 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.

FBE 464. Investment Management. 3 hours.

Study of specific types of marketable securities; advanced analysis and appraisal of companies and industries from point of view of investor. Evaluation of profit opportunities and exposure to risk of various investments; their relationship to different portfolio objectives and constraints. Prerequisite: FBE 363, senior standing.

FBE 465. Investment Banking and Capital Markets. 3 hours.

Background of investment banking institutions; legal and regulatory problems of the origination, syndication, and distribution of security issues; methods of appraisal and valuation of the principal types of securities, including municipal and corporate bonds and common and preferred stocks. Prerequisite: FBE 363.

FBE 466. Business Fluctuations and Planning. 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.

FBE 474. International Finance Management. 3 hours.

Role of 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. Instruments of foreign exchange, setting

of exchange rates, and national and international institutions which participate in the worldwide flow of funds and goods.

FBE 480. Problems in Financial Management. 3 hours.

Analysis of selected problems in financial management of the firm, including short- and long-term financial requirements, trade credit analysis, special media of finance, capital budgeting, and profit analysis. Research project and analysis of cases. Prerequisite: FBE 322.

(For 500 courses, open only to graduate students, see pages 346-348.)

Marketing, Insurance, and Transportation

THE EDUCATIONAL OBJECTIVES of the Department of Marketing, Insurance, and Transportation are: (1) to develop the student's understanding of the environment in which the firm operates; (2) to give the student an understanding of the interrelationships of marketing, insurance, transportation, and real estate with the other areas of operation of the firm; (3) to provide the student with the opportunity to apply the functions of management and to obtain experience in decision making in the areas of marketing, insurance, transportation, real estate, or international business; and (4) to enable the student to develop his capacity for research and scientific analysis of basic problems in these areas.

The department offers major options in marketing, insurance, transportation, real estate, business and construction, and international business.

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 and of quantitative methods to the study of marketing. The program includes intensive study of the application of principles of management to marketing problems.

Students majoring in marketing are required to take one of the following sequences: General Anthropology (Anth 101, 102, 103); Introduction to Cultural Anthropology (Anth 207, 208, 209); Society and Culture (Anth 301, 302, 303); General Sociology (Soc 204, 205, 206); Principles of Sociology (Soc 300) and American Society (Soc 301); Learning and Thinking (Psy 211) or Perception (Psy 212), Motivation and Physiological Psychology (Psy 214) or Social Psychology (Psy 215), Human Development and Individual Differences (Psy 217) or Personality (Psy 218). If a 3-term sequence is used to meet this requirement, it may also be used to satisfy a University lower-division group requirement.

The major requirements, in addition to the above and the general business requirements of the school, are listed below:

	Term Hours
Marketing Research (MIT 415)	3
Marketing Analysis I (MIT 443)	3
Marketing Analysis II (MIT 444)	3
Elementary Inference in Business Statistics (QM 333)	3
A minimum of 9 hours of the electives listed below	9
	21
ELECTIVES	
Retail Administration (MIT 330)	3
Industrial Marketing (MIT 336)	3
Analysis of Consumer Behavior (MIT 341)	3
Seminars in Marketing (MIT 407)	3
Marketing Communications (MIT 442)	3
Cases in Forest Industries Management (MIT 470)	3
International Marketing Management (MIT 475)	3

Risk and Insurance. The specific goal of the risk and insurance option is to prepare students for careers in which a knowledge of risk, risk handling, and insurance is desirable. Opportunities for such careers exist in private industry and government and in the insurance industry itself. The risk and insurance program may be combined with work in other areas in business. The option emphasizes the broad role of risk and risk bearing in decision making. The major requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Risk & Insurance (MIT 354)	3
Business Insurance & Risk Management (MIT 455)	3
Life & Health Insurance (MIT 456)	3
Social Insurance (MIT 458)	3
Elementary Inference in Business Statistics (QM 333)	3
	15

Students who select the risk and insurance option, and who expect to enter actuarial and statistical work, should plan to supplement the requirements of this program with substantial work in mathematics and statistics.

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 College of Business Administration which are of special value in meeting the requirements for these certificates.

Transportation and Business Logistics. This option is designed to prepare students for careers with transportation or utility companies, for traffic or physical distribution (logistics) positions with industrial or commercial firms or trade associations, and for government positions with regulatory or logistics agencies or publicly owned utilities. The major requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Transportation and Distribution Systems (MIT 349)	3
Business Logistics (MIT 350)	3
International Transportation (MIT 351)	3
Transportation Administrative Law (MIT 451)	3
One of the following courses: Transportation Organization and Management (MIT 452); Public Utility Management (MIT 467); Economics of Regulated Industries (Ec 463)	3
	15

Real Estate. The option in real estate is designed to provide professional training in the development, financing, marketing, and management of real estate. Students must earn a grade of at least B in Introduction to Real Estate, MIT 331, to be eligible either to major in real estate or to take advanced real estate courses. Requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Introduction to Real Estate (MIT 331)	3
Seminar: Real Estate Appraisal (MIT 407)	3
Real Estate Environmental Analysis (MIT 430)	3
Real Estate Investment Analysis (MIT 407)	3
Real Estate Finance (FBE 440)	3
	15

Business and Construction. A five-year program is offered jointly by the School of Architecture and Allied Arts and the College of Business Administration to prepare students for professional careers in housing, construction, and related fields; the program leads to a bachelor's degree from the College of Business Administration. Three options focus on development, management, and materials distribution aspects of construction: the urban development option prepares stu-

dents for careers as builders, developers, real estate specialists, and public employees; the construction management option emphasizes technical aspects of construction to qualify students to write job specifications and to prepare cost estimates with and for architects, engineers, and contractors; the materials distribution option is concerned with the production and marketing of such products as wood, concrete, and structural steel.

Details of specific course requirements may be obtained from either the School of Architecture and Allied Arts or the College of Business Administration.

International Business. The option in international business is designed to increase the depth and breadth of the student's perspective in the field of business administration by exposing him to international problems confronting the business community both at home and abroad. In addition to the general business requirements, the students must meet the following requirements:

	Term Hours
International Finance Management (FBE 474)	3
International Marketing Management (MIT 475)	3
Case Problems in International Business (MIT 476)	3
Either of the following courses: Seminar: Foreign Commercial Law (FBE 407), or International Transportation and Distribution Management (MIT 351)	3
A minimum of 6 term hours from any one of the following: International Economics (Ec 440, 441, 442), or upper-division courses in political science, political and economic geography, sociology or cultural anthropology	6
	18

The student is strongly advised to attain second-year level of competence in a modern foreign language. Minimum language competence is a requirement for graduate study in international business.

UPPER-DIVISION COURSES

MIT 323. **Marketing Systems and Demand Analysis.** 3 hours.

The dynamics of demand; economic and behavioral approaches to the analysis of demand; purchase motivations—consumer versus industrial; flows of goods and services; nature of marketing institutions. Prerequisite: completion of conceptual tools core, or consent of instructor.

MIT 324. **Marketing Management.** 3 hours.

Marketing planning and control: planning, organizing, measuring, evaluating, and controlling marketing performance. Nonmajors only.

MIT 330. **Retail Administration.** 3 hours.

Structure of retailing; efficiency in the retail sector; organizing the firm; management of price and nonprice competition; space allocation and stock control; management science and retailing; retailing and the future. Prerequisite: MIT 323.

MIT 331. **Introduction to Real Estate.** 3 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.

MIT 336. **Industrial Marketing.** 3 hours.

The marketing problems of manufacturers of industrial goods, such as machinery and equipment, raw and semifabricated materials, industrial supplies, and component parts; special marketing problems of companies in the defense industry. MIT 323.

MIT 341. **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, 206; Soc 300 or one 3-hour upper-division course in sociology; or consent of instructor; MIT 323 recommended.

MIT 349. Transportation and Distribution Systems. 3 hours.

Designed to acquaint the student with principles and practices of transportation and its role in the distribution process. The physical transportation plant of the United States and its performance; carrier responsibilities, services, and cooperation; economic and legal bases of rates, freight classification and tariffs; relationships between transportation and the location of economic activity; public policies regarding regulation, unification, labor-management relations, promotion, and similar transportation problems.

MIT 350. Business Logistics. 3 hours.

Designed to acquaint the student with problem of purchasing transportation services, selecting transportation alternatives and planning the physical distribution system of the firm. Includes a consideration of rate structures, shipper's rights in law, relationship of physical distribution to the marketing function and to the production function, inventory management and control, plant location and warehousing.

MIT 351. International Transportation and Distribution Management. 3 hours.

The role of the United States and world ocean and air transportation in international trade and development. Physical facilities; basic laws, policies, and associations affecting carrier and shipper operations; problems of international and intercarrier cooperation; principal trade routes and commodity flows; packaging, documentation, rates, and charters; marine and air cargo insurance; land-based supporting organizations, including terminal operations and connecting foreign land transportation systems. Emphasis on use of international transportation in export and import activities.

MIT 354. Risk and Insurance. 3 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.

MIT 390. Consumer Problems of the Poor. 3 hours.

Problems of Portland's urban population. Field research preparation for work in Portland spring term. Class discussions, lectures, group discussions, and films.

MIT 407. Seminar. Hours to be arranged.

Sales Forecasting.
Current Problems in Marketing.
Product Innovation.
Marketing Information Systems.
Preparation for Field Work.
Field Work.
Marketing and Corporate Responsibilities.
Nonprofit, Government, and Cooperative Marketing.
Entrepreneurship.
Real Estate Appraisal.
Real Estate Investment Analysis.
Legal Aspects of Marketing.

MIT 409. Practicum: Consumer Problems of the Poor. 5-15 hours.

Problems of Portland's urban population. A continuation of MIT 390 and taught in Portland. Course work is project oriented and based on field experience. In consultation with the instructor, students arrange their own living conditions on site. During the term in which a student is enrolled in this course he is restricted to a total course load of 15 hours of credit. Prerequisites: MIT 390 and a written invitation from an organization.

MIT 410. Small Business Management. 3 hours.

Emphasis on mastering the techniques of various business disciplines and applying them to the organization and operation of a small business. Each student is required to select, analyze a particular business, present and defend his findings before the class and submit a written report from 9 to 15 pages. 3 hours lecture and 2 hours laboratory which includes visits to small businesses and business operators.

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. Emphasis on the cost versus the value of information for decision making. Problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and reporting. Research projects conducted on actual marketing problems. Prerequisite: QM 333, MIT 323, or consent of instructor.

MIT 442. 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 341 or consent of instructor; MIT 415 recommended.

MIT 443. Marketing Analysis I. 3 hours.

Analytical methods for the solution of marketing problems with emphasis on product and pricing decisions. Prerequisite: MIT 415, or consent of instructor.

MIT 444. Marketing Analysis II. 3 hours.

Analytical methods for solution of marketing problems with emphasis on promotion and distribution decisions. Prerequisite: MIT 443, or consent of instructor.

MIT 470. Cases in Forest Industries Management. 3 hours.

General management problems in the forest products industries—lumber, plywood, pulp and paper, construction, and housing; marketing, production, finance, control, human relations; major emphasis on marketing problems. Cases, supplemented by field trips.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 349-350.)

MIT 430. Real Estate Environmental Analysis. (G) 3 hours.

Analysis of factors and situations affecting the development and utilization of real property from a macro point of view. Emphasis is on problems and issues created by current land-use practices. Effective policy-making for guiding and controlling land utilization is considered relative to public and private goals and objectives. Prerequisite: MIT 331.

MIT 431. Residential Property Development. (G) 3 hours.

The process of residential property development; property development considered in terms of market analysis, site selection, land planning, arranging for utilities and services, financing and budgeting, public and private legal controls. Prerequisite: MIT 331, MIT 430.

MIT 432. 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. Prerequisite: MIT 331, MIT 430.

MIT 451. Transportation Administrative Law. (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, or MIT 350, or Ec 463, or consent of instructor.

MIT 452. Transportation Organization and Management. (G) 3 hours.

Carrier organization and management problems. Operational, personnel, financial, pricing, marketing, and related practices as influenced by competition and governmental policies. In addition to classroom work, each student makes a detailed study of a type of carrier or carrier problem related to his specific career interest. Prerequisite: MIT 349, or MIT 351, or consent of instructor.

MIT 455. Business Insurance and Risk Management. (G) 3 hours.

Financial risk management in the firm. Analysis of the more important methods of reducing business risks from physical and moral hazards; financial impact on profits of risks and risk handling methods; major contracts of insurance to indemnify for losses from such perils as fire, windstorm, explosion, consequential losses, transportation, legal liability, dishonesty, and insolvency of others; loss adjustment practices, agent selection and placement of problem risks; pricing of insurance. Prerequisite: MIT 354 or consent of instructor.

MIT 456. Life and Health Insurance. (G) 3 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.

MIT 457. Special Topics in Risk and Insurance. (G) 3 hours.

Analysis of underwriting capacity, writing powers of insurers, insurance of hold-harmless agreements, causes of insurer failure, insuring of special risks, selection of flexible forms of coverage, international insurance coverage, theory of regulation, tax problems in insurance.

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.

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: consent of instructor.

MIT 475. International Marketing Management. (G) 3 hours.

Study of marketing methods in the international environment. Prerequisite: MIT 323, or consent of instructor.

MIT 476. Case Problems in International Business. (G) 3 hours.

Determinants of foreign business decision making in light of case studies; operation 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. Prerequisite: MIT 475.

COURSES OFFERED ONLY IN EXTENSION

MIT 231. **Real Estate Fundamentals.** 3 hours (extension).

MIT 232. **Real Estate Finance and Management.** 3 hours (extension).

MIT 233. **Real Estate Appraising.** 3 hours (extension).

MIT 234. **Real Estate Law.** 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 operations management, personnel, organization and management, business teacher education, and office administration.

Operations Management. This option provides specialized knowledge in preparation for careers in operations 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 general business requirements of the school, are listed below:

	Term Hours
Seminar: Management Decision Simulation (PIM 407)	3
Elementary Inference in Business Statistics (QM 333)	3
Production Management (PIM 329)	3
Operations Research Techniques (PIM 428)	3
Production Planning & Control (PIM 429)	3
Methods Time Analysis (PIM 440)	3
Problems in Production Management (PIM 430)	3
	21

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 general business requirements 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
Personnel Psychology (PIM 415)	3
Organized Labor (Ec 445) or Labor Legislation (Ec 446)	3
Seminar: Management Decision Simulation (PIM 407)	3
	18

Organization and Management. The organization and management option provides an education in management analysis, organization studies, and business policy; it focuses on the interaction of the administrative process with the organization, in order to attain business goals. It provides both specialized study and an integrated view of business problems confronting the higher levels of management. The major requirements, in addition to the general business requirements of the school, are listed below:

	Term Hours
Production Management (PIM 329)	3
Organizational Behavior (PIM 416)	3
Personnel Management (PIM 412)	3
Business Policy (PIM 453)	3
Seminar: Management-Decision Simulation (PIM 407)	3
Any three of the following courses: Seminar: Administrative Communication (PIM 407); Management, Technology, and Innovation (PIM 444); Management Information Systems (Ac 420); Operations Research (PIM 428); Business Enterprise and Social Responsibility (FBE 434); Business History (PIM 480)	9
	24

UPPER-DIVISION COURSES

PIM 321. **Organization and Interpersonal Relations.** 3 hours.

The design of organizations and their impact on work groups and individual behavior. Topics include interpersonal relations, communication, leadership, organizational structure, and individual motivation.

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.

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. Prerequisite: typing ability required.

PIM 329. **Production Management.** 3 hours.

Survey of 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.

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.

PIM 407. **Seminar.** Hours to be arranged.

Computers in Business.
Management Decision Simulation.

PIM 415. **Personnel Psychology.** 3 hours.

Review of research in application of principles of psychology to personnel selection, evaluation, training and development, job and equipment design, safety, mental health, and morale and attitude measurement. Special analysis of psychometric methods and instruments available to the personnel manager in each of the above areas. Prerequisite: PIM 321 and PIM 412, or consent of instructor.

PIM 416. **Organizational Behavior.** 3 hours.

An analysis of human performance as it affects, and is affected by the organization. Examination of research studies dealing with the effect of organization structure and policies on productivity, motivation and morale, group behavior, communication, conflict, change, innovation, and decision making. Prerequisite: PIM 321 and senior standing.

PIM 428. Operations Research Techniques. 3 hours.

Application of scientific techniques to the solution of complex business problems through the quantitative comparison of alternatives; linear programming, opportunity cost analysis, expected value analysis, decision-making processes.

PIM 430. Problems in Production Management. 3 hours.

A "model enterprise" built, and its production management problems analyzed, with the use of methods of operations research, statistics, and economics. Planned to acquaint the students with tools of scientific analysis and techniques of management which are applicable to problems in production management.

PIM 444. Management and Innovation. 3 hours.

Study of the creative process as it applies to business decision making; the techniques available for generating and improving ideas. The process of technological innovation and the problems involved in supervising and encouraging creative individuals. The patent system is introduced. Practice is provided in developing new solutions to business problems.

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.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 351-352.)

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.

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.

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.

PIM 429. Production Planning and Control. (G) 3 hours.

Techniques for planning and control of the flow of materials into, through, and out of the industrial concern.

PIM 440. Methods-Time Analysis. (G) 3 hours.

Theory and techniques of work measurement systems; emphasis on the human factor and on cooperative activity among various divisions of the enterprise.

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.

Business Education and Secretarial Science

THE COLLEGE OF BUSINESS ADMINISTRATION offers major options, through the Department of Personnel and Industrial Management, in business teacher education and in office administration, and also offers service courses in secretarial science.

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 the teaching of secretarial subjects, the other emphasizing the teaching of bookkeeping and basic business; both programs offer preparation for the teaching of typing.

The requirements are as follows: (1) completion of the core program of the School of Business, (2) the specialized courses listed below, (3) competence in the skill subjects prerequisite to Applied Stenography (SS 223), demonstrated by examination or by college-level courses, and (4) completion of the general requirements for secondary teacher certification.

	Term Hours
Business Education and the Community (BEd 422)	3
Principles of Business Education (BEd 370)	3
Typewriting for Business Teachers (BEd 371)	3
One of the following courses: Bookkeeping and Basic Business for Business Teachers (BEd 372); Shorthand and Office Practice for Business Teachers (BEd 373)	3
One of the following courses: Taxation and Business Policy (FBE 323); Business & Professional Correspondence (Wr 224)	3
	15

For certification as a teacher of business education in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation. The programs outlined above satisfy the state standards and the requirements for recommendation by the University of Oregon. For further information, the student should consult a member of the business education faculty who serves as adviser to prospective teachers.

Office Administration. The option in office administration is intended to develop in the student an understanding of scientific management systems as they apply to business problems, with particular emphasis on office systems and on the role of automatic data processing. The major requirements, in addition to the core program of the School of Business Administration, are as follows:

	Term Hours
Business and Professional Correspondence (Wr 224)	3
Office Organization & Management (PIM 333)	2
Office Practice (PIM 324)	2
Office Practice (PIM 325)	2
Personnel Management (PIM 412)	3
One of the following courses: Wage & Salary Administration (PIM 413); Problems in Personnel Management (PIM 414)	3
	15

Business Education

UPPER-DIVISION COURSES

BEd 370. Principles of Business Education. 3 hours.

Objectives of business education; history, trends, issues; contribution of

business education to general education; vocational education with emphasis on Federal programs in office occupations and distributive education; work experience; curriculum for institutions offering business education. Prerequisite: junior standing, consent of instructor.

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.

BEd 372. Bookkeeping and Basic Business for Business Teachers. 3 hours.

Comprehensive study of materials and techniques of instruction; trends affecting course content; handling student differences; analysis of research. Prerequisite: consent of instructor.

BEd 373. Shorthand and Office Practice for Business Teachers. 3 hours.

Problems in the development of occupational proficiency; standards of achievement; new developments in organization and presentation of materials; integration of skills. Prerequisite: consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

BEd 407. Seminar. (g) Hours to be arranged.

BEd 422. Business Education and the Community. (g) 3 hours.

Community resources; reaction of business and labor to business education; school and business standards; vocational guidance, placement, and follow-up; community surveys; administrative problems of supervision; related research. Prerequisite: senior standing, consent of instructor.

COURSE OFFERED ONLY IN SUMMER SESSION AND EXTENSION

BEd 508. Workshop. Hours to be arranged.

Secretarial Science

LOWER-DIVISION COURSES

SS 10. Beginning Typing. No credit.

Principles of touch typing; emphasis on development of speed and accuracy. 3 hours laboratory.

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.

SS 126, 127, 128. Stenography. 3 hours each term.

Gregg shorthand. SS 126, 127 devoted to the study of basic shorthand theory and transcription; 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 126 for credit. 4 hours recitation.

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.

Graduate School Of Management and Business

THE GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS provides: (1) basic professional business education for entering 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; and (3) preparation for careers in college teaching and research.

Graduate degree programs are offered at both the master's and doctoral level. The Graduate School of Management and Business coordinates the graduate work of the four departments of the College of Business Administration.

Instruction at the graduate level is offered by the four departments of the College of Business Administration in the fields of specialization listed below. In all fields, instruction in the college is supported by courses in cognate fields offered by other divisions of the University. The graduate program is accredited by the American Association of Collegiate School of Business.

Accounting—public, industrial, and government.

Business Economics—managerial economics, business planning, forecasting, business taxation.

Business Education—teacher preparation for secondary schools and colleges.

Finance—investments, financial management, financial institutions.

Forest Industries Management—management of forest products industries (lumber, plywood, pulp and paper, construction and housing).

International Business—finance, trade, management, foreign commercial law.

Management Analysis and Policy—systems analysis, top-level policy making, functional integration, overall analysis and control.

Marketing—marketing theory, consumer and industrial marketing, marketing research and forecasting, management of product, pricing, promotion, distribution.

Organization Theory—organization structure, communication, technology change, group behavior, administrative processes, policy, the organization and the environment.

Personnel Administration—selection, training, wage and salary administration, labor relations.

Operations Management—operations research, production programming, industrial management, industrial structure and policy.

Quantitative Methods—quantitative decision procedures, regression analysis, analysis of variance, time-dependent processes, sampling techniques.

Real Estate—urban land use, site location.

Risk and Insurance—risk management, personal and property insurance, pensions and group insurance, social insurance.

Transportation and Logistics—carrier and industrial traffic management, international and public policy aspects of transport and distribution systems.

Information concerning financial aid available to graduate students may be obtained from the Graduate School of Management and Business.

Research and Consultation. Faculty research interests include: impact of computerization, marketing forest products, labor benefit programs, gerontology, the commercial code, bank reserves, accounting theory, forecasting techniques, role of the board of directors, consumer behavior, regional growth patterns, cybernetics, investment patterns, commodity flow trends, transportation pricing, and the impact of taxation on foreign trade. Faculty members are consultants to firms in a great many industries, to civic planning groups, and to Federal, state, and local governmental agencies.

Master's Program

THE GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS offers two-year programs 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 82 term hours of work is required, including a 37-hour preliminary core program. All or part of the preliminary core program may be waived for students who have had equivalent work as undergraduates. For students whose undergraduate studies have been in the field of business administration, the master's programs require from four to six terms to complete, depending upon the specific courses included in their undergraduate work.

Admission. For admission to the master's program, the student must satisfy the general requirements for admission to the Graduate School of the University (see pages 115 ff.), and must submit an acceptable score on the Admission Test for Graduate Study in Business, a letter of purpose, and three letters of recommendation.

Graduate work taken in summer sessions before a student is admitted formally to a graduate program in business must have prior approval of the dean in order to be counted as credit toward an advanced degree.

The Graduate School of Management and Business does not recognize post-baccalaureate status as constituting entry to its graduate degree programs, nor as the basis for admission to graduate courses.

Preliminary Core Program. The first year of the master's program includes a series of core courses, planned especially for students whose undergraduate studies have been in fields other than business administration. For these students, the preliminary core program is required; all or part of the requirement may be waived for students who have had equivalent instruction as undergraduates. The preliminary core requirement is as follows:

	Term Hours
Accounting in Administration (Ac 511, 512).....	6
Statistics for Business Decisions (QM 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 the Marketing Function (MIT 511)	3
Intermediate Economic Analysis (Ec 375, 376)	6
Mth 106 or Mth 109	4
Introduction to Numerical Computation (CS 233), or Scientific and Statistical Computation (CS 428)	3
	37

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 preliminary core program or equivalent; (2) completion of a minimum total of 45 hours of graduate work beyond the preliminary core program, of which a minimum of 36 hours must be in courses exclusively for graduate students; (3) of the 45 hours, at least 27 in the College of Business Administration (including not more than 18 hours in a field of specialization); (4) of the 45 hours, the remaining 18 hours either in business courses or in related areas outside the College of Business Administration. 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. Degree requirements within these general guidelines are further specified on a departmental basis.

All candidates for the M.B.A. degree are required to take a final written comprehensive examination covering the field of specialization. A final oral examination is optional with the student's major department.

Although M.B.A. programs are generally intended to provide a broad background, a special M.B.A. program in accounting has been organized to provide intensive preparation for students who intend to enter professional accounting practice. This program is especially appropriate for students who have secured undergraduate degrees in fields outside of business administration.

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, quantitative methods and research, industrial management, and college teaching.

The requirements are: (1) completion of the preliminary core program or equivalent; (2) completion of a minimum total of 45 hours of graduate credit beyond the preliminary core program; (3) within the 45 hours, a major in a field of specialization consisting of a maximum of 15 hours of course work and 9 hours for thesis; (4) within the 45 hours, a minor consisting of a minimum of 12 hours of course work in the College of Business Administration or in a cognate field; (5) of the 45 hours, the remaining 9 hours in business courses outside the field of specialization or in related areas outside the college. For the M.A. degree, competence in a foreign language is required. For the M.S. degree in business education, the thesis is not required.

Candidates for the M.S. or M.A. degree are required to take a written comprehensive examination covering the major field of specialization. An oral examination on the thesis is optional with the student's major department.

Minor in Business Administration. A master's candidate with a major in another field or in an interdisciplinary studies program may elect a minor in business administration. The minor is usually chosen from the business courses in the preliminary core. Minor programs must be reviewed by the school before course work is taken, and students taking a minor in business should, in general, meet standards required for admission to the school.

Forest Industries Management. The College of Business Administration, through the Forest Industries Management Center, offers graduate work leading to the Master of Business Administration degree with a major in forest industries management. This program is designed to train students for management careers in the forest products industries—lumber, plywood, pulp, and paper—as well as for government careers in this field.

The program is interdisciplinary in nature. It includes course work in all departments within the College of Business Administration as well as courses in other divisions of the University. The program is administered by an interdepartmental committee.

The option in forest industries management is normally open only to students with undergraduate degrees in forestry. It emphasizes general management issues

of forest products companies, as well as problems in the particular functional areas of marketing, transportation, production, accounting and statistics, and finance. Attention is also given to the development of skills in the application of quantitative techniques to the solution of forest management and business management problems.

The major requirements, in addition to the regular M.B.A. preliminary core program, are listed below:

	Term Hours
Introduction to Numerical Computation (CS 233) (no credit)	..
Seminar: Computer Management (PIM 507)	3
Seminar: Operations Research or Production Control (PIM 507)	3
Problems in Industrial Marketing (MIT 530)	3
Problems in Forest Industries Management (MIT 540)	3
Problems in Business Planning & Forecasting (FBE 530) or International Business Operations (FBE 476) or Problems in Business Finance (FBE 540)	3
Seminar: Managerial Cost and Budget Analysis (Ac 507)	3
	18

The student takes 27 term hours of work in addition to the 18 hours listed above. These courses may be either within or outside of the College of Business Administration. The particular courses selected vary, depending upon the student's undergraduate major within the general field of forestry. Courses are chosen with the guidance and approval of the interdepartmental committee. Following is a list of suggested courses:

Computing (CS 444)	Quantitative Analysis for Business
Production Programming (PIM 530)	Decisions (QM 432)
Personnel Administration (PIM 534)	Industrial Dynamics (QM 435)
Marketing Research (MIT 560)	Building Construction & Materials (Arch 420)
Pricing Policies (MIT 521)	Regional Economics (Ec 414, 415, 416)
Physical Distribution Management (MIT 550)	Economy of the Pacific Northwest (Ec 418)
Transportation Theory and Practice (MIT 549)	International Economics (Ec 440, 441, 442)

For students who have not already had courses in these areas as undergraduates, the following additional courses are also suggested (to be taken at the School of Forestry, Oregon State University in Corvallis, through joint campus registration):

Forest Economics (F 412)	Industrial Forestry (F 427)
Forest Management (F 425)	Multiple-Use Management (F 522)

In the courses listed above, the students are required to write major term papers or case reports relating the content of the courses to problems and issues of the forest industries. Copies of these papers are to be furnished to the director of the Forest Industries Management Center at the time of submission to the course instructors.

International Business. The College of Business Administration, through the Center for International Business Studies, offers graduate work leading to the Master of Business Administration and the Doctor of Business Administration degrees with a major in international business.

The program in international business is broad in nature. It includes course work in: (1) international business, (2) a major functional area such as marketing, finance, management, or accounting, (3) business organization and policy, (4) quantitative methods, and (5) an area outside the College of Business Administration which complements the student's work in international business.

The student must demonstrate minimum competency in a modern language. Normally, this requirement may be met by taking a second-year language sequence or by examination at the second-year level of a language ability.

The objective of this program is to offer the student an opportunity to study the international dimensions of business to deepen his understanding of the role

played by business in the world economy. This is accomplished through case studies, field trips, special lectures, and research reports. In addition, there is opportunity for direct study in foreign countries.

Business Education. The College of Business Administration, through the Department of Personnel and Industrial Management, offers graduate work leading to the Master of Science degree in the field of business education. The program provides work in business education, business administration, and education or an elective field. A thesis based on an area of interest to the student in business education is optional.

The student's specific program depends to a great extent upon his background and needs. Unlike other programs in the College of Business Administration, a substantial portion of the requirements for the business education major may be satisfied by work completed during the summer sessions.

Doctoral Program

THE GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS offers a program of advanced graduate study and research leading to the degree of Doctor of Business Administration, for students preparing for careers in college teaching and administration and for 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 of the University, (2) either have completed the graduate work required for a master's degree in business administration *or* be recommended by the departmental admission committee of the student's major department and have the approval of the Graduate School of Management and Business, and (3) show evidence of exceptional academic promise.

The Doctoral Advisory Committee. The student and his doctoral advisory committee plan the student's doctoral program. The advisory committee assists the student to work out a program consistent with his background and objectives, evaluates the student's performance on a yearly basis, certifies completion of doctoral program requirements, and dismisses students who fail to maintain the standards of the doctoral program.

The advisory committee consists of at least three regular faculty members of the College of Business Administration. The committee is appointed by the head of the department in which the student is working. The student's adviser serves as chairman. The committee may or may not have an outside member, depending on the recommendation of the adviser and subsequent approval of the department head.

Degree Requirements. The student's program must meet the requirements of the Graduate School of the University, (pages 119-125) and the following requirements of the College of Business Administration:

- (1) Three years of work beyond the bachelor's degree, with two years of continuous residence on the Eugene campus.
- (2) Completion of requirements in five areas of concentration as follows:
 - (a) A major area in the College of Business Administration. The student selects a major business field of concentration, and passes a written comprehensive examination in this field. The list of majors is as follows: accounting, business economics, business organization theory, finance, international business, management analysis and policy, marketing, personnel management, production management, quantitative methods, transportation and logistics.

- (b) A minor area in the College of Business Administration. The student must demonstrate competence in a minor area of specialization in business. He must select an area of business not selected elsewhere. The advisory committee sets area requirements and assists the student in selecting appropriate course work. The student may elect to show competence by passing a written comprehensive examination.
 - (c) An additional area of specialization. The student must demonstrate competence in an additional area of specialization in business or a related field. The student may select an area in business not previously selected, or he may select an area outside the College of Business Administration. The advisory committee sets area requirements and assists the student in selecting appropriate course work. The student may elect to show competence by passing a written comprehensive examination.
 - (d) Economic theory. The student must be proficient in intermediate economic theory analysis and, in addition, must complete a specialized field in economics, represented by three graduate-level courses in one or more of the following areas: microeconomics (price and distribution theory), macroeconomics (income and employment theory), economic development, industrial organization and control, international economics, labor economics, money and credit, public finance, econometrics, mathematical economics, regional economics.

Satisfactory completion of the economic theory requirements may be shown by either (1) completing each graduate-level course with a grade of B or better or (2) completing each graduate-level course and passing a written comprehensive examination in the field.
 - (e) Quantitative methods. The student must demonstrate competence in the quantitative methods area by passing the beginning master's level course in quantitative methods, or the equivalent, plus three graduate-level courses in quantitative methods, or by passing the comprehensive examination in this area. The student who chooses quantitative methods as his major area must choose an additional area of specialization in business.
- (3) The student must pass a written comprehensive examination in his major area of concentration. He may elect to take a comprehensive examination in economic theory. He must also pass a written comprehensive examination in two of the remaining three areas of concentration. The student must earn a grade of B or better in each course taken in any area of concentration in which a written comprehensive examination is not taken.
- To be eligible to take the comprehensive examination, Graduate School policy requires the student to have taken substantially all the course work for the degree and satisfied substantially all other requirements except the completion of the thesis and the final oral examination.
- The student must pass all written examinations within 13 months of the date of the first examination. Comprehensive examinations are offered during fall and spring terms. Examinations during winter term and summer session must be arranged by agreement between the student and the faculty.
- In the event of failure, a student may retake a comprehensive examination at his option, after consultation with his advisory committee. He may do this during the term immediately following the initial examination, subject to the general provision that additional examinations must be completed within 18 months of the date of the first examination.
- (4) The student is advanced to candidacy for the D.B.A. degree upon passing the comprehensive examinations and upon certification by the advisory

committee, according to the regulations of the Graduate School of the University.

- (5) The student must complete a thesis presenting an original and major contribution to an understanding of the thesis subject. He is responsible for formation of his dissertation committee, subject to the requirements of the Graduate School of the University and must make an oral presentation of his proposed dissertation topic to his dissertation committee and the faculty.

When the proposed dissertation topic is accepted by the committee, a copy of the proposal and a written statement is placed in the candidate's record.

Each doctoral candidate must defend his completed dissertation in an oral examination.

- (6) The student must maintain a cumulative GPA of 3.00 or higher.
- (7) The student who has been approved for graduate study may not be dropped by the Graduate School of Management and Business before advancement to candidacy except by a majority vote of the student's advisory committee. A vote to drop the student from the D.B.A. degree program is taken under the following conditions: (a) failure to make satisfactory progress for advancement to candidacy as determined by the candidate's advisory committee; (b) failure to pass a comprehensive examination in two attempts; (c) a cumulative GPA below 3.00; (d) a GPA of less than 3.00 received in two consecutive terms; (e) a GPA of less than 3.00 for any three terms; (f) failure to complete the dissertation within three years after the student is advanced to candidacy; (g) at the request of the student; (h) any time a member of the student's advisory committee requests a vote in writing.

The date and the results of any vote to drop the student are included in the student's record and the student is notified in writing of the outcome.

Research. Doctoral candidates are expected to become actively engaged in the research program of the College of Business Administration. Opportunities for research experience are provided in connection with projects of individual faculty members, and in the Bureau of Business and Economic Research, the Center for International Business Studies, the Forest Industries Management Center, and the Transport and Logistics Research Center.

Graduate Courses

Accounting and Quantitative Methods

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

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

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

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

Ac 507. **Seminar.** Hours to be arranged.

Development of Accounting Thought.
Managerial Cost and Budget Analysis.

QM 507. **Seminar.** Hours to be arranged.

Dynamic Time-Dependent Processes.
Dynamic Systems.
Multivariate Methods.

* No-grade course.

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.

QM 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 QM 232, QM 333 or equivalent. Prerequisite: one year of college mathematics.

QM 532. Analysis for Decision Under Uncertainty. 3 hours.

Systematic analysis of decisions involving uncertainty; diagramming the decision processes; quantification of subjective and intuitive information; incorporating utility and probability considerations into the decision model; combination of prior and sample information; simulation of the decision model. Prerequisite: one year of college mathematics; QM 232, QM 333 or equivalent.

QM 536. Applied Sampling Techniques. 3 hours.

Theory and application of probability sampling techniques to business problems. Topics: simple random sampling, stratified sampling, cluster sampling, systematic sampling, multistage sampling, double sampling, nonresponse problems, ratio and regression estimators. Prerequisite: QM 333.

Ac 540. Administrative Control. 3 hours.

Descriptive cybernetics and the concept of control as a property of all organized behavior; control attitudes and practices in human organizations; traditional and emerging views of the role of control in administration; problems of performance measurement; military command and control systems; rudiments of information and communication theory; computer abuses; role of man in a controlled system; student papers usually theoretical and related to major fields.

Ac 542. Accounting Verification. 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.

Ac 552. Accounting Theory. 3 hours.

Examination of some of the elements of the conceptual framework underlying financial accounting reports, viewed in part as a postulate structure, in part as a series of decisions as to how and when changes in assets and liabilities shall be recognized. Readings in accounting literature, study of some current controversial areas in financial accounting theory. Course content varies somewhat from year to year with changing interests of participants. Prerequisite: Ac 450.

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 460.

COURSE OFFERED ONLY IN SUMMER SESSION AND EXTENSION**Ac 508. Workshop.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**

(For descriptions, see pages 322-323.)

Ac 411. Federal Income Tax. (G) 3 hours.

- Ac 412. **Federal Income Tax Procedure.** (G) 3 hours.
- Ac 420, 421. **Management Information Systems.** (G) 3 hours each term.
- Ac 430. **Fund Accounting.** (G) 3 hours.
- QM 420. **Dynamic Systems.** (G) 3 hours.
- QM 421. **Industrial Dynamics.** (G) 3 hours.
- QM 433. **Applied Analysis of Variance.** (G) 3 hours.
- QM 434. **Applied Regression Analysis.** (g) 3 hours.
- QM 440. **Time-Dependent Processes.** (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 Environment

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

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

FBE 507. **Seminar.** Hours to be arranged.

Applied Theory of the Firm.
Business Tax Policy.
Industrial Organization and Public Policy.
Monetary Management.

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. Prerequisite: Ec 375, 376, or equivalent, or consent of instructor.

FBE 516. **Financial Management.** (p) 3 hours.

Objectives, tools, methods, and problems of financial management from the viewpoint of the firm; special problems, including funds acquisition, dividend policy, capital acquisitions, taxes, mergers, forecasting, and investment banking. Prerequisite: at least one accounting course.

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.

FBE 519. **Business Ethics.** 3 hours.

Ethical and social obligations which businessmen are expected to assume; critical consideration of presuppositions, opinions, and practices manifest in business enterprise and in business education.

FBE 520. **Methods in Business Research.** 3 hours.

Research techniques in business; project design, analysis of data.

FBE 525. **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. Prerequisite: Mth 109 or equivalent.

* No-grade course.

FBE 530. 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 the planning and forecasting process; theories of business cycles and economic growth.

FBE 540. Problems in Finance. 3 hours.

Funds allocation and its relationship to the firm's objectives: asset valuation; profit analysis; choice of capital budgeting decisions under uncertainty; cash flow models of the firm; decision rules for controlling working capital. Theory and cases. Prerequisite: FBE 516 or equivalent.

FBE 545. Theory of Finance. 3 hours.

Managing the capital structure: the influence of debt, dividend policy, and growth on the cost of capital; problems of valuation, merger, and reorganization; role and behavior of capital markets. Theory and cases. Prerequisite: FBE 516 or equivalent.

FBE 550. 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 and common law; legal documents involved in foreign-trade transactions; antitrust problems in international trade.

FBE 552. Concepts of Investments. 3 hours.

Analysis of marketable debt and equity instruments, corporate issuers, security market conditions, and the economic environment from the viewpoint of investors; portfolio strategies and policies of various types of individual and institutional investors. Prerequisite: FBE 516, Ac 511.

FBE 565. Investment Analysis. 3 hours.

Comprehensive analysis of specific industries; critical evaluation of firms within these industries; comparative analysis of these firms' securities and their potential contribution to stipulated investment objectives. Prerequisite: FBE 552 or equivalent.

FBE 566. Investment Administration. 3 hours.

Development of the theory of investment management; relation of investment policy to money and capital markets; risk and rate of return relationships and investor objectives; security and portfolio techniques. Prerequisite: FBE 552 or equivalent.

FBE 570. Commercial Banking. 3 hours.

The role of commercial banks as the prime transmitter of monetary policy; emphasis on the formulation of Federal Reserve Policy, the impact on commercial banks and the money market, and the implications for business decisions. Prerequisite: FBE 514, FBE 516, or equivalent.

FBE 571. International Finance and Investment. 3 hours.

The international monetary system; balance of payments; liquidity; foreign-exchange market; foreign investment; international and regional financial institutions. Not open to students who have taken FBE 474.

FBE 575. The Money Market. 3 hours.

Analysis of the money market and its several segments, including the markets for U.S. Government securities, commercial paper, bankers' acceptances, certificates of deposit, Federal (Reserve) funds, and Euro-dollars—with special emphasis on the relation of monetary management to the market, and on the key positions of Federal Reserve Banks and commercial banks. Prerequisite: FBE 514 or equivalent.

FBE 580. Management of Financial Institutions. 3 hours.

Study of policies and management of various financial institutions, including asset management, acquisition of funds, capital structure, and control of

operations; relationship of management plans and decisions to competition with other institutions and markets; interaction of business conditions and government actions on the operations of financial institutions. Prerequisite: FBE 514 and FBE 516, or equivalent.

COURSE OFFERED ONLY IN SUMMER SESSION AND EXTENSION

FBE 508. **Workshop.** Hours to be arranged.

Marketing, Insurance, and Transportation

All course programs must be approved in writing by the candidate's adviser. Normally, not more than 9 hours of 400 (G) courses may be taken in the College of Business Administration toward the 45 hours required in the M.B.A. program. A comprehensive written examination is required. An oral examination is required at the option of the committee.

Marketing. The marketing option requirements, in addition to the regular M.B.A. preliminary core program, are listed below (total 45 hours):

- (1) Marketing courses: 12-18 hours in 500-level marketing courses.
- (2) Finance, business organization, and quantitative methods: a minimum of one 500-level course, in addition to the graduate core courses, from each of the following areas—finance or business economics, business organization theory, quantitative methods.
- (3) Electives: 18-24 hours.

Real Estate and Urban Land Economics. The real estate and urban land economics requirements, in addition to the regular M.B.A. preliminary core program, are listed below (total 45 hours):

- (1) Real estate courses: 12-18 hours, including courses in property valuation, real estate finance, real estate investment and analysis, and urban land utilization.
- (2) General business courses: 15 hours, with one course selected from each of the following areas: accounting and statistics; finance; marketing; transportation, public utilities, or insurance; personnel and industrial management.
- (3) Electives: 12-18 hours. With the adviser's approval, a maximum of 15 hours may be taken outside the college.

Risk and Insurance. The risk and insurance option requirements, in addition to the regular M.B.A. preliminary core program, as listed below (total 45 hours):

- (1) Risk and insurance courses: 9 hours. M.B.A. candidates are required to take MIT 555, MIT 556, and MIT 507 (Seminar in Risk Management).
- (2) Electives: minimum of 15 hours. At least one course selected from each of the following areas: accounting, statistics, and mathematics; finance and business economics; marketing; transportation and public utilities, real estate; personnel and industrial management.
- (3) Free electives—21 hours.

Transportation and Business Logistics. The transportation and business logistics requirements, in addition to the regular M.B.A. preliminary core program, are listed below (total 45 hours):

- (1) Transportation and business logistic courses: 9-18 hours. (a) Majors who have not had the equivalent must complete MIT 451, MIT 467, Ec 463. (b) Majors must complete MIT 549, MIT 550, MIT 551.
- (2) Thesis or research: 3-9 hours. Majors must take MIT 503 (Thesis) or MIT 501 (Research).
- (3) Electives: 18-33 hours.

Programs for the M.S. and D.B.A. degrees in the Department of Marketing, Insurance, and Transportation are planned with advisers under guidelines established by the department.

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

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

MIT 507. **Seminar.** Hours to be arranged.

Product Innovation.

Entrepreneurship.

Urban Land Utilization.

Retailing Institutions.

Marketing Information Systems.

Marketing and Economic Developments.

Marketing and Corporate Responsibility.

Current Problems—Marketing.

Legal Aspects of Marketing.

MIT 511. **Administration of the Marketing Function.** (p) 3 hours.

Environment of marketing decisions; design of a marketing program; nature and behavior of markets; marketing planning; product, channel, pricing, and promotion decisions; marketing and the law; evaluating marketing efficiency.

MIT 520. **Marketing Problems and Policies.** 3 hours.

Marketing and formal planning; uncertainty and decision making; marketing position analysis; problems in the management of the marketing mix; design of marketing campaigns, facilities, organization, and systems; evaluation of marketing performance. Prerequisite: MIT 511 or equivalent.

MIT 521. **Pricing Policies.** 3 hours.

The development of individual company pricing policies; the environment of pricing; effect of legislation and specific court rulings on price policy; contributions to pricing from economic theory, management science, and the behavioral sciences.

MIT 530. **Problems in Industrial Marketing.** 3 hours.

The marketing of industrial goods; environmental effects on marketing; major issues of product policy, pricing, marketing programs, and marketing organization.

MIT 532. **Real Estate Investment Analysis.** 3 hours.

Analysis of influence of depreciation, leverage, taxes, and holding period on investment value of property and on the rate of return to equity; selection among alternative real estate investments utilizing the mortgage-equity capitalization technique; investment strategies.

MIT 533. **Real Estate Valuation.** 3 hours.

Principles and practices of real property valuation; consideration of factors affecting property values and incomes; leasehold valuation; trends in real property values and appraisal procedures; the appraisal process.

MIT 540. **Problems in Forest Industries Management.** 3 hours.

Historical, economic, social, and technological factors affecting the current and future operations of the forest products industry.

MIT 549. **Transportation Theory and Practice.** 3 hours.

An extensive introductory study of principles, practices, and problems of the transportation function and its role in the distribution process. 2 hours of lecture-discussion weekly, plus individual consultations. Extensive reading and individual research projects.

MIT 550. **Physical Distribution Management.** 3 hours.

Analysis of transportation and logistics problems of industrial and commercial firms, including inventory and warehouse management, management of private transportation facilities, location problems, and relationship of physical distri-

* No-grade course.

bution functions to other functions of the firm. Prerequisite: MIT 549 or consent of instructor.

MIT 551. Transportation Policies. 3 hours.

Effects of major formal and informal transportation policies on carriers, transport users, and the general public. Implications of alternative policies; how policy changes are effected. Prerequisite: MIT 549 or consent of instructor.

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.

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.

MIT 557. Analysis of Business Risk. 3 hours.

The risk-management concept; corporate organization for insurance and risk management; analysis of exposure to loss; self-insurance versus commercial insurance; control of commercial insurance costs; use of captive insurers.

MIT 560. Marketing Research. 3 hours.

Marketing research as a tool for decision making. Planning research projects; design, measurement, experimental and nonexperimental techniques, analysis and interpretation of data; reporting of research results. Prerequisite: QM 333 or QM 511, or equivalent.

MIT 561. Analysis of Consumer Behavior. 3 hours.

Behavioral-science concepts utilized in the analysis of life-style patterns of the ultimate consumer; values and behavioral patterns of consumer segments, and their significance for marketing. Not open to students who have taken MIT 341. Prerequisite: Soc 204, 205, 206, or Soc 300, plus one 3-hour upper-division course in sociology, or consent of instructor.

MIT 562. Marketing Communications. 3 hours.

Analysis of the environmental conditions that enhance or inhibit the firms' attempt to design and use the most effective communication for demand cultivation. Prerequisite: MIT 561 or consent of instructor. Not open to students who have taken MIT 442.

MIT 563. Marketing Concepts and Theory. 3 hours.

Application of theoretical concepts in the social sciences to the development of a theory of marketing. Prerequisite: 9 hours of graduate work in marketing; consent of instructor.

MIT 572. International Marketing Policies. 3 hours.

Study of the impact of political, social, economic, and cultural forces upon the managerial decision-making process in international marketing operations. Problems associated with the development of marketing strategy and policies emphasized.

MIT 573. International Business Operations. 3 hours.

Functional management within multinational corporations; case studies of operations abroad; focus on managerial decision making. Prerequisite: MIT 572, FBE 571.

COURSE OFFERED ONLY IN SUMMER SESSION AND EXTENSION

MIT 508. Workshop. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see pages 331-333.)

- MIT 430. **Real Estate Environmental Analysis.** (G) 3 hours.
 MIT 431. **Residential Property Development.** (G) 3 hours.
 MIT 432. **Commercial and Industrial Site Location.** (G) 3 hours.
 MIT 451. **Transportation Administrative Law.** (G) 3 hours.
 MIT 452. **Transportation Organization and Management.** (G) 3 hours.
 MIT 455. **Business Insurance and Risk Management.** (G) 3 hours.
 MIT 456. **Life and Health Insurance.** (G) 3 hours.
 MIT 457. **Special Topics in Risk and Insurance.** (G) 3 hours.
 MIT 458. **Social Insurance.** (G) 3 hours.
 MIT 467. **Public Utility Management.** (G) 3 hours.
 MIT 475. **Foreign-Trade Marketing.** (G) 3 hours.
 MIT 476. **Foreign Business Operations.** (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.
 Computer in Business.
 Comparative Management Systems.
 Methods and Time Analysis.
 Operations Research Applications.
 Administrative Communication.
 Collective Bargaining.
 Administration of Labor Market Policies.
 Administrative Science.
 Manpower Research.

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.

PIM 528. **Concepts in Industrial Management.** 3 hours.

Analysis of such organization parameters as capacity, control, authority, productivity, etc.; impact of managerial policies and practices on these concepts.

PIM 530. **Operations Simulation.** 3 hours.

Analysis and formulation of computer simulation models for operations management processes. Presents introduction to concepts of simulation methodology as they apply to analysis and design of operating systems. Application of simulation will be used in individual and group projects as experiments on a model system. Prerequisite: QM 232, QM 233 and CS 233 or equivalent.

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.

* 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.

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.

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.

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.

PIM 538. Management of Research and Development. 3 hours.

Behavioral and organizational aspects of research and development groups, and practical problem areas associated with managing such groups.

PIM 541, 542. Theory of Business Organization. 3 hours each term.

Strategies for studying organizations. Behavioral research, theory, and business examples dealing with organizational structure, goal formation, human and social factors, communication, control, technology, decision making, organizational dynamics, and the administrative process.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see page 335.)

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 429. Production Planning and Control.** (G) 3 hours.**PIM 480. Business History.** (G) 3 hours.

Wallace School of Community Service and Public Affairs

NORMAN D. SUNDBERG, Ph.D., Dean of the Wallace School of Community Service and Public Affairs.

KENNETH D. VIEGAS, M.S.W., Chairman, Community Service Programs.

RICHARD C. COLLINS, Ph.D., Chairman, Public Affairs and Administration Division; Chairman, Interdisciplinary Master's Degree Program in Public Affairs.

LYNN RODNEY, Ph.D., Chairman, Leisure and Cultural Services Division.

CLARENCE E. THURBER, Ph.D., Chairman, International Development Division.

EDGAR W. BREWER, M.A., Director, Field Instruction Programs.

M. DOUGLAS RAY, M.S., Acting Director, Office of Career Counseling and Advising.

WALTER SCHAFER, Ph.D., Director, Research and Special Programs.

KENNETH TOLLENAAR, M.A., Director, Bureau of Governmental Research and Service.

THEODORE JOHANNIS, Ph.D., Director, E. C. Brown Center for Family Studies.

JAMES R. BOOTH, M.S., Director, Northwest Training Center, Volunteers in Service to America.

V. LEE LAYMAN, M.A., Director, Oregon Project NewGate.

Professors: M. H. ACKER, HERBERT BISNO, T. B. JOHANNIS, JR., J. R. KLONOSKI, ARTHUR PEARL, L. S. RODNEY, A. G. SMITH, N. D. SUNDBERG, C. E. THURBER.

Associate Professors: E. W. BREWER, R. C. COLLINS, ORVAL ETTER, R. C. INGRAHAM, J. E. KERRIGAN, V. L. LAYMAN, R. J. ROUSSEVE, W. E. SCHAFER, F. G. SCOTT, SHIRLEY TERREBERRY, K. C. TOLLENAAR.

Assistant Professors: J. B. COLLINS, E. L. FAIRCHILD, S. A. FULLERTON, M. M. JANZEN, R. T. McLAIN, ADELL McMILLAN, MYRA S. MILLER, JANET P. MOURSUND, M. D. RAY, K. D. VIEGAS, J. L. WHITE, M. B. WRIGHT, B. L. WYNIA.

Instructors: M. D. BLANTON, J. R. BOOTH, M. F. OLDHAM, ANN WEICK.

Lecturers: E. H. DRAPELA, G. W. FRY, J. H. JONES, J. G. WALKER.

THE LILA ACHESON WALLACE School of Community Service and Public Affairs was organized in 1967. It is a professional school with the aim of preparing undergraduate and graduate students for careers in areas of public and community service. Graduates of the school may seek work in a variety of human and social services such as the following: public administration at local, state, and Federal levels; urban and regional development; recreational and park management; assistance to the aged; rehabilitation for the disabled; public welfare; special antipoverty programs; mental retardation; corrections; mental health services; international development and foreign service; the Peace Corps, and VISTA. Within these broad areas the student may prepare himself for working directly with the public,

in juvenile corrections for example, or for working in an administrative capacity in support of such activities, as in city management. The school's curriculum enables undergraduate students to prepare for graduate work in the social sciences and related applied areas. The student interested in preparation for becoming an active, contributing citizen of his community through employment or volunteer work will find the curriculum flexible in breadth as well as depth. The rapidly changing nature of the employment market and the structure of society requires flexibility and versatility on the part of every individual. The Wallace School strives to provide a curriculum which will allow the student to prepare himself for these changes.

The faculty of the Wallace School is drawn from several disciplines and includes practitioners experienced in public and community services. The student may draw upon these experiences as he develops his professional competence. The curriculum allows for the inclusion of work from the liberal arts in addition to the professional course work. This professional course work offers opportunities to observe and evaluate the problems of public and private service agencies. All majors spend the equivalent of at least one full term in Supervised Field Study (CSPA 409) working in such programs as part of their academic studies.

The school also offers opportunities for persons who require additional studies after they have begun employment, including refresher courses, professional conferences, and special training sessions. The school's Office of Career Counseling and Advising is open to persons who wish to resume academic work after long periods of other activities. Assistance in clarifying career objectives and dealing with University requirements is available to students and prospective students. The school has a special interest in facilitating the continuing academic development of women.

Admission. Formal admission to the Wallace School is required before a student may undertake a degree program in community service and public affairs. The entrance requirements vary slightly among divisions of the school. Prospective students should contact the Office of Career Counseling and Advising and request specific information about the division in which they are interested.

Degrees. The Wallace School of Community Service and Public Affairs offers work leading to the degrees of Bachelor of Arts and Bachelor of Science. The interdisciplinary master's degree in public affairs, offered by the Graduate School, is administered through the school (see below).

Major Requirements. The general University degree requirements are the same for the Wallace School as for other schools in the University (see pages 91-92).

The student must have a basic understanding of the broad areas of knowledge in the social and behavioral sciences. While the school relates primarily to the social sciences, the student has the opportunity to take work in the humanities, fine arts, and sciences which will contribute to his understanding of problems in human service.

The school has four divisions, each with its own academic programs and its own admission criteria, which apply after satisfaction of the University's group requirements for professional schools.

Community Service. The community service division offers a major in community service and a program in social work. Preference for admission to the division is given students with at least two terms of work in each of the following fields: sociology, psychology, and anthropology. Additional work in philosophy and economics is desirable. Prior work in community agencies or projects, and in student or other youth-related activities is strongly recommended.

The major in community service requires work in the following areas: an introduction to working with individuals, groups, and communities; advanced

methods of intervention and social problem solving; human growth and development, with emphasis on psychological development and behavior; introductory descriptive and inferential statistics and basic research methodology; knowledge of social welfare institutions and of contemporary social issues and policies; professional roles and practices in community service; Supervised Field Study (CSPA 409) at the junior and senior levels; Theory-Practice Integration (CSPA 411, 412) to accompany each period of field study. Additional work is required in the areas of community mental health, counseling theory and practice, or correctional systems.

Public Affairs and Administration. The division offers a major in public affairs and administration with several areas of emphasis, depending on student interest and the availability of faculty. Preference for admission to the division is given students with a year of political science and one or more courses in economics and sociology. Additional work in anthropology and history is desirable.

The major requires work in the following areas: processes of public policy-making; public organization and organizational theory; methodologies and techniques of information gathering and processing; administrative structure and processes; social issues, policy, and programs; principal areas of effective administration; professional and organizational responsibility and ethics; basic concepts of individual psychological development and small-group processes; Supervised Field Study (CSPA 409) and the accompanying Theory-Practice Integration (CSPA 411, 412); demonstrated ability to use the Law Library of the University and the Government Documents Division of the main Library and the Bureau of Governmental Research and Service.

International Development. The division offers a major in international development with required additional work in either Latin American affairs, community development, or national development. Preference for admission to the division is given students with at least a year of work in political science. Some additional work in sociology, economics, anthropology, and history is desirable.

The major requires work in the following areas: public administration concepts, social issues and policies, quantitative analysis and research methodology, international relations, cross-cultural understanding and comparative ideology, Supervised Field Study (CSPA 409) and the accompanying Theory-Practice Integration (CSPA 411, 412).

Leisure and Cultural Services. The division offers a major in leisure and cultural services with additional required work in either community recreation, programs in youth work, or cultural arts administration. Upon request a special program in college-union programming and management can be arranged by the student's adviser. Preference for admission to the division is given students with a year of sociology and a year of either political science, economics, anthropology, or psychology.

The major requires work in the following areas: measurement and evaluation; leisure in society; administration of leisure services; programs in leisure and cultural services; human development; strategies of intervention; group process and leadership; Supervised Field Study (CSPA 409) and the accompanying Theory-Practice Integration (CSPA 411, 412).

Students in any division with prior work and study experiences which might be considered equivalent to certain of these areas may, in conjunction with an adviser, propose alternatives to the usual course of studies, if the objectives of the school and those of the student can be met satisfactorily. All requests for waivers and substitutions must be approved by the student's academic adviser and the chairman of his division. Such actions are considered official and binding only after they have been entered by the school in the student's record.

All undergraduate majors must plan their program with a faculty adviser and then see him at least once during the fall and spring terms each year.

Detailed information concerning the curriculum is available in the Advising Guide, published by the school each fall. The Advising Guide is available from the school upon request.

Interdisciplinary Master's Program in Public Affairs. This program, administered through the school, is a part of the interdisciplinary studies program of the Graduate School. The degrees offered are Master of Arts and Master of Science. A total of 45 term hours of graduate work is required—36 hours of course work and 9 hours of thesis. Each candidate, with the aid and approval of an interdisciplinary committee, plans a program of study with his career objective in public affairs providing the central focus. Inquiries about this program should be directed to Richard Collins, chairman, Interdisciplinary Master's Degree Program in Public Affairs.

LOWER-DIVISION COURSES

CSPA 221. Social Issues and Policies. 2-3 hours.

Introduction to major socio-economic trends in American society, social problems associated with these trends, and public policy issues raised.

***CSPA 225, 226. Career Analysis.** 2 hours each term.

Examination of personal and environmental factors influencing career choice; survey of careers related to community service and public affairs; considerations in future career planning.

***CSPA 230. Field Observation.** 2 hours.

An introduction to human service agencies in the areas of community service and public affairs. The student visits several agencies during the term to gain first-hand experience with a variety of agency settings and career patterns before undertaking Supervised Field Study (CSPA 409), required of all majors. Preference to CSPA majors.

CSPA 242. Poverty Solutions. 3 hours.

Alternative strategies for the elimination of poverty; development of competence in evaluation of such strategies.

UPPER-DIVISION COURSES

CSPA 315. Behavioral Foundations for the Helping Professions. 3 hours.

An interdisciplinary approach to the basic elements of human behavior. Learning, motivation, social interaction, and similar phenomena are studied in the light of psychological, sociological, and anthropological theory.

CSPA 321, 322. Public Administration Concepts. 3 hours each term.

An introductory course designed to provide an understanding of concepts, processes, and methods involved in the administration of public agencies and institutions.

CSPA 323, 324, 325. Strategies of Intervention. 3-5 hours each term.

Basic principles of generic problem-solving process; individual interaction, small group, organizational, and community functioning in problem solving; principles of problem solving applied to individuals, small groups, organizations, communities; professional roles analyzed. Study and practice in the use of skills and techniques for working with individuals, small groups, organizations, communities.

CSPA 328, 329. Applied Social Research. 3 hours each term.

Introduction to social research in community, agency, and governmental settings. Descriptive and experimental methods, sampling, research design, data collection, hypothesis testing, statistical analysis, research proposal, and report writing.

* No-grade course.

CSPA 340, 341. Violence and Nonviolence in Society. 3 hours each term.

Ideological bases of violence and nonviolence in society; violent and non-violent policies and practices in law enforcement, corrections, custody and therapy of the mentally ill, rearing and education of children, labor-management relations, racial relations, social and political reform, national defense, etc.

CSPA 370. National Development. 3 hours fall.

This course is designed to introduce the student to the political, economic, and social problems of the new nation states. Since the primary aims of these new states are economic, social and political development, the course focuses on some of the primary factors affecting this development.

CSPA 371, 372. International Community Development. 3 hours each term, winter and spring.

Introduction to basic theories of communities and their development. Examination of the critical skills needed for effective community development work with a focus on the particular problems encountered in cross-cultural settings. Supervised participation in a field community development project.

CSPA 382. Foundations of Leisure Programs. 3 hours.

Community programs related to leisure and cultural services; evaluative criteria for leisure and cultural programs; considerations in future program planning.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

CSPA 401. Research. (g) Hours to be arranged.

CSPA 403. Thesis. (g) Hours to be arranged.

CSPA 405. Reading and Conference. (g) Hours to be arranged.

CSPA 406. Special Problems. (g) Hours to be arranged.

CSPA 407. Seminar. (g) Hours to be arranged.

Alienated Youth.
Group Process and Leadership.
Psychology of Aging.
Factors of Old-Age Security.
Confrontations of Death.
Allocation of Justice.
Theory of Public Organization.
Introduction to Community Arts.
Black American: Socialization.
Perspectives on Aging.
Life Styles of the Poor.
Living Systems.
Counseling the Disadvantaged.
Issues in Social Work Practice.
College Activity Programming.
Social Aspects of Leisure in Retirement.
Health Aspects of Aging.
Orientation to Black America.
Introduction to Social Work.
Organization of Community Arts Programs.
Black Experience and Group Dynamics.
Interviewing.
Social Group Work.
Fundamentals of Community Organization and Social Planning.
Social Program Administration.
Organizational Theory Change
Institutional Budgets and Financing.
Administrative Power and Procedures.
Institutional Public Relations.
Family Planning Programs.

Southeast Asian Development.
Urban Planning in Developing Countries.
Problems of Development in Africa.
Introduction to Leisure Services.
Supervision of Programs and Groups.
Wilderness I and II.

CSPA 408. **Workshop.** (g) Hours to be arranged.

*CSPA 409. **Supervised Field Study.** Hours to be arranged (30 hours maximum credit).

Participation in the activities of community, social, and administrative agencies and institutions, under close supervision; coordinated instruction. Prerequisite: consent of instructor. Formal application required at least one term in advance of placement.

CSPA 411, 412. **Theory-Practice Integration.** 1-3 hours each term.

An introduction to the organization, character, and conduct of community and public agency programs as a link between theoretical concepts and participation in supervised field study. Prerequisite: consent of instructor.

CSPA 420. **Behavioral Ecology.** (g) 3 hours.

The study of human behavior in natural settings and the interaction between social and physical environments. Covers such topics as personal space, territoriality, spatial relations in different cultures, symbolic meaning of physical environments, behavioral results of crowding, and the implications for social institutions, buildings, and environmental planning.

CSPA 431, 432, 433. **Communication Analysis in Social Systems.** (g) 3 hours each term.

An analysis of interpersonal communication in organizational settings: non-verbal signals and informal channels; communication among members of organizations; communication between organizational representatives and the public.

CSPA 435. **Developmental Counseling.** (g) 3 hours winter.

An exploration of starting assumptions and concepts basic to the process of developmental counseling. A foundations (theory-oriented) course in professional counseling aimed at the normal individual's optimal development.

CSPA 440, 441. **Social Service Policies and Programs.** (g) 3-5 hours each term.

The policy-making process in social services, and structure, policies, and services of major programs and agencies; critical problems which concern the social services, ability to evaluate outcomes of services, current issues, and new proposals. Prerequisite: CSPA 221 or consent of instructor.

CSPA 442, 443. **The Professional in Community Service.** (g) 3-5 hours each term.

Major components in the practice of the "helping services," such as social-cultural milieu, organizational context, professional role and functions, and varied modes of providing service. Emphasis on basic concepts and principles. Prerequisite: consent of instructor.

CSPA 444, 445. **Correctional Systems.** (g) 3-5 hours each term.

Role of corrections in the criminal-justice system. Examination of major components, processes and methods of adult and juvenile correctional systems, including probation, institutions, parole and related services. Some historical, but primarily contemporary focus. Modern treatment programs and techniques illustrated by readings, case studies, and field visits. Prerequisite: Soc 440 and consent of instructor.

CSPA 448. **Community Mental Health.** (g) 3 hours fall.

Communities are studied as functional bodies. Disorganization or breakdown within the system can result in damage to any of its subcomponents: organizations, small groups, and individuals.

* No-grade course.

CSPA 450. Public Financial Administration. (g) 3 hours.

Budgetary decision and control processes in a variety of public organizations; their relationship to allocation of public resources to accomplish public purposes; problems of planning, budgeting, controlling and evaluating government activities.

CSPA 460. Public Personnel Administration. (g) 3 hours.

Basic principles, practices, and issues of public personnel administration. The merit system, staffing, compensation, motivation and ethics in public service. Special attention to public management and public-employee collective bargaining.

CSPA 463. Metropolitan Government. (g) 3-5 hours.

Historical and current problems of governmental organization in metropolitan areas, proposals and operations for solutions in the past, solutions for contemporary problems. Prerequisite: consent of instructor.

CSPA 465, 466. Administration of State and Local Government. (g) 3 hours each term.

Policy-making and policy-administering process within American states. Intergovernmental relationships, Federal, state, and local; state political processes, program responsibilities, organizational features, and administrative problems.

CSPA 467. Federal Public Administration: The Presidency. (g) 3 hours.

The origin and basic characteristics of the Presidency in all of its parts; the contributions to its development made by particular presidents, with a comparison of the administrations of Franklin Roosevelt and succeeding administrations; the importance of certain national events and developments in strengthening the role of the President. (No credit if credit received for PS 467).

CSPA 468. Federal Public Administration: Departments and Agencies. (g) 3 hours.

The structure, features, and relationships of the major Federal departments and agencies analyzed in terms of major policy implications and power relationships. (No credit if credit received for PS 468).

CSPA 469. Federal Public Administration: Intergovernmental Relations and the Regulatory Process. (g) 3 hours.

Emphasizes the major administrative features of grants-in-aids, Federal assistance, and relations with state and local governments, particularly in social policy areas; also considers selected aspects of the regulatory process at the Federal level with emphasis on programs affecting consumers, environmental policy and civil rights. (No credit if credit received for PS 469.)

CSPA 470. Comparative Bureaucracy in Developing Countries. (g) 3 hours fall.

The study of bureaucratic institutions and functions in developing countries. Western bureaucratic models are examined: the Weberian "ideal type," the Anglo-American, the Latin, and the Soviet. Their transfer and transformation through colonialism and technical assistance to Asia, Africa, and Latin America is detailed. Bureaucracy is viewed both as a goal setter (above or to one side of politics) and as a contender for power, with uncertain results for development programs.

CSPA 472. National Planning. (g) 3 hours winter.

The cultural setting and the political, economic, and social institutions of India examined to see how they are being transformed. The government's planning commission and the planning process evaluated as major agents of change. The problems of development in various sectors (agriculture and community development, industrialization, urbanization, education) analyzed. A "planning exercise" is undertaken in which students act as substantive experts on the Indian Planning Commission and compete for budgetary resources.

CSPA 474. Aid to Developing Countries. (g) 3 hours spring.

The origins and growth of bilateral and multilateral aid programs to the developing countries examined, with special attention to the United States program of aid, with supplementary attention to the United Nations and other programs. Cross-cultural political and administrative problems of aid programs stressed. A simulated international negotiation of next year's aid program to India concludes the course.

CSPA 480. Organization of Leisure Services. (g) 3 hours winter.

Organizational problems; board powers, duties, roles, issues; organizing leisure services; community relations.

Bureau of Governmental Research and Service

KENNETH C. TOLLENAAR, M.A.	Director
DONALD N. JOHNSON, B.A.	Associate Director
HERMAN KEHRLI, M.A.	Research Associate
EVAN A. IVERSON, Ph.D.	Research Associate
ARNOLD M. WESTLING, B.S.	Planning and Public Works Consultant
BRUCE MCKINLAY, M.A.	Research Associate
*W. ED WHITELAW, Ph.D.	Research Associate
SHIRLEY F. SWENSON, M.A.	Research Assistant
JAMES M. MATTIS, B.A., LL.B.	Legal Assistant
ROBERT E. KEITH, M.Arch.	Planning Consultant
EDWARD G. WATSON, M.A.	Research Associate
BARBARA A. MITCHELL, B.S.	Research Associate
J. DAVID ROWE, B.A.	Planning Consultant
KAREN M. SEIDEL, B.A.	Planning Assistant
J. FRANK THIBEAU, M.A.	Planning Assistant
*LAWRENCE SHADBOLDT, M.A.	Planning Assistant
JUDY CARLSON, B.S.	Research Assistant
ROBERT S. PARKER, M.A.	Executive Officer

THE BUREAU OF GOVERNMENTAL RESEARCH AND SERVICE, a division of the School of Community Service and Public Affairs, conducts research and provides training and consultation in a broad range of fields relating generally to government and comprehensive planning. Programs are oriented toward the improvement of governmental programs through work in the areas of public administration, public finance, public law, public works and planning. Research ranges broadly within these areas of concern, including economic, social, and environmental problems and such subjects as housing, governmental organization, taxation, information systems, and urban planning systems.

The bureau also provides consultation and information service to state and local government officials, cooperates with governmental agencies in the development of programs, and works with state and local officials in sponsoring institutes, conferences, and in-service training programs.

An extensive library of periodicals, pamphlets, and reference materials is maintained for use by students, faculty members, state and local officials and employees, and civic groups. Reference files are maintained on subjects relating to government. The bureau answers inquiries from individual public officials and employees and civic groups.

The bureau works in close cooperation with Federal, state, and local governmental agencies and with various organizations of local governments and professional associations.

* On leave of absence 1970-71.

E. C. Brown Center for Family Studies

THEODORE B. JOHANNIS, JR. Director

C. NEILL BULL Research Assistant

JOYCE LANG Information and Publications Coordinator

Executive Committee: THEODORE B. JOHANNIS, JR., CURTIS E. AVERY, SARAH BROWN, VERN FAATZ, NORMAN SUNDBERG, WALTER SCHAFER.

THE E. C. BROWN CENTER FOR FAMILY STUDIES was established in 1968, through funds provided by the E. C. Brown Trust Foundation of Portland, to foster improvement in the understanding of marriage, the family, human sexuality, and sex roles through materials development, research, and service. The center is a cooperative venture of the E. C. Brown Trust Foundation and the University through the Wallace School of Community Service and Public Affairs.

A prime purpose of the center is the development and production of materials to aid classroom instructors and other professionals dealing with marriage, the family, and related male and female roles in society. Interdisciplinary research opportunities are provided.

A bi-monthly newsletter, *Focus on the Family*, published by the center provides professional information about the family and annotates recent publications in the field.

Northwest VISTA Training Center

JAMES R. BOOTH Director

THE NORTHWEST VISTA TRAINING CENTER prepares individuals for entry into community service within the structure of a Federal program such as the Office of Economic Opportunity and Volunteers in Service to America (VISTA), by contract with the Office of Economic Opportunity. Applicants to VISTA are brought to the center for a two-week training program and then assigned to job sites within the region for two weeks of on-the-job training before being assigned for a year of service.

Oregon Project NewGate

V. LEE LAYMAN Director

OREGON PROJECT NEWGATE is a demonstration project created by the Office of Economic Opportunity in cooperation with the Division of Corrections of the Oregon State Penitentiary. Inside the prison, students may move through a college preparatory program to a regular college curriculum experience. When readiness for the "outside" phase is determined, the student moves from prison to a regular university campus on school release status. Such students at the University of Oregon live at a special campus center where they receive help in preparing for the next phase, parole and independent living. Throughout the program, intensive counseling and other supportive services are provided.

Dental School

LOUIS G. TERKLA, D.M.D., Dean of the Dental School.

ROBERT J. BRUCKNER, D.M.D., Associate Dean for Academic Affairs.

WILLIAM B. WESCOTT, D.M.D., Associate Dean for Administrative Affairs.

EUGENE W. BAUER, B.S., Assistant Dean for Business Affairs.

PHILLIP D. RAY, B.S., Registrar.

ROBERT M. DONNELL, M.A., Librarian.

KENNETH CUSHMAN, M.S., Director of Institutional Relations.

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, operative dentistry and dental materials, oral pathology, orthodontics, pedodontics, periodontology, 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. Three or more academic years of preprofessional work in an accredited college or university are required for admission to the Dental School. The University offers, on the Eugene campus, a three-year pre dental curriculum which satisfies the admission requirements of the Dental School (see page 172).

The Dental School also offers a two-year dental hygiene program. One year of college-level education is a requirement for admission. Upon completion of the dental hygiene program, students may, by taking one additional year 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 may be obtained upon request from the Registrar, University of Oregon Dental School, Portland, Oregon 97201.

College of Education

ROBERT D. GILBERTS, Ph.D., Dean of the College of Education.

ROBERT H. MATTSON, D.Ed., Acting Associate Dean.

CLARENCE W. SCHMINKE, Ph.D., Acting Associate Dean.

PAUL E. KAMBLY, Ph.D., Assistant Dean and Director of Teacher Education.

KENNETH A. ERICKSON, Ed.D., Director of the Bureau of Educational Research and Service.

BARTON E. CLEMENTS, Ed.D., Director of DeBusk Memorial Center.

STAFFORD G. THOMAS, M.Ed., Assistant to Dean for Federal Projects.

EARL M. MILLER, M.Ed., Administrative Assistant.

Counseling

Professors: J. W. LOUGHARY (department head), M. H. ACKER, R. N. LOWE, ESTHER E. MATTHEWS.

Associate Professors: SUSAN K. GILMORE, G. D. KRANZLER, R. J. ROUSSEVE, ANDREW THOMPSON, SAUL TOOBERT.

Assistant Professors: G. A. DUDLEY, H. W. JAMES.

Senior Instructor: J. R. BOOTH.

Fellow: A. L. SNYDER.

Curriculum and Instruction

Professors: DOROTHY CANDLAND, P. E. KAMBLY, ARTHUR PEARL, MILDRED ROBECK, O. F. SCHAAF, C. W. SCHMINKE, G. O. SHELLNBARGER, J. E. SUTTLE.

Associate Professors: J. H. HANSEN (department head), K. A. ACHESON, S. N. COHEN, E. C. FREDERICK, W. H. HARRIS, JAMES HOTCHKISS, N. W. MAERTENS, VERNICE NYE, R. A. SYLWESTER, C. J. WALLIN, RUTH WILLARD.

Assistant Professors: EDNA DEHAVEN, STEVEN GOLDSCHMIDT, SYLVIA B. HILL, LARRY HORYNA, R. E. HULL, EDNA KEHL.

Clinical Professors: GARY BURTON, WILLIAM DEDMAN, BERYL ELLIOTT, MARGARET JOHNSON, LON KELLENBERGER, DON SHUTT.

Senior Instructor: SUSAN MILLER.

Instructors: R. I. ARENDS, G. W. FERRINGTON, FEDERICO GARZA, JR., P. E. TUCKER, C. J. ZIGLER.

Fellows: S. J. ABBOTT, D. O. BAKER, R. K. BEEBE, M. E. CARL, L. E. CHRISTIANSEN, JUDITH COFFEY, R. H. COINER, G. E. COOKE, LEORA CORDIS, DAVID CRONK, WILLIAM DUNLAP, S. H. HUGHES, C. L. JOHNSON, W. F. LACEY, MARJORIE LEE, R. M. LEFLORE, NEWSOM MAPLES, ANNE MARNIX, WILLIAM MOORE, MARGARET NELSON, EARLE NEWTON, ANTON NICKEL, R. D. PEDEE, DAVID QUINN, RICHARD RIGGLE, TOM ROBERTS, CARLTON SLATER, T. E. THOMAS, WILCEY WINCHELL.

Educational Administration

Professors: M. G. ABBOTT, R. O. CARLSON, W. W. CHARTERS, K. A. ERICKSON, A. C. HEARN, CLARENCE HINES (emeritus), C. L. HUFFAKER (emeritus), P. B. JACOBSON (emeritus), A. A. SANDIN, F. L. STETSON (emeritus).

Associate Professors: T. L. EIDELL (department head), HENRY OSIBOV, F. C. THIEMANN.

Assistant Professors: G. P. MALTBY, P. K. PIELE, R. L. ROSE.

Instructor: MARGARET A. NIELSEN.

Fellows: RONALD BURGE, J. R. HURNARD, R. T. MANION, L. J. MCCLURE, J. N. NOBLE, M. S. PALANUK, J. F. REAGAN, TIM SABEN, R. E. SMITH, S. R. WISELY.

Educational Foundations

Professors: GRACE GRAHAM, H. B. WOOD.

Associate Professors: C. A. BOWERS (department head), H. F. WOLCOTT.

Educational Psychology

Professors: ARTHUR MITTMAN (department head), H. F. DIZNEY, R. J. RANKIN, R. A. SCHMUCK, FRANCES G. SCOTT.

Associate Professors: M. M. JANZEN, L. L. LOVELL.

Assistant Professors: J. O. JOHNSTON, JEAN LEPPALUOTO.

Instructors: DONNA MCKENZIE, RUTH M. BREWER.

Fellows: J. L. BRICKELL, SHEELAGH BULL, CLARA COLLETTE, D. A. CULVER, J. L. HICKS, IRENE MAZER, SUSAN RICHTER, R. H. STIRTZ.

Higher Education

Professors: T. L. DAHLE (department head), E. W. DILS, N. R. HAWK, P. E. KAMBLY, J. E. LALLAS, H. B. WOOD.

Associate Professors: G. K. BOGEN, R. L. BOWLIN, DAVID BRINKS, SUSAN K. GILMORE, F. C. THIEMANN.

Special Education

Professors: H. J. PREHM (acting department head), BARBARA BATEMAN, W. C. BECKER, J. E. DEJUNG, R. H. MATTSON, G. R. PATTERSON.

Associate Professors: J. E. CROSSON, S. E. ENGELMANN, V. K. ESPESETH, ANDREW HALPERN, FRANK HARMON, WAYNE LANCE, GEORGE SHEPARD, H. M. WALKER.

Assistant Professors: F. A. BENSON, BORIS BOGATZ, EARL BRABANDT, P. L. BROWNING, JOSEPH COBB, JESSICA H. DANIEL, E. C. HAUGHTON, M. S. LILLY, L. B. MYERS, HELEN SIMMONS, JOYCE SPENCE, JOHN STAMM, JAMES YOUNG.

Senior Instructor: NONDA P. STONE.

Instructors: PATRICIA ARIENT, LINDA CARNINE, ELIZABETH COLTON, DOLORES COOK, G. K. DAVIS, KAREN DAVIS, G. F. DOLL, DIANE DONASH, B. E. DOWNS, GLENDA FOX, CAROLYN GREEN, PATRICIA HOLLOWAY, BARBARA HORNE, CAROL HUNTER, T. L. HUNTER, NATALIE JIMENEZ, MARJORIE KALMAN, LUCY KEATING, G. A. MADSEN, ELIZABETH MAGERL, PATRICIA MAHAN, MARGO MELNICOVE, DONNA MINICH, CAROLYN MORIMITSU, KATHRYN MORIMITSU, EDNA O'CONNOR, ROBERT REYNOLDS, SHIRLEY ROBINSON, MARGARET ROGERS, WILMA SHAW, SUSAN STEARNS, GERALDINE TALLEY, MAXINE TOWLE, O. R. WHITE, W. S. WRIGHT.

Fellows: S. H. ALBAN, E. L. ALBERTSON, R. S. ALPERN, J. D. ATKINSON, B. K. BISHOP, J. E. CARLSON, D. W. CARNINE, SHIRLEY COALE, JACQUELINE COULTER, R. I. DAVIS, J. M. EPSTEIN, FRANK FALCO, D. A. GENARDI, MARGARET GLIM, R. GOEMAN, D. GOSTNELL, PATRICK GRANT, HYMAN HOPS, B. D. HOWELL, YVONNE KARAS, JOHN KELLEHER, ANNA KELLEY, R. J. KIDD, E. LOTITO, J. E. McDONALD, C. E. MCKEEN, DIANE MILLER, TERRY MILSTEIN, A. W. MUNKRES, P. D. O'CONNOR, P. C. RAFFELD, F. C. RAY, C. ROSARIO, J. RUDGEAR,

D. P. SCHMAHL, BARBARA SPENCE, F. F. SPRINZ, D. G. STEELY, R. W. TALBOTT, PAT WATHEN, JUDY WHITE.

DeBusk Center

Associate Professor: B. E. CLEMENTS (director).

Assistant Professor: EVA M. O'NEIL.

Senior Instructors: JACQUELINE S. BROCKWAY, RUTH P. WAUGH.

Fellows: SANDRA P. CHERNOFF, D. H. MARTINEZ, G. D. SNOW, D. L. ZASLOFF.

THE COLLEGE OF EDUCATION was established in 1910 as a School of Education. The change to a college with departmental organization became effective in 1968.

The college offers undergraduate programs for elementary-school and junior high-school teachers, and teachers of the mentally retarded and physically handicapped.

Graduate programs are offered in the areas listed above as well as for teachers of secondary schools, children with extreme learning problems, gifted children, children with social-emotional problems, and disadvantaged children.

The college also offers graduate programs for school service personnel including school superintendents, elementary- and secondary-school principals, supervisors, guidance counselors, school psychologists, and administrators of special education programs.

Graduate work in education leads to the following degrees: Master of Arts, Master of Science, Master of Education, Doctor of Education, and Doctor of Philosophy.

Information about specific programs is included in the appropriate departmental section. Information concerning requirements for admission to graduate programs is available from the College of Education Graduate Personnel Office.

The University of Oregon is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary-, junior high-, and senior high-school teachers, school administrators, and school personnel specialists. The graduate programs in these fields, leading to master's and doctor's degrees, are also accredited by the National Council.

The following education honorary societies have active chapters at the University: Pi Lambda Theta for women, and Phi Delta Kappa for men.

Bureau of Educational Research and Service. The Bureau of Educational Research and Service conducts basic research in the field of education and provides to school districts and other governmental agencies consultant and field services aimed at the solution of problems related to the administration, organization, financing, and operation of education programs as well as the evaluation and construction of educational facilities. The bureau is also charged with providing in-service training programs for Oregon school administrators.

Affiliated with the bureau is the Oregon School Study Council, a research and service agency sponsored by the Oregon Board of Education, the Oregon School Boards Association, and the University of Oregon. Its program is supported by dues paid by participating school districts.

Oregon School Study Council. The Oregon School Study Council is a division of the Bureau of Educational Research and Service. It reviews current research and significant educational studies for member school districts and serves them by: (1) publishing monthly and special bulletins; (2) servicing requests for investigation of research on special education problems; (3) arranging for visitations to places of unusual educational merit; (4) publishing up-to-date quarterly reports on school issues and concerns; (5) lending library and research materials requested by administrators.

DeBusk Memorial Center. The DeBusk Memorial Center is a service-training and research facility functioning in the College of Education. Its purpose is to provide counseling, remedial education, and evaluation for the public and to involve graduate students at the master's and doctoral levels in these programs as an integral part of their professional training. Students, members of the faculty, and representatives of many outside agencies work closely to provide a learning experience for the student in training as well as competent professional assistance to the individuals who request services from the center.

Counseling

THE DEPARTMENT OF COUNSELING offers programs of study leading to the master's and doctor's degrees. The programs are interdisciplinary in nature, drawing upon both the behavioral and social sciences to provide the student with the necessary foundation for his professional preparation. In each program the student has the opportunity to develop the necessary professional competencies through a planned sequence of supervised experiences which introduce him to the various responsibilities of the counselor and enable him to take increasingly greater responsibility in dealing with counselees. Although the counselor education programs in each of the particular fields of specialization are structured to some extent, a feature of each of them is a high degree of flexibility. The particular program of study appropriate for the individual student is determined by the student and his adviser in light of the student's background of professional preparation and experience and his own professional goals.

The master's degree programs in counseling are designed to prepare students for work as professional counselors in the specific fields of elementary-school counseling, secondary-school counseling, community-college counseling, and counseling in rehabilitation settings. In addition, individual programs are designed for those interested in pastoral counseling, employment service counseling, juvenile-court counseling, counseling with the disadvantaged and displaced, and counseling in any other relevant setting.

The program of study leading to the master's degree in counseling is normally a four- to six-term program.

The doctoral programs in counseling psychology are designed to prepare students for positions in schools, colleges, hospitals, rehabilitation settings, and other community agencies. Graduates are equipped not only to function as counselors but also to organize and administer counseling programs, to teach college courses in counseling and related areas, and to plan and conduct counseling research.

The program of study leading to the doctor's degree in counseling psychology normally entails a minimum of four years beyond the bachelor's degree. A full academic year of internship experience is normally included during the course of the doctoral program. The University's doctoral program in counseling psychology is recognized and approved by the American Psychological Association.

UPPER-DIVISION COURSE

Coun 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Coun 407. **Seminar.** (G) Hours to be arranged.

Issues in Counseling. Dudley, staff.
Appraisal in Counseling I. Kranzler.
Appraisal in Counseling II. Kranzler.
Occupational Information. Matthews.
Group Counseling. Clements, Toobert.

Moral Issues in Counseling. Gilmore.
 Family Counseling. Lowe.
 Research in School Counseling. Kranzler.
 Research in Counseling. Loughary.
 Interdisciplinary Consultation.

*Coun 409. **Practicum.** (G) Hours to be arranged.

Introduction to Counseling. Clements, Brockway, staff.
 Elementary-School Counseling. Kranzler.
 Secondary-School Counseling. Matthews, Clements, Dudley, Roussève,
 Brockway.
 Rehabilitation Counseling. James.
 Community-College Counseling.
 College Counseling. Gilmore, Toobert, Dudley.
 Group Counseling. Clements, Toobert.
 Procedures in Family Counseling. Lowe.

Coun 485. **Principles and Practices of Guidance Services.** (G) 3 hours.

A general overview of the guidance function in a free society; principles and procedures attendant to guidance and counseling services in American schools. Roussève.

Coun 488. **Educational and Vocational Guidance.** (G) 3 hours.

Designed to broaden theoretical understandings of career development theory and to encourage application of theory to the practice of vocational and educational guidance within diverse settings (schools, clinics, employment centers, etc.). Matthews.

Coun 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. James.

GRADUATE COURSES

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

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

Coun 505. **Reading and Conference.** Hours to be arranged.

Coun 507. **Seminar.** Hours to be arranged.

Seminar in Counseling Psychology. Gilmore.
 Counseling Procedures I. Acker, Loughary.
 Counseling Procedures II. Toobert.
 Counseling Procedures III. Dudley.
 Appraisal in Counseling I. Kranzler.
 Appraisal in Counseling II. Kranzler.
 Moral Issues in Counseling. Gilmore.
 Counseling Supervision. Clements.
 Community-College Counseling.
 Research in Counseling. Loughary.
 Research in Vocational Development. Matthews.
 Developmental Counseling and the Human Career. Matthews.
 Imagination and Learning. Dudley.
 Philosophy of Science and Behavior. Dudley.
 Advanced Counseling Theory. Dudley.
 Evaluation of Work Potential. James.
 Management and Supervision in Public Agencies. James.

*Coun 508. **Workshop.** Hours to be arranged.

Coun 509. **Practicum.** Hours to be arranged.

Elementary-School Counseling. Kranzler.
 Secondary-School Counseling. Matthews, Clements, Dudley, Roussève,
 Brockway.

* No-grade course.

Rehabilitation Counseling. James.
 Community-College Counseling.
 College Counseling. Gilmore, Toobert, Dudley.
 Group Counseling. Clements, Toobert, Waller.
 Family Counseling. Lowe.

Coun 526. Counseling Theories. 3 hours.

Survey, evaluation, and integration of philosophical and theoretical assumptions which underlie counseling procedures. Designed to assist individuals of all ages with behavior changes, personal plans, and choices. Gilmore.

Coun 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.

Coun 589. Organization and Administration of Guidance Services. 3 hours.

Review of principles and functions undergirding guidance activities in the schools; organizing and managing guidance services; role differentiation; procedures for improvement. Rousseve.

Curriculum and Instruction

THE DEPARTMENT OF CURRICULUM AND INSTRUCTION recognizes as its primary function provision of the broad education and understandings essential for responsible careers in education.

The basic purpose of all programs of study is to provide qualified personnel for positions in private, public, and higher education. As a direct consequence, highly individualized programs of study that may utilize the resources of the total institution are planned for selected students. This instruction affords to qualified students the opportunity of gaining new insights in previously unexplored areas of inquiry as well as gaining skills that will assure concomitant competency and leadership in fulfilling future professional roles.

Admission to Teacher Education. Students may enroll in methods courses in the College of Education only after they have been admitted to the teacher education program. Admission requirements include: (1) at least sophomore standing, (2) audiometric test, (3) writing clearance, and (4) recommendation by the Office of Student Services. Further information and admission application forms may be obtained in the Teacher Education Office in the College of Education.

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.

Students preparing for secondary-school teaching are usually required to complete their work for a bachelor's degree with a major in a subject field while taking the professional courses in education required for teacher certification. An undergraduate major program in education is, however, available principally for students preparing for elementary- or junior high-school teaching. The program leads to the Bachelor of Arts, Bachelor of Science, or Bachelor of Education degree.

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 curriculum and supervision, elementary

education, secondary education, disadvantaged youth, early childhood education, and reading and language arts. Teaching experience is required for admission to these programs unless the student has special permission from the faculty.

Special programs of graduate study are also offered toward the satisfaction of the Oregon state requirement of a fifth year of college work for the standard secondary-school certificate. 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. Students interested in these programs should consult the department involved.

Teacher Internship Program. Through the teacher internship program of the College of Education, selected and mature students may now participate in "on the job with pay" experience leading to certification at either the elementary or secondary levels.

Important aspects of the teaching internship program include: (1) pre-intern observation and participation in a classroom setting; (2) summer workshop activities, including joint planning with the intern's supervising teacher for the year ahead; (3) a full year of teaching with guidance from both the school system and the University; and (4) a post-intern summer session.

Any person with strong interest in teaching as a professional career, who has, or will have, a baccalaureate degree within the year, may apply for an internship.

An applicant for a teaching internship should obtain an application form from the office of the Coordinator of Interns, a transcript of his college record, and references from three of his major instructors, and should prepare an autobiography of his background, both professional and academic—and send these materials to the Coordinator of Interns with a request for an interview.

Disadvantaged Youth. The program for training teachers to work with disadvantaged youth is an integrated set of experiences acquainting teachers with specific problems of urban youth with curricula specifically designed for such youth, and with the influences of race and class bias in education programs. The program includes extensive practicum experiences with disadvantaged youth. Students of the program are prepared to teach, administer, or develop programs for the disadvantaged from preschool through high school.

Reading and Language Arts. The department offers graduate reading and language arts courses in elementary and secondary reading instruction, and in diagnosis and correction of reading disabilities. The program of studies prepares: (1) reading and language arts consultants and supervisors at the elementary and secondary levels; (2) elementary-classroom teachers; (3) secondary reading teachers; and (4) reading specialists in the diagnosis and correction of extreme learning problems.

For a master's degree in the field, 12 term hours in foundation courses are required, plus 30 term hours in reading and language arts courses relating to the particular emphasis the student chooses.

Curriculum and Supervision. The graduate program in curriculum and supervision provides continued opportunities for professional personnel in the field. Programs may be developed which lead to Oregon certification for positions of supervisors and curriculum consultants and to a doctor's degree. Programs of study emphasize theory, research, and skill development. Opportunities for observation and field experiences are available in the public schools.

Honors. See HONORS COLLEGE, pages 132 ff.

Curriculum Library. The Curriculum Library, located in the University Library, provides facilities for specialized study of the public-school curriculum and for practical research on curriculum problems. The materials of the library include: (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 tests 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 105.

Elementary Education

In the field of elementary education the University offers (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 includes: (1) a broad distribution of studies in subject fields, (2) three integrated phases of professional courses, and (3) an additional group of professional courses. The three phases must be taken in sequence, and the instruction included in each phase must be taken concurrently. Arrangements for enrollment in Phase II and Phase III must be made during spring term of the preceding year.

General Education Courses*		Term Hours
Arts and letters—22 term hours, including:		
Writing (Wr 121, Wr 323)		6
Music Fundamentals (Mus 321, 322)		4
Electives		12
Social science—27 term hours, including:		
United States History		3
Additional term hours of social science		24
Science and mathematics—26 term hours, including:		
† Mathematics for Elementary Teachers (Mth 121)		3
Electives		23
Allied Professional Courses		
17 term hours, including:		
Physical Education (MPE 121-199, WPE 121-199)		2
Elementary school physical education (PE 321, 322, 323)		6
Elementary School Health Education (HE 450)		3
Art in the Elementary School (ArE 323)		3
Music Methods for Elementary Teachers (MuE 383)		3
Professional Courses		
49 term hours, including:		
Social Foundations of Teaching (EdF 327)		3
Children's Literature (Lib 451)		3
Teaching Mathematics in the Elementary School (CI 333)		3
Teaching Language Arts in the Elementary School (CI 332)		3
Teaching Social Studies in the Elementary School (CI 334)		3
Phase I:		
Human Development & Learning (EPsy 326)		5
Introduction to Basic Classroom Procedures (CI 331)		2
Field Experience (CI 330)		2

* 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.

	Term Hours
Phase II:	
Teaching Reading in the Elementary School (CI 335)	3
Seminar: Student Teaching (CI 407)	2
Student Teaching: Grades 1-6 (CI 415)	5
Phase III:	
Teaching Science in the Elementary School (CI 336)	3
Seminar: Student Teaching (CI 407)	2
Student Teaching: Grades 1-6 (CI 415)	10

The University also has an elementary-teacher education program that includes a period of internship. For information concerning this program, consult the Teacher Education Office, College 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.

Early Childhood Education. An emphasis in early childhood education incorporates theory, practice and research in child learning during the pre-school and primary years. Courses and seminars cover the relationship of affective and cognitive learning, physical and intellectual characteristics of the child, acculturation and socialization, school and home environments, curricula for the primary grades, and teaching creative self-direction. Opportunities for observation and field studies are currently available in the private and public schools.

UPPER-DIVISION COURSES

CI 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.

CI 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. Hull.

CI 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. Miller.

CI 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: EPsy 326. Maertens.

CI 334. **Teaching Social Studies in the Elementary School.** 3 hours.

Objectives, scope, and sequence of elementary-school social studies. Emphasis on methods of unit teaching; development of skills in critical thinking and problem solving; relationship of other content areas to social studies; resources and instructional materials.

CI 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. Wallen.

CI 336. Teaching Science in the Elementary School. 3 hours.

Emphasis on teaching the processes of science; ways of using district, state, and nationally developed programs in planning instruction for children; using instructional media, methods of presentation, appraising the attainment of objectives. Sylwester, Hull.

CI 404. Seminar: Elementary Student Teaching.** 2 hours.**CI 405. Reading and Conference.** Hours to be arranged.CI 414. Student Teaching: Kindergarten.** 3-15 hours (15 hours maximum credit).***CI 415. Student Teaching: Grades 1-6.** 3-15 hours (15 hours maximum credit).**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****CI 407. Seminar.** (G) Hours to be arranged.***CI 409. Practicum.** (G) Hours to be arranged.**CI 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 behavior; the place of the teacher; equipment; activities; books and music for young children.

GRADUATE COURSES***CI 501. Research.** Hours to be arranged.***CI 503. Thesis.** Hours to be arranged.**CI 505. Reading and Conference.** Hours to be arranged.

Independent study for graduate students interested in special problems or topics in elementary education.

CI 507. Seminar. Hours to be arranged.

Research in Reading.

Evaluation of Elementary-School Programs.

Research in Elementary-School Mathematics.

Research in Elementary School Social Studies.

Primary Education.

Analysis of Teaching.

Research in Elementary Language Arts.

Supervision of Laboratory Practice.

***CI 508. Workshop.** Hours to be arranged.

Opportunity for group work on special problems.

CI 509. Practicum. Hours to be arranged.

College Teaching.

CI 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. Kambly.

CI 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.

CI 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. Willard.

* No-grade course.

CI 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. Wallen.

CI 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. Maertens.

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, 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.

To obtain a standard teacher's certificate the applicant must complete the five-year certification program, obtain the recommendation of the institution in which he completes the program, and verify the completion of two years of successful teaching experience while holding the Oregon basic certificate. Consult the Teacher Certification Office for approved programs.

Junior High-School Teaching. The following education courses are recommended as part of the preparation of junior high-school teachers:

Junior Year*	Term Hours
Human Development & Learning (EPsy 326)	5
Reading in High School & College (CI 469)	3
Senior Year	
The Junior High School (CI 484)	3
Special Secondary Methods (CI 408)	3
Student Teaching: Junior High School (CI 416)	10-15
Electives in education	6
Graduate Year	
Junior High-School Curriculum (CI 571)	3
Principles & Practices of Guidance Services (Coun 485)	3
Diagnostic Techniques in the Basic Skills (CI 465)	3
Electives in education	6

A special program, for prospective junior high-school language arts-social studies teachers is offered through the College of Education. The requirements for the five-year program are as follows:

Language arts:	Term Hours
English Composition for Teachers (Wr 411)	3
Modern English Grammar (Eng 492)	3
American literature	9
English literature	9
World literature	9
Literary Analysis for Teachers (Eng 488)	3
History of the English Language (Eng 491)	3
English electives	6
Speech elective	3

* The student should pre-register for student teaching during April of his junior year. Consult the Teacher Education Office for more information.

Social studies:	Term Hours
Introductory geography	9
Geography of North America (Geog 302, 303)	6
Geography of Europe (Geog 471, 472)	6
Geography of the Soviet Union (Geog 473)	3
Geography electives	12
American history	9
European or world history	9
History electives	12
Electives in other social-science fields	6
Professional education	38
Including courses recommended above for junior high-school teachers and, in addition: Seminar: September Experience (CI 407); Principles of Remedial Education (CI 429); History of American Education (EdE 441).	

Senior High-School Teaching. The following education courses are recommended as part of the preparation of secondary teachers:

Junior Year*	Term Hours
Human Development & Learning (EPsy 326)	5
Senior Year	
†Special Secondary Methods (CI 408)	3
†Student Teaching: Junior High School (CI 416) or Senior High School (CI 417)	10-15
Elective chosen from list under Graduate Year	3
Graduate Year	
Reading in High School & College (CI 469)	3
Philosophy or history of education	3
Courses in two or 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	6
Electives in professional education courses	6

A student who has completed the courses listed under "junior year" and "senior year," has attained adequate preparation in a subject field, has earned a bachelor's degree, and has been recommended to the Oregon Board of Education by the University, 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 College of Education concerning allowed equivalents for the satisfaction of Oregon requirements. Senior and graduate transfer students will be unable to complete student teaching in one year.

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 Board of Education, new teachers employed in approved high schools may be assigned to teach only in those subject fields in which they have been recommended by the University as having adequate 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 the student should consult the special advisers for prospective teachers in each field. Names of advisers are available upon inquiry at the Certification Office in the College of Education.

* The student should pre-register for student teaching during April of his junior year. Consult the Teacher Education Office for more information.

† This work may be taken in the graduate year, but may not be applied toward a graduate degree; CI 416 or CI 417 is required for the basic certificate.

The University also has a secondary-teacher education program that includes a period of internship. For details of this program, consult the Coordinator of Interns.

UPPER-DIVISION COURSES

CI 325. 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: EPsy 326.

CI 405. Reading and Conference. Hours to be arranged.

CI 408. Special Secondary Methods. 1 to 3 hours.

Prerequisite: EPsy 326.

***CI 416. Student Teaching: Junior High School.** 3-15 hours.

15 hours maximum credit for CI 416 or CI 417 or any combination of these courses. Prerequisite: EPsy 326, CI 416.

***CI 417. Student Teaching: Senior High School.** 3-15 hours.

15 hours maximum credit for CI 416 or CI 417 or any combination of these courses. Prerequisite: EPsy 326, CI 416.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

CI 407. Seminar. (G) Hours to be arranged.

CI 420. The Student Council in the Secondary School. (G) 3 hours.

Aims and objectives of the student council movement; types of organization; leadership development; council relationship problems; evaluation of the student council program.

CI 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. Shellenbarger.

CI 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. Hansen.

GRADUATE COURSES

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

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

CI 505. Reading and Conference. Hours to be arranged.

CI 507. Seminar. Hours to be arranged.

***CI 508. Workshop.** Hours to be arranged.

Opportunity for group work on special problems.

CI 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.

CI 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 revision.

* No-grade course.

sions of the present-day mathematics curriculum. Prerequisite: teaching experience or consent of instructor. Schaaf.

CI 595. Methods in Secondary-School Science. 3 hours.

Selection of materials for secondary-school science teaching, demonstrations, science test construction, instructional devices; use and care of microscopes, meters, and other equipment. Prerequisite: teaching experience or consent of instructor.

CI 596. Methods in Secondary-School Social Studies. 3 hours.

Designed to facilitate learning in social studies classrooms. Recent developments in curriculum materials and teaching are reviewed. Teaching which promotes inquiry is discussed, illustrated, and practiced. 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.

Reading and Language Arts

UPPER-DIVISION COURSE

CI 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

CI 407. Seminar. (G) Hours to be arranged.

Social-Emotional Problems. Hotchkiss.

Perception and Analysis. Frederick.

Individualized Reading Instruction. Candland.

***CI 409. Practicum.** (G) Hours to be arranged.

Social-Emotional Problems. Hotchkiss.

CI 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. Frederick.

CI 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. Frederick.

CI 469. Reading in High School and College. (G) 3 hours.

Nature and scope of the developmental and corrective reading program in all the content areas (e.g., English, social studies, science, and mathematics) with an emphasis on methods, materials, and organization. Frederick.

GRADUATE COURSES

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

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

CI 505. Reading and Conference. Hours to be arranged.

CI 507. Seminar. Hours to be arranged.

Advanced Reading in High School. Frederick.

Word Attack Skills.

Perception.

***CI 508. Workshop.** Hours to be arranged.

CI 509. Practicum. Hours to be arranged.

Diagnosis and Treatment of Extreme Learning Problems. O'Neil.

Disadvantaged Youth. Pearl.

Social and Behavior Disorders. Hotchkiss.

* No-grade course.

Curriculum and Supervision

UPPER-DIVISION COURSE CARRYING GRADUATE CREDIT

CI 435. **Audiovisual Aids.** (G) 4 hours.

The techniques of, and the advantages and problems in the use of mediated instructional materials such as audio, film, filmstrips, and television. Production experience with materials of special value in the individualizing of classroom learning experiences: overhead transparencies, audio tape, visual display and duplication, and copy techniques. Emphasis on the use of audio and visual communication media as an integrated system in the designing of learning experiences. Ferrington.

GRADUATE COURSES

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

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

CI 505. **Reading and Conference.** Hours to be arranged.

CI 507. **Seminar.** Hours to be arranged.

*CI 508. **Workshop.** Hours to be arranged.

CI 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.

EdAd 527. **Secondary-School Administration and Supervision.** 3 hours.

For description, see page 381.

EdAd 552. **Elementary-School Problems.** 4 hours.

For description, see page 381.

CI 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. Kell, Sandin.

EdAd 554. **Elementary-School Administration and Supervision.** 4 hours.

For description, see page 381.

EdAd 559. **Evaluation of Secondary-School Programs.** 3 hours.

For description, see page 381.

EdAd 560. **Secondary-School Problems.** 3 hours.

For description, see page 381.

CI 565. **Curriculum Foundations.** 4 hours.

Implications of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning.

CI 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.

CI 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.

* No-grade course.

CI 571. Junior High-School Curriculum. 3 hours.

Instructional programs appropriate for the early adolescent years, with emphasis upon the various subject fields. Hansen.

CI 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.

Disadvantaged Youth

UPPER-DIVISION COURSES

CI 340. Life Styles of the Poor. 3 hours.

Various theories accounting for distinctive behavior of the poor, with emphasis on school performance. Evaluation of these theories on the basis of empirical evidence and logical consistency. Pearl.

CI 341. Alienated-Youth Education. 3 hours.

Schools in a changing society, with special attention to attributes of schools which tend to disengage the student from the learning processes. Consideration of needed changes. Pearl.

CI 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

CI 407. Seminar. (G) Hours to be arranged.

Theory and Research of the Poor. Hill.
 Careers in a Changing World. Pearl.
 Alienation of Youth from Education. Pearl.
 Life Styles of the Poor. Pearl.
 The Teacher and Ecology. Hill.

CI 409. Practicum. (G) Hours to be arranged.

Social-emotional problems. Hotchkiss.
 Disadvantaged youth. Pearl.

Educational Administration

THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION offers comprehensive graduate programs. One of these is a two-year program, which satisfies requirements for administrative certificates issued by the Oregon Board of Education and the membership requirements of the American Association of School Administrators. Degree programs leading to the Ph.D. and D.Ed. degrees are also offered. Students who complete either of the two degrees usually enter positions in school administration, teaching in higher education, or research.

By act of the Oregon Legislature, all persons employed in the Oregon public schools in administrative positions must hold an Oregon administrative certificate. The University of Oregon and Portland State University are the only institutions in Oregon currently offering an approved program. To be admitted to the University's programs for administrators the student must: (1) hold a master's degree, or the equivalent, from a standard college or university; (2) file formal application for admission on a form provided by the College of Education; (3) achieve a satisfactory score on the Miller Analogies Test, or approved substitute; (4) provide recommendations from at least three persons capable of evalu-

ating the candidate's teaching and administrative experience; (5) present a complete program of studies for either (a) the two-year graduate program in educational administration, or (b) the doctoral program in educational administration, with the approval of his adviser; (6) be recommended for admission by the Committee on Advanced Administrative Programs of the Department of Educational Administration.

Administrative Certificates. The programs listed below fulfill state requirements for various administrative certificates.

Basic Administrative Certificate. To qualify for an Oregon basic administrative certificate, the applicant must: (1) hold a valid Oregon teaching certificate; (2) have completed a five-year general teaching norm at the level to be administered; (3) have had three years of successful teaching experience at the level to be administered; (4) have completed 9 term hours of graduate study in a college or university approved by the Oregon Board of Education for the preparation of school administrators, this preparation to be applicable to a planned sixth-year program for the preparation of administrators; (5) verify completion of a master's degree in a standard teacher-education institution.

Standard Administrative Certificate. To qualify for an Oregon standard administrative certificate, the applicant must: (1) hold a valid Oregon standard teacher's certificate; (2) have had five years of successful teaching and administrative experience, including at least two years in some supervisory or administrative capacity; (3) have completed, for a principal's certificate, 33 term hours or, for a superintendent's certificate, 45 term hours of upper-division or graduate study in educational administration subsequent to the master's degree, in a college or university approved by the Oregon Board of Education; (4) be recommended by the college or university in which he has completed his graduate program as having the qualifications for school administration; (5) have completed specialization requirements set by the Oregon Board of Education. It is expected that 18 of the 33 hours and 24 of the 45 hours will be taken in residence.

The two-year programs outlined below meet the Oregon requirements for superintendent's and principal's certificates. Approximately two-thirds of the candidate's program must be completed after he has received formal notification of admission. Candidates must have an adequate background in the social sciences and humanities. Deficiencies in these areas must be remedied prior to or concurrent with advanced work.

Superintendent's Certificate. The following program satisfies the requirements for the superintendent's certificate:

(1) Nine term hours in the following introductory courses: Public School Administration (EdAd 572), Public School Organization (EdAd 573), Secondary School Administration (EdAd 527), or Elementary School Administration (EdAd 554).

(2) Not less than 9 term hours in fields of specialization, selected from the following courses:

School Finance (EdAd 575)
School Buildings (EdAd 576)
Seminar: Advanced School Law (EdAd 507)
Seminar: Problems of Staff Organization (EdAd 507)

Seminar: Problems of Government Finance (EdAd 507)
Seminar: School Business Administration (EdAd 507)
Seminar: School Surveys (EdAd 507)

(3) Not less than 12 term hours in the field of curriculum and supervision, including the following: Secondary-School Curriculum (CI 522), Elementary-School Curriculum (CI 553), and School Supervision (CI 574). The remainder may be selected from the following courses:

Elementary-School Problems (EdAd 552)
 Evaluation of Secondary-School Programs
 (EdAd 559)
 Secondary-School Problems (EdAd 560)
 Curriculum Materials (CI 567)
 Junior High-School Curriculum (CI 571)

Seminar: Evaluation of the Elementary-School
 Program (CI 507)
 Seminar: Pupil Personnel Policies & Services
 in the Elementary School (Coun 507)
 Seminar: The Community College (CI 507)
 Seminar: Procedures of Classroom Observa-
 tion & Analysis of Teaching (CI 507)

(4) Fifteen term hours in advanced graduate seminars. Courses may be selected from the graduate seminars listed under Educational Administration, below.

(5) Six term hours in research methods and field services, selected from the following (3 term hours must be in field services) :

Seminar: Advanced Research Design
 (EPsy 507)
 Introduction to Research Procedures in
 Education (EPsy 512)

Educational Statistics (EPsy 515, 516)
 Advanced Educational Statistics (EPsy 517)
 Research: Field Studies (EdAd 501)

(6) Nine term hours in behavioral sciences and humanities, including Group Dynamics (Soc 431) and Seminar: The Humanities and Education (EdF 507) or approved substitutes. The candidate selects courses in areas where he is deficient.

Principal's Certificate. The following program satisfies the requirements for the principal's certificate.

(1) Nine term hours in the following introductory courses: Public School Administration (EdAd 572), Public School Organization (EdAd 573), Secondary-School Administration and Supervision (EdAd 527) or Elementary School Supervision and Administration (EdAd 554).

(2) Twelve term hours in curriculum and supervision, including: Secondary-School Curriculum (CI 522) or Elementary-School Curriculum (CI 553) or Junior-High School curriculum (CI 571); Evaluation of Secondary-School Programs (EdAd 559) or Seminar: Evaluation of the Elementary-School Program (CI 507); Seminar: Procedures of Classroom Observation and Analysis of Teaching (CI 507); School Supervision (CI 574).

(3) Three term hours in research methods and field services, including Introduction to Research Procedures in Education (EPsy 512) or an approved substitute.

(4) Six term hours in the behavioral sciences and humanities.

(5) Three term hours in other administrative courses selected with approval of the student's adviser.

UPPER-DIVISION COURSE

EdAd 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSE CARRYING GRADUATE CREDIT

EdAd 407. **Seminar.** (G) Hours to be arranged.

GRADUATE COURSES

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

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

EdAd 505. **Reading and Conference.** Hours to be arranged.

EdAd 507. **Seminar.** Hours to be arranged.

Administrative Problems. Carlson.

* No-grade course.

Administrative and Curricular Practices in Elementary Schools. Sandin.
 Administrative and Curricular Practices in Secondary Schools. Hearn.
 Advanced School Law. Osibov.
 Anthropology in Educational Administration. Wolcott.
 Change in Organizations. Carlson.
 Foundations of Educational Research. Charters, Maltby.
 Internship in Elementary Administration. Sandin.
 Internship in Secondary Administration. Hearn.
 Nature and Problems of Administrative Behavior. Jacobson, staff.
 Nongraded Elementary School. Sandin.
 Problems of Staff Organization.
 Research in Educational Organization. Brissey.
 Research in Elementary Education. Sandin.
 Scope and Method of the Social Sciences. Staff.
 School Social Organization. Charters.
 School Surveys. Maltby.

*EdAd 508. **Workshop.** Hours to be arranged.

EdAd 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.

EdAd 552. **Elementary-School Problems.** 4 hours.

A study of current problems, issues, significant research, and theories in the field of elementary education. Sandin.

EdAd 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.

EdAd 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.

EdAd 560. **Secondary-School Problems.** 3 hours.

Current problems in the field of secondary education. Hearn.

EdAd 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.

EdAd 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. Maltby.

EdAd 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. Osibov.

EdAd 576. **School Buildings.** 3 hours.

Study of the problems involved in planning, financing, and construction of

* No-grade course.

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. Erickson.

EdAd 580. School Personnel Administration. 3 hours.

School personnel relationships in their organizational and societal context; factors in upgrading personnel, salary scheduling, work load, tenure; staff negotiations.

See also under Counseling, Coun 485, Coun 589; under Higher Education, HiEd 592; under Librarianship, Lib 538; and Special Education, SpEd 471.

EdAd 585. Instructional Practices in Secondary Schools. 3 hours.

Study, observation, and evaluation of innovative practices in junior and senior high schools; special attention to provisions for gifted and slow learners, flexible scheduling, large and small group instruction, independent study, the house plan, and instructional materials centers.

EdAd 599. Administrative and Curricular Practices in Elementary Schools. 3 hours.

Study, observation, and evaluation of current developments in elementary education; special attention to such innovations as nongrading, multigrading, flexible grouping, computerized curriculum planning, instructional materials centers, special programs for the culturally deprived and for gifted children, and middle schools. Prerequisite: consent of instructor.

Educational Foundations

IN ADDITION TO PROVIDING COURSES for students working for other degrees and certificates, the Department of Educational Foundations offers a program of advanced study leading to either the Ed.D. or the Ph.D. The program provides study and research opportunities in the areas of history, philosophy, sociology, and anthropology of education. Flexibility in the planning of the program of study allows each student to choose either a generalist approach to the field of educational foundations or a more concentrated study in one of the foundation areas. Work in other departments of the College of Education, as well as in the College of Liberal Arts, is an integral part of the doctoral program.

UPPER-DIVISION COURSES

EdF 324. 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.

EdF 327, 328. 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.

EdF 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

EdF 407. Seminar. (G) Hours to be arranged.

EdF 440. History of Education. (G) 3 hours.

A study of the major issues and ideas that have influenced the development of education in the West. Attention will also be given to the relation of educational ideas to social, political, and philosophical issues. Bowers.

EdF 441. History of American Education. (G) 3 hours.

A study of ideas and events in American education from the Puritans to the present. Bowers.

EdF 445. Modern Philosophies of Education. (G) 3 hours.

An examination of how the ideas of Sartre, Buber, Dewey, and Hutchins are related to current educational aims and practices. Special attention is given to humanistic values in education. Bowers.

EdF 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***EdF 501. Research.** Hours to be arranged.***EdF 503. Thesis.** Hours to be arranged.**EdF 505. Reading and Conference.** Hours to be arranged.**EdF 507. Seminar.** Hours to be arranged.

Cultural Perspectives in Education. Wolcott.

Anthropology in Educational Administration. Wolcott.

Ideology and Education. Bowers.

Educational and Social Ideas of John Dewey. Bowers.

***EdF 508. Workshop.** Hours to be arranged.**EdF 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.

EdF 545. School and Society in the Recent Past. 3 hours.

An examination of the issues that have arisen in education as a result of recent social, political, and intellectual developments. An analysis of the issues presented in the writings of Ortega, Marcuse, Goodman, Freud, and Skinner, among others, will be a major part of the course work. Prerequisite: EdF445 or consent of instructor. Bowers.

EdF 571, 572. Anthropology and Education. 3 hours each term.

Education viewed as cultural process. The anthropology of teaching: review of cultural anthropology for its relevance to educating; analysis of formal education from an anthropological perspective, education in cross-cultural settings. The teaching of anthropology: anthropology in the curriculum. Formal and informal modes of enculturation. Prerequisite: graduate standing in anthropology or classroom teaching experience. Wolcott.

EdF 590. Economics of Education. 3 hours winter.

Study and application of basic underlying principles and techniques. Education as investment, wastage, systems analysis, costing, general planning. Wood.

EdF 591. Educational Planning in Developing Countries. 3 hours spring.

Characteristics of developing countries, nature of education in developing countries and relation to economic development, principles, and applications of educational planning. Wood.

EdF 598. Comparative Education. 3 hours.

Educational systems, philosophies, curricula, and recent developments in

* No-grade course.

European, Asian, African, Pan-American, and other countries of the world; factors underlying common and unique characteristics of various educational systems. Wood.

Educational Psychology

THE DEPARTMENT OF EDUCATIONAL PSYCHOLOGY serves a dual role: (1) it provides instruction in the elements of learning, motivation, perception, and measurement as they apply to classroom situations for undergraduates preparing to teach, and service courses in these areas for graduate students training for any of the educational specialties, e.g., remedial education, early childhood education, counseling psychology, and special education. (2) The department offers intensive programs at the graduate level for persons interested in (a) the discipline of educational psychology, (b) human development, (c) school psychology, and (d) measurement and research.

Graduate study in the four areas listed above is supported by a qualified faculty representing each of the specialties. Programs are designed for each student individually, to remedy initial weaknesses in the student's previous background and experience and at the same time provide a program of study compatible with his future professional goals.

Admission to all programs follows the usual procedure for admission to the Graduate School at the University of Oregon. Formal admission to the Department of Educational Psychology is also required.

General Educational Psychology. Three master's (M.A., M.S., and M.Ed.) and two doctoral (Ph.D. and Ed.D.) programs are offered in general educational psychology. For specific requirements, see GRADUATE SCHOOL. In general, the purpose of each of these programs is to produce graduates capable of functioning as college teachers and researchers in the areas of educational psychology. Each program varies in level and emphasis, but all are planned to provide a sound foundation in the content and methodology of the discipline. Human learning and behavior is stressed. Instructional support is found in many departments of the University, but especially in Curriculum and Instruction, Psychology, Anthropology, Sociology, and Special Education. The system of advising allows flexibility in each student's program in terms of individual needs, strengths, and prior experience.

Human Development. The human development program is broadly based and designed to prepare the student to work in a large number of areas associated with the discipline. A strong background in statistics, research design, and measurement is required, and a sequence in human development combined with the educational psychology sequence is considered essential. Twenty-seven term hours of work outside the College of Education are required. Choices or offered among anthropology, biology, psychology, and sociology courses.

Measurement and Research. A graduate student in educational psychology may elect to concentrate in the area of measurement and research. In addition to advanced courses in the department, the student is required to take work in probability, statistics, and computing and related courses in psychology. Undergraduate mathematics training through calculus is desirable.

School Psychology. Master's and doctoral degrees available, and procedures for admission, are similar to those of the general educational psychology programs. The school psychology programs prepare students to function as professional psychologists in educational systems and to teach at the college level. Emphasis is on the application of general principles of psychology to the learning and developmental processes within the educational system.

UPPER-DIVISION COURSES

EPsy 326. **Human Development and Learning.** 5 hours.

Learning principles and theories and their applications to classroom practice. Some theories and principles of human development. Basic concepts of measurement and testing. Separate sections for prospective elementary and secondary teachers.

EPsy 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

EPsy 407. **Seminar.** (G) Hours to be arranged.

Developmental Psychology—Child.
Developmental Psychology—Adolescent.
Developmental Psychology—Adult. Scott.
School Learning and Motivation. Johnston.

*EPsy 409. **Practicum.** (G) Hours to be arranged.

Individual Intelligence Tests. Rankin, Johnson.
School Psychology.

EPsy 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. Dizney.

EPsy 439. **The Gifted Child.** (G) 3 hours.

The psychology, education, and guidance of the mentally superior and the extraordinary gifted child. Lovell.

GRADUATE COURSES

*EPsy 501. **Research.** Hours to be arranged.*EPsy 503. **Thesis.** Hours to be arranged.EPsy 505. **Reading and Conference.** Hours to be arranged.EPsy 507. **Seminar.** Hours to be arranged.

Abnormal Psychology.
Learning. Johnston.
Motivation. Johnston.
Design and Analysis of Experiments. Mittman.
Correlation Methods. Mittman.
Topics in Statistics. Mittman.
Advanced Topics in Measurement. Mittman.
Theories of Interpersonal Relations. Schmuck.
Planned Change in Schools. Schmuck.
Research Strategies in Gerontology. Scott.
Philosophy of Science. Lovell.
Group and Individual Differences. Rankin.
Thesis.
Personality and Aging. Sundberg.
Theories and Practices of School Psychology in Oregon. Leppaluoto.

EPsy 508. **Workshop.** Hours to be arranged.EPsy 509. **Practicum.** Hours to be arranged.EPsy 512. **Introduction to Research Procedures in Education.** 3 hours.

Serves as an introduction to the scientific methodology essential to carrying out a research study. Particular attention is given to statement of the problem, formulation of hypotheses, and design of the experiment. Prerequisite: EPsy 424, EPsy 515, 516, or their equivalents. Dizney, Mittman.

* No-grade course.

EPsy 515, 516. Educational Statistics. 3 hours each term.

A basic sequence in statistical analyses: presentation of data, probability, sampling theory, hypotheses testing, regression and correlation, analysis of variance. Mittman.

EPsy 517. Advanced Educational Statistics. 3 hours.

The study of probability theory, sampling theory, and sampling distributions of greatest use in educational research on experimental design. Prerequisite: EPsy 515, 516 or Mth 425, 426, or equivalent. Mittman.

EPsy 525. Theory and Technique of Educational Measurement. 3 hours.

A study of the development of measurement theory from different postulations and the relationship of this theory to tests and scales in the practical setting. Prerequisite: EPsy 424, EPsy 515, 516 or equivalent. Mittman.

EPsy 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: EPsy 424. Dizney.

EPsy 529. Advanced Educational Psychology I. 2 hours.

Motivation and learning. Review of theories and variables with emphasis on implications for teaching methodology and classroom management. Prerequisite: background in educational or general psychology. Johnston.

EPsy 530. Advanced Educational Psychology II. 2 hours.

Personality and individual differences. Review of theories and relevant literature with emphasis on implications for understanding and dealing with individuals in educational settings. Prerequisite: EPsy 529. Johnston, Rankin.

EPsy 531. Advanced Educational Psychology III. 2 hours.

Perception and social psychology. Review of theories of perception and perceptual learning; applications to the educational process. Theories and literature of group dynamics especially as applicable to educational settings. Prerequisite: EPsy 529, EPsy 530. Lovell, Schmuck.

EPsy 549. Principles and Practices in School Psychology. 3 hours.

The theory and function of a school psychology in its relation to the learning function. Required of all school psychology majors. Leppaluoto.

EPsy 564. Mental Tests. 4 hours.

An investigation is pursued into the rationale underlying modern ability tests. Factorial and G factor models are described with the intent of building a conception of the nature of ability. Literature is reviewed showing how tests in general contribute to psycho-educational theory. Attention is paid to practical psychometric problems. Prerequisite: consent of instructor. Rankin.

Oregon Center for Gerontology

FRANCES G. SCOTT, Ph.D.....	Director
RUTH M. BREWER, M.S.....	Librarian
MARVIN M. JANZEN, M.S.....	Field Instruction Supervisor

Executive Committee: JOAN ACKER, A. M. HANHARDT, R. E. KIME, T. W. KLEIN-SASSER, PETER LEWINSOHN, U. V. MANION, R. J. MERTZ, C. M. REICH, E. F. SCOLES, A. L. SODERWALL, WALTER SCHAFER.

THE OREGON CENTER FOR GERONTOLOGY is a multidisciplinary training program currently funded by a training grant from the Federal Administration on Aging. Gerontology is considered a supporting area for majors in several University schools and departments. Both graduate and undergraduate traineeships are available.

An interdisciplinary core curriculum in gerontology, including either field placement or research experience or both, is required of students electing gerontology as a supporting area. The core curriculum introduces the student to problems of the aging process and permits scholarly development of special interests through research or field placement.

In addition to work on the University's Eugene campus, the Oregon Center for Gerontology conducts training programs at Portland State University and at the University of Oregon Dental School.

Higher Education

UPPER-DIVISION COURSE

HiEd 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

HiEd 407. **Seminar.** (G) Hours to be arranged.

*HiEd 409. **Practicum.** (G) Hours to be arranged.

GRADUATE COURSES

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

*HiEd 502. **Supervised College Teaching.** Hours to be arranged.

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

HiEd 505. **Reading and Conference.** Hours to be arranged.

HiEd 507. **Seminar.** Hours to be arranged.

Administration of the Community College. Thiemann.

Adult Education. Dahle.

College Programs for the Disadvantaged. Bogen.

College Student Personnel. Hawk.

Higher Education in Developing Countries. Wood.

Programs in the Community College. Thiemann.

*HiEd 508. **Workshop.** Hours to be arranged.

HiEd 509. **Practicum.** Hours to be arranged. Bowlin.

HiEd 520. **Adult Education.** 3 hours fall.

Survey of adult education. Purposes, programs, philosophy, methods, materials, agencies, organizations. Prerequisite: consent of department.

HiEd 530. **Higher Education in Developing Countries.** 3 hours winter.

Brief survey of higher education in selected developing countries; comparison with American higher education; relation to economic development; major problems. Wood.

HiEd 550. **Administration of College Student Services.** 3 hours winter

Problems of counseling, financial assistance, dormitories, student employment, student union supervision, etc. Prerequisite: consent of department.

HiEd 571. **Administration of the Community College.** 3 hours.

An examination of the origin and functions of the college movement with emphasis on the problems and issues in organization and administration.

HiEd 572. **Programs in the Community College.** 3 hours.

A survey of the variety of programs offered in the community college and their relationship to other educational, professional, and vocational areas.

HiEd 590. **Higher-Education Survey.** 3 hours.

Problems of higher education. Organization, administration, finance; philoso-

* No-grade course.

phy, purposes, curricula; student and faculty personnel; extension and special services. Lallas.

HiEd 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.

HiEd 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. Lallas.

HiEd 597. Methods of College Teaching. 3 hours.

Psychology of learning, methods and techniques of college teaching, preparation for teaching, evaluation of teaching. Wood.

Special Education

THE UNIVERSITY DOES NOT offer an undergraduate major in special education; however, undergraduates may enroll in a wide variety of special education courses.

The undergraduate program in special education is planned to meet state certification requirements to teach the physically handicapped and the mentally retarded. The undergraduate program may also serve as a strong foundation for graduate work in such fields as learning disabilities and education of the emotionally disturbed. Students at the undergraduate level are encouraged to follow a program leading to certification as a regular elementary or secondary teacher. Work to complete certification requirements to teach the mentally retarded or the physically handicapped may be completed concurrently with the regular elementary or secondary program.

It is recommended that freshman and sophomore students follow a broad liberal arts program to meet group requirements in arts and letters, social science, and science. Students interested in experiences with the handicapped may participate in volunteer programs or observation in such programs as camping, recreation, swimming, or physical education for the handicapped. Participation in these activities may also earn practicum credit.

Students enrolled in areas outside of the College of Education, such as psychology, sociology, or recreation are also encouraged to enroll in courses in special education. These students should consult members of the special education faculty concerning job opportunities for persons trained in special education who do not have a general elementary or secondary preparation.

During the junior year the following courses serve as an introduction to special education and specifically to the areas of mental retardation and the physically handicapped.

Mental Retardation		Term Hours
Psychology of Exceptional Children (SpEd 462)		3
The Mentally Retarded Child (SpEd 464)		3*
Practicum: Teaching the Mentally Retarded (Introductory) (SpEd 409)		3
The Physically Handicapped		
Psychology of Exceptional Children (SpEd 462)		3*
Seminar: Counseling for Teachers of Exceptional Children (SpEd 407)		3*
Seminar: The Physically Handicapped (SpEd 407)		3*
Seminar: Education of the Physically Handicapped (SpEd 407)		3*

* Required for the basic certificate to teach the mentally retarded or physically handicapped in the state of Oregon. Completion of 24 additional hours in mental retardation or 15 additional hours in the education of the physically handicapped master's program is required for the standard certification.

Additional courses in special education may also be completed at the junior level if the student's schedule permits.

For students completing a regular elementary or secondary program and certification requirements to teach the mentally retarded and the physically handicapped, work in the senior year includes practical internship experience within the classroom. Suggested senior-year courses are:

Mental Retardation	Term Hours
Seminar: Extended Curriculum Activities for the Handicapped (SpEd 407)	3*
Curriculum for the Retarded (SpEd 489)	3*
Practicum: Teaching Mentally Retarded (SpEd 409)	6*
Seminar: Behaviorism in Special Education (SpEd 407)	3
The Physically Handicapped	
Seminar: Neurological Impairment (SpEd 507)	3*
Developmental Psychology (Psy 460)	3
Practicum: Teaching the Physically Handicapped (SpEd 409)	3-9*
Seminar: Behaviorism in Special Education (SpEd 407)	3

Graduate Programs. The Department of Special Education offers graduate programs leading to the Master of Arts, Master of Science, or Master of Education, and Doctor of Philosophy or Doctor of Education degrees.

All graduate students in special education are expected to be knowledgeable about the total structure of the field of education and special education. Thus, the graduate program in all areas of special education should include some work in social foundations, psychological foundations, philosophical and historical foundations, and measurement and research.

Master's Programs. Master's degree programs in special education usually concentrate in one of the four following areas: physically handicapped, emotionally disturbed, learning disabilities, or mental retardation. However, programs may be so designed that they will lead to a dual concentration, i.e., mental retardation-physically handicapped; learning disabilities-emotionally disturbed.

Programs are individually planned with the assistance of an adviser. Primary concern is given to the student's interest and objectives. Length and content of programs vary, dependent upon student's background and proposed objectives. Credit hours required for a master's degree in special education range from 45 to 60 term hours.

Doctoral Programs. Admission to the doctoral program in special education is based on an evaluation of the candidate's academic potential, experiential background, references, writing ability, age, and projected goals.

Doctoral programs in special education have a broad-based commonality with opportunities for specialization in administration, research, or college teaching. The doctoral program is individually planned by the candidate with the assistance of an adviser.

Length of doctoral programs will vary. It is generally recommended that a candidate plan to spend a minimum of six terms in residence.

It is recommended that a prospective candidate for admission to the doctoral program in special education spend an exploratory summer on campus a year previous to his intended full-time enrollment.

Center for Research and Demonstration in Early Childhood Education of the Handicapped. The center conducts research for the purpose of identifying problems of handicapped children and for finding ways of solving them. The results of the center's research are available to persons who work in this field.

* Required for the basic certificate to teach the mentally retarded or physically handicapped in the state of Oregon. Completion of 24 additional hours in mental retardation or 15 additional hours in the education of the physically handicapped master's program is required for the standard certification.

Northwest Regional Special Education Instructional Materials Center. The purpose of the center is to provide instructional materials to be used with handicapped children, as well as information about materials, techniques, and research.

Regional Resource Center for Handicapped Children. The purpose of the center is to develop a behaviorally based theory and system of instruction.

Rehabilitation Research and Training Center in Mental Retardation. The center provides in-service training, and conducts research on the rehabilitation of the mentally retarded.

University-Affiliated Center. The center is designed for diagnosis, treatment, and research in the field of special education, with a staff from medical, psychological, and educational fields.

UPPER-DIVISION COURSE

SpEd 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

SpEd 407. **Seminar.** (G) Hours to be arranged.

Teaching—Mental Retardation. Madsen.

Teaching—Gifted. Lovell.

Teaching—Physical Disability. Espeseth, Horn, Sheperd.

Education of Exceptional Children. Stone.

Research—Exceptional Children. de Jung.

Physical Disability. Espeseth, Sheperd.

Behavior Modification. Becker, Crosson, Walker.

Curriculum Trainable Mentally Retarded. Lance.

Extra-Curriculum Mentally Retarded. Madsen.

Social-Emotional Problems. Spence.

*SpEd 409. **Practicum.** (G) Hours to be arranged.

Exceptional Children—Mental Retardation. Madsen, Waechter.

Exceptional Children—Physical Disability. Espeseth, Sheperd.

Administration of Programs for Exceptional Children. Brabandt.

Supervision of Special Educational Personnel. Brabandt.

Prescriptive Teaching. Haughton.

Social-Emotional Problems. Spence.

Diagnostic-Remedial Clinic. O'Neil, Waugh.

SpEd 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. Stone.

SpEd 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.

SpEd 464. **The Mentally Retarded Child.** (G) 3 hours.

The psychology, education, and guidance of the mentally retarded child. Espeseth, Halpern, Prehm.

SpEd 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 (SpEd 409) required. Waugh.

* No-grade course.

SpEd 468. Remedial Techniques in the Basic Skills. (G) 3 hours.

Organization and implementation of the remedial program; specific procedures in the diagnosis and remediation of difficulty in the skills of reading, and related subjects. Concurrent enrollment in Practicum: Remedial Clinic—Remediation (SpEd 409) required. O'Neil.

SpEd 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. Brabandt.

SpEd 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: SpEd 464. Espeseth, Sheperd, Stamm.

GRADUATE COURSES***SpEd 501. Research.** Hours to be arranged.***SpEd 503. Thesis.** Hours to be arranged.**SpEd 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.

SpEd 507. Seminar. Hours to be arranged.

Teaching—Mental Retardation. Espeseth, Madsen, Sheperd.
Teaching—Physical Disability. Espeseth, Sheperd.
Research—Exceptional Children. de Jung.
Neurological Impairment. Myers.
Physical Disability. Espeseth, Sheperd.
Behavior Analysis I and II. Crosson.
Clinical and Rehabilitation Practicum: Cerebral Palsy. Myers.
Neurological Basis of Behavior. Myers.
Psychological Aspects of Mental Retardation. Prehm.
Rehabilitation Aspects of Mental Retardation. Browning.
Piaget: Educational Implications. Benson.
Administration of Pupil Personnel Services. Brabandt.
Advanced Curriculum for Mental Retardation. Sheperd.

***SpEd 508. Workshop.** Hours to be arranged.

Role-play Techniques. Lowe.

SpEd 509. Practicum. Hours to be arranged.

Exceptional Children—Problems of Education. Stone.
Exceptional Children—Mental Retardation. Espeseth, Madsen.
Exceptional Children—Physical Disability. Espeseth, Sheperd.
Supervision of Special Educational Personnel. Brabandt.
Field Research for Administrators. Brabandt.

SpEd 562. Issues in Extreme Learning Disorders. 3 hours.

Current issues in the field of learning disorders. These include: (1) definitional problems surrounding the relationships among mental retardation, emotional disturbance, cultural factors, etc., and learning problems; (2) whether learning disorders should be viewed as inhering within the child or within his environment; (3) the extent to which learning disorders, particularly reading problems, can be prevented by specific training; (4) the efficacy of predicting learning disorders; and (5) the evaluation of new approaches and materials.

SpEd 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: EPsy 424, SpEd 464, SpEd 489; or consent of instructor. Espeseth.

* No-grade course.

School of Health, Physical Education, and Recreation

ARTHUR A. ESSLINGER, Ph.D., Dean of the School of Health, Physical Education, and Recreation.

Men's Physical Education

Professors: W. J. BOWERMAN, L. J. CASANOVA, H. H. CLARKE, A. A. ESSLINGER, E. G. EVONUK, L. A. HARRIS, E. R. KNOLLIN (emeritus), W. P. RHODA, P. O. SIGERSETH, V. S. SPRAGUE, P. R. WASHKE (emeritus).

Associate Professors: J. D. ADLER, STEPHEN BELKO, J. W. BORCHARDT, L. R. GESER, E. R. REUTER, R. J. SMITH, D. P. VAN ROSSEN.

Assistant Professors: C. E. BRUBAKER, WILLIAM DELLINGER.

Senior Instructor: L. A. BELLISIMO.

Instructors: FRANK ARNOLD, B. A. BORREVIK, C. M. HENDY, DONALD MCGAVERN, E. F. SUMMERS.

Lecturers: STANLEY JAMES, ROBERT LARSON, R. O. RANKIN.

Fellows: R. M. BONALEWICZ, H. J. BROEKER, F. A. CARRE, R. H. COX, J. L. CRAMER, G. M. GRAHAM, J. J. JONES, ROBERT KERR, WERNER KUHN, C. P. LARCHER, C. M. MCGOWN, A. W. MCNEILL, R. C. MEALY, M. J. MELANEFY, I. E. MORE, ROBSON MOSES, B. A. PARTON, A. P. PIPHO, C. J. RUSSELL, T. M. SANDERS, B. M. TROWBRIDGE.

Women's Physical Education

Professors: BETTY McCUE (department head), JANET G. WOODRUFF (emeritus), EDNA WOOTEN.

Associate Professors: B. CORLEE MUNSON, JESSIE PUCKETT.

Assistant Professors: ELIZABETH GLOVER, KARLA RICE, BECKY SISLEY, LOIS YOUNGEN.

Instructors: SANDRA ACKINCLOSE, VIRGINIA ARVIDSON, DIANE BAXTER, MARILYN FITCH, GLENN NORRIS.

Fellows: MARGARET CARROLL, HAZEL ELLER, VERONICA ESKRIDGE, JANICE GORTON, SUSAN WHITE, JEAN WHITEHEAD, VIETTA WILSON.

Dance

Professor: M. FRANCES DOUGHERTY (department head).

Associate Professor: K. WRIGHT DUNKLEY.

Assistant Professor: LINDA HEARN.

Senior Instructor: BRUNO MADRID.

Instructors: ELIZABETH BUTTERBAUGH, TERRIE C. HAYES.

Fellow: SUE GRIES.

Health Education

Professors: F. B. HAAR (department head), R. E. KIME, W. E. SMITH.

Associate Professors: E. D. FURRER, L. D. JACOBSON, R. G. SCHLAADT.

Assistant Professor : M. C. HOSOKAWA.

Instructors : T. P. BACA, B. J. GRAY, D. C. IVERSON, D. G. WHITE.

Lecturers : A. E. BERWICK, R. J. CARSON.

Fellows : K. C. BECKER, CYNTHIA COOK, LORRAINE DAVIS, P. D. LORANGER, BEVERLY SAHLIN.

Recreation and Park Management

Professor : L. S. RODNEY (department head).

Associate Professors : PHYLLIS M. FORD, C. M. REICH.

Assistant Professors : EFFIE FAIRCHILD, L. L. NEAL, R. P. RAUS.

Instructor : MARY DALE BLANTON.

Lecturers : ERNEST DRAPELA, JERRY JACOBSON, J. G. WALKER.

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 and park 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: WPE and CPE 121-199 for women, MPE and CPE 121-199 for men; not more than 1 hour of credit may be earned in these 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. A student may not take a service course and a professional activity course for credit at the same time.

Both men and women students satisfy the health-education requirement with HE 150 or HE 250. Students are advised 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 and park man-

* 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.

agement. 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 twelve areas or in a combination of related areas: (1) administration; (2) applied research; (3) child growth and development; (4) history, principles and philosophy; (5) motor learning; (6) physical education for exceptional students; (7) scientific bases; (8) dance; (9) health education; (10) safety and driver education; (11) recreation and park management; (12) advanced exercise physiology.

Ph.D. and Ed.D. candidates are expected to concentrate in one of the following fields of specialization: (1) administration of physical education; (2) physical education for exceptional students; (3) growth and development bases of physical education; (4) health education; (5) anatomical and kinesiological bases of physical education; (6) physiological bases of physical education; (7) motor learning in physical education; (8) recreation and park management. The dissertation must be an original contribution to knowledge.

Advanced study in dance may be arranged under the interdisciplinary master's program (see pages 120-121).

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 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. A new women's gymnasium has just been completed southwest of Gerlinger Hall.

Adjoining the Physical Education Building to the south is McArthur Court, basketball pavilion and athletic center of the Associated Students. McArthur Court seats more than 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, Associated Students athletic field, has seats for 23,000 spectators. There are six standard concrete tennis courts north of Hayward Stadium, eight additional courts south of the Education Building, and nine covered courts east of Leighton Pool. Autzen Stadium, a 41,000-seat football stadium, was dedicated in the fall of 1967. It is located across the Willamette River from the main University campus.

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 and park 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.

Secondary-School Teaching of Health and Physical Education. For certification as a teacher of health and physical education in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation. The following programs meet state standards and the requirements for recommendation by the University of Oregon.

Physical Education. The program includes required undergraduate courses and additional courses required for permanent certification after a fifth year of preparation:

UNDERGRADUATE		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 321, 322)	.....	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)		
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
FIFTH YEAR		
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. The program includes required undergraduate courses and additional courses required for permanent certification after a fifth year of preparation:

UNDERGRADUATE		
General Biology (Bi 101, 102, 103)	.....	12
School Health Services (HE 465)	.....	3
Human Anatomy (Bi 391, 392)	.....	6
Human Physiology (Bi 321, 322)	.....	6
Nutrition (HEc 225)	.....	3
Safety Education (HE 359)	.....	3
First Aid (HE 252)	.....	3
Personal Health Problems (HE 361)	.....	3
Community Health Problems (HE 362)	.....	3
Communicable & Noncommunicable Diseases (HE 363)	.....	3
Social Health (HE 463)	.....	3
Health Instruction (HE 464)	.....	3
FIFTH YEAR		
Advanced Health Instruction (HE 543)	.....	3
Mental Health (HE 506)	.....	3
Administration of School Health Education (HE 552)	.....	3

Health and Physical Education. The Oregon State Department of Education has set special subject-preparation requirements for positions involving the teaching of both health and physical education. A program for the satisfaction of these requirements may be arranged with advisers in the School of Health, Physical Education, and Recreation.

Fifth-Year Certification Requirements. Students transferring from other institutions who wish to enroll in a fifth-year program leading to a standard certificate in health education or physical education must meet the University of Oregon requirements for the basic certificate in these fields before final acceptance in the program.

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. Students who elect a minor in a field other than health education are required to complete an approved program in the second field, including 21 term hours of work beyond the introductory sequence in the field.

Physical education majors may select a program of studies which will prepare them to teach at any grade level, kindergarten through high school. This program includes professional activities and theory courses dealing with the instructional program at the elementary as well as the secondary level.

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)	3
Psychology	9
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 321, 322)	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 404-406).

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.

Aquatic Option. This option is intended to prepare students for careers as aquatic specialists in schools, communities, public and private agencies, and institutions. Emphasis is on the development of competencies in administration and in conduct of instructional and recreational aquatic programs, in facility design, and in operation and maintenance. The student may elect this option in consultation with the aquatic supervisor and with his adviser. Classes are offered in a structured sequence, with requirements listed below:

Lower Division		Term Hours
Life Saving in Aquatic Programs (PE 291)	.....	2
Swimming and Water Safety Instruction (PE 292)	.....	2
Aquatic Sports (MPE 132 or WPE 132)	.....	1
Skin Diving and Scuba Diving (MPE 133 or WPE 133)	.....	1
First Aid (HE 252)	.....	3
Community Health (HE 251)	.....	3
Upper Division		
Administration of Aquatic Programs (PE 344)	.....	3
Advanced Aquatics (PE 494, PE 495)	.....	2
Recreation Leadership (RM 352)	.....	3
Organization and Administration of Recreation (RM 370)	.....	3
Supervised Field Study (RM 415), or Student Teaching; Senior High School (Ed 417) (maximum credit, 9 term hours)	.....	3-9
		26-32

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

MPE 121-199. **Physical Education (Men).** 1 hour each term, five 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

- MPE 321-399. Physical Education for Junior and Senior Men.** 1 hour each term, seven terms.
3 hours a week.

Service Courses for Women

LOWER-DIVISION COURSES

- WPE 121-199. Physical Education (Women).** 1 hour each term, five 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

- WPE 321-399. Physical Education for Junior and Senior Women.** 1 hour each term, seven terms.
3 hours a week.

Coeducational Service Courses

LOWER-DIVISION COURSES

- CPE 121-199. Physical Education (Men and Women).** 1 hour each term, five terms.
For both men and women students. Applies toward the five-term physical education requirement. 3 hours a week.

UPPER-DIVISION COURSES

- CPE 321-399. Physical Education for Junior and Senior Men and Women.** 1 hour each term, five 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.
- 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.
- GPE 221. Principles and Methods of Conditioning.** 2 hours.

The rationale for life-long physical activity, supported by the evidence of research in medicine, physiology, psychology, sociology, and physical education. Experience in a variety of physical-exercise programs for use in different situations. Tests for self-evaluation of physical fitness. May be substituted for one term of the five-term physical-education requirement. 3 hours a week.

- 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 weight training.

UPPER-DIVISION COURSES

PE 321. Games and Sports Skills. 2 hours.

Values, purposes, and uses of creative games, games of low organization, basic skills and lead-up activities for children. General information, methods of instruction, and time allotments appropriate for elementary school program.

PE 322. Posture and Developmental Activities. 2 hours.

Values, purposes and uses of mechanics of movement, posture screening, and developmental activities for children. General information, methods of instruction, and time allotments appropriate for elementary school program.

PE 323. Rhythms and Dance. 2 hours.

Dance program for children in the elementary school. Basic movement activities including locomotor and nonlocomotor movement, original dance patterns. General information, methods of instruction, and time allotments appropriate for elementary school program.

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. Van Rossen.

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, Sigereth.

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 badminton. Winter: dance. Spring: soccer 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; approval of the dean.

PE 406. Special Problems. Hours to be arranged.

Prerequisite: approval of the dean.

PE 409. Practicum. Hours to be arranged.

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. Frei.

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. Krause.

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: Bi 312, 313. Evonuk.

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. 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, 422, 423. Foundations of Elementary-School Physical Education. (g) 3 hours each term.

Anatomical and physiological factors; kinesiological factors; motor-skill development factors basic to physical education in the elementary school.

PE 424. 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 321, PE 322, PE 323, or consent of instructor. Munson.

PE 444. Physical Education for the Exceptional Student. (G) 3 hours.

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. Wooten.

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.

Prerequisite: approval of the dean.

PE 506. Special Problems. Hours to be arranged.

Study of selected problems in the field of physical education. Prerequisite: approval of the dean.

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 Service Programs.
Current Literature in 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 511. Philosophy of Physical Education. 3 hours spring.

The philosophic foundations underlying the principles and practices of physical education as a part of the total educational program in the Western world.

PE 515, 516. History of Physical Education. 3 hours each term.

A history of physical education from its earliest development up to the eighteenth century, followed by consideration of the various physical education system in Europe and their transfer and adaptation to the United States. McCue.

PE 518. 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.

PE 520. 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. Reuter.

PE 521. Body Mechanics and Correctives. 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. Wooten.

* No-grade course.

PE 522. Orthopedics and Therapeutics. 3 hours.

Survey of the orthopedic conditions which fall in the province of the corrective physical-education specialist; recommended therapeutic procedures; the orthopedic examination; organization of the corrective physical-education program in schools and colleges. Prerequisite: PE 521 or consent of instructor. Wooten.

PE 523. Individual and Adapted Physical Education. 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. Wooten.

PE 527. 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. Wooten.

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. Wooten.

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. Wooten.

PE 533. 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. Prerequisites: PE 517, PE 540, at least one year's teaching experience. Adler.

PE 537. Sports Psychology. 3 hours.

Analysis of psychological factors and principles affecting physical performance, behavior, and emotions in sports; differences between individuals and between teams.

PE 540. Statistical Methods in Physical Education. 3 hours fall.

Elementary statistics applied to research, including central tendency, variability, normal probability curve, reliability and correlation. Prerequisite: graduate standing. Clarke.

PE 541. Statistical Methods in Physical Education. 3 hours winter.

Advanced statistics applied to research, including variance analysis, co-variance analysis, partial and multiple correlation, regression equations, chi-square, special correlational techniques, and non-parametric processes. Prerequisite: PE 540. Clarke.

PE 544. Critique and Interpretation of Research. 3 hours.

Examination of completed research in health, physical education, and recreation; exercises in applying research results to practical situations. Geser.

PE 545. 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, 551, 552. Administration of Physical Education. 3 hours each term.

Administration of physical education in colleges and universities and city systems. Historical background, administrative theory; organizational purposes, organizational climate, leadership behavior, human relations, processes of administration. Esslinger.

PE 554. 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 555. 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. Borchardt.

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. Wooten.

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. Wooten.

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. Wooten.

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.

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. Adler.

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, 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. Prerequisite: Bi 391, 392, PE 472, or equivalent. Sigerseth.

PE 576, 577, 578. Advanced Physiology of Exercise. 3 hours each term.

The physical and chemical mechanisms underlying the major functions of the body. Evonuk.

Dance

CURRICULA IN DANCE leading to the Bachelor of Arts or Bachelor of Science degrees provide theoretical and technical preparation in ballet and folk and modern dance forms. Specialization may be directed toward performance, choreography, teaching, therapy, recreation, or notation.

A program of dance concentration may be elected by students whose major is in another field. This program includes the study of dance as an art form, a social form, and a theater form. Requirements are met by the election of a minimum of 12 term hours of professional dance theory courses, 10 hours in dance laboratories, and two 9-hour sequences in a related discipline.

Requirements for the Bachelor's Degree. Candidates for the bachelor's degree with a major in dance must satisfy all general requirements of the University, elect appropriate sequences in related areas, and complete the professional requirements of the Department of Dance. Departmental requirements are:

Lower Division	Term Hours
Introduction to the Dance (D 251)	2
Fundamentals of Rhythm (D 252)	2
Movement Notation (D 253)	3
Intermediate Movement Notation (D 254)	3
Dance Laboratory (D 192, D 292)	12
Foreign language or science	24
Personal Health (HE 250)	3
Courses in art, drama, literature, music, or philosophy	18
Upper Division	
Elementary Dance Composition (D 351)	3
Advanced Dance Composition (D 352)	3
Dance Accompaniment (D 353)	3
Dance Laboratory (D 392)	6
Practicum in Dance Demonstration & Choreography (D 409)	9
Dance Programs & Production (D 451)	3
Dance History to 1000 A.D. (D 452)	3
Dance History 1000-1900 A.D. (D 453)	3
History of the Dance since 1900 (D 454)	3
Dance Apprenticeship (D 492)	6
Courses in anthropology, philosophy, theater, or art	9

LOWER-DIVISION COURSES

D 192. Dance Laboratory. 2 hours any term.

For professional students. Techniques in folk, ballet, and contemporary dance.

AL 230, 231, 232. Survey of the Performing Arts. 3 hours each term.

For description, see page 139.

D 251. Introduction to the Dance. 2 hours fall.

An overview of professional and educational aspects of dance, the function of dance in society, and the significance of dance as an art form in contemporary culture.

D 252. Fundamentals of Rhythm. 2 hours fall.

Rhythm as a basic factor for movement. Rhythmic devices used in the dance. Notation and rhythmic analysis.

D 253. Movement Notation. 3 hours winter.

A study of the process of recording movement graphically; the conversion of the effort and shape of motion into symbols from which original movement patterns can be reconstructed.

D 254. Intermediate Movement Notation. 3 hours spring.

Theory and application of intermediate principles of Labanotation. Prerequisite: D 253.

D 292. Dance Laboratory. 2 hours any term.

For professional students. Movement theory in folk, ballet, and contemporary dance.

UPPER-DIVISION COURSES**D 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.

D 352. Advanced Dance Composition. 3 hours winter.

Compositional forms and styles in dance. Preclassic and modern dance forms.

D 353. Dance Accompaniment. 3 hours spring.

Function of accompaniment for dance skills and composition. Types of accompaniment—instrumental, electronic percussion, voice.

D 392. Dance Laboratory. 2 hours any term.

For professional students. Elements of performance for folk, ballet, and contemporary dance.

D 403. Thesis. Hours to be arranged.**D 405. Reading and Conference.** Hours to be arranged.**D 406. Special Problems.** Hours to be arranged.**D 408. Workshop.** Hours to be arranged.**D 451. Dance Programs and Production.** 3 hours winter..

Production problems of staging, lighting, and costuming for the dance; dance demonstration and concert.

D 492. Dance Apprenticeship. 2 hours any term.

For professional students. Directed activities related to the teaching of dance; selection of materials, class organization and management, student teaching.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**D 409. Practicum.** (G) Hours to be arranged.**D 452. Dance History to 1000 A.D.** (G) 3 hours.

Historical survey of the dance and its relationships to other arts through the early Middle Ages.

D 453. Dance History 1000-1900 A.D. (G) 3 hours.

Social and theater dance forms of Western cultures from the period of the Crusades through the Golden Age of the ballet.

D 454. Dance History since 1900. (G) 3 hours.

Influences of leading dance artists; dance in education; dance in psychotherapy; new directions in concert and theater forms; emphasis on the dance in America.

GRADUATE COURSES***D 501. Research.** Hours to be arranged.***D 503. Thesis.** Hours to be arranged.**D 505. Reading and Conference.** Hours to be arranged.

* No-grade course.

D 506. **Special Problems.** Hours to be arranged.

Study of selected problems in the field of the dance. Prerequisite: consent of the dean.

D 507. **Seminar.** Hours to be arranged.

D 508. **Workshop.** Hours to be arranged.

D 509. **Practicum.** Hours to be arranged.

D 593. **Aesthetic Bases for Dance in Art and Education.** 3 hours.

Dance as an art form; function of dance in the changing social milieu.

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
Psychology (Psy 211, 212, or Psy 214, 215; Psy 217 or 218).....	9
General Sociology (Soc 204, 205, 206).....	9
Special Problems: Nutrition (HE 406)	3
First Aid (HE 252)	3
Personal Health (HE 250)	3
Upper Division	
Intro. to Bacteriology (Bi 381, 382), Human Physiology (Bi 321, 322)	12
Human Anatomy (Bi 391, 392).....	6
Safety Education (HE 359)	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
Genetics (Bi 423)	5
Parasitology (Bi 463) or Intro. to Bacteriology (Bi 382)	3-4

Safety Education and Driver Education Option. This option is designed to prepare students for careers as safety- and driver-education instructors for schools, communities, public and private agencies, and institutions. Emphasis is on the development of competencies in organization, administration, and supervision for classroom and laboratory experience. The student may elect this option in consultation with the Department of Health Education and his academic adviser.

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 sen-

ior 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 or women.

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 or women.

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.

HE 252. **First Aid.** 3 hours any term.

Immediate and temporary care for a wide variety of injuries or illnesses; control of bleeding, care for poisoning, and proper methods of transportation, splinting, and bandaging. Successful completion of course leads to Red Cross standard, advanced, and instructors' certificates.

Professional Courses

UPPER-DIVISION COURSES

HE 359. **Safety Education.** 3 hours fall and 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. Carson, Kime.

HE 362. **Community Health Problems.** 3 hours spring.

Basic community health problems important in public school health instruction. Designed primarily for teachers and community leaders. Prerequisite: junior standing or consent of instructor.

HE 363. **Communicable and Noncommunicable Diseases.** 3 hours winter.

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. Jacobson.

HE 364, 365, 366. **Introduction to Public Health.** 3 hours each term.

Functions and organization of public health; vital statistics; consumer health problems; functions of voluntary and governmental health organizations; health education in 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. Berwick, Haar.

HE 405. **Reading and Conference.** Hours to be arranged.

HE 406. **Special Problems.** Hours to be arranged.

HE 407. Seminar. Hours to be arranged.

Biological and Health-Related Aspects of Aging.

***HE 409. Practicum.** 3-9 hours any term.**HE 467. Driver Education.** 4 hours spring.

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. Schlaadt.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**HE 408. Workshop.** (g) Hours to be arranged.**HE 450. Elementary-School Health Education.** (g) 3 hours any term.

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. Schlaadt, Smith.

HE 463. Social Health. (G) 3 hours spring.

Sex education 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. Kime.

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. Schlaadt.

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. Smith.

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.

HE 468. Psychophysical Testing Equipment in Driver Education. (G) 3 hours.

Instruction for driver-education teachers in the use of driver simulation, psychophysical testing, and multi-media equipment.

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, including public health, mental health, and drug abuse.

HE 507. Seminar. Hours to be arranged.

Biological and Health-Related Aspects of Aging.
Public Health Administration.

HE 508. Workshop. Hours to be arranged.

Diseases and Environment.
Smoking and Disease.
School and Community Health.
Sex Education and Materials.

* No-grade course.

*HE 509. **Practicum.** 3-9 hours any term.

HE 542. **Basic Issues in Health Education.** 3 hours fall.

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 winter.

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 spring.

Organization and administration of the school health program. Haar.

HE 560. **Administration and Supervision of Safety Programs.** 3 hours.

The organization, development, and implementation of safety programs in schools, communities, and industries.

HE 561. **Psychology of Accident Prevention.** 3 hours.

Characteristics of problem drivers, teenage behavior related to accidents and accident prevention, effective methods in safety education programs.

HE 562. **Administration and Supervision of Driver Education Programs.** 3 hours.

Budgeting, selection and placement of teachers, curriculum development, public relations. Schlaadt.

HE 563. **Problems in Traffic Safety.** 3 hours.

Factors in the traffic safety problem; law enforcement, engineering problems, health and medical factors, use of alcohol and drugs by drivers, driver licensing. Haar.

Recreation and Park Management

THE DEPARTMENT OF RECREATION AND PARK MANAGEMENT offers programs of undergraduate and graduate professional study planned to prepare young men and women for careers in administration, supervision, and leadership in recreation, park, youth-serving, and community agencies. Graduates in recreation and park management become recreational 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; directors of camping and outdoor recreation; student union managers; and supervisors in colleges, universities and cultural arts centers.

Students in the undergraduate major programs may elect to work toward a Bachelor of Science degree in recreation and park management with a concentration of 36 term hours in social science or in science, or a Bachelor of Arts degree in recreation and park management with a concentration of 36 term hours in language and literature. The undergraduate major programs provide a foundation for graduate work leading to the Master of Science, Master of Arts, and Doctor of Philosophy degrees. The programs provide a broad liberal education together with professional and technical studies essential for careers in the field.

Requirements for Bachelor's Degree. The requirements for the bachelor's degree in recreation and park management include: (1) courses in arts and letters, social science, and science which satisfy general University requirements for a bachelor's degree; (2) a core of basic professional courses required of all majors; (3) courses which provide a measure of concentration and mastery in one of seven recreation and park curriculum options.

* No-grade course.

General Requirements. Majors are expected to complete the following: (1) one year of science to satisfy the science group requirement; (2) two terms of English composition (unless exempted by examination); (3) one year of English, American, or world literature; (4) one year of sociology; (5) one year of political science, economics, anthropology, or psychology; (6) one term of psychology if not taken in (5); (7) a minimum of 36 term hours in the social sciences; (8) a minimum of 42 term hours in recreation and park management.

Professional Core Courses. The professional core required of all majors includes the following courses:

	Term Hours
History & Theory of Recreation (RM 251)	3
Recreation Leadership (RM 352, 353)	6
Organization & Administration of Recreation (RM 370, 371)	6
School & Community Recreation Programs (RM 499)	3
Recreation Field Work (RM 415)	15
Seminar: Measurement & Evaluation (RM 407)	3

Options are offered in the following seven areas of concentration:

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 in the supervision and administration of recreation in public and private agencies or institutions. 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. In addition to the core program, required courses are:

	Term Hours
Seminar: Supervision of Personnel (RM 407)	3
Parks, School Grounds & Recreation Areas (LA 411, 412, 413)	9
Recreation & Natural Resources (RM 492)	3
Seminar: Metropolitan Park Planning (RM 407)	3
Special Problems: Area and Facility Planning (RM 406)	3
Seminar: Recreation Areas and Facilities (RM 407)	3

Community Youth Services. The option in community youth services provides preparation for careers in voluntary youth-serving organizations and clubs. Emphasis is placed on community leadership, group work, and the role of recreation in the social structure of the community. In addition to the core program, required courses are:

	Term Hours
Camp Counseling (RM 290) or approved elective	3
Camp Administration (RM 391)	3
Youth Agencies (RM 394, 395) or approved elective	6
Seminar: Recreation for Special Groups (RM 407)	3
Seminar: Group Processes and Leadership (RM 407)	3

Program Administration. The option in recreation program administration is designed to prepare students for positions in recreation or cultural arts programs in community and youth centers, playgrounds, hospitals, institutions, service clubs in the armed forces, etc. In addition to the core program, required courses are:

	Term Hours
Art in Elementary School (Art 321, 322)	4
Music Fundamentals (Mus 321, 322)	4
Camp Counseling (RM 290)	3
Youth Agencies (RM 394, 395)	6
Recreation Leadership (RM 353)	3
First Aid (HE 252)	3

Program Specialties. The option in program specialties is designed to prepare students for careers in cultural program areas such as music, art, dance, or drama,

or in special sports areas. 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. In addition to the core program, the required courses are:

	Term Hours
Camp Counseling (RM 290)	3
Youth Agencies (RM 394, 395)	6
Recreation Leadership (RM 353)	3
Seminar: Group Processes and Leadership (RM 407)	3
Courses in area of specialization.....	24-35

Outdoor Education. The option in outdoor education is designed to prepare students for careers in outdoor education. It is strongly recommended that students electing this option pursue a Bachelor of Science degree with a concentration of 36 or more term hours in science. The following courses are required:

	Term Hours
Camp Counseling (RM 290)	3
Camp Administration (RM 391, 392)	6
Principles of Outdoor Education (RM 490).....	3
Recreation & Natural Resources (RM 492).....	3

Therapeutic Recreation. The therapeutic recreation option provides both conceptual and practical training for students interested in working with special groups, such as the ill, the handicapped, the disabled, the aged. It prepares majors for supervisory and administrative positions. The following courses are required:

	Term Hours
Seminar: Survey of Therapeutic Recreation (RM 407)	3
Seminar: Recreation for Special Groups (RM 407)	3
Seminar: Community Organization for Special Groups (RM 407)	3
Psychology of Exceptional Children (SpEd 462)	3
The Maladjusted Child (SpEd 463)	3
The Mentally Retarded Child (SpEd 464)	3

Park and Resource Planning. This option prepares students for acquisition, planning, development, and maintenance of recreation and park areas. Majors may become coordinators of federal grant programs, park directors, resort managers, etc. Required courses are:

	Term Hours
Special Problems: Area and Facility Planning (RM 406)	3
Seminar: Recreation and Park Systems (RM 407)	3
Seminar: Recreation Areas and Facilities (RM 407)	3
Landscape architecture design analysis	6
Urban or regional planning	6

LOWER-DIVISION COURSES

RM 150. Recreation in Society. 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.

RM 251. History and Theory of Recreation. 3 hours fall.

Introduction to the basic historical and philosophical foundations of leisure and recreation. Ford.

RM 290. Camp Counseling. 3 hours winter.

Orientation to youth work in camps; examination of the values and objectives of organized camps; understanding campers, camp programs, and staff responsibilities. Raus.

UPPER-DIVISION COURSES

RM 352, 353. Recreation Leadership. 3 hours.

First term: techniques of group and individual leadership in recreation pro-

grams. Examination of playground and community center leadership and program. Second term: leadership and programming in semi-public agencies. Fairchild.

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 391, 392. Camp Administration. 3 hours each term.

Selected organizational and administrative aspects of organized camping including: site development, personnel, health, safety, sanitation, programs, finance, and public relations; emphasis on national standards and local regulations. 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.

RM 405. Reading and Conference. Hours to be arranged.

RM 406. Special Problems. Hours to be arranged.

Prerequisite: approval of department head.

RM 407. Seminar. Hours to be arranged.

Recreation Budgeting and Finance.

Supervision of Personnel.

Park Management.

Youth and Leadership.

Group Processes and Leadership.

Measurement and Evaluation.

Survey of Therapeutic Recreation.

Recreation Areas and Facilities.

Recreation and Park Systems.

Recreation for Special Groups.

Community Organization for Special Groups.

RM 409. Practicum. Hours to be arranged.

RM 415. Supervised Field Study. Hours to be arranged (15 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 winter.

Development of outdoor education and school camping; theories, practices, educational significance; organization, administration, and program planning.

RM 492. Recreation and Natural Resources. (G) 3 hours spring.

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.

RM 497. Recreation and Park Facilities. (G) 3 hours fall.

Acquisition, development, construction, and maintenance of recreational areas, facilities, and buildings. Reich.

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. Blanton.

GRADUATE COURSES

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

*RM 503. **Thesis.** Hours to be arranged. Reich.

RM 505. **Reading and Conference.** Hours to be arranged.

Prerequisite: approval of department head.

RM 506. **Special Problems.** Hours to be arranged.

Study of selected problems in recreation. Prerequisite: approval of department head.

RM 507. **Seminar.** Hours to be arranged.

Basic Issues in Parks and Recreation. Rodney.

Public Park Administration.

Problems of Recreation Finance.

Administrative Problems of Recreation. Rodney.

Philosophical Foundations of Recreation. Ford.

Youth and Leadership.

Studies and Surveys. Reich.

Methods of Social Research. Reich.

Social Statistics. Reich.

Metropolitan Park Planning. Reich.

Recreation and Park Systems.

RM 508. **Workshop.** Hours to be arranged.

RM 552. **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.

RM 553. **Administration of Recreation.** 3 hours winter.

Organization and administration of park and recreation programs in 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.

* No-grade course.

School of Journalism

JOHN W. CRAWFORD, M.A., Dean of the School of Journalism.

Professors: J. W. CRAWFORD, C. T. DUNCAN, B. L. FREEMESSER, J. L. HULTENG,*
R. P. NELSON, W. F. G. THACHER (emeritus), G. S. TURNBULL (emeritus),
R. M. WALES.

Associate Professors: J. D. EWAN, R. C. HALL (emeritus), R. K. HALVERSON,
J. B. LEMERT, D. F. REA, C. C. WEBB,† W. L. WINTER.

Assistant Professors: G. A. BELTRAN, EVERETTE DENNIS, K. T. METZLER, K. J.
NESTVOLD,‡ ALYCE SHEETZ.

Lecturers: L. P. BISHOP, P. R. COUEY.

Fellows: DOREEN BAUMAN, G. A. BEALL, N. A. FELGENHAUER, D. J. ROYCROFT,
R. E. TIPPO, S. S. WAGNER.

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 sequences in advertising, news-editorial, and radio-television journalism are 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.

A lower-division student may choose prejournalism as his major without meeting any specific requirements, but he may not enroll in upper-division journalism courses. The Mass Media and Society (J 224) is recommended for all pre-journalism majors. A lower-division student from another department in the University who wishes to become a prejournalism major will be accepted on the same basis as other prejournalism students.

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.

To become a journalism major the student must have completed his sophomore year (93 term hours) and be accepted as a degree candidate by the dean of the School of Journalism. The student must apply for acceptance at least one month before the beginning of the term for which he seeks admission. He must have substantially completed the University's group requirements, and must have a minimum cumulative grade-point average of 2.25. These requirements apply to upper-division students who have completed their prejournalism work and to upper-division students from other departments in the University who wish to become journalism majors, with the additional requirement that students in the latter category must apply no later than three terms before graduation.

A transfer student from another institution may apply for acceptance as a journalism major. Transfer major credit is granted for work completed in an accredited school of journalism. No major credit is granted for work done in a nonaccredited school of journalism, but elective credit may be granted for such work.

* On leave of absence, fall and winter terms, 1970-71.

† Retired, June 30, 1971.

‡ On sabbatical leave 1970-71.

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. Each student majoring in the School of Journalism is expected to complete the following year sequences in liberal arts (most of which may also be used to satisfy the University's general and group requirements):

- (1) Two terms of English Composition (unless exempted by examination).
- (2) Two years of literature: English, American, or world literature (not a foreign-language literature course).
- (3) One year of history.
- (4) One year of economics and one year of political science; *or* one year of either economics or political science and one year in one of the following: anthropology, geography, philosophy, psychology, or sociology.
- (5) Two additional blocks of at least 9 related term hours each in liberal arts courses.

At least *two* of the year sequences or 9-hour blocks completed to satisfy (2), (3), (4), or (5) above must be at the upper-division level.

The professional requirements for a bachelor's degree with a major in journalism are as follows:

- (1) A minimum of 33 term hours in upper-division professional courses (the total number of upper- and lower-division hours combined must be limited to 46 hours within the first 186 hours of an undergraduate program).
- (2) At least two courses chosen from each of the following two groups:
Group A—Reporting I (J 361); Magazine Article Writing I (J 468); Advertising Copy Writing (J 446); Radio-Television News Writing I (J 431); Public Relations Writing (J 465); *Group B*—Law of the Press (J 485); History of Journalism (J 487); Journalism and Public Opinion (J 494).
- (3) A minimum cumulative grade-point average of 2.5 in courses taken at the University.
- (4) A minimum cumulative grade-point average of 2.5 in journalism courses.
- (5) A maximum of nine pass-undifferentiated term hours in journalism courses.

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 Writing (J 446); Media of Advertising: Print (J 441); Media of Advertising: Broadcast (J 442); Advertising Problems (J 444); Advertising Layout (J 447); Law of the Press (J 485); courses selected from the following: Reporting I (J 361), Seminar: Advertising Research (J 407), Advertising Agencies and Departments (J 445), Production for Publication (J 321), Marketing Management (MIT 324), Television Workshop (BC 344), Photographic Seeing (J 335), Principles of Public Relations (J 459).

News-Editorial—Reporting I (J 361); Newspaper Editing (J 371); Reporting II (J 462); Law of the Press (J 485); courses selected from the following: Production for Publication (J 321), History of Journalism (J 487), Magazine Article Writing I and II (J 468, 469), The Community Newspaper (J 424), Photographic Seeing (J 335).

Newspaper Management—Production for Publication (J 321); Principles of Advertising (J 341); Reporting I (J 361); Newspaper Editing (J 371); The Community Newspaper (J 424); Newspaper Management (J 421); courses se-

lected from the following: Reporting II (J 462), Photographic Seeing (J 335), Law of the Press (J 485), Advertising Copy Writing (J 446), Advertising Layout (J 447).

Radio-Television Journalism—Radio-Television News I and II (J 431, 432); Seminar: Radio-Television News Workshop (J 407); Seminar: Documentary Film (J 407); courses selected from the following: Seminar: Radio-Television Station Management (J 407), Seminar: Radio-Television Problems (J 407), Reporting II (J 462), Media of Advertising: Broadcast (J 442), Radio and Television Workshop (BC 341), Radio and Television Script Writing (BC 347), Television Workshop (BC 344), Radio-Television Production (BC 444), Radio-Television Programming (BC 446).

Magazine Journalism—Magazine Article Writing I and II (J 468, 469); Magazine Editing (J 470); courses selected from the following: Production for Publication (J 321), Principles of Advertising (J 341), Newspaper Editing (J 371), Seminar: Industrial Editing (J 407), Advertising Copy Writing (J 446), Advertising Layout (J 447), Law of the Press (J 485).

Public Relations—Principles of Public Relations (J 459); Public Relations Writing (J 465); Public Relations Problems (J 483); Reporting I (J 361); Law of the Press (J 485); courses selected from the following: Production for Publication (J 321), Principles of Advertising (J 341), Magazine Article Writing I (J 468), Magazine Editing (J 470), Photographic Seeing (J 335), Advertising Copy Writing (J 446), Journalism and Public Opinion (J 494), Seminar: Documentary Film (J 407), Television Workshop (BC 344), Seminar: Photography in the Print Media (J 407).

Visual Communication—Photographic Seeing (J 335); Photojournalism (J 336); Seminar: Photography in the Print Media (J 407); courses selected from the following: Basic Design (Art 295), Production for Publication (J 321), Television Workshop (BC 344), Principles of Advertising (J 341), Reporting I (J 361), Seminar: Documentary Film (J 407), Seminar: History of Photography (J 407), Public Relations Writing (J 465), Radio-Television Production (BC 444), Radio-Television Direction (BC 445), Radio-Television Programming (BC 446), Magazine Editing (J 470), Law of the Press (J 485), Visual Continuity (Art 493), Journalism and Public Opinion (J 494).

Secondary-School Teaching of Journalism. For certification as a teacher of journalism in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

State standards are established for a basic certificate and for a standard certificate. Students are encouraged to meet the standard certificate requirements during their undergraduate study.

To meet the state standards in journalism and the requirements for recommendation by the University of Oregon, the student should complete the following program:

(1) For the basic certificate, Reporting I (J 361), Newspaper Editing (J 371), and either The Mass Media and Society (J 224) or The Press and Society (J 450).

(2) For the standard certificate (in addition to the courses required for the basic certificate), Reporting II (J 462) and Methods of Teaching Journalism (J 455). In addition, students are encouraged to complete Production for Publication (J 321), Photographic Seeing (J 335), and Principles of Advertising (J 341).

For further information, the student should consult a member of the journalism faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

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 undergraduate majors in journalism or considerable journalistic experience and for those who do not have an undergraduate major in journalism or journalistic experience.

Plan A. Thesis required. Designed for students with an extensive background in journalism. The candidate may satisfy the major requirements with 30 hours work in journalism, 9 of which are awarded for the thesis. The minimum number of graduate hours is 45.

Plan B. Terminal project required. Designed for students with little or no journalistic background. The candidate may take a maximum of 45 hours in journalism, 4 of which are awarded for the terminal project. Plan B students, in addition to completing the 45 hours of graduate credit required for the master's degree, may be required to enroll in two basic professional courses which do not carry graduate credit.

Admission. To be admitted to the School of Journalism for the purpose of seeking a graduate degree, a student must be a graduate of a four-year accredited college or university and must have a grade-point average of at least 3.00 (B) in his undergraduate study and a satisfactory score on the Graduate Record Examination.

A student may be admitted conditionally for graduate study if he offers evidence that a graduate course of study will be pursued successfully. An applicant may fulfill this requirement by (1) submitting his scores on the Graduate Record Examination, and (2) having earned, during the last two years of his undergraduate studies, a GPA exceeding 3.00 (B). Persons who have substantial experience in any of the fields of journalism may offer such experience, with the approval of the faculty, in lieu of (2) for conditional admittance. A student who is not admitted may request a review of his application by the faculty.

Advising. On admission, each graduate student is initially assigned for academic advising to the chairman of the school's graduate committee or to the dean. When the student has presented the proposal for his thesis or terminal project to the dean and the proposal has been approved, the student is assigned to a member of the faculty for all further academic advising and for direction of the thesis or terminal project. Students should register for credit in the appropriate courses (J 503 for thesis or J 505 for terminal project) during the terms in which they are doing the actual research and writing.

Degree Requirements. Candidates for the master's degree must complete at least 45 term hours of graduate work, with a cumulative grade-point average above 3.00. Courses that do not carry graduate credit are not considered in determining the graduate student's grade-point average. Students whose undergraduate program did not include the following courses or their equivalent must take them, either before taking graduate-level courses or concurrently with graduate-level courses: Principles of Advertising (J 341), Reporting I (J 361). Since these are not graduate-level courses, they cannot be counted in the 45 term hours required for the master's degree. Thus the total degree program for students with limited undergraduate work in the field may include up to 52 term hours and typically may require four or five terms for completion. All graduate students should expect to be assigned extra work in any undergraduate course they may take. This usually takes the form of a term paper not required of undergraduates in the course.

Of the 45 graduate-level term hours needed for completion of degree requirements, at least 30 should be in journalism courses. Students who have not taken undergraduate programs in journalism, and who do not have professional experi-

ence in the field, may elect to take up to 45 term hours in graduate-level journalism courses.

Nonjournalism courses taken must constitute an integrated program of work in a single area or in closely related areas. Scattered work in a variety of areas is not acceptable.

Course programs for graduate students are usually planned individually, on the basis of consultation with the student's adviser. It is expected, however, that any student intending to complete requirements for an advanced degree will include the following courses in his program (or present evidence that he has previously completed such courses or their equivalent): Law of the Press (J 485), History of Journalism (J 487), Seminar: Public Opinion and Propaganda (J 514), Theories of Mass Communication (J 513).

In addition, all master's degree programs must include the following: (1) three journalism courses or seminars numbered at the 500 level; (2) at least one graduate-level course in journalistic writing from the following group: Reporting II (J 462); Magazine Article Writing I (J 468); Advertising Message Strategy (J 546); Editorial Writing (J 564); Public Relations Writing (J 465); Visual Criticism (J 507).

Graduate majors will receive no credit toward satisfaction of degree requirements for journalism courses taken on a pass-undifferentiated basis if the grading basis is optional. For courses offered only on a pass-undifferentiated basis, the grade of P is understood to mean performance at the level of B or better. Graduate majors will receive credit toward satisfaction of degree requirements for a maximum of six hours of pass-undifferentiated work in courses taken outside the school and graded on an optional basis. Degree candidates who are preparing theses should obtain from the Graduate School a pamphlet describing the appropriate form and style of the thesis.

Students nearing the completion of their program should obtain from their adviser a copy of a check list of steps to be taken and examinations to be passed immediately prior to the award of the degree. Each student is responsible for making sure that all formalities have been completed sufficiently in advance of the deadline.

Examinations. Applicants seeking admission should make arrangements to take the Graduate Record Examination at a location convenient to them. Upon receipt of the results of this examination and of a transcript setting forth all the academic work the applicant has taken, the Committee on Graduate Study will notify the candidate whether or not he has been admitted.

Graduate students' programs are examined by the faculty of the School of Journalism during progress toward the master's degree:

Each graduate student in journalism is automatically considered for advancement to candidacy in the term following the completion of 12 hours of graduate work. Advancement to candidacy is necessary for both conditionally admitted students and for students admitted on an otherwise unqualified basis.

The student not advanced to candidacy at this evaluation will be given written notice but may be allowed to continue course work until the completion of 24 hours of graduate study. At that time a final decision regarding advancement to candidacy will be made.

Advancement to candidacy will not be granted to students unless they have a graduate GPA of better than 3.00. Advancement to candidacy evaluation is not based upon the GPA alone but involves additional evidence of the student's performance and promise.

When the student has completed all other requirements including the thesis or terminal project for the degree, he is scheduled for the final oral examination.

Candidates for the M.A. degree must have completed work in a foreign language.

age through the second year of college, or must pass an examination demonstrating equivalent mastery. Candidates for the M.S. degree need not fulfill this requirement.

Foreign Students. Foreign students beginning graduate work at the School of Journalism should plan to spend some time (at least a full term, in most cases) taking basic courses that do not carry graduate credit, before embarking on graduate-level courses.

A firm mastery of English, including American mass communications idiom, is necessary to success in professional courses at the graduate level. Foreign students who lack such a mastery find themselves severely handicapped, and may find it wise to pursue a program of course work leading to a second bachelor's degree but not to attempt to complete master's degree requirements. Foreign students who decide to undertake to complete a degree program should plan to spend five or more terms in residence. Foreign students who decide to complete requirements for a second bachelor's degree rather than a master's degree should expect to spend three or four terms in residence.

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, photography, and typography. Current files of newspapers 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 teletypesetter monitor services of the Associated Press. 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 cooperate with the school and the University Placement Service in providing placement services for journalism graduates. The Oregon Scholastic Press also has its headquarters in Allen Hall.

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.

The Arthur and Marian Rudd Loan Fund, established by a gift to the school from an alumnus, provides no-interest loans to men or women students majoring in journalism.

A fund established by Zeta chapter of Gamma Alpha Chi, professional society for women in advertising, provides loans for women students majoring in journalism. A fund established and administered by the Oregon Press Women provides loans for senior women majoring in journalism.

News-Editorial

LOWER-DIVISION COURSE

J 224. **The Mass Media and Society.** 3 hours.

Recommended for prejournalism majors; open to nonmajors. Survey and criticism of news and opinion media; effect of media on society. Nelson, Hulteng.

UPPER-DIVISION COURSES

J 321. **Production for Publication.** 3 hours.

The production of news-editorial and advertising material into publications. Printing processes and machinery; typography and composition methods;

technical aspects of letterpress printing and photo-engraving, photo-offset, gravure, and silk-screen process; paper, ink, and color.

J 361. Reporting I. 4 hours.

Basic training in news gathering. Extensive writing under time pressure, including a variety of assignments—straight news, features, interviews, speeches. Typing ability required. Lectures, conferences, laboratory. Halverson, Hulteng, Metzler, Rea.

J 371. Newspaper Editing. 4 hours.

Instruction and practice in copy editing and headline writing for the newspaper; emphasis on grammar and style. Instruction and practice in problems involved in evaluation, display, make-up and processing of written and pictorial news matter under time pressure. Lectures and laboratory. Prerequisite: J 361. Halverson, Rea.

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.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 407. Seminar. (G) Hours to be arranged.

Caricature and Graphic Humor.
Industrial Communications and Editing.
Magazine Design and Production.
Reporting of Urban Affairs.
Science Writing.
Reporting of Public Affairs.

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.

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 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.

J 455. Methods of Teaching Journalism. (G) 2-3 hours.

The teacher's role in guiding student publications in secondary schools; methods of teaching of journalism. Rea.

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. Halverson.

J 468. Magazine Article Writing I. (G) 3 hours.

Writing newspaper and magazine feature articles; book and movie reviewing for the mass media; study of the problems of marketing magazine and book manuscripts. Metzler, Nelson.

J 469. Magazine Article Writing II. (G) 3 hours.

Writing and marketing magazine articles. Individual conferences. Prerequisite: J 468. Nelson.

* No-grade course.

J 470. Magazine Editing. (G) 4 hours.

Survey and history of magazines; principles and problems of magazine editing; planning, content selection, manuscript revision, copy editing, caption and title writing, layout, typography; editorial responsibility. Lectures, exercises, and project; laboratory. Metzler, Nelson.

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. Rea.

J 487. History of Journalism. (G) 3 hours.

Study of the changing character of the mass media in the United States since colonial times. Emphasis on theories of the press and the relationship of the mass media to the society they have served. Halverson.

J 494. Journalism and Public Opinion. (g) 3 hours.

The formation, reinforcement, and change of opinions. The role of major social and political institutions, with emphasis upon the mass media of communication. Lemert.

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 communication. Duncan, Hulteng.

GRADUATE COURSES***J 501. Research in Journalism.** Hours to be arranged.***J 503. Thesis.** Hours to be arranged.**J 505. Reading and Conference.** Hours to be arranged.**J 507. Seminar.** Hours to be arranged.

Public Opinion Measurement.
Economics of the Newspaper.
Literature of Journalism.
History of Journalism.
Law of the Press.
Methodology of Communication.
Writing the Nonfiction Book.

J 514. Public Opinion and Propaganda. 3 hours.

Analysis of research literature, with emphasis upon finding analogues for research findings in decisions and choices made by mass media decision-makers. Research in attitude change processes, and source, message, channel, and receiver variables in the mass communication process. Lemert.

J 564. Editorial Writing. 3 hours.

Analysis and interpretation of news for media of mass communication; editorial policy formulation; editorial page operation. Hulteng.

J 589. Comparative Foreign Journalism. 3 hours.

History of and contemporary structure of international communications facilities: the flow of worldwide news; conflicting theories of press control, foreign correspondence, international censorship, major world newspapers and broadcasting systems, and historical and contemporary leaders of the world press.

Advertising and Public Relations**UPPER-DIVISION COURSES****J 341. Principles of Advertising.** 3 hours.

Advertising as a factor in the distributive process; the advertising agency;

* No-grade course.

the "campaign"; the function of research and testing; the selection of media: newspaper, magazine, broadcasting, outdoor advertising, direct mail. Ewan, Wales, Winter.

J 401. **Research.** Hours to be arranged.

J 403. **Thesis.** Hours to be arranged.

J 405. **Reading and Conference.** Hours to be arranged.

J 459. **Principles of Public Relations.** 3 hours.

Theory and practice of public relations as viewed by business, government, and civic organizations; study of mass media as publicity channels; role of the public relations practitioner; public relations departments and agencies. Ewan, Wales.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 407. **Seminar.** (G) Hours to be arranged.

Advertising and Society.

Advertising Research.

J 441. **Media of Advertising: Print.** (G) 3 hours.

Examination and evaluation of newspapers, magazines, outdoor, direct mail, and point-of-purchase displays as media for advertising; includes media buying procedures and philosophy, media research, media planning, and agency media department organization. Ewan, Wales, Winter.

J 442. **Media of Advertising: Broadcast.** (G) 3 hours.

Examination and evaluation of television and radio as media for advertising; includes network relations, program and audience measurements, network and spot-buying procedures, media planning, N.A.B. Code and F.C.C. regulations. Ewan, Nestvold.

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, Winter.

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. Ewan, Wales.

J 446. **Advertising Copy Writing.** (G) 3 hours.

Theory and practice in writing advertising copy. Study of style and structure, with emphasis on persuasive writing. Lectures and laboratory. Prerequisite: J 341. Ewan, Wales, Winter.

J 447. **Advertising Layout.** (G) 3 hours.

Instruction and practice in graphic design for advertising. Work with type and illustrations. Consideration given to all media. Prerequisite: J 341. Ewan, Nelson.

J 465. **Public Relations Writing.** (G) 3 hours.

Preparation of press conferences, press kits, and news releases; institutional advertising copy, executive speeches, dissemination of publicity material through the broadcasting media. Prerequisite: J 361, J 459. Ewan, Nelson.

J 483. **Public Relations Problems.** (G) 3 hours.

Use of research, decision processes, and program design in the solution of public relations problems. Application of principles and techniques in the public relations programs of profit and nonprofit institutions. Role of the mass media of communication in such programs. Ethics of public relations. Prerequisite: J 459. Ewan, Wales.

GRADUATE COURSES

- *J 501. **Research in Journalism.** Hours to be arranged.
 *J 503. **Thesis.** Hours to be arranged.
 *J 505. **Reading and Conference.** Hours to be arranged.
 J 507. **Seminar.** Hours to be arranged.

Advertising Research.

*Public Relations for Higher Education.

- J 520. **Public Relations Planning and Administration.** 3 hours.

Intended for graduate students in business, education, public affairs, etc., as well as journalism majors. Each student constructs a comprehensive public relations plan in his field of study. Ewan, Nelson, Wales.

- J 546. **Advertising Message Strategy.** 3 hours.

Advanced theory and practice in concepts of advertising copy. Emphasis on the search for advertising, ideas and their development into message strategy, visual and verbal, for a variety of advertising media. Lectures and laboratory develop variety in writing style for varied audiences. Prerequisite: J 446, J 447, or equivalent; consent of instructor. Crawford.

Broadcasting

UPPER-DIVISION COURSES

- J 401. **Research.** Hours to be arranged.
 J 403. **Thesis.** Hours to be arranged.
 J 405. **Reading and Conference.** Hours to be arranged.
 J 431. **Radio-Television News I.** 3 hours.

Gathering and writing news for broadcast media. Emphasis on broadcast style, basic aspects of radio-television news writing, and radio news operation. Lectures, individual conferences, and laboratory. Prerequisite: J 361. Nestvold.

- BC 341. **Radio and Television Workshop.** 2 hours.

For description, see SPEECH.

- BC 347. **Radio and Television Script Writing.** 2 hours.

For description, see SPEECH.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- J 407. **Seminar.** (G) Hours to be arranged.

Radio-Television Station Management.

Radio-Television Problems.

Radio-Television News Workshop.

- J 432. **Radio-Television News II.** (G) 3 hours.

Advanced aspects of the preparation, reporting, and broadcasting of radio-television news. Emphasis on television news writing and reporting, the broadcast documentary, and radio-television news interviewing. Lectures and laboratory. Prerequisite: J 361 or J 431. Nestvold.

- BC 444. **Radio-Television Direction.** (G) 3 hours.

For description, see SPEECH.

- BC 445. **Radio-Television Production.** (G) 3 hours.

For description, see SPEECH.

- BC 446. **Radio-Television Programming.** (G) 3 hours.

For description, see SPEECH.

* No-grade course.

Visual Communications: Photography and Film

UPPER-DIVISION COURSES

J 335. Photographic Seeing. 3 hours.

Photographic imagery and visual communication. Basic principles of content and composition of photographs, including form and design. Lectures and discussion, including review and criticism of student work.

J 336. Photojournalism. 3 hours.

Documentary and informational aspects of photojournalism. Creation and editing of a photographic essay; trends in pictorial journalism.

J 401. Research. Hours to be arranged.

J 403. Thesis. Hours to be arranged.

J 405. Reading and Conference. Hours to be arranged.

J 409. Practicum: Teaching Methods (Photography). 3 hours.

Active participation in teaching program under supervision in a laboratory situation. Prerequisite: consent of instructor. May be repeated for credit.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 407. Seminar. (G) Hours to be arranged.

Photographic Perception.
Photography in the Print Media.
Advanced Photography.
Documentary Film.
Film: Editing.
Film: Perception.
Film: Making.
History of Photography.

GRADUATE COURSES

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

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

J 505. Reading and Conference. Hours to be arranged.

J 507. Seminar. Hours to be arranged.

Advanced Photography.
Film: Making.
Visual Criticism: Film.
Visual Criticism: Photography.
Philosophy of Photography.
Visual Communication Research.

J 509. Practicum: Teaching Methods (Photography). 3 hours.

Preparation and leadership of criticism discussions in teaching program under supervision. Prerequisite: consent of instructor. May be repeated for credit.

Communication Research

GRADUATE COURSES

***J 501. Research in Journalism.** Hours to be arranged.

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

J 505. Reading and Conference. Hours to be arranged.

J 507. Seminar. Hours to be arranged.

Public Opinion Measurement.

* No-grade course.

J 512. **Communication Research Methods.** 3 hours.

Selection of research problems; planning the study; field research methods; experimental research methods; content analysis; readability measurement. Lemert.

J 513. **Theories of Mass Communication.** 3 hours.

The communication process; communication perception and attention; audiences of the mass media; mass communication and attitude change. Lemert.

J 514. **Public Opinion and Propaganda.** 3 hours.

For description, see page 421.

School of Law

EUGENE F. SCOLES, A.B., J.D., LL.M., J.S.D., Dean of the School of Law.

RONALD L. CHERRY, B.A., LL.B., M.L.L., Law Librarian.

Professors: F. J. BARRY, W. M. BASYE, C. D. CLARK, G. GOLDSTEIN, J. R. GRODIN, O. J. HOLLIS, C. G. HOWARD (emeritus), F. R. LACY, H. A. LINDE, T. W. MAPP,* G. M. PLATT, A. P. RUBIN, J. W. STRONG, H. W. TITUS.*

Associate Professors: D. W. BRODIE, P. N. SWAN.

Assistant Professors: B. B. ALDAVE, G. L. DAWSON, D. B. FROHNMAYER, J. L. JACOBSON, F. R. MERRILL, D. R. VETRI.

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 1919; the standards of the school were approved by the American Bar Association in August 1923.

New Law Center. The new three-story Law Center building, which houses the School of Law, is located on the southeast corner of Kincaid Street and Eleventh Avenue East and will eventually accommodate 500 students and 30 faculty members.

Modern classrooms, seminar rooms, and a moot courtroom are provided. Student facilities include a student bar association office, lounge, typing room, locker room, and space for the Editorial Board of the OREGON LAW REVIEW.

The Law Library has shelf space for 120,000 books, and is designed to permit expansion. Spacious reading rooms are available for student study, as well as a sizable number of individual study carrels. The holdings of the Law Library exceed 72,000 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 366 legal journals. An excellent collection of publications relating to Oregon territorial and state law includes an extensive file of Oregon Supreme Court briefs.

Admission to the School of Law. A baccalaureate degree is required for admission to the School of Law. Because of the increasing volume of applications for admission to the School of Law in recent years and enrollment restrictions, only those applicants who, in terms of their overall records, appear to be most qualified for legal studies can be admitted. On the basis of past experience, it is unlikely that an applicant with a score of less than 600 on the Law School Admission Test and an undergraduate grade-point average of less than 3.00 on a four-point scale would be admitted unless one of the two figures is sufficiently high to compensate for the other.

Admissions Correspondence. Specific inquiries, applications, transcripts, application fee, the Law School Admission Test report, and all supporting documents should be forwarded to the School of Law, University of Oregon, Eugene, Oregon 97403.

* On leave of absence 1970-71.

Time of Application. Applications and supporting documents should be filed with the Admissions Committee after September 15 of the academic year preceding that for which admission is sought, and are not accepted before that time, except for reports of Law School Admission Test scores, which will be accepted at any time. The Admissions Committee acts on completed applications beginning January 1 preceding the fall term for which admission is sought. Although there is no formal deadline for filing applications, applicants will find it in their interest to apply and furnish supporting documents before May 15.

Applications. Two applications are required, one for the School of Law (white) and one for the University (yellow). Both applications should be returned directly to the School of Law. All applicants must complete the School of Law application. Applicants who have not previously been admitted to the University must also complete the University application.

Application Fee. Applications must be accompanied by a check for \$10.00, payable to the University of Oregon, unless the applicant has previously been registered at the University. An applicant who has previously been admitted to the University, but who did not register, must submit the \$10.00 fee with his reapplication. This fee is neither refundable nor credited toward tuition and fees, regardless of action taken on the application.

Law School Admission Test. Applicants must take the Law School Admission Test and have an official report of the test scores sent to the School of Law by the Educational Testing Service, which administers the test. Inquiries concerning the dates, places, and fee for the Law School Admission Test should be sent directly to the Educational Testing Service, Box 944, Princeton, New Jersey 08540. The Admissions Committee will not act on an application until the report of the test scores has been received.

Admissions Action and Transcripts. The Admissions Committee will act on an application only if the applicant has completed at least 109 semester or 156 term hours toward a baccalaureate degree.

Applicants must provide official transcripts showing at least the foregoing minimum amount of academic work. If the applicant is enrolled in an undergraduate, graduate, or professional school, favorable action by the Admissions Committee will be a conditional admission. Final admission cannot be granted until transcripts are furnished to the Admissions Committee showing all academic work completed at each undergraduate, graduate, or professional school attended and showing, where appropriate, receipt of a baccalaureate degree.

Validity of Admission. An admission to the School of Law is valid only for the fall term stated on the final notice of admission. An admitted applicant who is unable to register in the School of Law for that term must reapply to be admitted for a subsequent fall term.

Personal Interviews. Although members of the law faculty are willing to discuss legal education at the School of Law with prospective applicants, personal interviews are neither required nor encouraged as part of the admission process.

Time of Enrollment. Students may begin studies at the School of Law only at the beginning of the fall term of each academic year.

Transfer Law Students. An applicant who has attended another law school must have the dean of that law school send a letter to the Admissions Committee stating that the applicant is in good standing and eligible to return to that school without condition. This statement is required even if the applicant does not seek advanced standing.

Transferred Credit. An applicant may transfer, as a general rule, not to ex-

ceed 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 also met the admission requirements then existing at the University of Oregon School of Law. In exceptional cases only, an applicant 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 an applicant 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 applicant is eligible for return in good standing to the school previously attended; and (3) the applicant'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 applicant's professional law-school record is of high quality.

The Admissions Committee cannot act on an application from an applicant seeking to transfer credit earned at another law school until transcripts showing all work for which credit is sought are filed with the Committee.

Prelegal Program. The School of Law does not prescribe any particular form of prelegal education. Intellectual maturity and breadth of educational background are considered more important than particular subject matter. The School of Law does, however, emphasize the importance of well-developed writing skills.

Registration and Fees. Law students register and pay their fees at the times set in the Academic Calendar for registration. Law students, whether resident or nonresident, who hold a baccalaureate degree from an accredited college or university, pay the same fees as graduate students.

Curriculum and Degrees. The School of Law offers a professional curriculum leading to the 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 at the University of Oregon.

The curriculum of the School of Law provides a thorough preparation for the practice of law in any state. The School of Law seeks to have the student acquire knowledge not only of legal doctrine, but also of the judicial process and of the social, economic, and political problems with which lawyers must deal. The method of instruction requires an intensive exercise of analytical skills.

Because the curriculum is arranged to present the fundamental topics of the law during the first year, the first-year program is composed of required courses. In order to stimulate student involvement in classroom discussion, every effort is made to assure first-year students of at least one basic course with an enrollment limit of twenty-five students.

All second- and third-year courses are elective except The Legal Profession (L 477), which is required. The scope of the curriculum has been progressively enriched in recent years by the addition of courses, seminars, and other research and writing programs which explore the role of law in new areas of social and economic importance, and which stress a close student-faculty relationship. The clinical experiences program is also available to second- and third-year students.

The School of Law does not offer an evening program.

Because substantial participation in classroom discussion is an essential factor in legal education, 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 Friday. Some classes may be scheduled on Saturday.

Students who have met the requirements for admission to the School of Law, and who have successfully completed courses in law aggregating 123 term hours of

satisfactory credit and have otherwise satisfied the requirements of the University and the School of Law, will be granted the J.D. degree, provided that they have been a full-time student for 90 weeks or the equivalent and comply with such other requirements as the law faculty may from time to time impose.

Research and Writing Requirements. During his second year of study in the School of Law, each student must complete a writing assignment designed to improve his legal writing skills and his ability to critically analyze legal problems. This assignment must be completed before a student may begin his third year of study in the School of Law.

During his third year of study in the School of Law, each student must complete a research and writing assignment designed to test his analytical and creative ability to consider and develop solutions for one or more legal problems in depth. This assignment must be completed before a student will be granted a professional law degree.

Students may satisfy the foregoing requirements by selection from the following alternatives:

(1) Seminar: Advanced Appellate Advocacy (L 507). Satisfies second-year requirement only.

(2) Any faculty-supervised writing assignment whether or not undertaken in connection with a course or seminar. Satisfies second-year requirement only.

(3) Any faculty-supervised research paper whether or not undertaken in connection with a course or seminar. Satisfies either requirement.

(4) Participation in a nationally recognized moot court competition. Satisfies either requirement.

(5) Participation as a candidate for or member of the OREGON LAW REVIEW editorial staff. Satisfies either requirement.

Oregon Law Review. The OREGON LAW REVIEW is published quarterly under the editorship of a student editorial staff, with the assistance of a faculty editorial adviser, 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.

Moot Court Program. The School of Law participates in the National Moot Court Competition. A student Moot Court Board assists in the substantive and procedural administration of all moot court programs in the School of Law.

Clinical Experience Program. Law students have the opportunity to participate in both civil and criminal clinical experience programs. The civil program centers on the legal-aid program operated by the Lane County Bar Association. The criminal program provides opportunities to work with agencies and lawyers concerned with prosecution, defense, and postconviction proceedings.

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 to the 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.

Placement. The School of Law maintains its own placement service for its graduates.

UPPER-DIVISION SERVICE COURSE

L 430. **Law, Its Processes and Functions.** (g) 3 hours.

Introduction to the legal system for nonlaw students. Law presented not as a body of rules but as man's chief means of political and social control; judicial opinions and other primary source materials used to show how the legal system operates and what its main social functions are.

FIRST-YEAR COURSES (REQUIRED)

L 411, 412, 413. **Contracts.** 3 hours each term.

Formation of simple contracts; consideration and other formalities; performance and breach; discharge; remedies, including specific performance; third-party beneficiaries; assignments; problems of agency; illegality.

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.

L 417, 418, 419. **Legal Bibliography, Writing, and Oral Advocacy.** 1 hour each term.

Legal reference materials: training in use of legislative and administrative materials, judicial precedents, text books and periodicals. Preparation of original legal research papers. Participation in appellate moot court program.

L 420, 421. **Civil Procedure.** 3 hours each term, fall and winter.

Introductory study of procedure in civil litigation. The origin and development of the English court system; the dual system of state and Federal courts in the United States; organization and operation of courts; judicial power; jurisdiction at law and in equity; common-law forms of action; methods of trial at law and in equity; nature of judgments and decrees; jurisdiction of federal courts; origin and development of common-law and equity pleading, code pleading, and the Federal Rules of Civil Procedure.

L 422, 423, 424. **Torts.** 3 hours each term.

Liability for intentionally and negligently caused injuries to person and property; the impact of insurance and risk-bearing upon liability for such injuries; vicarious liability; liability without legal fault; products liability; defamation; misrepresentation; business torts; limitations on liability; remedies: damages, injunction, and compensation plans.

L 425, 426, 427. **Criminal Law and Procedure.** 2 hours each term.

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; equity and criminal law; protection of individual rights by constitutional and other legal limitations on criminal law enforcement.

L 428. **Legislative and Administrative Processes.** 3 hours spring.

Introduction to the nature of and distinctions between development and application of law; interrelationship of legislative, executive and judicial powers; concept of delegation of authority; legislative and administrative processes in adjudicated cases as opposed to managerial execution of governmental policy.

SECOND- AND THIRD-YEAR COURSES (ELECTIVE*)

L 434. **Secured Land Transactions.** 4 hours.

Vendor-purchaser and mortgage law; emphasis on functional comparison of

* Except for L 477.

land sale contracts, mortgages, and deeds of trust as real property security devices in the market place.

L 435. Commercial Transactions. 4 hours.

Secured transactions, sales, documents of title, and introduction to commercial paper under the Uniform Commercial Code.

L 436. Commercial Paper. 3 hours.

Analysis of rights and liabilities of parties to negotiable instruments under the Uniform Commercial Code. Some comparisons with foreign law will be made.

L 437, 438. Commercial Law and Practice. 3 hours each term, fall and winter.

Consideration of legal and practical problems of businessmen and consumers arising out of (1) the use of personal property as collateral to secure financing and (2) the distribution and sale of goods. Not open to students who have completed L 435.

L 440. Insurance. 3 hours.

The insurance business; insurable interest; coverage of contract as to event and insured; subrogation; warranties, representations, and concealment.

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.

L 444. Restitution. 3 hours.

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.

L 446. Family Law. 3 hours.

Nature of marriage; annulment; divorce; adoption; legal incidents of status of husband and wife and parent and child.

L 447, 448. Partnerships and Corporations. 3 hours fall, 4 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.

L 449, 450. Constitutional Law. 3 hours fall, 4 hours 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.

L 453. Code Pleading. 4 hours.

Pleading under the codes and the Federal rules of civil procedure; parties; joinder of causes; the pleadings; objections to pleadings; amendments.

L 454. Trusts and Estates I. 4 hours.

Intestate succession, execution and construction of wills and trusts, fiduciary administration of decedents' estates and trusts.

L 455. Trusts and Estates II. 3 hours.

Validity and effect of gratuitous dispositions of assets in which enjoyment is postponed or restrained, including construction, powers of appointment, rule against perpetuities and related restrictions.

L 458, 459. Conflict of Laws. 4 or 6 hours total credit.

Theoretical basis of decision; jurisdiction; foreign judgments; right under

foreign law in torts, contracts, sales, security transactions, business organizations, family law.

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.

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.

The legislative process; the lawyer's role in policy formulation and law making in contrast to litigation; drafting; presentations before legislative committees and other law-making bodies; lobbying and its regulation; legislative history and the interpretation of statutes.

L 476. Labor Law. 3 hours.

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.

L 477. The Legal Profession. 2 hours.

Organization of bench and bar; functions of the legal profession in the administration of justice; canons and other standards of professional ethics. Required for all students.

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.

L 481. Trade Regulation. 4 hours.

Survey of the effect of the major Federal legislation (Sherman, Clayton, Robinson-Patman, Federal Trade Commission Acts) in the anti-trust and unfair-competition areas.

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.

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.

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.

L 486. Securities Regulation. 3 hours.

Analysis of Federal legislation administered by the Securities and Exchange Commission and of state legislation, popularly designated as "blue sky laws," based on the policy of investor protection.

L 487. Local Government Law. 3 hours.

The nature, constitution, powers, and liabilities of municipal corporations.

L 488. Legal Writing. 1 hour.

Preparation, under the supervision of a member of the faculty, of a research and writing assignment designed to test the student's analytical and creative ability to consider and develop solutions for one or more legal problems in depth.

L 501. Research. Hours to be arranged.

Open to 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.

L 507. Seminar. Hours to be arranged.

Seminars offered in the following subjects as student interest and other conditions may make the instruction feasible:

Administration of Criminal Justice.

Admiralty.

Advanced Appellate Advocacy.

Civil Clinical Practice.

Compensation for Personal Injuries.

Constitutional Problems.

Copyright and Unfair Competition.

Criminal Clinical Practice.

Environmental Quality.

Federal Courts.

Indian Law.

International Business Transactions.

International Institutions.

International Law.

Jurisprudence.

Labor Problems.

Land Use Planning.

Law Review.

Legal Problems of Business Planning.

Natural Resources.

Ocean Resources.

Public Assistance.

Regulated Industries.

Social Legislation.

State and Federal Revenue Sharing.

State and Local Taxation.

Tax Policy.

Urban Housing.

School of Librarianship

PERRY D. MORRISON, D.L.S., Acting Dean of the School of Librarianship.

Professors: ELIZABETH FINDLY, C. W. HINTZ, R. R. MCCOLLOUGH, P. D. MORRISON.

Associate Professors: HOLWAY JONES, IONE PIERRON.

Assistant Professors: CAROLINE FELLER, BARBARA FISHER, R. E. KEMPER, PATRICIA B. POND.

THE UNIVERSITY OF OREGON School of Librarianship was established in the fall of 1966 and its Master of Library Science program was accredited by the American Library Association in 1968. The University offered undergraduate courses for school librarians in summer sessions as early as 1920; a regular-session program was established in the Department of English in 1934. In 1948 the program was transferred to the School of Education. In 1960 the University was authorized to offer graduate work in librarianship leading to the Master of Arts or Master of Science degrees. Professional instruction in the School of Librarianship is offered at the graduate level, and leads to the professional degree of Master of Library Science.

The offices, classrooms, and laboratories of the school are located in the University Library building; the facilities and resources of the Library itself provide the basic laboratory for students in the school.

The program of the School of Librarianship is designed to provide: (1) graduate instruction in the basic principles and practices of library service and administration; (2) opportunities for in-service training for graduate librarians; (3) leadership in the development of new and improved concepts and practices in librarianship; (4) education for school librarianship; (5) service to library development in Oregon through research, consultation, and work with professional organizations.

Admission. Requirements for admission to the professional graduate program of the school include: (1) graduation from an institution of higher education whose requirements for the bachelor's degree are substantially equivalent to the requirements of the University of Oregon; (2) a grade-point average of 3.00 for the last two years of the student's academic preparation; (3) a satisfactory score on the Graduate Record Examination Aptitude Test; (4) for foreign students, proof of proficiency in the English language as measured by the University of Michigan English Language Institute Test or the Princeton University Test of English as a Foreign Language, in lieu of the G.R.E. Aptitude Test.

For application procedures for admission to graduate standing in the University, see pages 115-116. Students applying for admission to the School of Librarianship must also: (1) have three letters of recommendation (one preferably from a librarian) sent to the dean of the School of Librarianship; (2) arrange for an interview with the dean or member of the faculty of the school or with a representative of the school designated by the dean. All application procedures should be completed at least two full regular terms in advance to assure admission at the time desired.

Applicants are advised to take the Graduate Record Examination well in advance of the quarter for which they seek admission since the test requires five weeks to process. Write Educational Testing Service (Princeton, N.J. 03450; or 1947 Center Street, Berkeley, Calif. 94704) for application blank and schedule of examination dates.

Degree Requirements. The requirements for the M.L.S. degree are as follows: (1) 45 term hours of graduate work, including not less than 39 hours in librarianship and at least two graduate courses in another school or department totaling not less than 4 term hours; (2) completion of a 24-hour core curriculum, including Lib 411, Lib 421, Lib 431, Lib 442, Lib 512, Lib 522, Lib 571, Lib 572; (3) a 3.00 GPA covering all upper-division and graduate courses taken in graduate status at the University of Oregon; (4) two years of college-level study of one modern foreign language, or one year of college-level study of each of two modern foreign languages. Candidates who hold advanced degrees in another field may be considered to have satisfied the requirement for work outside the school, and may take additional courses in librarianship.

M.L.S. Degree Program for School Librarians. This specialized program makes it possible for the student to meet requirements both for the M.L.S. degree and for certification as a school librarian in Oregon schools. Admission requirements for the program are the same as for the regular M.L.S. program.

Degree Requirements. The requirements for the M.L.S. degree in this program are as follows: (1) 48 term hours of graduate work with a major area of concentration (33-36 term hours) in librarianship and a minor area of concentration (12-15 term hours) in education, or, for students holding an Oregon teacher's certificate, a minor area of concentration in education or another field of study; (2) completion of a 21-hour core curriculum, including Lib 411, Lib 421, Lib 431, Lib 432, Lib 442, Lib 445, and Lib 512; (3) a 3.00 GPA covering all upper-division and graduate courses taken in graduate status at the University of Oregon; (4) two years of college-level study of one modern foreign language, or one year of college-level study of each of two modern foreign languages; and (5) completion of the course requirements of a planned program of study for an Oregon basic teacher's certificate with standard-certificate preparation in librarianship.

Certification Requirements for School Librarians. For certification as a school librarian in Oregon schools, the Oregon Board of Education requires the following:

Basic Certificate. To qualify for a basic certificate with preparation in library science valid for three years, the applicant must: (1) hold or be eligible for a valid basic teacher's certificate; and (2) have completed a planned program for the preparation of librarians in a standard teacher-education institution with an approved program of 18 term hours in library science, including preparation in the following areas: cataloging and classification, reference, library administration, and selection. These requirements may be met by completing Lib 411, Lib 421, Lib 432, Lib 442, and two of the following: Ed 435, Lib 431, Lib 445, Lib 451, Lib 455.

Standard Certificate. To qualify for a standard teacher's certificate with preparation in library science, the applicant must: (1) have completed the general standard five-year teaching preparation requirements for elementary, junior high-school or senior high-school teachers; and (2) have completed a planned five-year program for the preparation of librarians in a standard teacher-education institution, with an approved program of at least 30 term hours in library science, including the 18 term hours required for the basic certificate and 12 additional term hours. These additional term hours may be chosen from 400 courses not taken as part of a basic certificate program and from the following 500 courses: Lib 512, Lib 522, Lib 523, Lib 543, Lib 556, Lib 558, Lib 561, Lib 562, Lib 563, Lib 571, Lib 572.

The requirement of a planned five-year program may be met by completing requirements for the standard teacher's certificate in an approved nondegree program, the M.L.S. program, or the Interdisciplinary Master's Program for Teach-

ers. For further information, the student should consult the member of the School of Librarianship faculty who serves as adviser for prospective school librarians.

LOWER-DIVISION SERVICE COURSE

Lib 127. Use of the Library. 1 hour any term.

Training in the use of the card catalog, periodical indexes, and reference books; experience in the preparation of bibliographies. Designed to help undergraduate students use the library more effectively. Sponsored by the University Library. Durnell.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Lib 411. Cataloging I. (G) 3 hours.

Constructing, maintaining, and using a library catalog. Main entry, descriptive cataloging, cross reference, and filing.

Lib 421. Bibliography and Reference. (G) 3 hours.

Introduction to reference services; evaluation and use of reference materials; correct bibliographical form; practical problems in the use of basic reference books in school, public, and academic libraries. Findly, Morrison.

Lib 431. The Library in Society. (G) 3 hours.

The functions, standards, and responsibilities of American libraries in relationship to the mass media and other elements and trends in today's society; librarianship as a profession. Pierron.

Lib 432. The School Library As an Instructional Materials Center. (G) 3 hours.

Introduction to school librarianship and to methods of organization and maintenance of effective materials-centered libraries in elementary and secondary schools. Pond.

Lib 442. Selection and Acquisition of Materials. (G) 3 hours.

Reviewing media, selection aids, and other means of evaluating and selecting books and other materials in the light of library objectives. Acquisition procedures. Intellectual freedom and censorship. Pierron.

Lib 445. The Library and Audiovisual Materials. (G) 3 hours.

Evaluation and use of audiovisual resources and consideration of uses of all forms of nonprint communications media in library programs for all types of libraries.

Lib 451. 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. Feller, Pond.

Lib 455. Books and Related Materials for Young Adults. (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. Pond.

GRADUATE COURSES

Lib 505. Reading and Conference. 3 hours.

Lib 507. Seminar. 3 hours.

Lib 509. Practicum. 3 hours.

Supervised practical experience under the guidance of a professional librarian.

Lib 512. Cataloging II. 3 hours.

Constructing, maintaining, and using a library catalog. Descriptive cataloging, classification, subject headings, administration of the catalog department. Kemper.

Lib 522. Advanced Bibliography and Reference. 3 hours.

Reference books in the various subject fields; theory and history of bibliography; interlibrary loan. Solving of bibliographic and information problems encountered in reference service. Prerequisite: Lib 421. Findly, Morrison.

Lib 523. 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. Prerequisite: Lib 421. Findly, Morrison.

Lib 533. The Public Library. 3 hours.

Administrative and service problems of public libraries, including collection building and maintenance, staffing, public relations with clientele and governing authority. Prerequisite: Lib 431. Pierron.

Lib 534. The Academic Library. 3 hours.

Administrative and service problems of college, university, and research libraries, including collection building and maintenance, staffing, public relations with clientele and supporting institution. Prerequisite: Lib 431. Morrison.

Lib 535. The Special Library. 3 hours.

Administration, organization, resources, and services of the special library or information center. Prerequisite: consent of instructor. Pierron.

Lib 538. Library Administration. 3 hours.

Processes of administration as applied to the government, organization, staffing, financing, housing, interpretation, and evaluation of libraries. Student projects relate the processes to specific types of libraries. Prerequisite: 9 hours in librarianship. Kemper, Pierron.

Lib 541. 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.

Lib 543. Instructional Materials Centers: Resources and Services. 3 hours.

Advanced problems in the organization and administration of the school library as an instructional materials center at the building, district, and regional level. Prerequisite: Lib 432 or consent of instructor. Pond.

Lib 556. Library Programs for Children and Young Adults. 3 hours.

Public library service to young people, its organization, administration, promotion, and evaluation; book talks, class visits, discussion groups, radio and television programs. Prerequisite: Lib 451 or 455. Feller.

Lib 558. Storytelling. 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. Feller.

Lib 561. Literature of the Humanities. 3 hours.

A reading and lecture course on the role of the humanities in contemporary society; surveys the development of the literature associated with the humanistic disciplines, with emphasis on key men, books, and terminology; outlines problems associated with acquisition and handling of specialized resources. McCollough.

Lib 562. Literature of the Sciences. 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. Morrison.

Lib 563. Literature of the Social Sciences. 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. Jones.

Lib 571. Research in Librarianship. 3 hours.

Survey of library literature, with attention to significant research in librarianship; selection and definition of a project, collection of data, historical, experimental, and descriptive methods, evaluation of data, statistical concepts; values of research in librarianship. Kemper, Morrison.

Lib 572. Library Automation. 3 hours.

Flow of recorded information in library development and use, with emphasis on mechanical aids and systems of control. Data-processing techniques from punched cards to computers. Basics of systems analysis and evaluation as applied to library procedures. Prerequisite: Lib 512. Kemper.

Lib 573. The Library and the Publishing Process. 3 hours.

Consideration of general trade and scholarly publishing processes from the librarian's viewpoint; the role of the library as publisher; publishing activities of library organizations; participation in the publication of a library periodical. Prerequisite: 12 term hours of librarianship and consent of instructor. Morrison.

Lib 581. Introduction to Archives. 3 hours.

Historical development of archival practices and problems; analysis of current trends in Federal, state, local, business, church, and university archives. Archival processing, records management procedures, accession, arrangement, storage; research use of archival source material. Fisher.

COURSE OFFERED ONLY IN SUMMER SESSION

Lib 508. Workshop. Hours to be arranged.

Medical School

CHARLES N. HOLMAN, M.D., Dean of the Medical School.

M. ROBERTS GROVER, JR., M.D., Associate Dean.

WILLIAM A. ZIMMERMAN, B.S., Associate Dean for Business Affairs.

JOSEPH J. ADAMS, B.B.A., Assistant Dean.

RICHARD L. SLEETER, M.D., Assistant Dean.

CAROLINE H. POMMARANE, B.S., Registrar.

MARGARET HUGHES, B.S., 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 in Sam Jackson Park overlooking the city. 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, a seven-year program for the M.D. and Ph.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, affiliation in radiologic technology, an internship in hospital dietetics, affiliations in physical and occupational therapy, and training in cytotechnology and orthoptic technique. The school's internship and residency programs provide more than 200 appointments to qualified physicians. Extensive continuing education 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 more than 195,000 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 grant expenditures total approximately \$5,000,000 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 page 227 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 226 of this Catalog.

Medical School Catalogs. Separate catalogs describing the curricula in medicine and medical technology and the graduate programs in the basic sciences may be obtained from the Medical School.

School of Music

ROBERT M. TROTTER, Ph.D., Dean of the School of Music.

EDMUND A. CYKLER, Ph.D., Associate Dean of the School of Music.

Professors: EXINE A. BAILEY, F. W. BITTNER, G. G. BOUGHTON, E. A. CYKLER, MILTON DIETERICH (emeritus), J. R. HLADKY, G. P. HOPKINS (emeritus), H. T. KELLER, I. D. LEE, R. E. NYE, M. D. RISINGER, H. R. SALTZMAN, JANE THACHER (emeritus), R. M. TROTTER, R. S. VAGNER, N. E. WILSON.

Associate Professors: PETER BERGQUIST,* L. T. BREIDENTHAL, R. G. CUNNINGHAM, J. M. GUSTAFSON, JOHN HAMILTON, G. M. MARTIN,† L. C. MAVES, J. C. McMANUS, J. A. MILLER, H. J. OWEN, RICHARD TROMBLEY, M. E. TUBB, VIRGINIA WHITFIELD, W. C. WOODS.

Assistant Professors: C. W. FARMER, R. J. HURWITZ, VICTOR STEINHARDT.

Instructors: G. B. DILLON, E. W. KAMMERER.

Fellows: R. L. EDWARDS, JOAN GEHANT, JOSEPHINE HART, I. H. JOHNSTONE, H. J. KENNETT, J. D. OTTLEY, J. E. STANARD.

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, emphasizing 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 analysis and criticism 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 School 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 in several ensemble groups, including band, orchestra, chorus, chamber ensembles, and opera workshop, and for performance instruction if facilities are available.

Admission to Major Curricula. The lower-division program is a core of introductory work in musicianship, including performances, composition, and analytical-critical studies, 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,

* On sabbatical leave, winter and spring terms, 1970-71.

† At German Music Center 1970-71.

before entering the University, a thorough knowledge of standard musical symbols and terminology, some skill at the piano, considerable proficiency in performance in a primary medium, and as wide an acquaintance as possible with all kinds of music.

During registration week, all new students are given auditions to determine their eligibility for studio performance studies and examinations in basic musical grammar and keyboard skill to test their aptitude and readiness for lower-division core musicianship 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 lower-division study differing from the University pattern may, however, be admitted if they show satisfactory proficiency.

All degree candidates in music are required to attend campus musical events each year of residence as follows: 12 or more credits, 10 events per term; 8-11 credits, 8 events per term; 1-7 credits, 5 events per term.

German Center for International Music Education. The School of Music offers a music study program in Europe, centered in Ludwigsburg, Germany. The curriculum is open to senior and graduate students in music. Participants enroll as regular full-time students in the University of Oregon for the current academic year, and must complete requirements for admission as outlined in this Catalog. The objectives of the center are: (1) to give students a knowledge of music pedagogy in European countries through observation and participation; (2) to bring each student into the rich stream of European cultural life, both past and present; and (3) to add new perspectives to American musical practices and attitudes. Address inquiries to: Director, German Center for International Music Education, School of Music, University of Oregon.

Facilities. The School of Music is housed in a building complex designed for instruction, practice, and performance—including a recital hall seating 550 persons, rehearsal rooms, studio-offices, classrooms, and more than fifty practice rooms. The school's equipment includes William Dowd and Wittmayer concert harpsichords; seven pipe organs for student use, by Flentrop, Olympic, Schlicker, and Reuter; a Sperrhake clavichord; a number of Steinway grand pianos; and a Moog Electronic Synthesizer.

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. Douglass, 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 and String Orchestras, the University Singers, the University Chorale, Chamber Choir, University Symphonic and Concert Bands, Stage Band, Brass Ensemble, 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, using a sizeable collection of reproductions of Renaissance and baroque instruments. The work of these organizations is planned to complement courses in analysis and criticism 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 Music Association and the Chamber Concert Series.

Music Fees. Students majoring or minoring in music who are eligible for Mus 190 or above pay no special fees for private performance instruction. Fees for private vocal or instrumental instruction for all other students are: ten half-hour lessons, \$30.00 per term; twenty half-hour lessons, \$50.00 per term. These fees are due at the time of registration each term.

All music majors and music minors pay a fee of \$5.00 per term which entitles them to practice-room privileges. The fee for organ practice and for use of the Moog Synthesizer is \$12.00 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, Master of Music, and Doctor of Musical Arts degrees.

In the undergraduate program, the candidate for the B.A. degree takes approximately one-third of his work in music, one-third in fields outside the school, and the remaining third in electives either outside the school or in music. 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 candidate for the B.Mus. degree 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 of candidates for the B.A. or B.Mus. degree for admission to upper-division degree programs:

First Year	Term Hours
Musicianship I (Mus 121, 122, 123).....	12
Ensemble (selected from Mus 195, Mus 196, Mus 197).....	3
Performance Studies (Studio Instruction) (Mus 190).....	3
Second Year	
Musicianship II (Mus 221, 222, 223).....	12
History of Music I (Mus 204, 205, 206).....	9
Ensemble (selected from Mus 195, Mus 196, Mus 197).....	3
Performance Studies (Studio Instruction) (Mus 190 or above).....	3

All entering students are required to pass a test in functional keyboard skills or enroll in Functional Keyboard (Mus 50) until the required level of proficiency is met. The test must be taken prior to initial enrollment in music courses and passed before enrollment in upper-division courses in music. Information concerning the functional keyboard requirements is available from the School of Music.

History of Western Civilization (Hst 101, 102, 103) is recommended for the satisfaction of the social science group requirement; psychology is recommended for the satisfaction of the science group requirement.

Candidates for the B.A. degree must acquire proficiency in French, German, or Italian equivalent to that expected after two years of college study of the language.

Elementary Aesthetics (Phl 222) and either History of Western Art (ArH

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. Definitions of competencies at all levels for all performing media are available in the School of Music office.

Every music major must review his program of study with his adviser at the beginning of each school year.

Upper-Division Major Requirements. Completion of the following upper-division work is required of all candidates for the B.Mus. or the B.A. degree in music:

	Term Hours
History of Music II (Mus 360, 361, 362).....	9
Musical analysis and criticism (in the student's main performance area, chosen from Mus 455-477).....	3
Additional upper-division music.....	12

All candidates for the B.A. degree must complete a senior project demonstrating a satisfactory level of achievement as performer, scholar, or composer.

During their upper-division years, all candidates for the B.Mus. degree must, in addition: (1) complete a minimum of 12 term hours in performance study on a principal 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 chosen from Mus 395, Mus 396, Mus 397, and Mus 398; (3) complete a course in their primary area of instrumental or vocal specialization, chosen from Mus 461, 462, 463; Mus 464, 465, 466; Mus 467, 468, 469; Mus 470, 471, 472; Mus 473, 474, 475; Mus 476; Mus 477. Additional requirements for each specialty are as follows:

Performance. (1) Achievement of proficiency on a principal instrument or in voice equivalent to that required for the completion of Mus 490; (2) senior recital; (3) for students specializing in voice, proficiency in piano equivalent to that required for completion of Mus 190; (4) for students specializing in voice, proficiency in a combination of French, German, Italian as follows: either two years in one and one year in another of these, or one year of each of the three.

Music Theory. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434); (2) Composition I (Mus 340, 341, 342); (3) Scoring for Instruments (Mus 336); (4) Advanced Analysis (Mus 430, 431, 432); (5) upper-division courses in analysis and criticism, 6 term hours; (6) senior lecture-recital.

Composition. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434); (2) Composition I (Mus 340, 341, 342), Composition II (Mus 440, 441, 442); (3) Scoring for Instruments (Mus 336); (4) Experiments in Improvisation and Composition (Mus 435); (5) public performances of original works.

Music Education, All Fields. Satisfaction of education requirements for an Oregon secondary teacher's certificate (see page 373); (1) Orientation to Music Education (MuE 326); (2) Special Teaching Methods (MuE 408), 2-4 term hours; (3) Colloquium in School Music (MuE 418); (4) additional requirements for one of the options listed below.

Music Education, Choral-General. (1) Choral Conducting (Mus 385, 386); (2) Instrumental Conducting (Mus 387); (3) class instruction in instrumental techniques (strings, brass, woodwind—1 term hour in each of these three areas); (4) Scoring for Voices (Mus 439); (5) Choral Materials for Schools (Mus 444); (6) performance study, completion of Mus 290, voice or piano (for the latter, three terms of voice are required).

Music Education, Instrumental. (1) Instrumental Conducting (Mus 387, 388); Choral Conducting (Mus 385); (3) Instrumental Techniques (MuE 392),

9 term hours chosen in consultation with the adviser; (4) Voice Pedagogy (MuE 391), one term; (5) Chorus (Mus 197), one term; (6) of the 18 term hours in private performance studies required of all B.Mus. candidates, a minimum of 9 term hours in Mus 390, Mus 391, or Mus 490.

Secondary-School Teaching of Music. For certification as a teacher of music in Oregon high schools, the Oregon Board of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in music and the requirements for recommendation by the University of Oregon, the student must complete the general requirements for a major in music and the requirements for a music education option, listed above.

For further information, the student should consult a member of the music faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 132 ff.

Minor in Music. The following core courses are required: Musicianship I (Mus 121, 122, 123) and one year of Functional Piano (Mus 50) *or* Music Fundamentals (Mus 321, 322); music history or literature (Mus 201, 202, 203 or Mus 204, 205, 206); performance study, 3 hours; ensemble, 3 hours; and electives to complete 36 hours.

Graduate Work. The School of Music offers graduate work leading to the M.A., M.Mus., and D.M.A. degrees:

Master of Arts—music history, music theory, music education.

Master of Music—composition, music education, performance and music literature, church music.

Doctor of Musical Arts—see pages 124-125.

The College of Education offers graduate work leading to the degrees of Doctor of Education in Music Education or Doctor of Philosophy in Music Education.

During fall-term registration week and the first week of summer session, all entering students seeking graduate degrees 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 before the student is formally admitted to candidacy for a graduate degree. Information concerning the examinations and guides for study are available in the School of Music office.

Music

LOWER-DIVISION COURSES

*Mus 50. **Basic Performance Studies.** 1 hour any term (3 hours maximum credit).

Class instruction in the fundamentals of performance for students with no previous training. Sections in strings, woodwinds, brass, and voice. Prerequisite: audition.

*Mus 51. **Functional Keyboard.** 1 hour any term.

Classroom instruction for music majors. Development of skills in playing scales and modes, chords, arpeggios; sight reading, playing by ear, harmonizing, transposing, accompanying, score reading. Prerequisite: audition.

*Mus 52. **Basic Music.** 1 hour.

Remedial instruction for students who are deficient in preparation for work in musicianship. To be taken concurrently with Mus 121.

* No-grade course.

- *Mus 90. **Intermediate Performance Studies.** 1 hour any term (3 hours maximum credit).
Class instruction in the fundamentals of performance for students with some previous background. Sections in keyboard, strings, woodwinds, brass, and voice. Prerequisite: audition.
- Mus 91. **Intermediate Functional Piano.** 1 hour any term. (3 hours maximum credit).
- Mus 121,* 122, 123.† **Musicianship I.** 4 hours each term.
Study of the disciplines of hearing, performing, analyzing, improvising, and composing different kinds of music; terminology, concepts, and the development of aural-visual acuity. Hurwitz, Owen, Steinhardt, Trotter, Tubb.
- Mus 190. **Performance Studies (Studio 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 to 4 term hours of credit) in their principal 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 in courses numbered 190-290. Information concerning required levels of proficiency at each level (Mus 190 through Mus 690) may be obtained in the School of Music office. Prerequisite: audition.
- | | |
|---|--|
| Piano—Bittner, Farmer,
Steinhardt, Woods. | Cello and String Bass—Hladky. |
| Voice—Bailey, Breidenthal,
Miller, Wilson. | Woodwind Instruments—Bergquist,
Cunningham, McManus,
Trombley, Vagner. |
| Organ and Harpsichord—
Hamilton. | Brass Instruments—Dillon,
Kammerer, Lee. |
| Violin—Boughton, Maves. | Harp. |
| Viola—Boughton. | |
- Mus 195. **Band.** 1 hour each term (6 hours maximum credit).
Fall: football band; winter and spring: concert band; all terms: symphonic band, wind ensemble. Prerequisite: audition for symphonic band and wind ensemble; interview for football band and concert band. Dillon, Vagner.
- Mus 196. **Orchestra.** 1 hour each term (6 hours maximum credit).
Prerequisite: audition; consent of instructor. Upper-division students enroll in Mus 396. Maves.
- Mus 197. **Chorus.** 1 hour each term (6 hours maximum credit).
University Singers, University Chorale, Chamber Choir, Laboratory Chorus. Prerequisite: audition; consent of instructor. Upper-division students enroll in Mus 397. Risinger, Saltzman, Wilson.
- 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. Trotter.
- Mus 204, 205, 206. **History of Music I.** 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 or consent of instructor. Farmer.
- Mus 221, 222, 223. **Musicianship II.** 4 hours each term.
A continuation of Mus 121, 122, 123. Prerequisite: Mus 123 or equivalent. Hurwitz, Owen, Trotter, Tubb.
- AL 230, 231, 232. **Survey of the Performing Arts.** 3 hours each term.
For description, see page 139.

* No-grade course.

† Graded course.

Mus 290. Performance Studies (Studio 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. 2 recitations; 2 one-hour laboratories. Gustafson, Martin, Nye, Whitfield, staff.

Mus 333, 334, 335. Counterpoint I. 2 hours each term.

Contrapuntal technique of the sixteenth through the twentieth centuries; composition and analysis. Prerequisite: Mus 223. Hurwitz, Owen, Steinhardt, Tubb.

Mus 336, 337, 338. Scoring for Instruments. 2 hours each term.

Study of the instruments of the orchestra and band; the practical art of scoring for various instrumental combinations. Prerequisite: Mus 223. Keller, Owen, Tubb.

Mus 340, 341, 342. Composition I. 3 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, Trombley.

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, Trombley.

Mus 362. Avant-garde Music in the Twentieth Century. 3 hours.

The concert 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. Risinger, Saltzman.

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.

Mus 390. Performance Studies (Studio Instruction). 2-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 290; jury audition. For further information, see Mus 190.

Mus 391. Performance Studies (Studio Instruction). 2 hours any term.

Prerequisite: successful completion of Mus 290. For instructors, see Mus 190.

- Mus 393. **Jazz Ensemble.** 1 hour any term.
Study of jazz and other popular music through large and small group rehearsal. Prerequisite: audition with instructor. Kammerer.
- Mus 394. **Chamber Ensemble.** 1 hour each term (6 hours maximum credit).
Study of music through small group rehearsal. For stringed-instrument and wind-instrument players, percussionists, pianists, and singers. Prerequisite: audition or consent of instructor.
- Mus 395. **Band.** 1 hour each term (6 hours maximum credit).
Prerequisite: upper-division standing and audition. Dillon, Vagner.
- Mus 396. **Orchestra.** 1 hour each term (6 hours maximum credit).
Prerequisite: upper-division standing: audition. Maves.
- Mus 397. **Chorus.** 1 hour each term (6 hours maximum credit).
Prerequisite: upper-division standing; audition. Risinger, Saltzman, Wilson.
- Mus 398. **Opera Workshop.** 2 hours each term (6 hours maximum credit).
Study of traditional and contemporary operatic repertoire 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. Maves.
- Mus 405. **Reading and Conference.** Hours to be arranged.
Prerequisite: consent of dean.
- Mus 419. **Senior Colloquium in Music.** 3 hours.
Exploration of interrelationships among the various areas in music.
- Mus 490. **Performance Studies (Studio 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 407. **Seminar.** (G) Hours to be arranged.
- Mus 425. **Advanced Keyboard Harmony.** (G) 2 hours.
Realization of figured bass notation in the light of baroque performance practices. Prerequisite: Mus 223, Mus 335 or consent of instructor. Owen.
- Mus 426, 427. **Score Reading.** (G) 2 hours.
Analysis of musical scores of compositions for small and large ensembles involving transposition of parts; use of the piano as a means of studying ensemble scores. Maves.
- Mus 430, 431, 432. **Advanced Analysis.** (G) 2 hours each term.
Advanced analytical techniques, especially those developed by Heinrich Schenker and Felix Salzer, applied to music of all periods and styles. Prerequisite: Mus 223. Bergquist.
- Mus 433, 434. **Counterpoint II.** (G) 2 hours each term.
Continuation of Counterpoint I, with emphasis on canon and fugue and twentieth-century techniques. Prerequisite: Mus 335. Keller.
- *Mus 435. **Experiments in Improvisation and Composition.** (G) 3 hours any term.
Student compositions rehearsed and recorded by experienced performers in varying pre-determined combinations. Discussions of the recordings. Experiments in music-making without conventional notations. Prerequisite: consent of instructors. Steinhardt, Tubb.
- Mus 436, 437. **Advanced Scoring for Instruments.** (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.

* No-grade course.

Mus 438. Scoring for Bands. (G) 3 hours.

Scoring for larger combinations of wind instruments, including the concert band, the marching band, and the stage band. Prerequisite: Mus 337. Dillon.

Mus 439. Scoring for Voices. (G) 3 hours.

Techniques of arranging for various types of choral groups, both accompanied and a cappella. Prerequisite: Mus 223. Owen, Tubb.

Mus 440, 441, 442. Composition II. (G) 3 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 perceptive listening through analysis of various types of music (Gregorian chant through jazz); collateral reading, class discussion, and individual presentation. Not open to music majors or students with credit in Mus 201, 202, 203. Martin.

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. Primarily for nonmajors. Offered alternate years. Maves.

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. Primarily for nonmajors. Offered alternate years. Maves.

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*, *Wozzeck*, *Pelléas et Mélisande*, *The Rake's Progress*. Primarily for nonmajors. Offered alternate years. Maves.

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. Primarily for nonmajors. Offered alternate years. Tubb.

Mus 455. Hymnology. (G) 3 hours.

History and interpretation of the Christian hymn, both as literature and as music; criteria for the selection of hymn texts and tunes; various denominational hymnals; the use of hymns in worship. Saltzman.

Mus 456. Liturgics. (G) 3 hours.

Study of formal rituals of worship in Eastern and Western churches from the pre-Christian era to the present, with particular reference to the forms and styles of their associated music. Saltzman.

Mus 457. Sacred Choral Music. (G) 3 hours.

Survey of choral music for church and concert use based on liturgical and nonliturgical sacred themes; performance practices of various styles; development of criteria for judging aesthetic quality of the music and its performance. Saltzman.

Mus 458, 459. Administration of Church Music. (G) 2 hours each term.

Developing the music program of the church; relation of the ministry of music to the music committee, pastor, and parish; volunteer choir organization; music in the church school. Saltzman.

Mus 460. Music in Worship. (G) 2 hours.

Theory and practice of music in the corporate worship of nonliturgical churches, with attention to the functions of the congregation, organ, and choir. Saltzman.

Mus 461, 462, 463. Music for Chamber Ensemble. (G) 2 hours each term.

Study of the basic literature for string quartet and other ensembles using piano and strings, with emphasis on listening and analysis. Offered alternate years. Prerequisite: Mus 361. Hladky.

Mus 464, 465, 466. Piano Music. (G) 2 hours each term.

Survey of solo piano music from J. S. Bach to the present; original works for four hands and for two pianos; the concerto; emphasis on style as it affects performance. Prerequisite: Mus 361. Woods.

Mus 467, 468, 469. Solo Vocal Music. (G) 2 hours each term.

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 artistic performance and sound critical judgment through study of text, voice, and accompaniment. Prerequisite: Mus 361. Miller, Wilson.

Mus 470, 471, 472. Orchestral Music. (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. Offered alternate years. Hladky.

Mus 473, 474, 475. History of Opera. (G) 2 hours each term.

Critical study of the musical and dramatic content of operas forming the standard international repertoire. Mus 473: antiquity to Mozart. Mus 474: Mozart to Verdi. Mus 475: Wagner to the present. Prerequisite: Mus 361. Miller, Wilson.

Mus 476. Organ Music. (G) 3 hours.

The organ in church and concert; organ repertoire from the fifteenth century to the present. Prerequisite: Mus 361. Hamilton.

Mus 477. Wind-Instrument Music. (G) 3 hours.

Survey of literature for wind instruments and band from the sixteenth century to the present. Emphasis on style and performance practice and on the development of bases for critical judgment in the selection of wind instrument and band music. Prerequisite: Mus 361. Vagner.

Mus 485. Advanced Choral Conducting. (G) 3 hours.

Refinement of choral conducting techniques; study of musical scores from contemporary and earlier periods, with emphasis upon analysis, interpretation, and rehearsal procedures. Review of organizational and administrative procedures for choral organizations. Prerequisite: Mus 385, 386. Risinger.

Mus 486. Advanced Instrumental Conducting. (G) 3 hours.

The study of conducting techniques as applied to band and orchestra literature, with emphasis on various styles and periods of music; study of twentieth-century rhythms and related conducting problems. Prerequisite: Mus 387, 388. Vagner.

Mus 493. Collegium Musicum. (G) 1 hour each term.

Study of music repertoire of the mediaeval, Renaissance, and baroque periods through rehearsals and extensive sight reading; vocal and instrumental repertoire. Owen.

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.
Church Music.

* No-grade course.

Mus 511, 512, 513. Research Methods in Music. 3 hours each term.

Mus 511: use of general bibliographical sources and reference materials in music. Mus 511 is prerequisite to either Mus 512, a consideration of research methods in music history and theory, or Mus 513, a consideration of experimental research including problem identification, research design, influencing variables, tools of research, and the interpretation of data in relation to the teaching of music. Bergquist, Martin, staff.

Mus 533, 534. Twentieth-Century Counterpoint. 2 hours each term.

Techniques of present-day contrapuntal practice; application in larger contrapuntal forms. Prerequisite: Mus 434. Keller.

Mus 540, 541, 542. Composition with Electronic Media. 3 hours each term.

Electronic-music instruments and techniques; creative use of Moog Electronic Music Synthesizer and tape-recording equipment. Prerequisite: graduate standing; consent of instructor. Keller.

Mus 543, 544. Notation of Mediaeval and Renaissance Music. 3 hours each term.

Study of representative examples of notational systems and practices in western European polyphony from 900 to 1600. Bergquist.

Mus 560. Music in the Middle Ages. 3 hours.

Music in the quadrivium; the writings of Boethius; varieties of liturgical music, particularly Gregorian; performance theories. Pitch notation, rhythmic theory and early polyphony at Notre Dame; poetic influences on musical form; French and Italian *Ars nova*. Hamilton.

Mus 561. Music in the Renaissance. 3 hours.

The influence of Italian humanism on continental and English styles. Poetic and musical practice in mass, motet, and secular vocal song. Notational developments; music printing. Luther and music; Counter-Reformation in Rome and Venice. Bergquist, Hamilton.

Mus 562. Music in the Baroque Era. 3 hours.

Musica poetica and humanistic traditions; florid gesture and large statement in the arts. Monody, *concertato*, *Affektenlehre*, fugal textures; growth, transfer, and fusion of national and generic styles; performance practices; the rococo in France and Italy. Hamilton.

Mus 563. Music in the Classical Period. 3 hours.

Sources of classic style and their culmination in the Viennese high classical style of Haydn, Mozart, and Beethoven. Dramatic forms and procedures in opera. Bergquist.

Mus 564. Music in the Romantic Era. 3 hours.

The heritage of Beethoven; virtuosic and lyric extremes in instrumental and vocal styles. Literary romanticism, descriptive music and the *Lied*; opera in France and Italy; Wagner's music drama as *Gesamtkunstwerk*; the rise of music nationalism; Wagnerism in France. Bergquist.

Mus 565. Music in the Twentieth Century. 3 hours.

The crisis of Romanticism and tonality: the transition in Debussy, Mahler, and others; formation of new styles by Stravinsky, Schoenberg, Bartok; developments in the United States; implications of recent developments. Bergquist, Hurwitz.

Mus 589. Performance Practices before 1800. 3 hours.

Music performance practices from the Renaissance through Viennese classic style; reading of primary and secondary sources of pertinent information; comparative study of recorded examples; class demonstrations. Trombley.

Mus 590. Performance Studies (Studio Instruction). 2-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 490; sufficient talent and experience to justify the undertaking of graduate studies in performance; jury audition. For instructors, see Mus 190.

- Mus 591. Performance Studies (Studio Instruction).** 1-2 hours any term (6 hours maximum credit).
For graduate students not specializing in performance. Prerequisite: proficiency required to complete Mus 290; jury audition.
- Mus 592. Performance Studies (Studio Instruction).** (p) 1 hour any term (3 hours maximum credit).
For graduate students who need instruction in a supplementary performance area. Prerequisite: proficiency in another instrument or voice required for admission to Mus 390 or Mus 391; jury audition.
- Mus 593. Jazz Ensemble.** 1 hour any term.
Study of jazz and other popular music through large and small group rehearsal. Prerequisite: audition with instructor. Kammerer.
- Mus 594. Chamber Ensemble.** 1 hour any term.
- Mus 595. Symphonic Band.** 1 hour any term.
- Mus 596. Orchestra.** 1 hour any term.
- Mus 597. Chorus.** 1 hour any term.
- Mus 598. Opera Workshop.** 2 hours any term.
- Mus 690. Performance Studies (Studio Instruction).** 2-4 hours any term.
Prerequisite: sufficient talent and experience to justify undertaking performance studies as a primary area for the Doctor of Musical Arts degree; jury audition.
- Mus 691. Performance Studies (Studio Instruction).** 1-4 hours any term.
Prerequisite: sufficient talent and experience to justify undertaking performance studies as a supporting area for the Doctor of Musical Arts degree; jury audition.

Music Education

UPPER-DIVISION COURSES

- MuE 326. Orientation to Music Education.** 3 hours.
Observation of the total school music program (grades one through twelve). Includes dialogue with local teachers. McManus, staff.
- MuE 383. Music Methods for Elementary Teachers.** 3 hours.
Planning and organizing musical activities for elementary school children. Required for elementary-education majors. Prerequisite: Mus 321, 322. Gustafson, Martin, Nye, Whitfield.
- MuE 391. Voice Pedagogy.** 1 hour any term.
Vocal techniques for chorus, studio and class instruction. Methods and materials for adolescent and mature soloists.
- MuE 392. Instrumental Techniques.** 1 hour any term.
Elementary instruction in orchestral instruments. Primarily for majors in music education. 2 recitations.
- MuE 405. Reading and Conference.** Hours to be arranged.
Prerequisite: consent of dean.
- MuE 408. Special Teaching Methods.** 1-4 hours.
Precedes student teaching. Consideration of the concerns of music teachers in the secondary and elementary schools. Observations, procedures, and instructional materials; planning and teaching lessons for analysis and criticism. Required for all candidates for certification. Instrumental, two-term sequence, McManus; choral-general elementary, 1 term, Nye; choral-general secondary, 1 term, Whitfield.

MuE 409. **Practicum.** Hours to be arranged.

Gustafson, coordinator.

MuE 418. **Colloquium in School Music.** 3 hours.

An analysis of the interrelationships among the various areas of the field of music, to be taken in the last term of the senior year. Whitfield, staff.

MuE 426. **The General Music Program: Elementary.** 3 hours.

Musical development of children from nursery school through elementary school; curriculum, methods, materials, and evaluation. Nye.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

MuE 407. **Seminar.** (G) Hours to be arranged.

MuE 427. **The General Music Program: Secondary.** (G) 3 hours.

Objectives, procedures, instructional materials, and evaluation of music programs for the general student in both junior and senior high schools. Whitfield.

MuE 444. **Choral Materials for Schools.** (G) 2 hours.

Repertoire for choral groups in secondary schools; review of choral music from early historical periods to the *avant-garde*; development of criteria for selection of choral music; instructional program and concert planning. 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. Hladky.

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, and organization. Prerequisite: consent of instructor. Cunningham, Lee, Vagner.

MuE 447. **Psychology of Music.** (G) 3 hours.

Functions of the musical mind; knowledge and intellectual skills related to mature musical perception; implications for the teaching of music. Prerequisite: EPsy 326 or equivalent. Wilson.

MuE 491. **Advanced Pedagogy.** (G) 3 hours any term (9 hours maximum credit).

Sections in areas such as: brass, college music education courses, composition, musicianship, percussion, piano, stringed instruments, voice, woodwinds.

GRADUATE COURSES

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

Prerequisite: consent of dean.

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

MuE 505. **Reading and Conference.** Hours to be arranged.

Prerequisite: consent of dean.

MuE 507. **Seminar.** Hours to be arranged.

Concept Development and Curricular Planning. Martin.

Thesis Organization. Nye.

History of Music Education in the United States. Nye.

Music Education. Whitfield.

Band and Orchestra Conducting. Vagner.

New Trends in Music Education. McManus.

MuE 509. **Practicum.** Hours to be arranged.

Gustafson, coordinator.

MuE 532. **Basic Concepts in the Teaching of Music.** 3 hours.

Principles and issues in the teaching of school music; recent history of con-

* No-grade course.

cepts basic to music education today; views of music education from other disciplines; implications of recent developments. Nye.

MuE 533. Music in the Elementary School. 3 hours.

Educational bases of vocal-music teaching in the elementary school. Nye.

MuE 534. Music in the Junior High School. 3 hours.

Current concerns and philosophies related to music in the junior high school and in the life of its students. Whitfield.

MuE 535. Music in the Senior High School. 3 hours.

Curricula, organization, methods, and materials in senior high-school music, both vocal and instrumental. McManus, Whitfield.

MuE 536. Administration of School Music. 3 hours.

Principles underlying a sound policy in the administration of school music programs; budgets, personnel, curriculum, facilities. Gustafson, McManus, Nye, Whitfield.

MuE 537. Comparative Music Pedagogy. 3 hours.

Comparative study of the teaching of school music in different cultures; critical judgment of curricula and methods. Cykler.

MuE 538. Curriculum Development in Music. 3 hours.

Application of curricular theory to the construction of courses of study in music; determination of objectives, content, and instructional materials; development of evaluative criteria. Whitfield.

School of Nursing

JEAN E. BOYLE, M.N., Director of the School of Nursing.

THE UNIVERSITY OF OREGON has offered professional courses in nursing in Portland since 1919. The first course of study was in Public Health Nursing and was administered through the Portland Division of the School of Sociology and the Portland School of Social Work. In 1926 the University introduced the nursing curriculum leading to a bachelor's degree. As part of the reorganization of the State System of Higher Education in 1932, the Portland School of Social Work was discontinued and the program in nursing was transferred to the University of Oregon Medical School and established in a Department of Nursing Education. A graduate program, leading to a 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 a curriculum leading to the Bachelor of Science degree. It is designed for two types of students, those with no previous preparation in nursing and those who are graduates of hospital or community-college schools of nursing. The curriculum includes preparation in public health nursing.

The School of Nursing also offers an advanced curriculum leading to the Master of Science degree in nursing education with a major in medical and surgical nursing. This program is planned to prepare nurses for faculty positions.

The freshman year of the baccalaureate program is offered on the Eugene campus of the University of Oregon (see page 227) and by other accredited colleges and universities. The remainder of the program, as well as the master's degree program, is offered at the University of Oregon School of Nursing located on the Medical School campus in Portland. Professional study is offered throughout the curriculum, with greater concentration during the junior and senior years. The School of Nursing utilizes the hospitals and clinics of the Medical School. In addition, the following off-campus facilities are used: selected health departments; the Visiting Nurse Association; Dammasch State Hospital, Wilsonville; Physicians and Surgeons Hospital, Portland; Veterans Administration Hospital, Portland; St. Vincent Hospital, Portland; Portland State College; the Portland Continuation Center of the Division of Continuing Education of the Oregon State System of Higher Education.

The curricula in nursing meet University standards and requirements. The School of Nursing is a member of the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing; its baccalaureate program is accredited by the National Nursing Accrediting Service and the Oregon State Board of Nursing. The baccalaureate program is approved for preparation for public health 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 97201.

Department of Military Science and Aerospace Studies

WILLIAM E. BURR II, M.A., Colonel, U.S. Army; Head of Department; In Charge of Army R.O.T.C. Program.

JOSEPH K. BYRNE, J.D., Colonel, U.S. Air Force; In Charge of Air Force R.O.T.C. Program.

THE DEPARTMENT OF MILITARY SCIENCE AND AEROSPACE STUDIES is organized as a regular instructional division of the University. The department includes 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 aerospace studies.

The mission of the department is to select and prepare students to serve as commissioned officers in the United States Army and the United States Air Force, and to promote understanding of problems and policies of national security. The instruction includes a two-year lower-division program and a two-year upper-division program.

Lower-Division Program. The lower-division program is elective for men students who are under 23 years of age on first enrollment in the University, who are citizens of the United States, and who meet prescribed physical standards. 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 consult the department concerning eligibility for advanced standing.

Upper-Division Program. The upper-division program includes two years of instruction on the University campus, plus a summer training period. Completion of the upper-division program and academic requirements for a bachelor's degree qualifies the student for appointment as a commissioned reserve officer.

The summer training period, normally in the summer between the student's junior and senior years, is conducted at one of the regular installations of the Army or Air Force. It provides application of theory and familiarization with weapons, operations, organizational methods, and installational activities.

Students enrolled in the upper-division program receive retainer pay for a total period of not to exceed twenty months (the current rate is \$50 a month). Students are issued all required textbooks and uniforms. During the summer training period, students are rationed and quartered, are paid at the rate for service academy cadets, and receive a travel allowance of 6 cents a mile to and from the training installation.

Admission to Upper-Division Program. To be admitted to the upper-division program, a student must have completed either (1) the lower-division program offered by the University or (2) a six-week field training course at an Army or Air Force installation during the summer between his sophomore and junior years. Other qualifications for eligibility are as follows:

- (1) Acceptance by the University of Oregon as a regularly enrolled student.
- (2) Selection for advanced training by R.O.T.C. and University officials, with the concurrence of the President of the University of Oregon.
- (3) Ability 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) Successful completion of such survey or general screening tests as may be prescribed.
- (5) United States citizenship.
- (6) Physical qualification for appointment as a commissioned officer.
- (7) Execution of a written agreement with the United States government to complete the two-year upper-division program, including attendance at the summer training period, and to satisfy the service obligation after graduation.

Relation of R.O.T.C. to Selective Service. Enrollment in the R.O.T.C. program does not waive the requirement 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 accepted for enrollment in the lower-division program may be granted draft deferment. Students enrolled in the upper-division program are enlisted in the armed services reserves until completion of the program. Upper-division students receiving R.O.T.C. deferment are required to satisfy their service obligations as commissioned officers after graduation and appointment.

Scholarships. The Army and Air Force R.O.T.C. annually award scholarships, providing full tuition, book allowance, and incidental fees, to well-qualified students enrolled in the program of the Department of Military Science and Aerospace Studies. Scholarship recipients also receive a monthly subsistence allowance of \$50.

Military Science

Professor: COLONEL W. E. BURR.

Assistant Professors: CAPTAIN P. J. CONWAY, CAPTAIN J. L. LAMBERT, CAPTAIN N. E. SOWELL.

Administrative Specialist: SERGEANT MAJOR R. L. GATTMAN.

Technical Specialists: SFC D. L. DENNY, SSG O. A. POTTER.

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 lower-division program, 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 upper-division program, 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 121, 122, 123. **Military Science I.** 1 hour each term.

Organization of the Army and the Army R.O.T.C.; United States Army and national security; leadership laboratory.

Mil 221, 222, 223. **Military Science II.** 1 hour each term.

Map and aerial photograph reading; American military history; introduction to basic tactics and techniques; leadership laboratory.

UPPER-DIVISION COURSES

Mil 321, 322, 323. **Military Science III.** 3 hours each term.

Leadership; military teaching principles; branches of the Army; small-unit tactics and communications; precamp orientation; leadership laboratory.

Mil 411, 412, 413. **Military Science IV.** 3 hours each term.

Operations; logistics; Army administration; military law; the role of the United States in world affairs; service orientation; leadership laboratory.

Aerospace Studies

Professor: COLONEL J. K. BYRNE.

Assistant Professors: CAPTAIN J. R. BALLOU, MAJOR R. T. GOLLY, CAPTAIN N. W. KIRINCICH.

Administrative Specialists: STAFF SERGEANT M. J. COMEAU, STAFF SERGEANT J. J. DELAHUNT, TECHNICAL SERGEANT E. H. ROBLES.

THE AEROSPACE STUDIES CURRICULUM is designed to provide education that will develop skills and attitudes vital to the career of the professional Air Force officer, and to qualify college men for commissions in the United States Air Force. It includes two major activities, University and aerospace instruction and leadership laboratory.

Students qualify for appointment as commissioned reserve officers upon completion of the upper-division program and the award of the baccalaureate degree. Students designated as distinguished military graduates may apply for commissions in the regular Air Force.

Flight Training. The Air Force offers a flight instruction program to senior cadets who will enter pilot training after commissioning. The flight training, conducted at a local F.A.A.-approved civilian flying school, provides flight instruction of sufficient scope to qualify the student in the basic principles of flying in aircraft of 65-200 horsepower. Students who successfully complete the flight instruction program may qualify for a private pilot's license.

LOWER-DIVISION COURSES

AS 121, 122, 123. **Aerospace Studies I.** 1 hour each term.

Study of U. S. Air Force, strategic offense forces, strategic defense forces, general-purpose forces, and aerospace support forces. Corps training provides practical leadership experience in basic military and officer-type activities.

AS 221, 222, 223. **Aerospace Studies II.** 1 hour each term.

Study of Department of Defense, military in United States national policies, general and limited war, Soviet and Chinese strategies and policies, alliances, and defense policy. Corps training provides practical leadership experience in basic military and officer-type activities.

UPPER-DIVISION COURSES

AS 321, 322, 323. **Aerospace Studies III.** 3 hours each term.

Development of airpower in the United States, aerospace power today, astronautics and space operations, and probable future developments in manned aircraft and space operations. Corps training provides varied advanced leadership experiences.

AS 405. Reading and Conference. Hours to be arranged.

Supervised individual studies, covering portions of the material of AS 311, 312, 313 and AS 411, 412, 413. Total credit earned in these sequences and in AS 405 may not exceed 18 hours. Prerequisite: consent of instructor.

AS 411, 412, 413. Aerospace Studies IV. 3 hours each term.

Study of Air Force leadership at the junior-officer level, including theoretical, professional and legal aspects; study of military management functions, principles, and techniques. Corps training provides varied advanced leadership experiences.

Continuing Education

THE CONTINUING EDUCATION program is primarily an extension of University resources to persons not regularly enrolled as students on campus. This program includes courses offered for credit or no credit, or conferences, cultural offerings, and special educational service projects.

University continuing education programs reach many communities in Oregon and are developed to meet varying needs. They are designed to help people learn to do their jobs well, to lead useful lives, and to make good use of leisure time.

Special educational programs are also provided in other areas of the state by means of correspondence study and educational broadcasts.

Detailed information may be obtained from the University of Oregon office of the Division of Continuing Education, Education Annex, University of Oregon, Eugene, Oregon 97403.

Summer Session

PAUL B. JACOBSON, Ph.D., Dean of Summer Session.

THOMAS DAHLE, Ph.D., Associate Director.

PAUL E. KAMBLY, Ph.D., Associate Director.

THE UNIVERSITY'S summer session is designed to meet the educational needs of a broad range of people. The program is arranged to include a wide variety of courses offered within convenient time periods, and includes the following categories of course work:

Eleven-Week Session. Courses offered in the eleven-week session are primarily for undergraduates who wish to accelerate their progress toward a degree. Sixteen or more term hours of credit may be earned during this session. In some departments, a three-term sequence may be taken by students wishing to complete a full year's work in one subject during the eleven-week session.

Eight-Week Session. Courses offered in the eight-week session are designed for both undergraduate and graduate students. Students may normally earn 12 or 13 term hours of credit in this session.

Special Courses. Workshops, institutes, conferences, and seminars of varying length and starting at various times are offered throughout the summer session.

Formal admission to the University is not required for enrollment in the summer session, but a *registration request card* must be filed with the Registrar's Office before official registration procedures can be started. A *registration request* card is included with each Summer Session Catalog. The summer student who wishes to become a candidate for a degree from the University or intends to continue his studies in the fall, winter, or spring term is encouraged to complete regular University admissions procedures. As early as possible before the opening of the summer session, such a student should send to the Director of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) official transcripts of all high-school and college records.

A resident of Oregon who is unable to qualify for fall-term admission on the basis of his high-school record or College Entrance Examination Board test score, may qualify for admission by doing acceptable work during summer session. Those students seeking to qualify for fall-term admission may choose between registering in a 9 term-hour structured program or a 12 term-hour unstructured program of elective course work. The 9 term-hour structured program must include 3 hours of writing and any 6-hour combination of humanities, social science, or science. In either the structured program or the unstructured program, students are required to earn a 2.00 grade-point average to qualify for fall-term admission.

Prefreshman students are urged to write the Office of Admissions for more information before the beginning of the summer session. The prefreshman program is no longer available to out-of-state student.

Further information about the summer session may be obtained from the Summer Session Catalog, published annually in February, or by writing the Director of Summer Session, Room 130, Education Building, University of Oregon, Eugene, Ore. 97403.

Summary of Enrollment and Degrees Granted 1969-70

ENROLLMENT BY CLASS AND MAJOR, REGULAR SESSIONS, 1969-70

Division	Sp	Fr	So	Jr	Sr	Gr	Total
College of Liberal Arts:							
Lower Division	290	985	849	0	0	0	2,124
Anthropology	1	8	26	42	43	99	219
Asian Studies	0	2	2	2	7	1	14
Biology	2	21	32	55	105	143	358
Chemistry	0	15	17	19	26	106	183
Classics & Chinese & Japanese	1	0	1	3	4	9	18
Comparative Literature	1	0	0	0	0	37	38
Economics	4	9	9	34	70	87	213
English	5	53	75	159	220	289	801
General Arts & Letters	0	9	16	16	15	0	56
General Science	1	8	4	19	69	6	107
General Social Science	4	22	36	78	177	8	325
Geography	0	1	3	11	18	47	80
Geology	0	4	7	14	17	31	73
German & Russian	1	2	12	14	28	58	115
History	4	32	36	62	96	111	341
Linguistics	0	2	0	1	1	0	4
Mathematics	1	33	37	67	105	185	428
Philosophy	1	6	7	17	17	39	87
Physics	1	9	10	23	23	102	168
Political Science	6	41	110	152	208	130	647
Predentistry	0	41	39	23	16	1	120
Prelaw	3	70	56	43	18	7	197
Premedical Technology	1	7	7	16	7	0	38
Premedicine	5	106	100	49	48	2	310
Prenursing	3	50	19	5	2	2	81
Psychology	6	41	71	145	158	118	539
Romance Languages	0	37	22	41	59	71	230
Sociology	19	43	62	110	191	108	533
Speech	5	37	35	59	79	143	358
College of Liberal Arts	365	1,694	1,700	1,279	1,827	1,940	8,805
School of Architecture & Allied Arts	16	260	303	296	454	254	1,583
College of Business Administration	35	207	232	363	446	321	1,604
School of Community Service & Public Affairs	8	41	76	132	150	5	412
College of Education	56	164	234	281	311	904	1,950
School of Health, Physical Education & Recreation	16	94	122	153	199	241	825
School of Journalism	5	81	116	125	153	71	551
School of Law	2	0	0	0	5	279	286
School of Librarianship	1	2	0	1	0	139	143
School of Music	8	64	38	49	69	115	343
Interdisciplinary Studies	2	0	0	0	0	241	243
Unclassified	3	1	1	305	31	254	595
Total Eugene Campus	517	2,608	2,822	2,984	3,645	4,764	17,340
Dental School (Portland)							*425
Medical School (with Nursing; Portland)							*963
Total University of Oregon							18,728

* Enrollment total for the academic year, all sessions.

ENROLLMENT AND DEGREES

ENROLLMENT BY PROFESSIONAL OBJECTIVE, EUGENE CAMPUS,
REGULAR SESSIONS, 1969-70

Field	Men	Women	Total
Liberal Arts & general	5,975	3,668	9,643
Architecture & Allied Arts	1,002	581	1,583
Business Administration	1,445	159	1,604
Community Service & Public Affairs	147	265	412
Education	674	1,276	1,950
Health, Physical Education & Recreation	447	378	825
Journalism	349	202	551
Law	272	14	286
Librarianship	36	107	143
Music	174	169	343
Total	10,521	6,819	17,340

ENROLLMENT BY SEX, ALL SESSIONS, 1969-70

Session	Men	Women	Total
Summer session at Eugene 1969	4,566	3,367	7,933
Fall term at Eugene 1969-70	9,297	5,969	15,266
Winter term at Eugene 1969-70	9,054	5,736	14,790
Spring term at Eugene 1969-70	8,872	5,580	14,452
Net total, regular sessions at Eugene 1969-70	10,521	6,819	17,340
Net added total, all sessions in Portland 1969-70	775	586	1,361
Net total, all sessions U.O. 1969-70	13,739	9,466	23,205

SUMMARY OF DEGREES GRANTED, 1969-70

Degree	Men	Women	Total
Advanced Degrees:			
Doctor of Philosophy	191	31	222
Doctor of Arts	15	4	19
Doctor of Business Administration	8	0	8
Doctor of Musical Arts	3	0	3
Doctor of Dental Medicine	78	0	78
Doctor of Education	35	5	40
Doctor of Jurisprudence	50	4	54
Doctor of Medicine	74	6	80
Master of Arts	241	159	400
Master of Science	313	133	446
Master of Architecture	3	0	3
Master of Landscape Architecture	2	0	2
Master of Business Administration	90	3	93
Master of Education	107	112	219
Master of Fine Arts	38	8	46
Master of Library Science	17	67	84
Master of Music	13	18	31
Master of Urban Planning	6	0	6
Total Advanced Degrees	1,284	550	1,834
Bachelor's Degrees:			
Bachelor of Arts	327	498	825
Bachelor of Science	834	655	1,489
Bachelor of Architecture	62	2	64
Bachelor of Interior Architecture	2	1	3
Bachelor of Business Administration	143	15	158
Bachelor of Education	1	10	11
Bachelor of Fine Arts	1	1	2
Bachelor of Landscape Architecture	11	1	12
Bachelor of Music	13	16	29
Total Bachelor's Degrees	1,394	1,199	2,593
Total degrees	2,678	1,749	4,427

Index

Academic Regulations, 87
 Accounting, 320, 344
 Admission, 87
 Admission, Graduate, 115
 Admission, Special Students, 89
 Admission, Transfer Students, 88
 Advanced Placement Program, 88, 137
 Advertising, 421
 Advising, 95
 Aerospace Studies, 457
 Anthropology, 142
 Architecture, 290
 Architecture and Allied Arts,
 School of, 288
 Art, 301
 Art Education, 312
 Art History, 148, 310
 Arts and Letters, General, 149, 188
 Asian Studies, 148
 Astronomy, 234
 Audiology, 281
 Auditors, 101

 Bachelor's Degree, Requirements, 93
 Biology, 149
 Broadcast Communication, 278, 423
 Business Administration, 316
 Business and Construction, 291, 328
 Business and Economic Research,
 Bureau of, 130
 Business Education, 336, 342

 Calendar, 8
 Camping and Outdoor Education, 396
 Campuses, 79
 Ceramics, 306
 Chemistry, 157
 Chinese, 139, 168
 Classics, 164
 College Teaching, Institute for, 134
 Communication Research, 424
 Community Art Studies, Institute for, 315
 Community Service and Public Affairs,
 School of, 353
 Community Studies, Institute for, 129
 Comparative Literature, 141, 169
 Computer Science, 170
 Computing Center, 128
 Continuing Education, 459
 Cooperative Houses, 107
 Counseling Center, 105
 Counseling, 366
 Course Numbering System, 96
 Credit by Examination, 97
 Curriculum and Instruction, 368
 Curriculum and Supervision, 377

 Dance, 397, 404
 DeBusk Memorial Center, 366
 Degrees, 90, 114
 Degrees, Application for, 93
 Degrees Granted, 1969-70, 461
 Dental Hygiene, 362, 406
 Dental School, 126, 172, 362
 Dentistry, Preparatory, 172
 Deposits, 98, 107, 118
 Disadvantaged Youth, 378
 Doctor's Degree, Requirements, 122
 Dormitories, 106
 Drama, 284

Economics, 173
 Education, College of, 349
 Educational Administration, 378
 Educational Administration, Center for the
 Advanced Study of, 130
 Educational Foundations, 382
 Educational Psychology, 384
 Educational Research, Bureau of, 365
 Elementary Education, 370
 English, 178
 English, Written Requirement, 91, 185
 Enrollment, 1969-70, 461
 Erb Memorial Union, 115
 Exceptional Children, Education of, 375
 Examinations, Entrance, 90

 Faculty, 11
 Family Studies, E. C. Brown Center for, 361
 Fees, 98
 Fees, Music, 425
 Fellowships, 125
 Financial Aid, 110
 Film and Photography, 306, 424
 Finance and Business Environment, 323, 346
 Fine Arts, 301
 Foreign Students, 105
 Forest Industries Management Center, 317
 Fraternities, 107
 French, 260

 Geography, 189
 Geology, 194
 German, 139, 198
 Gerontology, Oregon Center for, 386
 Governmental Research and Service,
 Bureau of, 360
 Grading System, 96
 Graduate School, 114
 Grants, 113
 Graphic Design, 305
 Greek, 165
 Group Requirement, 93

 Health, Physical Education, and Recreation,
 School of, 392
 Health Education, 406
 Health Education Requirement, 91
 Higher Education, 387
 History, 207
 Home Economics, 213
 Honors, 94, 132
 Honors College, 132, 139
 Housing, Campus, 105
 Housing, Off-Campus, 108
 Housing for Married Students, 107

 Independent Study, Honors College, 136
 Industrial and Labor Relations,
 Institute of, 130, 215
 Insurance, 328, 348
 Interdisciplinary Studies, 120
 Interior Architecture, 294
 International Business, 329, 341
 International Studies and Overseas
 Administration, Institute of, 129
 Italian, 141, 262

 Japanese, 139, 168
 Jewelry and Metalsmithing, 307
 Journalism, School of, 414

- Labor Relations, 130, 215
 Landscape Architecture, 296
 Latin, 166
 Latin American Studies, 216
 Law, School of, 426
 Liberal Arts, College of, 138
 Librarianship, School of, 434
 Libraries, 80
 Library, Curriculum, 370
 Library, Law, 426
 Library, Use of, 436
 Library Fines, 83
 Linguistics, 217
 Loans, 111

 Magazine Journalism, 416
 Management, 333, 351
 Marine Biology, Institute of, 131, 151
 Marketing, Insurance, and
 Transportation, 327, 348
 Married Students, Housing, 107
 Master's Degree, Requirements, 119
 Mathematics, 218
 Medical School, 126, 227, 439
 Medical Technology, 226, 439
 Medicine, Preparatory, 227
 Military Science and Aerospace
 Studies, 455
 Molecular Biology, Institute of, 127
 Museum of Art, 84
 Museum, Miniature Wagon, 85
 Museum of Natural History, 84
 Music, School of, 440
 Music Education, 443, 451

 New Student Week, 105
 Newspaper Management, 420
 Nonresident Students, 89, 101, 104
 Northwest VISTA Training Center, 361
 Norwegian, 206
 Nursing, Preparatory, 227
 Nursing, School of, 126, 227, 454

 Office Administration, 336
 Oregon Center for Gerontology, 386
 Oregon Project NewGate, 361
 Oregon State System of
 Higher Education, 5

 Painting, 302
 Paleontology, 196
 Park Management, 409
 Personnel and Industrial
 Management, 333, 351
 Pharmacy, Preparatory, 228
 Philosophy, 229
 Photography, 424
 Physical Education, 396
 Physical Education Requirement, 91
 Physical Examination, 110
 Physical Therapy, 397
 Physics, 233
 Placement Service, 105
 Political Science, 237
 Portuguese, 263
 Printmaking, 302
 Psychology, 246
 Psychology, Educational, 384

 Public Relations, 421
 Publications, Official, 85

 Quantitative Methods, 320, 344

 Radio-Television Journalism, 278, 423
 Reading and Language Arts, 376
 Reading-Study Skills Center, 105
 Real Estate, 328, 348
 Recreation and Park Management, 409
 Recreation Research and Service,
 Institute of, 394
 Registration Procedure, 95
 Religious Studies, 255
 Remedial Education, 376
 Research, 126
 Rhetoric and Public Address, 275
 Romance Languages, 257
 Romance Philology, 266
 Russian, 140, 204

 Scandinavian, 140, 206
 Scholarship Regulations, 98
 Scholarships, 111
 Science, General, 141, 188
 Sculpture, 304
 Secondary Education, 373
 Secretarial Science, 336
 Slavic, 206
 Social Science, General, 142, 189
 Sociology, 266
 Sororities, 107
 Spanish, 263
 Special Education, 388
 Speech, 274
 Speech and Hearing Center, 105
 Speech Pathology and Audiology, 281
 Sports, Intramural, 393
 Student Administrative Services, 104
 Student Employment, 110
 Student Expenses, 108
 Student Health Center, 109
 Student Life and Welfare, 104
 Student Living, 106
 Student Personnel Services, 104
 Student Union, 113
 Summer Session, 460
 Swedish, 206

 Teachers, Graduate Program for, 120
 Television Broadcasting, 278
 Theater, 284
 Theoretical Science, Institute of, 127
 Transportation, 328, 348
 Tuition, 98

 University, History of, 78
 University, Income, 79
 University of Oregon Development Fund, 79
 Urban Planning, 298

 Visual Communication, 424
 Volcanology, Center for, 195

 Weaving, 308
 Writing, 185

 Youth Agencies, 397