



GENERAL
EXTENSION
DIVISION
BULLETIN

**Portland Extension Center
Evening Classes**

Portland, Oregon

CATALOG
I S S U E
1955-56

GENERAL EXTENSION
DIVISION

BULLETIN

Portland Extension Center Evening Classes

University of Oregon
Oregon State College
Oregon Colleges of Education
Portland State College

ANNOUNCEMENTS 1955-56

1620 S.W. Park Avenue
Portland 1, Oregon
Telephone CAPITOL 4251

General Extension Division
BULLETIN

EUGENE SERIES NO. 35

MAY 1955

Entered as second-class matter August 25, 1950 at the Post Office at Eugene, Oregon, under act of August 24, 1912. Published four times a year, in April, May, on July 10 and July 20, by the Oregon State Board of Higher Education, Eugene, Oregon.

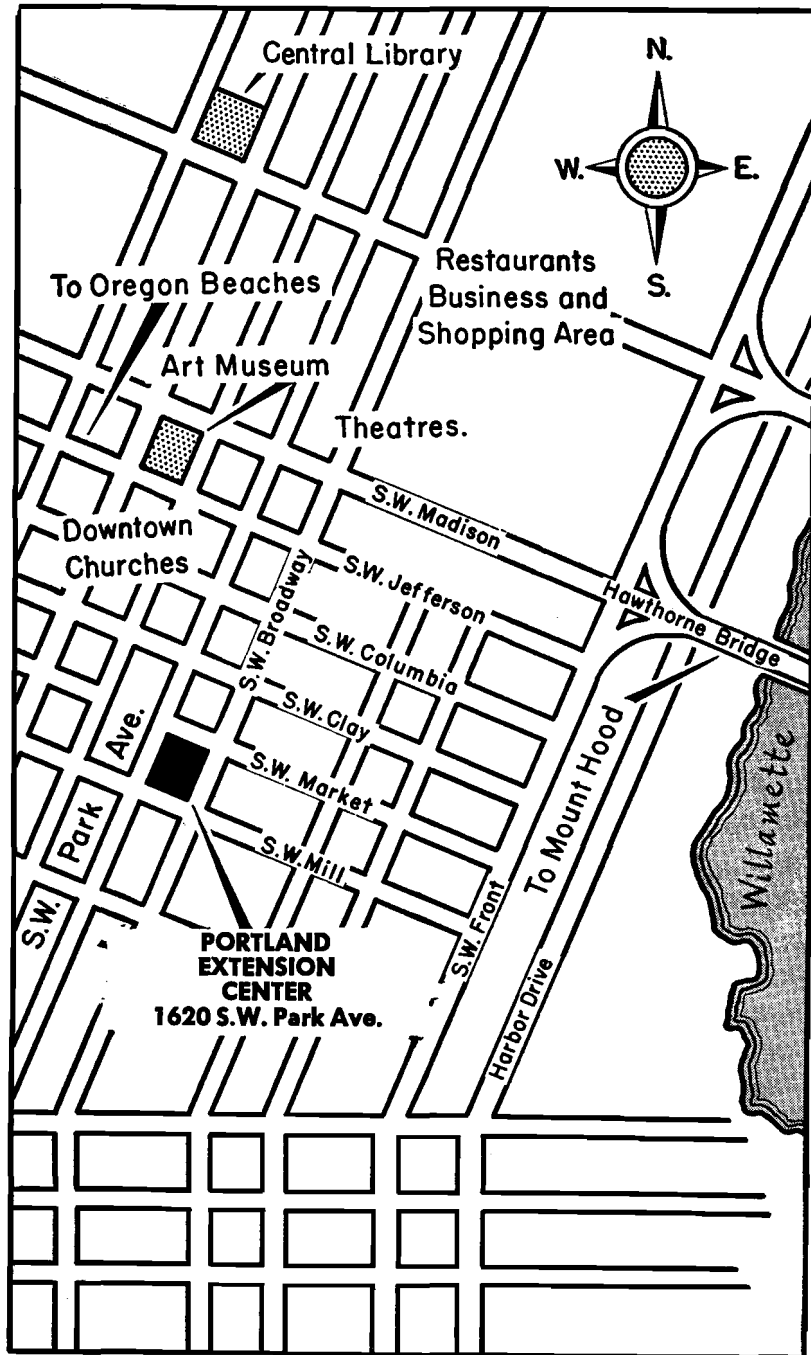


Table of Contents

	Page
OREGON STATE SYSTEM OF HIGHER EDUCATION.....	4
STATE BOARD OF HIGHER EDUCATION.....	5
ACADEMIC CALENDAR.....	6
OFFICERS OF ADMINISTRATION.....	8
FACULTY.....	8
GENERAL INFORMATION.....	20
Fee Schedule.....	21
Academic Regulations.....	21
Facilities and Activities.....	23
Veterans.....	23
PROGRAMS OF STUDY.....	24
Advanced Degree Programs.....	24
Teacher Programs.....	26
Cooperative Programs.....	26
OTHER GENERAL EXTENSION DIVISION SERVICES.....	28
DESCRIPTION OF COURSES.....	29
GENERAL EXTENSION DIVISION.....	67
OREGON STATE SYSTEM OF HIGHER EDUCATION.....	68
OFFICERS OF ADMINISTRATION.....	69
INDEX.....	71

Oregon State System of Higher Education

The Oregon State System of Higher Education, as organized in 1932 by the State Board of Higher Education following a survey of higher education in Oregon by the U. S. Office of Education, includes all the state-supported institutions of higher education. The several institutions are elements in 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 College at Corvallis, Portland State College at Portland, Oregon College of Education at Monmouth, Southern Oregon College of Education at Ashland, and Eastern Oregon College of Education at La Grande. The Medical School and the Dental School are located in Portland.

Each of the institutions provides the general studies fundamental to a well-rounded education. At the three colleges of education, students who do not plan to become teachers may devote their time to general studies or preprofessional work, or, at Southern Oregon and Eastern Oregon colleges of education, to approved lower-division programs in certain semi-professional fields.

At the University and the State College two years of unspecialized work in liberal arts and sciences are provided on a parallel basis in the lower-division. Major curricula, both liberal and professional, are grouped on either campus in accordance with the distinctive functions of the respective institutions in the unified State System of Higher Education.

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 Information, Board of Higher Education, Eugene, Oregon.

State Board of Higher Education*

	Term Expires
A. S. GRANT, Baker.....	1956
CHERYL S. MACNAUGHTON, Portland.....	1957
§BERNARD MAINWARING, Salem.....	1957
HERMAN OLIVER, John Day.....	1958
LEIF S. FINSETH, Dallas.....	1958
R. E. KLEINSORGE, Silverton.....	1959
WILLIAM E. WALSH, Coos Bay.....	1959
HENRY F. CABELL, Portland.....	1960
CHARLES R. HOLLOWAY, JR., Portland.....	1961

Officers

R. E. KLEINSORGE.....President
HENRY F. CABELL.....Vice-President

†CHARLES D. BYRNE, Ed.D., Chancellor

‡JOHN R. RICHARDS, Ph.D., Secretary of Board

Office of the State Board of Higher Education
Eugene, Oregon

* Board members are appointed to six-year terms by the Governor of Oregon with confirmation by the State Senate.
† Resignation as Chancellor effective June 30, 1955.
‡ Appointment as Chancellor effective July 1, 1955.
§ Appointed May 9, 1955, to fill unexpired term of G. F. Chambers, resigned.

Academic Calendar

September 1955

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

October 1955

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

November 1955

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

December 1955

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

January 1956

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

February 1956

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		

Fall Quarter 1955

*Evening class counseling.....	September 12-October 1
Registration	September 12-October 1
Classes begin.....	September 26-October 1
Late fee begins.....	October 3
Last day to register or add a course.....	October 8
Last day to drop a course without penalty.....	November 5
Thanksgiving vacation.....	November 24-27
Final examinations.....	December 12-17
Term ends.....	December 17

Winter Quarter 1956

Registration	January 3-9
Classes begin.....	January 3-9
Late fee begins.....	January 10
Last day to register or add a course.....	January 16
Last day to drop a course without penalty.....	February 13
Final examinations.....	March 12-17
Term ends.....	March 17

Portland Extension Center

Spring Quarter 1956

Registration	March 26-31
Classes begin	March 26-31
Late fee begins.....	April 2
Last day to register or add a course.....	April 7
Last day to drop a course without penalty.....	May 5
Memorial Day.....	May 30
Final examinations.....	June 4-9
Term ends.....	June 9

Summer Session 1956

Registration	June 18
Classes begin.....	June 19
Holiday—Independence Day.....	July 4
Final examinations.....	August 9-10
Term ends.....	August 10

March 1956

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 1956

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

May 1956

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 1956

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 1956

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 1956

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

* Counseling: September 12-24—9:00 a.m.-4:30 p.m. daily except Saturdays when the hours are 9:00-11:30 a.m. September 26-October 1—9:00 a.m.-8:30 p.m. daily except Saturdays when the hours are 9:00-11:30 a.m.

Portland Extension Center

Officers of Administration

- *CHARLES D. BYRNE, Ed.D., Chancellor, Oregon State System of Higher Education.
†JOHN R. RICHARDS, Ph.D., Vice-Chancellor, Oregon State System of Higher Education.
PHILIP G. HOFFMAN, Ph.D., Dean, General Extension Division.
‡JAMES C. CAUGHLAN, Ph.D., Assistant Dean, General Extension Division; Director, Portland Center.
CLARK P. SPURLOCK, D.Ed., Acting Director, Portland Center.

- JEAN PHYLLIS BLACK, Ph.D., Librarian, General Extension Division.
MARIE E. BROWN, Secretary to Director.
LESTER EGLESTON, Superintendent of Buildings and Maintenance.
HOWARD IMPECOVEN, Ed.D., Registrar, General Extension Division.
DONALD R. LARSON, B.A., Director, Information Services, General Extension Division.
W. T. LEMMAN, JR., B.S., Assistant Business Manager, General Extension Division.
LESLIE B. NEWHOUSE, M.B.A., Business Manager, General Extension Division.
HELEN R. WILDERMAN, B.A., Assistant Registrar, General Extension Division.

Faculty

- MARIAN C. AIKIN, M.Sc., Assistant Professor of Family Life and Home Administration, Oregon State College.
B.Sc. (1939), University of Nebraska; M.Sc. (1943), Iowa State College.
MARJORIE ALBERTSON, M.M., Assistant Professor of Music, General Extension Division and Portland State College.
B.M. (1929), M.M. (1941), University of Idaho.
E. DEAN ANDERSON, D.Ed., Assistant Professor of Education, Portland Extension Center and Portland State College.
B.A. (1936), Reed; M.A. (1941), Oregon; D.Ed. (1954), Oregon State College.
GEORGE BABILOT, M.A., Instructor in Economics, University of Oregon.
A.B. (1950), Hastings College; M.A., (1952), University of Nebraska.

* Resignation as Chancellor effective June 30, 1955.
† Appointment as Chancellor effective July 1, 1955.
‡ On sabbatical leave Oct. 1, 1955 to June 30, 1956.

- WESLEY C. BALLAINE, Ph.D., Professor of Business Administration, University of Oregon.
A.B. (1927), M.B.A. (1931), Washington; Ph.D. (1940), Chicago.
ROBERT W. BERGSTROM, Ed.D., Professor of Physical Education, Oregon State College.
B.S. (1937), Oregon State College; M.A. (1942), Ed.D. (1947), Columbia.
HAROLD WRIGHT BERNARD, Ph.D., Associate Professor of Education, Portland Extension Center and General Extension Division.
A.B. (1930), Spokane University; M.A. (1933), Stanford; Ph.D. (1938), Northwestern.
FRANCIS W. BITTNER, M.A., Assistant Professor of Piano, University of Oregon.
B.Mus. (1936), Cincinnati Conservatory of Music; M.A. (1943), New York University.
JEAN PHYLLIS BLACK, Ph.D., Librarian; Associate Professor of History, General Extension Division.
B.A. (1924), Mount Holyoke; M.A. (1925), Ph.D. (1928), Michigan; B.S. in L.S. (1932), Washington.
ROBERT W. BLAKELEY, M.S., Instructor; Speech Clinician, Portland Extension Center and General Extension Division.
B.A. (1951), University of California, Santa Barbara College; M.S. (1952), Oregon.
W. ARTHUR BOGGS, Ph.D., Assistant Professor of English, Portland Extension Center and Portland State College.
B.A. (1939), M.A. (1941), University of Southern California; Ph.D. (1950), University of California.
ARTHUR GEORGE BRISTOW BOUQUET, M.S., Professor Emeritus of Horticulture, Oregon State College.
B.S. (1906), Oregon State College; M.S. (1930), Cornell.
WILLIAM J. BOWERMAN, M.S., Assistant Professor of Physical Education; Assistant Director of Athletics; Head Track Coach, University of Oregon.
B.S. (1933), M.S. (1951), University of Oregon.
RALPH L. BOYD, Ph.D., C.P.A., Professor of Business Administration, Oregon State College.
B.Ed. (1930), Illinois State Normal; M.S. (1932), Ph.D. (1942), Illinois; C.P.A. (1933) Illinois, (1945) Ohio.
ROBERT BOYD, Ph.D., Associate Professor of Psychology, University of Oregon.
B.A. (1938), Linfield College; M.A. (1941), University of Southern California; M.A. (1947), Ph.D. (1953), Michigan.
DAVID S. BRODY, Ph.D., Associate Professor of Psychology; Director of Child Guidance Clinic, Oregon College of Education.
B.S. (1932), M.A. (1936), Ph.D. (1952), University of Minnesota.
CLARKE H. BROOKE, JR., M.A., Instructor in Geography and History, Portland Extension Center and Portland State College.
B.A. (1942), M.A. (1950), University of Washington.
HELEN B. BROWNE, Ph.D., Instructor in English, Portland State College.
B.A. (1924), Wilson College; M.A. (1929), Ph.D. (1939), Cornell.
KENNETH W. BUTLER, B.A., Reference and Audio-Visual Librarian, General Extension Division.
A.L.A. (1948), Leeds School Librarianship; B.A. (1953), University of Portland.
ROBERT CAMPBELL, Ph.D., Assistant Professor of Economics, University of Oregon.
A.B. (1947), Ph.D. (1952), California; B.S. (1950), U.S. Merchant Marine Academy.

- RONALD K. CAMPBELL, Ph.D., Professor of Business Administration, Oregon State College.
A.B. (1925), Illinois; M.B.A. (1928), Harvard; Ph.D. (1940), Stanford.
- *JAMES C. CAUGHLAN, Ph.D., Professor of Education, Portland Extension Center.
A.B. (1924), Willamette; M.A. (1942), Columbia; Ph.D. (1927), Yale.
- TRUMAN M. CHENEY, Ed.D., Assistant Professor of Education, Portland Extension Center and Portland State College.
B.A. (1931), Intermountain Union College; M.A. (1936), Montana State University; Ed.D. (1951), Oregon State College.
- LESLIE ALLISON CLAYTON, M.S., Associate Professor of Civil Engineering, Oregon State College.
B.S. (1941), M.S. (1949), Colorado.
- HOWARD R. CLISHAM, A.B., Instructor in Journalism, General Extension Division.
A.B. (1938), University of Georgia.
- †PERCY M. COLLIER, B.A., LL.B., Professor of English, Portland Extension Center.
B.A. (1911), Oregon; LL.B. (1914), Michigan.
- JAMES W. COOMBS, B.S., Assistant Professor of Physics, Portland Extension Center and Portland State College.
B.S. (1929), Oregon.
- MARTIN P. COOPEY, B.S., Professor of Civil Engineering, Oregon State College.
B.S. (1936), Oregon State College.
- WILLIAM R. CROOKS, Ph.D., Associate Professor of Psychology, Oregon State College.
A.B. (1937), California; M.A. (1939), Connecticut; Ph.D. (1952), Minnesota.
- JAMES R. CURTIN, Ph.D., Assistant Professor of Education; Supervisor of Teaching, Oregon College of Education.
B.S. (1946), State Teachers College, Milwaukee, Wisconsin; M.A. (1950), Ph.D. (1954), University of Iowa.
- CARL E. W. L. DAHLSTROM, Ph.D., Associate Professor of English, Portland Extension Center and Portland State College.
A.B. (1920), A.M. (1921), Ph.D. (1928), Michigan.
- JOHN O. DART, Ph.D., Assistant Professor of Geography, Portland Extension Center and Portland State College.
B.A. (1946), Central Washington; M.A. (1948), Ph.D. (1953), Washington.
- RALPH S. DAVIS, JR., B.S., Instructor in Physical Education, Portland Extension Center and Portland State College.
B.Sc. (1949), Oregon State College.
- DAVID D. DEWEESE, M.D., Clinical Professor of Otolaryngology, Rhinology, and Laryngology, University of Oregon Medical School.
A.B. (1934), M.D. (1938), Michigan.
- NAOMI S. DIETZ, M.A., Assistant Professor of Art Education, Portland Extension Center and Portland State College.
B.S. (1944), Whitworth College; M.A. (1953), Teachers College, Columbia.
- BROCK DIXON, M.A., Assistant Professor of Political Science, Portland Extension Center and Portland State College.
B.A. (1939), Pacific; M.A. (1949), Oregon.

* On sabbatical leave 1955-56.

† Retirement effective June 30, 1955.

- DAVID M. DOUGHERTY, Ph.D., Professor of Romance Languages; Head of Department of Foreign Languages, University of Oregon.
A.B. (1925), Delaware; A.M. (1927), Ph.D. (1932), Harvard.
- WILL DRUM, M.A., J.D., Assistant Professor of Social Work, Portland Extension Center and University of Oregon.
J.D. (1921), University of Goettingen; M.A. (1943), Washington.
- WILLIAM FREDERIC ENGESSER, M.S., Professor of Industrial Engineering, Oregon State College.
B.S. (in Ind. Engr.) (1941), M.S. (in Ind. Engr.) (1950), Northwestern.
- STEPHEN E. EPLER, Ph.D., Professor of Education, Portland Extension Center and Portland State College.
B.A. (1932), Cotner; M.A. (1933), Nebraska; Ph.D. (1943), Columbia.
- HOYT CATLIN FRANCHERE, Ph.D., Professor of English, Portland Extension Center and Portland State College.
A.B. (1928), M.A. (1931), Iowa; Ph.D. (1950), Washington.
- CHARLES FRANZ, A.M., Instructor in Anthropology and Sociology, Portland Extension Center and Portland State College.
B.A. (1950), Portland College; A.M. (1951), Haverford College.
- CHARLES J. GAUPP, JR., Ph.D., Assistant Professor of Speech, Portland Extension Center and Portland State College.
B.A. (1938), U.C.L.A.; M.A. (1939), Cornell; M.F.A. (1948), Ph.D. (1950), State University of Iowa.
- JESSE L. GILMORE, Ph.D., Instructor in History, Portland Extension Center and Portland State College.
B.A. (1942), Willamette University; M.A. (1948), Ph.D. (1952), University of California.
- ROBERT GOODMAN, Ph.D., Assistant Professor of Clinical Psychology, University of Oregon Medical School.
A.B. (1947), M.A. (1948), Ph.D. (1952), Washington University.
- THEODORE C. W. GRAMS, M.S. in L.S., Catalog Librarian, General Extension Division.
B.A. (1947), Washington; M.S. in L.S. (1951), University of Southern California.
- PHYLLIS E. GRANT, M.S., Assistant Professor of Clothing, Textiles and Related Arts, Oregon State College.
B.S. 1939, Minnesota; M.S. (1950), Oregon State College.
- MARGARET GREENSLADE, M.S., Assistant Professor in Health and Physical Education; Women's Adviser; Portland Extension Center and Portland State College.
B.S. (1945), M.S. (1952), Oregon.
- LUCILE GREGERSON, M.Ed., R.N., Associate Professor; Assistant Director in Charge of Teaching and Supervision Program, Department of Nursing Education, University of Oregon Medical School.
R.N. (1929), St. Joseph's Hospital School of Nursing, Sioux City, Iowa; B.S. (1944), Boston University; M.Ed. (1951), Oregon.
- MARKO L. HAGGARD, M.A., Instructor in Political Science, Portland State College.
B.A. (1947), M.A. (1948), University of Kansas.
- JAMES S. HART, Ph.D., Instructor in English, Portland Extension Center and Portland State College.
A.B. (1939), Amherst College; M.A. (1952), Oregon; Ph.D. (1954), Stanford University.

- PAULUS A. HEIST, M.A., Assistant Professor of Psychology, Oregon State College.
B.A. (1939); Luther College; M.Ed., (1947), Minnesota; M.A. (1948), Illinois.
- EMMA FRANCES HENKLE, M.A., Associate Professor of Education; Director of Reading Clinic, Oregon College of Education.
B.S. (1931), M.A. (1932), Teachers College, Columbia.
- GEORGE C. HOFFMANN, Ph.D., Associate Professor of History, Portland Extension Center and Portland State College.
B.A. (1939), M.A. (1940), Ph.D. (1951), Southern California.
- JOSEPH V. HOLLAND, M.Ed., Assistant Professor of Physical Education; Athletic Director; Portland Extension Center and Portland State College.
B.A. (1941), M.Ed. (1946), Willamette.
- RUTH E. HOPSON, Ph.D., Associate Professor of General Science, General Extension Division and Portland State College.
B.A. (1931), Oregon; M.A. (1935), Ph.D. (1946), Cornell.
- EVELYN E. HUDSON, M.S., Assistant Professor of Physical Education, Portland Extension Center and Portland State College.
B.S. (1947), M.S. (1948), Oregon.
- ERRETT E. HUMMEL, D.Ed., Associate Professor of Education, Portland Extension Center and Portland State College.
B.A. (1933), Pacific; M.A. (1939), D.Ed. (1951), Oregon.
- *PHILIP WOOD JANNEY, B.A., C.P.A., Professor of Business Administration, Portland Extension Center.
B.A. (1921), Oregon.
- CLYDE R. JOHNSON, Ph.D., Associate Professor of Chemistry, Portland Extension Center and Portland State College.
B.A. (1925), Reed; M.A. (1929), Ph.D. (1930), Rice Institute.
- LEEVERN JOHNSON, M.B.A., Assistant Professor of Business Administration, University of Oregon.
B.A. (1939), Iowa State Teachers; M.B.A. (1948), Denver.
- STANLEY L. JOHNSON, Ph.D., Instructor in English, Portland Extension Center and Portland State College.
B.A. (1942), Utah; Ph.D. (1935), University of Southern California.
- MILDRED O. KANE, M.A., Assistant Professor of Education; Supervisor of Teaching, Oregon College of Education.
B.A. (1935), Oregon; M.A. (1942), Teachers College, Columbia.
- SYLVAN N. KARCHMER, M.F.A., Assistant Professor of English, University of Oregon.
B.F.A. (1949), M.F.A. (1950), Texas.
- MITCHELL W. KERR, Ph.D., Instructor in History, Portland Extension Center and Portland State College.
B.S. (1941), Oregon; M.A. (1944), Ph.D. (1951), Stanford University.
- †MORTON KROLL, Ph.D., Assistant Professor of Political Science, Portland Extension Center and University of Oregon.
B.A. (1946), Ph.D. (1952), University of California at Los Angeles.
- ERWIN F. LANGE, D.Ed., Associate Professor of Chemistry, Portland Extension Center and Portland State College.
B.A. (1933), Willamette; M.S. (1936), Oregon; D.Ed. (1951), Oregon State College.

* Retired December 31, 1954.

† Resigned August 31, 1954.

- LEORA F. LARIVIERE, B.L.S., Circulation Librarian, General Extension Division.
B.A. (1929), Occidental College; B.L.S. (1930), University of Southern California.
- JEROME E. LEAVITT, D.Ed., Assistant Professor of Education, Portland Extension Center and Portland State College.
B.S. (1938), New Jersey State Teachers College; M.A. (1941), New York University; D.Ed. (1952), Northwestern.
- WOLFGANG A. LEPPMAN, Ph.D., Assistant Professor of German, University of Oregon.
B.A. (1948), M.A. (1949), McGill; Ph.D. (1952), Princeton.
- HEROLD LILLYWHITE, Ph.D., Associate Professor of Speech, General Extension Division.
B.S. (1932), Utah State Agriculture College; M.A. (1939), University of Minnesota; Ph.D. (1943), New York University.
- HUGH G. LOVELL, Ph.D., Assistant Professor of Economics, Portland Extension Center.
B.A. (1947), Pomona College; Ph.D. (1951), Massachusetts Institute of Technology.
- ALFRED L. LOMAX, M.A., Professor of Business Administration, University of Oregon.
B.B.A. (1923), Oregon; M.A. (1927), Pennsylvania.
- JAMES A. MACNAB, Ph.D., Associate Professor of Biology, Portland Extension Center and Portland State College.
B.A. (1921), Albany (Oregon); M.A. (1931), Ph.D. (1944), Nebraska.
- DAVID R. MALCOLM, Ph.D., Instructor in Zoology, Portland State College.
B.S. (1949), Winona State Teachers College; M.S. (1951), Ph.D. (1954), Washington State.
- MORTON S. MALTER, Ph.D., Associate Professor of Elementary Education, Portland Extension Center and Portland State College.
B.Sc.Ed. (1942), Chicago Teachers College; M.S. (1944), Ph.D. (1948), University of Chicago.
- LUCIAN C. MARQUIS, M.A., Instructor in Political Science, Portland Extension Center and University of Oregon.
B.A. (1942), Black Mountain College, North Carolina; M.A. (1951), University of California at Los Angeles.
- DONALD J. MARTEL, B.S., Associate Professor of Landscape Architecture; Head of Department, Oregon State College.
B.S. (1942), Oregon.
- WALLACE H. MARTIN, M.E., M.S., Professor Emeritus of Mechanical Engineering, Oregon State College.
M.E. (1910), Minnesota; M.S. (1930), Iowa State.
- THOMAS J. MCCLELLAN, M. Engr., Associate Professor of Civil Engineering, Oregon State College.
B.S. (in C.E.) (1945), Oregon State; M. Engr. (1948), Yale.
- VIOLET McMURTRY, B.S., Assistant Professor of Elementary Education, Portland State College.
B.S. (1938), Oregon State College.
- WILLIAM W. MILLS, Ph.D., Assistant Professor of Psychology, Oregon State College.
A.B. (1939), St. Louis University; Ph.D. (1954), University of Minnesota.
- IVAN NAGY, Assistant Professor of Political Science, Portland Extension Center and University of Oregon.

- MILTON NELS NELSON, Ph.D., Professor of Economics; Head of Department, Oregon State College.
A.B. (1915), M.A. (1917), Ph.D. (1921), Illinois.
- W. VICTOR NORRIS, Sc.D., Professor of Physics, Portland Extension Center and Portland State College.
A.B. (1918), William Jewell; M.S. (1920), Texas Christian; E.M. (1921), Sc.D. (1922), Colorado School of Mines.
- EGBERT S. OLIVER, Ph.D., Associate Professor of English, Portland Extension Center and Portland State College.
B.A. (1927), M.A. (1929), Ph.D. (1939), Washington.
- *DONALD D. PARKER, M.B.A., Assistant Professor of Business Administration, Portland Extension Center and Portland State College.
B.A. (1941), Linfield; M.B.A. (1942), Northwestern.
- FRANK L. PARKS, Ph.D., Associate Professor of Sociology; Head Counselor of Lower Division, Oregon State College.
B.A., B.E. (1929), M.A. (1932), Colorado; Ph.D. (1949), Washington.
- K. ELLSWORTH PAYNE, M.Ed., Assistant Professor of Physical Science, Portland Extension Center and Portland State College.
B.A. (1947), Brigham Young; M.Ed. (1953), Oregon State College.
- THURMAN S. PETERSON, Ph.D., Professor of Mathematics, Portland Extension Center and Portland State College.
B.S. (1927), California Institute of Technology; M.S. (1928), Ph.D. (1930), Ohio State.
- VICTOR NEWTON PHELPS, D.Ed., Associate Professor of Education, Portland Extension Center and Portland State College.
B.S. (1933), M.S. (1939), Oregon; D.Ed. (1950), Colorado State College of Education.
- ALFRED POWERS, A.B., Professor Emeritus of Creative Writing, General Extension Division.
- W. DWAIN RICHINS, Ph.D., Associate Professor of Business Administration, University of Oregon.
B.A. (1936), Brigham Young; M.B.A. (1938), Louisiana State; Ph.D. (1950), Washington.
- PHILIP CARL ROBERTI, Ph.D., Instructor in Chemistry, Portland State College.
B.S. (1944), M.S. (1949), University of Portland; Ph.D. (1953), Oregon State.
- FRANK L. ROBERTS, Ph.D., Assistant Professor of Speech, Portland Extension Center and Portland State College.
B.A. (1938), Pacific; Ph.M. (1943), Wisconsin; Ph.D. (1955), Stanford University.
- JOHN ALEXANDER SCHARBACH, M.A., Instructor in English, Portland Extension Center and Portland State College.
B.A. (1932), University of Notre Dame; M.A. (1941), Washington.
- MARGARET M. SHARP, Associate Professor Emeritus of Extension Teaching, General Extension Division.
- JAMES WILSON SHERBURNE, Ph.D., Professor of Psychology; Head of Department, Oregon State College.
A.B. (1927), Greenville College; M.A. (1928), Michigan; Ph.D. (1938), Ohio State.
- BARNARD E. SMITH, M.S., Assistant Professor of Industrial Engineering, Oregon State College.
B. M. Engr. (1949), M.S. (1950), University of Minnesota.

* On sabbatical leave 1955-56.

- RONALD E. SMITH, Ph.D., Instructor in Psychology, Portland Extension Center and Portland State College.
A.Sc. (1939), Weber College; B.A. (1948); M.A. (1949), Ph.D. (1954), University of Utah.
- INGVALD B. SOLBERG, B.L.A., Associate Professor of Landscape Architecture, Oregon State College.
B.L.A. (1924), Cornell.
- DON S. SOMERVILLE, M.A., Associate Professor of Radio Education, Portland Extension Center and Portland State College.
B.A. (1946), Capital University; M.A. (1948), Baylor University.
- WILLARD B. SPALDING, Ed.D., Professor of Education, Portland Extension Center and Portland State College.
B.B.A. (1926), Boston University; Ed.M. (1933), University of New Hampshire; Ed.D. (1942), Harvard.
- VERNON S. SPRAGUE, Ph.D., Associate Professor of Physical Education, University of Oregon.
B.S. (1937), Oregon; M.A. (1942), Ph.D. (1951), Michigan.
- *CLARK P. SPURLOCK, D.Ed., Assistant Professor of History, Portland Extension Center.
B.S. (1936), M.S. (1940), Oregon; D.Ed. (1954), Oregon State College.
- EUGENE CARL STARR, B.S., E.E., Professor of Electrical Engineering, Oregon State College.
B.S. (1923), E.E. (1938), Oregon State College.
- JOHN H. STEHN, M.S., Professor of Music, Portland Extension Center and Portland State College.
A.B. (1925), Grinnell; M.S. (1927), Iowa.
- †HENRY EUGENE STEVENS, D.Ed., Professor of Education, Portland Extension Center.
B.S. (1936), D.Ed. (1940), Oregon.
- JOHN MAX SWARTHOUT, Ph.D., Professor of Political Science; Chairman of Department, Oregon State College.
A.B. (1934), M.A. (1937), Ph.D. (1942), Southern California.
- HENRY ARNOLD TEN PAS, M.S., Associate Professor of Agricultural Education; Acting Head of Department, Oregon State College.
B.S. (1940), Wisconsin; M.S. (1949), Oregon State College.
- LYLE R. TRUEBLOOD, D.B.A., Assistant Professor of Business Administration, University of Oregon.
B.S. (1948), M.A. (1949), Missouri; D.B.A. (1953), Indiana.
- RICHARD B. WALTON, B.A., Assistant Professor of Physics, Portland Extension Center and Portland State College.
B.A. (1943), Oregon State.
- PAUL R. WASHKE, Ph.D., Professor of Physical Education, University of Oregon.
A.B. (1927), Western State Teachers (Michigan); A.M. (1929), Michigan; Ph.D. (1943), New York University.
- JOSEPHINE WASSON, M.A., Assistant Professor of Art and Architecture, Oregon State College.
B.A. (1925), Washington State College; M.A. (1933), Columbia.

* Acting Director 1955-56.

† Resignation effective June 30, 1955.

- MARSHALL D. WATTLES**, Ph.D., Assistant Professor of Economics, University of Oregon.
B.A. (1938), Southwest Missouri State; M.A. (1941), Missouri; Ph.D. (1950), Ohio State.
- EGBERT S. WENGERT**, Ph.D., Professor of Political Science; Head of Department, University of Oregon.
B.A. (1933), LL.B. (1936), Ph.D. (1936), Wisconsin.
- HOWARD E. WESTCOTT**, D.Ed., Instructor in Physical Education, Portland State College.
B.A. (1939), Reed; M.A. (1940), D.Ed. (1951), Columbia.
- RUTH WIDMAYER**, Ph.D., Assistant Professor of Political Science, Portland Extension Center and Portland State College.
B.A. (1943), M.A. (1946), Washington; Ph.D. (1952), Harvard-Radcliffe.
- ROBERT R. WIEGMAN**, Ed.D., Assistant Professor of Education, Portland Extension Center and Portland State College.
A.B. (1946), Midland College; M.A. (1951), Ed.D. (1952), Oregon.
- WARREN W. WILCOX**, Ph.D., Associate Professor of Psychology, Portland Extension Center and Portland State College.
A.B. (1924), Dakota Wesleyan; A.M. (1929), Ph.D. (1932), Kansas.
- RUTH WINCHELL**, M.A., Assistant Professor of Biology, General Extension Division.
B.A. (1926), Reed; M.A. (1931), Oregon.
- ***DERYL L. WOOD**, M.S., Instructor; Speech Clinician, Portland Extension Center and General Extension Division.
B.S. (1948), Washington; M.S. (1952), Oregon.
- CHARLES THEODORE YERIAN**, Ph.D., Professor; Head of Departments of Secretarial Science and Business Education, Oregon State College.
B.S. (1932), Oregon State; M.S. (1936), Ph.D. (1938), Iowa.
- CHARLES F. ZIEBARTH**, Ph.D., Associate Professor of Business Administration, University of Oregon.
B.A. (1931), M.A. (1932), Washington State; Ph.D. (1952), Chicago.

Special Staff

- WILLIAM P. ALLYN**, B.A., Assistant Cashier, Mortgage Loan Department, United States National Bank.
- SHIRLEY BARBER**, M.Ed., Instructor in Secretarial Science.
- RALPH W. BASSETT**, A.B., Assistant Supervisor of Language Arts, Portland Public Schools.
- GRACE BENTALL**, M.A., Consultant, Remedial Reading, Portland Public Schools.
- ROBERT A. BLAKENEY**, B.S. in E.E., Electrical Engineer, Portland General Electric.
- LOUIS BUNCE**, Instructor in Painting, Museum Art School.
- LEONARD L. CARPENTER**, M.A., Assistant Supervisor in charge of Business Education, Portland Public Schools.
- MILTON CHILDERS**, M.S., Principal, Rose City Park School.

* On leave of absence 1955-56.

- IRWIN J. CHRISTOPHER**, Ph.D., Assistant Professor of Mathematics, Pacific University.
- MARIE CHURCHILL**, B.A., Instructor, Portland Public Schools.
- THOMAS N. COLASUONNO**, M.Ed., Instructor, Portland Public Schools.
- EARL L. CONDIT**, M.A., Principal, Portland Public Schools.
- CORNELIUS CREMER**, M.Ed., Instructor, Portland Public Schools.
- AMO DEBERNARDIS**, D.Ed., Assistant Superintendent, Portland Public Schools.
- GLADYS DOBSON**, M.S., Supervisor of Visiting Teacher Division, Portland Public Schools.
- ROBERT DUSENBERRY**, Ph.D., Instructor, Lewis and Clark College.
- MADLINE DUTTON**, M.Ed., Head Teacher, Hosford Day School for the Deaf.
- HAROLD ELKINTON**, M.B.A., Professor of Economics and Business Administration, Linfield College.
- DENISE FARWELL**, B.A., Instructor in Nursery School Education.
- JESSE FOSTER**, M.Mus., Assistant Supervisor of Music, Portland Public Schools.
- ROCCA GAROFALO**, M.S., Instructor in Chemistry.
- FLORENCE HOLMES GERKE**, B.S., Landscape Architect.
- JOHN GIERHART**, M.A., Economic Geographer, Raw Materials, Inc.
- WILLIAM H. GIVLER**, Dean, Museum Art School.
- VINCENT GLAUDIN**, Ph.D., Clinical Psychologist, Veterans' Hospital.
- PATRICIA GREEN**, M.A., Assistant Superintendent, Radio Station KBPS, Portland Public Schools.
- RACHAEL GRIFFIN**, Supervisor, Children's Classes, Museum Art School.
- RUTH ELISE HALVORSEN**, M.A., Supervisor of Art, Portland Public Schools.
- NORMAN K. HAMILTON**, M.A., Assistant Superintendent, Portland Public Schools.
- JOSEPH C. HARTLEY**, M.A., Principal, Peninsula School.
- RUTH C. HEALY**, M.Ed., Instructor in French.
- ALFRED J. HERMAN**, Consul of France.
- LUCILLE F. HILL**, Ed.D., Principal, Richmond School.
- LESTA HOEL**, M.A., Supervisor of Mathematics, Portland Public Schools.
- LOUISE R. HUCKBA**, B.S., Music Consultant, Portland Public Schools.
- ELDON I. JENNE**, M.S., Supervisor of Health, Physical Education and Recreation, Portland Public Schools.
- DOROTHY JOHANSEN**, Ph.D., Associate Professor of History, Reed College.
- CHARLES L. JONES**, M.A., Principal, Jefferson High School.
- ANDREW F. JURAS**, M.A.Sc., Child Welfare Director, Oregon State Public Welfare Commission.
- JAMES H. KARLE**, B.A., Lecturer in Astronomy, Lewis and Clark College.
- LETA M. KENNEDY**, B.S., Instructor in Design, Museum Art School.
- CLARENCE A. KRAFT**, M.A., Assistant Professor of Spanish, Willamette University.

VERA KOTLAREVSKY KRIVOSEHEIN, Instructor in Russian.
 MAURINE LABER, M.A., Vice-Principal, Cleveland High School.
 MARTIN LANTZ, M.S., Bonneville Power Administration.
 ETHEL L. LAWRENCE, B.S., Instructor in Mathematics.
 FREDERIC LITTMAN, Instructor in Sculpture, Museum Art School.
 GREBA T. LOGAN, M.A., Supervisor of Health Education, Portland Public Schools.
 RUTH S. LOTTRIDGE, M.A., Instructor in English.
 DOUGLAS LYNCH, Instructor in Commercial Design, Museum Art School.
 LEWIS C. MARTIN, Ph.D., Clinical Psychologist, Multnomah County Health Department.
 RALPH S. MASON, B.S., Mining Engineer, State of Oregon Department of Geology and Mineral Industries.
 STEWART F. MCCOLLOM, B.S., Instructor in Public Relations.
 FRANCES MCGILL, M.A., Supervisor of Guidance and Counseling, Portland Public Schools.
 THOMAS L. MEADOR, M.D., M.P.H., Health Officer, City of Portland.
 BERNARD H. MILKES, C.P.A., Certified Public Accountant.
 JOSEPH F. MURPHY, M.A., Accountant.
 HAZEL R. NEWHOUSE, M.A., Instructor, Gresham High School.
 JAMES C. O'GARA, M.A., Supervisor of Industrial Arts, Portland Public Schools.
 CLARENCE E. OLIVER, M.Ed., Principal, Eliot School.
 JUSTINE O'REILLY, M.S., Supervisor of Home Economics, Portland Public Schools.
 MINER T. PATTON, Ed.D., Principal, Irvington School.
 DAVID S. PATTULLO, B.A., C.P.A., LL.B., Accountant and Attorney at Law.
 EILEEN C. RAYMOND, M.Ed., Consultant in Secondary Education, Portland Public Schools.
 RUTH RENFROE, M.A., Family and Child Welfare Division, Community Council.
 LLOYD J. REYNOLDS, M.A., Associate Professor of Literature and the History of Art, Reed College.
 WILLIAM H. RICE, Ph.D., Electric Steel Foundry.
 MICHELE RUSSO, B.S.A., Instructor in Painting, Museum Art School.
 HELEN E. SCHAPER, M.A., Director of Curriculum, Portland Public Schools.
 ARTHUR SCOTT, Ph.D., Professor of Chemistry, Reed College.
 ALICE M. SMITH, M.Ed., Principal, Grout School.
 JANET SMITH, B.S., Instructor, Portland Public Schools.
 RONALD O. SMITH, M.A., Supervisor of Social Studies, Portland Public Schools.
 STEPHEN E. SMITH, M.A., Principal, Washington High School.
 KATE STEINHARDT, Ph.D., Instructor in Social Science.
 DONALD W. STOTLER, M.D., D.Ed., Supervisor of Science, Portland Public Schools.
 HUGH STOUT, B.A., Manager, Portland Teachers Credit Union.

EDITH SULLIVAN, Ph.D., Instructor in Remedial Reading, Portland Public Schools.
 EDGAR A. TAYLOR, JR., M.A., Supervisor of Special Education, Portland Public Schools.
 A. KINGSLEY TRENHOLME, M.A., Director of Instructional Materials, Portland Public Schools.
 CHARLES H. VOORHIES, Instructor in Drawing and Painting, Museum Art School.
 CARRIE L. WALL, M.Ed., Principal, Rigler School.
 RICHARD C. WALLSINGER, B.S., Operations Manager, McKesson and Robbins, Inc.
 JOHN WATKINS, Ph.D., Chief Clinical Psychologist, Veterans' Hospital.
 WALTER WEIR, M.A., Assistant Professor of Philosophy and Humanities, Reed College.
 LUCIA WILEY, M.F.A., Instructor in Drawing and Painting, Museum Art School.
 THOMAS G. WILLIAMS, B.A., C.P.A., Certified Public Accountant.
 A. VERNE WILSON, M.S., Supervisor of Music, Portland Public Schools.
 MILO WOLD, M.A., Professor of Music, Linfield College.
 RAY WOLF, M.A., Supervisor of Child Services, Portland Public Schools.
 LEONARD WORELL, Ph.D., Instructor in Psychology, Reed College.

General Information

Portland Extension Center, a unit of the General Extension Division, Oregon State System of Higher Education, extends the resources, curricula, and facilities of the six institutions of higher learning within the state system to persons unable to enroll as regular students with those institutions. This service is performed through the evening program, conducted during the academic year, and through the Portland Summer Session, information concerning which is contained in a separate catalog.

The recent legislation which established Portland State College as an independent degree-granting institution within the state system in no way affected this role of Portland Extension Center. The services indicated above continue unchanged except that six instead of five institutions of higher learning are now represented.

The Center does not grant degrees, but offers a diversified program of related graduate and undergraduate courses in many of the major fields of study which comprise the curricula at the University of Oregon, Oregon State College, the Colleges of Education, and Portland State College. Work taken at the Center may be applied toward graduation from any of these degree-granting institutions, providing residence and other individual requirements are met.

In addition to the program of accredited college and university courses designed to meet degree requirements, Portland Extension Center participates with industry, labor, and the professions, in conducting cooperative courses in specific areas at the professional level. A program of courses aimed at the avocational interests of the community is also maintained.

Location. Portland Extension Center and Portland State College share the same instructional building, located at 1620 S.W. Park Avenue, Portland 1, Oregon, which is the mailing address. The telephone number is CA 4251. Administrative offices are at 1724 Park Avenue; the Business Office and the Office of the Registrar, at 1734 Park Avenue.

Accreditation. Portland Extension Center's academic accreditation is coextensive with the institutions of higher learning in the Oregon State System of Higher Education. Credits earned at the Center are accepted as residence credit toward a degree (subject to the limitations listed in the following paragraph) when transferred to the University of Oregon, Oregon State College, any of the three Oregon Colleges of Education, or to Portland State College, provided that the credits have been earned as part of a planned degree program. (See Academic Regulations Section). If transferred to institutions not a part of the Oregon State System of Higher Education, such credits are acceptable on the same basis as credits transferred from the campus institutions of the state system.

Institutional Residence Requirement. Courses available at Portland Extension Center which are drawn from the various study areas and professional schools of the institutions within the state system may, with the approval of the institution, be used to complete all but 12 term hours of the total degree program. The *minimum* residence requirement for baccalaureate and graduate degrees from the campus units of the state system is 12 term hours.*

* The following special Portland State College regulation will govern residence requirements at that institution in the circumstances described: "A student within sixty hours of graduation by July 1, 1955, and who completes 45 of his last 60 hours in the Oregon State System of Higher Education, and who completes at least 12 of these hours in either the day or evening programs of Portland State Extension Center or in Portland Extension Center or in Portland State College shall have met residence requirements for graduation from Portland State College provided he graduates prior to July 1, 1958.

Fee Schedule

Regular registration and course fees, tuition not included, applicable to undergraduates, graduates and auditors.

Item	Per Term
Per credit hour rate.....	\$ 8.00
Minimum charge for 1 or 2 credit hours for any student.....	16.00
Charge for students enrolled for 7 credit hours or more*.....	65.00

SPECIAL FEES AND CHARGES

Late registration fee per week (\$3.00 first week, plus \$1.00 each week thereafter)	\$3.00-1.00
If institutional charges are met by a check which is returned because of any irregularity for which the student is responsible (NSF, illegible signature, improper bank account number, etc.), a fine of \$1.00 per business day will be charged. (Maximum penalty, \$5.00).....	1.00
Change of program fee (Assessable for each change of program after last day to add course).....	1.00
Reinstatement fee.....	2.00
Transcript fee (first one is free, charge of 50c for each additional transcript)50
Graduate Qualifying Examination Fee.....	\$1.00-15.00
Staff fee, per credit hour (by approval, maximum of 5 hours).....	3.00

Fee Refunds

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

(1) Any claim for refund must be made in writing before the close of the term in which the claim originated.

(2) Refunds in all cases are calculated from the date of application for refund and 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.

Academic Regulations

Admission Requirements. Portland Extension Center exists to serve those who wish to take the courses offered and are able to profit by them, and except for those who are degree candidates, there are no formal requirements for admission. Students may audit any course, i.e. take it for its cultural or practical value alone, not for credit. For any given course, however, the instructor may require evidence of ability to do the work or that certain prerequisite work has been done. Transcripts are required only of students who are regularly enrolled at Portland State College, and from veterans enrolling under any of the veterans' federal educational benefits. Permission of the instructor is required for admission to classes after the first meeting of the class. *Admission for credit is not allowed after the third meeting.*

Students who enroll at Portland Extension Center for undergraduate or graduate work which they expect to include in a degree program must inform themselves of the graduation requirements at the institution to which they intend to transfer. Students beginning such a degree program will note that degree-

* Applicable to students enrolled in any combination of Portland Extension Center or Portland State College classes.

granting institutions usually specify patterns of lower-division (freshman and sophomore) work, frequently referred to as "group requirements." In addition, such institutions may also specify lower-division courses in a student's major field, although this work is usually concentrated in the last two years. All degree candidates at Portland Extension Center should tailor their programs to two specific sets of academic requirements: (1) the general requirements common for all students in the selected institution; and (2) the departmental, divisional, or professional school requirements pertaining to the appropriate major fields. All such students who intend to transfer to institutions within the Oregon State System of Higher Education must satisfy admission requirements prevailing for the school of their choice at the time such admission is granted.

Information concerning admission, advanced standing, transfer of credits, and requirements for graduation may be obtained from the registrars of the separate institutions within the state system.

Registration. Students may register during the day in accordance with the academic calendar on pages 6-7, and until 8:30 p.m. during the first week of each term. In order to be assured of admission to a class, students must be present at the first meeting each term; otherwise written approval of the instructor for subsequent admission and/or delayed registration must be secured. Since most instructors are present at the Center only for their classes, students missing the first class meeting in any given term can expect to pay late fees whether or not admission to the class is subsequently obtained. Attendance and not prior registration is the criterion for admission to a class, but attendance without registration does not provide a basis for the waiving of late fees.

Credit Hour Load. Portland Extension Center students normally may enroll for not more than six term hours if employed full time. Those students who are qualified and have adequate study time available, and who for cogent reasons are unable to enroll at a campus institution, may, however, petition the registrar for permission to take more than six term hours. In no case may graduate students employed full time register for more than six term hours of graduate credit. Any student who takes two or more courses which duplicate each other, even in part, will receive credit for but one of them.

Definitions and Explanations

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.

A **TERM HOUR*** is synonymous with a "quarter hour" and a "credit hour." It is the unit by which a student's progress is measured and recorded. Usually, it represents a minimum of three clock hours of the student's time each week for one term. This time may be assigned to work in classroom, laboratory, or to outside preparation. The number of lecture, recitation, laboratory or other periods per week for any course may be found in the course descriptions given in this catalog.

A **GRADE** is a mark used to measure quality of a student's work in an academic course: *A*, exceptional accomplishment; *B*, superior; *C*, average; *D*, inferior; *F*, failure; *Inc*, incomplete; *W*, withdrawn. When a course has not been completed for reasons acceptable to the instructor, a report of *Inc* may be made and additional time granted. A student who fails to appear for the final examination or who discontinues attendance in a course without officially withdrawing through the Registrar's Office within the time designated on the academic calendar receives a grade of *F* in the course.

A limited number of courses are designated "non-credit" in the course descrip-

* Term hours ("quarter hours") may be converted to semester hours by multiplying the number of term hours by 2/3. Semester hours may be converted to term hours by multiplying the number of semester hours by 1 1/2.

tions. Students in non-credit courses are rated *NC* in the term grade reports. Non-credit courses are not considered in computing the grade-point average.

A **GRADE POINT** is a numerical expression of the quality of a student's work. Grade points are calculated on the basis of 4 points for each term hour of *A* grade; 3 for *B*; 2 for *C*; 1 for *D*; and 0 for *F*. Marks of *Inc* and *W* are disregarded. The grade point average (*GPA*) is determined by dividing the total of grade points earned by the total number of hours for which the student has been registered.

COURSE NUMBERING SYSTEM. Courses are numbered in accordance with the course numbering systems of the Oregon State System of Higher Education.

Lower-division (freshman and sophomore) courses are numbered from 1 to 299; 100-110, 200-210 are survey or foundation courses that satisfy lower-division group requirements in arts and letters, social science and science and mathematics groups; 111-199, 211-299 are other courses offered at first year and second year levels.

Upper-division (junior and senior) courses are numbered from 300 to 499. Courses numbered from 400 to 499 are primarily for seniors, but certain of these courses may be taken for graduate credit, in which case the course is designated (*G*) if approved for graduate major credit or (*g*) if approved for graduate minor credit.

Graduate courses are numbered from 500 to 599.

Facilities and Activities

Library. The library, located on the second floor of the building, is open from 8 a.m. to 9 p.m. Mondays through Fridays, and on Saturdays from 8 a.m. to 12 noon. The library card is issued upon presentation of the student's tuition receipt. This receipt should therefore be preserved, even when payment is by check. Students who hold cards from a previous term must have them validated for the succeeding term.

Cooperative Bookstore. Texts and supplies required by Portland Extension Center instructors will be made known at the first meeting of all classes each term. They may be purchased at reasonable cost from the cooperative bookstore located in the basement of the building.

Cafeteria. The cafeteria, with a snack and coffee bar, is located in the basement of the building. Evening meals are served Mondays through Fridays. The snack bar is open until 9 p.m.

Special Events. Portland Extension Center students are eligible to attend all special events in the building, whether sponsored by Portland State College or by the Center. Lectures, concerts, plays, forums, etc. are scheduled regularly, many at no admission charge.

Veterans

Portland Extension Center is approved by the Veterans Administration for training veterans under PL 346 and PL 550, the World War II and Korean "GI" bills, and under PL 16 and PL 894, the bills for veterans in receipt of war-time disability compensation. Detailed information concerning eligibility under these Acts may be obtained from the Regional Office of the Veterans Administration, 208 S.W. 5th Avenue, Portland 4, Oregon.

Portland Guidance Center of the Veterans Administration is located in the Portland Extension Center building, and veterans with entitlement are eligible for counseling and guidance at this facility. Applications must be made to the Regional Office.

The State of Oregon also has legislation affording educational assistance to veterans; information may be obtained from the State Department of Veterans Affairs, State Office Building, 1400 S.W. 5th Avenue, Portland, Oregon.

Programs of Study

Advanced Degree Programs

Graduate work in certain fields, leading to degrees from the University of Oregon, Oregon State College, or any of the three Colleges of Education, may be taken at Portland Extension Center.

Education

Except for the 12 term hours which must be completed in residence, graduate students may complete all work required for the *Master of Education* degree offered by the University of Oregon and by Oregon State College at Portland Extension Center or in other departments of the General Extension Division. The same situation holds true for students who are candidates for the *Master of Science in Education* degree, offered by the Oregon Colleges of Education.

The *Master of Education* (M.Ed.) degree is regarded as a professional teaching degree and not necessarily as a research degree. At the University of Oregon a thesis or field study is required, unless waived upon petition. Oregon State College requires no thesis or field study in the "Option C" program available through Portland Extension Center. At both institutions a well integrated program exists for each candidate, designed to improve individual service as a teacher, supervisor, or administrator. Each program embraces first the common core of required courses, and second the complex of courses designed to meet individual student requirements. The University of Oregon requires both the qualifying and final examinations to be written; Oregon State College requires both a written and an oral final examination but no qualifying examination. The Master of Education degree is awarded in both the elementary and secondary fields.

The *Master of Science in Education* degree from one of the Oregon Colleges of Education requires a thesis or field study from those students whose emphasis is on administration or who contemplate doctorates. The qualifying examination is written, and both written and oral final examinations are given. The program includes a common requirement of 27 term hours, 18 in the professional field and nine in general courses.

General Studies

Master of Arts in General Studies. This research degree is designed for students whose broad academic background makes them eligible for *graduate work embracing several major departments*. The degree is awarded by both the University of Oregon and Oregon State College; both institutions require a thesis. Under favorable circumstances all work toward this degree at Oregon State College may be taken at Portland Extension Center. The University of Oregon requires that candidates earn at least 15 term hours in on-campus enrollment.

Master of Arts, Master of Science. Up to 15 term hours of work toward the *Master of Arts* (departmental), *Master of Science*, or *Master of Science in General Studies* degrees may be completed at Portland Extension Center, with the approval of the candidate's major department at the degree-granting institution.

Program in Public Administration. The program in public administration may lead to a Master of Arts degree in General Studies at the University of Oregon (see above). Emphasis of this program is on regional studies, administration, management, and public policies. Interested students should confer with the program director.

Program for Registered Nurses. A program leading to the Master of Arts in General Studies degree, designed specifically to meet the requirements of registered nurses, is offered in cooperation with the Department of Nursing Education, University of Oregon Medical School, and with the Graduate School, Oregon State College.

Professional Degrees in Engineering. Those who hold a baccalaureate or master's degree from Oregon State College may substitute graduate credit for a maximum of three of the five years of professional practice required for the degree of professional engineer. Graduate study, extension or otherwise, will be considered at the approximate rate of 12 credit-hours in lieu of each year of professional practice.

Those who hold a baccalaureate degree or master's degree from other colleges or universities are also eligible to obtain the degree of engineer from Oregon State College, by fulfilling the same requirements as for those above except at least 12 credit-hours of graduate work must be completed in residence upon the Oregon State College campus.

Graduate Credit Requirements

Graduate courses are numbered in the 500 series, with certain courses in the 400 series also available for graduate credit. (See section on course numbering.) A student electing graduate credit in a 400 (g) or 400 (G) course must so indicate at the time of registration; otherwise graduate credit in such course cannot be granted. Graduate credit is not retroactively granted in any instance.

Graduate students enrolling in Portland Extension Center as candidates for advanced degrees at institutions within the State System of Higher Education must make application for admission to the graduate school selected, and make arrangements to take the graduate qualifying examination at the earliest opportunity. Students are warned that the mere accumulation of credits does not establish candidacy for graduate degrees.

Admission to Graduate Schools. A graduate of an accredited college or university is admitted to graduate standing only after filing his application for admission and an official transcript of all undergraduate credits with the Registrar of the institution he has selected. Such admission does not entitle the student to become a degree candidate, however, until he has taken and passed the qualifying examination required of all graduate degree candidates.* Arrangements for this examination should be made with the graduate adviser of the selected institution as early as possible, but in any event before completion of one-third of the work for the degree.

Transferred credit, of which not more than 15 graduate term hours can be accepted, is provisional until the qualifying examination is taken and the student becomes a candidate. The acceptance of transferred credit does not reduce residence requirements of the institutions within the state system.

For a graduate major, the equivalent of an undergraduate major in the same subject is required. Preparation for a graduate minor must be at least a one-year sequence of upper division work, in addition to foundation courses in the subject.

A maximum period of seven years is allowed for completing all work for a master's degree including work for which credit is transferred.

Grade Requirements. An accumulation of nine term hours of grades below "B" in the major field disqualifies a student for further graduate work toward the master's degree at the University of Oregon. To be considered for award of the master's degree at this institution a student must present 45 term hours of graduate work with grades of "A" or "B".

* Qualifying examinations will be administered during the year at times and places to be announced.

At Oregon State College and at the Colleges of Education a grade point average of 3.00 (a "B" average) is required for all graduate degrees. Grades below "C" are not accepted for graduate credit, nor are "C" grades accepted as transferred credit.

Foreign Language. A reading knowledge of one foreign language, preferably French or German, must be demonstrated by examination or by the undergraduate record for the Master of Arts (departmental degree). There is no foreign language requirement for the Master of Science degree, the Master of Education degrees, or the Master of Arts in General Studies degree.

Thesis and Final Examination. Theses must be filed in the graduate office two weeks before final examination and must be submitted in the form required by the graduate office at the institution where the degree is to be taken. Examinations are normally given on the campus of the institution granting the degree.

Graduate students should consult an adviser at Portland Extension Center before registering for any graduate program.

Teacher Programs

Elementary and Secondary Certification. Portland Extension Center is authorized to offer all work required for both elementary and secondary teaching certificates in Oregon with the exception of supervised teaching. Portland State College and the Center's Portland Summer Session, however, do offer supervised teaching and a limited number of students may meet supervised teaching requirements through these facilities. No more than three term hours of credit in supervised teaching is offered in a given summer session.

Training in Pre-School Education. While Portland Extension Center does not offer a complete program in pre-school education, certain courses which are applicable to the nursery or kindergarten child are available. Interested students should consult an elementary education adviser at the Center.

Teachers and administrators seeking to fulfill requirements for various certificates, including administrator's certificates and certificates to teach handicapped children, should consult an adviser or refer to *Oregon Rules and Regulations Governing the Certification of Teachers*, an annual publication of the Superintendent of Public Instruction, Salem, Oregon.

Cooperative Programs

Participation with Industry, Labor, Trades, and Professions. Portland Extension Center will cooperate with industry, unions, and trade and professional groups in planning and in providing instructional staff and facilities for classes designed to meet special needs. This service may be offered to the sponsors at a fee based on the cost to General Extension Division.

Cooperative Speech and Hearing Rehabilitation Center. Portland Extension Center cooperates with the Crippled Children's Division of the University of Oregon Medical School and the Division of Special Education of the State Department of Education for the extension of facilities to prepare teachers to teach speech-handicapped children, and for the expansion of services to children with speech defects. This facility is housed at the Crippled Children's Division of the University of Oregon Medical School.

Museum Art School. A number of courses are offered by Portland Extension Center in cooperation with the Museum Art School of the Portland Art Association. The courses are scheduled at the Museum Art School, and the enrollment is limited by the facilities of the studios. Registration must be made at the Museum Art School, S. W. Park at Madison Street.

In-Service Training. An extensive list of courses is offered as part of the in-service training program of the Portland Public Schools and Multnomah County Schools. These classes are open to all qualified students. The courses carry college or university credit, and the fees are the same as for the regular evening courses.

In-service and other courses scheduled for afternoon hours outside Portland Extension Center building are limited to 2 term hours of credit. Those scheduled for evenings may be offered for 3 term hours of credit.

Other General Extension Division Services

The General Extension Division is the agency of the Oregon State System of Higher Education by which the various schools comprising the system serve the people of Oregon through resident extension classes, short courses, correspondence study, visual instruction, radio programs, summer sessions, and special activities.

Department of State-Wide Services. These services consist of State-Wide evening classes, correspondence study courses, conferences, and workshops. Any community in Oregon may become an extension class center if a satisfactory meeting place is provided and sufficient enrollment is guaranteed to cover actual operating costs. A schedule of correspondence courses is available to enable students to continue their program of study when not in residence. Conferences are conducted for business and professional groups. In-service institutes and workshops are organized to assist school districts.

Visual Instruction. The Department of Visual Instruction of General Extension Division provides glass and film slides, microscopic slides, and 16 mm. motion picture films suitable for use by schools, community clubs, and other organizations. A special catalog is published listing materials available. Located on the campus of Oregon State College at Corvallis, the department is maintained jointly by General Extension Division and Federal Cooperative Extension Service.

Radio Station KOAC. Station KOAC is Oregon's state-owned station of which the State Board of Higher Education is managing agency. The station is located at Corvallis on the campus of Oregon State College, the licensee and operator of the physical plant. General Extension Division of the State System of Higher Education directs the program service. Program talent is drawn from Oregon State College, University of Oregon, Portland State College, the three Oregon Colleges of Education, Portland Extension Center and from various departments of state government. Many other public agencies, organizations and individuals contribute frequently to broadcasts. KOAC operates with 5,000 watts power on a frequency of 550 kilocycles by authority of the Federal Communications Commission. The station is operated in the interest of the Oregon public and programs are free of commercialism. Program schedules are issued periodically and will be furnished on request. Studios are located at Corvallis, Eugene, Monmouth, Portland, and Salem. "Tapes for Teaching" are provided for schools of Oregon as a special service.

Portland Summer Session. The summer session is a day-time program only, offering a selection of both graduate and undergraduate courses from University of Oregon, Oregon State College, the three Oregon Colleges of Education, and Portland State College. Particular emphasis is placed on elementary and secondary teacher education.

Description of Courses

All students are responsible for knowing the regulations and requirements given in the sections of this catalog entitled General Information, Fee Schedule, and Academic Calendar.

Descriptions which accompany the following courses are designed to reflect their purpose and scope. Degree students should understand that they may not register in certain courses until a more basic course in the same field has been completed. This more basic course, or prerequisite, is usually included with the description of the more advanced course. Mature, non-degree students may register in advanced courses upon securing the consent of the instructor.

An explanation of the course numbering system appears on page 23. The numbers following the course title represent the term hours of credit which may be earned in the course. The letters (U), (S), (C), (P), and (E) which appear in the left hand margin before each course description refer to: (U) the University of Oregon, (S) to Oregon State College, (C) to the Colleges of Education, (P) to Portland State College, and (E) to the General Extension Division. They indicate that the accompanying course appears in the catalog of the institution designated and is a regular offering of that institution.

Class Schedule. A class schedule detailing the course meeting times and places and the instructors for each class is issued in advance of each term. Classes meet one evening a week, on the following time schedule, unless otherwise noted in the course descriptions: Two hour classes, 7 to 8:45 p.m.; three hour classes, 6:45 to 9:25 p.m.; and four hour classes two nights a week, from 7:15 to 9 p.m. Deviations from this plan will appear in the term class schedules.

Portland Extension Center reserves the right to change the meeting hour or day of any listed course, or to cancel or discontinue any listed course for lack of sufficient enrollment or for other reasons, at any time.

Anthropology

Instructor: FRANTZ

Lower-Division Course

(P) 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. Frantz.

Upper-Division Courses

(U) Anth 301, 302, 303. **Primitive Society.** 3 hours each term.

Social relationships and organizations among primitive people, including kinship, fraternal, political, and religious forms and behaviors. Prerequisite: upper-division standing.

(U) 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: Anth 207, 208, 209 or consent of instructor.

Art

Associate Professor: REYNOLDS. Instructors: BUNCE, GIVLER, KENNEDY, LITTMAN, LYNCH, RUSSO, VOORHIES, WILEY.

The following classes are given in cooperation with the Museum Art School. The registration fee is \$16.00 per term for each class, plus a special course fee as indicated in some of the courses. (However, in no case will students registering for work in the Museum Art School and Portland State College or Portland Extension Center pay more than \$65.00). Students register at the Museum Art School, S. W. Park Avenue at Madison Street, where the classes are held.

Lower-Division Courses

- (U) AA 201a, 201b, 201c. **Survey of the Visual Arts.** 1 hour each term.
For beginners and laymen. A survey of many aspects of the arts, with discussion and practice in drawing, composition, painting, and sculpture, for the purpose of increasing the student's powers of observation and expression and leading to a better understanding of the arts, 7:30-9:30. Section I: Tuesday. Section II: Wednesday. Section III: Thursday. Course fee, \$4.00 in addition to registration fee. Staff.
- (U) *AA 255. **Ceramics.** 1 hour any term.
Creative approach to ceramics, including knowledge of various clays, building forms by hand, and experience with glazes. Section I: Tuesday. Section II: Wednesday. Section III: Thursday. Course fee \$4.00 in addition to registration fee. 7:30-9:30. Kennedy.
- (U) *AA 290. **Painting.** 1 hour any term.
Problems of the individual student; instruction in the use of a variety of mediums. 7:30-9:30. Section I: Tuesday. Voorthies. Section II: Wednesday. Bunce. Section III: Thursday. Wiley.
- (U) *AA 291. **Drawing.** 1 hour any term.
Life drawing; emphasis on drawing from live models. 7:30-9:30. Section I: Wednesday. Wiley. Section II: Thursday. Russo.
- (U) *AA 293. **Elementary Sculpture.** 1 hour any term.
Experience with modeling from the figure and from imagination and practice in casting. Progressive series of problems in sculpture. 7:30-9:30. Section I: Tuesday. Section II: Thursday. Course fee, \$3.00 in addition to registration fee. Littman.

Upper-Division Courses

- (U) AA 401. **Special Studies.** 1 hour any term.
Lettering and calligraphy. Tuesday, 7:30-9:30. Reynolds.
- (U) AA 480. **Graphic Arts.** 1 hour any term.
Design and technical problems in the graphic arts fields. Lithography, etching, woodblock, and silk screen printing. Wednesday, 7:30-9:30. Course fee \$2.00 in addition to registration fee. Givler.
- (E) A 0313. **Commercial Design.** No credit, any term.
Commercial design including posters, cartoons, and book jackets. Prerequisite: previous training. Wednesday, 7:30-9:30. Lynch.
- (U) AA 490. **Advanced Painting.** 1 hour any term.
Advanced problems in portrait, figure, landscape, and still life, in all media. Monday, 7:30-9:30. Prerequisite: 12 term hours in AA 290 or consent of instructor. Bunce.

* Students who have met the prerequisites of 15 hours in either AA 255, 290, 291, and 293 may petition to be allowed to take these courses for upper-division credit.

Art Education

Assistant Professors: DIETZ, WASSON. Instructors: GRIFFIN, HALVORSEN.

Lower-Division Courses

- (C) A 127. **Art Appreciation.** 3 hours fall.
Designed to develop insight into the actual work of art and breadth in the understanding of diverse works of art. Introduction to the principal visual arts as related to daily living to include some experience with materials. Griffin.
- (P) AA 160, 161. **Color and Composition.** 3 hours each term winter and spring.
Studio classes in the everyday use of the principles of composing or creating with lines, colors, and textures. Required in the School of Home Economics. Wasson.
- (S) AA 178. **House Planning and Architectural Drawing.** 3 hours fall.
Aim is to stimulate appreciation and criticism of domestic architecture. Small house planning and drawing with particular reference to the needs of individual students. Wasson.
- (C) A 217. **Lettering.** 1 hour. Registration by arrangement.*
- (C) A 219. **Ceramics.** 2 hours. Registration by arrangement.*
- (C) A 220. **The Print.** 2 hours. Registration by arrangement.*

Upper-Division Courses

- (P) AA 311, 312, 313. **Creative Arts and Crafts for the Elementary Teacher.** 3 hours each term.
Art activities for the classroom teacher. Basic tools and materials. Planning the art program to meet the needs of the child. Art in the school curriculum. Art experiences in relation to child growth and development. Lectures and laboratory work. Dietz and staff.
- (C) A 316. **Clay Modeling.** 2 hours. Registration by arrangement.*
- (C) A 317. **Head and Figure Construction.** 2 hours. Registration by arrangement.*
- (C) A 318. **Painting.** 2 hours. Registration by arrangement.*
- (U) AA 401. **Special Individual Studies (Art Appreciation).** 3 hours each term winter and spring. Griffin.
- (C) A 447, 448, 449. **Crafts for Teachers.** 2 hours each term.
Application of original designs to glass, metal and wood etchings; foil metal tapping and plastic carving; work with leather, stencil, plastics, wood, art metal and sheet metal; selection and organization of curricular content of industrial arts as an expressional medium, giving motivation to other elements of the curriculum and serving as an integrating agency. Halvorsen.

Bacteriology

Instructor: ROBERTI.

Lower-Division Course

- (P) Bac 204, 205. **General Bacteriology.** 3 hours each term fall and winter.
Bac 204. Characteristics of bacteria, yeasts, molds, viruses, and related organisms; elementary technique in cytology, taxonomy, and physiology. Bac 205. Application of microbiology to dairy, soils, industry, sanitation and the home. Two lectures; 2 two-hour laboratory periods.

* Registration in these courses is open only to those students in elementary education programs who have secured the consent of their advisers.

Business Administration

Professors: BALLAINE, BOYD, CAMPBELL, LOMAX. Associate Professors: RICHINS, ZIEBARTH. Assistant Professors: JOHNSON, TRUEBLOOD. Instructors: PATTULO, STOUT, WALLSINGER.

ACCOUNTING**Lower-Division Courses**

- (P) BA 111, 112, 113. **Constructive Accounting.** 3 hours each term.
Technique of account construction; preparation of financial statements. Application of accounting principles to practical business problems. Required of majors; prerequisite to advanced work in business.
- FALL: BA 111 (Section I), Monday; BA 111 (Section II), Tuesday; BA 111 (Section III), Wednesday; BA 112, Wednesday; BA 113, Thursday.
- WINTER: BA 111 (Section I), Wednesday; BA 111 (Section II), Thursday; BA 112 (Section I), Monday; BA 112 (Section II), Tuesday; BA 113, Wednesday.
- SPRING: BA 111, Tuesday; BA 112 (Section I), Wednesday; BA 112 (Section II), Thursday; BA 113 (Section I), Monday; BA 113 (Section II), Tuesday.

Upper-Division Courses

- (U) BA 312. **Principles of Cost Accounting.** 3 hours winter.
Basic principles of cost accounting; departmentalization; expense allocation; designed primarily for students interested in general accounting. Prerequisite: BA 111, 112, 113.
- (U) BA 313. **Analysis of Financial Statements.** 3 hours spring.
Managerial accounting for effective management and control of industrial and trading concerns. Preparation, analysis, and interpretation of balance sheets and operating reports. Prerequisite: BA 111, 112, 113.
- (U) BA 479, 480. **Income-Tax Procedures.** 3 hours each term fall and winter.
Income-tax laws of the United States and the State of Oregon. Facts involved in making up the various returns; use of the various sources of information. Prerequisite: senior standing in BA 483, 484, 485, or equivalent. Pattullo.
- (U) BA 483, 484, 485. **Accounting Theory and Practice.** (G) 3 hours each term.
The theory of accounting records and statements; statements of affairs, depreciation, analysis of profit-and-loss accounts, receiverships, balance-sheet construction and problems. Required of students majoring in accounting. Boyd.
- (U) BA 489, 490. **Advanced Accounting Problems.** (G) 3 hours each term fall and winter.
Application of the technical phases of accountancy. Professional training in practical accounting theory and auditing. Prerequisite: BA 483, 484, 485. Required of accounting majors. Boyd.
- (U) BA 491. **Advanced Accounting Theory.** (G) 3 hours spring.
Continuation of BA 489, 490. Boyd.
- (U) BA 492, 493, 494. **Auditing.** (G) 3 hours each term.
The auditing standards and procedures currently followed by public accountants; the working papers developed in connection with an audit; the various types of audit reports. Prerequisite: BA 483, 484, 485. Boyd.

GENERAL BUSINESS COURSES**Lower-Division Courses**

- (U) BA 221. **Elements of Organization and Production.** 3 hours fall.
Principles of management as applied to commercial and industrial concerns.
- (U) BA 222. **Elements of Finance.** 3 hours spring.
The financial problems of corporations. Organization of corporations; how they obtain long-term funds, management of working capital, and distribution of securities. Required of all majors. Prerequisite: BA 111, 112, 113 or consent of instructor.
- (U) BA 223. **Elements of Marketing.** 3 hours winter.
Methods, policies, and problems. Private and cooperative channels, auctions, exchanges, middlemen; demand creation, assembly, standardization, packaging, financing, risk taking, distribution. Required of all majors.

Upper-Division Courses

- (U) BA 323. **Office Organization and Management.** 2 hours spring.
Elements of office organization, office management, office records and systems. Special study of the office manager as an executive, and his qualifications. Prerequisite: consent of instructor. Wallsinger.
- (U) BA 339. **Principles of Advertising.** 3 hours fall.
Advertising as a factor in the distribution process; the advertising agency; the "campaign"; the function of research and testing; the selection of media—newspapers, magazines, broadcasting, outdoor advertising, direct mail.
- (E) BA 407. **Seminar in Business Problems: Credit Unions.** 3 hours spring.
An introductory course in credit union management and operation technique. History of credit union development. The position of credit unions in current economic development. Basic differences between federal and state charters. Examination of typical by-laws. Organization procedures under federal and state charters. Duties and responsibilities of officers. Bookkeeping procedure. Preparation of monthly and annual reports. Figuring interest in a credit union. A non-technical course with seminar for officers and directors of existing credit unions who desire to discuss advanced projects in connection with their present operations. Stout.
- (U) BA 411. **Business Public Relations.** 3 hours fall.
Public relations of business firms; tools and techniques for determining public reactions; methods of securing good public relations. Open to non-majors with consent of instructor.
- (U) BA 412. **Personnel Management.** (G) 3 hours fall.
The place and significance of personnel management in the modern business organizations; personnel policies and practices conducive to good relations with employees. Personnel problems of small organizations. Prerequisite: BA 222, 223, or consent of instructor.
- (U) BA 413. **Wage and Salary Administration.** (G) 3 hours winter.
Systematic wage and salary program as an essential part of an efficient personnel program. Basic methods for determining individual wage rates and wage structures; job evaluation. Prerequisite: BA 412.
- (U) BA 414. **Problems in Personnel Management.** (G) 3 hours spring.
Specific personnel problems at various organization levels. Each student proposes solutions, and group solutions are attempted through class discussion, in the light of various viewpoints and sound personnel principles. Prerequisite: BA 411, BA 412, and consent of instructor. Campbell.
- (U) BA 415. **Regional Studies in Business.** (G) 3 hours winter.
A study of the regional resources of the Pacific Northwest, as they are related to industry and commerce. Lomax.

- (U) BA 416, 417, 418. **Business Law.** (G) 3 hours each term.
Application of fundamental legal principles to typical business situations; illustrated by selected cases. The following topics are considered: contracts, bankruptcy, insurance, suretyship, sales, agency, personal property, real property, business organizations, partnerships, corporations, associations, trusts, joint stock companies, negotiable instruments.
- (U) BA 422, 423. **Problems in Business Education.** (G) 3 hours each term winter and spring.
Examination of current literature and text materials. Work-experience programs; standards of achievement; guidance programs; placement and follow-up; in-service training for teachers; business entrance tests; evaluation of current methods; auditory and visual aids. Special attention in BA 423 to individual needs of students enrolled. Prerequisite: consent of instructor.
- (U) BA 425. **Real-Estate Fundamentals.** (G) 3 hours fall.
Problems relating to the purchase, transfer, lease, and financing of land and buildings; home building, site selection, principles of house-and-lot evaluation. Open to non-majors. Johnson.
- (U) BA 426. **Real-Estate Practice.** (G) 3 hours winter.
Application of the principles of land and building management from the standpoint of the broker and owner-operator; real-estate practices and institutions. Prerequisite: BA 425. Johnson.
- (U) BA 427. **Real-Estate Appraising.** (G) 3 hours spring.
Specific factors affecting the value of land and buildings; the effect of city structure, zoning and city planning; demonstrations of various techniques in appraising; preparation of an appraisal report. Prerequisite: BA 425. Johnson.
- (U) BA 428. **Manufacturing.** (G) 3 hours fall.
Manufacturing industries of the United States; their raw materials, processes, and current technological and marketing developments. Prerequisite: BA 222, 223. Lomax.
- (U) BA 429. **Production Management.** (G) 3 hours winter.
Nature and scope of production processes; economics, technological, regional, and managerial organization of production; plant location; design and layout; control of plant investment; working-capital investment and labor costs; planning production operations. Prerequisite: BA 111, 112, 113; BA 222, 223. Ziebarth.
- (U) BA 432. **Business Statistics.** 3 hours fall.
Emphasis on appreciation and understanding of statistical methods. Charts and tables; sampling; averages, time-series analysis; index numbers; a brief introduction to the concept of linear correlation. Ballaine.
- (U) BA 434. **Problems in Distribution.** (G) 3 hours winter.
Critical study of marketing problems. Strength and weakness of various retail marketing channels; merits and limitations of wholesale marketing channels; extent and adaptability of direct marketing. Prerequisite: BA 223. Richins.
- (U) BA 435. **Sales Management.** (G) 3 hours fall.
Structure of sales organizations; sales policies; control of sales operations; sales planning; market analysis; coordination of production and sales; selection, training, and management of salesmen. Prerequisite: BA 223 or consent of instructor. Richins.
- (U) BA 437. **Credits and Collections.** (G) 3 hours winter.
The credit and collection policies of wholesale concerns, retail firms, and banks. The sources of credit information, the use of agency reports, interpretation of financial statements; collection tools and their uses. Prerequisite: BA 222, 223, or consent of instructor. Ballaine.
- (U) BA 441. **Radio-Television Advertising.** (G) 3 hours spring.
A study of the principles of radio and television advertising and of the tech-

- niques involved. The place of radio and television in modern advertising; methods of measuring circulation, planning campaigns, writing copy, checking results. Prerequisite: BA 339 or consent of instructor.
- (U) BA 442. **Principles of Salesmanship.** (G) 3 hours spring.
Principles and techniques of personal salesmanship; selling reactions. From the standpoints of seller and buyer. Prerequisite: BA 223 or consent of instructor. Richins.
- (U) BA 448. **Air Transportation.** (G) 3 hours fall.
Air transportation systems, Federal regulations, airport development in the United States, feeder air lines, and nonscheduled air transportation. Prerequisite: BA 111, 112, 113; BA 222, 223. Ziebarth.
- (U) BA 449. **Industrial Traffic Management.** (G) 3 hours spring.
Organization of a traffic department; organization and services of rail, truck, and air lines; theory and application of freight rates; shipping documents; routing; materials handling; claims; classification and rate-committee procedures. Prerequisite: BA 222, 223; BA-450 prerequisite to BA 451. Ziebarth.
- (U) BA 454. **Casualty Insurance.** (G) 3 hours spring.
Organization of companies, risks covered, and contracts, in accident insurance of all types. Automobile, plate glass, elevator, public liability, steam boiler, burglary, robbery, forgery, etc. Trueblood.
- (U) BA 455. **Life Insurance.** (G) 3 hours fall.
Types of life insurance, contracts, rate making, reserves, selections of risks, life insurance and the state. Prerequisite: consent of instructor. Trueblood.
- (U) BA 456. **Property Insurance.** (G) 3 hours winter.
Nature of coverage, types of underwriters, types of contracts; analysis of the policy contract, special endorsements and factors determining rates and adjustment of losses. Prerequisite: consent of instructor. Trueblood.
- (U) BA 459. **Finance Management.** (G) 3 hours spring.
Financial problems involved in promotion, organization, obtaining permanent and working capital, bank loans, commercial-paper borrowing, management of earnings, administration policies. Prerequisite: BA 222, 223. Ballaine.
- (U) BA 463, 464, 465. **Investments.** 3 hours each term.
Methods for evaluating various kinds of investment securities; formulation of an investment policy. Detailed study of the special phases of investments including taxation, brokerage services, and security markets. Application of investment principles to the analysis of specific securities in the industrial, public-utility, and railroad fields.
- (U) BA 467. **Public-Utility Management.** (G) 3 hours fall.
Production, distribution, and finance problems of public utilities; rates, accounting methods, flotation of securities, public relations, and consolidations. Prerequisite: BA 222, 223 or consent of instructor.
- (S) BA 497. **Human Relations in Business and Industry.** (g) 3 hours spring.
Relationships among managerial, supervisory and other workers; actual cases used to help develop attitudes, frames of reference, and approaches which will be useful in solving human relations problems in business. Prerequisite: senior standing or consent of instructor. Campbell.
- See Also:*
- Ec 201, 202, 203. **Principles of Economics** (under Economics).
- Wr 214. **Business English** (under English-Writing).
- Sp 225, 226. **Public Speaking for Business and Professional Men and Women** (under Speech).
- SS 111, 112, 113. **Stenography** (under Secretarial Science).

- SS 121, 122, 123. **Typing** (under Secretarial Science).
 SS 411. **Secretarial Problems** (under Secretarial Science).

Chemistry

Associate Professor: JOHNSON. Instructor: GAROFALO.

Lower-Division Courses

- (P) Ch 104, 105, 106. **General Chemistry**. 4 hours each term.
 For nursing-education and medical-technology students. 3 lectures; 1 three-hour laboratory period. Johnson and Garofalo.

Drama

(See SPEECH)

Economics

Professors: ELKINTON, NELSON. Assistant Professors: CAMPBELL,
 LOVELL, WATTLES. Instructor: BABILOT.

Lower-Division Courses

- (P) Ec 201, 202, 203. **Principles of Economics**. 3 hours each term.
 Principles that underlie production, exchange, distribution, etc. Prerequisite: sophomore standing. Elkinton.

Upper-Division Courses

- (U) Ec 318. **Money and Banking**. 3 hours fall.
 Operations of commercial banks, the Federal Reserve System, and the Treasury which affect the United States monetary system. Prerequisite: Ec 201, 202, 203 or consent of instructor. Nelson.
- (U) Ec 319. **Public Finance**. 3 hours winter.
 Principles and problems of government financing. Expenditures, revenues, debt, and financial administration. Prerequisite: Ec 201, 202, 203 or consent of instructor. Babilot.
- (U) Ec 320. **International Finance**. 3 hours spring.
 The nature of foreign-exchange markets; techniques of international payments; exchange rates and their determination; problems of an international monetary standard; international banking facilities; economic aspects of major international organizations. Prerequisite: Ec 201, 202, 203 or consent of instructor. Wattles.
- (U) Ec 325. **Labor Economics**. 3 hours fall.
 Conditions of labor since the industrial revolution. The labor market; wages, hours, conditions of work; unemployment; etc. Prerequisite: Ec 201, 202, 203. Lovell.
- (U) Ec 326. **Organized Labor**. 3 hours winter.
 History of the labor movement; aims, methods, and policies of trade unions, conservative and radical. Prerequisite: Ec 201, 202, 203. Lovell.
- (U) Ec 327. **Labor Legislation**. 3 hours spring.
 Labor legislation in the United States; problems facing employee, employer, and public which call for regulation through public authority. Prerequisite: Ec 201, 202, 203. Lovell.
- (U) Ec 415. **National Income Analysis**. (G) 3 hours fall.
 Analysis of statistical estimates of gross national production, national income, and related series. Emphasis on theory and limitations. Use of forecasting and economic analysis. Prerequisite: Ec 201, 202, 203. Campbell.

Graduate Course

- (U) Ec 507. **Problems of Policy and Administration in the Pacific Northwest**. 3 hours spring. (See: PS 507).

Education

Professors: CAUGHLAN, EPLER, SPALDING, STEVENS. Associate Professors: BERNARD, HUMMEL, MALTER, PHELPS. Assistant Professors: ANDERSON, CHENEY, LEAVITT, McMURTREY, WIEGMAN.

- (P) Ed 111. **Orientation to Teaching**. 3 hours winter.
 The importance of public education and the teacher's part in the child's learning experiences. Time will be devoted to a study of the teacher in school and community and to the demands and rewards of the teaching profession. Tests will be given in order that each student may understand how nearly his speech, hearing, vision, and personality fit him for teaching.
- (P) Ed 311. **The School in American Life**. 3 hours fall or winter.
 Designed to acquaint prospective teachers with the historical and philosophical background and development of the American public school. Special attention will be given to the development of the present day curricular practices and a comparison of opposing philosophies of education. Attention will be devoted to Oregon School Law and System of Education.
- (P) Ed 312. **Psychology of Learning and Teaching**. 3 hours fall or winter.
 A consideration of the nature of the learner, changes which occur in learning processes, conditions under which learning best takes place, and the characteristics and methods of the teacher who directs learning in the school. Basic concepts of measurement are utilized to evaluate the changes which characterize learning. Field experiences supplement theoretical study. Prerequisite: Psy 201, 202.
- (P) Ed 313. **Principles of Teaching in the Secondary School**. 3 hours spring.
 Different methods of presentation of subject-matter; values and weaknesses of each method; individual and group differences; extracurricular activity programs; measuring the results of teaching. Prerequisite: Ed 311, 312.
- (P) Ed 316. **Oregon School Law and System of Education**. 2 hours winter or spring.
 Oregon laws applying to school and teachers; teacher personnel policies and practices; professional organization; means for continued professional growth.
- (P) Ed 344. **Physical Education in the Elementary Grades**. 3 hours winter or spring.
 Theory and practice in Rhythm; singing games, group and folk dancing; stunts, games, self-testing activities, tumbling; materials; planning and evaluating programs with reference to basic principles of physical education.
- (P) Ed 351. **Health Education in the Elementary Grades**. 3 hours winter.
 Teaching of health education with emphasis on health knowledge, health habits of school children, and the development of a health-service program. Special study of the state health-education program. Prerequisite: Sc 101, 102, 103.
- (P) Ed 357. **Methods in Reading**. 3 hours fall.
 The place of reading in the modern elementary school. Trends and practices in reading instruction and prevention of reading difficulties. A study of appropriate materials and methods. Prerequisite: Ed 311, 312, and Psy 311.
- (P) Ed 358. **Methods in Science and Mathematics**. 3 hours winter.
 Science and mathematics in the elementary schools. Methods in the areas of science, including experiments, demonstrations, trips, and instructional materials. Trends and practices in the teaching of mathematics. Emphasis will be placed upon basic principles, research studies, problem solving, and the utilization of life situations. Prerequisite: Ed 311, 312, and Psy 311.
- (P) Ed 359. **Methods in Language Arts and Social Studies**. 3 hours spring.
 Trends and practices in listening, speaking, spelling, hand writing and English. Educational objectives of social studies and social problems of elementary

- school pupils. Organization and planning of the instructional program for the elementary grades. Attention will be given to appropriate methods and materials in language arts and social studies. Prerequisite: Ed 311, 312, and Psy 311.
- (P) Ed 380. **Elementary-School Library.** 3 hours winter.
Organization, administration, and development of the elementary-school library, including instruction in simple methods of handling essential technical, mechanical, and business processes; the care and repair of books, evaluation of reference materials useful for both teacher and children; stimulation of wider use of books for study and recreation; utilization of the library resources of Oregon, and service of the school library to the community.
- (P) Ed 406. **Problems in Elementary Education.** 3 hours winter or spring.
A seminar-type reading conference course designed as an elective for candidates for the bachelor's degree in elementary education. It will embrace study and investigation of selected problems in teaching to meet needs of individual candidates.
- (P) Ed 408. **Special Teaching Methods.** 3 hours any term.
Problems and methods in selecting and organizing materials for instruction; comparison and evaluation of methods, laboratory techniques, supplies, equipment, economy of time and materials. Courses include (a) English, (b) Social Science, (c) Science-Mathematics, (d) Music. Prerequisite: Ed 311, 312.
- (C) Ed 410. **Methods and Research Materials.** (G) 3 hours.
Emphasis for graduate students will be placed upon recent research and literature dealing with instructional materials, methods, and facilities, including the completion of a special project. Maximum 6 hours undergraduate and 9 hours graduate credit. Art, fall; Music, winter; Physical and Health Education, spring; Reading, fall.
- (P) Ed 414. **Student Teaching—Kindergarten.** 3-15 hours any term.
Observation and teaching under the direction of a supervising teacher. Students will be provided with opportunities for assuming direct responsibility for the learning activities of children, for developing skill in the techniques of teaching and schoolroom management, and for participating in the life of the school. Prerequisite: completion of general and professional courses leading to third year standing. Admission by application only.
- (U) Ed 424. **Measurement in Education.** (G) 3 hours fall or spring.
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. Simple statistics of test interpretation.
- (U) Ed 435. **Audio-Visual Aids.** (G) 3 hours any term.
The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc., are utilized. Sources of materials and equipment; administration of audio-visual program. Enrollment limited to 30.
- (U) Ed 440. **History of Education.** (G) 3 hours spring.
A general review of the growth and development of education in relation to the civilization of the times; emphasis on development of educational philosophies.
- (S) SEd 441, 442, 443. **Health Education.** (G) 3 hours each term.
Philosophy and principles of health education; organization and administration; health education curriculum; coordination of school health activities with other health resources. Prerequisite: one year of upper-division biological science and SEd 321 and 322, or equivalent.

- (C) Ed 451. **Preprimary Education.** (G) 3 hours fall.
An evaluation of the preprimary period in terms of the opportunities it affords to build up good attitudes toward school life, to help the child adjust himself to the group, to build up good habits of work, and to develop a readiness for subjects in the first-grade curriculum, such as reading, numbers, and language.
- (U) Ed 460. **Administration of Special Education.** (G) 3 hours spring.
Organizing, financing, housing, equipping, staffing, and supervising the special-education program. Desirable educational provision for each type of handicapped child.
- (U) Ed 461. **Psychology of Reading Instruction.** (G) 3 hours spring.
The fundamental nature of the reading process; principles of growth, adjustment, and learning basic to reading achievement; psychological foundations of methods of reading instruction.
- (U) Ed 462. **Psychology of Exceptional Children.** (G) 3 hours fall.
Survey of characteristics and problems of all types of exceptional children with special emphasis on those with sensory handicaps; consideration of essential educational adaptations.
- (S) (U) Ed 463. **The Maladjusted Child.** (G) 3 hours winter.
The discovery and treatment of the emotionally maladjusted child; the home, school, and community in relation to the child's mental health.
- (U) Ed 464. **The Mentally Handicapped Child.** (G) 3 hours fall.
Identification and guidance of the mentally deficient and slow learner.
- (S) (U) Ed 465. **Diagnostic and Remedial Techniques.** (G) 3 hours winter.
See Ed 468.
- (C) Ed 467. **Applied Mental Hygiene.** (G) 3 hours spring.
A study of the development of personality, personality conflicts, mechanisms of adjustment, and the basic principles of mental hygiene. Emphasis is placed on application of mental hygiene principles to personality development of teachers and of children.
- (C) Ed 468. **Diagnostic and Remedial Instruction in Reading.** (G) 3 hours winter.
Opportunities for experienced teachers to consider the typical causes of difficulty in the reading program and to evaluate procedures to be used in remedial classes by means of lectures, demonstrations, readings, and case studies. This course is essentially the same as Ed 465. Students may register for Ed 465 if they prefer.
- (S) SEd 481. **Alcohol Studies in the School Curriculum.** (G) 3 hours winter.
Incorporation of scientific information about alcohol in the school curriculum; physiological, psychological, sociological, and legal aspects of alcoholism.
- (C) Ed 484. **Junior High School.** (G) 3 hours fall.
Development of the junior high school, its purposes and objectives. The general organization of the school; courses of study; present practices in leading representative junior high schools; the direction of classroom activities; provision for individual differences; pupil guidance, and socialization.
- (S) Ed 485. **Principles and Practices of Guidance Services.** (G) 3 hours fall.
Overview of guidance and personnel work. Attention given to vocational, educational, health, social, personality, recreational, and other aspects of individual development. Participation of teachers, counselors, administrators, parents, and community organizations in a program of guidance. For all teachers and administrators. Students specializing in guidance should begin with this course. Prerequisite: senior standing.
- (U) Ed 486. **Education and Vocational Guidance.** (G) 3 hours winter.
The place of school records, test results, interests, aptitudes, abilities, and personal characteristics in the appraisal of educational and vocational potentialities.

ties; sources of current materials relating to educational opportunities and occupational trends.

- (S) Ed 486. **Occupational and Educational Information.** (G) 3 hours winter. Materials available regarding occupations; interpretations of present trends; value and usefulness for high-school and college students. Prerequisite: senior standing.
- (S) Ed 487. **Counseling Techniques.** (G) 3 hours spring. Mental, achievement, trade, and other tests; administration of such tests; classifications, methods in educational and vocational counseling. Prerequisite: Ed 485.

Graduate Courses

- (U) Ed 501. **Educational Research.** Terms and hours to be arranged. Prerequisite: graduate standing in education; consent of instructor. The Master of Education candidate will work with an instructor assigned by the Dean upon recommendation of his major adviser. Adult Education, Caughlan; Curriculum, Leavitt, Spalding; Educational Psychology, Bernard; School Administration, Hummel, Leavitt, Phelps, Spalding; Secondary Education, Hummel, Spalding, Wiegman; Elementary Education, Leavitt, Malter, Phelps.
- (U) Ed 501. **Educational Research (Field Study).** Terms and hours to be arranged. (See 501 Educational Research for areas.) Field study for graduate students who plan to take the Master of Education degree from the University of Oregon.
- (U) (S) (C) Ed 503. **Thesis.** Terms and hours to be arranged.
- (U) (S) Ed 505. **Reading and Conference.** Terms and hours to be arranged.
- (C) Ed 506. **Special Individual Studies.** Maximum of 6 hours. Terms and hours to be arranged. (See Ed 501 Educational Research for areas.) Registration only after adviser's approval of student's project.
- (C) Ed 506. **Special Individual Studies: Play Therapy.** 3 hours spring. An introduction to the theory and methods of play therapy. Emphasis on the observation, analysis, and interpretation of children's behavior both in and out of play situations to help the student develop skill in awareness and understanding of emotional expression. By consent of instructor only.
- (U) Ed 507. **Education Seminar: Problems of Public School Supervision.** 3 hours fall. This course is intended for advanced students of school supervision and for persons who hold supervisory positions. Students are expected to become familiar with basic theory of supervision and to apply this theory to selected problems from the field. Prerequisite: consent of instructor.
- (U) Ed 507. **Education Seminar: Unit Construction.** 3 hours winter. This course is intended to acquaint students with a theory of teaching and with construction of units based upon this theory. It is open only to persons who are currently employed in the field of education. Each student is expected to prepare a unit.
- (U) Ed 507. **Education Seminar: Problems of Public School Administration.** 3 hours spring. This course is intended for advanced students of public school administration and for persons who hold administrative positions. Students are expected to become familiar with basic theory of organization and to apply this theory to selected problems from the field. Prerequisite: consent of instructor.
- (U) Ed 507. **Education Seminar: School Maintenance.** 3 hours fall. Planning and supervising the district maintenance program. Building renovation. Problems of building sanitation, maintenance, lighting, etc. Open to graduate students and practicing custodians.

- (U) Ed 507. **Educational Seminar: Special Education.** 3 hours spring.
- (U) Ed 507. **Educational Seminar: Problems in Curriculum Development.** 3 hours winter. A study of conditions affecting curriculum as well as means used in affecting curriculum change. This study will be based upon previous work taken in curriculum by the various class members. Prerequisite: consent of instructor.
- (U) Ed 507. **Education Seminar: Teaching in the Elementary School.** 3 hours spring. A study-discussion seminar devoted to an intense survey of the teaching-learning situations found in our elementary schools. Previous teaching experience is required. Prerequisite: consent of instructor.
- (U) Ed 507. **Education Seminar: Family Finance Education.** 2 hours each term fall and winter.
- (S) Ed 512. **Research Procedures in Education.** 3 hours fall or spring. Methods, techniques, and tools for doing research work; meaning of scientific method; ways of locating and formulating problems; necessary statistical tools; collections and interpretation of data; preparation of research reports.
- (U) Ed 515. **Educational Statistics.** 3 hours winter. Technique in quantitative and experimental methods. Calculus not required. Admission after fall term only with consent of instructor. Prerequisite: graduate standing.
- (U) Ed 522. **Secondary-School Curriculum.** 3 hours winter. An advanced course for experienced teachers. The school in the community; guidance activities in the school; extra class activities; the role of the school in contemporary society; the teacher in the local community.
- (U) Ed 523. **School Activities.** 3 hours fall. 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.
- (U) Ed 526. **High-School Counseling.** 3 hours spring. The purposes, techniques, and processes of counseling. Dynamics of adjustment and personality change. Methods of promoting emotional, educational, and occupational adjustment.
- (U) Ed 527. **Secondary-School Administration and Supervision.** 3 hours fall. 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.
- (U) Ed 529, 530. **Advanced Educational Psychology.** 3 hours fall. Review of some modern viewpoints in educational psychology; discussion of useful experimental material. Prerequisite: graduate standing in education.
- (U) Ed 530, 531. **Advanced Educational Psychology.** 3 hours winter. Review of some modern viewpoints in educational psychology; discussion of useful experimental material. Prerequisite: graduate standing in education.
- (U) ArE 532. **Art in the Elementary School.** 3 hours fall. Designed to enable elementary art teachers and administrators to gain a better understanding of the significance of creative art activity. Lectures are closely integrated with laboratory work. Levels of creative development in children; direction and supervision of this development; building of a basic curriculum.
- (U) MuE 533. **Music in the Elementary School.** 3 hours winter. Philosophy, supervision, curriculum, materials, and procedures of music teaching in the elementary school. Research in problems involving music and related areas of instruction.

- (U) Ed 537. **Reading in the Elementary School.** 3 hours fall.
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.
- (S) Ed 543. **History of American Education.** 3 hours winter.
Intellectual development of America with special reference to education. Prerequisite. graduate standing in education.
- (U) Ed 546. **Philosophy of Education.** 3 hours fall.
Study of the broad fundamental principles and problems of education as evaluated by the various schools by philosophical thought.
- (U) Ed 552. **Elementary-School Problems.** 3-4 hours fall.
Selected current problems; issues and theories of elementary education; characteristics of modern teaching; major trends in elementary education.
- (U) Ed 553. **Elementary-School Curriculum.** 3-4 hours winter.
A systematic study of the elementary-school curriculum, including pupil needs in everyday life situations, objectives, essentials of a good program, varying curriculum designs, organizations of learning experiences, evaluation of learning, and appraisal of newer curriculum practices.
- (U) Ed 554. **Elementary-School Supervision and Administration.** 3-4 hours spring.
The role, duties, needs, and problems of modern supervision, including the evaluation and improvement of the teaching-learning situation.
- (U) Ed 565. **Curriculum Foundations.** 3 hours fall.
Implication of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning.
- (U) Ed 566. **Curriculum Construction.** 3 hours winter.
Survey and appraisal of curriculum patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning.
- (U) Ed 567. **Curriculum Materials.** 3 hours spring.
Effective use and organization of curriculum materials; text and reference books, supplementary pamphlet material, films and slides, records and recordings, pictures, radio, etc.; techniques of unit construction and community survey.
- (U) Ed 572. **Public-School Administration.** 3 hours fall.
Duties and responsibilities of school administrators. Relationships with board, staff, and community. Consideration of the professional and non-professional problems of school administration.
- (U) Ed 573. **Public-School Organization.** 3 hours winter.
The organizational patterns and programs of both elementary and secondary schools. Details of administration, including scheduling, records, and accounts, public accounting, personnel and guidance programs, activity programs, etc.
- (U) Ed 574. **School Supervision.** 3 hours spring.
Purposes and techniques of school supervision, as applied to both elementary and secondary schools. The organization of supervisory programs and diagnosis of both teacher and pupil difficulties.
- (U) Ed 575. **School Finance.** 3 hours winter.
The problems of school finance and business management; sources of school income, relationship to the state financial structure, budgeting and accounting, as effected by the school program. Construction of a budget is a part of the course.

- (U) Ed 576. **School Buildings.** 3 hours spring.
A study of the problems involved in planning, financing, and construction of school buildings; the care and maintenance of buildings; problems of equipment. An analysis of problems in a specific district is a part of the course.
- (U) Ed 587. **Adult Education.** 3 hours fall.
History and philosophy of the adult-education movement; its aims, ranging from the specifically vocational to the cultural. Representative work and methods in adult education.

Library Courses

Upper-Division Courses

- (U) Lib 386. **Organization of Library Materials.** 3 hours fall.
Instruction and practice in simplified procedures for the acquisition, preparation, organization, and circulation of books and related library materials.
- (U) Lib 482. **The Elementary-School Library.** (g) 3 hours winter.
Organization and administration of the elementary-school library, with emphasis on its functions in the instructional program. Simple methods of ordering and processing materials; care and repair of books; teaching the use of the library; utilization of library resources in the community and the state. Planned for both teachers and librarians. Prerequisite: Lib 386, or consent of instructor.
- (U) Lib 483. **Books and Related Materials for Children.** (g) 3 hours spring.
Primarily a reading course based on materials suitable for elementary-school children. Study of reading interests and curricular needs; criteria for evaluating materials; selection aids; devices for encouraging reading. Prerequisite: Lib 382 or consent of instructor.

In-Service Training Courses

(Portland Public Schools)

INSTRUCTORS: BASSETT, BENTALL, CARPENTER, CHILDERS, CONdit, DOBSON, FOSTER, GREEN, HALVORSEN, HAMILTON, HILL, HOEL, JENNE, LABER, LOGAN, MCGILL, MEADOR, O'GARA, OLIVER, O'REILLY, SCHAPER, SMITH, STOTLER, TAYLOR, TRENHOLME, WILSON.

The following courses, arranged in cooperation with the Portland Public Schools are given for in-service training of Portland teachers. They also are open to other qualified students. Most classes are held Tuesday afternoon, from 4:30 to 6:15 in one of the public schools. Meeting times and places are detailed in the *Class Schedule* published prior to each term.

Lower-Division Courses

- (C) A 127. **Art Appreciation.** 2 hours winter.
Designed to develop insight into the actual work of art and breadth in the understanding of diverse works of art. Introduction to the principal visual arts as related to daily living to include some experience with materials. Halvorsen.
- (U) Mus 127. **Introduction to Music Literature.** 2 hours fall.
A non-technical study of the development of music stressing the elements of musical understanding, study of representative compositions with emphasis on their musical and historical significances. Wilson.
- (P) Ph 161. **Rudiments of Photography.** 2 hours spring.
Intended for students interested in photography as an avocation. One lecture; 1 three-hour laboratory period. Trenholme.

Upper-Division Courses

- (C) A 352. **Art in Environment.** 2 hours fall.
Study and class participation in flower arrangement, classroom decoration; analysis of color, texture and line applied to clothing; discussion of home and civic improvements related to daily life. Halvorsen.
- (P) AA 414. **Art Education in the Senior High School.** 2 hours spring.
Study of art education in the secondary school, through laboratory work and individual research. Practice-teaching problems examined and studied as a group experience. Evaluation of current thinking in the field and of its application to the classroom situation. Halvorsen.
- (P) Ed 316. **Oregon School Law and System of Education.** 2 hours winter.
Oregon laws applying to school and teachers; teacher personnel policies and practices; professional organization; means for continued professional growth. Condit, Laber, Oliver.
- (P) Ed 351. **Health Education.** 2 hours spring.
Teaching of health education with emphasis on the health knowledge, health attitudes, and health habits of school children, and the development of a health service program. Special study of the state health education program. Logan.
- (P) Ed 406. **Problems in Elementary Education (Elementary Rhythms).** 2 hours fall or winter.
Programs of dance for kindergarten and primary school children. Locomotor skills, imitative movements, singing games, simple folk dances, dramatizations, and creative dance studies. Hill.
- (S) BEd 407. **Seminar: Business Education.** 2 hours winter.
Techniques and materials for teaching the various courses in business education will be studied. Problems related to business education will be investigated. Carpenter.
- (S) Ed 408. **Methods and Materials: Industrial Arts.** 2 hours each term fall and winter.
Problems and methods in selecting and organizing materials. Study of the industrial arts program, its objectives and the types of classroom activities that will meet these objectives. Evaluation of methods. Use of supplies and equipment. O'Gara.
- (U) Ed 408. **Seminar: Foreign Languages—Materials and Methods of Teaching Foreign Languages.** 2 hours spring.
Problems and methods in selecting and using materials. Teaching techniques will be studied. Bassett.
- (U) Ed 408. **Special Teaching Methods: Special Education Program.** 2 hours winter.
Problems of classroom management, methods, materials and curriculum development arising in the high school programs approved and supervised by the Special Education Division. Taylor.
- (U) Ed 408. **Special Teaching Methods: Secondary Mathematics.** 2 hours spring.
Planned for high school teachers who wish to study methods and techniques for improving classroom instruction. Study of materials and techniques to meet individual differences. Hoel.
- (C) Ed 410. **Methods and Research Materials: Industrial Arts.** 2 hours each term fall and winter.
Problems and methods in selecting and organizing materials. Study of the industrial arts program, its objectives and the types of classroom activities that will meet these objectives. Evaluation of methods. Use of supplies and equipment. Fall: Elementary industrial arts. Winter: High school industrial arts. O'Gara.

- (C) Ed 410. **Methods and Research Materials: Physical Education.** 2 hours fall.
Problems and methods in selecting and organizing materials for teaching elementary school physical education. Emphasis will be placed upon recent research and literature dealing with instructional materials, methods, and facilities, including the completion of a special project. Jenne.
- (C) Ed 410. **Methods and Research Materials: Primary Music.** 2 hours winter.
Techniques and materials for teaching music to primary children. Foster.
- (C) Ed 410. **Methods and Research Materials: Science.** 2 hours each term winter and spring.
The rudiments of science will be taught and especially directed toward an understanding of the science background of the age in which we are living. There will be an opportunity to become familiar with new equipment and experiments that can be used. Stotler.
- (C) Ed 410. **Methods and Research Materials: Unit Preparation and Teaching.** 2 hours winter.
Techniques and materials for unit teaching in the intermediate and upper grades and in the high school. Problems will be developed to show how a unit may be taught in a classroom. Schaper.
- (P) Ed 435. **Audio-Visual Aids.** 2 hours winter.
The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc., are utilized. Source of materials and equipment; administration of audio-visual program. Limited to 20. Trenholme.
- (E) Ed 450. **Radio Education.** 2 hours winter.
Study of problems such as using radio programs in the classroom, preparing a class to listen, preparing script, broadcasting and using transcriptions. Home radio listening, home TV viewing and utilization of home radio and TV viewing and utilization of home radio and TV viewing will be studied. Green.
- (C) Ed 455. **Primary Education Workshop.** 2 hours fall.
- (C) Ed 459. **Upper-Grade Education Workshop.** 2 hours fall.
Designed for elementary teachers who are new in the district. Problems dealing with the unit approach to teaching and the skill areas, arithmetic and language arts, will be studied. Groups will be organized in primary, intermediate, and upper grade levels. Hamilton and staff.
- (U) Ed 465. **Diagnostic and Remedial Techniques: Arithmetic.** 2 hours winter.
Diagnostic, remedial, and corrective techniques in arithmetic. Hoel.
- (C) Ed 468. **Diagnostic and Remedial Instruction in Reading.** 2 hours winter.
Opportunities for experienced teachers to consider the typical causes of reading difficulty and to evaluate remedial procedures, by means of lectures, demonstrations, readings and case studies. Bentall.
- (S) Ed 485. **Principles and Practices of Guidance Services.** 2 hours fall.
Overview of guidance and personnel work. Attention given to vocational, educational, health, social, personality, recreational, and other aspects of individual development. Participation of teachers, counselors, administrators, parents, and community organizations in a program of guidance. For all teachers and administrators. Dobson, McGill.
- (U) HE 358. **Safety Education. Safety, First Aid and Emergency Procedures.** 2 hours spring.
Designed to develop competencies in skills and knowledge for meeting individual and mass emergency situations; to prepare teachers to present the unit on safety, first aid, and emergency procedures required in grades 7 and 9. The course will be of value to all teachers. Included are safety problems in the

community; first aid procedures; emergency procedures; safety phases of civil defense program. Minimum: 20 students. Meador and staff.

- (U) Hst 377. **Oregon History.** 2 hours winter.
Brief survey of the building of civilization in the Oregon Country. Required for teacher's certificate in Oregon. Childers, Smith.
- (P) PE 386. **Dance and Physical Education Laboratories.** 2 hours spring.
Instruction and practice in intermediate and upper grade elementary and high school rhythms. Jenne.

Graduate Courses

- (U) Ed 507. **Education Seminar: Science.** 2 hours each term winter and spring.
Winter: High school science. Spring: Elementary Science. Stotler.
- (U) Ed 507. **Education Seminar: Social Studies for the Secondary School.** 2 hours winter.
Emphasis will be placed upon recent research and literature dealing with instructional materials, methods and facilities, for teaching social studies in the secondary schools. Such topics as education for democratic citizenship, individual differences, use of visual and auditory materials, testing and evaluation, use of the community, current events, organization of the materials, available classroom materials, problem solving methods, will be examined. Smith.
- (S) HEd 507. **Seminar Teaching Procedures in Home Economics Education.** 2 hours winter.
Current trends in the teaching of home economics with special attention given to cooperative planning and problem solving techniques, use of audio-visual materials, socio-metric and socio-dramatic techniques, radio and television. Individual teacher needs served through work on special problems. O'Reilly.

Multnomah County Schools

Instructor: MARTIN.

The following courses, arranged in cooperation with the Multnomah School Health Agency, will be offered at *Russellville School*, 124 S. E. 102nd Avenue, Portland, and at *Park Rose Senior High School*, 11717 N. E. Shaver, Portland. All classes meet from 4:00 to 6:45 p.m. Classes at Russellville will meet on Tuesdays; classes at Parkrose will meet on Thursdays.

- (U) Ed 463. **The Maladjusted Child.** (G) 3 hours fall.
The discovery and treatment of the emotionally and socially maladjusted child; the home, school and community in relation to the child's mental health.
- (U) Ed 341. **Individual Differences.** 2 hours winter.
Importance and extent of individual differences in various human traits; origin, measurements, and practical significance.
- (U) Ed 464. **The Mentally Handicapped Child.** (G) 3 hours spring.
Identification and guidance of the mentally deficient and the slow learner.

Engineering

Professors: COOPEY, ENGESSER, STARR, MARTIN. Associate Professor: CLAYTON. Assistant Professors: MCCLELLAN, SMITH.

Lower-Division Courses*

- (S) GE 104, 105, 106. **Engineering Fundamentals.** 3 hours each term.
Basic concepts and principles of physical science; elementary technical problems, algebraic composition; training in use of slide rule. One lecture; 2 three-hour computation periods. Tuesday and Thursday.

* Courses listed here under various fields of engineering are designed for advanced engineering students or for persons with practical experience in the field. Students interested in lower-division work toward an engineering degree should see also: Chemistry, Mathematics, and Physics.

CIVIL ENGINEERING COURSES

- (E) CE 011. **Civil Engineers Review.** Non-credit fall.
Designed to prepare civil engineering graduates for examinations administered by the Board of Engineering Examiners of Oregon. Wednesday. Clayton.
- (E) CE 031. **Effective Fleet Operation.** Non-credit fall.
A practical program for effective fleet operation through study of problems relating to selecting, training, and supervising drivers, and also to keeping down accidents and operational costs. It is particularly designed for local or city delivery fleets. Coopey.
- (S) CE 405. **Reading and Conference (Reinforced Concrete Design).** 3 hours fall. Wednesday. McClellan.
- (S) CE 405, 505. **Reading and Conference (Pre-Stressed Concrete).** 3 hours winter. Wednesday. McClellan.
- (S) CE 405, 505. **Reading and Conference.** 3 hours spring. Wednesday. McClellan.

ELECTRICAL ENGINEERING COURSES

- (E) EE 012. **Electrical Engineers Review.** Non-credit fall.
Designed to prepare electrical engineering graduates for examinations administered by the Board of Engineering Examiners of Oregon. Monday.
- (S) EE 405, 505. **Reading and Conference (Electrical Distribution).** 3 hours fall. Tuesday.
- (S) EE 405, 505. **Reading and Conference (Synchronous Machines).** 3 hours winter.
- (S) EE 405, 505. **Reading and Conference (Magnetic Amplifiers).** 3 hours spring. Tuesday.

INDUSTRIAL ENGINEERING COURSES

- (S) IE 405. **Reading and Conference (Industrial Safety).** 3 hours fall. Wednesday. Engesser.
- (S) IE 405. **Reading and Conference (Statistical Quality Control).** 3 hours winter. Wednesday. Smith.
- (S) IE 405. **Reading and Conference (Time and Cost Study).** 3 hours winter. Wednesday. Engesser.
- (S) IE 490. **Industrial Supervision Principles.** (G) 3 hours spring.
Basic company, supervisor, and operator objectives and responsibilities, and their relationship to one another; solutions of case problems compared with fundamentals established by industrial leaders. Prerequisite: IE 391, 392, 393, or consent of instructor. Wednesday. Engesser.

MECHANICAL ENGINEERING COURSES

- (E) ME 021. **Thermodynamics Review.** Non-credit spring.
Tuesday. Martin.
- (S) ME 421. **Heating and Air Conditioning.** (G) 3 hours fall.
Application of basic principles to heating, ventilating, and air conditioning of buildings for human comfort or industrial processes; design, selection, construction, and operation of air conditioning equipment, including warm air, steam, hot water, and refrigeration systems; testing of air conditioning equipment and controls. Tuesday.
- (S) ME 405, 505. **Reading and Conference (Heating and Air Conditioning).** 3 hours winter.
Continuation of ME 421. Tuesday.

English

Professors: FRANCHERE, POWERS, YERIAN. Associate Professors: DAHLSTROM, HENKLE, OLIVER. Assistant Professors: GAUPP, KARCHMER.
Instructors: BROWNE, HART, JOHNSON.

LITERATURE

Lower-Division Courses

- (P) Eng 101, 102, 103. **Survey of English Literature.** 3 hours each term.
From Beowulf to the present. Fall: Beowulf to Milton. Winter: Milton to Byron. Spring: Byron to the present. Dahlstrom.
- (P) Eng 104, 105, 106. **Appreciation of Literature.** 3 hours each term.
The aim is to stimulate the appreciation and criticism of literature through a study of outstanding works in prose and poetry, selected from all periods, including the twentieth century; includes works in English and translations from other literatures. Hart.
- (P) Eng 107, 108, 109. **World Literature.** 3 hours each term.
A sequence in narrative prose, drama, and poetry. Complete books are studied so that the student may be familiar with some of the masterpieces in Western World literature. Johnson.
- (P) Eng 201, 202, 203. **Shakespeare.** 3 hours each term.
Study of the important plays, comedies, histories, and tragedies. Required for majors. Dahlstrom.
- (P) Eng 261, 262, 263. **Survey of American Literature.** 3 hours each term.
American literature from its beginning to the present day. Two consecutive terms required to satisfy the high-school teaching field requirement. Oliver.

Upper-Division Courses

- (P) Eng 388. **Children's Literature and Library.** 3 hours fall.
Designed to give an acquaintance with good books and magazines for children and procedures in introducing them to children. Experience with and knowledge of school library procedures. Henkle.
- (P) Eng 394, 395, 396. **Twentieth-Century Literature.** 3 hours each term.
British and American literature since 1900.
- (U) Eng 420, 421, 422. **Anglo-Saxon.** (G) 3 hours each term.
Grammar; translation of selected passages and the entire Beowulf. Required for graduate students in English. Franchere.
- (U) 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. Dahlstrom.
- (P) Eng 472. **The Teaching of Composition.** 3 hours winter.
A course which emphasizes methods and materials for the teachers of writing. Browne.
- (U) Eng 478, 479, 480. **The Modern Spirit in American Literature.** (g) 3 hours each term.
From Whitman to the present. Oliver.
- (C) Eng 511, 512. **Contemporary Developments in the Humanities.** 3 hours each term.
Emphasis upon the search for values in the modern world as reflected in forces shaping contemporary philosophies, trends in contemporary literature, and developments in language study, with implications for elementary school personnel. Selected readings from leading contemporary thinkers and writers.

WRITING

Lower-Division Courses

- (P) Wr 111, 112, 113. **English Composition.** 3 hours each term.
The fundamentals of English composition and rhetoric; frequent written themes. Special attention to correctness in fundamentals and to the organization of papers.
FALL: Wr 111. (Section I), Monday; Wr 111. (Section II), Tuesday; Wr 111. (Section III), Wednesday; Wr 111. (Section IV), Thursday; Wr 111. (Section V), Friday.
WINTER: Wr 111. (Section I), Monday; Wr 112. (Section I), Monday; Wr 112. (Section II), Tuesday; Wr 112. (Section III), Wednesday; Wr 112. (Section IV), Thursday.
SPRING: Wr 111. (Section I), Friday; Wr 112. (Section I), Monday; Wr 113. (Section I), Monday; Wr 113. (Section II), Tuesday; Wr 113. (Section III), Wednesday; Wr 113. (Section IV), Thursday.
- (S) Eng 211. **Vocabulary Building.** 3 hours fall or spring.
Through analysis of words and meanings in context, seeks to increase vocabulary, reading comprehension, and effective use of language.
- (U) Wr 214. **Business English.** 3 hours winter or spring.
Study of modern practices in business correspondence, primarily for students of business administration. Analysis and writing of the principal types of correspondence. Prerequisite: Wr 111, 112, 113. Winter: Yerian. Spring: Staff.

Upper-Division Courses

- (E) Wr 031. **Writing for Magazines.** Non-credit fall.
For students interested in writing fiction or articles for sale. Karchmer.
- (U) Wr 321, 322, 323. **Play Writing.** 3 hours each term.
Creative experiment in the writing of plays with incidental study of models. Analysis and discussion of student work. Prerequisite: consent of instructor. Gaupp.
- (U) Wr 316, 317a, 317b. **Advanced Expository Writing (Art of Fiction).** 2 hours each term.
Writing the modern short story. Subjects and forms. Structure, suspense, plot, invention. Characters, setting, atmosphere, dialogue, narrative technique, style. Range of fiction and adaptation to modern dramatic outlets; slanting and special types: markets and the business side of writing. Prerequisite: consent of instructor. Powers.
- (E) Wr 354, 355. **Advanced Creative Writing.** 2 hours fall and winter.
Writing in the various forms to provide increased ease, certainty, and force in written expression. A continuation, with emphasis on effectiveness and craftsmanship, for those who have taken lower-division courses in rhetoric. Prerequisite: consent of instructor. Powers.
- (U) Wr 451. **Projects in Writing.** 2 hours spring.
For students who desire advanced instruction and practice in writing in the short-story, novel, or nonfiction form. Prerequisite: consent of instructor. Powers.

Entomology

Instructor: MALCOLM.

Lower-Division Course

- (S) Ent 200a, 200b. **General Entomology.** 3 hours fall, 2 hours winter.
For students whose principal interest is biology. Classification, biology, morphology, physiology. Malcolm.

Family Life*(See HOME ECONOMICS)***Foreign Languages**

Professor: DOUGHERTY. Assistant Professors: KRAFT, LEPPMANN.
Instructors: HEALY, HERMAN, KRIVOSHEIN.

FRENCH**Lower-Division Courses**

- (U) RL 1a, 1b, 2a. **First-Year French (First Course)**. 2 hours each term.
Provides an introduction to grammar and practice in reading modern prose; considerable practice in pronunciation and opportunity for understanding the spoken language. Healy.
- (U) RL 2b, 3a, 3b. **First-Year French (Second Course)**. 2 hours each term.
Reviews and extends the knowledge of grammatical principles and the irregular verbs. Exercise in pronunciation and study of idioms used in conversation. Reading of simple texts and sight work to develop in the student ability to read easy French without recourse to English. Healy.
- (U) RL 102b, 103a, 103b. **Second-Year French (Second Course)**. 2 hours each term.
Study of selected texts of representative authors; review of grammar; considerable attention to oral use of the language. Healy.
- (U) RL 314, 315, 316. **Intermediate French Composition and Conversation**. 2 hours each term.
Exercises in pronunciation, comprehension and composition. Ample opportunity for conversation. Conducted in French. Prerequisite: two years of college French or equivalent. Dougherty.

GERMAN**Lower-Division Course**

- (U) GL 1a, 1b, 2a. **First-Year German (First Course)**. 2 hours each term.
Provides a thorough grammatical foundation and an elementary reading knowledge of German, as well as an understanding of the spoken language. Leppmann.

RUSSIAN**Lower-Division Course**

- (U) SL 11a, 11b, 12a. **First-Year Russian (First Course)**. 2 hours each term.
Reading of simple prose with adequate study of grammar for reading comprehension. Krivoshein.

SPANISH**Lower-Division Courses**

- (U) RL 11a, 11b, 12a. **First-Year Spanish (First Course)**. 2 hours each term.
Provides an introduction to grammar and practice in reading modern prose; considerable practice in pronunciation and opportunity for understanding the spoken language. Herman.
- (U) RL 12b, 13a, 13b. **First-Year Spanish (Second Course)**. 2 hours each term.
Reviews and extends the knowledge of grammar, composition and conversation. Kraft.

General Science

Associate Professors: HOPSON, LANGE. Assistant Professors: PAYNE, WINCHELL.
Instructor: BROOKE.

Lower-Division Courses

- (P) GS 107, 108, 109. **Biological Science Survey**. 3 hours each term.
Place of man in relation to other forms of life; with particular reference to heredity, nervous systems, organic evolution; importance of animal and plant forms as sources of food, shelter, clothing, and medicines, and as sources of disease. Two lectures: 1 two-hour laboratory period. Winchell.
- (P) GS 201, 202, 203. **Foundations of Physical Science**. 3 hours each term.
A course in the elements of the branches of physical science, i.e. astronomy, chemistry, geology, meteorology, and physics. Study of the development of these fields from their earliest historical beginnings to their present-day positions and effects on society. Particular emphasis is placed on the development of scientific attitudes. Two lectures: one 2-hour laboratory period. Payne.
- (S) NR 261, 262, 263. **Cartography**. 3 hours each term.
Study and practice in techniques of cartography, field mapping, and reproduction methods essential to professional workers. May layout and field sketching; projections, color, and advanced mapping. Brooke.

Upper-Division Courses

- (C) GS 311, 312, 313. **Natural History of Oregon**. 3 hours each term.
The earth and life history of Oregon; kinds and distribution of contemporary plant and animal life; man and his relation to the environment; conservation of natural resources. Prerequisite: upper-division standing and a year sequence in general biology, or consent of instructor. Hopson.
- (S) GS 507. **Seminar: Natural Resources of the United States**. 3 hours spring.
Hopson.
- (S) GS 411, 412, 413. **History of Science**. (G) 2 hours each term.
The development of science from the beginnings, with emphasis on the scientific method and spirit. Prerequisite: eighteen hours of upper-division science, or equivalent. Lange.

Graduate Courses

- (C) Sc 511. **Contemporary Developments in the Sciences and Mathematics**. 3 hours winter.
Emphasis upon the more important phases of contemporary development in the natural sciences and mathematics. Evaluation in terms of historical background, the true aims of science, and the effect upon society. Review of related regional problems and resources. Selected readings. Lange.

General Studies

Portland State Extension Center Adviser: DR. JAMES C. CAUGHLAN.
University Committee: DR. JOEL V. BERREMAN, Chairman.
State College Committee: DR. E. A. YUNKER, Chairman.

Graduate Courses

- GSt 501. **Research in General Studies**. Terms and hours to be arranged.
- GSt 503. **Graduate Thesis**. Terms and hours to be arranged.
- GSt 505. **Reading and Conference**. Terms and hours to be arranged.

Geography

Assistant Professor: DART. Instructors: NEWHOUSE, STEINHARDT.

Lower-Division Courses

- (E) Geog 011. **This is Europe (A Practical Guide)**. Non-credit fall.
An opportunity for those who plan a visit or a stay in Europe to draw upon the knowledge and experience of one who has studied, traveled and lived on the continent for many years. Steinhardt.
- (P) Geog 105, 106, 107. **Introductory Geography**. 3 hours each term.
A general introduction to the field of geography in sequence as follows: Geog 105, physical elements; Geog 106, earth resources; Geog 107, cultural elements. Newhouse.

Upper-Division Courses

- (U) Geog 323. **Geography of the Pacific Northwest (Oregon)**. 3 hours spring.
A study of the land forms, climates, population, resources, products, and lines of communication of the Pacific Northwest. Dart.
- (U) Geog 391. **Geomorphology**. 3 hours fall.
Systematic study of land forms. Field trips, 1 two-hour laboratory period. Prerequisite: one year of geology or consent of instructor. Dart.
- (U) Geog 392. **Regional Geomorphology**. 3 hours winter.
Continuation of Geog 391. Detailed study of the geomorphology of the United States. Dart.
- (U) Geog 405. **Reading and Conference**. Terms and hours to be arranged.
- (U) Geog 426. **Geography of Europe**. (G) 3 hours fall.
Some of the special problems of Europe today studied in light of the geographic background of the continent. Prerequisite: Geog 105, 106, 107, or Geog 201, 202, 203. Newhouse.
- (U) Geog 429. **Geography of North America**. (g) 3 hours spring.
Regional geography of the continent north of the Rio Grande. Prerequisite: Geog 105, 106, 107, or Geog 201, 202, 203. Newhouse.
- (U) Geog 430. **Geography of South America**. (G) 3 hours spring.
Physical, economic, and human geography of the continent. Prerequisite: Geog 105, 106, 107 or Geog 201, 202, 203.
- (U) Geog 435. **Urban Geography**. (G) 3 hours winter.
World distribution of great cities; urban patterns, forms, and functions; systems of urban land classification; forces affecting urban land use; geographic aspects of city planning. Prerequisite: Geog 201, 202, 203; Geog 219 or consent of instructor.

Graduate Course

- (U) Geog 507. **Seminar: Geography of the Mediterranean**. 3 hours winter.
Newhouse. *See also*: NR 261, 262, 263 Cartography (under General Science).

Geology

Associate Professor: HOPSON. Instructor: MASON.

Lower-Division Courses

- (P) G 201, 202, 203. **Geology**. 3 hours each term.
Processes of nature by which earth's surface has been built up, deformed, and torn down; natural history and occurrence of common rocks and useful minerals; outline of history of earth and life. Mason.

Upper-Division Courses

- (S) G 324, 325. **Engineering Geology**. 3 hours each term fall and winter.
Application and use of geology in engineering and industrial arts. May be taken separately. Prerequisite: upper-division standing. Some field trips required. Mason.
- (S) G 350. **Rocks and Minerals**. 3 hours fall.
This course gives opportunity to become acquainted with rocks and minerals without having to meet the requirements of the more technical courses. Especially useful to students expecting to teach general science. Prerequisite: upper-division standing. Two lectures; one 2-hour laboratory period. Hopson.
- (S) G 352. **Geology of Oregon**. 3 hours winter.
Affords opportunity to obtain a general knowledge of the geology of the state without having to meet the technical requirements imposed for a professional geology major. Prerequisite: upper-division standing. Hopson.
- (S) G 405. **Reading and Conference**. Terms and hours to be arranged.

Health and Physical Education

Professors: BERGSTROM, WASHKE. Associate Professor: SPRAGUE. Assistant Professors: GREENSLADE, HOLLAND, HUDSON. Instructor: WESTCOTT.

Lower-Division Courses

- (U) HE 252. **First Aid**. 3 hours fall.
American Red Cross first aid, lectures, demonstration, and practices leading to standard and advanced first-aid certificates. Holland.

Upper-Division Courses

- (U) 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. Holland.
- (U) HE 358. **Safety Education**. 3 hours winter.
Basic principles of safety education; current safety programs as they apply to the school, home and community. Designed to develop competencies in skills and knowledges for meeting individual and mass emergency situations; also to prepare teachers to present this unit in their classes. First aid procedures; emergency procedures; safety phases of civil defense program. Minimum: 20 students.
- (U) HE 411, 412, 413. **Health-Education Workshop**. (g) 3 hours each term.
Greenslade.
HE 411. Structure and functions of the human body, first aid and safety. Choice and use of health and health products.
HE 412. Personal hygiene (including effects of alcoholic drinks, stimulants, and narcotics), nutrition, community health, and sanitation.
HE 413. Physiology of exercise, communicable and non-communicable disease, and mental health (including family-life education).
- (U) PE 41, 412, 413. **Physical-Education Workshop**. (g) 3 hours each term.
Hudson.

A workshop for physical-education teachers in the public schools. Each teacher works out and organizes the complete program for his school in light of the objectives, standards, and purposes of the Oregon physical-education program. Open to men and women. (May be substituted for College of Education Ed 344.) Content of the course is as follows: PE 411. Rhythmics and folk dancing. PE 412. Games of low organization. PE 413. Individual team sports and games.

- (S) PE 423. **Organization and Administration.** (g) 3 hours spring.
Administrative problems; organization of department, organization of instructional and recreational programs, supervision of both teaching and physical plant and routine administration.
- (U) PE 428. **Wrestling (Men).** 2 hours fall.
For professional students. Westcott.
- (S) PE 431. **Current Trends and Problems.** (g) 3 hours fall.
Study of present trends in health, physical education and recreation and their underlying forces; recent developments and their implications for administrative responsibility and planning for programs in schools and colleges. Prerequisite: PE 412 or consent of instructor. Bergstrom.
- (U) HE 450. **Elementary-School Health Education.** (g) 3 hours spring.
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. Holland.

Graduate Courses

- (U) PE 507. **Seminar: Recreation.** 3 hours each term.
Specific area of each term's seminar to be announced.
- (U) PE 507. **Seminar: Supervision of Physical Education.** 3 hours spring.
Sprague.
- (U) PE 515. **History and Theories of Physical Education.** 3 hours winter.
The history of physical education from the Greeks to modern times. Special emphasis on modern developments, and on current professional organization and relationships. Washke.
- (U) PE 574. **Physiological Principles of Advanced Conditioning.** 3 hours winter.
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 the major sports and individual activities. Prerequisite: Bi 312, 313; PE 473 or equivalent.

See also:

- Ed 344. **Physical Education in the Elementary School (under Education).**
- Ed 351. **Health Education (under Education).**
- SEd 431, 432, 433. **School Health Problems.** (G) (under Education).
- SEd 481. **Alcohol Studies in the School Curriculum.** (G) (under Education).

History

Professor: SWARTHOUT. Associate Professors. HOFFMANN, JOHANSEN.

Lower-Division Courses

- (P) Hst 101, 102, 103. **History of Western Civilization.** 3 hours each term.
The development of Western civilization from early beginnings to the present time; political, social and cultural factors; present conditions and problems. The three terms constitute a sequence but may be taken separately. Swarthout.
- (P) Hst 201, 202, 203. **United States History and Government.** 3 hours each term.
From colonial times to the present day. Attention is given to the factual functions of its government and to the adaptations that have been made to changing social and economic conditions.

Upper-Division Courses

- (U) 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.
- (U) Hst 405. **Reading and Conference.** Terms and hours to be arranged.
- (U) Hst 430, 431. **Renaissance.** (G) 3 hours each term, fall and winter.
Fall: the Renaissance in Italy. Winter: the northern Renaissance.
- (U) Hst 432. **Reformation.** (G) 3 hours spring.
The Protestant and the Catholic reform of the sixteenth century.
- (U) Hst 445. **Europe since 1939.** (g) 3 hours winter.
Origins and course of World War II; postwar developments in the European States.
- (U) 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, in relation to trends of public opinion and political and social action. Prerequisite: 9 hours in United States history or consent of instructor. Johansen.
- (U) Hst 479. **Forces and Influences in American History.** (G) 3 hours spring.
Geographic influences; influence of the frontier; inheritance and tradition; economic forces; nationalism; sectionalism; manifest destiny; democracy.
- (U) Hst 478. **History of the Pacific Northwest.** (G) 3 hours any term.
Detailed study of the building of civilization in the Pacific Northwest. Prerequisite: Hst 201, 202, 203, or consent of instructor. Johansen and staff.
- (U) Hst 480, 481, 482. **The United States in the Twentieth Century.** (G) 3 hours each term.
Fall: to 1917. Winter: 1917-35. Spring: since 1935. Hoffmann.
- (C) Hst 492. **World Problems.** (G) 3 hours winter.
Consideration given to current and significant political, economic, and social problems of the nations in relation to American culture. *Not open to students who have taken SSc 411.*
- (U) Hst 507. **Seminar: Problems of Policy and Administration in the Pacific Northwest.** 3 hours winter.
Treats the major aspects of growth and development of the region.

Home Economics

Assistant Professors: AIKIN, GRANT, WASSON.

Lower-Division Courses

- (S) AA 178. **House Planning and Architectural Drawing.** 3 hours fall.*
Aim is to stimulate appreciation and criticism of domestic architecture. Small-house planning and drawing with particular reference to the needs of individual students. Wasson.
- (S) CT 250. **Textiles.** 3 hours winter.
Properties, uses, selection and care of textile fibers and fabrics. No prerequisite, but chemistry is desirable. Grant.

Upper-Division Courses

- (S) FL 311, 312. **Child Development.** 3 hours each term fall and winter.
Growth and development of normal preschool children. Prerequisite: Psy 207 or 202. Aikin.

- (S) CT 331. **Home Furnishing.** 3 hours winter.
Furnishing a small home from standpoint of comfort, beauty, and economy; influence of historic design. Prerequisite: CT 212, 250, AA 161, 178, or consent of instructor. Wasson.
- (S) FL 407. **Seminar: Nursery School Teaching.** Terms and hours to be arranged.
- (S) CT 431. **Home Furnishing.** (G) 3 hours spring.
Consumer study of home furnishing, fabrics, furniture, rugs, china, silver and ceramics. Particular attention paid to contemporary designers and materials and to prices and manufacturers. Prerequisite: CT 331, upper-division standing, or consent of instructor. Wasson.
- See also:* Art, Landscape Architecture.

Horticulture

Professor: BOUQUET.

Lower-Division Course

- (S) Hrt 111. **Elements of Horticulture.** 2 hours fall.
Lectures, discussions, and demonstrations dealing with horticultural crops about the home—vegetables, small fruits, tree fruits, and flowers. Emphasis on principles and fundamentals of growth, propagation, soil management and fertility, garden planning, pest control, irrigation. Special problems concerned with important crops. Greenhouse and frame management in gardening. Demonstrations during class meetings. *See also:* Landscape Architecture.

Journalism

Instructor: CLISHAM.

Lower-Division Courses

- (S) J 111, 112. **Elementary Journalism.** 3 hours each term fall and winter.
Journalistic style of writing; workings of the press, both general and technical. Clisham.
- (S) J 211. **Copyediting.** 3 hours spring.
Copy reading, head writing, proof reading, and make-up; actual experience in editing copy. Prerequisite: J 111. Two lectures; 1 laboratory period. Clisham.

Upper-Division Courses

- (U) J 339. **Principles of Advertising.** 3 hours fall.
Advertising as a factor in the distributive process; the advertising agency; the "campaign"; the function of research and testing; the selection of media—newspaper, magazine, broadcasting, outdoor advertising, direct mail.
- (U) J 441. **Radio-Television Advertising.** (G) 3 hours spring.
A study of the principles of radio and television advertising and of the techniques involved. The place of radio and television in modern advertising; methods of measuring circulation, planning campaigns, writing copy, checking results. Prerequisite: J 339 or consent of instructor.
- (U) J 488. **The Public and the Press.** (g) 3 hours spring.
Analysis of the role of newspapers, magazines, motion pictures, radio, and television in a democratic society; the problems of improving the relationship between the public and the press in the mass-communication process. Not open to journalism majors.

Landscape Architecture

Associate Professors: MARTEL, SOLBERG. Instructor: GERKE.

Lower-Division Courses

- (S) LA 279. **Home-Ground Planning.** 2 hours fall.
The principles of good design in home grounds; arrangement of the site for modern living, adapted particularly to this locality. Relationship between house and garden, space uses, study of materials which are used in garden development—plants, pavings, masonry, wood. Gerke.
- (S) LA 290. **Lower-Division Landscape Design.** 2 hours winter.
Design of city and suburban residence properties and other design problems of three acres or less. Prerequisite: LA 279 or consent of instructor. Martel.

Upper-Division Courses

- (S) LA 326. **Plant Materials.** 3 hours spring.
Trees, shrubs, vines, and perennials and their uses in plant composition. Martel.
- (S) LA 359. **Maintenance and Construction.** 3 hours winter.
Maintenance of private and public landscapes; construction of landscape features and structures. Prerequisite: LA 279 or consent of instructor. Solberg.
See also: Home Economics and Horticulture.

Library

(See EDUCATION)

Mathematics

Professor: PETERSON.

Lower-Division Courses

- (P) Mth 101, 102, 103. **Elementary Analysis.** 4 hours each term.
College algebra, trigonometry, and analytic geometry.
- (P) Mth 201, 202, 203. **Differential and Integral Calculus.** 4 hours each term.
Standard sequence for students in science or engineering. Prerequisite: Mth 101, 102, 103, or equivalent.

Upper-Division Courses

- (S) Mth 331, 332. **Differential Equations.** 3 hours each term fall and winter.
Applied ordinary and partial differential equations for engineers. Prerequisite: calculus.
- (U) Mth 425, 426. **Elements of Statistical Methods.** (g) 3 hours each term fall and winter.
A basic course in statistical analysis. Presentation of data; sampling theory; tests of significance; analysis of variance and covariance; regression and correlation; sequential analysis; design of experiments. Prerequisite: one year of high school algebra; junior standing or consent of instructor.
- (U) Mth 431, 432, 433. **Advanced Calculus.** (G) 3 hours each term.
Elements of infinite series, partial differentiation, differential geometry, line and surface integrals, vectors, calculus of variation, and functions of a complex variable. Prerequisite: calculus. Peterson. *See also:* IE 450. Reading and Conference (Statistical Quality Control) under Engineering.

Music

Professors: STEHN, WOLD. Assistant Professors: ALBERTSON, BITTNER.

Lower-Division Courses

- (U) Mus 111, 112, 113. **Theory.** 3 hours each term.
Music fundamentals, scales, key relationships, intervals, triads; harmonizations of various triad and seventh chords in all positions, nonchord tones, free harmonization and simple modulation; keyboard work, chord recognition, sight-singing, and analysis correlated with written work. Stehn.
- (U) Mus 127, 128, 129. **Introduction to Music Literature (Appreciation of Music).** 2 hours each term.
A nontechnical study of the development of music, stressing the elements of musical understanding; study of representative composition, with emphasis on their musical and historical significance. Bittner.
- (U) Mus 196. **Orchestra.** 1 hour any term.
Six hours maximum credit. Stehn.

Upper-Division Courses

- (U) Mus 360, 361, 362. **History of Music.** 3 hours each term.
A study of the development of music from primitive times to the present day. Wold.
- (C) Mus 381, 382, 383. **Music Fundamentals.** 3 hours each term.
Section I: Albertson. Section II: Staff.
- (U) Mus 390. **Applied Music.** 1 hour any term.
Individual instruction. By arrangement. Stehn.

Nursing Education

Associate Professor: GREGERSON.

Upper-Division Course

- (U) Nur 428. **Organization of Schools of Nursing.** (G) 3 hours winter.
The objectives of the modern school of nursing; organization patterns; support and control; faculty qualifications, organization, and responsibilities; student selection, guidance, welfare; facilities for conducting a school.

Philosophy

Assistant Professor: WEIR.

Lower-Division Course

- (P) Phl 201, 202, 203. **Introduction to Philosophy.** 3 hours each term.
Fall: Problems of Philosophy, an introduction to the study of some of the persistent problems of philosophy. *Winter:* Elementary Ethics, an introduction to the philosophical study of morality, *e.g.*, right and wrong, free will and determinism, morals and society, etc. *Spring:* Elementary Logic, an introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.

Upper-Division Course

- (U) Phl 328, 329. **Modern American Philosophy.** 3 hours each term fall and winter.
Survey from colonial times to the present. Puritanism, deism, transcendentalism, idealism, and realism. Weir.

Physical Education

(See HEALTH AND PHYSICAL EDUCATION)

Physics

Professor: NORRIS. Assistant Professor: WALTON.

Lower-Division Courses

- (P) Ph 101, 102, 103. **Engineering Physics.** 4 hours each term.
Studies in general physics adapted to students in engineering. Prerequisite: mathematics required for engineering majors. Lectures and laboratories on three evenings a week. Staff.
- (P) Ph 161. **Rudiments of Photography.** 2 hours fall.
Planned for beginners in photography. The topics covered include cameras, printing, enlarging, developing, composition, materials, and lighting. Lecture and laboratory. Staff.
- (P) Ph 201, 202, 203. **General Physics.** 4 hours each term.
Standard first-year college physics. Mechanics, sound, heat, light, electricity, and magnetism. Prerequisite: Mth 102, or consent of instructor. Lectures and laboratories three evenings a week. Staff.
- (P) Ph 204, 205, 206. **Astronomy.** 3 hours each term.
Descriptive treatment. Coordinate system; astronomical instruments; the solar system; star types and groupings. Two lectures; one 2-hour period of observation or laboratory. Staff.

Upper-Division Courses

- (P) Ph 311, 312, 313. **Introduction to Modern Physics.** 3 hours each term.
Kinetic theory, the electron, radioactivity; photoelectricity, thermionic emission, X-rays, electronic devices, gaseous conduction, cosmic rays, nuclear physics. Prerequisite: Ph 103 or 203. Staff.

Political Science

Professor: WENGERT. Assistant Professors: DIXON, WIDMAYER. Instructor: MARQUIS.

Political Science courses offer an opportunity to study domestic government and politics, public administration, and international relations. Special programs have been organized in international relations and public administration. The program in public administration may lead to a Master of Arts degree in General Studies at the University. Emphasis in this program is on regional studies, administration, management, and public policies. (*See Business Administration, Economics, History, Sociology and Psychology.*) Mr. Marquis is the adviser for the graduate program in Public Administration, and students who are interested in it should consult him before registering.

Upper-Division Courses

- (U) PS 314, 315, 316. **Problems of State and Local Government.** 3 hours each term.
A study of the major problems in the organization and function of state, county, city and other local governments, with special attention to Oregon. Dixon.
- (U) PS 320, 321. **World Politics.** 3 hours each term fall and winter.
Basic principles of the modern state system; analysis of factors making for conflict and cooperation. Emphasis, during second term, on the foreign policies of the leading states, exclusive of the United States. *Fall:* Widmayer. *Winter:* Staff.
- (U) PS 322. **American Diplomacy.** 3 hours spring.
Contemporary foreign relations of the United States; objectives, world and domestic factors affecting American foreign policy, governmental institutions concerned with development and execution of foreign policy, major issues and problems.

- (U) PS 340, 341, 342. **Issues and Evaluation of American Foreign Policy.** 3 hours each term.
The major world problems as they challenge American policy; a critical functional analysis of American diplomacy, developed through discussions of the most important projects of our government in the world.
- (U) PS 405. **Reading and Conference.** Terms and hours to be arranged.
- (U) PS 411, 412, 413. **Public Administration.** (G) 3 hours each term.
Study of the organization and activities of government in carrying out public policy, with special reference to the Federal government and to the government of Oregon. Marquis.
- (U) PS 414. **Political Parties and Election Problems.** (G) 3 hours fall.
The nature, organization, and operation of political parties; election and recall of officers; proportional representation; initiative and referendum; civil-service reform. Seligman.
- (U) PS 415. **Public Opinion.** (G) 3 hours winter.
Study of the methods of formation and control of public opinion.
- (U) PS 419, 420. **International Organization.** (G) 3 hours each term fall and winter.
A survey and analysis of the development of public international organization, with chief emphasis on the United Nations and its affiliated organizations; consideration of the leading problems of the United Nations; international administration.
- (U) PS 421. **International Law.** (G) 3 hours spring.
Introduction to international public law. Forces influencing its development; the nature and sources of international law; codification; the International Court of Justice. Rules of international law respecting more important subjects.
- (U) PS 482. **The Legislature in American Government.** (G) 3 hours spring.
Study of the work of representative lawmaking bodies in a modern technological society; how legislatures are organized and operate in the Federal and state governments. Dixon.
- (U) PS 484, 485. **The Supreme Court in American Government.** (G) 3 hours each term fall and winter.
The part of the Supreme Court in shaping American public policy; study of leading cases and other materials. Dixon.
- (U) PS 507. **Seminar: Problems of Policy and Administration in the Pacific Northwest.** 3 hours fall.
Treats the major aspects of growth and development of this region. (Students may continue in related seminars in History and Economics during winter and spring terms.) Wengert.

Psychology

Professor: SHERBURNE. Associate Professors: BOYD, BRODY, CROOKS, MALTER, WILCOX. Assistant Professor: HEIST. Instructor: SMITH.

Lower-Division Courses

- (P) Psy 201, 202. **General Psychology.** 3 hours each term.
Introductory study of behavior and conscious processes. Survey of experimental studies with reference to motivation, learning, thinking, perceiving, and individual differences. *Fall*: Psy 201. (Section I). Wilcox; Psy 201. (Section II). Thursday. Wilcox. *Winter*: Psy 201. Tuesday. Wilcox; Psy 202. Thursday. Wilcox. *Spring*: Psy 201. Monday. Wilcox; Psy 202. Tuesday. Wilcox.

- (P) Psy 204. **Psychology of Adjustment.** 3 hours fall or spring.
The nature and origins of differences in personality; means of making desired changes. Prerequisite: Psy 201, Psy 202.
- (P) Psy 205. **Applied Psychology.** 3 hours winter.
A survey of the ways in which psychology is applied in advertising, salesmanship, market research, measurement of opinion, occupational placement, development of personal efficiency. Prerequisite: Psy 201, 202.

Upper-Division Courses

- (P) Psy 311. **Human Development.** 3 hours winter or spring.
Consideration of the child as an individual and as a member of social groups. Included is a study of the kinds of home and school environment essential to the best intellectual, physical, and emotional development of the child. Winter: Malter. Spring: staff.
- (U) Psy 405. **Reading and Conference.** Terms and hours to be arranged.
- (S) Psy 411. **Mental Hygiene.** (g) 3 hours spring.
Principles and application of mental hygiene to problems of the individual in home, school, and occupational situations. Prerequisite: Psy 202 or Psy 207. Sherburne.
- (U) Psy 421, 422, 423. **Clinical Methods in Psychology.** (G) 2 hours each term.
Application of psychological methods to the study of the individual; survey of intelligence, achievement, special-aptitude, and personality tests; theoretical and statistical background for interpretation of test scores; training in diagnosis of actual cases. Must be taken in sequence. Prerequisite: General Psychology, Educational Psychology, Measurement in Education, and consent of instructor. Statistics course is desirable. Boyd.
- (U) Psy 424, 425, 426. **Mental-Testing Laboratory.** (G) 2 hours each term.
Supervised practice in the Administration and scoring of individual and group intelligence tests and various tests of achievement, special aptitude, and personality. Two 2-hour laboratory periods. Prerequisite: Psy 421, 422, 423, and consent of instructor. Hours to be arranged. Boyd.
- (S) Psy 431. **Industrial Psychology.** (g) 3 hours winter.
Psychological characteristics of employees and psychological requirements of occupations; employee appraisal through development and use of evaluating instruments and recording of evaluations; psychological factors involved in maintaining employee fitness and morale. Prerequisite: Psy 202, or Psy 207. Heist.
- (U) Psy 450. **Abnormal Psychology.** (G) 3 hours winter.
Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Normal motives and adjustment mechanisms as they are exaggerated in the so-called neurotic person. Smith.
- (U) Psy 460, 461. **Developmental Psychology.** (g) 3 hours fall and winter.
Behavioral and developmental changes during infancy, childhood, adolescence, maturity and old age. Attention to personal and social adjustment at all ages and to family and community organization to meet the needs of older persons.
- (S) Psy 474. **Psychological Tests and Testing.** (g) 3 hours fall.
Theory and practice of test administration, scoring, and interpretation; administration, scoring, and interpretation of individual tests in fields of mental abilities, special aptitudes, interests, personality, and nonacademic achievement; administration, scoring, and interpretation of group tests in the same areas. Psy 474 must be taken before either Psy 475 or Psy 476. Prerequisite: Psy 371 or equivalent, or consent of instructor. Crooks.

Graduate Courses

- (U) Psy 505. **Reading and Conference.** Terms and hours to be arranged.

- (U) Psy 507. **Seminar: Personal Adjustment and Counseling.** 3 hours fall. Brody.
- (U) Psy 507. **Seminar: Social Adjustment and Counseling.** 3 hours winter. Brody.
- (U) Psy 507. **Seminar: Problems of Human Behavior in Large-Scale Organization.** 3 hours spring.
- (C) Psy 519. **Research Studies in Child Development.** 3 hours fall.
Study of current research studies and experimental programs concerned with the physical, emotional, intellectual, and social development of children. Individual studies by students, case studies, and model experimental projects with children in the laboratory school will supplement library resources. Brody.
- (C) Psy 520. **Psychology of Learning.** 3 hours spring.
Introduction to the major theories of learning current among psychologists doing research in the field. Experimentation and research underlying these theories will be studied and applied to modern educational practices. Includes learning theory and practices at all age levels through adulthood. Brody.
- (U) Psy 521, 522, 523. **Systematic Psychology.** 2 hours each term.
Contemporary systems; Gestalt psychology, purposive behaviorism, topological psychology, psychoanalysis, etc. Aims of psychology, nature of explanation, and functions of abstractions in psychology.

Public Speaking

(See SPEECH)

Religion

Upper-Division Courses

- (U) R 421. **Religion in Contemporary Society.** (g) 3 hours fall.
The relation of religion to social institutions. Religion and the state, totalitarian and democratic. The social teachings of the various churches and religious groups. The religious situation today. Criteria for evaluating religion as a social force.
- (S) R 461. **Philosophy of Religion.** 3 hours winter.
Basic convictions underlying religious thinking; values, God, problem of good and evil, immortality, human nature, religious experience.
- (S) R 462. **History of Great Religions.** 3 hours spring.
Comparative study of religions that command a large following today, such as Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam.

Science

(See: BACTERIOLOGY, CHEMISTRY, ENTOMOLOGY, GENERAL SCIENCE, PHYSICS, ZOOLOGY)

Secretarial Science

Professor: YERIAN.

Lower-Division Courses

- (P) SS 111, 112, 113. **Stenography.** 3 hours each term.
Theory of shorthand; practical applications in sentence dictation. SS 121, 122, 123 must be taken concurrently unless the student has had the equivalent. Students with one year of shorthand are not permitted to take SS 111 for credit.

- (P) SS 121, 122, 123. **Typing.** 2 hours each term.
Theory and practice of touch typing; rhythmical drills, dictation exercises; writing paragraphs; punctuation and mechanical arrangement of business correspondence, legal forms, tabulating, manifold, speed practice. Students with at least one year of typing are not permitted to take SS 121 for credit. Students who wish to acquire basic typing proficiency may enter at the beginning of any term.

Upper-Division Courses

In addition to the fall term offering shown, a course for each of the remaining terms will be announced.

- (S) SS 411. **Secretarial Problems.** 3 hours fall.
Duties and problems of the secretary in business and professions; relation to employer and fellow employees; office supervision. Yerian.

Sociology and Social Work

Associate Professor: PARKS. Assistant Professor: DRUM.

SOCIOLOGY

Lower-Division Course

- (P) Soc 204, 205, 206. **General Sociology.** 3 hours each term.
The basic findings of sociology concerning the individual, culture, group life, social institutions, and factors of social change. Prerequisite: sophomore standing or consent of instructor. Parks.

Upper-Division Courses

- (U) Soc 327. **Introduction to Social Research.** 3 hours winter.
First term: the development of social research; the nature of scientific inquiry and the basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Prerequisite: Soc 204, 205, 206 or consent of instructor.
- (P) Soc 334, 335. **Social Psychology.** 3 hours each term fall and winter.
Analysis of the psychological and sociological processes involved in personality formation and in various forms of group behavior. Particular attention to origin, function, ideologies, membership, and leadership. Prerequisite: Soc 204, Soc 205, or Psy 201, Psy 202. Parks.
- (P) Soc 338. **Marriage and the Family.** 3 hours any term.
The growth and development of the family throughout its life cycle. The family and personality development, dating, courtship, selection of marital partner, engagement, wedding and honeymoon, adjustment processes in marriage and family living, family crises. Prerequisite: junior standing or consent of instructor. Drum.
- (U) Soc 346. **Social Case Methods Applied to Nursing.** 3 hours any term.
History and current concepts of case-work theory; social problems related to illness; principles of interviewing; relationships between nurses and social workers. At University of Oregon Medical School.
- (U) Soc 407. **Seminar: Penological Systems.** (G) 3 hours spring. Drum.
- (U) Soc 407. **Seminar: Social Welfare Resources and Organization.** (G) 3 hours spring.
The various types of social welfare resources which the nurse can use to help patients with social problems; methods of organizing these resources for the meeting of human needs. (Substitute for Soc 347 and Ed 429.) Drum.

- (U) Soc 416, 417. **Criminology and Delinquency.** (G) 3 hours each term fall and winter.

The nature and extent of delinquency and crime as forms of deviant social behavior; contributing factors; current prevention and treatment programs. Prerequisite: General Sociology or General Psychology or Principles of Sociology or consent of instructor. Drum.

- (U) Soc 437. **Sociology of Race Relations.** (G) 3 hours spring.

The development of "race consciousness" and emergent problems of race-culture contacts. Prerequisite: introductory course in sociology, anthropology, or psychology. Parks.

- (S) Soc 474. **Social Psychology.** (g) 3 hours winter.

Biological and social functions of human behavior; individual and social adjustments; behavior in presence of others; social psychology of institutions; social conflict. Prerequisite: introductory sociology. Parks.

Graduate Course

- (U) Soc 507. **Seminar.** Terms and hours to be arranged.

SOCIAL WORK

Graduate Courses

- (U) SW 507. **Seminar.** Terms and hours to be arranged.

- (U) SW 511, 512. **Social Case Work.** 3 hours each term fall and winter.

Generic concepts of case work practices in different agency settings; diagnosis and analysis of cases, treatment problems. Drum.

- (U) SW 516. **Personality Development.** 2 hours fall.

The growth of the individual with emphasis on emotional factors; the integration of psychiatric theory with case work; social factors that influence development; special lectures and case studies. Drum.

- (U) SW 517. **Personality Development.** 2 hours winter.

Emotional problems commonly met in social agencies; the role of the psychiatrist and caseworker in the study and treatment of the patient; special lectures and case studies. Prerequisite: SW 516 or consent of instructor. Drum.

- (U) SW 556. **Medical Information for Social Workers (and other Professionals).** 2 hours spring.

Social factors in common disabling illnesses; the integration of the work of the physician and the caseworker in dealing with health problems; the role of the physician in the treatment of the social and physical problems of the patient. Drum.

- (U) SW 572. **Community Organization for Social Welfare.** 3 hours spring.

Problems involved in bringing about an adjustment between social welfare needs and resources; understanding the social forces of the community; methods used by public and private agencies to meet these needs; interpretation of agency problems to the community.

- (U) SW 580. **Introduction to Public Welfare.** 3 hours fall.

History, philosophy and current theories of social welfare work; development of public and voluntary programs of social services.

- (U) SW 582. **Administration of Social Insurances.** 3 hours winter.

The social insurance movement in the United States and selected foreign countries. Present legislation; administrative problems in unemployment compensation and in insurance for the aged, survivors, disabled, and sick. Prerequisite: SW 580 or consent of instructor.

Speech and Drama

Associate Professor: LILLYWHITE. Assistant Professor: GAUPP.
Instructor: BLAKELEY.

Lower-Division Courses

- (P) Sp 111, 112, 113. **Fundamentals of Speech.** 3 hours each term.

Projects in extempore speaking. Primary emphasis on content and organization, with attention also to the student's adjustment to the speaking situation, effective delivery, audience motivation, and language of the speech.

- (U) Sp 221. **Public Discussion.** 2 hours spring.

Public speeches on current questions with the addition of panel and round table discussions, and practice in chairmanship.

- (E) Sp 225, 226. **Public Speaking for Business and Professional Men and Women.** 2 hours each term fall and winter.

A practical course in actual speaking. Poise on the floor; improvement of diction and voice; organization of speech material and presentation in direct conversational style. Persuasion in speaking; sales talks. Study of motives that impel men to action and ways of reaching these motives.

Upper-Division Courses

- (U) Sp 351, 352, 353. **Technique of Acting.** 3 hours each term.

Principles of acting technique. Problems in the analysis and presentation of character. Gaupp.

- (U) Sp 370. **Phonetics.** 3 hours fall.

Study of sounds used in speech. Determination of sounds; their symbolic nature; their production; physical and psychological problems involved in their perception, sectional differences. Lillywhite.

- (C) Sp 392. **Principles and Techniques of Speech Correction.** 3 hours winter.

A survey to afford classroom teachers an understanding of typical speech defects and of preventive and corrective techniques. Analysis of speech mechanics, recognition of defects, formation of sounds, application of testing devices, and parent-school cooperation are emphasized. Blakeley.

- (U) Sp 451, 452, 453. **Theory of Dramatic Production.** (G) 3 hours each term.

Theory of various elements of dramatic productions. Fall: theory of acting; Winter: theory of dramatic direction; spring: theory of dramatic structure.

- (U) Sp 464, 465, 466. **History of the Theater.** (G) 3 hours each term.

An historical study of the theater from ancient to modern times.

- (U) Sp 481, 482. **Speech Defects and Disorders.** (G) 3 hours each term winter and spring.

Emphasis on cleft-palate and spastic speech, aphasia, stuttering, and neurological speech disorders. Registration by consent of instructor only. Each part available each term. Lillywhite.

- (U) Sp 484, 485, 486. **Clinical Practice in Speech Correction.** (G) 2 hours each term.

Actual case experience for student clinicians in the diagnosis and treatment of speech-defective children and adults, under supervision. Registration with consent of instructor only. Must be taken in sequence. Each part available each term. Staff.

- (P) TA 307, 308. **Principles of Educational Theater.** 3 hours each term fall and winter.

Fall: Children's Theater and theater for the elementary school. Winter: secondary school drama. Spring: college and community drama. Methods and materials for developing the theater program within the curriculum and as an extracurricular activity. Not necessarily a sequence course. Saturday, 9:00-11:40. Gaupp.

See also: Wr 321, 322, 323. **Playwriting** (under English).

Zoology

Associate Professor: MACNAB.

Lower-Division Course(P) Z 201, 202, 203. **General Zoology.** 3 hours each term.

For premedical, pre dental, pre nursing, pharmacy, physical education, psychology, fish and game management students, and others.

General Extension Division**Administration**

PHILIP G. HOFFMAN, Ph.D., Dean, General Extension Division.
 VIRON A. MOORE, Ed.D., Assistant Dean, Director State-Wide Services.
 JAMES C. CAUGHLAN, Ph.D., Assistant Dean, Director Portland Extension Center.
 WILLIAM CURTIS REID, Ph.D., Director, Department of Visual Instruction.
 JAMES M. MORRIS, B.S., Program Manager, Radio Station KOAC.
 DONALD R. LARSON, B.A., Director of Information Services, Assistant to the Dean.
 HOWARD IMPECOVEN, Ed.D., Registrar, General Extension Division.
 LESLIE B. NEWHOUSE, M.B.A., Business Manager, General Extension Division.
 JEAN PHYLLIS BLACK, Ph.D., Librarian, General Extension Division.

Portland Extension Center

JAMES C. CAUGHLAN, Ph.D., Assistant Dean, Director.
 CLARK P. SPURLOCK, Ed.D., Administrative Assistant, Graduate Adviser.
 MARIE E. BROWN, Secretary, Portland Summer Session.

Department of State-Wide Services

VIRON A. MOORE, Ed.D., Assistant Dean, Director.
 HOWARD J. AKERS, D.Ed., Administrative Assistant, Director of Correspondence Study.
 JOHN A. SCHULZ, Ed.D., Field Representative.
 ROBERT J. GRIDLEY, Ed.M., Field Representative.

Radio Station KOAC

JAMES M. MORRIS, B.S., Program Manager.

Department of Visual Instruction

WILLIAM CURTIS REID, Ph.D., Director.

Institute of International Affairs

E. DEAN ANDERSON, Ed.D., Executive Secretary.

High School-College Relations Committee

E. DEAN ANDERSON, Ed.D., Executive Secretary.

Oregon State System of Higher Education

*CHARLES D. BYRNE, Ed.D., Chancellor

PHILIP G. HOFFMAN, Ph.D.
Dean, General Extension Division

O. MEREDITH WILSON, Ph.D.
President, University of Oregon

DAVID W. E. BAIRD, M.D., LL.D.
Dean, University of Oregon Medical School

ELMO N. STEVENSON, Ed.D.
President, Southern Oregon College of Education

J. F. CRAMER, D.Ed.
President, Portland State College

FREDERICK M. HUNTER, Ed.D., LL.D., Honorary Chancellor

AUGUST L. STRAND, Ph.D.
President, Oregon State College

ROY E. LIEUALLEN, Ed.D.
President, Oregon College of Education

FRANK B. BENNETT, Ed.D.
President, Eastern Oregon College of Education

HAROLD J. NOYES, D.D.S., M.D.
Dean, Dental School

Office of the Chancellor

†JOHN R. RICHARDS, Ph.D. Vice-Chancellor
RICHARD L. COLLINS, M.A., C.P.A. Budget Director
TRAVIS CROSS, B.A. Assistant to the Chancellor and Director of Information

Office of the Comptroller

HERBERT A. BORK, M.S., C.P.A. Comptroller and Bursar
JOHN L. WATSON, B.B.A., C.P.A. Assistant Comptroller
HAROLD ROWLEY, B.S. Chief Accountant
WILLIAM R. STOVALL Assistant Chief Accountant
THOMAS F. ADAMS, B.S. Administrative Assistant
JOHN I. HUNDERUP, M.B.A., C.P.A. Administrative Assistant

General Extension Division

VIRON A. MOORE, Ed.D. Assistant Dean of General Extension
JAMES C. CAUGHLAN, Ph.D. Assistant Dean of General Extension

Libraries

WILLIAM HUGH CARLSON, M.A. Director of Libraries
BESSIE GWNYETH TRESSLER, A.B., B.S. in L.S. Head of Orders Department
IMOGENE CUSAC, B.A., B.A. in L.S. Cataloger for Union Catalog

High School-College Relations Committee

E. DEAN ANDERSON, Ed.D. Executive Secretary

* Resignation as Chancellor effective June 30, 1955.
† Appointment as Chancellor effective July 1, 1955.

Oregon State System of Higher Education

*CHARLES DAVID BYRNE, Ed.D., Chancellor, State System of Higher Education; Dean; Professor.
B.S. (1921), M.S. (1922), Wisconsin; Ed.D. (1940), Stanford. With System since 1929, chancellor since 1950.

†JOHN REESE RICHARDS, Ph.D., Vice-Chancellor and Secretary of the Board, State System of Higher Education; Professor.
B.A. (1929), M.S. (1931), Pennsylvania State; Ph.D. (1936), Chicago. With System since 1953, vice-chancellor since 1953.

E. DEAN ANDERSON, Ed.D., Executive Secretary, High School-College Relations Committee; Assistant Professor of Education.
B.A. (1936), Reed; M.A. (1941), Oregon; Ed.D. (1954), Oregon State. With System since 1948, executive secretary, High School-College Relations since 1948.

DAVID W. E. BAIRD, M.D., LL.D., Dean of Medical School; Professor of Medicine.
M.D. (1926), Oregon; LL.D. (1946), Portland. With System since 1927, dean, Medical School since 1943.

FRANK BROWN BENNETT, Ed.D., President, Eastern Oregon College of Education; Professor.
B.A. (1921), Willamette; M.A. (1933), Oregon; Ed.D. (1948), Willamette. With System since 1952, president, Eastern Oregon since 1952.

HERBERT ARNOLD BORK, M.S., C.P.A., Comptroller and Bursar, State System of Higher Education; Dean; Professor.
B.A. (1924), Wisconsin; C.P.A. (1926); M.S. (1940), Oregon State. With System since 1934, comptroller since 1934.

WILLIAM HUGH CARLSON, M.A., Director of Libraries, State System of Higher Education; Professor of Education.
A.B. (1924), Nebraska; M.A. (1937), California. With System since 1945, director of libraries since 1945.

RICHARD LYLE COLLINS, M.A., C.P.A., Budget Director, State System of Higher Education; Professor.
B.B.A. (1927), Oregon; C.P.A. (1931); M.A. (1940), Columbia. With System 1927-29 and since 1932, budget director since 1948.

JOHN FRANCIS CRAMER, D.Ed., President, Portland State College; Professor of Education.
A.B. (1920), Willamette; A.M. (1921), M.Ed. (1932), D.Ed. (1937), Oregon. With System since 1944, president, Portland State College, 1955.

(WILLIAM) TRAVIS CROSS, B.A., Assistant to the Chancellor and Director of Information; Assistant Professor.
B.A. (1949), Stanford. With System since 1950, assistant to chancellor since 1953.

PHILIP G. HOFFMAN, Ph.D., Dean, General Extension Division; Associate Professor of History.
B.A. (1938), Pacific Union College; M.A. (1941), University of Southern California; Ph.D. (1948), The Ohio State University. With System since 1953, dean, General Extension Division, 1955.

ROY ELWAYNE LIEUALLEN, Ed.D., President, Oregon College of Education; Professor.
B.S. (1940), Pacific; M.S. (1947), Oregon; Ed.D. (1955), Stanford. At Oregon College since 1946, president, 1955.

HAROLD J. NOYES, D.D.S., M.D., Dean of Dental School; Professor of Dentistry; Clinical Professor of Dental and Oral Medicine and Head of Division, Medical School.
Ph.B. (1923), M.D. (1933), Chicago; B.S. (1928), D.D.S. (1928), Illinois. With System since 1946, Dean, Dental School since 1946.

* Resignation as Chancellor effective June 30, 1955.
† Appointment as Chancellor effective July 1, 1955.

- ELMO NALL STEVENSON, Ed.D.**, President, Southern Oregon College of Education; Professor.
A.B. (1927), San Jose State; A.M. (1929), Ed.D. (1938), Stanford. With System since 1929, president, Southern Oregon since 1945.
- AUGUST LEROY STRAND, Ph.D.**, President, Oregon State College; Professor.
B.S. (1917), Montana State; M.S. (1925), Ph.D. (1928), Minnesota. With System since 1942, president, Oregon State since 1942.
- O. MEREDITH WILSON, Ph.D.**, President, University of Oregon; Professor.
B.A. (1934), Brigham Young; Ph.D. (1943), California. With System since 1954, president, University since 1954.

- Academic Calendar, 6
Academic Regulations, 21
Accounting, 32
Accreditation, 20
Activities, 23
Address, 20
Admission Requirements, 21
Admission to Graduate Schools, 25
Advanced Degree Programs, 23
Anthropology, 29
Art, 30
Art Education, 31
Astronomy (see Physics)
- Bacteriology, 31
Biology (see Entomology)
Bookstore, 23
Botany (see Horticulture)
Business Administration, 32
Business Courses, General, 33
- Cafeteria, 23
Calendar, Academic, 6
Campus, Location of, 20
Certification, Elementary and Secondary, 26
Change of program fee, 21
Chemistry, 36
Civil Engineering, 47
Class Schedule, 29
Cooperative Programs, 26
Cooperative Speech and Hearing Center, 26
Correspondence Study, 22
Course Descriptions, 29
Course Numbering System, 23
Credit Hour Load, 22
Credit Hour Requirements, graduate, 25
Curriculum, definition of, 23
- Definitions, 22
Degrees, graduate, 24
Department of State Wide Services, 28
Description of Courses, 29
Drama (see Speech)
- Economics, 36
Education, 24, 37
Electrical Engineering, 47
Elementary Certification, 26
Engineering, General, 46
Engineering, Civil, 47
Engineering, Electrical, 47
Engineering, Industrial, 47
Engineering, Mechanical, 47
Engineering, Professional Degrees, 25
English, 48
Entomology, 49
Expenses, (see Fees), 21
- Explanations and Definitions, 22
Extension Division, General, 28, 67
Facilities and Activities, 23
Faculty, 8-19
Family Life, (see Home Economics), 50
Fees and Refunds, 21
Fees, Art, 30
Foreign Languages, 50
Foreign Language Requirements, 26
French, 50
Freshman Standing (see Admission)
- General Extension Division, 28, 67
General Information, 20
General Science, 51
General Studies, degrees in, 24
General Studies, courses in, 51
Geography, 52
Geology, 52
German, 50
Grade, definition of, 23
Grade Point Average, 23
Grade Requirements, Graduate Credit, 25
Graduate Programs, 25
Graduate Credit Requirements, 25
Graduate Schools, Admission to, 25
Group Requirements, 21
- Health and Physical Education, 53
History, 54
Home Economics, 55
Horticulture, 56
- Industrial Engineering, 47
In-Service Training, 27, 43
Institutional Residence Requirement, 20
- Journalism, 56
- Landscape Architecture, 57
Late Registration Fee, 21
Languages, Foreign, 50
Library, 23
Library Courses, 43
Literature, 48
Location, 20
- Major Fields, 21
Map, 2
Master's Degrees, 24
Master of Arts, General Studies, 24
Master of Education, 24
Master of Science, 24
Master of Science in Education, 24
Mathematics, 57
Mechanical Engineering, 47
Minimum Charge, 21

Index

- Multnomah County School Courses, 46
 Museum Art School, 26
 Music, 58
- Nurses, program for, 25
 Nursing Education, 58
- Oregon State Board of Higher Education, 5
 Oregon State System of Higher Education, 68
- Philosophy, 58
 Physical Education (*see* Health and Phys Ed), 58
 Physics, 59
 Political Science, 59
 Portland Summer Session, 28
 Pre-School Education, Training in 26
 Professional Engineering Program, 25
 Program for Registered Nurses, 25
 Psychology, 60
 Public Administration Program, 24
 Public Speaking (*see* Speech)
- Radio Station KOAC, 28
 Refunds, Fee, 21
 Registration, 21
 Regulations, Academic, 21
 Religion, 62
 Requirements, Admission, 21
 Requirements, Graduate Credit, 25
- Residence Requirements, Institutional, 20
 Russian, 50
- Science, General, 62
 Secondary Certification, 26
 Secretarial Science, 62
 Sociology, 63
 Social Work, 64
 Spanish, 50
 Special Events, 23
 Special Staff, 16
 Speech and Drama, 65
 Staff Fee, 21
 State-Wide Services, Department of, 28
 Summer Session, Portland, 28
 Supervised Teaching, 26
- Teacher Programs, 26
 Term Hour, Defined, 23
 Theses and Final Examinations, 26
 Training, In-Service, 27
 Transcript Fee, 21
 Tuition, 21
- Veterans, 23
 Visual Instruction, 28
- Writing, 49
 Year Sequence, defined, 22
 Zoology, 66