## J NIVERSITYOF OREGON REGULAR SESSION

EUGENE, OREGON



# UNIVERSITY 

## OF OREGON

 REGULAR SESSION1966-67 CATALOG

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## Oregon State System of Higher Education

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

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

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

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

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

Oregon Technical Institute offers technological curricula leading to associate degrees in technical and semiprofessional areas.

An interinstitutional booklet, Your Education, which outlines the curricula of the several instituitons and contains other information, is available. For a copy, write to Division of Publications, P.O. Box 5175, Eugene, Oregon 97403.

## State Board of Higher Education

John Merrifield, Portland ..... xpires
Charles R. Holloway, Jr., Portland ..... 1967
Elizabeth H. Johnson, Redmond ..... 1968
J. W. Forrester, Jr., Pendleton ..... 1969
John W. Snider, Medford. ..... 1969
Philip A. Joss, Portland ..... 1970
George Layman, Newberg ..... 1970
Ralph E. Purvine, Salem ..... 1971
Ray T. Yasui, Hood River ..... 1971
Officers
Charles R. Holloway, Jr $\qquad$ President J. W. Forrester, Jr. $\qquad$ Vice-President Ralph E. Purvine. Member, Executive Committee

Roy E. Lieuallen, Chancellor
Richard L. Collins, Secretary of Board

Office of State Board of Higher Education
Post Office Box 5175
Eugene, Oregon 97403

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

## Oregon State System of <br> Higher Education Officers

Roy E. Lieuallen, Ed.D., L.H.D., Chancellor
Arthur S. Flemming, LL.D. James H. Jensen, Ph.D. President, University of Oregon President, Oregon State University
David W. E. Baird, M.D., LL.D. Elmo N. Stevenson, Ed.D. Dean, Medical School President, Southern Oregon College
Harold J. Noyes, D.D.S., M.D. Dean, Dental School
Branford P. Millar, Ph.D
Averno M. Rempl, Ph.D. Averno M. Rempl, Ph.D.
President, Eastern Oregon College
$\underset{\text { President, Portland State College }}{\text { Branford }}$

Winston D. Purvine, A.B., LL.D
Director, Oregon Technical Institute

Richard L. Collins, M.A., C.P.A $\qquad$ Secretary of the Board Budget Director

Herbert A. Bork, M.S., C.P.A.......Vice-Chancellor for Business Affairs Miles C. Romney, Ph.D. $\qquad$ .Vice-Chancellor for Academic Affairs James W. Sherburne, Ph.D. $\qquad$ Vice-Chancellor for Continuing

Donald R. Larson, B.A..........................Assistant Chancellor ; Director of Public Services
Carl W. Hintz, Ph.D $\qquad$ Director of Libraries
Jack V. Edling..............................................Director of Teaching Research

## Former Chancellors

 Oregon State System of Higher EducationWilliam J. Kerr, D.Sc., LL.D 1932-1935

Frederick M. Hunter, Ed.D., LL.D
1935-1946

Paul C. Packer, Ph.D., LL.D........................................................ 1946-1950
Charles D. Byrne, Ed.D. 1950-1955

John R. Richards, Ph.D. 1955-1961

## University of Oregon

September 1966
S M TWT FS $\begin{array}{rrrrrrrr}4 & 5 & 6 & 7 & 8 & 2 & 3 \\ 11 & 12 & 10 \\ 11 & 12 & 13 & 14 & 15 & 16 & 17 \\ 18 & 19 & 20 & 21 & 22 & 23 & 24 \\ 25 & 26 & 27 & 28 & 29 & 30 & \end{array}$

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November 1966

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## January 1967

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> February 1967
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## Fall Term, 1966-67

August 31, Wednesda $\qquad$ Last day to apply for fall-term admission without penalty

September 20-24, Tuesday to Saturday ...........New Student and Registration Week

September 26, Monday $\qquad$ Classes begin September 30, Friday............................Last day for payment of fees without penalty

October 7, Friday..................................Last day for registration or for addition of courses October 14, Friday..........Last day for withdrawal from courses

November 24-27, Thursday to Sunday....Thanksgiving vacation December 9, Friday...............Fall-term graduation December 12-16, Monday to Friday................Fallterm examinations

## Winter Term, 1966-67

January 3, Tuesday. $\qquad$ Registration January 4, Wednesday Classes begin

January 6, Friday. $\qquad$ payment of fees without penalt January 13, Friday.................................Last day for registration or for addition of courses January 20, Friday..........Last day for withdrawa from courses

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

March 13-17, Monday to Friday $\qquad$ erm examinations

## Academic Calendar

March 1967
SMTWTFS $\begin{array}{rrrrrrr}5 & 6 & 7 & 8 & 2 & 3 & 4 \\ 12 & 11 \\ 12 & 13 & 14 & 15 & 16 & 17 & 18 \\ 19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$ $\begin{array}{llllll}12 & 13 & 14 & 15 & 16 & 17 \\ 19 \\ 26 & 20 & 21 & 22 & 23 & 24 \\ 26 & 27 & 29 & 30 & 31\end{array}$

April 1967 S M TWTHS $\begin{array}{rrrrrrrr}2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 9 & 10 & 11 & 12 & 13 & 14 & 15 \\ 16 & 17 & 18 & 19 & 20 & 21 & 22 \\ 23 & 24 & 25 & 26 & 27 & 28 & 29\end{array}$ 23
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May 1967
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June 1967
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## July 1967

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## August 1967

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| 27 | 28 | 29 | 30 | 24 |

## Spring Term, 1966-67

 March 31, Friday_...............................Last day for April 7, Friday.....................................Last day for registration or for addition of courses April 14, Friday................Last day for withdrawal from courses May 30, Tuesday.................Memorial Day, holiday June 5-9, Monday to Friday SpringJune 10, Saturday....................................Alumni Day June 11, Sunday. $\qquad$ Commencement Day

## Summer Sessions, 1967

June 19, Monday. $\qquad$ Registration
June 20, Tuesday $\qquad$ Classes begin June 23, Friday $\qquad$ Last day for payment of summer-term fees without penalty June 30, Friday............Last day for summer-term registration or addition of courses July 4, Tuesday - ........... Independence Day, holiday July 7, Friday. . ..............................Last day for withdrawal from summer-term courses August 11, Friday............Eight-week session ends August 12, Saturday..........................Summer-term graduation convocation September 1, Friday......Eleven-week session ends

## Fall Term, 1967-68

August 31, Thursday
. .......Last day to apply September 17-23, Sunday to Saturday...........New Student and Registration Week
September 25, Monday $\qquad$ ..Classes begin

## University of Oregon

## Officers of Administration

Arthur S. Flemming, Ll.D
President William C. Jones, Ph.D. $\qquad$ Dean of Administration Harry Alpert, Ph.D.... $\qquad$
$\qquad$ Associate Dean of Faculties
Charles T. Duncan, M.A
Jarold A. Kieffer, Ph.D.. $\qquad$

David W. E. Baird, M.D., LL.D. Dean, Medical School
Jean E. Boyle, M.S., R.N. $\qquad$ Director, School of Nursing Walter L. Creese, Ph.D...................Dean, School of Architecture and Allied Arts Arthur A. Esslinger, Ph.D.............Dean, School of Health, Physical Education, and Recreation
Orlando J. Hollis, B.S., J.D......................................................Dean, School of Law John L. Hulteng, M.S. $\qquad$ Dean, School of Journalism
Paul B. Jacobson, Ph.D. Dean, School of Education; Director, Summer Sessions Charles E. Johnson, Ph.D. $\qquad$ Dean, College of Liberal Arts Richard W. Lindholm, Ph.D.................Dean, School of Business Administration Lucian C. Marquis, Ph.D................................................... Director, Honors College Harold J. Noyes, D.D.S., M.D.. ......Dean, Dental School
Leona E. Tyler, Ph.D. $\qquad$ Dean, Graduate School
Robert M. Trotter, Ph.D. $\qquad$ Dean, School of Music

Vernon L. Barkhurst, M.A $\qquad$ Director of Admissions H. Philip Barnhart, B.S $\qquad$ rector of Dormitories George N. Belknap, M.A. $\qquad$ University Editor
Russell M. Blemker, M.D Director of Health Service
Robert L. Bowlin, D.Ed. $\qquad$ tudents (Dean of Men) J. Spencer Carlson, M.A...
$\qquad$ .Director of Counseling Center
Clifford L. Constance, M.A. $\qquad$ Registrar
Eugene W. Dils, Ed.D. Director of Placement Service Donald M. DuShane, M.A $\qquad$ Dean of Students
Alfred L. Ellingson, B.S Director of Erb Memorial Union Leo A. Harris, M.A. $\qquad$ Director of Erb Memorial Union Carl W. Hintz, Ph.D $\qquad$ Athletic Director
J. Orville Lindstrom, B.S $\qquad$ Director of Fiscal Affairs
Walter N. McLaughlin, B.S., C.P.A. $\qquad$ Herbert L. Penny, B.S $\qquad$ Director of Informational Services James M. Shea, M.S $\qquad$ - $\quad$ Associate Dea........ Director of University Relations Golda P. Wickham, B.S. ssociate Dean of Students (Dean of Women) Richard C. Williams, B.S. $\qquad$ Director of Development Carryl Wines. $\qquad$ Superintendent of University Press Irwin I. Wright, B.S $\qquad$ Director of Physical Plant

## University Faculty*

Harold Abel, Ph.D., Professor of Education ; Director of Division of Psychological Services.
B.A. (1949), M.A. (1951), Ph.D. (1958), Syracuse. At Oregon since 1965

David F. Aberle, Ph.D., Professor of Anthropology. B.A. (1940), Harvard; Ph.D. (1950), Columbia. At Oregon since 1963.

Edwin A. Abrahamson, Instructor, Tongue Point Job Corps Center. At Oregon since 1965
Joan R. Acker, M.A., Instructor in Sociology. B.A. (1946), Hunter; M.A. (1948), Chicago. At Oregon since 1964.

Martin H. Acker, Ph.D., Associate Professor of Education. B.A. (1943), Brooklyn; M.A. (1953), Ph.D. (1963), New York University. At Oregon since 1961.
William W. Adamchak, M.Ed., Instructor, Tongue Point Job Corps Center. B.A. (1948), B.S. (1951), M.Ed. (1960), Bowling Green. At Oregon since 1965.

Abby Adams, M.A., Assistant Professor of Education; Head of Foreign Language Department, South Eugene High School.
B.A. (1925), Oregon; M.A. (1932), Washington. At Oregon since 1944

Joseph J. Adams, B.B.A., Assistant Dean for Institutional Relations, Medical School (Associate Professor).
B.B.A. (1949), Gonzaga. At Oregon since 1951.
$\dagger$ Robert E. Agger, Ph.D., Professor of Political Science. B.A. (1948), Williams; LL.B. (1951), Yale; Ph.D. (1954), Oregon. At Oregon since 1958.

Gary L. Аho, B.S., Lecturer in English.
B.S. (1959). Portland State. At Oregon 1962 -64 and since 1965.

Florence D. Alden, M.A., Professor Emeritus of Physical Education. A.B. (1904), Smith; M.A. (1928), Columbia. At Oregon since 1921.
$\ddagger$ Gustave Alef, Ph.D., Associate Professor of History. B.A. (1949), M.A. (1950), Rutgers; M.A. (1952), Ph.D. (1956), Princeton. At Oregon
since 1956. since 1956.
Dorothy L. Alexander, M.Libr., Science Librarian, with the Rank of Instructor. B.S. (1962), Tougaloo; M.Libr. (1965), Washington. At Oregon since 1965.

Henry A. Alexander, Jr., Ph.D., Associate Professor of Philosophy; Head of Department.
B.A. (1947), Princeton; M.A. (1951), Ph.D. (1955), California. At Oregon since 1964

Robert L. Allen, Ph.D., Professor of Economics.
B.A. (1947), Redlands; M.A. (1950), Ph.D. (1953), Harvard. At Oregon since 1959.

Harry Alpert, Ph.D., Dean of Faculties; Professor of Sociology. A.B. (1932), College of City of New York; Cert. de soc. (1933), Bordeaux; A.M. (1935), Ph.D. (1938), Columbia. At Oregon since 1958
§Bower Aly, Ph.D., Professor of Speech.
B.S. (1925), Southeast Missouri State; M.A. (1926), Missouri; Ph.D. (1941), Columbia. At Oregon since 1957.
*This list provides a record of the University faculty as of Jan. 1, 1966. The principal administrative officials and the heads of departments and divisions of the University of Oregon
Medical School, the University of Oregon Dental School, and the University of Oregon School of Nursing in Portland are included; for complete lists of these faculties, see catalogs of these schools.
$\dagger$ On sabbatical leave, fall term, 1965-66.
8 On leave of absence 1965-66.

Lucile F. Aly, Ph.D., Assistant Professor of English. B.S. (1935), Ph.D. (1959), Missouri; M.A. (1942), Columbia. At Oregon since 1960.

Barry F. Anderson, Ph.D., Assistant Professor of Psychology. B.A. (1957), Stanford; Ph.D. (1963), Johns Hopkins. At Oregon since 1963.

Frank W. Anderson, Ph.D., Associate Professor of Mathematics. B.A. (1951), M.S. (1952), Ph.D. (1954), Iowa. At Oregon since 1957.

Leslie P. Anderson, Ph.D., Associate Professor of Finance. B.S. (1951), M.S. (1954), Ph.D. (1960), Wisconsin. At Oregon since 1964.

Thomas C. Anderson, D.Ed., Assistant Professor of Education; Coordinator, Audio-Visual Media Center.
B.A. (1957), Puget Sound; M.Ed. (1962), D.Ed. (1964), Idaho. At Oregon since 1964.

Fred C. Andrews, Ph.D., Associate Professor of Mathematics; Director, Statistical Laboratory and Computing Center.
B.S. (1946), M.S. (1948), Washington; Ph.D. (1953), California. At Oregon since 1957

George F. Andrews, B.S., N.C.A.R.B., Professor of Architecture. B.S. (1941), Michigan; N.C.A.R.B. (1954). At Oregon since 1948.
J. Michael Armer, Ph.D., Visiting Assistant Professor of Sociology. B.A. (1959), Whittier; M.S., Ph.D. (1964), Wisconsin. At Oregon since 1965.

David B. Ashby, B.A., Instructor in Economics. B.A. (1962), Oregon. At Oregon since 1965.

Robert M. Atkinson, M.A., Instructor in English. B.A. (1960), Linfield; M.A. (1964), Oregon. At Oregon since 1965.
*Fred Atrneave III, Ph.D., Professor of Psychology. B.A. (1942), Mississippi; Ph.D. (1950), Stanford. At Oregon since 1958.

George M. Austin, M.D., Professor of Neurosurgery, Medical School; Head of Division.
A.B. (1938), Lafayette; M.D. (1942), Pennsylvania. At Oregon since 1957.

Curtis E. Avery, M.A., Professor of Education.
B.A. (1925), Pomona; M.A. (1928), Yale. At Oregon since 1946.

Ronald E. Babcock, M.S., C.P.A., Lecturer in Accounting. B.S. (1949), M.S. (1958), Oregon; C.P.A. (1951), State of Oregon. At Oregon since 1954.

Daniel M. Bachman, M.D., Associate Professor of Medicine, Medical School: Head of Division of Rheumatology.
B.A. (1949), Reed; M.S. (1953), M.D. (1952), Oregon. At Oregon since 1956.

David A. Baerncopf, Ph.D., Associate Professor of Business Statistics. A.B. (1942), Indiana; M.A. (1956), Ph.D. (1961), Stanford. At Oregon since 1958.

Exine A. Bailey, M.A., Associate Professor of Music (Voice). B.S. (1944), Minnesota; M.A. (1945), Diploma (1951), Columbia. At Oregon since 1951.
J. Edwin Bailey, B.A., Assistant University Editor (Instructor). B.A. (1923), Montana. At Oregon since 1938.

David W. E. Baird, M.D., LL.D., Dean of the Medical School; Professor of Medicine.
M.D. (1926), Oregon; LL.D. (1946), Portland. At Oregon since 1927.

Andrew S. Bajer, D.Sc., Associate Professor of Biology. M.A. (1949), D.Sc. (1950), Cracow. At Oregon since 1964.

Lois I. Baker, M.A., Law Librarian (Associate Professor). B.A. (1927), M.A. (1932), Oregon; Cert. (1935), California. At Oregon since 1935.

Ellen N. Baldinger, M.A., Visiting Lecturer in Art History. A.B. (1932), Oberlin; M.A. (1933), Bryn Mawr. At Oregon since 1962.

[^0]Wallace S. Baldinger, Ph.D., Professor of Art; Director, Museum of Art. B.A. (1928), M.A. (1932), Oberlin; Ph.D. (1938), Chicago. At Oregon since 1944.

Ewart M. Baldwin, Ph.D., Professor of Geology; Curator of Geology, Museum of Natural History.
B.S. (1938), M.S. (1939), Washington State; Ph.D. (1943), Cornell. At Oregon since 194.

Roland C. Ball, Jr., Ph.D., Associate Professor of English.
B.A. (1939), Swarthmore; M.A. (1941), Cornell; Ph.D. (1953), California. At Oregon
since 1952. since 1952.
Wesley C. Ballaine, Ph.D., Professor of Business Economics; Director, Bureau of Business and Economic Research; Associate Dean of the Graduate School. B.A. (1927), M.B.A. (1931), Washington; Ph.D. (1940), Chicago. At Oregon since 1941.

Thomas O. Ballinger, M.A., Associate Professor of Art Education; Head of Department.
B.A. (1949), M.A. (1951), New Mexico. At Oregon since 1952.

Ralph B. Ballou, Jr., M.S., Instructor in Physical Education. B.S. (1949), M.S. (1956), Springfield. At Oregon since 1960.

Cora A. Bamford, M.S.W., Instructor, Tongue Point Job Corps Center. B.A. (1935), Reed; M.S.W. (1949), California at Berkeley. At Oregon since 1965.

Harold B. Barclay, Ph.D., Assistant Professor of Anthropology. B.A. (1952), Boston; M.A. (1954), Ph.D. (1961), Cornell. At Oregon since 1963.

Burt Brown Barker, LL.D., Vice-President Emeritus. (1935), Linfield. At Oregon since
A.B. (1897), Chicago; LL.B. (1901), Harvard; LL.D. (1938.
1928.

Vernon L. Barkhurst, M.A., Director of Admissions, Assistant Dean of Students, Director of Alumni Activities, with the Rank of Professor. B.A. (1949), M.A. (1950), Oregon. At Oregon since 1959.

Eugene B. Barnes, Ph.D., Head Acquisition Librarian (Professor). B.A. (1941), M.A. (1943), Minnesota; Ph.D. (1947), Chicago. At Oregon since 1947.

Homer G. Barnett, Ph.D., Professor of Anthropology.
A.B. (1927), Stanford; Ph.D. (1938), California. At Oregon since 1939.
H. Phillp Barnhart, B.S., Director of University Housing, with the Rank of Professor.
B.S. (1947), Pennsylvania State. At Oregon since 1949.

Roland Bartel, Ph.D., Professor of English.
B.A. (1947), Bethel; Ph.D. (1951), Indiana. At Oregon since 1951.

Wendell M. Basye, A.B., LL.B., Professor of Law.
A.B. (1941), Nebraska; LL.B. (1947), Virginia. At Oregon since 1957.

Eugenio Batista, M.F.A., Lecturer in Architecture.
Dip. (1924), Havana; M.F.A. (1930), Princeton. At Oregon since 1962.
Eugene W. Bauer, B.S., Business Manager, Dental School; Assistant to the Dean (Associate Professor).
B.S. (1956), Lewis and Clark. At Oregon since 1947.

Edwin F. Beal, Ph.D., Professor of Management.
B.A. (1931), Ohio Wesleyan ; M.S. (1951), Ph.D. (1953), Cornell. At Oregon since 1959.

Philip E. Beal, Ph.D., Assistant Dean of Students, with the Rank of Assistant Professor.
A.B. (1957), Cornell College; M.A. (1961), Northwestern; Ph.D. (1965), Oregon. At Ore-
gon since 1963.
*Chandler B. Beall, Ph.D., Professor of Romance Languages ; Director of Comparative Literature Program.
Dip. (1921), Sorbonne; A.B. (1922), Pb.D. (1930), Johns Hopkins. At Oregon since 1929.

* On leave of absence, winter and spring terms, 1965-66.

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Erwin T. Bender, D.D.S., Professor of Dentistry, Dental School; Superintendent of Dental Clinics.
D.D.S. (1924), Iowa. At Oregon since 1943.

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*Constance B. Bordwell, M.A., Senior Instructor in English and Legal Writing. B.A. (1931), Oregon; M.A. (1932), Washington State. At Oregon 1947-49 and since 1958.

Thomas W. Boswell, B.S., Instructor, Tongue Point Job Corps Center. B.S. (1959), Fairleigh Dickinson. At Oregon since 1965.
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Wili.iam J. Bowerman, M.S., Professor of Physical Education; Head Track Coach.
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Virginia Bowler, B.Ed., Instructor, Tongue Point Job Corps Center. B.Ed. (1940), California at Los Angeles. At Oregon since 1965,

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B.S. (1953), M.A. (1958), California State Polytechnic; D.Ed. (1964), Oregon. At Oregon since 1961.
Jean E. Boyle, M.S., R.N., Director, School of Nursing ; Professor of Nursing. B.S. (1936), M.S. (1941), Washington; R.N. (1936), State of Washington. At Oregon B.S. (1936),
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Quirinus Breen, Ph.D., Professor Emeritus of History. A.B. (1920), Calvin; Ph.D. (1931), Chicago. At Oregon since 1938.

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gon since 1961.

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Arthur G. Brodeur, Ph.D., Visiting Professor of English.
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B.S. (1935), M.S. (1936), Ph.D. (1939), Michigan. At Oregon since 1949.

* On sabbatical leave 1965.66 .

On sabbatical leave, spring term, 1965-66.
$\ddagger$ On leave of absence $1965 \cdot 66$.

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B.S. (1940), Brigham Young; M.D. (1943), Northwestern; M.S. (1949), Minnesota. At Oregon since 1955 .
Darrel R. Brown, M.b.A., Instructor in Business Administration. B.S. (1950), Kansas; M.B.A. (1964), New Mexico. At Oregon since 1965

Eyler Brown, M. Arch., Reg. Archt., Associate Professor Emeritus of Architecture.
B.A. (1916), B.S in Arch (1917) Oregon; M.Arch. (1922), Massachusetts Institute of

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B.Arch. (1947), Washington; M.Arch. (1948), Massachusetts Institute of Technology; Reg. Archt. States of Washington, Oregon, and California. At Oregon $1949-50$ and since Reg.
1955.
Paul E. Buckner, M.F.A., Assistant Professor of Sculpture. B.A. (1959), Washington; M.F.A. (1961), Claremont. At Oregon since 1962.

Howard W. Buford, B.S.L.A., Visiting Professor of Architecture. B.S.L.A. (1933), Oregon State. At Oregon since 1955.

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Jack W. Burgner, M.A., Associate Professor of Art. B.S. in Ed. (1948), Eastern Illinois; M.A. (1949), Colorado State College. At Oregon B.S. in Ed
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Ralph E. Burns, M.Agr., Instructor, Tongue Point Job Corps Center. B.S. (1949), M. Agr. (1957), Oregon State. At Oregon since 1965.

James E. Butler, B.S., Instructor, Tongue Point Job Corps Center. B.S. (1962), Arkansas State. At Oregon since 1965.

Lydia T. Butler, B.S., Instructor, Tongue Point Job Corps Center. B.S. (1962), Arkansas State. At Oregon since 1965.

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*William E. Cadbury, Ph.D., Associate Professor of English. B.A. (1956), Harvard; M.S. (1957), Ph.D. (1961), Wisconsin. At Oregon since 1961.

David M. Callahan, B.A., Instructor, Tongue Point Job Corps Center. B. A. (1960), California at Los Angeles. At Oregon since 1965.

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Robert Camprell, Ph.D., Professor of Economics; Head of Department.
A.B. (1947), Ph.D. (1952), California; B.S. (1950), U.S. Merchant Marine Academy. At Oregon since 1952.
William R. Campbell, M.A., Instructor in English.
B.A. (1961), San Jose State; M.A. (1963), Oregon. At Oregon since 1964.
*Dorothy N. Candland, Ed.D., Associate Professor of Education.
B.S. (1940), M.S. (1949), Brigham Young; Ed.D. (1956), Stanford. At Oregon since 1961.

Kenneth A. Cantwell, D.M.D., Professor of Dentistry, Dental School; Head of Department of Operative Dentistry.
B.S. (1938), Utah State; D.M.D. (1943), North Pacific. At Oregon since 1936.

Edwin H. Caplan, Ph.D., Associate Professor of Accounting.
B.B.A. (1950), M.B.A. (1952), Michigan; C.P.A. (1952), State of Michigan; Ph.D.
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(1965), California at Berkeley. At Oregon since 1964.

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B.A. (1963), Linfield ; M.P.A. (1964), Syracuse. At Oregon since 1964.

Harry J. Carlson, Ed.D., Assistant Professor of Education.
B.S. (1952), M.S. (1956), New Mexico Western; Ed.D. (1963), Arizona. At Oregon since 1962.
J. Spencer Carlson, M.A., Director, University Counseling Center, Associate Dean of Students, with the rank of Professor ; Associate Professor of Psychology.
B.S. (1935), Oregon; M.A. (1937), Minnesota. At Oregon since 1947.

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B.S. (1951), M.S. (1955), Utah; Ed.D. (1957), California. At Oregon since 1963.

Carl. W. Carmichael, Ph.D., Assistant Professor of Speech.
B.A. (1961), Westminster; M.A. (1962), Louisiana State; Ph.D. (1965), Iowa. At Oregon since 1965 .
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B.A. (1963), Idaho State; M.A. (1965), Oregon. At Oregon since 1965.

Gino A. Casagrande, B.S., Visiting Instructor in Romance Languages. B.S. (1955), California at Berkeley. At Oregon since 1965.

Lbonard J. Casanova, Ph.B., Professor of Physical Education; Head Football Coach.
Ph.B. (1927), Santa Clara. At Oregon since 1951.
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B.S. (1954), Michigan State. At Oregon since 1963.

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A.B. (1950), Clark; M.A. (1958), Columbia. At Oregon since 1965.

- On leave of absence 1965-66.

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Gregory H. Wannier, Ph.D., Professor of Physics. Ph.D. (1935), Basel. At Oregon 1959 and since 1961.
Lewis E. Ward, Jr., Ph.D., Professor of Mathematics. B.A. (1949), California; M.S. (1951), Ph.D. (1953), Tulane. At Oregon since 1959.

Paul R. Washke, Ph.D., Professor of Physical Education. A.B. (1927), Western State Teachers (Michigan) ; A.M. (1929), Michigan; Ph.D. (1943) New York University. At Oregon since 1930.
Donald A. Watson, Ph.D., Associate Professor of Finance; Associate Director, Bureau of Business and Economic Research. B.A. (1947), M. A. (1948), Ph.D. (1951), Iowa. At Oregon since 1956.

Edward G. Watson, M.A., Associate Planner, Bureau of Municipal Research and Service, with the Rank of Assistant Professor.
B.A. (1943), Reed; M.A. (1948), Washington. At Oregon since 1962.
*Marshall D. Wattles, Ph.D., Professor of Economics. B.A. (1938), Southwest Missouri State; M.A. (1941), Missouri; Ph.D. (1950), Ohio B.Ate. At Oregon since 1950.

Marian P. Watts, B.A., B.S. in L.S., Reference Librarian Emeritus. B.A. (1921), Oregon; B.S. in L.S. (1934), Illinois. At Oregon since 1921.

Ruth Waugh, M.S., Instructor in Education. B.S. (1957), Southern Oregon; M.S. (1963), Oregon. At Oregon since 1963.
A. Kingsley Weatherhead, Ph.D., Associate Professor of English; Associate Dean of the College of Liberal Arts. M.A. (1949), Cambridge; M.A. (1949), Edinburgh; Ph.D. (1958), Washington. At Oregon since 1960.
$\dagger$ Carl C. Webb, M.A., Associate Professor of Journalism. B.S. (1932), M.A. (1950), Oregon. At Oregon since 1943.

Vinson M. Weber, D.D.S., Professor of Dentistry, Dental School ; Head of Department of Postgraduate Education. A.B. (1936), Oberlin; M.A. (1940), Michigan ; D.D.S. (1946), Western Reserve. At Oregon since 1947.

* On leave of absence 1965-66. $\dagger$ On sabbatical leave, spring term, 1965-66.

Christof A. Wegelin, Ph.D., Professor of English
M.A. (1942), North Carolina; Ph.D. (1947), Johns Hopkins. At Oregon since 1952.

Kenneth W. Wegner, Ed.D., Assistant Professor of Education, Tongue Point
Job Corps Center. Job Corps Center.
B.S. (1953), M.Ed. (1955), Ed.D. (1961), Kansas. At Oregon since 1961

George D. Weight, M.S., Instructor in Business Administration B.S. (1961), Utah; M.S. (1964), Oregon. At Oregon since 1965.

Fred Weinstein, Ph.D., Visiting Assistant Professor of History
B.A. (1954), M.A. (1957), Brooklyn; Ph.D. (1962), California at Berkeley. At Oregon
since 1965.

Adolph Weinzirl, M.D., Professor of Public Health and Preventive Medicine, Medical School ; Chairman of Department.
B.S. (1922), M.D. (1925), Oregon; C.P.H. (1932), M.P.H. (1939), Johns Hopkins. At
Oregon since 1937.

Sefton R. Wellings, M.D., Ph.D., Professor of Pathology, Medical School ; Acting Chairman of Department.
B.S. (1951), M.D. (1953), Washington; Ph.D. (1961), California. At Oregon since 1961.

David K. Wells, B.S., Captain, U.S. Army ; Assistant Professor of Military
Science. Science.
B.S. (1956), Oregon. At Oregon since 1964.

Donald O. Wells, Ph.D., Assistant Professor of Physics. B.S. (1955), M.S. (1956), Ph.D. (1962), Stanford. At Oregon since 1961

Edward S. West, Ph.D., Professor of Biochemistry, Medical School; Chairman of Department.
A.B. (1917), Randolph-Macon; M.S. (1920), Kansas State; Ph.D. (1923), Chicago. At
Oregon since 1934.

Arnold M. Westling, B.S., Planning and Public Works Consultant, Bureau of Municipal Research and Service, with the Rank of Professor. B.S. (1943), Washington. At Oregon since 1947.

LeRoy D. White, Instructor, Tongue Point Job Corps Center. At Oregon since 1965.
Virginia J. Whitfield, Ed.D., Associate Professor of Music (Education). B.Mus. (1934), M.Mus. (1946), Colorado; Ed.D. (1962), California at Los Angeles. At
Oregon since 1965.

Golda P. Wickham, B.S., Dean of Women and Associate Dean of Students, with the Rank of Professor. B.S. (1931), Oregon. At Oregon since 1944.

Margaret J. Wiese, M.A., Assistant Professor of Home Economics; Head of Department.
B.S. (1941), Iowa State; M.A. (1945), Iowa. At Oregon since 1947

Jack Wilkinson, Professor of Art; Head of Department of Fine and Applied Arts.
Grad. (1937), California School of Fine Arts. At Oregon since 1941
Oliver M. Willard, Ph.D., Associate Professor of English. B.A. (1927), Stanford; A.M. (1931), Ph.D. (1936), Harvard. At Oregon since 1946.

Ruth A. Willard, Ed.D., Associate Professor of Education. B.A. (1943), M.A. (1945), Iowa ; Ed.D. (1952), California. At Oregon since 1952.

Astrid M. Williams. Ph.D., Associate Professor of Germanic Languages. B.A. (1921), M.A. (1932), Oregon; Ph.D. (1934), Marburg. At Oregon since 1935.

Daniel A. Williams, B.S., Assistant Director of Dormitories, with the Rank of Instructor.
B.S. (1962), Oregon. At Oregon since 1963

Elvin T. Williams, M.S., Instructor, Tongue Point Job Corps Center. B.S. (1949). M.S. (1950), Oregon. At Oregon since 1965.

James D. Williams, M.S., Instructor, Tongue Point Job Corps Center. B.A. (1960), Seattle Pacific; M.S. (1963), Oregon. At Oregon since 1965

Loren J. Williams, M.Ed., Instructor, Tongue Point Job Corps Center. B.S. (1958), Portland State; M.Ed. (1962), Oregon State. At Oregon since 1965.

Mildred H. Williams, D.Ed., Adjunct Associate Professor of Education; Head of Social Studies Department, South Eugene High School. B.A. (1925), M.A. (1930), D.Ed. (1954), Oregon. At Oregon since 1930.

Richard C. Williams, B.S., Director of Development, with the Rank of Professor.
B.S. (1941), Oregon. At Oregon 1941 -54 and since 1961.

William B. Willingham, M.A., Program Director, Pl-3. B.A. (1957), M.A. (1963), Indiana. At Oregon since 1965.

Neil E. Wilson, M.Mus., Associate Professor of Music (Voice). B.F.A. (1952), M.Mus. (1955), New Mexico. At Oregon since 1961.

Robert R. Wilson, M.A., Instructor in English. B.A. (1956), M.A. (1958), Chicago. At Oregon since 1963.

Donald E. Wimber, Ph.D., Associate Professor of Biology. B.A. (1952), San Diego State; M.A. (1954), Ph.D. (1956), Claremont. At Oregon since 1963.
Carryl H. Wines, Superintendent of University Press, with the Rank of Associate Professor. At Oregon since 1962.
Gary Wiren, M.A., Instructor in Physical Education. B.A.(1958), Huron; M.A. (1960), Michigan. At Oregon since 1965.

Harry F. Wolcott, Ph.D., Assistant Professor of Education. B.S. (1951), California; M.A. (1959), San Francisco State; Ph.D. (1964), Stanford. At B.S. (1951), Califf
Oregon since 1964.

Frank H. Wolf, B.S., Instructor, Tongue Point Job Corps Center. B.S. (1951), Pacific. At Oregon since 1965.

Raymond G. Wolfe, Jr., Ph.D., Associate Professor of Chemistry. A.B. (1942), M.A. (1948), Ph.D. (1955), California. At Oregon since 1956.

Huch B. Wood, Ed.D., Professor of Education. B.S. (1931), Toledo; M.A. (1935), Colorado; Ed.D. (1937), Columbia. At Oregon since 1939.

Kenneth S. Wood, Ph.D., Professor of Speech; Director, Speech and Hearing Clinic.
B.S. (1935), Oregon State; M.A. (1938), Michigan; Ph.D. (1946), Southern California. B.S.
At Oregon since 1942.

John E. Woodham, Ph.D., Assistant Professor of History, $\underset{\text { 1964. }}{\text { B.A }}$ (1960), Birmingham-Southern; M.A. (1963), Ph.D. (1964), Duke. At Oregon since 1964.

Janet G. Woodruff, M.A., Professor of Physical Education. B.S. (1926), M.A. (1929), Columbia. At Oregon since 1929.

William C. Woods, M.M., Associate Professor of Music (Piano, History) B.M. (1948), M.M. (1949), Southern California. At Oregon since 1950.

Richard K. Woodward, M.D., Associate University Physician, with the Rank of Professor. B.S. (1955), M.D. (1960), Oregon. At Oregon since 1961.

Edna P. Wooten, Ph.D., Associate Professor of Physical Education. B.S. (1945), M.A. (1946), Ph.D. (1961), Ohio State. At Oregon since 1965.

Charles R. B. Wright, Ph.D., Assistant Professor of Mathematics. B.A. (1956), M.A. (1957), Nebraska; Ph.D. (1959), Wisconsin. At Oregon since 1961.

Emma G. Wright, A.B., B.S. in L.S., Senior Acquisition Librarian (Assistant Professor).
A.B. (1925), Miami (Ohio) ; B.S. in L.S. (1939), Illinois. At Oregon since 1946.

Irwin I. Wright, B.S., Director of Physical Plant, with the Rank of Professor. B.S. (1926), Kansas State. At Oregon since 1947.

Leavitt O. Wright, Ph.D., Professor Emeritus of Romance Languages. A.B. (1914) Harvard; B.D. (1917), Union Theological Seminary; M.A. (1925), Ph.D.
(1928), California. At Oregon since (1928), California. At Oregon since 1926.
J. Lynn Wykoff, Instructor, Tongue Point Job Corps Center. At Oregon since 1965.
Tsunenobu Yamamoto, D.Sc., Visiting Professor of Chemistry. B.S. (1942), Osaka; D.Sc. (1956), Kyoto. At Oregon since 1965.

Morris Yarowsky, M.F.A., Visiting Assistant Professor of Art. A.B. (1955), Dartmouth; M.F.A. (1963), California College of Arts and Crafts. At oan Yeatman, M.A., Instructor in English. B.A. (1961), Southwestern Louisiana; M.A. (1962), Duke. At Oregon since 1963.

Hilda S. F. Yee, M.Ed., Counselor Supervisor, Dormitories, with the Rank of Instructor.
B.Ed. (1958), M.Ed. (1960), Hawaii. At Oregon since 1962.

Bertram Yood, Ph.D., Professor of Mathematics.
B.S. (1938), Ph.D. (1947), Yale; M.S. (1939), California Institute of Technology. At Oregon since 1953.
Richard O. Young, M.Ed., M.A., Counselor, University Counseling Center, with the Rank of Instructor.
B.Ed. (1954), Toledo; M.Ed. (1958), M A. (1964), Michigan. At Oregon since 1965.

Lois J. Youngen, M.A., Assistant Professor of Physical Education. B.S. (1955), Kent ; M.A. (1957), Michigan State. At Oregon since 1960.

Walter L. Youngquist, Ph.D., Professor of Geology.
A.B. (1942), Gustavus Adolphus; M.S. (1943), Ph.D. (1948), Iowa. At Oregon since 1957.

Jan Zach, Associate Professor of Art.
At Oregon since 1958.
L. Harmon Zeigler, Ph.D., Associate Professor of Political Science. B.A. (1957), Emory; M.A. (1958), Ph.D. (1960), Illinois. At Oregon since 1964.

Anthony E. Zener, M.A., Instructor, Tongue Point Job Corps Center. B.A. (1963), M.A. (1965), Oregon. At Oregon since 1965

Charles F. Ziebarth, Ph.D., Associate Professor of Transportation. B.A. (1931), M.A. (1932), Washington State; Ph.D. (1952), Chicago. At Oregon since
1946. 1946.

William A. Zimmerman, B.S., Associate Dean for Business Affairs, Medical School (Professor).
B.S. (1939), Oregon. At Oregon since 1940.

Ronald Z. Zook, M.Ed., Instructor, Tongue Point Job Corps Center. B.A. (1954), Hastipgs; M.Ed. (1963), Willamette. At Oregon since 1965.

Arnul.f Zweic, Ph.D., Assistant Professor of Philosoplyy. B.A. (1952), Rochester; Ph.D. (1960), Stanford. At Oregon since 1956.

## General Information

## History of the University

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

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

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

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

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

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

The first University courses were limited almost entirely to classical and literary subjects; the demand for a broader curriculum was, however, gradually met by the addition of scientific and professional instruction. Around the original liberal arts college were organized the professional schools, beginning with the School of Law, established as a night law school in Portland in 1884 (in 1915 the School of Law was moved to Eugene and reorganized as a regular division of the University). The Medical School was established in Portland in 1887. The Graduate School was organized in 1900 , the School of Music in 1902, the School of Education in 1910, the School of Architecture and Allied Arts and the School of Business Administration in 1914, the School of Journalism in 1916, and the School
of Health, Physical Education, and Recreation in 1920. The Dental School, located in Portland, became a part of the University in 1945 ; its previous history as a privately supported institution dates from 1893. The School of Nursing, located on the Medical School campus in Portland, was organized in 1960 (a degree curriculum in nursing has been offered by the University since 1926; from 1932 to 1960 the progran was administered through the Department of Nursing Education of the Medical School). The Honors College was established in 1960.

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

## Income

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

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

University of Oregon Development Fund. An integrated and continuing program to obtain financial support of the academic work of the University from private donors is operated through the University of Oregon Development Fund, a nonprofit organization incorporated under the laws of the state of Oregon. The fund is administered through a Board of Directors, including alumni, faculty members, students, and other friends of the institution. Information concerning the program and concerning University needs for which private support is essential may be obtained from Richard C. Williams, Director of Development.

## Campuses

THE MAIN CAMPUS of the University of Oregon is located in Eugene (population 51,000 ), 109 miles south of Portland, at the head of the Willamette Valley. Eugene is a progressive city with excellent schools, numerous churches, and strong civic and social organizations. The climate is mild, with moderate winters and cool summers. The average annual rainfall is $381 / 2$ inches, with the heaviest rainfall in the winter months, November, December, and January.

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

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

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

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

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

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

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

Libraries



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

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

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

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

| General Library | 900,313 |
| :---: | :---: |
| Law Library | 61,198 |
| Gertrude Bass Warner Memorial Library | 984 |
| Bureau of Municipal Research Library .................................................. | 21,525 |
| Medical School Library | 96,000 |
| Dental School Library ........................................................................ | 9,324 |

Total $1,089,344$

Other materials in the University Library include : 78,913 maps; 139,476 photos, pictures, and prints; 11,924 sound recordings ; 80,928 slides; 558 film strips; 446 motion picture films ; 102,127 uncataloged pamphlets ; and 878,244 manuscripts.

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

Some of the Library's resources of particular value for advanced study are: a collection of source materials on English life and letters in the seventeenth cen-
tury; a collection of books, reports, and periodicals on English opinion and politics of the nineteenth century, including considerable material on English liberalism in its relation to public education; materials on the history of American education in the nineteenth century; a collection of pamphlets on the English corn laws; the Overmeyer Collection of published works on the Civil War; a collection of Balzaciana; unusually extensive and complete files of psychological periodicals; an extensive collection of Oregon and Pacific Northwest manuscripts, photographs, maps, pamphlets, books, and newspapers. The noncurrent records of the University of Oregon are deposited with the Library as University archives.

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

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

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

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

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

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

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

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

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

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

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

Library Fines and Charges. The following regulations govern Library fines and charges:
(1) A fine of 25 cents per day is charged for each overdue book, recording, or other Library material other than reserve books and material circulated by special pernission (maximum, $\$ 10.00$ ).
(2) The following fines are charged for violation of rules governing reserve books and material circulated by special permission: (a) for overdue hooks, 25 cents an hour or fraction thereof (maximum, $\$ 10.00$ ), until the material is returned or reported lost (a maximum charge of $\$ 1.00$ an hour may be made in case of fagra
return books to proper department deck, 25 cents.
(3) Books needed for use in the Library are subject to recall at any time. A maximum fine of $\$ 1.00$ a day may be imposed for failure to return promptly.
(4) Borrowers losing Library materials are charged: (a) the replacement cost of the material, (b) the amount of fine incurred up to the time the material is reported missing (maxi mum, $\$ 10.00$ ), and (c) a service charge of $\$ 3.00$ for each title.
(5) When a lost book, for which the borrower has been billed, is returned before a replacewhere a replacement has been ordercd, any refunds to the borrower are at the discretion of the librarian.

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

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

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

## Museums and Collections

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

## Museum of Art

Wallace S. Baldinger, Ph.D. .....-Director Mallace S. Baldi


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

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

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

The first-floor galleries of the Museum of Art are reserved for the showing of traveling exhibitions, the display of special study material, and exhibitions of Northwest artists. Exhibitions, a program of statewide services, including circulating exhibitions, and acquisitions for the permanent collections are financed principally through a Friends of the Museum organization; membership is open to the public.

## Museum of Natural History

J. Arnold Shotwell, Ph.D......................................................irector; Curator of Fossil Vertebrates David L. Cole, M.S. $\qquad$ Curator of Anthropology Leroy Detling, Ph.D................................................................................................. Jane Gray, Ph.D. $\qquad$ C...Curator of Palaeobotany Laurence R. Kittleman, Ph.D. $\qquad$ Curator of Geology

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

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

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

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

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

## Miniature Wagon Museum

Ivan Collins
Director
The Miniature Wagon Museum, located in Erb Memorial Union, houses over fifty miniatures of wagons, coaches, and other horse-drawn equipment used in America in the nineteenth and early twentieth centuries. The miniatures are authentic reproductions one-eighth actual size. Many of the wagons are displayed in recreated historical settings.

## Official Publications

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

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

University of Oregon Books. Scholarly studies published by the University appear under the imprint, University of Oregon Books. Some studies also carry a serial designation, University of Oregon Monographs.

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

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

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

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

Northwest Review. The Northwest Review, issued three times a year, is devoted to creative writing, art, criticism, and comment; the work of Pacific Northwest contributors is particularly welcome.

Northwest Folklore. Northwest Folklore, published semiannually, publishes research articles and notes, with special reference to the folklore of the Pacific Northwest.

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

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

Municipal Research Bulletins. The publications of the Bureau of Municipal Research and Service, intended primarily as a service to city officials in the state of Oregon, are issued in four series, Information Bulletins, Legal Bulletins, Finance Bulletins, and Special Bulletins, published for the most part in mimeographed form.

## Academic Regulations

## Admission

TO BE ADMITTED to the University of Oregon a student must be of good moral character and must present evidence of acceptable preparation for work at the college level. Every person wishing to earn credit in the regular sessions of the University must send to the Office of Admissions: (1) an application on an official University form; (2) a $\$ 10.00$ application fee (this fee is not refundable) ; (3) official transcripts of all high-school and college records.

Application and transcripts of records should be filed well before the applicant intends to enter the University; late filing may delay or prevent registration. If a student fails to submit the required documents in complete and satisfactory fay a canceled. All records submitted form, his admission and registration
become the property of the University.
ome the property of the University.
Students planning to enter the University in the fall term should send their applications for admission to the Office of Admissions not later than August 31. A late-filing fee of $\$ 10.00$ is charged if applications are filed later than this date.

Entrance Deposit. When he receives a notice of admission to the University every entering student must send to the Office of Admissions an entrance deposit of $\$ 25.00$; when he enrolls and completes registration, this deposit is retained as the student's general $\$ 25.00$ deposit to cover loss or damage of University property, etc. (see page 84). If the student does not complete his registration, the entrance deposit is forfeited.

## Admission to Freshman Standing

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

Resident Students. To be eligible for admission with freshman standing in the fall term, a student who is a resident of Oregon must: (1) have a 2.25 gradepoint average in all high-school subjects taken for graduation; or (2) attain a satisfactory score (887) on the College Entrance Examination Board Scholastic Aptitude Test ; or (3) achieve a CPA of 200 or a full load of studies (at least 9 term hours) in a regular collegiate summer session, including a course in English composition and two or more courses from the fields of literature, social science, or science.

To be eligible for admission on the basis of high-school grades in the winter or spring terms, a resident student must have a high-school GPA of 2.00 or a satisfactory score (880) on the Scholastic Aptitude Test.

Nonresident Students. To be eligible for admission with freshman standing, a student who is not a resident of Oregon must: (1) have a 2.75 grade-point average in all high-school subjects taken for graduation; or (2) have a 2.25 highschool GPA combined with a satisfactory score on the Scholastic Aptitude Test; or (3) achieve a GPA of 2.25 on 12 term hours of work in a regular collegiate summer session, including a course in English composition and two or more courses from the fields of literature, social science, or science.*

[^9]Early Admission. A high-school student who is a resident of Oregon, has a cumulative gra of 2.50 or a Scholastic Aptitude Test score of 950 at the end of the first half of his senior year, and is recommended by his high-school principal will be granted admission to the University before graduation. On application to the Director of Admissions a nonresident high-school student will be granted admission before graduation on the basis of a 3.00 GPA or a 2.50 GPA and a Scholastic Aptitude Test score of 1,000 at the end of the first half of his senior year. Enroll ment in the University after early admission is contingent on graduation from high school and submission of a complete high-school transcript.

Credentials. A student applying for admission to freshman standing must send to the Office of Admissions: (1) an application on an official University form; (2) a $\$ 10.00$ application fee (this fee is not refundable) ; (3) records of all school work taken beyond the eighth grade; certified by the proper school official on the official form used by his high school for this purpose ; and (4) certified results of the following College Entrance Examination Board tests: (a) Scholastic Aptitude Test, (b) achievement test in English composition, (c) achievement test in level I mathematics, and (d) achievement test in a foreign language, if he has studied a foreign language for two years in high school.* See also Entrance Examinatrons, page 75.

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

Advanced Placement Program. Students who have completed college-level studies in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board, and who have received satisfactory grades in examinations administered by the Board, may be granted credit toward a bachelor's degree in comparable University courses on admission to freshman standing. For further information, see page 132.

## Admission of Transfer Students

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

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

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

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

No advanced standing is granted at entrance for work done in nonaccredited collegiate institutions. However, after three terms of satisfactory work in the Uni-

[^10]versity, an undergraduate student transferring from a nonaccredited institution may, on petition, receive credit in University of Oregon courses to which courses taken at the unaccredited institution are approximately equivalent; validating examinations may be required. Petitions for such credit may be based only on regularly organized college-level courses.

Transfer students must send to the Office of Admissions: (1) an application on an official University form; (2) a $\$ 10.00$ application fee (this fee is not refundable) ; (3) complete official records of all school work beyond the eighth grade; and (4) a certified score on the Coilege Entrance Examination Board Scholastic Aptitude Test. College records must be certified by the registrar of the institution providing the record; if the student's high-school record is adequately shown on his college transcript, he need not obtain another record direct from his high school. If a student has taken the Scholastic Aptitude Test on a previous occasion, he need not take it again, but may obtain and submit a transcript of his score from the College Entrance Examination Board.

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

## Admission of Special Students

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

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

## Admission to Graduate Standing

For requirements and procedures for admission to graduate study see Graduate School, pages 112 ff .

## Entrance Examinations

TO PROVIDE THE FACULTY with a basis for reliable advice and assistance to students in planning their programs and, in certain cases, for determination of eligibility for enrollment, the University requires all entering undergraduate students to submit certified scores on the College Entrance Examination

Board Scholastic Aptitude Test; freshman students are required to submit, in addition, scores on the College Board achievement tests in the following fields English composition, level I mathematics, a foreign language (if the student has tudied a foreign language for two years in high school).

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

All entering students, undergraduate and graduate, are also required to take a physical examination and provide evidence of immunization to certain contagious diseases (see page 93), The physical examination is given by a physician chosen by the student, who provides an examination report to the University Student Health Service

## Degrees

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

Honors College-B.A. (Honors College).
Liberal Arts-B.A., B.S., M.A., M.S., M.F.A., Ph.D.
Architecture and Allied Arts-B.A., B.S., B.Arch., B.I.Arch., B.L.A., M.A., M.S., M.Arch., M.F.A., M.L.A., M.U.P.

Business Administration-B.A., B.S., B.B.A., M.A., M.S., M.B.A., D.B.A.
Dentistry-M.S., D.M.D.
Education-B.A., B.S., B.Ed., M.A., M.S., M.Ed., D.Ed., Ph.D.
Health, Physical Education, and Recreation-B.A., B.S., B.P.E., M.A., M.S., D.Ed., Ph.D.

Journalism-B.A., B.S., M.A., M.S.
Law-B.A., B.S., LL.B., J.D.
Medicine--M.A., M.S., Ph.D., M.D.
Music-B.A., B.Mus., M.A., M.Mus., D.M.A.
Nursing-B.A., B.S., M.S.
The M.A. and M.S. degrees are also granted on the completion of programs of interdisciplinary studies.

## Requirements for Bachelor's Degree

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

Lower-Division Requirements. The lower-division requirements for a bachelor's degree are as follows
(1) Written English:
(a) For freshmen who receive low ratings on a placement examination given to all entering students: Corrective English (Wr 10), offered
on the campus through the Division of Continuing Education of the Oregon State System of Higher Education (students register separately and pay a special fee for this remedial instruction).
(b) For all students : English Composition (Wr 121, 122, 123), 9 term hours. (With the consent of the head of the Department of English, all or part of this requirement may be waived for students who demonstrate superior ability in writing.)
(2) Physical education: 5 terms in activity courses unless excused.* (One or more terms of this requirement may be waived on the basis of proficiency examinations.)
(3) Health education: HE 150 or HE 250. (This requirement may be waived on the basis of a proficiency examination.)
(4) Group requirement-see pages 178-180.
(5) Grade-point average on completion of 93 hours of work: minimum, 2.00 .

General Requirements. The general requirements for a bachelor's degree äre as follows:
(1) Total credit:
(a) For B.A., B.S.. B.B.A., B.Ed., B.P.E., or B.Mus. degree: minimum, 186 term hours.
(b) For B.Arch., B.I.Arch., or B.L.A. degree : minimum, 220 term hours.
(c) For LL.B. degree : minimum, 263 term hours.
(2) Work in upper-division courses: minimum, 62 term hours.
(3) Work in the major:
(a) Minimum : 36 term hours, including at least 24 hours in upper-division courses.
(b) Any additional requirements of the major school or department (satisfaction must be certified by the dean or department head).
(4) Work in residence : minimum, 45 term hours of the last 60 presented for the degree. $\dagger$
(5) For the B.A. degree, work in language and literature: 36 term hours, $\ddagger$ including attainment of proficiency in a foreign language equivalent to that attained at the end of two years of college study of the language.§
*Students who have completed six months of active military ser vice in the Armed Forces of
United States are exempt from 3 terms of the physical-education requirement; to qualify for exemption, such students must file official documentary evidence of their service. th Ony University of Oregon work completed on the Eugene campus of the University or at the Medical School, the Dental School, or the School of Nursing in Portland may be counted $\dagger$ For the purpose of determining
instructional fields of the College of Language and Literature: General Arts and Letters, English, Foreign Languages, Speech. Socia! Science: General Social Science, Anthropology, Economins, Geography, Home Economics, History, Philosophy, Political Science, Psychology, Religion, Sociology.
\& The language requirement for the B.A. degree may be niet in any one of the following ways: (1) two years (normally 24 term hours) of college work in a foreign language; (2) one year of college work at the second-year or higher level; or (3) examination, administered by the Department of Foreign Languages, showing language competence equivalent to that attained at the end of two years of college study. The requirement may not be met by examination after the completion of a student's junior year.
(6) For the B.S. degree, work in science or in social science : 36 term hours.*
(7) Restrictions:
(a) Correspondence study : maximum, 60 term hours.
(b) Law, medicine, dentistry : maximum, 48 term hours in professional courses toward any degree other than a professional degree.
(c) Performance (individual study) : maximum for all students except music majors, 12 term hours; maximum for music majors toward the B.A. degree, 24 term hours-of which not more than 12 hours may be taken in the student's freshman and sophomore years.
(d) No-grade courses: minimum of 150 term hours in graded courses.
(8) Grade-point average:
(a) Covering all graded college work: minimum, 2.00 .
(b) Covering all graded work taken at the University of Oregon : minimum, 2.00 .
The occasional student who wishes to earn a second bachelor's degree must satisfy the requirements listed above and, in addition, must earn at least 36 term hours in courses on the Eugene campus after meeting all requirements for the first degree ( 45 hours if his first degree was not granted by the University of Oregon).

## Advanced Degrees

The requirements for graduate degrees are listed under Graduate School. The requirements for the degree of Doctor of Jurisprudence are listed under School of Law. The requirements for the degree of Doctor of Medicine are listed in the Medical School Catalog, the requirements for the degree of Doctor of Dental Medicine in the Dental School Catalog.

## Application for Degree

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

## Group Requirement

TO INSURE breadth of liberal education, all candidates for a bachelor's degree are required to complete work selected from restricted lists of sequences in each of three groups-arts and letters, social science, science. Courses which may be taken for the satisfaction of the group requirement are numbered 100 to 120 , 200 to 220 , and 300 to 310 . The requirement, for majors in the College of Liberal Arts and for majors in the professional schools, is as follows:

Majors in Liberal Arts-(a) one sequence numbered 100-120 or 200-220 in each of the three groups ; (b) an additional sequence numbered $100-120,200-220$, or 300-310 in each of the three groups.

Majors in Professional Schools-(a) one sequence numbered 100-120 or 200220 in each of the three groups; (b) an additional sequence numbered 100-120, 200-220, or $300-310$ in any one of the three groups.

[^11]At least one sequence selected for the satisfaction of the arts and letters group requirement must be a sequence in literature.

Each of the group sequences must total at least 9 term hours; each sequence in the science group must include laboratory work or total 12 term hours.

When two sequences are taken in social science or in science for the satisfaction of the requirement, the sequences must be in different departments.

Enrollment in group sequences designated "H.C." is restricted to students in the Honors College.

Sequences which may be taken for the satisfaction of the group requirement are listed below:

## Arts and Letters Group

General Arts and Letters
Jiterature (H.C.) (AL 101, 102, 103)
*Intro. to Jap. Lit. (AL 301, 302, 303)
*Lit. of Ancient World (AL 304, 305, 306)
*Intro. to Chinese Lit. (AL 307, 308, 309)
Art
$\dagger$ Survey of Vis. Arts (ArH 201, 202, 203) or Hist. of Western Art (ArH 204, 205, 206)

English
Survey of Eng. Lit. (Eng 101, 102, 103)
or Intro to Lit. (Eng 104, 105, 106) or $o r$ Intro. to Lit. (Eng 104, 105, 106)
World Lit. (Eng 107, 108, 109)
Shakespeare (Eng 201, 202, 203)
*Three eourses chosen from: Tragedy (Eng 301), Epie (Eng 303), Comedy (Eng lish Bible (Eng 306, 307)

Foreign Languages

+ Intro. to Homer (CL 101, 102), Intro. to to Plato (CL 103)
${ }^{+}$Cicerc's Orations (CL 104), Virgil's
Aencid (CL 105), Terence (CL 106)
$\dagger$ 2nd Yr. German (GL 101, 102, 103)
Foreign Languages (continued)
$\dagger$ 2nd Yr. Norwegian (GL 104, 105, 106)
$\dagger$ 2nd Yr. Swedish (GL 107, 108, 109)
$\dagger$ 2nd $\mathrm{Yr}_{\text {r. Chinese }}(\mathrm{OL} 101,102,103$ )
$\dagger$ 2nd Yr. Japanese $\left.^{(O L} 104,105,106\right)$
$\dagger$ 2nd Yr. French (RL 101, 102, 103)
$\dagger$ 2nd Yr. French (RL 101, 102, 103)
$\dagger$ 2nd Yr. Spanish (RL 107, 108, 109)
†2nd Yr. Russian (SL 101, 102, 103)
Read. in Russian Lit. (SL 201, 202, 203) *Livy (CL 301), Virgil's Eclogues \& 303) *Survey of German Lit. (GL 301, 302, 303) *Survey of German Lit. (RL 301, 302, 303)
*Survey of French Lit.
Stith (RL 304, 305, 306) *Survey of French Lit. (RL 30, 302,
*Survey of Spanish Lit. (RL 304, 305)
*Survey of Italian Lit. (RL 307, 308, 309) Music
$\dagger$ Intro. to Music \& Its Lit. (Mus 201, 202, 203) or History of Music (Mus 204,
205, 206)

Philosophy
Philosophy
$\ddagger$ History of Philosophy (Phl 301, 302, 303) Speech
$\ddagger$ Theo
$\substack{\text { peeech } \\ \ddagger \text { Theory \& Lit. of Rhetoric (Sp 301, 302, } \\ 303)}$

## Social Science Group

General Social Science
Soc. Sc. \& Soc. Policy (SSc 104, 105,
$\underset{\substack{\text { Intro. to } \\ 203)}}{\text { Soc. Sc. (H.C.) (SSc 201, 202, }}$
Anthropology
Gen. Anthropology (Anth 101, 102, 103)
Intro to Cult. Anth. (Anth 207, 208, 209)
Intro. to Cult. Anth. (Anth 207, 208, 209)
*Society \& Culture (Anth 301, 302, 303)

## Economics

Principles of Econ. (Ec 201, 202, 203)
Geography
Intro. Geography (Geog 105, 106, 107) World Regional Geog. (Geog 201, 202, *Geog. of Oregon (Geog 301), Geog. of
North America (Geog 302, 303) History

Hist. of West. Civiliz. (Hst 101, 102, 103) History (H.C.) (Hst 107, 108, 109) ${ }_{*}$ Hist. of U.S. (Hst 201, 202, 203) *Europe since 1789 (Hst 301, 302, 303)
*English History (Hst 304, 305, 306)
English History (Fist 304, 305, 306)
Philosophy Philosophy
Problems of Phil. (Phl 201, 202, 203)
Intro. to Phil. (H.C.) (Phl 207, 208, 209) Intro. to Phil. (H.C.) (Phl 207, 208, 209)
*Social \& Pol. Phil. (Phl 304, 305, 306)
" Courses numbered $300-310$ satisfy only second-sequence requirements.
$\dagger$ Courses marked with a dagger ( $\dagger$ ) do not satisfy the "literature" requirement in arts and letters.
$\ddagger$ Courses marked with a double dagger ( $\ddagger$ ) satisfy only second-sequence requirements and do not satisfy the "literature" requirements in arts and letters.

Political Science
American Govts. (PS 201, 202, 203)
American Govts. (PS 201, 202), Intern
American Govts. (PS 201, 202), Interna
tional Relations (PS 205)
Intro. to Pol. Sc. (PS 206, 207, 208)

## Psychology

Learning \& Thinking (Psy 211) or Perception (Psy 212); Motivation \& Phys iological Psych. (Psy 214) or Social
Psych. (Psy 215): Human Develop. Individual Diff. (Psy 217) or Personality (Psy 218)

Religion
Great Religions (R 201, 202, 203) *Religions of Mankind ( $\mathrm{R} 301,302,303$ )

Sociology
Gen. Sociology (Soc 204, 205, 206) *Princ. of Sociology (Soc 300; and two courses chosen from: American Society (Soc 301), World Population \& Soc. (Soc 304), Contemporary Social Prob. lems (Soc 305)

## Science Group

General Science
Physical Sc. Survey (GS 104, 105, 106)
Physical Sc. (H.C.) (GS 204, 205, 206)
Biology
Gen. Biology (Bi 101, 102, 103)
Biological Sc. (H.C.) (Bi 204, 205, 206)
Chemistry
Elementary Chem. (Ch 101, 102, 103)
General Chem. (Ch 104, 105, 106); and
a minimum oi two terms of lab.
a minimum oi two terms of ab.
†General Chem. (Ch 204, 205, 206); and
a minimum of two terms of lab.
Geology
Gen. Geology (Geol 101, 102, 103)
Gen. Geology (Geol 101, 102, 103)
tGeologic Hist. of Life (Geol 301, 302, 303)

## Mathematics

Intro. College Math. (Mth 104, 105, 106) Intro. College Math. (Mth 104, 105, 106 )
Intro. College Math. (Mth 104, 105), Calculus with Analytic Geometry (Mth 200)

Intro. College Math. (Mth 105, 106), Calculus with Analytic Geometry (Mth 200)

Mathematics (continued)
Intro. College Math. (Mth 104 or Mth 105), Calculus with Analytic Geometry (Mth 200, 201)
Calculus with Analytic Geometry (Mth Fund. of Math. (H.C.) (Mth 107, 108, 109) Analytic Geo
205, 206)

Physics
Essentials of Physics (Ph 101, 102, 103); Essentials of Physics (Ph 101, 102, 103);
and Gen. Physics Lab. (Ph 204, 205, 206)
Descriptive Astronomy (Ph 104, 105, 106) General Physics (Ph 201, 202, 203)
Psychology
Learning \& Thinking (Psy 211 or Perception (Psy 212): Motivation \& Physiological Psych. (Psy 214), or Social
Psych. (Psy 215): Human Develop. \& Psych. (Psy 215) ; Human Develop. \&
Individual Dift. (Psy 217) or Personality (Psy 218); and Psych. Lab. (Psy 213, Psy 216, Psy 219)

## Honors

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

Honors College. The University of Oregon Honors College offers a fouryear program of study leading to the degree of Bachelor of Arts (Honors College). For further information, see pages 129 ff .

Recognition for High Scholarship. Candidates for the bachelor's degree who achieved a cumulative grade-point average of $3.75-4.00$ receive the award

[^12]$\dagger$ Courses which may be taken with General Chemistry to satisfy the Jaboratory requirement include: Introductory Chemistry Laboratory (Ch 107); Inorganic Qualitative Analysis (Ch 108); Introductory Volumetric Analysis (Ch 109); Inorganic Qualitative Analy (Ch 209). $\ddagger$ May be offered for the satisfaction of the science group requirement only by majors in the College of Liberal Arts.
of "Recognition for Highest Scholarship"; candidates who achieve a cumulative grade-point average of $3.50-3.74$ receive the award of "Recognition for High Scholarship."

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

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

## Academic Procedure

THE REGULAR ACADEMIC YEAR throughout the Oregon State System of Higher Education is divided into three terms of approximately twelve weeks each. The summer session supplements the work of the regular year (see special announcements). Students may enter at the beginning of any term. It is important that freshmen and transferring students entering in the fall term be present for New Student Week (see page 88). A detailed calendar for the current year will be found on pages 8-9.

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

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

## Registration Procedure

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

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

Students planning to register in a term of the regular academic year after absence of a term or more or after earning a degree or after attending only a summer session should notify the Registrar's Office several weeks before registration, in order to allow time for the preparation of registration materials. If notice is not given, registration will be delayed, and the student may become subject to penalties.

All regular students are required to file official transcripts of any academic work taken at other institutions since their first enrollment in the University ; a student's official records must be kept complete at all times. Exceptions are made only for "special students," who are formally admitted on special individual arrangements, and for summer "transient" students, who are not formally evaluated and admitted. Any failure to file all required records is considered a breach of ethics, and may result in the cancellation of registration and credits.

## Academic Advising

Academic advising is regarded by the University as an extension of the teaching function and, therefore, as an important responsibility of the faculty Academic advisers attempt to communicate to students, particularly freshmen, the meaning of higher education and its significance to the student. Advisers also explain University acadenic requirements and assist individual students in building programs which satisfy these requirements.

The Office of Academic Advising coordinates a program of lower-division advising in which each student is assigned a faculty adviser, who normally teaches in the student's major field. The student must have his program approved in advance by his adviser, and should consult with him whenever he has academic problems.

Advisers for upper-division and graduate students are assigned by major schools and departments

## Definitions

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

A course is a subject, or an instructional subdivision of a subject, offered hrough a single term

A year sequence consists of three closely articulated courses extending through the three terms of the academic year.

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

## Course Numbering System

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

1. 49. Remedial courses which carry no credit toward a degree
1. 99. Beginning courses in subjects taught in high school which carry credit toward a bachelor's degree.
100-299. Lower-division courses.
$100-120,200-220$. Survey or foundation courses which satisfy the group requirement
300-499. Upper-division courses.
300-310. Upper-division courses which satisfy the group requirement.
400-410. Upper-division courses which may be taken through successive terms under the same number, credit being granted according to the amount of work done. Certain numbers in this bracket are reserved for special types of work: 401 ,
Research or other supervised original work; 403, Thesis; 405, Reading and Conference; ${ }^{*} 407$, Seminar.
400-499, with designation (G) or (g). Upper-division courses which may be taken for graduate credit. Courses which may be taken for graduate major credit ar designated (G); courses which may be taken for graduate minor credit only are designated ( g ).
500-599. Graduate courses. Seniors of superior scholastic achievement may be admitted to 500 courses on the approval of the instructor.

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

500-510. Graduate courses which may be taken through successive terms under the same number, credit being granted according to the amount of work done. Certain numbers in this bracket are reserved for special types of work: 501, Research or other supervised original work;* 503, Thesis;* 505, Reading and Conference; 507, Seminar
$500-599$, with designation (p). Courses in a professional field offered at a level of intellectual maturity suitable for graduate students who have earned a bachelor's degree in a field other than their graduate professional field

600-699. Courses of a highly professional or technical nature, which count toward a proessional degree only (not toward advanced academic degrees such as M.A., M.S., Ph

## Grading System

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

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

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

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

## Scholarship Regulations

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

## Fees and Deposits

STUDENTS AT THE UNIVERSITY OF OREGON, $\dagger$ Oregon State University, and Portland State College pay the same fees. In the fee schedule printed be-

* In all divisions except the School of Law, Research (501) and Thesis (503) are classified as no-grade courses (see below)
fee schedules for these studedical School, the Dental School, and the School of Nursing. The fee schedules for these students are published in the separate catalogs of these schools.
low, regular fees are those paid by all students under the usual conditions of undergraduate or graduate study; regular fees are payable in full at the time of registration. Special fees are paid under the special conditions indicated.

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

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

## Regular Fees

Undergraduate Students. Undergraduate students who are residents of Oregon and who are enrolled for a total of 8 term hours of work or more during the regular academic year pay tuition and fees totaling $\$ 110.00$ a term or $\$ 330.00$ for the three-term academic year.

Undergraduate students who are not residents of Oregon and who are enrolled for a total of 8 term hours of work or more during the regular academic year pay, in addition, a nonresident fee of $\$ 190.00$ a term, or a total of $\$ 300.00$ a term or $\$ 900.00$ for the three-term academic year. For regulations governing the assessment of the nonresident fee, see page 86.

Graduate Students. Graduate students enrolled for a total of 8 term hours of work or more pay tuition and fees totaling $\$ 110.00$ a term; students employed as teaching or research assistants pay a reduced fee of $\$ 32.00$ a term. Graduate students do not pay a nonresident fee.

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

## Deposits

All persons who enroll for academic credit (except staff members) must make a general deposit of $\$ 25.00$, payable once each year at the time of first registration The deposit is required for protection of the University against loss or damage of institutional property such as dormitory and laboratory equipment, military uniforms, Library books, and locker keys, and against failure to pay promptly nominal fines and assessments, such as Library fines, campus traffic fines, and Health Service charges. If at any time charges against this deposit become excessive, the student may be called upon to re-establish the original amount.

See also Entrance Deposit, page 73.

## Special Fees

The following special fees are paid by University students under the conditions indicated:
Part-Time Fee. $\qquad$ .per term, $\$ 28.00$ to $\$ 98.00$
Students (undergraduate or graduate) who enroll for 7 term hours of work or less pay, instead of regular registration fees, a part-time fee in accordance with the fol-

* Special fees, in addition to regular fees, are charged for individual instruction in musical performance. See School of Music.
lowing scale: 1.2 term hours $\$ 28.00 ; 3$ term hours, $\$ 42.00 ; 4$ term hours, $\$ 56.00$; 5 term hours, $\$ 70.00 ; 6$ term hours, $\$ 84.00 ; 7$ term hours, $\$ 98.00$. Students enrolled entitles the student to all services maintained by the University for the benefit of students.
Staff Fee. per term hour, $\$ 3.00$
With the approval of the President's................................................................................. in University courses pay a special staff fee of $\$ 3.00$ per term hour. Full-time staff members (aca credit, generally for not more than 3 term hours of work in any term; staff members employed half-time or more, but less than full-time, may enroll under this fee for a maximum of 10 term hours of work.
Auditor's Fee. $\qquad$ .per term, $\$ 28.00$ to $\$ 110.00$ An auditor is a person who has obtained permission to attend classes without receiving academic credit; such a person is not considered an enrolled student. Auditors atend auditors attending classes carrying a total credit of 7 term hours or less pay fees in accordance with the part-time fee scale (see above).
Application Fee See page 73.
Late-Registration Fee. $\qquad$ minimum, $\$ 5.00$ A full-time student who registers after the scheduled registration dates of any term A full-time student who registers after the scheduled registration dates of any term
pays a late-registration fee of $\$ 5.00$ for the first late day plus $\$ 1.00$ for each late day thereafter.
Change-of-Program Fee
A student may be required to pay this fee for each change in his official program.
Reinstatement Fee.
If for any reason a student has his registration canceled during a term for failure to If for any reason a student has his registration canceled during a term for failure to
comply with the regulations of the institution, but is later allowed to continue his work, he must pay the reinstatement fee.
Special Examination Fee. $\qquad$ per term hour, $\$ 1.00$ A student pays a fee of $\$ 1.00$ per term hour for the privilege of taking an examina-
tion for advanced credit, or other special examinations.
Graduate Qualifying Examination Fee $\qquad$ $\$ 1.00$ to $\$ 15.00$
Paid by students taking the Graduate Record Examination or other standard tests of ability to do graduate work.
Transcript Fee. $\qquad$ $\$ 1.00$ For a transcript of his University academic record, a student pays a fee of $\$ 1.00$ for the first copy and 50 cents each for additional copies furnished at the same time.
Check Irregularity Penalty... $\qquad$ per business day, $\$ 1.00$ Penalty assessed when a check in payment for institutional charges is returned because of irregularity for which the student is responsible (NSF, illegible signature, etc.) Maximum penalty, $\$ 5.00$.
Late-Application Fee. See page 73
Placement Service Fee. $\qquad$ .See page 88
Music Course Fees School of Music
Library Fines and Charges.
See page 70


## Refunds

Fee Refunds. Students who withdraw from the University and who have complied with the regulations governing withdrawals are entitled to certain refunds of fees paid, depending on the time of withdrawal. The refund schedule has been established by the State Board of Higher Education, and is on file in the University Business Office. All refunds are subject to the following regulations:
(1) Any claim for refund must be made in writing before the close of the term in which the claim originated
(2) Refunds in all cases are calculated from the date the student officially withdraws from the University, not from the date when the student ceased attending classes, except in unusual cates
student.

Deposit Refunds. The $\$ 25.00$ general deposit, less any deductions which may have been made, is refunded about six weeks after the close of the academic year Students who discontinue their work at the University before the end of the year may receive refunds, upon petition to the Business Office, about six weeks after the close of the fall or winter terms.

## Regulations Governing Nonresident Fee

Under the regulations of the Oregon State Board of Higher Education, a minor student whose parent or guardian is a bona fide resident of Oregon quali fies for enrollment under the resident fee; a student whose domicile is independent of his parent or guardian qualifies for enrollment under the resident fee if he presents convincing evidence that he established his domicile in Oregon six months prior to his first registration.

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

A student who has been classified as a nonresident may be reclassified as a resident:
(1) In the case of a minor, if his parent or guardian has moved to Oregon and has established a bona fide residence in the state, or
(2) In the case of a student whose domicile is independent of that of his parent or guardian, if the student presents convincing evidence that he has established his domicile in Oregon and that he has resided in the state for an entire school year immediately prior to the term for which reclassification is sought, and that he has no intention of moving out of the state after completion of his school work.

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

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

## Student Life and Welfare

## Office of Student Affairs

Donald M. DuShane, M.A....................................................................................................an of Students J. Spencer Carlson, M.A................Director of Counseling Center; Associate Dean of Students
Clifford L. Constance, M.A.......................................................................................................istrar

* Robert L. Bowlin, D.Ed....................................................ssociate Dean of Students (Dean of Men) Eugene W. Dils, Ed.D....................Director of Placement Service; Associate Dean of Students Kenneth S. Ghent, Ph.D...................Associate Dean of Students; International Student Adviser Francis B. Nickerson, D.Ed..................Associate Dean of Students; Student Relations Officer Karl W. Onthank, M.A.. $\qquad$ Counselor, University Mothers and Dads *Golda P. Wickham, B.S. $\qquad$ Associate Dean of Students (Dean of Women) Vernon L. Barkhurst, M.A.........................Director of Admissions; Assistant Dean of Students Howard L. Ramey, M.F.A......................Assistant Dean of Students; Director of Financial Aids W. A. Brooksby, M.D............................................................. Rosalie Howard, M.Ed.
 Supervisor of Reading-Study Laboratory Kenneth S. Wood, Ph.D..................................................Director of Speech and Hearing Clinic Avid Brinks, Ed.D..................................Supervisor of Testing Services, Counseling Center Apen Thompson Ph.D....................................... Counselor, Counseling Center
 Saul Tcobert, D.Ed...
............... Supervisor of Group Counseling \& Sue K. Gilmore, Ph.D
h.D........................................................................................................................... Counselor, Counseling Center Annette M. Porter, Ph.D ...Counselor, Counseling Center Elizabeth Dubin, Ph.D................................................................................................................................... Counselor, Counseling Center Philip E. Beal, Ph.D.................................................................................................... Charlene M. Blackburn, B.A.............................................................Assistant Dean of Women Margaret Blago, B.A..........................................................................................................istant Registrar
 Richard P. Rapp, B.S..........................................................................Assistant Dean of Students Dan R. Etulain, M.Ed........................................................................................ Dean of Men
 bray D. Orele, M.
 arry D. Large, b.S. dmissions Counselor Ll, M.P.S., B.D..... Richard A. Sorenson, B.S
M.P.S., B.D.................................................................................................................. ...Assistant Dean of Men Phyli.is L. Knight, B.S..

| S. |  |
| :---: | :---: | sistant Dean of Women Benjamin D. Owens, M.S B.D... $\qquad$ Counselor, Student Affairs Charles S. Palmbrlee, A.B., B.D. $\qquad$ to Student Conduct Program Gregory W. Reed, B. $\qquad$ Assistant Dean of Students, International Students

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

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

[^13]University Counseling Center. The University Counseling Center provides facilities for testing and counseling University students, to help them in making wise choices in their studies and in solving academic and personal problems. A special fee of $\$ 5.00$ is charged for the full educational and vocational testing service of the Counseling Center.

Speech and Hearing Clinic. The Speech and Hearing Clinic, operating in conjunction with the Counseling Center, provides diagnosis, consultation, and treatment in connection with speech and hearing problems of University students. Students may be referred to the clinic either by the Counseling Center or by faculty advisers, or they may contact the clinic without a referral.

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

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

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

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

## New Student Week

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

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

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

## Student Living

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

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

## University Dormitories

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

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

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

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

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

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

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

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

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

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

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

Dormitory Living Expenses. Board and room costs in University dormitories are approximately $\$ 307.50$ for the fall term, $\$ 246$ for the winter term, and $\$ 229.50$ for the spring term-a total of approximately $\$ 783$ for the academic year. The charges are based on the following rates:

| Board, per month | \$ 61.50 |
| :---: | :---: |
| Room, multiple occupancy, per term: |  |
| Fall term | 134.00 |
| Winter term | 90.00 |
| Spring term | 75.00 |
| Room, single occupancy, per term: |  |
| Fall term | 201.00 |
| Winter term | 135.00 |
| Spring term | 112.50 |

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

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

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

## Fraternities and Sororities

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

In the summer, after formal notice of admission has been received, new students receive from the Office of Student Affairs full information, instructions, and a copy of rushing rules.

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

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

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

## Cooperative Houses

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

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

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

## Off-Campus Housing

The University Housing Office, Carson Hall, maintains a list of approved rooms, apartments, and houses available for rent. The list is not published for mail distribution. Students under 21 years of age who are eligible to live off campus must live in quarters found on the approved list. Students planning to live off campus are advised to engage quarters personally after inspection and conference with the householder.

## Housing for Married Students

Housing for married students is provided in 716 furnished and unfurnished family-dwelling units owned and operated by the University. The units include a wide variety of accommodations. The rents range from $\$ 42.50$ to $\$ 76.00$ per month. Application should be made to the University Housing Office, Carson Hall

The married-student housing program is intended primarily to accommodate married graduate students working toward advanced degrees. To be eligible for married-student housing, students must be enrolled for course work, as follows graduate assistants, 0.5 FTE, 5 term hours; graduate assistants, 0.3 FTE, 9 hours other graduate students, 9 hours; undergraduate students, 12 hours.

Maximum tenant occupancy is restricted to the following: 1-bedroom apart-ments- 2 adults and 1 child under the age of one ; 2 -bedroom apartments -2 adults, 2 children over the age of one, and 1 child under the age of one. Occupancy is restricted to the members of one family.

## Social Activities

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

## Housing Regulations

(1) Freshmen students are required to live in University dormitories (see, however, under Cooperative Houses, above.)
(2) Other undergraduate students under 21 years of age are required to live either in the dormitories or in houses maintained by organized University living groups (fraternities, sororities, cooperatives), unless their parents request that they be permitted to live off campus, in quarters found on the approved list maintained by the Housing Office.
(3) Married students and students living with relatives in the Eugene community are excepted from rules (1) and (2); other exceptions are rare, and are made only for students working for room and board, or for whom rooms are not available in campus quarters.
(4) Students who rent off-campus quarters are expected to remain in these quarters for at least one term. If the students does not plan to stay for a full term, he should make certain that this is understood by his landlord before a rental agreement is made. Oregon law provides that a tenant or landlord wishing to terminate a rental agreement must give a 30 -day written notice (unless otherwise agreed).
(5) All students living in the dormitories must take their meals in the dormitory dining rooms.
(6) All dormitory housing is taken on a year basis; all other campus housing (fraternity, sorority, and cooperative) is taken on a term basis. Students may not move during a term without special permission from the Dean of Men or the Dean of Women.
(7) All students enrolled in the University (with the exceptions noted above) are subject to University housing regulations, including students enrolled for parttime study.

## Student Expenses

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

|  | $\begin{aligned} & \text { Fall } \\ & \text { Term } \end{aligned}$ | AcademicYear |  |
| :---: | :---: | :---: | :---: |
| Institutional fees (for Oregon residents) .-.............................. | \$110.00 | \$ | 330.00 |
| Books, supplies, etc. .............................. | 45.00 |  | 100.00 |
| Board and room | 307.00 |  | 783.00 |
| Incidentals | 50.00 |  | 150.00 |
| Total | \$512.00 |  | 363.00 |

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

## Student Health Service



Year
$\$ 330.00$
100.00
${ }_{783.00}$
150.00
$\$ 1,363.00$


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

The student health services in the institutions in the Oregon State System of Higher Education are supported by student registration fees. Every student registered for credit and whose total registration fee includes the breakage deposit fee is entitled to all the services offered by the Student Health Service.

The Student Health Service facility is new, designed and equipped to meet the rapidly changing concepts in medical treatment and the rapid growth of the University; it consists of out-patient departments, a 44-bed hospital, including a modern isolation unit of four private beds, and the necessary laboratory, emergency, and administrative facilities. In general, medical services offered include: (1) general medical attention and treatment, including minor surgery (major surgery and other procedures requiring general anesthesia and specialists' services are referred) ; (2) 15-day free hospitalization during one academic year if recommended by a Health Service physician; (3) 24-hour daily emergency service; (4) complete routine laboratory procedures, including diagnostic X-ray, clinical laboratory, and physiotherapy; (5) a pharmacy; (6) limited psychiatric and counselling services on an out-patient basis, supervised by a psychiatrist.

All expenses of, or connected with, surgical operations or specialized services must be borne by the student, including the services of a special nurse, where deemed necessary. Under no circumstances will the Health Service pay or be responsible for bills from private physicians or private hospitals.

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

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

Students who decline immunizations because of religious conviction may be admitted, but only on the condition that they or (in the case of minor students) their parents or guardians agree in writing to assume all expenses incident to their care or quarantine, should they acquire smallpox, diphtheria, or tetanus while students at the University. This does not exempt them from the physical examination or the intradermal tuberculin skin test. However, the student may choose to have a chest X-ray in lieu of the skin test but must submit an annual chest X-ray report to remain in school.

## Financial Aid

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

## Student Employment

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

The University participates in the work-study program established under the Federal Economic Opportunity Act of 1964.

## Loan Funds

The University of Oregon administers student loan funds totaling more than $\$ 421,500$. These funds are available for two types of loans: regular loans for a period of six months to two years, and emergency loans of small amounts for a period of ninety days or less.

The loan funds held in trust by the University are governed by uniform principles and policies, administered by a Student Loan Committee. Applications for loans are made through the Office of Student Affairs. The following regulations govern student loans:
(1) Any student who has been enrolled in the University for at least one term and has a cumulative GPA of at least 2.00 may obtain an emergency loan for a period of three months or less; to be eligible for a long-term loan a student must have a GPA of 2.25 .
(2) The service charge for emergency loans of $\$ 10.00$ or less is 50 cents for one month, 75 cents for two months, and $\$ 1.00$ for three months. The service charge for emergency loans
of more than $\$ 10.00$ is $\$ 1.00$ for one month, $\$ 1.25$ for two months, and $\$ 1.50$ for three months. The service charge for all overdue emergency loans is 50 cents a month until paid in full.
(3) The interest rate for long-term loans is 4 per cent per year.
(4) No more than $\$ 800$ will be lent to any individual from University long-term loan funds.
(5) It is the policy of the University to encourage repayment of loans as soon as the borrower is able to pay. The maximum loan period is two years, with the privilege of renewal if the borrower has in every way proved himself worthy of this consideration. Payment of loans in monthly installments as soon as possible after graduation is encouraged. The interest on
renewed loans is 4 per cent a year if the borrower is still a student at the University; the rate of interest on renewals made after the student leaves the University is 6 per cent.
(6) The University does not accept various forms of collateral which most money lenders require for the security of loans. The only security accepted for long-term loans is the signature
of two responsible property owners, in addition to that of the student borrower. The cosigners must submit evidence of their ability to pay the note-by fling a financial statement or by giving bank references. One cosigner must qualify by bank reference. It is desirable that one of the cosigners be the parent or guardian of the borrower. If a student is married, bis or ber spouse must sign the loan application.
(7) The signature of the borrower is the only security required for an emergency loan Foreign students must also obtain the signature of the international student adviser.
(8) In considering applications, the members of the Student Loan Committee give weigh o the following considerations: (a) the student's scholastic record; (b) his reputation for re iability, honesty, and industry; (c) need for aid and probability of wise expenditure; (d) amoun of present indebtedness; (e) ability to repay; (f) effort which the student has made to assist
(9) Except in the case of a few funds which are specifically restricted to University students at Eugene, students at the Medical School, the Dental School, and the School of Nursing
are eligible for loans from University student loan funds on the same basis as students on the campus at Eugene.

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

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

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

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

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

National Defense Loan Fund. Under the National Defense Education Art of 1958 funds have been provided for national defense loans for students at the University. For students who enter the teaching profession on the primary, secondary, or higher-education level, one-tenth of the total indebtedness will be forgiven for each full year of teaching up to a maximum of 50 per cent of the loan. Further information may be obtained in the Office of Student Affairs.

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

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

## Scholarships and Fellowships

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

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

Application for any scholarship administered by the University of Oregon may be made on a form furnished by the Oregon State System of Higher Education; copies of the form may be obtained from high-school principals. Further information may be obtained from the Director of Financial Aids, Office of Student Affairs. Applications should be filed not later than March 1.

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

## General

State Fee Scholarships for Oregon Residents. The Oregon State Scholarship Commission awards annually a limited number of scholarships to residents of Oregon for study in the institutions of the Oregon State System of Higher Education. These scholarships cover a portion of the regular fees charged by the institutions-at the University, $\$ 78$ a term or $\$ 234$ an academic year. To be eligible, an entering freshman must rank in the upper half of his high-school graduating class; a student who has been previously enrolled in an institution of higher education must have a grade-point average of 2.50 ; all applicants, to be eligible, must be in need of financial assistance. Application should be made on forms available in the offices of high-school principals and of scholarship officers of the institutions of the State System, and should be submitted to the scholarship committee of the institution in which the student wishes to enroll. The scholarships include: (1) scholarships open to state-wide competition and (2) scholarships awarded to students residing in each of the counties and legislative districts of the state. The state-wide scholarships are apportioned to the several institutions of the State System, and are equal in number to 2.5 per cent of the enrollment of the institution; at least 50 per cent are awarded to freshmen; the scholarships are awarded for a period of one year, but may be canceled at the end of any term in which the recipient fails to make a GPA of 2.50 . The county and legislative district scholarships are four-year awards for study in any State System institution chosen by the student, but may be canceled if the student fails to maintain a 2.50 GPA ; they are transferable to any other institution of the State System after one year at the initially chosen institution. One new county scholarship is awarded annually in each county of the state; the number of new legislative district scholarships in each district is equal to the number of legislative seats in the district.

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

State Fee Scholarships for Foreign Students. A limited number of state scholarships are awarded annually to students from foreign countries attending
the institutions of the Oregon State System of Higher Education. These scholarships cover a portion of the regular fees charged by the institutions-at the University, a maximum of $\$ 268$ a term for undergraduates, $\$ 78$ a term for graduate students.

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

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

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

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

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

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

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

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

Leon A. Culbertson Scholarships. Scholarships ranging from $\$ 330$ to $\$ 1,000$ are supported through interest on an endowment under the will of the late Leon A. Culbertson, Class of '23. Ten new scholarships are awarded each year, and are renewable for a total period of four years. Awards are based on character, financial need, and promise of achievement.

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

Delta Delta Delta Scholarships. Two scholarships are awarded annually by the Delta Delta Delta sorority to University women students, one for $\$ 175$ and one for $\$ 100$. The awards are made on the basis of need, scholarship, and record of student activities. The scholarships are financed by the local Delta Delta Delta chapter and by alumnae groups.

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

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

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

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

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

Holmes Scholarship. A $\$ 300$ scholarship, supported by Harry and David Holmes of Medford, is awarded annually to a graduate of a Jackson County, Oregon high school who is in financial need and shows high scholastic promise.

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

Maurice Harold Hunter Scholarship. The Maurice Harold Hunter Leadership Scholarship, covering full tuition ( $\$ 330$ ), is awarded annually to the junior man in the University, a resident of the state of Oregon, who is judged to have made the most notable contribution, through his own achievements and good example, toward the development of qualities of leadership among his fellow students. The names of the recipients are engraved on a permanent plaque, which is displayed in the Browsing Room in the Student Union. The scholarship is supported through gifts to the University by Honorary Chancellor and Mrs. Frederick Maurice Hunter and Dr. and Mrs. Arthur Francis Hunter, in honor of
their son and brother, Captain Maurice Harold Hunter, Class of '41. Captain Hunter was killed in action in Burma on January 31, 1945.

Kwama and Phi Theta Scholarships. Kwama and Phi Theta award scholarships ranging in value from $\$ 150$ to $\$ 200$ to women students. Funds for the support of the scholarships are provided through the service projects of the two honorary societies.

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

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

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

Oregon Dads Scholarships. The Oregon Dads organization awards annually the $\$ 500$ Donald M. Erb Memorial Scholarship and fifteen or more scholarships ranging in value from $\$ 100$ to $\$ 330$ to freshman students graduating from Oregon high schools. Recipients of the scholarships are chosen on the basis of academic record, financial need, and promise of successful University work. High-school students may apply for Oregon Dads scholarships during their senior year or during the two years following their graduation.

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

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

Phi Gamma Delta Scholarship. The Phi Gamma Delta Scholarship, a memorial to Robert C. Jones, is a $\$ 135$ award given annually to a junior student who is outstanding in scholarship, leadership, and prospects for future service. Mr. Jones, Class of '43, was killed on December 26, 1944 in the Battle of the Bulge. The scholarship has been endowed by Mrs. Eleanor Jones Mumm and Mr. and Mrs. Frank C. Jones.

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

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

Rockwell Scholarships. Two $\$ 250$ scholarships, endowed through a bequest from the late Mrs. Mary E. Rockwell, are awarded annually "to assist worthy, ambitious, and needy young men and women to acquire an education" at
the University of Oregon, "so that they may be better fitted and qualified to appreciate and help to preserve the laws and institutions of this country."

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

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

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

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

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

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

William W. Stout Scholarships. Several scholarships, ranging in amount from $\$ 750$ to $\$ 1,250$, are awarded annually to worthy students who need financial assistance to get the maximum benefit from their education. The scholarships are supported through a bequest from the late William W. Stout of California.
C. P. Tillman Scholarship. The C. P. Tillman Scholarship, about $\$ 100$, is awarded annually to a University freshman residing in the Eugene-Springfield area, on the basis of ability and financial need. The scholarship is supported by an endowment bequeathed to the University by the late C. P. Tillman of Eugene, Oregon.

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

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

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

## Liberal Arts

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

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

Judy Ellefson Speech Scholarship. A $\$ 100$ scholarship is awarded annually to an upper-division student whose primary interest is in the field of speech and drama. The scholarship is named in memory of the late Miss Judy Ellefson, Class of ' 55 , and is supported by her family and friends.
F. G. G. Schmidt Fellowship in German. A $\$ 250$ fellowship, supported by a gift from the late Dr. F. G. G. Schmidt, a member of the University faculty from 1897 until his death in 1945, is awarded annually to a worthy graduate student majoring in German.

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

## Architecture and Allied Arts

Maude I. Kerns Scholarship. A $\$ 100$ scholarship is awarded annually to a junior, senior, or graduate student majoring in art education. The scholarship is supported by gifts to the University from friends and students of Miss Maude I. Kerns, Class of '99 and member of the University faculty from 1921 to 1947.

Ion Lewis Scholarship in Architecture. A $\$ 3,000$ traveling scholarship is awarded, when funds are available, to Oregon architects, draftsmen, or advanced architectural students who are under 30 years of age. Award is made on the basis of character, ability, promise, and need of travel. The scholarship is supported by a trust fund established by the late Ion Lewis of Portland, Oregon.

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

Northwest Plaster Bureau Scholarship. A $\$ 250$ scholarship is awarded annually by the Northwest Plaster Bureau, Inc. to an architecture student recommended by the architecture faculty and the dean of the school.

Oil Heat Institute Scholarship. A $\$ 300$ scholarship is awarded annually by the Oil Heat Institute to a senior student in architecture.

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

Women's Architectural League Scholarship. Scholarships in varying amounts, supported by the Women's Architectural League, are awarded annually to a student of architecture, preferably from the Portland, Oregon vicinity.

## Business Administration

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

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

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

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

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

Republic Carloading and Distributing Company Scholarship. The Republic Carloading and Distributing Company awards annually a $\$ 300$ scholarship to an entering freshman student planning to major in the field of traffic management and transportation in the School of Business Administration. The scholarship is renewable each year until the student's graduation, provided he maintains a satisfactory academic record.

Weyerhaeuser Fellowship. The Weyerhaeuser Company Foundation offers a $\$ 2,250$ fellowship to outstanding graduate students in business administration majoring in forest industries management. The award is made through the Forest Industries Management Center to encourage advanced professional training for this field.

## Journalism

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

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

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

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

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

Minneapolis Star Scholarship. A $\$ 400$ scholarship is awarded annually to the outstanding student in journalism completing junior-year studies. The award is based on scholastic and professional achievement. The scholarship is provided by the Minneapolis Star.

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

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

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

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

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

## Law

American College of Trial Lawyers Scholarship. A $\$ 500$ scholarship is provided annually by the Oregon members of the American College of Trial Lawyers for a law student who gives promise of becoming a competent advocate after his admission to the bar.

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

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

Lane County Lawyers Wives Association Scholarship. A scholarship covering fees for one term is awarded annually by the Lane County Lawyer Cial need and academic achievement third-year law student on the basis of finan-

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

Herb B. Galton Scholat
Herbert B B. Galton Scholarship. A $\$ 200$ scholarship is provided annually by Herbert B. Galton, a Portiand attorney and a member of the Class of '38, to be Lawded a second-year student, for use during his third year in the School of Review, the basis of academic performance, production for the Oregon Law in the Review.

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

James T. Landye Scholarship. A $\$ 300$ scholarship is awarded annually by the trustees of the James T. Landye Scholarship Fund to a needy and wally by student of outstanding scholastic ability who aspires to be a leedy and worth entering upon his second or third year of study in the School of Law. The scholarship is financed from the income from a fund contributed by the friends of the late James T. Landye, a Portland lawyer and a member of the Class of ' 34.

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

Paul Patterson Memorial Fellowship. A $\$ 1,250$ fellowship is awarded annually to a student completing his second year in the School of Law who best exemplifies the high qualities of integrity, leadership, and dedication to public service which characterized the late governor of Oregon, Paul L. Patterson, Class of $\quad 26$. versity. versity.

Womens Association of the Multnomah County Bar Scholarship. An annual scholarship of $\$ 300$ is provided each year by the Womens Association of the Multnomah County Bar for award to a third-year law student on the basis of financial need and academic achievement.

## Medicine*

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

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

## Music

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

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

Byron Hoyt Music Scholarship. Annual scholarships sponsored by Byron Hoyt's Sheet Music Service of Portland is awarded to a graduate of a high school in Oregon who has participated in the school's band, orchestra, or choir and who intends to prepare for teaching music in the schools. Awards range from $\$ 50$ to $\$ 250$.

Mu Phi Epsilon Scholarships. These scholarships, covering fees for private instruction in performance, are awarded by the members of the Eugene, Oregon alumnae chapter and patronesses of Mu Phi Epsilon to students in the School of Music.

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

Phi Beta Scholarships. Several scholarships, covering fees for private instruction in performance, are awarded by alumnae and patroness groups of Ph Beta, women's national professional fraternity for music and drama, to women students in the School of Music on the basis of talent, scholarship, and worthiness.

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## Physical Education

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

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

## Veterans' Aid

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

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

## Prizes and Awards

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

## General

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

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

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

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

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

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

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

## Liberal Arts

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

Julia Burgess Poetry Prize. The Julia Burgess Poetry Prize of $\$ 25$ is awarded annually for the best original poem submitted by an undergraduate. In formation concerning the award may be obtained from the head of the Department of English. The prize is endowed through a bequest from the late Julia Burgess, member of the University faculty from 1907 until her death in 1942.
L. S. and D. C. Cressman Prize in Anthropology. A $\$ 75$ prize is offered annually for the best essay in any subfield of anthropology submitted by a currently enrolled graduate student. It is expected that the essay be written especially for the prize competition and be suitable for publication, both in content and form. The prize is supported through funds provided by Dr. and Mrs. Luther S. Cressman.

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

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

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

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

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

Dr. and Mrs. Arthur F. Hunter Literary Award. An award of $\$ 50$ is given annually for the best piece of creative writing (fiction, poetry, or drama) by a senior or graduate student in the creative writing program of the Department of English. The award is supported by gifts from Dr. and Mrs. Arthur F. Hunter

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

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

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

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

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

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

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

## Architecture

LeRoy Flemming Kerns Award. An award of $\$ 100$ is given annually to an architecture student for demonstrated originality and creativity. The award is supported by Miss Maude I. Kerns, Class of '99 and a member of the University faculty from 1921 to 1947, and is named in memory of her brother

John Lee-Rick Bullis Memorial Fund. Income from a trust fund established by the parents and friends of John Philip Lee, Class of '65, is awarded annually to a third-year student in architecture in recognition of high potential in his feld.

## Business Administration

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

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

Erickson, Eiseman \& Company Awards. Five $\$ 25$ awards are made annu ally to students in accounting, for the purchase of books, periodicals, or other acally to students in accounting, the awards are provided by Erickson, Eiseman \& counting materials. Funds for the a

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

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

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

## Journalism

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

Harpham Award in Journalism. An award of $\$ 25$ is given annually for the best journalistic writing or term paper by a foreign student in the School of Jourbest journalistic writing or term pare provided by Mr. and Mrs. Everett H. Harpham nalism. Fund Eugene, Oregon.

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

Sigma Delta Chi Scholarship Award. Recognition for exceptional scholarship is made annually to journalism senior majors by Sigma Delta Chi, professional journalism fraternity.
T. Neil Taylor Awards in Journalism. Awards of $\$ 50, \$ 25$, and $\$ 15$ are given anually for the three best senior theses presented by majors in journalism. Funds for the a wards are provided by an endowment established by the late T. Neil Taylor of Oakland, California, University journalism graduate in the Class of ' 31 .

Turnbull-Hall A ward. Each year the name of the outstanding senior member f the staff of the Oregon Daily Emerald is engraved on a plaque which hangs in the Emerald news room. The plaque was presented in 1931 by George Turnbull and Vinton H. Hall.

## Law

American Jurisprudence Prizes. The Lawyers Cooperative Publishing Company and the Bancroft-Whitney Company award annually separately bound opics from American Jurisprudence to those students having the best scholastic ecords in the several courses in the School of Law covering the topics included in American Jurisprudence.

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

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

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

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

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

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

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

Oregon District Attorneys' Association Prize. A book prize for legal writing in the field of criminal law is provided each year by the Oregon District Attorneys' Association for award to a law student or a practicing member of the Oregon State Bar who is adjudged to have produced the best piece of legal writing for publication in the Oregon Law Review.

West Publishing Company Prizes. The West Publishing Company awards annually a selected title from the Hornbook Series to the student with the highest cumulative grade-point average in each of the three classes in the School of Law.

## Physical Education

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

## Erb Memorial Student Union

| Alfred L. Ellingson, B.S. <br> Burton A. Benson, B.S. Student Publications Director John A. Cross, M.S. $\qquad$ Associate Director Adell McMillan, M.S. Program Director Activities Director |  |
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THE ERB MEMORIAL STUDENT UNION is a building dedicated to making the extracurricular work of students an integral part of their education. It provides group meeting rooms, a lounge, soda bar, cafeteria, and dining room, an art group gallery, a large balloom, a brary. Student activity offices are on the for jazz, a piano practice room, a "combo" tening room for classical music, arowing alley, billiard tables, and table tennis practice room, a sixteen-lan boused in the building are the offices of the and shuffleboard facilities. Also housed in ane a six-chair barber shop.
Y.M.C.A., a branch of the U.S. Post solely through gifts from alumni and friends of

The Student Union was built solely through gifts from anmere frem future the University, student building fees, and the sale of Dr. Donald M. Erb, President building fees. The building is named inl memory of Dr. Donald M. Erb, President of the University from 1938 until his death in 1943.

## Graduate School

Leona E. Tyler, Ph.D., Dean of the Graduate School.
Wesley C. Ballaine, Ph.D., Associate Dean of the Graduate School.
Fred J. Mohr, B.A., Special Assistant to the Dean

## Graduate Council

Leona E. Tyler (chairman), W. C. Ballaine, Paul Civin, C. L. Constance, R. Mron Novis, T. L. Hill, C. W. Hantz, P. L. Kleinsorge, R. H. Mattson, Trotter, Christof Wegelin.

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

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

Research. Through its Office of Scientific and Scholarly Research and with advice and assistance from the faculty Research Committee, the Graduate School administers the University's program for the encouragement and approval of research by members of its faculty and the University's interdisciplinary research institutes (see page 123-128).

## Advanced Degrees

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

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

Doctor of Business Administration : business administration
Doctor of Education : education, health and physical education.
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## Doctor of Musical Arts : Music.

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

## Master of Architecture : architecture.

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

Master of Business Administration : marketing, insurance, and transportation, personnel and industrial management, finance and business environment, accounting and business statistics.

Master of Education: education.
Master of Landscape Architecture : landscape architecture.
Master of Music: music education, performance and music literature, composition.

Master of Urban Planning: urban planning.

## General Regulations

THE UNIVERSITY recognizes two classes of graduate students: (1) students enrolled in the Graduate School for work toward a graduate degree, and (2) students enrolled for postbaccalaureate study. Students of the first class follow programs organized in conformity with the rules stated below. Students of the second class enroll for the courses in which they are interested, with the understanding that the University is under no implied obligation to accept credit earned as credit toward a graduate degree. Whether a student is adequately prepared to enroll in any graduate course is determined by the instructor in charge and the head of the department or school concerned.

Admission. Admission as a graduate student, either for work toward a graduate degree or for postbaccalaureate study, is dependent on the approval of the department or school in which the student wishes to work. The general University requirements for graduate admission, stated below, may be supplemented by special requirements of major departments and schools. An applicant should address inquiries concerning graduate admission to the department or school in which he plans to study, not to the Graduate School or the Office of Admissions.

General University requirements for graduate admission are as follows:
Admission for Work toword a Graduate Degree. Graduation from an accredited college or university with a cumulative undergraduate grade-point average of 2.75 or higher is required for admission for work toward a graduate degree. A student who has completed 12 or more term hours of graduate work at another institution with a GPA of 3.00 or higher is admitted without reference to his undergraduate GPA if the work is accepted by his major department or school as applicable toward a graduate degree.

* See also "Interdisciplinary Master's Programs," page 118.

Admission for Postbaccalaureate Study. A student who has earned a bachelor's degree but whose record does not meet the admission standards for work toward a graduate degree may be admitted for postbaccalaureate study. When such a student has earned 12 term hours of graduate credit, he is automatically transferred to graduate-degree status if his graduate GPA is 3.00 or higher. A postbaccalaureate student who has not earned a 3.00 gra on completion of 12 term hours of graduate work may continue his postbaccalaureate studies, and is again eligible for transfer to graduate-degree status on the completion of 24 term hours of graduate work, if he has earned the required cumulative 3.00 gra . A third, and final, opportunity to transfer to graduate-degree status is provided on the completion of 36 term hours of graduate work.

Not more than 12 term hours of work taken by a student with postbaccalaureate standing may be counted toward a graduate degree, except that a student who is transferred to graduate-degree status on the completion of 12 term hours of graduate work may count credit in excess of 12 hours earned before the transfer is made.

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

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

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

Continuous Enrollment. A graduate student who has been admitted for work toward a graduate degree is required to enroll in the University each term during the regular academic year from the time of first enrollment until the completion of all degree requirements, including the submission of thesis or dissertation, the passing of all examinations, and the awarding of the degree. His enrollment is either as a student in residence or as a student on leave of absence.

Leave of absence is granted for a stated period of time, normally not to exceed one calendar year. A graduate student on leave of absence is expected neither to make use of University facilities nor to place demands upon the faculty, and therefore pays no fees during the leave period.

Failure to maintain continuous enrollment, either in residence or on leave of absence, is considered evidence that the student has withdrawn from the University. If he wishes to resume his studies, he must formally apply for readmission, and must satisfy requirements for admission in effect at the time of application.

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

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

All graduate students using campus facilities or studying under the supervision of a member of the faculty are required to register for a minimum of 3 term hours of course work.

All graduate students holding half-time teaching or research assistantships are required to register for a minimum of 6 term hours of course work; students holding three-tenths-time assistantships are required to register for a minimum of 9 term hours of course work.

Students working for a master's degree with thesis are required to register for a minimum of 9 term hours in Thesis (503) before completing the program for the degree. Students working for a doctor's degree are required to register for a minimum of 18 term hours in Thesis before completing the program for the degree. (This regulation is effective for students who receive their degrees after September 1, 1966. )

Grade Requirement. A graduate student is required to earn at least a B grade average to qualify for a graduate degree. A grade-point average of less than 3.00 at any time during the student's graduate studies is considered unsatisfactory, and may result in disqualification by the dean of the Graduate School after consultation with the student's major department or school. Disqualification means reduction to postbaccalaureate standing. A course in which the student earns a grade of D will not carry graduate credit, but will be included in the computation of the student's gra. F grades will also be included in the GPa computation.

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

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

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

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

Fees and Deposits. The regular fees and tuition for graduate students total $\$ 110.00$ per term. Students holding graduate or research assistantships or fellowships pay a special reduced fee of $\$ 32.00$ per term. Students enrolled in the

Graduate School do not pay the nonresident fee. Graduate students registered for 7 term hours of work or less pay the regular part-time fee (see page 84). Payment of graduate fees entitles the student to all services maintained by the University for the benefit of students.

Graduate students must make a $\$ 25.00$ deposit once each year at the time of first registration; the deposit is required as a protection to the University against the loss or damage of institutional property.

See also Admission (page 73)) for information concerning the admission application fee and the entrance deposit

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

## Degree Requirements

## Master of Arts, Master of Science

Credit Requirements. For the M.A. or M.S. degree, the student must complete an integrated program of study totaling not less than 45 term hours in courses approved for graduate credit. Integration may be achieved either through a departmental major or through a program of interdisciplinary studies (see page 118.

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

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

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

Language Requirements. For the M.A. degree, the student must show, by examination or by adequate undergraduate courses (completion of the second-year college course), a reading knowledge of French, German, Russian, or a foreign language specified by his department. By petition to the dean of the Graduate School, a student may be permitted to substitute another language, if it is equally relevant to his program of graduate studies. A foreign student whose native language is not English may petition to substitute a reading and speaking knowledge of English for satisfaction of the language requirement. For the M.S. degree there

* Candidates for the M.S. degree with a major in health, physical education, and recreation may apply, toward the satisfaction of the residence requirement, a maximum of 18 termi faculty.
is no foreign-language requirement unless a language is required by the school or department.

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

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

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

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

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

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

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

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

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

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

The examining committee consists of from three to five members, nominated by the student's adviser, subject to the approval of the dean of the Graduate

School, who is ex officio a member of all examining committees. The committee must include at least two members from the student's major field and one member from a department or school outside the major field.

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

## Interdisciplinary Master's Programs

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

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

Graduate students pursuing a program of interdisciplinary studies may supplement courses offered by the several departments and schools with individualized studies, for which they may enroll under the following course numbers:
*ISt 501. Research. Hours to be arranged.
*ISt 503. Thesis. Hours to be arranged.
The requirements for an M.A. or M.S. degree in interdisciplinary studies are the same as those for the departmental master's degree, except those requirements relating to major or minor fields.

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

Graduate Program for Teachers. A special program of graduate study for students working toward the satisfaction of the Oregon state requirement of a fifth year of college work for final high-school teacher certification is offered as one of the University's programs of interdisciplinary studies. Enrollment is open to any person eligible for admission to the Graduate School ; the student must, however, have a reasonable background of undergraduate study in the fields in which he proposes to work, and must complete prerequisites for specific courses. The requirements for a master's degree in the program for teachers are as follows:
(1) A total of between 45 and 51 term hours in graduate courses, distributed in accordance with (a) and (b) below:
(a) A total of 36 term hours in subject fields (work in liberal arts departments or professional schools other than education), distributed in accordance with one of the following options:

Option 1. Between 15 and 21 term hours in each of two subject fields.
Option 2. A minimum of 36 term hours in any field in which the University offers major work toward the master's degree.
Option 3. A minimum of 36 term hours in the composite field of social studies or the composite field of science. A program in social studies may include work in the fields of anthropology, economics, geography, history, political science, psychology, and sociology. A program in science may include work in the fields of biology, chemistry, geology, mathematics, and physics.

[^15]In each of the options listed above, at least 6 term hours of work must be taken in 500 courses. The student's program must be planned to provide well-rounded knowledge, and must not be made up of scattered, unrelated courses.

For Options 1 or 2,18 term hours in each of the subject fields involved must be presented as an undergraduate prerequisite. For Option 3, the prerequisite is 36 term hours in the composite field involved.
(b) Between 9 and 15 term hours in graduate courses in the field of education, the number of hours to be determined on the basis of the amount of work in education completed by the student as an undergraduate.
(2) Satisfaction of the regular requirements of the Graduate School for the M.A. or M.S. degree without thesis. The combined total of work transferred from other accredited institutions and work done in the Division of Continuing Education of the Oregon State System of Higher Education cannot exceed 15 term hours.

## Master of Business Administration

The requirements for the degree of Master of Business Administration are listed under School of Business Administration.

## Master of Education

The Master of Education is a professional degree in the field of education Programs of study leading to this degree are designed to provide graduate training for teachers in either the elementary or the secondary schools. At the discretion of the faculty of the School of Education, the candidate may be required to submit a report of a field study. A written comprehensive final examination in the student's field of specialization is required.

Thirty term hours of work in residence is required for the M.Ed. degree. Candidates in the major fields of special education and remedial education may satisfy part of the residence requirement through work in the Portland summer session of the Division of Continuing Education.

## Master of Fine Arts

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

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

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

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

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

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

## Master of Architecture

The requirements for the degree of Master of Architecture are listed under School of Architecture and Allied Arts.

## Master of Landscape Architecture

The requirements for the degree of Master of Landscape Architecture are listed under School of Architecture and Allied Arts.

## Master of Urban Planning

The requirements for the degree of Master of Urban Planning are listed under School of Architecture and Allied Arts.

## Master of Music

The requirements for the degree of Master of Music are listed under School of Music.

## Doctor of Philosophy

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

A student whose academic work, both undergraduate and graduate, has been primarily at the University of Oregon will ordinarily be required to take graduate work at another institution before being accepted as a candidate for the degree.

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

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

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

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

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

The final examination for a doctor's degree must be taken not later than three calendar years after advancement to candidacy. Failure to complete requirements for the degree within this period will result in invalidation of the student's comprehensive examinations.

Thesis. Every candidate for the Ph.D. degree must submit a thesis embodying the results of research, and showing evidence of originality and ability in independent investigation. The thesis must be a real contribution to knowledge, based $0_{1}$ the candidate's own investigations. It must show a mastery of the literature of the subject, and be written in creditable literary form. It is expected that thesis preparation will require at least the greater part of an academic year.

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

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

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

## Doctor of Business Administration

The requirements for the degree of Doctor of Business Administration are listed under School of Business Administration.

## Doctor of Education

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

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

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

## Doctor of Musical Arts

The requirements for the degree of Doctor of Musical Arts are listed under School of Music.

## Assistantships, Scholarships, Fellowships

TEACHING AND RESEARCH assistantships, scholarships, and fellowships are available to well-qualified graduate students. All persons holding these positions are expected to register in the Graduate School, and to become candidates for advanced degrees. Applications should be made before March 1.

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

Teaching Assistantships. Nearly all schools and departments award graduate teaching assistantships. Stipends range from $\$ 1,800$ to $\$ 2,600$ for an academic year. Teaching assistants are allowed to register for a maximum of 12 term hours of course work. Duties, which are limited to 15 hours a week, consist of reading papers, supervising laboratory and quiz sections, etc.

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

Other Scholarships and Fellowships. Other scholarships and fellowships available to University graduate students are listed on pages 96-106. See especially Robert A. Booth Fellowship in Public Service, Coca Cola Scholarship, Thomas Condon Fellowship in Paleontology, Maud Densmore Music Fellowship, Haskins and Sells Teaching Fellowship in Accounting, Ion Lewis Scholarship in Architecture, F. G. G. Schmidt Fellowship in German, Weyerhaeuser Fellowship, and Zimmerman Scholarships.

Special Fellowship Programs. Graduate students at the University of Oregon are eligible for fellowship awards granted by the National Science Foundation, the National Institutes of Health, the Woodrow Wilson Foundation, and other national agencies, and for fellowships awarded under the National Defense Education Act. The University participates in the National Science Foundation traineeship program and in the N.S.F. program of summer fellowships for graduate assistants. Information concerning these programs may be obtained in the Graduate Office.

Loans. Graduate students are eligible for loans from University loan funds (see pages 94-95) and from funds available under the National Defense Education Act of 1958. The University also participates in United Student Aid Fund, Inc.

## Graduate Work in Portland

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

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

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

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

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

## Research Institutes

SEVERAL INTERDISCIPLINARY INSTITUTES administered through the Graduate School provide opportunities for graduate training and research in addition to those offered by the schools and departments. Institute staff members
hold joint appointments in related teaching departments. Graduate students who intend to do thesis research work in one of the institutes must satisfy the graduate degree requirements of the related department through which they will receive their degree.

Students who wish to work in any of the institute fields may obtain detailed information concerning the programs and available financial aid from the institute directors.

## Institute of Molecular Biology

Aaron Novick, Ph.D., Director of the Institute of Molecular Biology ; Professor of Biology.
Sidney A. Bernhard. Ph.D., Associate Professor of Chemistry.
Whliam T. Simpson, Ph.D., Professor of Chemistry.
Franklin W. Stahl, Ph.D., Professor of Biology.
George Streisinger, Ph.D., Professor of Biology.
Edward Herbert, Ph.D., Associate Professor of Chemistry.
Francis J. Reithel, Ph.D., Professor of Chemistry.
Edward Novitski, Ph.D., Professor of Biology.
John A. Schellman, Ph.D., Associate Professor of Chemistry.
William R. Sistrom, Ph.D., Associate Professor of Biology.
Raymond G. Wolfe, Ph.D., Associate Professor of Chemistry.
The Institute of Molecular Biology is a center for research and research instruction in areas of biology where understanding is found in terms of the properties of macromolecules, particularly nucleic acids and proteins. Staff members hold joint appointments in a department (biology, chemistry, or physics).

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

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

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

## Institute of Theoretical Science

Robert M. Mazo, Ph.D., Director of Institute of Theoretical Science; Professor
of Chemistry of Chemistry.
Marvin D. Girardeau, Jr., Ph.D., Associate Professor of Physics.
Ian E. McCarthy, Ph.D., Professor of Physics.
Martin L. Sage, Ph.D., Assistant Professor of Chemistry
William T. Simpson, Ph.D., Professor of Chemistry.
Terrell L. Hul, Ph.D., Professor of Chemistry.

Joel W. McClure, Ph.D., Professor of Physics.
John L. Poweil, Ph.D., Professor of Physics.
Gregory H. Wannier, Ph.D., Professor of Physics.
The Institute of Theoretical Science provides a center for research leading to the understanding of natural processes in terms of logically constructed conceptual systems, and to the synthesis of the specialized research of physicists, biologists, and other natural scientists.

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

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

## Statistical Laboratory and Computing Center

Fred C. Andrews, Ph.D., Director of the Statistical Laboratory and Computing Center; Associate Professor of Mathematics
George W. Struble, Ph.D., Associate Director ; Assistant Professor of Mathematics.
Ted K. Matthes, Ph.D., Research Associate; Assistant Professor of Mathematics.
Donald R. Truax, Ph.D., Research Associate; Assistant Professor of Mathematics.
Robert F. Tate, Ph.D., Associate Professor of Mathematics.
Ernst Merzrath, Research Assistant ; Instructor in Mathematics.
The Statistical Laboratory and Computing Center conducts research in the development of new statistical and numerical procedures and provides a consulting service for graduate students and members of the faculty in the fields of statistical and numerical analysis. Computing facilities include an IBM 360 , Model 50 , and an IBM 1620. The electronic computers are available to the faculty and students of the University for research and instruction. The staff offers seminars in programming for these machines.

## Institute of International Studies and Overseas Administration

John F. Gange, M.A., Director of Institute of International Studies and Overseas Administration; Professor of Political Science.
Leroy E. Graymer, M.A., Assistant to the Director; Instructor in Political Science.
Gene E. Martin, Ph.D., Associate Director ; Associate Professor of Geography.
The Institute of International Studies and Overseas Administration is responsible for the development and coordination of University activities in the field of international affairs. Its primary functions are: (1) to develop programs of research, teaching, and administration, in cooperation with private and gov-
ernmental agencies, and to arrange for the conduct of these programs by University personnel, both on the campus and overseas; (2) to assist the Committee on International Studies and Overseas Administration in the administration of graduate study in international affairs and to provide research training for graduate students; and (3) to serve as the University's center for other faculty and student activities concerned with international affairs.

The institute supervises a graduate study program leading to the Master of Arts in international studies (a two-year degree program) and a program leading to the M.A. in overseas administration (a second M.A. conferred in conjunction with an M.A. degree in a departmental discipline), and cooperates with major departments in supervising Ph.D. programs for students who elect an emphasis on international affairs within their chosen disciplines.

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

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

The institute conducts the University's annual Summer World Affairs Program and the program of the Oregon High School International Relations League.

## Center for Social Service Training and Research

Martin H. Acker, Ph.D., Co-Director of the Center for Social Service Training and Research; Associate Professor of Education.
Kenneth Polk, Ph.D., Co-Director of the Center for Social Service Training and Research ; Assistant Professor of Sociology.

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

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

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

## Institute for Community Studies

Roland J. Pellegrin, Ph.D., Director of Institute for Community Studies and the Center for the Advanced Study of Educational Administration ; Professor of Sociology.
Robert A. Ellis, Ph.D., Director, Center for Research on Occupational Planning ; Professor of Sociology.
Keith Goldhammer, Ph.D., Associate Director, Center for the Advanced Study of Educational Administration; Professor of Education.
Philip J. Runkel, Ph.D., Associate Director, Center for the Advanced Study of Educational Administration; Professor of Psychology.

The Institute for Community Studies conducts and encourages research in the behavioral and social sciences, education, and related areas. Most projects carried on under the auspices of the institute have a community orientation focusing on the structure and functioning of the community as a social and political system. Emphasis is on the policy-formulation processes in the economy, government, education, and other institutional areas of the community.

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

The Center for the Advanced Study of Educational Administration, a division of the institute, was established in 1964 with funds granted by the Research and Development Program of the United States Office of Education. The program of the center is concerned with the internal organization and functioning of public educational institutions and educational systems and with the relationships of these institutions and systems to the larger environments in which they are located

The Center for Research on Occupational Planning, also a division of the institute, was established in 1965 under contract with the Division of Vocational and Technical Education of the United States Office of Education. This center conducts nationwide research on occupational choice and planning.

As divisions of the institute, both centers draw upon the services of staff members and graduate students in the behavioral sciences and in the field of education.

## Bureau of Business and Economic Research

Wesley C. Ballaine, Ph.D., Director, Bureau of Business and Economic Research; Professor of Business Economics.
Paul L. Kleinsorge, Ph.D., Associate Director; Director of Institute of Industrial and Labor Relations; Professor of Economics.
Donald A. Watson, Ph.D., Associate Director; Associate Professor of Finance Edward M. Sienkiewicz, M.S., Research Assistant.

The Bureau of Business and Economic Research conducts and encourages research in business, economics, and related fields. Studies undertaken by the bureau or for which it provides assistance in research design and facilities are financed through University funds and through grants from foundations, government agencies, and the business community.

The bureau publishes the monthly Oregon Business Review, the annual Oregon Economic Statistics, and monographs reporting the results of business and economic research.

The bureau works in close cooperation with the Institute of Industrial and Labor Relations.

## Institute of Industrial and Labor Relations

Paul L. Kleinsorge, Ph.D., Director of Institute of Industrial and Labor Relations; Associate Director of Bureau of Business and Economic Research:
Professor of Economics.
Wesley C. Ballaine, Ph.D., Director, Bureau of Business and Economic Research; Professor of Business Economics.
Robert Dubin, Ph.D., Research Professor of Sociology.
Jack E. Triplett, Jr., Ph.D., Assistant Director; Assistant Professor of Economics.

The Institute of Industrial and Labor Relations conducts a program of research, public service, and graduate study in the field of industrial relations; see College of Liberal Arts for information on graduate study. The institute's research program includes studies in manpower resources, labor mobility, wage structures, personnel problems, management and labor organizations, communications in labor relations, labor legislation, and collective bargaining. The approach is interdisciplinary, involving the cooperative efforts of scholars in the several social sciences and related professional schools. In its research program, the institute is closely associated with the Bureau of Business and Economic Research. Research assistantships are available for graduate students.

The institute also sponsors programs in labor education and management, including regular campus courses, evening classes through the Division of Continuing Education, special seminars, and conferences, and provides an information service on problems of industrial relations.

## Institute for College Teaching

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

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

The institute, with the cooperation of members of the faculties of the several schools and departments, offers a seminar concerned with the broad problems of higher education and college teaching :
*ISt 507. Higher Education Seminar. 1 hour.
Jones, staff.

[^16]
## Honors College

Charles E. Johnson, Ph.D., Dean of the College of Liberal Arts.
*Luctan C. Marquis, Ph.D., Director of the Honors College; Assistant Dean of the College of Liberal Arts.
Stanley A. Pierson, Ph.D. Acting Director of the Honors College.
THE HONORS COLLEGE offers a four-year undergraduate program leading to the degree of Bachelor of Arts (Honors College). The College program is designed to provide full opportunity for the superior student to develop his highest potential in liberal education and specialized training; it is open to students majoring in liberal arts or in professional schools.

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

## Admission

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

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

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

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

## Curriculum and Requirements

The degree of Bachelor of Arts (Honors College) is conferred on students who satisfy the following requirements:
(1) Proficiency in a foreign language equivalent to that reached in the sec-ond-year college course.
(2) A satisfactory record on comprehensive examinations in each of six core areas. It is recommended that the student take these examinations during his lower-division years. The courses which prepare for the comprehensive examinations are:
(a) History-History (Honors College) (Hst 107, 108, 109).
(b) Literature-Literature (Honors College) (AL 101, 102, 103).

[^17](c) Social Science-Introduction to the Social Sciences (SSc 201, 202, 203) ;* or Principles of Economics, honors section (Ec 201, 202, 20).
(d) Science-Physical Science (Honors College) (GS 204, 205, 206) ; or Biological Science (Honors College) (Bi 104, 105, 106); or General Chemistry (Ch 204, 205, 206) ; or General Physics, honors section (Ph 201, 202, 203).
(e) Philosophy--Introduction to Philosophy (Honors College) (Phl 207, 208, 209).
(f) Mathematics--Fundamentals of Mathematics (Honors College) (Mth 107, 108, 109) ; or Analytic Geometry and Calculus, honors section (Mth 204, 205, 206).
Students may prepare for the comprehensive examinations in the core areas by taking the designated courses or through independent study. A student who prepares without formal course work, and passes the comprehensive examination may receive credit in the corresponding course. A student who receives full college credit, through the Advanced Placement Program, for a course included in the Honors College core program satisfies the requirement in that field and is excused from the comprehensive examination. With the consent of his adviser a liberal arts major may omit one of the six core areas and a professional-school major may omit two.
(3) Honors work in English composition-one term of Expository Writing (Wr 226), two terms of Composition Tutorial (Wr 231, 232).
(4) Two terms in Colloquium ( HC 404 ) in the junior or senior year. Colloquia provide seminar-type instruction for students of varying backgrounds, focusing for one term on a common topic outside the students' major fields.
(5) Completion of an honors program in the student's major; see Major Requirements, below.
(6) Satisfactory performance in a final comprehensive oral examination covering the student's major and related work.

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

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

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

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

## Major Requirements

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

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

[^18] pology, geography, political science, psychology, and sociology.

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

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

Architecture and Allied Arts. Honors reading and conference.
Asian Studies. Senior honors thesis utilizing materials in a foreign language germane to the region with which the thesis is concerned. (The final oral examination will cover the thesis.)

Biology. Honors thesis based on original observations or experiments, for which credit may be obtained under Bi 401 . (Honors students may be admitted to graduate courses in the department.)

Business Administration. Major programs developed in consultation with school honors adviser.

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

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

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

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

Geography. (1) Geog 481, 482, 483; (2) Geog 421, 422, 423; (3) Geog 491, 492, 493; (4) junior and senior honors seminars; (5) at student's option, senior honors thesis. Recommended: Geol 101, 102, 103.

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

History. Complete requirements for a major in history, including (1) junior honors seminar, 9 term hours; (2) senior honors essay, 7 term hours; (3) oral examination over two of the following fields: (a) Greece and Rome, (b) mediaeval Europe, (c) Renaissance and Reformation, (d) Europe 1500-1789, (e) Europe since 1789, (f) United States, (g) Far East, (h) Latin America.

Journalism. (1) J 485, J 487; (2) senior thesis (J 403), 6 term hours; (3) examination before faculty committee on thesis and professional course work.

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

Mathematics. (1) Mth 204, 205, 206 (preferably honors section) ; (2) Mth 412, 413, 414, Mth 431, 432, 433; (3) honors seminar or approved equivalent in junior or senior year.

Medicine. (1) Three years of work in the Honors College; (2) completion of the first-year professional program in medicine with a scholastic rank in the upper half of his class.

Modern and Classical Languages. (1) Normally, in the junior year, seminar in the literature of the student's principal language; (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee.

Music. (1) 9 term hours of independent study of a musical period, style, genre, composer, etc.; (2) honors essay in spring term of senior year.

Philosophy. (1) Phl 301, 302, 303 before senior year ; (2) senior honors essay, following intensive study of some aspect of philosophy either on a tutorial basis or in connection with a senior seminar; (3) a comprehensive written examination.

Physics. Maximum of 18 term hours of credit in independent study (research, reading and conference, thesis).

Political Science. (1) Fall term of senior year, honors seminar, 3 term hours; (2) winter term of senior year, reading and conference, 3 term hours; (3) spring term of senior year, honors essay, 3 term hours.

Psychology. (1) Honors seminar ; (2) honors thesis. (It is strongly recommended that honors students take Mth 425, 426 or Mth 441, 442, 443 in the junior year; advanced laboratory courses required of all majors.

Sociology. (1) Soc 311, Soc 334, Soc 342, Soc 343. Soc 470 (students planning to do graduate work are urged to substitute Soc 411, Soc 412, Soc 413 for Soc 311) ; (2) minimum of 12 term hours in a substantive area of sociology; (3) examination covering ten major works in the field of sociology; (4) honors thesis involving sociological analysis (maximum credit, 9 term hours).

Speech. (1) Honors seminar during junior year ; (2) honors readings, fall term of senior year; (3) honors thesis, prepared during winter and spring terms of senior year.

## Advanced Placement Program

Students who complete college-level work in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board and who receive satisfactory grades in examinations administered by the Board may, on admission to the University, be granted credit toward a bach elor's degree in comparable University courses. The University's participation in this program is supervised by the Honors College.

The fields included in the Advanced Placement Program are: English composition and literature, American history, European history, biology, chemistry, physics, mathematics, French. German, Spanish, and Latin.

## College of Liberal Arts

Charles E. Johnson, Ph.D., Dean of the College of Liberal Arts.
Glenn Starlin, Ph.D., Associate Dean.
A. Kingsley Weatherhead, Ph.D., Associate Dean.
*Lucian C. Marquis, Ph.D., Director of the Honors College; Assistant Dean. Stanley A. Pierson, Ph.D., Acting Director of the Honors College; Assistant Dean.
Phil Schoggen, Ph.D., Director of Academic Advising; Assistant Dean. Fred J. Mohr, B.A., Special Assistant to the Dean.

THE COLLEGE OF LIBERAL ARTS gives form to man's study of his world his history, and himself. Programs centered in the three great disciplines of the natural sciences, the social sciences, and the humanities emancipate his mind and extend that knowledge which is indispensable to the good life of free men.

The instructional divisions of the college are: Anthropology, Biology, Chemistry, Economics, English, Geography, Geology, History, Home Economics, Mathematics, Modern and Classical Languages, Philosophy, Physics, Political Science, Psychology, Religious Studies, Sociology, and Speech. All the divisions, except the departments of Home Economics and Religious Studies, offer major curricula leading to baccalaureate and graduate degrees.

Also administered through the college are special programs in Asian studies comparative literature, general arts and letters, general science, general social science, industrial and labor relations, and Latin American studies; preparatory programs in dentistry, medical technology, medicine, nursing, and pharmacy; and the Bureau of Municipal Research and Service and the Museum of Natural History.

Entrance Requirements. There are no entrance requirements, beyond the general entrance requirements of the University, for students intending to choose a major within the College of Liberal Arts.

Students intending to major in any of the natural sciences are, however, advised to present at least two units of high-school mathematics and two units of high-school science. Experience has proved that students who lack this preparation are handicapped in University work in science. Students planning to major in chemistry, mathematics, or physics or planning to prepare themselves for entrance to a medical school will find it to their advantage to take intermediate algebra, plane geometry, and trigonometry in high school.

Degree Requirements. For a bachelor's degree with a major in the College of Liberal Arts, a minimum of 186 term hours of University work is required, including :
(1) A minimum of four sequences in liberal arts courses numbered from 100 to 120 or 200 to 220 , in satisfaction of the general University lower-division group requirement (for a complete statement of the regulations governing this requirement, and a list of group courses, see pages 78-80.
(2) In addition, two sequences in liberal arts courses numbered from 100 to 120,200 to 220 , or 300 to $310 . \dagger$ Of the total of six sequences elected for the satis* On leave of absence 1965-66.
$\dagger$ Requirement (2) does not apply to students who are admitted to the University of Ore gon Medieal School or Dental School from other accredited institutions and who are candidates for a baccalaureate degree from the University of Oregon
faction of requirements (1) and (2), two must be chosen from each of the three groups, arts and letters, social science, and science; the two sequences in social science and in science must be from different departments. (For a list of group courses see pages 79-80.)
(3) A minimum of 62 term hours in upper-division courses.
(4) A minimum of 36 term hours in the student's major field, at least 24 of which must be in upper-division courses. Some departments require more than the 36 -hour minimum. For certain interdepartmental majors the major requirement is approximately 72 term hours of work distributed in several departments.

Honors College. Through the Honors College, the University offers a fouryear program of liberal education for selected superior students, leading to the degree of Bachelor of Arts (Honors College). The Honors College also supervises the University's participation in the Advanced Placement Program sponsored by the College Entrance Examination Board. See page 132.

## Interdepartmental Courses

## Arts and Letters*

## LOWER-DIVISION COURSES

AL 101, 102, 103. Literature (Honors College). 3 hours each term
Intensive study of selected works of Occidental literature. Combellack Intensive study of selected works of Occid
G. Johnson, Moll, Nicholls, Powers, Wegelin.

## UPPER-DIVISION COURSES

AL 301, 302, 303. Introduction to Japanese Literature. 3 hours each term.
Fall : origins through Fujiwara (twelfth century A.d.), with emphasis on the Tale of Genji; winter : mediaeval (Kamakura, Muromachi, Tokugawa) literature including drama ( $n \bar{o}, k a b u k i$, bunraku), haiku, and ukiyo writing; spring: literature since the Meiji Restoration (1868). All readings in English. Naff.
AL 304, 305, 306. Literature of the Ancient World. 3 hours each term.
Fall: Homer to Aeschylus ; winter: Sophocles to Plutarch; spring: Latin literature from Plautus to Apuleius. Lectures and readings in English. Specia attention to influence of Greek and Latin writers on English literature. Com bellack, Kim.
AL 307, 308, 309. Introduction to Chinese Literature. 3 hours each term. Ancient Chinese literature and Confucian classics, with emphasis on poetry ; later prose, poetry, and literary criticism; the development of drama and fiction. Readings and lectures in English. Palandri.
AL 314, 315, 316. Introduction to Germanic Literature. 3 hours each term. In English. Lectures and assigned readings covering the whole range of German literature.
AL 321, 322, 323. Classic Myths. 1 hour each term.
The three major myths of the classical world: Troy, Thebes, and the Golden Fleece. Lectures and readings in English. Combellack, Pascal.
AL 331, 332, 333. Survey of Russian Literature. 3 hours each term.
Russian literature from 1825 to 1917 , with extensive reading in the works of Gogol, Dostoevsky, and Tolstoy.
*For major program in general arts and letters, see page 167

AL 340, 341, 342. Russian Culture and Civilization. 3 hours each term.
Main currents of Russian iutellectual, literary, and artistic life.
AL 351, 352, 353. Scandinavian Literature in Translation. 3 hours each term.
Outstanding works of Scandinavian literature, studied in translation. Fall: Norwegian ; winter: Swedish; spring: Danish. Prerequisite : upper-division standing. Williams.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AL 407. Seminar. (g) Hours to be arranged.
AL 421, 422, 423. Modern Russian Short Story, Poetry, Drama. (g) 3 hours each term.
Fall: the short story-Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov Gorky, Soviet authors; winter: poetry-evolution of Russian poetry from the beginnings into the Soviet period, with selected readings; spring: dramamodern Russian drama from the eighteenth century. Knowledge of Russian not required; but Russian majors must do selected readings in the original.
AL 450, 451. Descriptive Linguistics. (g) 3 hours each term.
Study of the general internal structure of languages. Prerequisite : senior or graduate standing, three years of college language study; or consent of instructor.
AL 477, 478, 479. Dante and His Times. (g) 3 hours each term.
Historical and literary background of the Divine Comedy; study of the poem and of Dante's minor works; Petrarch and Boccaccio. Lectures and readings in English. Beall.

## GRADUATE COURSES

AL 507. Seminar. Hours to be arranged.
AL 514, 515, 516. Introduction to Comparative Literature. 3 hours each term. Study of significant examples of literature illustrating influences, themes, and movements that cross linguistic frontiers; opportunity for individual research on problems involving two or more literatures.
AL 586, 587. Comparative Literary Criticism. 3 hours each term.
Designed to familiarize the student with the more important approaches to the criticism of iterature current in the twentieth century; practical experimentation with methods and texts : readings, discussion, and analysis of literary works. Forms a year sequence with Eng 585.

## General Science*

## LOWER-DIVISION COURSES

GS 104, 105, 106. Physical-Science Survey. 4 hours each term General introduction to the physical sciences ; principles of astronomy, physics, and chemistry, geologic processes, and man's relation to them. Special emphasis on scientific method. 4 lectures. Ebbighausen, Ellickson.
GS 204, 205, 206. Physical Science (Honors College). 4 hours each term. Introduction to certain basic concepts, terms, and methods of modern physical science, with emphasis on the interrelations of the physical sciences with each other and with other fields of knowledge. Wannier.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
GS 411, 412, 413. History of Science. (g) 2 hours each term.
Lectures, readings, and discussions of selected topics in the history of science, considered as a part of the cultural history of Western civilization in the period 1500-1900.

* For major program in general science, see pages 167-168.


## General Social Science*

## LOWER-DIVISION COURSES

SSc 104, 105, 106. Social Science and Social Policy. 3 hours each term.
SSc 201, 202, 203. Introduction to the Social Sciences (Honors College). 3 hours each term.
A study of some fundamental concepts in the social sciences. Satisfies prerequisite requirement for upper-division courses in anthropology, geography, political science, psychology, and sociology. Dumond, Howard, Urquhart.

## Anthropology

Professors: A. C. Spaulding (department head), D. F. Aberle, H. G. Barnett, L. S. Cressman (emeritus), Theodore Stern.

Associate Professors: V. R. Dorjahn, A. G. Smith.
Assistant Professors: H. B. Barclay, D. L. Cole, D. E. Dumond, Leroy Joh n son, J. G. Jorgensen, Malcolm McFee, P. E. Simonds, D. T. Wallace
Associates: Kathleen G. Aberle, Ann G. Simonds.
Fellows: J. H. Bodley, J. H. Colvin, L. H. Donald, J. F. Hofmeister, B. L. Werl.
Assistants: A. C. Anderson, J. H. Atherton, J. E. Carter, G. H. Clark, C. N. Cole, G. G. Eck, J. L.'Eskildsen, A. G. Fantel, D. L. Hardesty, K. E. L. A. Mace, W. EArson, A. P. Lessin, Michael Lieber, S. M. Lloyd, R. L. A. Mace, W. E. Overholt, A. B. Perlin, H. S. Rice, C. M. Saunders, Sheldon Smith, D. R. Snow, Alexander Sónek, Jr., W. T. Stuart, R. E.
Wiest.

THE COURSES offered by the Department of Anthropology are planned to provide a broad and deep understanding of human nature and society for students in other fields, as well as integrated programs for majors in anthropology

A high-school student planning to major in anthropology is advised to take two years of high-school mathematics, preferably algebra. He should also come to the University with a sound background in English, so that he can read with understanding and express himself with clarity.

Majors in anthropology are required to take the following lower-division courses: General Anthropology (Anth 101, 102, 103) or Introduction to Cultural Anthropology (Anth 207, 208, 209) ; a year sequence in psychology.

At the upper-division level the following courses are required for majors: Peoples of the World (Anth 314, 315, 316) ; Physical Anthropology (Anth 320 , 321,322 ) ; World Prehistory (Anth 411, 412, 413) ; and one area course at the 400 ( G ) level. Students planning to do graduate work should take two years of German and two years of a second foreign language, preferably French or Spanish. To insure a broad liberal education, it is strongly recommended that the studen limit his undergraduate work in anthropology to a maximum of 51 term hours.

The department offers graduate work leading to the Master of Arts and Doctor of Philosophy degrees. Graduate instruction includes work in the fields of archaeology, ethnology, linguistics, and physical anthropology. To qualify for a master's degree, students must demonstrate a basic competence in all these fields

The carefully selected anthropological collections of the Museum of Natural History provide excellent material for class instruction, particularly in the culture of the American Indian.

[^19]Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in anthropology must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 gPa or higher: (1) work in anthropology required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upperdivision courses.

For further information, the student should consult the member of the anthropology faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .

## LOWER-DIVISION COURSES

Anth 101, 102, 103. General Anthropology. 3 hours each term.
Fall: man as a living organism; biological evolution; fossil man; winter: prehistoric cultures; spring : organization and functioning of culture. 2 lectures, 1 discussion period.
Anth 207, 208, 209. Introduction to Cultural Anthropology. 3 hours each term. The meaning of culture; its significance for human beings; its diverse forms and degrees of elaboration among different groups of men; its processes of growth and expansion. 2 lectures; 1 discussion period. Smith.

## UPPER-DIVISION COURSES

Anth 301, 302, 303. Society and Culture. 3 hours each term.
Social relationships and organizations among selected peoples around the world, including kinship, fraternal, political, and religious forms and behaviors. Prerequisite : upper-division standing. Not open for credit to majors or to students who have taken Anth 207, 208, 209. Barclay.
Anth 314, 315, 316. Peoples of the World. 3 hours each term.
Historical treatment of world culture areas, exclusive of Europe. Regional variations in culture, their backgrounds, and their significance in contemporary world affairs. Materials drawn from Africa, Asia, Oceania, and the Americas. Prerequisite : upper-division standing. Dorjahn.
Anth 320, 321, 322. Physical Anthropology. 3 hours each term.
Human and primate evolution, processes of human raciation, and primate behavior. Fall: man's place among the Primates, fossil man, principles in human evolution; winter: morphological and genetic racial criteria, blood groups, factors in population change; spring. ecology and behavior of free-
ranging Primates, evolution of human behavior. Prerequisite: upper-division ranging Primates,
standing. Simonds.
Anth 323. Laboratory in Physical Anthropology. 2 hours.
Optional laboratory work for students enrolled in Anth 320, 321, 322. Observation and measurement of skeletons; anthropometry; comparative primate anatomy. Simonds.
Anth 401. Research. Hours to be arranged.
Anth 403. Thesis. Hours to be arranged.
Anth 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Anth 407. Seminar. (g) Hours to be arranged.

Anth 408. Field Work in Anthropology. (G) Hours to be arranged.
Anth 411, 412, 413. World Prehistory. (g) 3 hours each term.
Survey of the main developments in world prehistory. Fall: methods of archaeology; geological and biological background of paleolithic man; the Old World paleolithic. Winter: Old World village and urban development. Spring: New World hunting and gathering; agricultural-village life, urban society. Prerequisite : upper-division standing. Wallace.
Anth 414. Race and Culture. (G) 2 hours.
Racial classifications and comparisons; the biological base of culture; attitudes toward race in human relations. Prerequisite: 9 hours in anthropology or consent of instructor. Jorgensen, Simonds.
Anth 415. Socialization in Primitive Society. (G) 2 hours.
Methods of child rearing, education, and social control among primitive peoples. Prerequisite : 9 hours in anthropology or consent of instructor. Jorgensen, Simonds, Stern.
Anth 416. History of Anthropology. (G) 2 hours.
A nontheoretical exposition of the beginnings and specialized developments within the fields of archaeology, physical anthropology, ethnology, and linguistics. Prerequisite: 9 hours in anthropology or consent of instructor. Barclay, Stern.
Anth 417, 418, 419. The American Indian. (G) 3 hours each term.
Indian life in Central, South, and North America before white contact ; contemporary Indian life where groups still survive. Prerequisite: 9 hours in anthropology or consent of instructor. Jorgensen, Stern.
Anth 423, 424, 425. Peoples of the Pacific. (G) 3 hours each term.
Life and customs among the native groups of the South Pacific, including Polynesia, Micronesia, Melanesia, Australia, and Indonesia. Prerequisite: 9 hours in anthropology or consent of instructor. Smith.
Anth 426, 427, 428. Peoples of Africa. (G) 3 hours each term.
The cultures of Negro Africa; their history and development; the problems of contemporary Africa. Fall : South and East Africa; winter: Central and West Africa; spring: the problems of modern Africa. Prerequisite: 9 hours
in anthropology or consent of instructor. Dorjahn. in anthropology or consent of instructor. Dorjahn.
Anth 434, 435, 436. Peoples of the Near East. (G) 3 hours each term.
The ethnic groups of North Africa and Southwestern Asia; Islam and Islamic social structure as a unifying force; the relations of the Near East with Negro Africa and Asia. Prerequisite: 9 hours in anthropology or consent of instructor. Barclay.
Anth 437. Peoples of Interior Asia. (G) 3 hours.
Cultures of Interior Asia: paleo-Siberians, Mongols, Manchus, Kirkhiz, Kazaks, and other peoples of Asiatic Russia. Prerequisite : 9 hours in anthropology or consent of instructor.
Anth 438, 439, 440. Peoples of Southern and Eastern Asia. (G) 3 hours each term.
Introduction to the cultures of India, Farther India, China, Japan, and related areas; development of distinctive cultural configurations; interrelationships Fall : the Hindu culture sphere; winter: the Chinese culture sphere; spring: southeastern Asia. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.
Anth 444. Religion and Magic of Primitives. (G) 3 hours.
The religions and systems of magic of primitive peoples as reflections of their thought processes ; supernatural systems in the life of primitive people. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

## Anth 445. Folklore and Mythology of Primitives. (G) 3 hours.

Unwritten literature as an expression of the imaginative and creative thought
of primitive people. Prerequisite : 9 hours in anthropology or consent of inof primitive people. Pre
structor. McFee, Stern.
Anth 446. Art Among Primitives. (G) 3 hours.
The artist and aesthetic expression among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.
Anth 450, 451, 452. Cultural Dynamics. (G) 3 hours each term.
Evaluation of approaches to the problem of cultural changes; analysis of invention and intergroup cultural borrowing; agents and conditions promoting change; mererequisite: 9 hours in anthropology or consent of instructor. Barchang
Anth 453. Primitive Value Systems. (G) 3 hours.
A comparative presentation and analysis of the differing world views of various primitive peoples. The basic premises and tenets revealed by an ethnic ous primitive propples. in its interpretations of its experiences. Prerequisite: 9 hours of anthropology or senior standing in social science. Barnett.
Anth 454. Applied Anthropology. (G) 3 hours.
Study of case material in which anthropological assumptions, theories, and techniques have been applied to effect desired changes in intergroup relations. Problems of cross-cultural communication, conflict, and adjustment. Prerequisite: 9 hours in anthropology or senior standing in social science. Barnett.
Anth 455. Anthropology and Native Administration. (G) 3 hours.
Survey of present policies and techniques of native administration; applicaSurvey of anthropological facts and theory to the solution of practical problems; the impact of external demands on native cultures; satisfaction of social, economic, and psychological needs. Principal areas studied are Oceania and Africa, with some attention to parts of North America and Asia. Prerequisite : 9 hours of anthropology or senipr standing in social science. Barnett.
Anth 456, 457, 458. Language, Culture, and Behavior. (G) 3 hours each term. How people interact through verbal and nonverbal signals, codes, messages, and networks; an integration of anthropology with information theory and social psychology. Prerequisite : 9 hours in anthropology or consent of instructor. Smith.

## GRADUATE COURSES

## *Anth 501. Research. Hours to be arranged.

Anth 502. Research Methods in Anthropology. Hours to be arranged.
Orientation of graduate students to basic research tools, particularly the explicit inductive methods of statistical and other types of formal analysis needed to formulate and conduct research. Three terms are required of majors in the first year of graduate study. Jorgensen, Smith.
*Anth 503. Thesis. Hours to be arranged.
*Anth 505. Reading and Conference. Hours to be arranged.
Anth 506. Special Problems. Hours to be arranged.
Anth 507. Seminar. Hours to be arranged.
Theory and Method in Archaeology. Dumond, Wallace, Spaulding.
Culture and Personality. Aberle.
Anthropological Theory. Barnett.
Field Methods in Ethnology. Barnett.
Field Methods in Et
Innovation. Barnett.
The Negro in the New World. Dorjahn.
Primate Behavior. Simonds.
Fossil Man. Simonds.
Evolution and Race. Simonds.

* No-grade course.

Primitive Primates. Simonds.
Modern Mexico. Dumond.
Basic Physical Anthropology. Simonds.
Basic Archaeology. Spaulding
Archaeology of the Eastern United States. Spaulding
Archaeology of the Circumpolar Region. Dumond
Archaeology of Western North America. Cole, Dumond, Wallace

## Anth 511. Culture, Society, and the Individual. 3 hours

A review and evaluation of the concepts of culture and society, as the terms are employed by anthropologists. The relationships between culture and society, between culture and the individual, and between society and the indi-
vidual. Prerequisite: graduate standing in the vidual. Prerequisite : graduate standing in the social sciences. Barnett.

## Anth 512. The Beginnings of Civilization 3 hours.

The change from a food-gathering to a food-producing economy; significance for cultural and social development. Prerequisite: graduate standing in the social sciences. Wallace.
Anth 514. Primitive Social Organization. 3 hours
Primitive social organization, with particular reference to kinship and sodalities, Prerequisite : graduate standing in sacial science. Aberle, Dorjahn.
Anth 515. Primitive Political Systems. 3 hours.
Government in primitive societies, considered from a cross-cultural perspective. Special attention to political innovations under colonial rule, and to the new nationalistic administrations in Africa and Asia. Prerequisite: graduate
standing in social science. Dorjahn.

## Anth 516. Primitive Economic Systems. 3 hours.

Production, consumption, distribution, and exchange in primitive societies. Special attention to property, the economic surplus, change in economic sysomy, and relationships between nonpecuniary economies and the worid economy. Prerequisite: graduate standing in social science. Dorjahn
Anth 520, 521, 522. Advanced Physical Anthropology. 4 hours each term
Observations and measurements of skeletons; morphological observations and anthropometry of the living. Genetic and morphological analysis of race. Dentition, biometric statistics, blood-group genetics and techniques. 2 threehour laboratory periods. Prerequisite: Anth 320, 321, 322 or consent of instructor. Cole, Simonds.
Anth 523, 524, 525. Archaeology of the New World. 3 hours each term.
Early man in the Americas. Fall: North America; winter: Meso-America; Spring: South America. Dumond, Spaulding, Wallace.
Anth 526, 527, 528. Linguistics. 3 hours each term
The relation of language to culture; nature and forms of language; influence of linguistic patterns on thought ; sounds of language--phonetics and phonemics; linguistic structures; morphophonemics and morphology ; semantics; techniques of linguistic recording and analysis; field work. Prerequisite: senior standing; Anth 207, 208, 209 or two years of a foreign language; consent of instructor. Smith, Stern.
Anth 530, 531, 532. Cultural Ecology. 3 hours each term.
Interrelationships of environment, technology, and social organization. In second and third terms, preparation and comparative analysis of case reports.
Aberle.

## Asian Studies

THE CURRICULUM IN ASIAN STUDIES is a program of area training through selected courses dealing with Asian culture. The primary emphasis is upon the Chinese culture sphere, with special attention to Japan. The program is de-
signed to provide necessary basic knowledge for students interested in commercial, governmental, journalistic, or educational work relating to the region, for students preparing for graduate work in Asian studies, or for those who wish to broaden their understanding of the interrelated world in which they live. The curriculum is administered by an advisory committee, of which $G$. Ralph Falconeri, lecturer in history, is chairman.

The major in Asian studies leads to the Bachelor of Arts degree. Normally, a candidate is required to take two years of either Chinese or Japanese; another language may, however, be substituted if it is germane to the region or country in which the student has a special interest. The major requirements are as follows:
(1) All majors must take the following: Far East in Modern Times (Hst or PS 391, 392, 393) ; Eastern and Southern Asia (Geog 451) ; Peoples of Southern and Eastern Asia (Anth 438, 439, 440).
(2) The candidate must take 39 term hours of work from groups (a) and (b) below; for the satisfaction of this minimum requirement, not more than 24 term hours may be selected from group (b).
(a) Lecture-seminar group: History of Oriental Art (ArH 246, 247, 248) ; Introduction to Japanese Literature (AL 301, 302, 303) ; Introduction to Chinese Literature (AL 307, 308, 309) ; Southern Asia in Modern Times (PS 337, 338, 339 ) ; Epochs in Oriental Art (ArH 446, 447, 448) ; Government and Politics of the Far East: China (PS 460, 461) ; History of China (Hst 494, 495, 496) ; History of Japan (Hst 497, 498, 499) ; Seminar: Religious Philosophy of China ( R 407 ) ; Seminar: Religions in Japan (R 407) ; Seminar: Japanese Historiography (Hst 407) ; Seminar: China's Modern Revolution (Hst 407) ; other approved seminars and colloquia.
(b) Language-course group: Chinese and Japanese language instruction; for courses, see pages 196-197.

Honors: See Honors College, pages 129 ff.
Graduate Work. The University also offers an interdisciplinary program of graduate work in Asian studies in conjunction with work in a departmental field of specialization. The program leads to two M.A. degrees, one in a departmental field and the second in interdisciplinary Asian studies. The student completes 45 term hours of work in his departmental field and, in addition, 30 term hours in Asian studies, including a seminar in the Asian field. His thesis applies the methodology of a departmental discipline to an Asian subject. The candidate must demonstrate mastery, equivalent to the attainment expected after two years of college study, in an Asian language relevant to his program.

Center for Japanese Studies. Graduate study and research in Japanese culture and civilization is sponsored through the University Center for Japanese Studies. The program of the center includes the direction of the work of graduate students who choose Japan as an area of concentration for the M.A. degree in Asian studies. Through the center, advanced students are provided an opportunity to pursue part of their studies in Japan.

## Biology

Professors: Edward Novitski (department head), Hans Burla, C. W. Clancy, P. W. Frank, Graham Hoyle, R. R. Huestis (emeritus), Aaron Novick, P. L. Risley*, B. T. Scheer, J. A. Shotwell, A. L. Soderwallt, F. W. Stahl, George Streisinger.

* On sabbatical leave, fall and winter terms, 1965-66.
$\dagger$ On sabbatical leave 1965-66.

Associate Professors: A. S. Bater, R. W. Castenholz, M. J. Cohen, L. E. Detling, James Kezer, R. W. Morris, F. W. Munz, F. P. Sipe (emeritus), ling, James Kezer, R. W. Morris, F. W. Muñ, F. P. St
W. R. Sistrom, Jacob Straus, S. S. Tepfer, D. E. Wimber.
Assistant Professors: H. T. Bonnett, S. A. Cook, Jane Gray, B. H. McConnaughey.*
Senior Instructor: K. B. Salmonson.
Instructors: R. L. Darby, J. W. Evans, P. J. Kilbourn, $\dagger$ G. J. Murphy, F. M. Sahinen.
Associates: C. C. Ashley, H. H. Goldin, M. E. Myszewski, R. Ramamurthi. Assistants: Jeanette Aagaard, K. R. Bigler, D. E. Bilderback, A. C. Churchill, E. B. Clancy, J. G. Colburn, T. J. Conners, T. A. Ebert, Elizabeth Ehrbich, S. Hall. Fiesel, h. Lansemann J. C. Hickman, J. W. Gacklet M. H. KapB. S. hall, F. S. Hanselmann, J. C. Hickman, J. W. jacklet, M. H. KapPaspisit J C Raymond, N R Sayage M. J Schnetore S. A Sch wanzara R. P. Sheridan, K. E. Silliman, G. E' Stone J P Stringer, E a Sutton, i. H. Therneycroft, R. C. Tinker, M. R. Troy, W. H. Vanding, S. L. Vernon, C. D. White, R. W. Wise, D. W. Yoon.

THE DEPARTMENT OF BIOLOGY offers an undergraduate program planned to provide an understanding of the living world as a part of a liberal education, to prepare the student for professional careers in industry, government, and secondary education, and to provide preparation for graduate work leading to careers in higher education, research, and the medical sciences.

Modern biology is a quantitative science; students planning to specialize in biology should include in their high-school preparation as much mathematics as possible, including at least algebra and geometry. Preparation in English is essential, and work in French, German, chemistry, and physics is highly desirable.

The course requirements for majors are as follows: General Biology ( Bi 101 , 102,103 or Bi 104, 105, 106) ; $\ddagger$ General Chemistry (Ch 104, 105, 106 or Ch 204, 205, 206) : Quantitative Analysis Laboratory (Ch 108,109 , or $\mathrm{Ch} 207,208,209$ ); mathematics through Mth 106; General Physics (Ph 201, 202, 203, Ph 204, 205, 206) ; Organic Chemistry (Ch 334, 335, 336) ; Introduction to Genetics (Bi 422); Cellular Physiology ( Bi 311 ) ; 16 hours of upper-division work selected from zoology (Bi 355, Bi 356, Bi 361, Bi 362, 363, 364), botany (Bi 332, 333, Bi 334), or microbiology ( $\mathrm{Bi} 481,482$ ), including courses in at least two of these three areas. Students who intend to go on for graduate work are urged to include calculus and two years of a foreign language (French, German, or Russian), in their programs.

Students who plan to enter medical or dental school for their senior year may substitute courses in anatomy and physiology for 8 hours of upper-division biology electives. Premedical and predental students should make sure that their programs meet the requirements of the schools they plan to enter, as well as those of the department. Vertebrate Zoology (Bi 362, 363, 364), may be substituted for Comparative Anatomy ( Bi 355 ), and Vertebrate Embryology ( Bi 356 ), to meet medical-school entrance requirements.

Secondary-School Teaching of Biology. For certification as a teacher of biology in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in biology and the requirements for recommendation by the University of Oregon, the student should complete the major program

* On leave of absence 1965-66.
+ On leave of alsence, fall term, 1965-66.
解 indicated by Advanced Placement Program record or by special departmental examinations.
outlined above. The mathematics and physics requirements will be liberalized for students who enter student teaching in the senior year; these students should comp'ete Introductory College Mathematics (Mth 105) and General Ecology ( Bi 372 ), and may substitute Essentials of Physics ( $\mathrm{Ph} 101,102,103$ ) for General Physics (Ph 201. 202, 203). Laboratory and Field Methods in Biology (Bi 494) satisfies the certification requirements for Special Secondary Methods (Ed 408).

For further information, the student should consult the member of the biology faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Graduate Work. The department offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Candidates for higher degrees are expected to meet undergraduate major requirements, as determined by their undergraduate records and by examination, before advancement to candidacy for the degree. Students taking a master's degree prior to doctoral work are advised to gain proficiency in French, German, or Russian, and to take the M.A. degree

Facilities are available for graduate study in botany (plant morphology, cytology, aratomy, taxonomy, and physiology), ecology (plant and animal), genetics, marine biology, microbiology, physiology (comparative, general, and mammalian), and zoology (cytology, embryology, invertebrate, and vertebrate).

Institute of Marine Biology. The University operates for the Oregon State System of Higher Education an Institute of Marine Biology at Charleston on Coos Bay on the Oregon Coast. The institute is located in a setting providing access to arr unusual variety of richly populated marine and terrestrial habitats. Under the guidance of an interinstitutional advisory committee, the institute serves all units of the State System. A program of undergraduate and graduate studies is offered during the summer session.

Institute of Molecular Biology. A program of research and research instruction in areas of biology where phenomena can be understood in terms of the struc ture of molecules is conducted through the University of Oregon Institute of Molecular Biology. See Institute of Molecular Biology (page 124).

## LOWER-DIVISION COURSES

Bi 101, 102, 103. General Biology. 4 hours each term.
Principles of life science, illustrated by studies of selected organisms. 3 lectures; 1 three-hour laboratory period.
Bi 104, 105, 106. Biological Science (Honors College). 4 hours each term.
Selected studies of biological principles, with emphasis on methods of observation, comparison, analysis, experiment, and synthesis in biological science. 3 lectures; 1 three-hour laboratory period.

## UPPER-DIVISION COURSES

(Bi 101, 102, 103 or equivalent is prerequisite to all upper-division courses in biology.
Other prevequisites are indicated in the course descriptions.)
Bi 311. Cellular Physiology. 3 hours.
Cellular phenomena common to all organisms, including chemical processes of metabolism and membrane processes. Prerequisite : Ch 334.
Bi 312, 313. Human Physiology. 3 hours each term, fall and winter
Required for majors in physical education, elective for others qualified. 2 lectures; 1 three-hour laboratory period. Prerequisite: one year of chemistry. Soderwall.
Bi 320. Cell Replication and Control Mechanisms. 3 hours.
Structure and properties of macromolecules common to all living matter, and the control of their synthesis. Prerequisite : Bi 311 .

Bi 332, 333. Plant Morphology. 4 hours each term, fall and winter.
Comparative study of the structure and life histories of representatives of the important plant phyla. Fall: ferns, fern allies, and seed plants; winter: algae, fungi, liverworts, and mosses. 3 lectures; 2 three-hour laboratory periods. Tepfer, Castenholz.
Bi 334. Systematic Botany. 4 hours.
Principles of plant classification ; common plant families; collection and identification of Oregon plants. Cook.
Bi 355. Comparative Anatomy. 4 hours.
Systematic study, dissection, and identification of vertebrate structures and anatomical relations. 2 lectures; 2 three-hour laboratory periods. Not open to students who have credit for $\mathrm{Bi} 362,363,364$. Morris.
Bi 356. Vertebrate Embryology. 4 hours.
Fertilization, morphogenesis, and differentiation of organ systems of vertebrates. 2 lectures; 2 three-hour laboratory periods. Not open to students who have credit for $\mathrm{Bi} 362,363,364$. Risley.
Bi 361. Essentials of Invertebrate Zoology. 4 hours.
Morphology, anatomy, and general biology of the major phyla of invertebrate animals. 2 lectures; 2 three-hour laboratory periods.
Bi 362, 363, 364. Vertebrate Zoology. 4 hours each term.
An integrated presentation of morphological, developmental, and functional features of the vertebrates. 2 lectures; 2 three-hour laboratory periods. Prerequisite : $\mathrm{Bi} 101,102$, 103 and consent of instructor, or $\mathrm{Bi} 104,105,106$. Not open to students who have credit for $\mathrm{Bi} 355, \mathrm{Bi} 356$. Morris, Munz.
Bi 372. General Ecology. 4 hours.
Examination of the interrelationships between organisms and environment; designed for nonmajors and for majors who do not plan further work in ecology. 3 lectures; 1 field trip a week
$\mathrm{Bi} 381,382$. Introduction to Bacteriology. 3 hours each term.
Basic principles and techniques of bacteriology; role of bacteria and other micro-organisms in transformations of organic matter and in physical and
chemical transformations in soil and water; their importance to man 2 lectures; 2 two-hour laboratory periods. Prerequisite: general chemistry. McConnaughey.
Bi 391, 392. Human Anatomy. 3 hours each term.
Gross anatomy; the skeletal and muscular structure ; the circulatory, respiratory, digestive, and neural systems and their functioning in physical activities. 2 lectures; 1 three-hour dissection period. Prerequisite: junior standing Sigerseth.
*Bi 401. Research. Hours to be arranged.
*Bi 403. Thesis. Hours to be arranged.
*Bi 405. Reading and Conference. Hours to be arranged.
*Bi 407. Seminar. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

*Bi 408. Laboratory Projects. (G) Hours to be arranged.
Special laboratory training in research methods.
Bi 414, 415, 416. Comparative Physiology. (G) 4 hours each term.
Physiology of excitation, conduction, and muscular contraction in animals; nutrition, digestion, circulation, metabolism, excretion, and integration in the major animal phyla, in relation to ecology and the evolution of physiological function. 3 lectures; 1 three-hour laboratory period. Prerequisite: organic chemistry, general physics, invertebrate zoology.

[^20]Bi 422. Introduction to Genetics. (g) 3 hours.
An introduction to the fundamental principles of genetics. 3 lectures. Prerequisite : general chemistry and college algebra (Mth 105). Clancy.
Bi 423. Genetics Laboratory. (G) 2 hours.
Fundamental principles of genetics illustrated by experiments with Drosophila and other organisms. 2 three-hour laboratory periods. Prerequisite: Bi 422. Clancy.
Bi 424. Human Genetics. (G) 3 hours.
The immunogenetics of the blood groups and transplantation incompatibilities; sex determination and the sex ratio; spontaneous and induced mutation radiation effects; the genetics of populations; selection, eugenics, and the genetic aspects of the human races. 3 lectures. Prerequisite : Bi 422 . Novitski.
Bi 426. Evolution. (G) 3 hours.
Theories of biological variation, race, and species formation. 3 lectures. Prerequisite : Bi 422 or equivalent ; senior or graduate standing.
Bi 428, 429. Cytology. (G) 4 hours each term, winter and spring.
Microscopic and submicroscopic structure of cytoplasm, and its relation to cell function; structure and behavior of chromosomes and other nuclear components. Methods of study and experimental procedures. 2 lectures, 2 threehour laboratory periods. Wimber.
Bi 431 . Microtechnique. (G) 3 hours.
Paraffin, squash technique, and handling of live cells. Theory and practice of light microscopes, photomicrography, and microcinematography. Two 3-hour laboratory-lecture periods. Prerequisite: senior standing; Bi 434. Bajer.
Bi 432. Fungi. (G) 4 hours.
Structure, physiology, and classification of fungi. 2 lectures; 2 three-hour laboratory periods. Not offered 1966-67. Castenholz.
Bi 433. Algae. (G) 4 hours.
Structure, life histories, and ecology of representative fresh-water and marine algae. 2 lectures; 2 three-hour laboratory periods. Castenholz.
Bi 434. Plant Anatomy. (G) 4 hours.
Comparative study of the structure and development of cells, tissues, and organs of seed plants. 2 lectures; 2 three-hour laboratory periods. Bajer.
Bi 441. Plant Physiology. (G) 4 hours.
Growth, respiration, water relations, and functions of plant organs. 3 lectures, Growth, respiration, water relations, and functions of plant organs.
1 three-hour laboratory period. Prerequisites : $\mathrm{Bi} 311, \mathrm{Ch} 336$. Straus.
Bi 455. Histology. (G) 4 hours.
Systematic study, description, and identification of microscopic structures of vertebrate tissues. 2 lectures; 2 three-hour laboratory periods. Prerequisite . Bi 355, Bi 356, or Bi 362, 363, 364 .
Bi 463. Parasitology. (G) 4 hours.
Biological relationships of parasite and host, and the effect of such relationships on each. 2 lectures; 2 three-hour laboratory periods. Offered in alternate years. McConnaughey.
Bi 471, 472, 473. Principles of Ecology. (G) 4 hours each term.
Fall : introduction to the ecosystem; interrelations between organisms and the physical environment, with emphasis on examples from higher plants. Winter : study of population; growth, structure, and species interactions. Spring: ecosystem energetics and structure, with intensive study of a few selected examples. 3 lectures; field work. Prerequisite: general chemistry, colleg
algebra, and consent of instructor. Bi 471 not offered $1966-67$. Cook, Frank.
Bi 475. Aquatic Biology. (G) 3 hours.
The ecology of fresh-water organisms. 2 lectures; 1 field trip and laboratory period. Prerequisite: Bi 372 or Bi 471 . Offered alternate years. Not offered 1966-67. Castenholz, Frank.

Bi 481, 482. Microbiology. (G) 4 hours each term.
Physiology and biochemistry of micro-organisms. The first term is mainly devoted to laboratory work on the isolation of various types of bacteria from nature and on the physiology of growth. In the second term, the emphasis is on mechanisms of metabolic control and on the physiology, of growth. Prerequisite : $\mathrm{Bi} 311, \mathrm{Ch} 336$ or consent of the instructor. Sistrom.

Bi 491, 492, 493. Historical Biogeography. (G) 3 hours each term.
Fall: classification of mammals and mammalian morphology, with emphasis on comparative osteology. Winter: history of mammals; principles involved 2 lectures. 1 three-hour laboratory period Prerequisite : senior standing in lectures, 1 hry e-hour habolagy. Offered alternate years. Shotwell.
biology, geology, or anthropology. Offered alternate years. Shotwell.
Bi 494. Laboratory and Field Methods in Biology. (G) 4 hours.
Designed especially for biology teachers in the secondary schools. Field collection, identification, and culturing of living material; utilization of this material in the biology teaching laboratory. Field trips for exploration of the various kinds of habitats found in the Pacific Northwest. Prerequisite: consent of instructor.
Bi 495. History of Biological Ideas. (G) 3 hours.
Lectures, readings, and discussion of the historical origin and present status of leading biological ideas, and the contribution of biological thought to contemporary culture. Prerequisite : Bi 101, 102, 103.

## GRADUATE COURSES

*Bi 501. Research. Hours to be arranged.
*Bi 502. Supervised College Teaching. Hours to be arranged.
*Bi 503. Thesis. Hours to be arranged.
*Bi 505. Reading and Conference. Hours to be arranged.
*Bi 507. Seminar. Hours to be arranged.
Animal Physiology
Biophysics.
Botany.
Ecology
Genetics.
Molecular Biology.
Radiation Biology.
Bi 510. Endocrinology Laboratory. 1-3 hours.
Laboratory work to accompany Bi 511 , Bi 512 , or Bi 513 , conducted on a project basis.

Bi 511. Vertebrate Endocrinology. 3 hours.
The morphology and physiology of glands of internal secretion; their role in normal body function of the vertebrates. Soderwall.

Bi 512. Physiology of Reproduction. 3 hours.
Biochemical, histochemical, physiological, and other experimental approaches to problems in the physiology of reproduction. Soderwall, Risley.
Bi 513. Comparative Endocrinology. 3 hours.
The morphology and physiology of neurosecretory and other endocrine structures of the invertebrates and lower vertebrates. Scheer.
Bi 515. Physiology of Membrane Processes. 3 hours.
Experimental and theoretical approaches to the study of diffusion, permeability, and active transport across living membranes; the physiological significance of these processes. Scheer.

[^21]Bi 516, 517. Neurophysiological Basis of Behavior. 3 hours each term.
Physiology of the neuromuscular systems of animals, with emphasis on phylogenetic development and the evolution of animal behavior. Cohen, Hoyle.
3i 519. Neurophysiology Laboratory. 3 hours.
Laboratory work to accompany Bi 516,517 , with emphasis on the electrical techniques for study of nerve and muscle function. Cohen, Hoyle.
Bi 520, 521, 522. Advanced Genetics. 2 hours each term.
Selected topics from the following: gene action, mutation, chromosome mechanics, population genetics, statistical methods, radiation genetics. 2 lectures. Novitski.
Bi 526. Developmental Genetics. 3 hours.
Selected topics from the field of developmental and biochemical genetics. Lectures, discussion, and student reports on current literature. Prerequisite: general genetics, cellular physiology. Clancy.
Bi 531. Experimental Plant Morphogenesis. 4 hours.
Lectures and laboratory work demonstrating experimental modifications of plant growth; the significance of these modifications in relation to normal growth and development. Prerequisites: $\mathrm{Bi} 332, \mathrm{Bi} 441$, or consent of instructor. Bonnett.
Bi $537,538,539$. Advanced Systematic Botany. 3 hours each term.
Classification, distribution, and speciation of seed plants of the Pacific Northwest. Prerequisite: Bi 332, 333, Bi 334. Offered alternate years.
Bi 541. Advanced Plant Physiology. 3 hours.
Lectures on special aspects of plant respiration, salt metabolism, the photochemical reactions of photosynthesis, and on the role, mechanism of action, and metabolism of plant growth-substances. Prerequisite: plant physiology, cellular physiology. Straus.
Bi 544. Plant Physiology Laboratory. 2 or 3 hours.
Laboratory work in techniques used in plant-physiology research, with special emphasis on plant-tissue cultures. Prerequisite: plant physiology, biochemistry. Straus.
Bi 545. Physiology and Ecology of Algae. 3 hours.
Comparative physiology of freshwater and marine algae ; ecological significance of physiological processes ; annual cycles and limiting factors. Emphasis on experimental and theoretical approaches to the solution of ecological problems. 3 lectures. Offered alternate years. Castenholz.
Bi 551. Biology of Fishes. 4 hours.
The anatomy, development, and biology of fishes. Morris.
Bi 565 . Experimental Embryology. 4 hours.
Problems and techniques of experimental morphogenesis and development. Lectures and laboratory work. Prerequisite: Bi 356. Offered alternate years.
Bi 597, 598, 599. Advanced Biology. 3 hours each term.
Lectures, readings, and discussions of basic principles and recent advances in selected aspects of biological science, with special attention to the needs in selected aspects oo niological science, with special

## COURSES OFFERED ONLY IN SUMMER SESSIONS

Bi 417. Introduction to Mammalian Physiology. (g) 4 hours.
Bi 439. Field Botany. (G) 4 hours.
Bi 459. Field Ornithology. (G) 3 hours.
*Bi 461, 462. Invertebrate Zoology. (G) 4 hours each term.
*Bi 467. Marine Invertebrate Types. (g) 3 hours.

* Offered at the Institute of Marine Biology.
*Bi 468. Invertebrate Embryology. (G) 4 hours
*Bi 476. Biology of Marine Organisms. (G) 8 hours
*Bi 477. Planktonology. (G) 4 hours.
${ }^{*}$ Bi 478. Marine Ecology. (G) 4 hours.


## Chemistry

Professors: V. C. Boekelheide (department head), H. S. Anker, T. L. Hili L. H. KLem i, $\dagger$ A. H. Kunz (emeritus), R. M. Mazo, R. M. Noyes, F. J Reithel, J. A. Schellman, W. T. Simpson, D. F. Swinehart, Tsunenobu Yамамото.
Associate Professors: S. A. Bernhard, L. J. Dolby, Edward Herbert, R. G Wolpe.
Assistant Professors : Marcel Grdinic, O. H. Griffith, J. F. W. Keana, T. W Koenig, M. L. Sage, J. S. Shabtai

## Senior Instructor: F. J. Morr

Instructors: Gerrit de Wilde, Glora W. Sage
Associates: P. M. Bayley, Heinz Blaschiee, G. W. Brown, R. G. Coffey Tibor Devenyi, Walter Gonchaux III, Kiyoshi Harada, Tadashi Miyasaka, E. B. Nielsen, D. R. Perry, J. T. Robdins, S. J. Rogers, F. Char lotte Schellman, J. M. Schurr, Paulheinz Schweitzer, C.'J. Smith Elmar Sturm, Hiroshi Zenda
Assistants: S. D. Adamson, D. L. Albrecht, T. E. Barklow, T. L. Barr, G. V Bettoney, D. P. Blattler, W. A. Bloch, Jr., Vera Bosshard, P. D Buckley, F. Louise Byrns, Gayle Callis, P. R. Callis, R. L. Christensen, P. J. Conn, C. C. Contaxis, S. J. Cross, R. T. Cruthoff, M. L Deinzer, P. T. Del.sman, Carolyn Denny, L. O. Edwards, J. G. Eiskamp, B. M. Fanconi, N. A. Fedoruk, R. D. Feinman, V. A. Fried, L. W. Gay, R. K. Gerding, Richard Gordon, Paolo Gramaccioni, G. W. Grible, C. F. Hanken, E. M. Hershberger, L. T. Hoffmann, H. J. Hofrichter, Judith Holt, T. A. Hylion, J. L. Ivey, R. H. Iwamoto, W. C. Johnson, D. M. Kaplan, Seiko Katagiri, J. E. Keizer, M. J. Keliy, C. E. Klopfen stein, L. C. T. Lau, S. J. Lau, F. G. H. Lee, M. W. Lerom, B. J. Litman P. D. Lord, S. L. Lowe M. G. Ly, V. S. Madison, M. H. Mallon, C. V Mason, D. R. McCoy, T. M. McGuire, F. A. Meneghini, R. J. Milligan C. Y. Mok, Margaret J. Morris, R. W. Morris, Masato Nakashima R. M. Newton, W. T. Nolan, H. F. Noller, J. E. Nottre, Takashi Onouchi, D. D. O'Rell, Judith Osias, W. T. Pepperdine, C. E. Ramey J. W. Raymonda, G. N. Riddle, R. M. Rodia, T. L. Rosenberry, W. N Shepard, G. M. Singer, L. S. Svaneyik, D. R. Taylor, J. F. Taylor, D. C Tompkins, S. R. Twedt, A. S. Waggoner, Judith Watson, Ellen Wedum G. M. White, R. A. Wielesek, Alice Wiersema, C. L. Wilkins, J. F Witte, R. A. Wolfe, W. R. Woodward, C. C. Wright.

UNDERGRADUATE COURSES in chemistry are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Liberal Arts. They are also designed to provide a substantial foundation in chemistry for students interested in (1) advanced work in chemistry or other sciences, (2) teaching in colleges or secondary schools, (3) a career in industrial chemistry, and (4) premedical or predental studies.

The high-school preparation of a prospective chemistry major should include as much mathematics as possible. One year each of algebra and geometry is a minimum. Students entering with insufficient preparation in mathematics mist remedy their deficiencies in elementary courses offered by the University. Sub-

[^22]stantial preparation in English, social science, literature, and foreign languages is expected. High-school work in chemistry and physics is desirable but not required

The recommended curriculum for majors includes the following courses in chemistry and related fields (variations in order may be approved by the de partment) :

Freshman Year. General Chemistry (Ch 104, 105, 106 or Ch 204, 205, 206); Inorganic Qualitative Analysis (Ch 207), Introductory Gravimetric Analysis (Ch 208), Introductory Volumetric Analysis (Ch 209); a year sequence in mathematics (as a basis for mathematics placement, high-school records are supplemented by a placement examination); German.

Sophomore Year. Organic Chemistry (Ch 334, 335, 336) ; Organic Chemistry Laboratory (Ch 340, 341, 342) ; General Physics (Ph 201, 202, 203, Ph 204, 205, 206) ; Calculus with Analytical Geometry (Mth 200, 201, 202), if not taken in the freshman year; German.

Junior Year. Physical Chemistry (Ch 441, 442, 443); Physical-Chemical Measurements (Ch 446, 447, 448) ; Biochemistry (Ch 461, 462, 463) for students intending to do graduate work in this field.

Senior Year. Research (Ch 401); an additional sequence in chemistry at the senior level.

The additional advanced sequence in the senior year may be elected from such courses as Physical-Inorganic Chemistry (Ch 411, 412), Biochernistry (Ch 461, 462, 463, Ch 464), Chemical Thermodynamics (Ch 551, 552), Advanced Organic Chemistry (Ch 531, 532, 533). Students who are particularly interested in biochemistry may take Ch 461, 462, 463 in their junior year.

The recommendations for the major outlined above meet the specifications of the Committee on Undergraduate Training of the American Chernical Society. Upon notification by the Department of Chemistry, the society issues cerificates to students who successfully complete the recommended curriculum. Students who desire a less specialized major, without American Chemical So ciety certification, may omit German and the extra chemistry sequence in the senior year.

Students who do not earn a grade of C or better in first-year chemistry courses are not permitted to enroll in second-year courses; however, they have the option to repeat the first-year chemistry course in which they received a grade lower than C .

To be recommended for the bachelor's degree with a major in chemistry, a student must have earned a minimum GPA of 2.00 in courses in chemistry, physics, and mathematics

To be eligible for enrollment in upper-division courses in chemistry, transfer students who plan a major in chemistry must have a college GPA of 2.75 or higher.

For students who plan to teach in secondary schools the department recommends the following as basic preparation: General Chemistry (Ch 104, 105 106) ; Introductory Chemistry Laboratory (Ch 107); Inorganic Qualitative Analysis (Ch 108); Introductory Volumetric Analysis (Ch 109); Organic Chemistry (Ch 334, 335, 336) ; Organic Chemistry Laboratory (Ch 337, 338); Quantitative Analysis (Ch 320). These courses provide acquaintance with several fields of chemistry. This recommended program does not satisfy the requirements for a bachelor's degree with a major in chemistry. Normally, students intending to teach in secondary schools meet the requirements for a bachelor's degree with a major in general science. Additional courses for secondary-school teachers are offered during the summer sessions.

Secondary-School Teaching in Chemistry. For certification as a teacher of chemistry in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in chemistry and the requirements for recommendation by the University of Oregon, the student is advised to take the following courses: General Chemistry (Ch 104, 105, 106) ; General Chemistry Laboratory (Ch 107) ; Inorganic Qualitative Analysis (Ch 108); Introductory Volumetric Analysis (Ch 109); Organic Chemistry (Ch 334, 335, 336); Organic Chemistry Laboratory (Ch 337, 338) ; Quantitative Analysis (Ch 320). These courses provide acquaintance with several fields of chemistry. The program does not satisfy the requirements for a bachelor's degree with a major in chemistry. Normally, students intending to teach chemistry in secondary schools meet the requirements for a bachelor's degree with a major in general science. Additional courses for secondary-school teachers are offered in the summer sessions.

For further information, the student should consult the member of the chemistry faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff.
Undergraduate Research Fellowships. Through a grant from the National Science Foundation, the department offers a number of undergraduate research participation fellowships to qualified junior and senior chemistry majors. The stipends are, on the average, $\$ 200$ for the academic year and $\$ 600$ for the summer months. Inquiries about the program should be addressed to the department head.

## Graduate Study. The Department of Chemistry offers graduate work leading

 to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Detailed information is published in the Graduate School Catalog.The department is prepared to accept Ph.D. candidates for work in the following fields of chemistry : physical chemistry, chemical physics, organic chemistry, theoretical chemistry, biochemistry, and inorganic chemistry.

## LOWER-DIVISION COURSES

Ch 101, 102, 103. Elementary Chemistry. 4 hours each term.
A brief presentation of some of the major areas of chemistry. Does not satisfy prerequisite for upper-division courses in chemistry. 2 lectures; 1 two-hour laboratory period; 1 quiz period.
Ch $104,105,106$. General Chemistry. 3 hours each term.
An introduction to the field of chemistry, providing an understanding of the structures of atoms, molecules, and ions and their interactions, and a foundation for the further study of chemistry. 3 lectures. Prerequisite: Mth 95 or equivalent.
Ch 107. Introductory Chemistry Laboratory. 2 hours fall term.
Experiments related to fundamental chemical principles. 1 lecture-discussion and 1 three-hour laboratory period. Prerequisite : Mth 95 or equivalent.
Ch 108. Inorganic Qualitative Analysis. 2 hours winter.
The separation and identification of cations and anions by semi-micro methods. Planned to accompany Ch 105. Prerequisite : grade of C or better in Ch 104. 1 three-hour laboratory period; 1 quiz period.
Ch 109. Introductory Volumetric Analysis. 2 hours spring term.
Introduction to titrimetric techniques for the estimation of selected species. Planned to accompany Ch 106. Prerequisite: Ch 108, with grade of C or higher. 1 three-hour laboratory period; 1 quiz period.
Ch 204, 205, 206. General Chemistry. 3 hours each term.
First-year college chemistry for selected students with excellent back-
grounds in high-school chemistry, physics, and mathematics. Quantitative and theoretical aspects of the subject emphasized, with less descriptive material than in Ch 104, 105, 106. Open by invitation only to Honors College students and other well-prepared students. Selection is based chiefly on mathe-
matics preparation. 3 lectures.
Ch 207. Inorganic Qualitative Analysis. 2 hours fall.
The separation and identification of cations and anions by semi-micro methods. Planned to accompany Ch 104 or Ch 204. Intended primarily for Honors College students and prospective chemistry majors. Admission limited to selected students. 2 three-hour laboratory periods.
Ch 208 . Introductory Gravimetric Analysis. 2 hours winter.
The separation and gravimetric determination of selected inorganic species. Planned to accompany Ch 105 or Ch 205. Intended primarily for Honors College students and prospective chemistry majors. Admission limited to selected students. 2 three-hour laboratory periods.
Ch 209. Introductory Volumetric Analysis. 2 hours spring.
The quantitative estimation of selected molecular species by titration procedures. Planned to accompany Ch 106 or Ch 206. Intended primarily for Honors College students and prospective chemistry majors. Admission limited to selected students. 2 three-hour laboratory periods.

## UPPER-DIVISION COURSES

Ch 320. Quantitative Analysis. 4 hours spring.
Laboratory work devoted mainly to volumetric analysis. Satisfies the requirements in quantitative analysis for admission to medical or dental schools. Not intended for chemistry majors. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Ch 106 or Ch 206: Ch 109 or Ch 209.
Ch 334, 335, 336. Organic Chemistry. 3 hours each term.
Comprehensive study of the chemistry of the compounds of carbon. 3 lectures. Prerequisite: Ch 106 or Ch 206 with a grade of C or better.
Ch 337, 338. Introductory Organic Laboratory. 2 hours each term, fall and winter.
Introduction to the principles and techniques of laboratory practice in or ganic chemistry. Prerequisite: Ch 109 or Ch 209 with a grade of C or better. ganic chemistry. Prerequisite: Ch 109 or
1 lecture; 1 four-hour laboratory period.
Ch 340, 341, 342. Organic Chemistry Laboratory. 2-3 hours per term. A survey of the principles and techniques fundamental to laboratory practice in organic chemistry, including aspects of both qualitative and quantitative organic analysis. Prerequisite : Ch 109 or Ch 209 with a grade of C or bette-. Required for chemistry majors; open to Honors College students and, by Required for chemistry majors, open to Honors College students and, by than is provided in Ch 337, 338. 1 lecture; 1 laboratory period.
Ch 401. Research. Hours to be arranged.
For advanced undergraduates. An introduction to the methods of chemical investigation.
Ch 403. Thesis. Hours to be arranged.
Open only to students eligible to work for the bachelor's degree with honors in chemistry.
Ch 405. Reading and Conference. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ch 409. Special Laboratory Problems. (G) Hours to be arranged.
Provides laboratory instruction not classifiable as research; laboratory work covered in other courses is not duplicated. Prerequisite: consent of instructor.

Ch 411, 412. Physical-Inorganic Chemistry. (G) 3 hours each term, fall and winter.
A comprehensive study of the structure, properties, and reactions of atomic and molecular species in the various states of aggregation. Prerequisite: three years of college chemistry.
Ch 414. Advanced Inorganic Laboratory. (G) 1 or 2 hours
Students in Ch 411, 412 who expect American Chemical Society accreditation normally enroll in Ch 414 for one term of laboratory work. Students wishing more than one term of laboratory work may enroll in Ch 409 . 1 or 2 threehour laboratory periods.
Ch 416. Kinetics in Solution. (G) 3 hours.
Theories of rates of homogeneous reactions in solution; application to the elucidation of the mechanisms of chemical reactions. Prerequisite: physical elucidation of the mechanisms of
chemistry. Offered alternate years.
Ch 441, 442, 443. Physical Chemistry. (g) 4 hours each term.
Comprehensive study of the theoretical aspects of physical-chemical phe nomena. Atomic and molecular properties; macroscopic systems in equilibrium; nonequilibrium macroscopic systems. 4 lectures. Prerequisite: two years of college chemistry (except for physics majors), one year of calculus.
Ch 446, 447, 448. Physical-Chemical Measurements. (g) 2 hours each term.
Analytical applications of electrical and optical instruments; techniques of physical chemistry, including basic electronic, potentiometric, electrical, optical spectroscopic, and high-vacuum methods; experiments include thermodynamic and kinetic measurements and a short research project. Prerequisite : currently) 2 three-hour laboratory periods. 43 (may be taken con currently). 2 three-hour laboratory periods.
Ch 461, 462, 463. Biochemistry. (G) 3 hours each term.
Chemical interpretation of biological phenomena; study of compounds having biological significance. 3 lectures. Prerequisite: Ch 108, Ch 109 or Ch 208, Ch 209 ; knowledge of organic and physical chemistry and biology.
Ch 464. Biochemistry Laboratory. (G) 3 hours fall.
Designed to illustrate approaches currently being used in research in enzyme kinetics, enzyme purification, structure of nucleic acids and peptides, protein synthesis in cell-free systems, nucleic acid coding, and biochemical pathways in bacterial mutants. 2 three-hour laboratory periods; 1 one-hour conference. Selected students may continue laboratory work in winter and spring terms under Ch 409.

## GRADUATE COURSES

*Ch 501. Research. Hours to be arranged.
${ }^{*}$ Ch 503. Thesis. Hours to be arranged.
Ch 505. Reading and Conference. Hours to be arranged.
*Ch 507. Seminar. 1 hour each term.
Seminars offered in physical chemistry, organic chemistry, and biochemistry.
Ch 508. Special Topics in Theoretical Chemistry. 2 or 3 hours.
Topics in thermodynamics (equilibrium and nonequilibrium), statistical thermodynamics, or quantum chemistry.
Ch 531, 532, 533. Advanced Organic Chemistry. 3 hours each term. Advanced general survey of organic chemistry ; structural theory, syntheses, scope and mechanism of reactions.
Ch 534, 535, 536. Special Topics in Organic Chemistry. 2 or 3 hours each term. Discussion of advanced topics selected from : carbocyclic and heterocyclic compounds, surface reactions and catalysis, stereochemistry, physical-organic concepts.

* No-grade course.

Ch 537, 538, 539. Advanced Organic Laboratory. 2 hours each term. Individual instruction in organic synthesis and techniques.
Ch 541, 542, 543. Chemical Kinetics. 3 hours each term.
The work of each term is selected from such topics as: classical kinetic theory of gases, statistical mechanics, statistical thermodynamics, chemical kinetics in the gas phase and in solution, catalysis. Offered alternate years.
Ch $544,545,546$. Quantum Chemistry. 2 or 3 hours each term.
Topics of chemical interest discussed in terms of the quantum theory. Introduction to wave mechanics, discussion of chemical bonding and the origin of the theory of resonance, and topics from atomic and molecular spectra.
Ch 551, 552. Chemical Thermodynamics. 3 hours each term, fall and winter. The laws of thermodynamics and their applications to gases, liquids, solids, phase equilibria, solutions, electrolytes, chemical equilibria, electrochemistry, surfaces, elasticity, external fields, etc.
Ch 553, 554. Statistical Thermodynarnics. 3 hours each term, fall and winter. Molecular interpretation of the properties of equilibrium systems; principles and applications to gases, crystals, liquids, phase transitions, solutions, electrolytes, gas adsorption, polymers, chemical equilibria, etc. Offered alternate years. Students may take $\mathrm{Ph} 451,452,453$ when Ch 553 , 554 are not offered.
Ch 556, 557. Molecular Spectra and Molecular Structure. 2 hours each term, fall and winter.
Survey of molecular spectra, with emphasis on the determination of molecular structure through spectroscopic methods.
Ch 561, 562, 563. Enzymes and Intermediary Metabolism. 2 or 3 hours each Enzyme kinetics and detailed consideration of glycolysis, biological oxidation, lipid metabolism, and selected biological synthesis.
Ch 564, 565, 566. Physical Biochemistry. 2 or 3 hours each term.
The physical properties of biological macromolecules ; proteins, nucleic acids, and viruses. The relationship between the molecular conformation and the special chemical, physical, and biological properties of these various macromolecules. Prerequisites : calculus and a knowledge of the elements of solution thermodynamics.

## COURSES OFFERED ONLY IN SUMMER SESSIONS

Ch 419. Advanced General Chemistry. (g) 4 or 5 hours.
Ch 429. Survey of Analytical Chemistry. (g) 4 or 5 hours.
Ch 439. Survey of Organic Chemistry. (g) 4 or 5 hours.

## Comparative Literature

THE UNIVERSITY OFFERS a program of graduate study in comparative literature, leading to the M.A. and Ph.D. degrees. The program is administered by a faculty committee drawn from the Department of English and the Division of Modern and Classical Languages. Dr. Chandler B. Beall, professor of Romance languages, is chairman of the committee.

While the student's program includes courses and seminars in comparative literature, the greater portion of his work is selected from advanced offerings in the classics and in English, German, Romance, and Slavic literatures. Command of at least one foreign language, ancient or modern, is required for admission.

Doctoral candidates must work in at least three literatures, one of which may be English, and must demonstrate competence in three foreign languages, one of which must be Latin or Greek.

Comparatve Literature, the official journal of the American Comparative Literature Association, is published quarterly by the University of Oregon.

## Dentistry, Preparatory

THE COUNCIL ON DENTAL EDUCATION of the American Dental Asso ciation has established the following minimum requirements for admission to approved dental schools : at least 90 term hours of collegiate courses, including one year of English, one year of general chemistry, one year of biology or zoology, one year of physics, and one-half year of organic chemistry ; a grade-point average of at least 2.00 .

The University offers a three-year predental curriculum, which satisfies these requirements, to prepare students for admission to the University of Oregon Dental School and other accredited dental schools. The completion of this curriculum and two years of dental-school work satisfies all requirements for a bachelor's degree from the University with a major in general science. With the proper choice of electives in the predental curriculum, the student may qualify for a bachelor's degree with a major in biology.

Students who expect to complete the requirements for a bachelor's degree at the Dental School should satisfy, in their predental program, all requirements for the degree (including general University requirements and requirements for a major in the College of Liberal Arts) that cannot be satisfied with work taken at the Dental School. For general University requirements for a bachelor's degree see pages 76 ff

Although a bachelor's degree is not prerequisite to a professional degree in dentistry, the University of Oregon Dental School and most other dental schools recommend that their students qualify for this degree in addition to the professional degree.

Predental students are advised to begin correspondence with the University of Oregon Dental School or the dental school they plan to attend during the spring term of their first year at the University. Aptitude tests given by the American Dental Association should be taken not later than the fall term one year before admission; applications to take this test must be made well in advance of the scheduled date of the test. Predental students should consult the Dental School Catalog for dates.

The following courses satisfy both the science requirements for admission to the University of Oregon Dental School and, with additional science instruction at the Dental School, the requirements for a major in general science :

|  | Term Hour |
| :---: | :---: |
| Mathematics (above level of Mth 10) | 12 |
| General Chemistry ( $\mathrm{Cb} 104,105,106$ ). | 10 |
| Inorganic Qualitative Analysis (Ch 108), Introductory |  |
| Volumetric Analysis (Ch 109) | 4 |
| Organic Chemistry ( $\mathrm{Ch} \mathrm{334,335} ,\mathrm{Ch} \mathrm{337)}$ | 9 |
| General Biology (Bi 101, 102, 103). | - 12 |
| Upper-division biology ( $\mathrm{Bi} 355, \mathrm{Bi} 356$ recommended) | 8 |
| General Physics (Ph 201, 202, 203, Ph 204, 205, 206). | 15 |

One term of Sculpture (Art 293) or Jewelry (Art 257) is recommended as an elective.

## Economics

Professors: Robert Campbell (department head), R. L. Allen, Calvin Crum-
baker (emeritus), R. M. Davis, C. D. Edwards, J. H. Gilbert (emeritus), P. L. Kleinsorge, H. T. Koplin, R. F. Mikesell, V. P Morris (emeritus), P. B. Simpson, M. D. Wattles.*

Associate Professors: B. N. Siegel, R. E. Smith, J. N. Tattersall.
${ }^{*}$ On leave of absence 1965-66.

Assistant Professors: G. O. Bierwag, M. A. Grove, M. E. McGoldrick, J. E Triplett, Jr.
Instructor: D. B. Ashby.
Fellows: K. A. Blackerby, J. M. Cooper, R. L. Ferrar, J. G. Harris, J. M. Newton, K. W. Olson, D. M. Rees, C. M. Stroh, R. B. Swanson.
Assistants: V. G. Affolter, B. Ben-Zion, J. E. Burns, J. R. Carter, R. B. Fischer, C. T. Haworth, L. E. Johnson, D. A. Jolly, R. S. Koot, G. B Landry, G. J. Long, D. C. Scheel, N. W. Schrock, J. D. Sutton, J. P Venieris, C. H. Wickham, J. L. Yager.

UNDERGRADUATE COURSES IN ECONOMICS are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Liberal Arts. They are also designed to provide a substantial foundation in economics for students interested in (1) professional gradu ate training in economics, (2) professional careers in business, law, and government, and ( 3 ) secondary-school teaching.

Major Requirements. The following courses are required for an undergraduate major in economics :

Lower Division. Principles of Economics (Ec 201, 202, 203) ; Introductory College Mathematics (Mth 104, 105, 106) ; 6 term hours of work in statistics The statistics requirement may be satisfied with introduction to Business Statistics (BS 232), Elementary Inference in Business Statistics (BS 333) or Elements of Statistical Methods (Mth 425, 426).

Upper Division. Economic Theory (Ec 375, 376, 377). In addition, majors must complete 27 term hours of work in upper-division courses in economics, at least 18 of which must be in year sequences. (Ec 318, Ec 319, Ec 320 is not considered a year sequence.)

Suggested programs of study for economics majors planning to attend graduate school or to enter careers in business, law, government, or secondary-school teaching may be obtained from the Department of Economics.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject prepara tion and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in economics must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in economics required for a major in the field ; (2) 27 term hours in history (3) 9 term hours in a third field; (4) at least one course in each of two additiona fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the economics faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff.
Graduate Work in Economics. The Department of Economics offers gradu ate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. For the general requirements see Graduate School, pages 112 ff

A candidate for the Ph.D. degree in economics must select four fields for concentrated study, including economic theory, and must pass a written comprehensive examination in each field and an oral examination covering the four fields.

One field may be in another department or school of the University. A working knowledge of statistics is required for admission to candidacy for the degree.

A candidate for the Ph.D. degree in another discipline may present a field of economics as a cognate subject, provided he has had proper preparation, including a background in economic theory, to support the field of special interest.

## LOWER-DIVISION COURSES

Ec 201, 202, 203. Principles of Economics. 3 hours each term
Principles that underlie production, exchange, distribution, etc. Special sec tion for Honors College students. Prerequisite: sophomore standing. Allen Bierwag, Campbell, Kleinsorge, Koplin, Smith, Wattles.

## UPPER-DIVISION COURSES

Ec 318. Money and Banking. 3 hours fall.
Operations of commercial banks, the Federal Reserve System, and the Treasury that affect the United States monetary system. Prerequisite: Ec 201, 202 203 or consent of instructor. Grove.
Ec 319. Taxation and Fiscal Policy. 3 hours winter
Principles and problems of government financing. Expenditures, revenues, debt, and financial administration. Prerequisite : Ec 201, 202, 203 or consent of instructor. Grove.
Ec 320. International Finance. 3 hours spring.
The nature of foreign-exchange markets; techniques of international payments; exchange rates and their determination; problems of an international major international organizations. Prerequisite: Ec 201, 202203 or consent majorstructor Grove. of instructor. Grove.
Ec 375, 376, 377. Economic Theory. 3 hours each term
Systematic study of the concepts and methods of current economic analysis with special atttention to the neoclassical school. Includes work in the fields of value and distribution, fluctuations, employment, etc. Required of all majors Prerequisite: Ec 201, 202, 203. Bierwag, Campbell, Koplin, Triplett.
Ec 401. Remearch. Hours to be arranged.
Ec 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Ec 407. Seminar. (g) Hours to be arranged.
Ec 411, 412, 413. Monetary and Banking Theory. (G) 3 hours each term.
Analysis of the nature of money, effects of changes in the money supply. monetary controls used by the Federal Reserve System and the Treasury, international repercussions of domestic monetary policies, international banking agencies; critique of various monetary policies. Prerequisite: Ec 201, 202, 203. Siegel, Simpson.
Ec 414, 415, 416. Regional Economics. (G) 3 hours each term.
Economic analysis applied to regional problems, with emphasis on problems and techniques relevant to the Pacific Northwest economy. Fall: economics of land use and resource conservation ; winter: theory of location of economic activities; regional social accounting, balance of payments, comparative cost studies; spring: application of analytical tools to study of regional specializaability, urban and metropolitan structure and problems. Prerequisite stability, urban and metropolitan structure and problems. Prerequisite
Ec 201, 202, 203. Tattersall, Allen.
Ec 417. Contemporary Economic Problems. (g) 3 hours fall.
Contemporary economic conditions and problems; analysis of economic policies and practices affecting such problems. Prerequisite: Ec 201. 202, 203 Campbell.

Ec 418. Economy of the Pacific Northwest. (g) 3 hours spring. Historical development and present industrial structure of the Pacific Northwest economy. Analysis of recent income changes, locational factors influencing development of major industries, relations with other regions, impact of Federal and state government policy. Simpson, Tattersall.
Ec 429, 430, 431. Public Finance. (G) 3 hours each term.
Critical analysis of taxes as sources of public revenue, with emphasis on tax theories and incidence. Effects of expenditure, tax, and debt policies of government upon the total economy. Prerequisite: Ec 201, 202, 203. Grove.
Ec 432, 433, 434. The Economics of Public Policy. (G) 3 hours each term. Application of economic principles and techniques to public policy issues; function of the economist in the formulation and implementation of public policy. Case studies involving systematic treatment of economic issues, inanalysis of relevant data. Prerequisite: Ec 201, 202, 203. Allen, Mikesell, Smith.
Ec 440, 441, 442. International Economics. (G) 3 hours each term.
Theory of international trade; problems in balance-of-payments adjustments during critical periods; commercial policies of the more-important nations international economic organizations in theory and practice. Prerequisite: Ec 201, 202, 203. Allen, Wattles.
Ec 444. Labor Economics. (G) 3 hours fall.
Economic analysis applied to the labor market, with particular emphasis on wage determination, the relation between wages and prices, and the relation between wages and employment. Prerequisite: Ec 201, 202, 203. Kleinsorge Smith.
Ec 445. Organized Labor. (G) 3 hours winter.
Theories of the labor movement ; history of the American labor movement; aims, methods, and policies of trade unions, conservative and radical: the impact of labor organizations on the American economy. Prerequisite: Ec 201 202, 203. Kleinsorge, Smith.

Ec 446. Labor Legislation. (G) 3 hours spring.
Analysis of labor legislation in the United States and of court decisions in leading labor cases; problems facing employee, employer, and public that cal for regulation through public authority. Prerequisite: Ec 201, 202, 203. Kleinsorge, Smith.
Ec 447, 448, 449. Collective Bargaining. (G) 2 hours each term.
Major techniques of negotiation; union and management policies; strikes and lockouts. Methods of settling labor disputes, including grievance procedures conciliation, fact finding, and arbitration. Prerequisite : Ec 444 or consent of instructor. Kleinsorge, Triplett.
Ec 450, 451, 452. Comparative Economic Systems. (g) 2 hours each term. An analytical comparison of capitalism and other economic systems. Prerequisite: Ec 201, 202, 203. Smith, Wattles.
Ec 454, 455, 456. Economic History of Modern Europe. (G) 3 hours each term. The economic development and economic institutions of modern Europe. Fall : from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter : late eighteenth century to end of nineteenth century; spring: twentieth century. Lorwin.
Ec 460, 461, 462. Industrial Organization and Public Policy. (G) 3 hours each term.
First term: Business policies, market organization, methods of competition, and distributive relationships, with particular attention to large diversified industrial enterprises. Second term: The nature and application of the antitrust laws. Third term: Unsolved problems in the relations of government to business; comparison of American and foreign policies. Prerequisite: Ec 201, 202,
203. Either of first two terms may be taken separately-both are requisite for the third term. Edwards, Smith.
Ec 463. Economics of Regulated Industries. (G) 3 hours winter.
Analysis of economic characteristics of industries in which the decisionmaking process is regulated by government administration rather than by competition: a description and evaluation of administrative procedures employed. Industries covered include transportation and the production of electricity, natural gas, and crude oil. Prerequisite: Ec 201, 202, 203. Smith.
Ec 464, 465, 466. Quantitative Economic Analysis. (G) 3 hours each term. The use of mathematical techniques in economic analysis. Consumption and production theory, programming, input-output; general equilibrium; multiplier, accelerator, growth, and inventory models. Prerequisite: Ec 201, 202, 203; Mith 104, 105, 106 or equivalent. Bierwag, Grove, Simpson.
Ec 470, 471, 472. History of Economic Thought. (G) 3 hours each term.
The evolution of man's ideas about economic matters; the classical school and the development of modern economic thought. Prerequisite: Ec 201, 202, 203. Camphell, Davis.
Ec 480, 481, 482. Mathematical Economics. (G) 3 hours each term.
Construction and fitting of mathematical models of economic life. Prerequisite: Mth 104, 105, 106 ; Ec 201. 202, 203. Simpson.
Ec 483, 484, 485. National Income and Business Cycles. (G) 3 hours each term. Theory and practice of social accounting, index numbers, measure of business cycle stages, leading and lagging series, behavior of labor cost, productivity, and other economic measures of business fluctuations. Prerequisite : Ec 201,
202,203 . Simpson. 202, 203. Simpson.
Ec 487, 488, 489. American Economic History. (G) 3 hours each term. All phases of the economic development of the United States. Peterson, Tattersall.
Ec 490, 491, 492. Development of Industrial Economies. (G) 3 hours each term.
Comparative study of economic growth in the advanced industrial nations: North America, Western Europe, Japan, U.S.S.R. Analysis of differential national and regional growth rates; sources of economic growth; structural characteristics of developing economies; problems in measurement of longterm growth trends. Prerequisite: Ec 201, 202, 203. Tattersall.

## GRADUATE COURSES

*Ec 501. Research. Hours to be arranged.
*Ec 503. Thesis. Hours to be arranged.
Ec 505. Reading and Conference. Hours to be arranged.
Ec 507. Seminar. Hours to be arranged.
Economic History. Tattersall, Allen.
Economic History. Tattersall, Allen.
Industrial Organization and Control. Edwards, Smith.
History of Economic Thought. Campbell, Koplin.
Labor Economics. Kleinsorge, Triplett.
International Economics. Mikesell, Wattles.
Money and Credit. Siegel.
Quantitative Economics. Simpson, Bierwag.
Public Finance. Grove
Ec 514, 515, 516. Regional Economic Analysis. 3 hours each term.
Analysis of the structure of economic regions, theories of regional and interregional relations, location of economic activity, central place theory and land and natural-resource use patterns, techniques of analysis, empirical studies, and regional policies. Allen, Tattersall.

[^23]Ec $524,525,526$. Economic Growth and Development. 3 hours each term.
Economic, cultural, and political factors in economic development with special emphasis on low-income countries. Theory of economic development; case studies in economic growth; measures for accelerating development of poor countries; special problems of underdeveloped countries. Prerequisite Ec 201, 202, 203; 12 term hours in upper-division social science. Mikesell.
Ec 558, 559, 560. Advanced Economic Theory. 3 hours each term. Intensive examination of the basic principles of price and distribution theory and of income and employment analysis. Koplin, Siegel.
Ec 561, 562, 563. Income and Employment Theory. 3 hours each term. Theory of output as a whole; theories of growth and fluctuations in the economic system, with emphasis on recent literature. Davis, Koplin.
Ec $575,576,577$. Price and Distribution Theory. 3 hours each term. Modern developments in the theory of price determination, income distribution, and economic welfare. Davis, Koplin.

## English

Professors : Kester Svendsen (department head), Roland Bartel, F. G. Black, A. G. Brodeur, S. B. Greenfield,* H. H. Hoeltie (emeritus), R. D. Horn, S. N. Karchmer, B. T. Kiely, A. R. Kitzhaber, W. F. McNeir, E. G. Moll Carlisle Moore, J. C. Sherwood, W. F. G. Thacher (emeritus), C. A. Wegelin.
Associate Professors: R. C. Ball, W. E. Cadbury, $\dagger$ Alice H. Ernst (emeritus), W. J. Handy, J. A. Hynes, S. R. Maveety (assistant department head) R. J. Salisbury, A. K. Weatherhead, O. M. Willard.

Assistant Professors: Lucile Aly, Merrit Cross, Pasquale Di Pasquale, Thelma Greenfield, $\dagger$ Gloria Joh nson, E. D. Kittoe, G. A. Loye (director of composition), Stoddard Malarkey, T. F. Mundee (emeritus), Irma Sherwood, Helen Soehren, W. C. Strange.
Senior Instructors: Constance Bordwell,* Ruth Jackson.
Lecturers: G. L. Aho, R. D. LaRue.
Instructors: R. M. Atrinson, R. S. Behar, R. J. Bertholf, Elaine Bowe, W. M. Burke, W. R. Campbele, J. A. Carstens, R. M. Clifton, M. I. Durst, G. G. Evans, J. D. Farley, J. W. Foster, J. W. Fraley, L. H. Freeman, Phyllis C. Gage, W. G. Gober, R. G. Gonzalez, Marjorie goss, hoyt greeson, Susann handy, dudley hascall, R. P. Hastings, R. L. Kelly, glennie M. Kittoe, Annabel Kitzhaber, D. R. Larson, R. A. Lee, M. R I R N, S. R. Relson, M. D S Payne, R. J. Ray, J. A. Reither, h. M. Robinson, S. L. Rosen, Lucy Sawyer, Ruth Schrock, J. R. Selig, K. J. Skovajsa, Joan Templeton, S. H. Tudor, E. A. Van Aelstyn, R. R. Wilson, Joan Joan Tem
Fellows: E. R. Anderson, B. E. Combs, Nan Coppock, R. J. Gervais, J. W. Griffith, Kay Irwin, H. F. Kuhn, Carol McNair, Leland Ryken, Walter Scheps, R. J. Spendal, R. C. Westover, Ann Wolff.
Assistants: D. W. Ackerson, R. W. Adams, A. K. Amos, L. H. Backstedt, Charlotte Baer, J. R. Barchek, Marna Broekhoff, Loni Demarest, D. D. Diaz, A. D. Drake, Barbara Drake, S. P. Fink, W. B. Hitchcock d. W. Lawder, T. S Long Gerald Modin, H. O. Nichals, E. J. Ottum, Ann Prengaman, W. S. Robb, M. J. Roberts, John Scally, Rebecca Trautman, Donalie Weingarten.

* On sabbatical leave 1965-66.
$\dagger$ On leave of absence $1965-67$.

THE DEPARTMENT OF ENGLISH offers instruction in English and American literature and in writing. Its lower-division courses are designed to supply the training essential for good writing, to serve as an introduction to humanistic studies, and to impart the fundamental knowledge requisite for a major in English Its upper-division courses are designed to develop an intelligent and just appreciation of literature, to give some insight into the continuity of literature and the interrelation of literary movements, and to provide the opportunity for a wellrounded knowledge of the history of English and American literature and of the English language.

Major Requirements. The Department of English expects its majors to acquire, in addition to a knowledge of English literature, a general knowledge of philosophy and history and a reading knowledge of at least one foreign language. The general major requirements for the degree of Bachelor of Arts in the Department of English are as follows:
(1) Satisfaction of the University language requirements for the B.A. degree.
(2) English History (Hst 304. 305, 306), History of Western Civilization (Hst 101, 102, 103), or History (Honors College) (Hst 107, 108, 109).
(3) Survey of English Literature (Eng 101, 102, 103), Introduction to Literature (Eng 104, 105, 106), World Literature (Eng 107, 108, 109), or Literature (Honors College) (AL 101, 102, 103) ; and Shakespeare (Eng 201, 202, 203).
(4) A total of 36 hours in upper-division courses in the department, including 3 hours in the Middle Ages, 9 in other literature before 1800, and 9 in literature since 1800 (these hours need not be taken in period courses). Within the framework of these requirements, the student should construct, subject to his adviser's approval, a balanced and coherent program consistent with his personal interests and vocational needs. Programs centering on English literature, American literature, or creative writing are suggested, but other patterns are not excluded. Prospective high-school teachers must satisfy state certification requirements (see School of Education).

Secondary-School Teaching of English. For certification as a teacher of English in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

Completion of the requirements for a major in English at the University satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon, provided that the student includes in his program English Composition for Teachers (Wr 411), Literary Analysis for Teachers (Eng 488), Modern English Grammar (Eng 492), work in American literature, and at least one term of speech. The Department of English will approve enrollment in student teaching only in the student's work in English courses is of high quality.

Nonmajors who plan to teach English must complete a total of 42 term hours in English and speech, including the courses listed above and work in world literature.

For permanent certification, after a fifth year of preparation, the student must take work in literary criticism, additional work in English language and grammar, and literature courses to remedy deficiencies in his undergraduate preparation It is recommended that students complete the interdisciplinary master's program for teachers during the fifth year of preparation.

For further information, the student should consult the member of the English faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .

Graduate Work. The Department of English offers graduate work in Eng lish literature, American literature, and linguistics, leading to the Master of Arts and Doctor of Philosophy degrees, and a graduate program in creative writing leading to the M.A. or Master of Fine Arts degree. A Ph.D. program in comparative literature, administered by a committee representing the Department of English and the Department of Foreign Languages, offers opportunity for advanced study of several literatures in their original languages (see page 152)

Except for candidates in creative writing, a thesis is not required in the M.A. Eram. All M.A. candidates take a written examination on a selected list of literary works.

The program leading to an M.F.A. in creative writing includes studies in English and American literature, in aesthetics, and in the history and criticism of English and American iterature, in ansic, and drama, and the production of a sustained piece of writing of high literary merit.

For the Ph.D. degree, the department recommends an elementary knowledge of Latin or Greek in addition to the required reading knowledge of two modern languages.

## Literature

## LOWER-DIVISION COURSES

*Eng 52. Corrective Reading. 1 hour any term.
Designed for students who have difficulties in reading at the college level Methods for increasing speed and comprehension. Jackson, Willard.
$\dagger$ Eng 101, 102, 103. Survey of English Literature. 3 hours each term. Study of the principal works of English literature based on reading selected to represent great writers, literary forms, and significant currents of thought. Provides both an introduction to literature and a background that will be useful in the study of other literatures and other fields of cultural history. Fall: Anglo-Saxon beginnings to the Renaissance; winter: Milton to Words worth; spring : Byron to the present. Behar, Bowe, Gage, Greeson, Mariels Mundle, Payne, I. Sherwood, Wilson, Yeatman
$\dagger$ Eng 104, 105, 106. Introduction to Literature. 3 hours each term.
Study of literature and the nature of literary experience through the reading of great works of prose and poetry, drawn from English and other literatures. Wossible with emphasis on such elements as structure style, characterization, possibe, wnd enpmbolism. Aho Campbell, Carstens, Di Pasquale, Durst Emagery, and symborsm. Areenfield, S. Handy, Hastings, Kelly, Lee, MalarEvans, Farley, Foster, S. Greenfiela, S. Martenson, Nelson, Reither, Sawyer, Stallman, Templeton, Van Aelstyn.
$\dagger$ Eng 107, 108, 109. World Literature. 3 hours each term.
Study of the literary and cultural foundations of the Western world through the analysis of a selection of masterpieces of literature, ancient and modern, American works. Ball, S. Handy, Milowicki, Selig, Skovajsa.

Eng 201, 202, 203. Shakespeare. 3 hours each term.
Study of the important plays-comedies, histories, and tragedies. Required for majors. Black, T. Greenfield, Horn, Johnson, McNeir, Maveety, Moll, Mortenson, Selig, J. Sherwood, Strange, Svendsen.
Eng 253, 254, 255. Survey of American Literature. 3 hours each term.
American literature from its beginnings to the present day. Black, Cross, Ray. * No-grade course.
† A student may register for only one of the three sequences: Eng 101, 102, 103; Eng 104, 105, 106; Eng 107, 108, 109

## UPPER-DIVISION COURSES

Eng 301. Tragedy. 3 hours.
A study of the nature of tragedy and of tragic expression in various literary forms. Strange, Wegelin.
Eng 303. Epic. 3 hours.
The heroic spirit in Western European literature, with emphasis on English literature. J. C. Sherwood, Strange.
Eng 304. Comedy. 3 hours.
The comic view in both dramatic and nondramatic forms. Main emphasis on English masters, but with attention also to classical and continental writers. Principal theories of the comic and of comic literary forms and types. Horn,
Strange.
Eng 305. Satire. 3 hours.
Satire, or criticism through ridicule, as a major type of literary expression. Examples from various literary forms-dramatic, narrative, and poetic-and from ancient and foreign literatures as well as English. Special emphasis on contemporary satire. J. Sherwood.
Eng 306, 307. The Literature of the English Bible. 3 hours each term. Study of the literary qualities of the English Bible, with some reference to its influence on English and American literature. Maveety.
Eng 320, 321, 322. English Novel. 3 hours each term.
From Richardson and Fielding to the present. Black, Hynes.
Eng 323. American Satire. 3 hours.
Satire in American literature ; its nature, development, and significant contributions to the interpretation of American life.
Eng 391, 392, 393. American Novel. 3 hours each term.
Development of the American novel from its beginnings to the present Cross, W. Handy.
Eng 394, 395, 396. Twentieth-Century Literature. 3 hours each term.
A critical survey of British, American, and some European literature from 1890 to the present ; significant works of poetry, drama, and fiction studied in relation to intellectual and historical developments. W. Handy, Hynes, Moore,
Eng 403. Thesis. Hours to be arranged.
Eng 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Eng 407. Seminar. (G) Hours to be arranged.
Eng 411, 412, 413. English Drama. (G) 3 hours each term.
The development of English dramatic forms from the beginnings to Sheridan. Horn, Strange.
Eng 414, 415, 416. History of Literary Criticism. (G) 3 hours each term.
Studies in the theory and practice of literary criticism from Plato and Aristotle to the present. J. C. Sherwood.
Eng 420, 421, 422. Modern Drama. (G) 3 hours each term.
Fall: growth of the modern theater in Europe from beginnings in romanticism through naturalism to symbolism and the poetic theater before 1914 ; winter : European and American drama between 1915-1940, the experimental theater and its effect on realism; spring: international developments in drama from
1941 to the present. Ball.
Eng 425. Early English Literature. (g) 3 hours.
The literature of the Middle Ages, in relation to the social and literary ideas of the period. Di Pasquale, S. Greenfield.

Eng 428. Chaucer. (g) 3 hours
As much of Chaucer's work read as time permits. Brodeur, Di Pasquale, S. Greenfield, Malarkey.
Eng 430, 431, 432. Literature of the Renaissance. (G) 3 hours each term. Fall: Renaissance thought; winter: Renaissance epic and prose narrative; spring: English lyric from Wyatt to Herrick. Thelma Greenfield, McNeir, Maveety.
Eng 434. Spenser. (G) 3 hours. McNeir.
Eng 436. Advanced Shakespeare. (g) 3 hours each term. Intensive study of selected plays. Not open to majors or to students who have had any term of Eng 201, 202, 203.
Eng 440, 441, 442. Seventeenth-Century Literature. (G) 3 hours each term. Poetry and prose from Jonson through the Restoration studied in relation to the trends of thought and feeling which characterize the century. Black, Svendsen.
Eng 444. Milton's Minor Poems and Prose. (G) 3 hours.
The Pocms of 1645 and the major prose works on liberty, education, and politics. Svendsen.
Eng 445. Milton's Major Poems. (G) 3 hours.
Paradise Lost; Paradise Regained, and Samson Agonistes. Svendsen.
Eng 450, 451, 452. Eighteenth-Century Literature. (G) 3 hours each term. The prose and poetry of the century studied in relation to the social, political, and aesthetic ideas which gave the period its peculiar character. Horn.
Eng 455. Pope. (G) 3 hours. J. C. Sherwood.

Eng 460, 461, 462. The Romantic Poets. (G) 3 hours each term. Fall: Wordsworth and Coleridge ; winter: Scott, Byron, and others; spring : Keats, Shelley, and others. Bartel, Moll.
Eng 463, 464, 465. The Later Nineteenth-Century Poets. (G) 3 hours each term.
Fall: Tennyson and Browning; winter: Arnold, the pre-Raphaelites, Swinburne, and others; spring: Morris, Thomson, Thompson, Hopkins, and others. Cadbury, Moll.
Eng 470, 471, 472. Nineteenth-Century Prose. (G) 3 hours each term.
Main currents of thought as reflected in Carlyle, Mill, Newman, Ruskin, Huxley, Arnold, Pater. Moore.
Eng 477, 478, 479. Nineteenth-Century American Literature. (G) 3 hours each term.
An intensive study of the American literary tradition. Fall: the beginnings of national literature ; winter : transcendentalism and anti-transcendentalism; spring : realism and naturalism. Cross, Wegelin.
Eng 481, 482, 483. Major American Writers. (G) 3 hours each term.
Intensive study of two or three major authors each term, such as Hawthorne,
Emerson, Whitman, Melville, James, Twain, Dickinson, Frost, Emerson, Whitman, Melville, James, Twain, Dickinson, Frost, Eliot, Hemingway, Faulkner. W. Handy.
Eng 487. Yeats and Joyce. (G) 3 hours.
The principal works of Yeats and Joyce, considered against the background of the Irish Renaissance. J. C. Sherwood
Eng 488. Literary Analysis for Teachers. (g) 3 hours.
For students interested in teaching high-school English. Training in comprehension and analysis of fiction, poetry, and drama from English and American literature. Recommended for prospective high-school teachers. Bartel.

Eng 491. History of the English Language. (g) 3 hours.
A general view of modern English vocabulary, grammar, pronunciation, and spelling. Recommended for students preparing for the teaching of English in the secondary schools. Willard.
Eng 492. Modern English Grammar. (g) 3 hours
Comprehensive study of the grammar of modern English, for prospective teachers of English; examination of traditional, structural, and transformational theories. Willard.

## GRADUATE COURSES

*Eng 501. Research. Hours to be arranged.
*Eng 503. Thesis. Hours to be arranged.
Eng 505. Reading and Conference. Hours to be arranged.
Eng 507. Seminar. Hours to be arranged.
Eng 511, 512, 513. Old English. 3 hours each term.
Linguistic study; selected readings in prose and poetry, including entire Beo. wulf. Brodeur, S. Greenfield.
Eng 514, 515, 516. Old Icelandic. 3 hours each term.
Linguistics; selected readings in the sagas, skaldic poetry, and the Elder Edda. Aho.
Eng 517. Middle English. 3 hours.
The English language from the time of the Norman Conquest to the early modern period; dialectical differences. Di Pasquale.
Eng 518. Chaucer's Troilus and Criseyde. 3 hours.
Detailed study of the poem, its sources, and its influence. Di Pasquale, S. Greenfield.
Eng 519. The Pearl Poet. 3 hours.
Detailed study of Pearl and Gazvain; collateral readings in dream visions and romances. Di Pasquale, S. Greenfield.
Eng 520, 521, 522. History and Structure of the English Language. 3 hours each term.
Covers the same features of the language as Eng 491, but with a more detailed consideration of historical background and recent theories. Fall: meaning and vocabulary ; winter: pronunciation and spelling; spring : grammar and usage. Willard.
Eng 530, 531, 532. Shakespeare. 3 hours each term.
Fall: representative comedies of Shakespeare's early, middle, and late periods; winter : historical plays; spring : tragedies. Thelma Greenfield, McNeir.
Eng 540. Problems and Methods of Literary Study. 3 hours fall.
Bibliography and the methods of literary research as an introduction to graduate work. Required for graduate students in English. Cadbury, Svendsen.
Eng 585. Modern English Literary Criticism. 3 hours.
British and American critical theory and practice, 1900 to the present. Forms a year sequence with AL 586, 587. Weatherhead.
Eng 588, 589. Modern Poetry. 3 hours each term.
Fall: British poetry from Hopkins to the present ; winter: American poetry from the imagists to the present. Weatherhead.
Eng 590, 591, 592. Modern Fiction. 3 hours each term.
Major tendencies in the fiction of the past hundred years. Fall: the rise and development of realism; winter : naturalism; spring : postnaturalism. Wegelin

* No-grade course.


## COURSES OFFERED ONLY IN SUMMER SESSIONS

Eng 423, 424. Types of Prose Fiction. (G) 3 hours each term.
Eng 508. Workshop. Hours to be arranged.

## Writing

The Department of English offers required and elective courses in writing for all University students, to help them develop an ability to express themselves clearly in good English.

Undergraduate English majors may plan a program emphasizing creative writing ; students planning to emphasize creative writing are advised to complete at least 6 term hours of $\mathrm{Wr}_{r} 221,222,223$. The department also offers a graduate program in creative writing, leading to the M.A. or M.F.A. degree.

English Composition (Wr 121, 122, 123) is a freshman sequence required of all students in the University; each term's work must be taken in its sequential order. A student who demonstrates, through examination, that his writing ability meets the standard aimed at in English Composition may be excused from all or part of this required sequence. Students who do superior work in the first two terms of English Composition may be permitted to substitute Wr 224, Wr 226, or Wr 227 for Wr 123.

Students whose placement examination indicates inadequate preparation may not register for English Composition until they either (1) pass Corrective English (Wr 10), offered through the Division of Continuing Education of the State System of Higher Education, or (2) improve their writing proficiency by private study and achieve a satisfactory score on a second English placement examination. Students failing to pass this second examination must then pass Corrective English (Wr 10) before they may register for English Composition.

## LOWER-DIVISION COURSES

Wr 97, 98. English as a Second Language. 3 hours each term.
Composition for students whose native language is not English. Admission to Wr 98 only on recommendation of instructor. Ray.
Wr 121, 122, 123. English Composition. 3 hours any term.
The fundamentals of English composition; frequent written themes. Special attention to correctness in fundamentals and to the organization of papers. Love, staff.
Wr 221, 222, 223. Introduction to Imaginative Writing. 3 hours each term. An introductory sequence for students interested in the techniques of writing and in the development of a critical appreciation of the art of writing in its varied forms. Fall: general consideration of style; winter and spring: criticism, essential of ine short story writing. Prerequisite: consent Swanson, Tudor.
Wr 224. Business and Professional Correspondence. 3 hours.
Study of modern practices in business correspondence, primarily for students of business administration. Analysis and writing of the principal types of correspondence. Prerequisite: Wr 121, 122, 123. Kittoe.
Wr 226. Expository Writing. 3 hours Practice in various forms of expository writing. Soehren, staff.
Wr 227. Scientific and Technical Writing. 3 hours.
Practice in scientific and technical expository writing. Emphasis on the organization, form, and style of scientific, technical, and professional reports, articles, abstracts, summaries, memoranda, and correspondence. Kittoe.

Wr 231, 232. Composition Tutorial. 1 hour each term.
Tutorial instruction in English composition for students in the Honors College. Staff.

## UPPER-DIVISION COURSES

Wr 316. Advanced Expository Writing. 3 hours. Soehren.
Wr 321, 322, 323. Play Writing. 3 hours each term.
Creative experiment in the writing of plays, with incidental study of models. Analysis and discussion of student work. Prerequisite: consent of instructor.
Wr 324, 325, 326. Short-Story Writing. 3 hours each term.
For students interested in creative writing or in professional writing for magazines. Prerequisite : consent of instructor. Karchmer, Kiely, Salisbury.
Wr 341, 342, 343. Poetry Writing. 3 hours each term.
Verse writing; study of various verse forms as media of expression. Analysis of class work. Prerequisite: consent of instructor. Salisbury.
Wr 404. Writing and Conference. Hours to be arranged.
Wr 451, 452, 453. Projects in Writing. 3 hours each term.
For students who desire advanced instruction and practice in writing short stories, novels, television dramas, nonfiction, etc. Prerequisite : consent of in structor. Karchmer, Kiely, Salisbury.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Wr 411. English Composition for Teachers. (g) 3 hours.
For students planning to teach English in high school. Practice in writing and a review of the rules of composition. Recommended for satisfaction of the high-school teaching requirement in English. Aly, Kitzhaber.
Wr 420, 421, 422. Novel Writing. (G) 3 hours each terms
Designed to provide apprentice training in writing of novels, and to develop a critical grasp of fiction problems. Sustained work on a writing project continued through the year. Individual assigned readings. Prerequisite: consent of instructor. Kiely.
Wr 430, 431, 432. Senior Creative Writing. 3 hours each term.
An advanced sequence in short story, poetry, and playwriting for seniors Prerequisites: consent of instructor and nine hours of creative writing at 300 or 400 level. Karchmer, Salisbury.
Sp 464, 465, 466. History of the Theater. (G) 3 hours each term.
For description, see page 242. Cutler.
Wr 494. Theory of Fiction Writing. (G) 3 hours.
Introduction to literary theory and its application to imaginative writing Designed for M.A. and M.F.A. candidates in writing, but open to others. Karchmer, Salisbury.

GRADUATE COURSES
*Wr 503. Thesis. Hours to be arranged.
Wr 504. Writing and Conference. Hours to be arranged.
Wr 530, 531, 5:2. Graduate Creative Writing. 3 hours each term.
A graduate level sequence for M.A. and M.F.A. candidates interested in forms other than the novel: short story, poetry, playwriting. Prerequisites: of the instructor. Karchmer, Salisbury. of the instructor. Karchmer, Salisbury.
Sp 511. Eighteenth-Century Rhetorical Theory. 3 hours.
For description, see page 238. Cohen.

[^24]$S_{p} 551,552,553$. Theory of Dramatic Production. 3 hours each term. For description, see page 243. Robinson.

## COURSE OFFERED ONLY IN EXTENSION

Wr 10. Corrective English. No credit.

## General Arts and Letters

THE CURRICULUM IN GENERAL ARTS AND LETTERS is designed for students who wish to build a progran of general studies around a core of literature. The work of the first two years serves as an introduction to the main aspects of Western culture. In the last two years the more intensive study of the history of ideas, of literary movements, and of art forms serves to interpret modern trends in civilization.

The curriculum is administered by a committee. Dr. Frederick M. Combellack, professor of Greek literature, is chairman of the committee and adviser of majors in general arts and letters.

The major in general arts and letters leads to the Bachelor of Arts degree. The following courses are required:

Lower Division. (1) Literature (Honors College) (AL 101, 102, 103), or Worid Literature (Eng 107, 108, 109), or Survey of English Literature (Eng 101, 102, 103) , or Introduction to Literature (Eng 104, 105, 106), or any sequence in foreign literature which has a prerequisite of two years (or equivalent) of foreign language in college. (2) Shakespeare (Eng 201, 202, 203), or Survey of the Visual Arts (ArH 201, 202, 203), or History of Western Art (ArH 204, 205, 206), or Introduction to Music and Its Literature (Mus 201, 202, 203). (3) At least one year of work in a foreign language beyond the first-year college level. (4) One of the following sequences in history: History of Western Civilization (Hst 101, 202, 103) ; History (Honors College) (Hst 107, 108, 109) ; English History (Hst 304, 305, 306).

Upper Division. (1) Literature of the Ancient World (AL 304, 305, 306). (2) Dante and His Times (AL 477, 478, 479). (3) One of the following sequences in philosophy: History of Philosophy (Phl 301, 302, 303) ; Philosophy in Literature (Phl 431, 432). (4) History of Literary Criticism (Eng 414, 415, 416) or Aesthetics (Phl 441, 442, 443).

In addition the student must complete four upper-division year sequences, each totaling at least 6 term hours, chosen from the departments of the College of Liberal Arts that offer majors; however, two of the sequences may be chosen from sequences in the history of art and music. If a recuired course is not offered in the student's senior year, he may, with the consent of the adviser, substitute another upper-division sequence in the same getneral field of study.

The student's program of study should form an integrated whole. The electives should support the objectives of this program.

For interdepartmental courses in general arts and letters, see pages 134-135.
Honors. See Honors College, pages 129 ff.

## General Science

THE CURRICULUM IN GENERAL SCIENCE is intended for students who wish to build a program of cultural studies around a central interest in science as an
aspect of civilization, for students preparing for professional careers in science (such as medical research) for whom a departmental science major may be too narrow and highly specialized, and for prospective science teachers. The standard three-year premedical or predental curriculum, followed by a year of work in a medical school or two years of work in a dental school, meets all of the requirements for the bachelor's degree in general science.

The general science major leads to the Bachelor of Arts or Bachelor of Science degree. The special requirements are : (1) Four one-year sequences, numbered 100-120 or 200-220, one in each of four sciences selected from biology, chemistry, geology, mathematics, and physics; (2) a minimum of 24 upper-division hours in the sciences in which lower-division sequences have been taken, including not less than 9 term hours in each of two sciences.

For interdepartmental courses in general science, see page 135
Secondary-School Teaching of General Science. For certification as a teacher of general science in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

The University's major program in general science satisfies these requirements. For further information, the student should consult the adviser of general science majors.

## General Social Science

THE PROGRAM IN GENERAL SOCIAL SCIENCE includes a series of courses of broad interdepartmental scope and a major curriculum in general social science leading to the bachelor's degree.

The curriculum in general social science is designed for students who wish broad cultural training, and for prospective teachers for whom a departmental major may be too highly specialized. In addition to satisfying the general University requirements, students following this program must take a minimum of 72 hours in social science courses. This work must include four lower-division year sequences, one in each of four of the following fields: anthropology, economics, geography, history, philosophy, political science, psychology, religion, sociology. Introduction to the Social Sciences (Honors College) (SSc 201, 202, 203) may be substituted for any one of the four required sequences. The upper-division work must include two one-year sequences (not less than 18 hours) in one social science department, and one one-year sequence (not less than 9 hours) in each of two other social science departments.

For interdepartmental courses in general social science, see page 136
Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregoul high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in general social science must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) 36 term hours of work in one field ; (2) 18 term hours in history (including one upper-division sequence); (3) a 9 -hour sequence in each of two additional fields; (4) at least one course in a fifth field. If history is chosen for the 26 hour concentration, the student must complete 18 hours in one of the two additional fields ( 3 , above), including 9 hours in upper-division courses.

For further information, the student should consult the adviser of general social science majors.

Honors. See Honors College, pages 129 ff .

## Geography

Professors: E. T. Price (department head), S. N. Dicken, C. P. Patton, W. J. Talbot.
Associate Professors: G. E. Martin, C. L. Johannessen,* E. G. Smith. Assistant Professor: A. W. Urguhart.
Instructor: D. Gade.
Fellows: C. Martinson, Janf. Pyle, M. Wilson, G. Schill.
Assistants: J. Anderson, B. Bechtol, T. Bell, R. Hatton, J. Houghton, J. Jordan, E. McIntire, K. Ruddle.

THE DEPARTMENT OF GEOGRAPHY serves: (1) professional major students; (2) nonprofessional major students who wish to build a broad cultural education around a central interest in geography; and (3) students majoring in other fields who wish some acquaintance with the contribution of geography to the understanding of the world and its problems.

The department offers work for major students in four fields of specialization : (1) cultural geography, including economic, urban, and population geography ; (2) physical geography, including climatology and geomorphology; (3) regional geography; and (4) techniques and methodology, including cartography, the interpretation of aerial photographs, and field geography.

Major Curriculum in Geography. A total of 45 term hours in geography courses, including 36 hours in upper-division courses, is required for a major in geography. It is recommended that the student limit his major work to approximately 54 term hours and elect work in such related fields as anthropology, biology, economics, geology, history, planning, political science, and sociology.

The student's work in geography must include a minimum of 9 term hours in each of the following four groups: (1) physical geography-Geog 105, Geog 481, 482, 483; (2) cultural geography-Geog 107, Geog 433, Geog 434, Geog 435, Geog 491, 492, 493; (3) regional geography-Geog 106, Geog 201, 202, 203, Geog 301, Geog 302, 303, Geog 451, 452, 453, Geog 461, 462, 463, Geog 471, 472, 473; (4) geographic techniques-Geog 407, Geog 421, 422, 423, Geog 484, Geog 485, 486

For the B.S. degree, the student must complete 21 hours of additional work in science, including a 9 -hour upper-division sequence requiring a prerequisite.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in geography must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GFA or higher: (1) work in geography required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional

* On sabbatical leave 1965-66.
fields. The program must include a minimum of 36 term hours in upper-division courses

For further information, the student should consult the member of the geography faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ft .
Graduate Study. The department offers graduate work leading to the M.A. and Ph.D. degrees. To rualify for the master's degree the student must complete successfully 45 term hours of graduate work, of which 36 hours must be in the field of geography. All master's candidates must complete the following courses or their equivalent: Geog 421, 422, 423; Geog 481, 482, 483; Geog 484 ; Geog 485, 486 ; Geog 491, 492, 493. Nine term hours in seminars (Geog 507), including work in both physical and cultural geography, are required for candidates for the M.A. degree. For general require:nents for graduate degrees see pp 112 ff .

## LOWER-DIVISION COURSES

Geog 105, 106, 107. Introductory Geography. 3 hours each term.
A general introduction to the field of geography, in sequence as follows:
Geog 105, physical geography; Geog 106, regional survey of the world; Geog 107, cultural geography.
Geog 201, 202, 203. World Regional Geography. 3 hours each term.
Physical, political, and regional economic geography. Fall: Europe; winter : Latin America; spring : Asia.

## UPPER-DIVISION COURSES

Geog 301. Geography of Oregon. 3 hours fall.
Physical and cultural geography of Oregon. Dicken.
Geog 302, 303. Geography of North America. 3 hours each term, winter and spring.
Physical and cultural geography of the North American continent north of
Mexico. Winter: western United States and western Canada; spring : eastern United States and eastern Canada. Dicken.
Geog 401. Research. Hours to be arranged.
Geog 405. Reading and Conference. Hours to be arranged.
Geog 407. Seminar. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Geog 421, 422, 423. Geographic Field Methods. (G) 2 hours each term.
Research techniques in geography applied to special areas and problems. First term : introduction to tools and techniques of geographic field investiga tion; second term : research design, use of air photographs, maps, and other documents; third term: data gathering and analysis, report writing. Prerequisite : 9 hours of geography. Johannessen, Martin, Price.
Geog 433. Political Geography. (G) 3 hours.
Impact of political institutions upon the landscape; resources and political decisions; relation of formal and informal groups to political areas.
Geog 434. Economic Geography. (G) 3 hours.
Location factors in primary and secondary industries, and the distribution of these industries over the earth. Prerequisite: 6 hours in lower-division geography courses or consent of the instructor.
Geog 435. Urban Geography. (G) 3 hours.
World distribution of great cities; urban patterns, forms, and functions; systems of urban land classification; forces affecting urban land use; geographic aspects of city planning. Prerequisite: 6 hours in lower-division
geography courses or consent of instructor.

Geog 451. Eastern and Southeast Asia. (G) 3 hours.
Geog 452. Southwestern Asia. (G) 3 hours.
Geog 453. Africa. (G) 3 hours.
Physical and cultural processes that have shaped the landscapes of the AfroAsian world.

Geog 461. Andean America. (G) 3 hours.
Geog 462. Brazil and Argentina. (G) 3 hours.
Geog 463. Middle America. (G) 3 hours.
Physical and cultural processes that have shaped the landscapes of Latin America.

Geog 471. Atlantic and Mediterranean Europe. (G) 3 hours.
Geog 472. Central and Eastern Europe. (G) 3 hours.
Geog 473. Soviet Union. (G) 3 hours.
Physical and cultural processes that have shaped the landscapes of Europe and the Soviet Union.
Geog 481, 482, 483. Physical Geography. (G) 5 hours each term, fall and winter; 3 hours spring.
Systematic study of the elements of the physical landscape. Fall : geomor-
phology ; winter: climatology; spring: biogeography. Prerequisite: 9 hours of geography. Urquhart, Patton, Johannessen.
Geog 484. Interpretation of Aerial Photographs. (G) 3 hours.
Introduction to the use and interpretation of map and air photographs. Dicken.
Geog 485, 486. Cartography. (G) 3 hours each term.
Study of maps; introduction to map projections; the map base; map content and design ; map interpretation. Prerequisite: 9 hours of geography. Johannessen, Patton
Geog 491, 492, 493. Cultural Geography. (G) 3 hours each term.
Systematic study of the elements of the cultural landscape; origin and spread of ways of living ; treatment of culture by geographers. Prerequisite: 9 hours of geography.

## graduate courses

*Geog 501. Research. Hours to be arranged.
*Geog 502. Supervised College Teaching. Hours to be arranged.
*Geog 503. Thesis. Hours to be arranged.
Geog 505. Reading and Conference. Hours to be arranged.
Geog 507. Seminar. Hours to be arranged.
Geomorphology. Dicken, Urquhart.
Climatology. Patton.
Biogeography. Johannessen.
Urban Geography
Rural Settlement. Martin, Price.
Historical Geography. Dicken.
Middle America. Johannessen.
Andean America. Martin.
Andean America.
Europe. Patton.
Soviet Union.
Geog 555. History of Geographic Thought. 3 hours.
Development of concepts of the earth and of man's relation to it; ends and means of geographic study.

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## Geology

Professors: L. W. Staples (department head), E. M. Baldwin, J. A. Shotwell, J. C. Stuvall, W. L. YoungQuist.

Associate Professors: E. H. Lund, A. R. McBirney.
Assistant Professors: G. T. Benson, Sam Boggs, Jr., M. A. Kays, L. R. KittleMAN.
Fellows: C. F. Forbes, D. H. Gardner, P. D. Hess, R. L. Lent, M. J. Switek. Assistants: J. M. Armentrout, T. L. Bezzerides, A. H. Brenaman, M. M. Godchaux, M. A. Heinrich, C. J. Hickman, J. R. Illian, R. R. Johnson, M. L. Klohn, P. A. Lydon, L. B. Magoon, L. G. Mossel, E. B. Nelson,
B. L. Stepp, R. L. Stewart, J. K. Trigger.

THE DEPARTMENT OF GEOLOGY serves three classes of students: (1) professional major students; (2) nonprofessional major students who wish to build a broad cultural education around a central interest in geology ; and (3) students majoring in other fields who wish some acquaintance with the contributions of geological studies to the understanding of the world and its problems.

High-school students planning to major in geology at the University are advised to include in their high-school course: algebra, plane geometry, trigonometry, geography, science (physics, chemistry, or general science).

Major Curriculum in Geology. The following courses are required for an undergraduate major in geology:

Lower Division. General Geology (Geol 101, 102, 103) ; Introductory College Mathematics (Mth 104, 105, 106) ; General Chemistry (Ch 104, 105, 106, Ch 108 , 109) ; General Physics (Ph 201, 202, 203, Ph 204, 205, 206).

Upper Division. Mineralogy (Geol 311, 312, 313) ; Introduction to Paleontology (Geol 331, 332) ; Principles of Stratigraphy (Geol 392) ; Field Methods (Geol 393) ; Field Geology (Geol 406) ; Seminar (Geol 407), three terms; Economic Geology (Geol 421, 422, 423) ; Lithology (Geol 411) or Petrology and Petrography (Geol 414, 415, 416) ; Structural Geology (Geol 491).

Geophysics-Geochemistry Option. Undergraduate majors may elect an option in geophysics-geochemistry, in preparation for graduate work in this or other fields of quantitative geology. The requirements for this option differ from the requirements of the regular major program in geology in the following respects: (1) Calculus with Analytical Geometry (Mth 200, 201, 202) or Analytic Geometry and Calculus (Mth 204, 205, 206) is required; (2) either Advanced General Physics ( $\mathrm{Ph} 320,321,322$ ) or Quantitative Analysis (Ch 320) is required; (3) Principles of Economics (Ec 201, 202, 203), Vertebrate Paleontology (Geol 333), and Economic Geology (Geol 421, 422, 423) are not required.

Paleontology Option. Undergraduate majors may elect an option in paleontology. The requirements for this option differ from the requirements of the major curriculum in geology in the following respects: (1) Principles of Economics, and Economic Geology are not required ; (2) General Biology (Bi 101, 102, 103) is required, and Invertebrate Zoology ( $\mathrm{Bi} 461,462$ ), offered at the Institute of Marine Biology, may be substituted for Field Geology ; (3) an additional 12 term hours of work must be elected from: Comparative Anatomy ( Bi 355 ), Principles of Ecology (Bi 471, 472, 473), Historical Biogeography (Bi 491, 492, 493), Micropaleontology (Geol 440).

Honors. See Honors College, pages 129 ff .

Graduate Study. The department offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. A satisfactory rating on a Graduate Record Examination and on a qualifying examination are required for admission to candidacy for a graduate degree. All candidates are required to write a thesis. Suggested minor fields are : chemistry, physics, biology, or mathematics.

Facilities. The Condon Museum of Geology contains extensive collections of rocks, minerals, and fossils; its resources are supplemented by working collections for classroom and laboratory use. The varied geological terrain of the state of Oregon offers an exceptionally interesting field laboratory. Field trips are conducted during the regular academic year. Field camps in various parts of the state are operated during the summer months.

Center for Volcanology. The Department of Geology includes a Center for Volcanology ; Dr. A. R. McBirney, associate professor of geology, is director. Research and graduate instruction are conducted in several fields dealing with the products and processes of volcanism. The state of Oregon possesses a variety of volcanic features, providing exceptional opportunities for study of volcanic rocks and structures.

## LOWER-DIVISION COURSES

Geol 101, 102, 103. General Geology. 4 hours each term.
Earth materials, processes, and forms; formation of economic mineral deposits ; the main events in earth history. Lectures, laboratory, and field trips.
Geol 291. Rocks and Minerals. 3 hours.
Common minerals and rocks; origin, lore, and properties of precious, semi-
precious, and ornamental stones; economically important rocks and minerals.
2 lectures; 1 three-hour laboratory period.

## Geol 292. Elementary Areal Geology. 3 hours.

A study of regional geology primarily for nonmajors; areal distribution of sedimentary, igneous, and metamorphic rocks in Oregon. Field studies of selected areas, with emphasis on the relationships between rock type, structure, and topography. 1 lecture; 6 hours field work. Prerequisite: Geol 101, 102, 103. Stovall.

## UPPER-DIVISION COURSES

Geol 301, 302, 303. Geologic History of Life. 3 hours each term.
Fall : origins and early history of life, as revealed by the fossil remains of animals and plants; winter: geologic history of vertebrates; spring: geologic history of the mammals. Intended for nonmajor juniors and seniors. Stovall.
Geol 311, 312, 313. Mineralogy. 4 hours each term.
Descriptive and determinative mineralogy ; geometric and X-ray crystallog-
raphy; optical mineralogy. Prerequisite: $\mathrm{Ch} 104,105,106 ; \mathrm{Ch} 108,109$; Geol 101, 102. Staples.
Geol 331, 332, 333. Introduction to Paleontology. 3 hours each term.
Structure and evolution of invertebrates and vertebrates, and their distribution in geologic time. Prerequisite : Geol 103. Youngquist, Baldwin.
Geol 352. Geology of Oregon. 3 hours.
Lectures, assigned reading, and field trips, to acquaint the student with some of the salient features of the geology of the state. Baldwin.
Geol 392. Principles of Stratigraphy. 3 hours.
Genesis and subsequent history of stratified rocks; sedimentation, induration, weathering; the methods of correlating such formations. Prerequisite: Geol 101, 102, 103. Baldwin.

## Geol 393. Field Methods. 3 hours.

Elementary topographic mapping; use of field instruments; field mapping of selected areas. Boggs.
Geol 401. Research. Hours to be arranged
Geol 405. Reading and Conference. Hours to be arranged.
Geol 406. Field Geology. Hours to be arranged.
Prerequisite : Geol 393, HEc 250, consent of instructor. Staples.
Geol 407. Seminar. Hours to be arranged.
Current Geological Literature.
Classical Geological Literature.
Engineering Geology.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Geol 411. Lithology. (g) 3 hours.
The origin, occurrence, and classification of the principal rock types. Laboratory examination and classification of rocks in hand specimens. 2 lectures; 1 laboratory period. Prerequisite : Geol 312. Lund.
Geol 414, 415, 416. Petrology and Petrography. (G) 4 hours each term.
Origins, occurrences, and classifications of rocks. Laboratory work in both megascopic and microscopic examination of rocks. Prerequisite: $\mathrm{Ph} 201,202$, 203. Geol 311, 312, 313. Lund.

Geol 421, 422, 423. Economic Geology. (G) 3 hours each term.
The general principles of the formation of metallic and nonmetallic economic geologic deposits; principal economic deposits, domestic and foreign. 2 lectures; 1 laboratory period. Prerequisite : Ec 201, 202, 203; Geol 311, 312, 313. Kays.
Geol 440. Micropaleontology. (G) 3 hours.
Survey of microfossil groups; stratigraphic distribution; methods of separation from matrices; classification. 1 lecture ; 2 laboratory periods. Prerequisite: Geol 331, 332. Youngquist.
Geol 451. Pacific Coast Geology. (G) 3 hours.
The general geology of the west coast of the United States and Canada from Alaska to southern California; special problems of the region. Prerequisite Geol 101, 102, 103 ; senior or graduate standing. Baldwin
Geol 473. Photogeology. (G) 3 hours.
Geologic interpretation of stereographic pairs of vertical aerial photographs. 2 lectures, 1 three-hour laboratory period. Prerequisite: Geol 101, 102, 103. Benson.
Geol 491. Structural Geology. (G) 4 hours.
Origin, interpretation, and mapping of major and minor geologic structures.
3 lectures, 1 laboratory period. Prerequisite 3 lectures, 1 laboratory period. Prerequisite : Geol 101, 102. Benson.
Geol 493. Petroleum Geology. (G) 3 hours.
Origin and accumulation of petroleum, methods of locating oil and gas organization of exploratory programs, current economic and political factors aftecting petroleum industry. 3 lectures. Prerequisite: Geol 392, Geol 491 Youngquist.

## GRADUATE COURSES

*Geol 501. Research. Hours to be arranged.
*Geol 503. Thesis. Hours to be arranged.
Geol 505. Reading and Conference. Hours to be arranged.
Geol 506. Advanced Field Geology. Hours to be arranged.

Geol 507. Seminar. Hours to be arranged
Regional geologic studies.
Geol 511, 512, 513. Advanced Microscopy and Instrumentation. 4 hours each term.
Microtechniques in connection with the petrographic microscope, goniometer, X-ray diffractometer, and spectroscope; chemical microscopy; photomicrography. Prerequisite: Geol 313. Staples, Kays.
Geol 514, 515, 516. Advanced Petrology and Petrography. 3 hours each term. Advanced petrographic methods and study of topics related to the origin and genetic relations of igneous and metamorphic rocks; microscopic examination of rock suites selected for study of petrologic principles and problems. Prerequisite: Geol 414, 415, 416. McBirney.
Geol 520. Advanced Economic Geology. 3 hours.
Theories of the origin of mineral deposits; study of examples illustrating general principles. Student reports on selected types of deposits. Review of current literature. Prerequisite: Geol 421, 422, 423. Kays.

Geol 523. Advanced Regional Stratigraphy. 3 hours. Stratigraphic framework of the United States and other countries. Prerequisite: Geol 392. Baldwin

Geol 524. Advanced Sedimentary Petrography. 3 hours.
Application of mechanical, optical, chemical, X-ray, and other techniques to the study of sediments and sedimentary rocks. Prerequisite: Geol 392, Geol 414. Boggs.

Geol 525. Advanced Sedimentation. 3 hours.
Genesis, transportation, and deposition of sediments; geologic processes involved in formation of sedimentary rocks. Prerequisite: Geol 524. Boggs

Geol 531, 532, 533. Advanced Paleontology. 3 hours each term.
Fall: scope and nature of paleontologic literature, procedures in taxonomy, current paleontologic research; winter: history and development of evolution studies and applications; spring : detailed study of selected fossil groups. Prerequisite: Geol 331, 332. Youngquist.
Geol 551. Advanced Physical Geology. 3 hours.
Comprehensive appraisal of earth materials and processes, based on the study of original sources in classical and current literature of geology.
Geol $561,562,563$. Geochemistry and Geophysics. 3 hours each term. Application of physico-chemical principles to geologic processes on and within the earth; special emphasis on thermodynamics and its application to geologic problems; methods of geophysics for the determination of the nature of the interior of the earth. Prerequisite: calculus and physical chemistry, or consent of instructor; physical chemistry may be taken concurrently. Kays.
Geol 591, 592, 593. Advanced Structural Geology. 3 hours each term. Theories of the origin of geologic structures observed in deformed rocks. Comparative study and classification of structures; theoretical and experimental studies. Prerequisite: Geol 491. Benson.

COURSES OFFERED ONLY IN SUMMER SESSIONS
Geol 455. Studies in Physical Geology. (g) 3 hours.
Geol 456. Regional Geology of North America. (g) 3 hours.

## History

Professors: Earl Pomeroy (department head), E. R. Bingham, Quirinus Breen (emeritus), P. S. Dull, V. R. Lorwin, K. W. Porter, W. O. Shanahan, R. W. Smith, L. R. Sorenson, W. H. Stephenson.
Associate Professors: Gustave Alef,* W. S. Hanna, S. A. Pierson.
Assistant Professors : R. F. Birn, P. S. Holbo, $\dagger$ R. G. Lang, J. W. Perrin, R. L. Peterson, R. A. Rosenstone, Fred Weinstein, J. E. Woodham.
Instructor: R. S. Dill.
Lecturer: G. R. Falconeri.
Associate: Mabel E. McClain (emeritus).
Fellows: S. B. Avery, M. A. Burkholder, R. A. Gates, Burns Raushenbush. Assistants: A. S. Baker, D. K. Buse, D. S. Chandler, G. W. Chase, J. F. Coursen, A. E. Curtis, J. S. Cuthbert, E. J. Dedrick, M. J. Deely, J. C. Doerr, D. B. Epstein, R. W. Etulain, R. J. Fahl, E. B. Gastony, R. C. Frey, W. T. Hall, T. E. Hogan, C. R. Jensen, S. E. Kammerman, N. L. Kunze, C. G. Lindiloom, F. D. Mahar, H. J. Mashinter, C. J. McCurry, P. G. Merriam, D. A. Plant, Kurt Rees, M. S. Rightmire, C. E. Roberts,
J. F. Scheck, S. A. Sexauer, P. J. Simpson, C. J. Speck, C. E. Thomason,
C. S. Thorne.

THE DEPARTMENT OF HISTORY offers instruction in American, European, and East Asian history, and major programs designed for general education and in preparation for public school teaching and for graduate study and research.

Requirements for the Bachelor's Degree. For a bachelor's degree with a major in history, a student must complete a balanced program approved by his departmental adviser. Specific requirements are as follows:
(1) Satisfaction of the University requirement for the B.A. degree.
(2) Forty-two term hours in history courses, of which 24 must be upperdivision, including at least 9 hours of 400 -level courses ( 15 upper-division hours must be taken at the University of Oregon).
(3) History of Western Civilization (Hst 101, 102, 103), or History (Honors College) (Hst 107, 108, 109), or, with consent of adviser, 15 hours of upper-division European history, including courses both before and after 1600.
(4) A year sequence in United States history.
(5) Not less than two terms ( 6 hours) of upper-division courses in each of two fields selected from the following: (a) Europe before 1600, (b) Europe after 1600, (c) United States, Far East, or Latin America.
(6) At least one term of Seminar (Hst 407) or Colloquium (Hst 408).
(7) A 2.25 grade-point average in history courses.

History majors should take work in allied fields that will contribute to a well-balanced liberal education. The department recommends work in foreign language and literature extending, if possible, beyond the second-year level and leading to a thorough reading knowledge of a language.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

[^26]To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in history must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher : (1) work in history required for a major. (2) 27 term hours in a second field; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult a member of the history faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff.
Graduate Work. The department offers graduate instruction leading to the degrees of Master of Arts and Doctor of Philosophy. For requirements for graduate degrees, see Gradcate School, pages 112 ff . A detailed statement of departmental requirements may be obtained in the department office.

## LOWER-DIVISFON COURSES

Hst 101, 102, 103. History of Western Civilization. 3 hours each term.
Origins and development of Western civilization from ancient times to the present. Alef, Birn, Perrin, Smith, Sorenson.
Hst 107, 108, 109. History (Honors College). 3 hours each term.
Significant events, ideas, and institutions in the development of Western civilization. Alef, Birn, Dill, Perrin, Pierson, Shanahan.
Hst 201, 202, 203. History of the United States. 3 hours each term.
From colonial times to the present. Special section for Honors College students. Bingham, Hanna, Holbo, Peterson, Porter, Stephenson.

## UPPER-DIVISION COURSES

Hst $301,302,303$. Europe since 1789. 3 hours each term.
Political, social, economic, and cultural trends from the French Revolution to the present. Fall: 1789 to 1870; winter: 1870 to 1918; spring: 1918 to the present. Pierson, Shanahan.
Hst 304, 305, 306. English History. 3 hours each term.
A general survey, covering political, economic, social, intellectual, and religious developments. Lang, Smith.
Hst $350,351,352$. Hispanic America. 3 hours each term.
A survey of Hispanic America with emphasis on political and cultural history, the Spanish colonial period; the wars for independence and the early republican years; internal development of the modern states and inter-American relations. Holbo, Woodham.
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 Ásiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Dull, Falconeri.
Hst 403. Thesis. Hours to be arranged.
Hst 405. Reading and Conference. Hours to be arranged.
Hst 407. Seminar. Hours to be arranged.
Junior Honors Seminar.
Senior Seminar.
Hst 408. Senior Colloquium in American History. 3 hours each term.
Study of significant historical writings from colonial times to the present, with emphasis on methods and interpretations. Prerequisite : consent of instructor. Stephenson.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Hst 411. History of Greece. (G) 3 hours fall.
Political, social, and cultural history of the Hellenic world from the Mycenaeans to Alexander the Great. Dill.
Hst 412, 413. History of Rome. (G) 3 hours each term, winter and spring. Winter : history of Rome from its earliest beginnings to the end of the Republic; spring: the period of the Empire. Dill.
Hst 420. Historical Method. (G) 3 hours fall.
Introduction to methods of historical research and writing. Shanahan.
Hst 421, 422, 423. Middle Ages. (G) 3 hours each term.
History of Europe from the decline of the Western Roman Empire to the Renaissance. Fall: to the Carolingians; winter: to 1100 ; spring : to 1300 . Perrin.
Hst 424, 425. Early Modern Europe. (G) 3 hours each term.
Political, economic, and cultural history of Europe from the Counter-Reformation to the French Revolution. Europe overseas, the rise of absolutism, the Age of Reason, and enlightened despotism. Birn.
Hst 430, 431. Renaissance. (G) 3 hours each term, fall and winter.
Fall: the renaissance in Italy; winter: the northern Renaissance.
Hst 432. Reformation. (G) 3 hours spring.
The Protestant and the Roman Catholic reforms of the sixteenth century.
Hst 434, 435, 436. Western Institutions and Ideas. (G) 3 hours each term.
Intensive study of selected ideas and institutions that have influenced the history of Western civilization. Prerequisite: a college-level introductory course in European history. Sorenson.
Hst 437, 438. History of Germany. (G) 3 hours each term.
First term: from the death of Frederick the Great (1786) through World War I; second term : the Weimar Repablic, the Nazi era, World War II, and the postwar development of East and West Germany. Shanahan.
Hst 441, 442, 443. History of France. (G) 3 hours each term.
Hst 441 : Old Regime, revolutionary and Napoleonic era, nineteenth century to 1870 ; Hst 442: Third Republic, 1870-1940; Hst 443 : since 1940. Lorwin.
Hst 444, 445. Twentieth-Century Europe. (G) 3 hours each term.
The revolutionary consequences of World War I for society, politics, and the economy; the new democratic governments and the challenge of Bolshevism, Fascism, and Nazism; World War II and its aftermath; the Soviet satellites; rebuilding the European economy. Shanahan.
Hst 447, 448, 449. History of Russia. (G) 3 hours each term.
Fall: the Kievan state and the emergence of Muscovy; winter: creation of the Russian Empire, political, social and economic developments; spring: revolutionary Russia, 1861 to the present. Alef.
Hst 454, 455, 456. Economic History of Modern Europe. (G) 3 hours each
The economic development and economic institutions of modern Eurone. Fall: from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter: late eighteenth century to end of nineteenth century; spring: twentieth century. Lorwin.
Hst 457. The Era of American Sectional Conflict. (G) 3 hours
Forces, events, and persons that contributed to unity and particularism in the United States during the first half of the nineteenth century.
Hst 458. The Era of the Civil War. (G) 3 hours.
Intensive study of the critical decade before the Civil War and of the course of that conflict.

Hst 459. The Era of Reconstruction. (G) 3 hours.
Problems of the tragic era following the Civil War; continuing effects to the end of the nineteenth century.
Hst $460,461,462$. History of American Thought and Culture. (G) 3 hours each term.
Main currents of American intellectual and cultural life from colonial times to the present. Prerequisite: Hst 201, 202, 203 or consent of instructor. Bingham.
Hst 463. History of Canada. (G) 3 hours.
A survey of the growth of Canada from colony to nation, emphasizing the period after confederation. Smith.
Hst 464. History of Mexico. (G) 3 hours.
Political, social, economic and intellectual trends and problems from 1810 to the present. Woodham.
Hst 465. British Empire. (g) 3 hours.
History of the British Empire since 1815 ; colonial nationalism and the development of the Commonwealth. Smith.
Hst 466. Tudor England. (G) 3 hours.
The political, social, economic, and intellectual development of England through the reigns of the Tudor sovereigns, 1485-1603. Lang, Smith.
Hst 468. Victorian England. (G) 3 hours.
Social, political, economic, and intellectual history of England from 1815 to 1900. Smith.

Hst 469. Twentieth-Century England. (G) 3 hours.
Social, political, economic, and intellectual changes in Great Britain in the twentieth century. Smith.
Hst 470, 471. Social Factors in American History. (G) 3 hours each term. Effect of the varied character of the population on American history and culture. First term : national and racial influences; second term: religious factors. Porter.
Hst 473, 474, 475. American Foreign Relations. (G) 3 hours each term. The origins, character, and consequences of American foreign policies from the Revolutionary War to the present. Holbo.
Hst 476, 477. History of the West. (G) 3 hours each term.
The American frontier. First term : the early American frontier; second term : the Great Plains and the Far West. Porter, Pomeroy.
Hst 478. History of the Pacific Northwest. (G) 3 hours.
Detailed study of the building of civilization in the Pacific Northwest. Prerequisite: Hst 201, 202 or consent of instructor. Bingham, Porter.
Hst 479. Forces and Influences in American History. (G) 3 hours.
Geographic influences; influence of the frontier; inheritance and tradition; economic forces; nationalism; sectionalism; manifest destiny; democracy.
Hst 480, 481, 482. The United States in the Twentieth Century. (G) 3 hours each term.
Fall : to 1921 ; winter : 1921-41; spring : since 1941. Pomeroy.
Hst 484, 485, 486. Early History of the American People. (G) 3 hours each term.
From the discovery of America to Washington's administration. Hanna.
Hst 487, 488, 489. American Economic History. (G) 3 hours each term. The economic development of the United States. Peterson.
Hst 494, 495, 496. History of China. (G) 3 hours each term. Fall: from legendary times through the T'ang Dynasty (618-907) ; winter:
from the Sung Dynasty (960-1276) to the "Second Treaty Settlement" of the Manchus in 1860 ; spring: 1860 to the present. Dull, Falconeri.
Hst 497, 498, 499. History of Japan. (G) 3 hours each term. History of Japan, from its beginnings to the present. Dull, Falconeri.

## GRADUATE COURSES

*Hst 501. Research. Hours to be arranged
*Hst 502. Supervised College Teaching. Hours to be arranged.
*Hst 503. Thesis. Hours to be arranged.
Hst 505. Reading and Conference. Hours to be arranged.
Hst 507. Seminar. Hours to be arranged.
Greek and Roman History. Dill
European History. Alef, Birn, Lorwin, Perrin, Pierson, Shanahan, Sorenson European Social and Economic History. Lorwin.
English History. Lang, Smith
American History. Bingham, Hanna, Holbo, Peterson, Pomeroy, Porter, Stephenson.
Latin American History. Woodharn
History of the Far East. Dull, Falconeri.
Historical Theory. Sorenson.
Hst 508. Colloquium. Hours to be arranged.
Roman History. Dill
Middle Ages. Perrin
English Historians. Smith.
Seventeenth-Century England. Lang
Interpretations of American History. Hanna, Porter.
Interpretations of Latin-American History. Woodham.
Japanese History. Dull, Falconeri
Hst 530, 531, 532. European History: Problems and Interpretations. 3 hours each term.
Readings, reports, and group discussions of major trends, problems, and interpretations in modern European history. Hst 530 : Renaissance and Reformation; Hst 531: the seventeenth and eighteenth centuries; Hst 532:1789 to the present. Birn, Lorwin, Pierson, Shanahan.
Hst 591. Japanese Political Evolution since 1912. 3 hours.
Japanese political institutions and ideologies from 1912 to the present, and their relation to domestic and foreign policies. Prerequisite: Hst 497, 498, 499 or consent of instructor. Dull

## COURSES OFFERED ONLY IN SUMMER SESSIONS

Hst 418, 419. Studies in Western Civilization. (g) 3 hours each term. Hst 490. Problems of the Pacific. (g) 3 hours

## Home Economics

Professor: Mabel A. Wood (emeritus).
Assistant Professors: Margaret J. Wiese (department head), Faith Joh nston.
Lois E. Nelson, Aniela E. Pelch, Frances Van Voorhis.
Instructor: Sally L. Hansen.
THE UNIVERSITY offers elective courses in three main areas of home economics : clothing, textiles, and related arts; foods and nutrition; and family life and home administration. The courses are designed to prepare students for better

[^27]home and community living as a part of their liberal education. The University does not offer major work in home economics; in the Oregon State System of Higher Education, major studies in the field are allocated to the School of Home Economics at Oregon State University.

Lower-division instruction in home economics offered at the University of Oregon and at Oregon State University is essentially the same. It is recommended that students intending to major in the field enter the institution where major work is offered at the beginning of their freshman year; they may if they wish, however, spend their freshman and sophomore years at the University of Oregon, and transfer to Oregon State University at the beginning of the junior year, with out loss of credit and with fundamental requirements for upper-division standing fully met.

The foods and clothing laboratories of the Department of Home Economics are designed and equipped in accordance with the best modern standards for instruction in these fields.

Secondary-School Teaching of Home Economics. For certification as a teacher of home economics in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

The University of Oregon offers an undergraduate program which satisfies the state standard, but does not offer the additional subject preparation required for permanent certification after a fifth year of study.

For further information, the student should consult the member of the home economics faculty who serves as adviser for prospective teachers.

## LOWER-DIVISION COURSES

HEc 121, 122, 123. Clothing Construction. 2 hours each term
Principles of clothing construction. HEc 121 : basic skills in use of patterns, fabrics, and equipment. HEc 122: selection, management, and construction, using silk and manmade fibers. HEc 123 : planning and construction of a lined wool suit or coat. It is recommended that the sequence be preceded by HEc $124,125,126$ or taken concurrently.
HEc 124, 125, 126. Clothing Selection. 1 hour any term.
Aesthetic and economic factors in the selection of clothing. HEc 124 : aesthetic principles of line, color and texture. HEc 125 : expression of individuality through clothing. HEC 126: problems of consumer buying of clothing; clothing expenditures of college students and the family.
HEc 127. Textiles. 2 hours any term.
Designed to develop a basic consumer understanding of the characteristics of fibers and fabrics; selection, purchase, and care of fabrics and household linens. Suggested parallel for HEc 121
HEc 222. Family Relationships. 2 hours any term.
Values and goals of modern family life; family roles of men and women; choice of a marriage partner ; adjustment to family life.
HEc 225. Nutrition. 2 hours any term.
Scientific study of foods; choice of foods for the maintenance of health; common nutritional problems; evaluation of nutritional information provided in the mass media.
HEc 226, 227, 228. Foods. 3 hours each term..
Scientific approach to food preparation; nutritional, managerial, and aesthetic aspects of meal planning. 2 recitations; 2 two-hour laboratory periods.
HEc 250. Camp Cookery. 1 hour any term.
Fundamental principles of cookery applied to simple meals in home and camp. 1 three-hour laboratory period. Open to men only.

## UPPER-DIVISION COURSES

HEc 325. Child Care. 3 hours any term
Current concepts of growth and development; prenatal care; behavior and development of the preschool child; the needs of the young child in the family; adult-child relationships.
HEc 331. Home Planning and Furnishing. 3 hours any term
Principles involved in the planning and furnishing of a home in the contemporary world; scientific, aesthetic, and traditional factors.

## HEc 339. Household Management. 3 hours any term.

Management principles applied to home life ; work simplification; choice, use, and care of basic household equipment.
HEc 340. Consumer Problems. 3 hours any term.
Management of the family income; budgeting, use of credit, insurance; intelligent choice in the market; consumer aids; consumer protection.

## Industrial and Labor Relations

THE UNIVERSITY offers an interdisciplinary program of graduate study in industrial and labor relations, leading to the Master of Arts or Master of Science degree. The program is administered by the Institute of Industrial and Labor Relations (see page 128)

The student's program must include work in at least three disciplines, with at least 18 term hours in one of the three disciplines, and must include a minimum of 15 term hours in 500 -level courses. Before advancement to candidacy for a degree, a student must submit a satisfactory score on the Miller Analogies Test or a comparable objective test.

The following University courses are especially relevant to the graduate program in industrial and labor relations:

Economics-Contemporary Economic Problems (Ec 417) ; Labor Economics (Ec 444) ; Organized Labor (Ec 445) ; Labor Legislation (Ec 446) ; Collective Bargaining (Ec 447, 448, 449) ; Comparative Economic Systems (Ec 450, 451, 452) ; American Economic History (Ec 487, 488, 489) ; Development of Industrial Economics (Ec 490, 491, 492) ; Seminar: Labor Economics (Ec 507)

Education-Seminar: Work Evaluation (Ed 407) ; Educational and Vocational Guidance (Ed 488).

History—American Economic History (Hst 487, 488, 489).
Journalism-Seminar: Industrial Editing (J 407); The Press and Society (J 450) ; Publicity and Public Relations (J 459) ; Public Relations Problems (J 483) ; Journalism and Public Opinion (J 494)

Law—Agency (L 427) ; Labor Law (L 476).
Political Science-Administrative Organization and Behavior (PS 412, 413) ; Theory of Democracy (PS 456, 457) ; The Supreme Court in American Government (PS 484, 485, 486) ; Seminar: Constitutional Law (PS 507) ; Seminar: Comparative Labor Movements (PS 507).

Production and Industrial Management-Personnel Management (PIM 412); Wage and Salary Administration (PIM 413) ; Problems in Personnel Management (PIM 414) ; Personnel Administration (PIM 534) ; Personnel Psychology (PIM 535) ; Organizational Conflict and Change (PIM 536).

Sociology—Seminar: Sociology of Professions (Soc 407) ; Theory of Small Groups (Soc 430) ; Group Dynamics (Soc 431) ; Sociology of Work (Soc 446) ;

Industrial Sociology (Soc 447) ; Sociology of Occupations (Soc 448) ; Theory of Organization (Soc 541).

The Institute of Industrial and Labor Relations provides advice and assistance to doctoral candidates who are interested in work in industrial relations as a minor field or as a supplement to their major program.

## Latin American Studies

THE UNIVERSITY offers undergraduate and graduate programs in Latin American studies. Students enrolled in these programs complete regular major requirements in a department of the College of Liberal Arts or a professional school, with additional studies providing an emphasis on the Latin American area. An interdisciplinary committee advises students in the planning of their area studies ; Dr. Gene E. Martin, associate professor of geography, is chairman of the committee.

The special requirements for a B.A. degree with emphasis on Latin American studies are: (1) two years of college study of Spanish or Portuguese or equivalent; (2) a minimum of 27 term hours in Latin American area courses, other
 major field.

The special requirements for a M.A. or Ph.D. degree with an emphasis on Latin American studies are: (1) competence in Spanish or Portuguese, to be demonstrated by examination; (2) a minimum of 21 term hours in graduate courses in Latin American studies, including 9 hours in an interdisciplinary seminar; (3) a thesis on a Latin American topic, for which a maximum of 9 hours of credit may be applied toward requirement (2).

## Mathematics

Professors: A. F. Moursund (department head), Paul Civin, C. W. Curtis, K. S. Ghent, D. K. Harrison, R. D. James, I. M. Niven, L. E. Ward, Jr., Bertram Yood.
Associate Professors: F. W. Anderson, F. C. Andrews, E. A. Maier, K. A. Ross, K. R. Stromberg, R. F. Tate, D. R. Truax.
Assistant Professors: R. M. Gillette, Franklin Lowenthal, T. K. Matthes, W. H. Sills, G. W. Struble, J. M. Van Buskirk, C. R. B. Wright.

Senior Instructors : Marie R. Mason, P. R. Sherman.
Lecturer: K. P. CASEy.
Instructors: Ernst Merzrath, Lulu Moursund.
Fellows: K. E. Batker, R. P. Brown, S. E. Brown, J. L. Cunningham, R. E. Dressler, R. M. Grassl, D. N. Hawley, Gloria Hewitt, R. A. Kreiss, M. G. Rutherford, J. E. Schneider, G. M. Seitz, D. R. Turnidge, D. D. W. G. Rut

Assistants: D. F. Anderson, G. F. Bachelis, J. O. Baker, R. L. Bernhardt III, C. B. Braden, D. W. Bree, Jr., D. L. Brtdges, W. J. Carsrdd, A. J. Clemons, R. S. Cunningham, E. N. Ferguson, C. E. Ford, T. V. Fossum, J. M. Franklin, K. R. Fuller, R. R. Hallett, V. E. Hill, R. W. Honerlah, W. M. Hubbart, D. R. Iltis, R. F. Johnsonbaugh, D. H. Kelker, D. G. Lamet, L. C. Leinbach, G. G. Michael, T. B. Paine, W. A. Parker, H. L. Peterson, W. E. Pfaffenberger, H. J. Schmidt, Jr., G. M. Seitz, J. W. Sherwood, T. A. Swanson, L. D. Tucker, E. D. Tymchatyn, V. E. Walsh, C. C. White, C. S. Wong.

MATHEMATICS COURSES at the University are designed to provide the training in rigorous thinking and analytical processes which is fundamental to a liberal education; to provide basic mathematical and statistical training for students in the social, biological, and physical sciences and in the professional schools; to prepare prospective teachers of mathematics; and to provide advanced and graduate work for students specializing in the field.

Preparation for Major Work. Students planning to major in mathematics at the University should take high-school courses in algebra (at least one and onehalf years) and plane geometry and, if possible, courses covering trigonometry, solid geometry, and more advanced topics

Majors usually begin University work in mathematics with Introductory College Mathematics (Mth 104, 105, 106), Fundamentals of Mathematics (Honors College) (Mth 107, 108, 109), Calculus with Analytical Geometry (Mth 200, 201, 202, 203), or Analytic Geometry and Calculus (Mth 204, 205, 206). The latter sequence is recommended for well-prepared freshmen whose high-school program included trigonometry. Students not prepared for one of these sequences must make up their deficiencies in one or both of the following courses: Elements of Algebra (Mth 10), Intermediate Algebra (Mth 95).

Students may enter Mth 204, 205, 206 upon completion of Mth 105 ; students electing Mth $95,104,105$ must take Mth 106 if they wish to enroll for Calculus with Analytical Geometry (Mth 200, 201, 202, 203).

Science Group Requirement. Correlated sequences which satisfy the science group requirements are listed on page 80 .

Mth 204, 205, 206 is the recommended sequence for all exceptionally wellprepared students. Mth $104,105,106$ is the standard sequence for students who enter with one and one-half years of high-school algebra, and who intend to major in mathematics, the physical sciences, or architecture, or to take more than one year's work in college mathematics. Mth 107, 108, 109 provides a distinctive approach to college mathematics for students in the Honors College. The department will recommend suitable sequences in the light of the individual student's interests and mathematics placement-test score.

Requirements for Bachelor's Degree. To qualify for a bachelor's degree with a major in mathematics, a student must complete 48 term hours of work in the field, including Calculus with Analytical Geometry (Mth 200, 201, 202, 203) or Analytic Geometry and Calculus (Mth 204, 205, 206), and at least 30 term hours in upper-division mathematics courses exclusive of Mth 425, 426, 427. Not more than 15 hours selected from Mth 441, 442, 443, Mth 447, 448, 449 may be counted toward the minimum major requirement.

Students preparing for graduate work in mathematics should include in their programs: Mth 411, Mth 415, 416, 417 ; Mth 418, Mth 419; Mth 431, 432, 433; and Mth 447, 448, 449. Students preparing for graduate work in statistics should follow the same program. Attainment of a reading knowledge of at least one of the following languages is highly recommended: French, German, Russian.

Secondary-School Teaching of Mathematics. For certification as a teacher of mathematics in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in mathematics and the requirements for unqualified recommendation by the University of Oregon, students should satisfy the requirements for a bachelor's degree with a major in mathematics, and should include in their programs: Calculus (Mth 313), Fundamentals of Algebra (Mth 341, 342, 343), Fundamentals of Geometry (Mth 344, 345), and Fundamentals of Statistics (Mth 346). Regular session courses with similar content and special
upper-division and graduate courses offered during summer sessions are acceptable substitutes for these courses.

Nonmajor students who wish to prepare for the teaching of mathematics as a second field should include Fundamentals of Algebra (Mth 341, 342, 343) and Fundamentals of Geometry (Mth 344, 345) in their programs.

For further information, the student should consult the member of the mathematics faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Graduate Work. The Department of Mathematics offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Candidates for the Ph.D. degree are accepted in such fields as number theory, algebra, analysis, topology, topological algebra, and probability and statitstics. Students interested in graduate work should consult the head of the department concerning departmental requirements.

Statistical Laboratory and Computing Center. A Statistical Laboratory and Computing Center is operated under the auspices of the Graduate School, in close cooperation with the Department of Mathematics. An IBM 1620 electronic computer is available for research and teaching. See page 125.

## LOWER-DIVISION COURSES

## Mth 95. Intermediate Algebra. 4 hours.

Fundamentals of algebra. Intended for students entering with less than two years of high-school algebra; not open for credit for students entering with four years of high-school mathematics including trigonometry.
Mth 104, 105, 106. Introductory College Mathematics. 4 hours each term.
A unified treatment of college algebra, trigonometry, analytic geometry, and elementary calculus. Prerequisite: one and one-half years of high-school algebra or Mth 95.
Mth 107, 108, 109. Fundamentals of Mathematics (Honors College). 4 hours each term.
A terminal course. Selected topics from number theory, combinatorics, graph theory, infinite sets and other areas; does not prepare students for Mth 204. Prerequisite: enrollment in the Honors College.
Mth 121, 122, 123. Mathematics for Elementary Teachers. 3 hours each term. Basic concepts of arithmetic, elementary algebra, and elementary geometry Emphasis on the real number system and deductive process within the system. Open only to prospective elementary teachers. Sherman.

## Mth 124. Mathematics of Finance. 4 hours

Simple and compound interest and discount, annuities, periodic-payment plans, bonds, depreciation, mathematics of insurance, and other topics related to business. Prerequisite : Mth 104.
Mth 200, 201, 202, 203. Calculus with Analytical Geometry. 4 hours each term. Standard sequence for students of physical, biological, and social sciences Prerequisite: high-school trigonometry and a high placement score; or Mth 105 ; or Mth 104 with a grade of A or B. Not open to students who have
credit for Mth 204, 205, 206 .
Mth 204, 205, 206. Analytic Geometry and Calculus. 5 hours each term.
A unified treatment of analytic geometry and calculus; equivalent of Mth 200, 201, 202, 203. Special section for Honors College and other superior students. Prerequisite: high-school trigonometry and a high placement score; or Mth 105 ; or Mth 104 with a grade of A or B.
Mth 233. Introduction to Numerical Computation. 3 hours
Basic principles of computation; programming a computer in an algebraic
language. Prerequisite: Mth 104 or equivalent. Struble, Computing Center staff.
Mth 290. Seminar. Hours to be arranged.
Selected topics not covered in the regular lower-division courses. For students of high ability.

## UPPER-DIVISION COURSES

Mth 313. Calculus. 4 hours.
Foundations of the calculus. For prospective high-school teachers. Prerequisite: calculus and consent of instructor. Maier, Moursund.
Mth 319. Number Theory. 3 hours.
Divisibility, congruences, number theoretic functions, Diophantine equations. Prerequisite : year sequence in calculus or consent of instructor. Ghent, Maier, Niven.
Mth 341, 342, 343. Fundamentals of Algebra. 3 hours each term.
Algebraic topics, for prospective secondary-school teachers of mathematics. Inequalities, congruences, bases of the number system, foundations of algebra, set theory, Boolean algebras, elementary matrix and group theory. Prerequisite : year sequence in calculus or consent of instructor. Ghent, Maier.
Mth 344, 345. Fundamentals of Geometry. 3 hours each term.
Geometric topics, for prospective secondary-school teachers of mathematics. Length, area, volume, and the related limit problem. Ruler and compass constructions, locus problems. Euclidean and non-Euclidean geometries. Coordinate and noncoordinate techniques in the plane and in space. Prerequisite: year sequence in calculus or consent of instructor. Ghent, Maier.

## Mth 346. Fundamentals of Statistics. 3 hours.

Topics in probability and statistics, for prospective secondary-school teachers of mathematics. Probability and random variables on finite sets. Binomial and hypergeometric distributions. Random number tables. Frequency distribl ins potheses and linear estimates. Prerequisite : year sequence in calculus or consent of instructor. Maier, Truax.
Mth 354. Mathematical Logic and Set Theory. 3 hours.
Topics in mathematical logic and set theory. Propositional calculus, algebra of sets, functions and relations, cardinal numbers, ordinal numbers, point sets on the real line. Prerequisite : calculus or consent of instructor. Gillette, Ward.
Mth 403. Thesis. Hours to be arranged.
Mth 405. Reading and Conference. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Mth 407. Seminar. (g) Hours to be arranged.
Mth 411. Introductory Linear Algebra. (g) 3 hours.
Computational matrix algebra. Vector spaces, systems of linear equations, matrices, determinants, characteristic roots, quadratic forms and diagonalizat:on. Prerequisite : Mth 202 or Mth 205, or consent of instructor. Anderson, Curtis, Harrison, Wright.
Mth 412. Linear Algebra. (g) 3 hours.
Proofs of theorems on basis and dimension in abstract vector spaces; linear transformations, the minimal polynomial ; determinant of a linear transformatransformations. Prerequisite: Mth 411. Anderson, Curtis, Harrison, Wright.
Mth 413. Geometric Algebra. (G) 3 hours.
Introduction to the classical linear groups and geometrics associated with them. Prerequisite: Mth 412.

Mth 414. Introduction to Hilbert Space. (G) 3 hours.
Geometry of infinite dimensional Hilbert space; bounded linear operators and their adjoints; spectral theorem for self-adjoint and unitary operators. Prerequisite: Mth 412.
Mth 415, 416, 417. Introduction to Abstract Algebra. (G) 3 hours each term. Sets, relations, mappings; introduction to the theory of groups, rings, fields, polynomial rings; linear algebra and matrix theory. Prerequisite: Mth 41 polynomial rings; linear algebra and matrix theory. Prerequ
Mth 418. Differential Equations. (g) 3 hours.
Linear differential equations, applications, systems of equations. Prerequisite Mth 200, 201, 202, 203 or Mth 204, 205. 206, Mth 411. Niven, Wright, Yood.
Mth 419. Functions of Several Variables. (g) 3 hours.
Infinite series, power series, partial differentiation, multiple integrals, and other related topics. Prerequisite: Mth 200, 201, 202, 203 or Mth 204, 205, 206. Curtis, Niven, Wright.
Mth 420. Vector Analysis. (g) 3 hours. Vector operations, divergence theorem, Stokes' theorem, applications. Prerequisite: Mth 419 or equivalent. Curtis, Niven, Wright.
Mth 421. Functions of a Complex Variable. (g) 3 hours.
Cauchy's theorem, residues, contour integration. Prerequisite: Mth 419 or consent of instructor. Lowenthal, Moursund, Stromberg.
Mth 422. Fourier Series. (g) 3 hours.
Pointwise and mean convergence, orthogonal functions, applications to partial differential equations. Lowenthal, Stromberg, Yood.
Mth 425, 426, 427. Elements of Statistical Methods. (g) 3 hours each term. A basic sequence in statistical analysis; not intended for mathematics majors. Presentation of data; sampling theory; tests of significance; analysis of variance and covariance; regression and correlation; sequential analysis; design of experiments; distribution-free techniques. Prerequisite: Mth 95 or equivalent ; junior standing. Matthes, Tate, Truax.
Mth 428. Scientific and Statistical Computation. (G) 3 hours.
Numerical computation, including programming a computer in algebraic language and numerical error control. Prerequisite: Mth 418 or concurrent registration in a $400-\mathrm{level}$ analysis or statistics course. Struble, Computing Center staff.

Mth 429, 430. Numerical Analysis. (G) 3 hours each term.
Approximation theory, finite difference calculus, numerical integration, matrix methods, numerical solution of differential equations. Prerequisite Mth 428 and one term in analysis. Struble.

Mth 431, 432, 433. Advanced Calculus. ( $G$ ) 3 hours each term.
A rigorous treatment of topics introduced in elementary calculus or more advanced topics basic to the study of real and complex variables. Prerequisite : calculus and upper-division mathematics sequence. Moursund, Ross, Stromberg.
Mth 438. Introduction to Topology. (G) 3 hours.
Elements of set theory, metric and topological spaces, connectedness and compactness; emphasis on those concepts of topology which are fundamental to advanced calculus. Prerequisite : calculus. Van Buskirk, Ward.
Mth 441, 442, 443. Introduction to Statistical Theory. (g) 3 hours each term. Designed primarily for nonmajors who have a working knowledge of calculus and for mathematics majors intending to take no further work in statistics estimation, hypothesis testing, sequential and nonparametric methods, elementary decision theory. Prerequisite: calculus. Andrews, Matthes, Truax.

Mth 444. Computing. (g) 4 hours.
Introduction of the principles of digital computers; analysis of data-processing systems; programming languages and techniques; selected advanced topics of current interest. Prerequisite: Mth 233. Andrews, Struble.
Mth 445. System Programming. (g) 4 hours.
Study of computer operating systems, input and output systems, assembler Study of computer operating systems, input and output systems, assembler
and compiler construction. Prerequisite : Mth 444. Struble, Computing Center and com
staff.
Mth 447, 448, 449. Mathematical Statistics. (G) 3 hours each term.
Combinatorial probability ; development of distribution theory from the theory of probability ; derivation of sampling distributions; introduction to theory of statistical estimation and inference. Prerequisite : calculus and upper-division mathematics sequence. Andrews, Matthes, Tate, Truax.

## graduate courses

*Mth 501. Research. Hours to be arranged.
*Mth 503. Thesis. Hours to be arranged.
Mth 505. Reading and Conference. Hours to be arranged.
Mth 507. Seminar. Hours to be arranged.
Applied Mathematics. Yood.
Banach Algebras. Yood.
Commutative Algebra. Anderson, Harrison.
Fomplex Analysis.
Groups and Representations, Curtis, Wright
Harmonic Analysis. Civin, Stromberg.
Homological Algebra. Anderson, Curtis, Harrison.
Noncommutative Rings. Anderson, Curtis, Harrison.
Noncommer Theory. Niven.
Stamber Thes and Stochastic Processes. Andrews, Matthes, Tate, Truax.
Topics in Functional Analysis. Civin, Ross, Stromberg, Yood.
Topology. Gillette, Van Buskirk, Ward.
Mth 541, 542, 543. Abstract Algebra. 3 hours each term.
Group theory, fields, Galois theory, algebraic numbers, matrices, rings, algebras. Anderson, Curtis, Harrison, Wright.
Mth 544, 545, 546. Structure of Rings and Algebras. 3 hours each term.
Topics selected from: rings with minimum condition, algebras over a commutative ring, rings without finiteness assumptions, and nonassociative rings and algebras. Anderson, Curtis, Harrison, Wright.
Mth 547, 548, 549 . Algebraic Number Theory. 3 hours each term.
Algebraic, irrational, transcendental, and normal numbers; approximation of algebraic and transcendental numbers by rationals. Niven.
Mth 551, 552, 553. Theory of Functions of a Real Variable. 3 hours each term. Measure and integration, Hilbert and Banach spaces, and related topics. Ross, Stromberg, Yood.
Mth $554,555,556$. Theory of Functions of a Complex Variable. 3 hours each term.
The theory of Cauchy, power series, contour integration, analytic continuation, entire functions, and related topics. Civin, Lowenthal, Stromberg.
Mth 557, 558, 559. Topics in Classical Analysis. 3 hours each term.
Fourier series, Fourier transforms, integral equations, linear operations in Hilbert space, spectral theory. Civin.
Mth 561, 562, 563. Modern Theories in Analysis. 3 hours each term.
Measure theory, Banach spaces and algebras, analysis in topological groups;

* No-grade course.
modern functional analysis, with emphasis on the connections with classical analysis and on applications to harmonic analysis. Civin, Ross, Stromberg, Yood.
Mth 571, 572, 573. Topology. 3 hours each term.
General and point set topology, introduction to algebraic topology. Gillette, Van Buskirk, Ward.
Mth 581, 582, 583. Theory of Estimation and Testing Hypotheses. 3 hours each term.
Classical theory of testing and estimation, BAN estimates, moment estimates, sequential analysis. Andrews, Matthes, Tate, Truax.
Mth 584, 585, 586. Theory of Probability. 3 hours each term.
Elements of measure theory, probability in abstract spaces, random variables, independence, cumulative distribution functions, characteristic functions, moindependence, cumulative distribution tunctions, characteristic functions, mo-
ments, convergence of distributions, the central limit problem, Infinitely divisible distributions; applications to statistics. Andrews, Matthes, Truax.
Mth 587, 588. Stochastic Processes. 3 hours éach term.
A non-measure-theoretic introduction to the theory of stochastic processes; processes discrete in space and time, discrete in space and continuous in time, continuous in space and time; applications. Andrews, Truax.
Mth 591, 592, 593. Advanced Mathematical Statistics. 3 hours each term.
Topics selected from: analysis of variance and design of experiments; multivariate analysis; sampling from finite populations; nonparametric methods. Andrews, Matthes, Tate, Truax.
Mth 594. Theory of Games. 3 hours.
The theory of games, with special emphasis on zero-sum two-person games. Matthes, Truax.
Mth 595, 596. Statistical Decision Theory. 3 hours each term.
Statistical decision theory based on the theory of games; sequential decision theory; comparison of experiments. Matthes, Truax.
COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION
Mth 10. Elements of Algebra. No credit (extension).
Mth 457 458, 459. Foundations of Mathematics. (g) $3-4$ hours each term (summer sessions).
Mth 468, 469. Probability and Statistics. (g) 3-4 hours each term (summer sessions).
Mth 478, 479. Algebra. (g) 3-4 hours each term (summer sessions).
Mth 487, 488, 489. Geometry. (g) 3-4 hours each term (summer sessions)
Mth 498, 499. Analysis. (g) 3-4 hours each term (summer sessions).
Mth 578, 580. Algebra. 3-4 hours each term (summer sessions).
Mth 589. Geometry. 3-4 hours (summer sessions).
Mth 598, 599. Analysis. 3-4 hours each term (summer sessions).


## Medical Technology

THE UNIVERSITY offers a four-year program in medical technology, leading to the bachelor's degree. The program includes three years of work on the Eugene campus and one year at the Medical School in Portland. During his three years on the Eugene campus, the student must satisfy (1) all general University degree requirements that cannot be satisfied with work taken at the Medical School, and
(2) the special science requirements for admission to the fourth-year program at the Medical School. The following recommended courses satisfy the science requirements:

|  | Term H |
| :---: | :---: |
| Mathenatics (above Mth 10) | 12 |
| General Biology (Bi 101, 102, 103) | 12 |
| General Chemistry (Ch 104, 105, 106) | 0 |
| Inorganic Qualitative Analysis (Cb 108) | 2 |
| Intro. Volumetric Analysis (Ch 109) | - ${ }^{2}$ |
| Organic Chemistry (Ch 334, 335, Ch 337, 338) | 10 |
| Quantitative Analysis (Ch 320). | 4 |
| Essentials of Physics (Ph 101, 102, 103) | 9 |
| Intro. to Bacteriology ( $\mathrm{Bi} 381,382$ ) | 6 |
| Upper-division biology | 6 |

For an outline of the fourth-year program, see the University of Oregon Medical School Catalog.

## Medicine, Preparatory

THE UNIVERSITY offers a premedical program which satisfies the requirements for admission to American medical schools, including the University of Oregon Medical School in Portland. The program is supervised by a special advisory committee, of which Dr. Bradley T. Scheer, professor of biology, is chairman.

Medical schools have varying admission requirements. The requirements of the several schools are listed in Admission Requirements for American Medical Colleges, an annual volume published by the Association of American Medical Colleges; students planning to seek admission to a particular school should consult this volume, and plan their premedical studies to satisfy any special requirements of the school.

Nearly all medical schools require applicants to take the Medical College Admissions Test. The test is given twice each year, in October and May; students are advised to take the test in May of the calendar year before they plan to enter medical school. Application for permission to take the test must be made about a month before the scheduled date. Application blanks may be obtained in the Office of Admissions.

The University of Oregon Medical School requires that the student must have earned a B.A. or B.S. degree before entrance or must complete the work for the degree at the University of Oregon or at the institution at which he received his premedical preparation before entering upon the work of the third year at the Medical School. Under University of Oregon regulations, a maximum of 48 term hours of work in medicine may be counted as credit earned in residence toward the bachelor's degree.

Students who expect to complete the requirements for a bachelor's degree at the Medical School should satisfy, in their premedical program, all requirements for the degree (including general University requirements and requirements for a major in the College of Liberal Arts) that cannot be satisfied with work taken at the Medical School.

Many students elect a departmental major in the College of Liberal Arts (history, biology, chemistry, physics, etc.) ; these students should consult their departmental adviser at the beginning of their junior year concerning major requirements. Students may also elect a more general program leading to a major in general science.

The following courses satisfy both the science requirements for admission to the University of Oregon Medical School and, with additional science instruction at the Medical School, the requirements for a major in general science:

$$
\begin{array}{ll}
\text { Mathematics (abovc levcl of Mth 10) } \\
\text { General Chemistry } & \text { Therm Hours } \\
\hline 10 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ & 12
\end{array}
$$

General Chemistry (Ch 104, 105, 106)
Inorganic Qualitative Analysis (Ch 108), Introductory Volumetric Analysis (Ch 109)
General Biology (Bi 101, 102, 103)
General Physics (Ph 201, 202, 203, Ph 204, 205, 206)
Organic Chemistry (Ch 334, 335, Ch 337, 338)
4
12
15

Transfer students will be expected to take Quantitative Analysis (Ch 320), 4 term hours.

Scholarships. For special scholarships for premedical students, see page 105.
Honors. See Honors College, pages 129 ff .

## Modern and Classical Languages

D. M. Dougherty, Executive Officer of Division

## Classics, and Chinese and Japanese

Professor: F. M. Combellack.
Assistant Professors: C. B. Pascal (department head), H. C. Kim, Edna Landros (emeritus), Hiroshi Miyaji, W. E. Naff, Angela Palandri.
Assistants: N. T. Chao, Raphael Chodos, Chaples Humphreys, Yoko McClain, Tseng-wen Shen, Bruce Taggart.

## German and Russian

Professors: W. A. Leppmann (department head), E. P. Kremer, (emeritus), H. W. Nordmeyer.

Associate Professors: P. B. Gontrum,* W. L. Hahn, R. A. Nicholls, Astrid Williams.
Assistant Professors: Carol Bedwell, J. R. McWilliams, R. E. Steussy, Vladimir Tolson.
Instructors: Nicholas Chicherin, R. M. Stockman, Klawa Thresher.
Fellows: David Benseler, Mary Bowen, Glen Franklin, Lawrence Johnson, Otmar Jonas, Eileen Krumm, Joan McAllister, Beth Maveety, Gilbert Nostrant, David Williams, Jean Woods.
Assistants: Axel Behn, Henry Croes, Donald Dugger, Ulrich Goebel, Hans Kasdorf, Esther Lesér, Josephine Mayer, Michael Moorad, Adam Kasdorf, Jother
Stiener, John

## Romance Languages

Professors: C. B. Beall, D. M. Dougherty, T. R. Hart, C. L. Johnson, L. O. Wright (emeritus).
Associate Professors: P. J. Powers (department head), E. S. Hatzantonis,* Carlos Lozano, T. E. Marshall, J. I. Palley, D. G. Simonin.
Assistant Professors : R. M. Birn, S. L. Rose, R. H. Desroches. $\dagger$
Instructors: G. A. Casagrande, H. F. Cooper, C. M. Freitag, M. H. Impey, M. V. Jones, E. K. Marlow, P. W. Nobile, Annie G. Risco, A. M. Risco, L. S. Rosenstone.

* On leave of absence 1965-66
† On sabbatical leave 1965-66.

Fellows: L. R. Afrank, H. K. Capron, V. D. Clark, Ted Gay, Jr., G. S. Giauque, D. D. McWilliams, D. E. Marston, B. G. Murphy, J. D Noland, J. W. Romig, J. C. Scott.
Assistants: M. O. Begher, R. E. Butler, B. M. Class, M. J. Conley, A. G. Cortes, B. A. Couchman, H. C. Dam, P. E. Farnham, M. T. Favero, S. von T. Fechner, R. M. Flores, S. B. Giustina, J. E. Hwang, V. M Judd, P. J. Kaff, E. H. Lesér, H. D. Manning, M. L. Marvin, J. S. V.
Melim, D. Rangel-Guerrero, N. Sanchez, C. C. Stathatos, W. D. Thomson.

THE DIVISION OF MODERN AND CLASSICAL LANGUAGES includes the Department of Classics, and Japanese and Chinese, the Department of German and Russian, and the Department of Romance Languages. The departments offer instruction in Chinese, French, German, Greek, Italian, Japanese, Latin, Norwegian, Portuguese, Russian, Spanish, and Swedish. The undergraduate course offerings provide: (1) an introduction to the nature and structure of language as a basic aspect of human culture ; (2) an introduction to the principal literatures of the world; (3) major programs in Greek, Latin, French, German, Italian, Spanish, and Russian; (4) a reading knowledge of languages required of candidates for advanced degrees ; and (5) proficiency in the speaking, understanding, and writing of French, German, Italian, Russian, and Spanish.

A fully equipped language laboratory provides practice in speaking and understanding the modern languages through the use of tapes and of recordings made by native speakers.

Major Requirements. Major requirements for the Bachelor of Arts degree are as follows:

Classics. Twenty-four term hours in Greek or Latin beyond the second-year sequence ; History of Greece (Hst 411), History of Rome (Hst 412, 413). Majors in Greek or Latin are normally expected to take work in the other Classical language or in French or German.

French, German, Italian, Russian, or Spanish. Thirty term hours beyond the second-year sequence-normally survey of literature, composition and conversation, and two additional upper-division year sequences (at least one a literature sequence).

Romance Languages, Modern Languages, Classical and Modern Languages. Thirty term hours beyond the second-year sequence in one language and 15 term hours beyond the second-year sequence in a second language, including two upperdivision literature sequences in the first language and one in the second.

Secondary-School Teaching of Foreign Languages. For certification as a teacher of French, German, Spanish, or Latin in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

Completion of 45 term hours of work in any one of these languages satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon. The Division of Modern and Classical Languages will, however, approve enrollment for student teaching only if the student's course work in the language he plans to teach is of high quality, if he has attained reasonable oral and written control of the language, and if he has completed Ed 315 and at least 3 term hours in Ed 408.

For permanent certification, after a fifth year of preparation, the student must complete an additional 15 term hours in linguistics, culture and civilization, and phonetics (phonetics not required for certification in Latin). The following courses
are recommended: French, RL 429, 430, RL 331, 3:2; German, GL 340, 341, 342 phonetics; Spanish, RL 432, 433, RL 350, 351; Latin, Hst 411, Hst 412, 413 ; all phonetics; Spanish, RL
languages, AL 450, 451.

It is recommended that, if possible, the student complete the five-year program for permanent certification before he begins teaching, and that, during the fifth year, he satisfy the requirements for the interdisciplinary master's degree in teaching.

For further information, the student should consult a member of the faculty of the Division of Modern and Classical Languages who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Graduate Study. The Division of Modern and Classical Languages offers programs of graduate study leading to the degree of Master of Arts in Greek, Latin, Classical languages, German, French, Spanish, Romance languages, and comparative literature, and to the degree of Doctor of Philosophy in Romance languages, Germanic languages, and comparative literature. For the master's degree, courses are offered in the languages and literatures of Greece, Rome, France, Germany, Spain, and Spanish America; preferably, the student's program should include work in two of these fields. For the doctorate in Romance languages, opportunities for advanced study are provided in the French and Spanish fields, supplemented by offerings in Italian, German, and Classical languages. The program for the doctorate in Germanic languages includes advanced study of literature and philology, supplemented by courses in English literature and philology and in Romance and Classical languages and literatures.

The graduate program in comparative literature is administered by a committee representing the Department of English and the Division of Modern and Classical Languages; it offers opportunity for advanced study of several literatures, in their original languages. The doctoral programs are intended primarily to prepare college teachers and research scholars. Doctoral studies may center in the investigation of a single problem, the results of which are emboried in the dissertation, or may be more broadly cultural, with less emphasis on research.

The resources of the University Library for research in Classical languages, French, Spanish, and German are adequate for the division's graduate programs; in some fields they are outstanding. The Library's holdings of learned periodicals are extensive; the quarterly journal, Comparative Literature, is edited in the department.

## Classics, and Chinese and Japanese GREEK

## LOWER-DIVISION COURSES

CL 50, 51. Beginning Greek. 4 hours each term. The fundamentals of the Attic Greek language. Kim.

## CL 52 . Introduction to Xenophon. 4 hours.

Reading of the first four books of Xenophon's Anabasis. Kim.
CL 101, 102. Introduction to Homer. 4 hours each term.
Reading of Books I-VI of the Iliad. The Homeric dialect: practice with the Homeric meter. Lectures on the Homeric Age. Combellack, Kim.
CL 103. Introduction to Plato. 4 hours.
Reading of the Euthyphro, Crito, and Apology. Combellack, Kim.
CL 231, 232. New Testament Readings. 4 hours each term.
Selected readings from the Gospels and Paul's Epistles. May be followed by CL 103 or CL 316 to complete a year sequence.

## UPPER-DIVISION COURSES

AL 304, 305, 306. Literature of the Ancient World. 3 hours each term. For description, see page 134. Combellack.
AL 321, 322, 323. Classic Myths. 1 hour each term. For description, see page 134. Pascal.
CL 314, 315. Introduction to Homer. 4 hours each term. For description, see CL 101, 102. Not open to students who have completed that sequence. Combellack.
CL 316. Introduction to Plato. 4 hours.
For description, see CL 103. Not open to students who have completed that course. Combellack
CL 317. Euripides. 3 hours
Reading of Alcestis and Electra. Lectures on Greek stage antiquities. Combellack.
CL 318. Herodotus. 3 hours.
Reading of selections from Herodotus' History. Study of the Ionic dialect Combellack.
CL 319. Aristophanes. 3 hours.
Reading of The Frogs and one or two other plays. Aristophanes as a literary critic. Lectures on Greek comedy. Combellack.
CL 320. Sophocles. 3 hours.
Reading, in alternate years, of the Trojan and the Theban plays. Combellack.
CL 321. Demosthenes. 3 hours.
Reading of the De corona. Lectures on the Attic orators. Combellack.
CL 351, 352, 353. Greek Prose Composition. 1 hour each term.
CL 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
CL 407. Greek Seminar. (G) Hours to be arranged.
CL 411. Thucydides. (G) 3 hours.
Reading of selections from the History of the Peloponnesian War. Lectures on fifth-century Athens. Combellack.
CL 412. Aeschylus. (G) 3 hours.
Reading of the Oresteia. Pascal, Combellack.
CL 413. Theocritus. (G) 3 hours.
Reading of Theocritus and selections from other Greek bucolic poets. Lectures on ancient pastoral poetry and its influence. Pascal, Combellack.
CL 414. Plato's Republic. (G) 3 hours.
Reading of the Republic, with special attention to Plato's literary art and to his attitude toward literature. Pascal, Combellack.
CL 415. Aristotle's Ethics. (G) 3 hours.
Reading of the Nicomachean Ethics. Lectures on ancient ethical theories and on Aristotle's relationship to Plato. Combellack.
CL 416. Greek Lyric Poetry. (G) 3 hours.
Readings from the lyric poets, including some elegiac poets. Combellack.

## GRADUATE COURSES

*CL 503. Thesis. Hours to be arranged.
CL 505. Reading and Conference. Hours to be arranged.

* No-grade course.

CL 507. Greek Seminar. Hours to be arranged
CL 517, 518, 519. Studies in Greek Literature. Hours to be arranged. Introduction to methods and materials for research in the classics; special attention to literary problems. Study of one of the following: Homer's Odyssey, Sophocles, Thucydides, Plato's Republic, Alexandrian poetry Combellack.

## LATIN

## LOWER-DIVISION COURSES

CL 60, 61, 62. First-Year Latin. 4 hours each term.
Fall and winter : fundamentals of Latin grammar; spring : selected readings from Caesar.
CL 104. Cicero's Orations. 4 hours.
Reading of selected orations, with close study of classical Latin forms and constructions as exemplified in Cicero's speeches.
CL 105. Virgil's Aeneid. 4 hours.
Reading of the first six books of the Aeneid. Practice in reading Latin hexameter.
CL 106. Terence. 4 hours.
Reading of a representative comedy of Terence. Survey of the early Roman theater.

## UPPER-DIVISION COURSES

CL 301. Livy. 3 hours.
Reading of Books I and II, with attention to Livy's prose style and especially his narrative technique. Pascal, Kim.
CL 302. Virgil's Eclogues and Georgics. 3 hours
Selected readings from the earlier poetic works of Virgil. Pascal, Kim.
CL 303. Horace's Odes. 3 hours.
Selected odes from the four books. Special attention to Horace's employment of the lyric form to express national ideals as well as personal thought and emotion. Pascal, Kim.
AL 304, 305, 306. Literature of the Ancient World. 3 hours each term. For description, see page 134. Combellack.
AL 321, 322, 323. Classic Myths. 1 hour each term For description, see page 134. Pascal.
CL 341. Horace's Satires and Epistles. 3 hours. Reading of selections from the Satires and Epistles. Study of the Horatian technique of satire. Pascal.
CL 342. Pliny and Martial. 3 hours.
Selected letters of Pliny and epigrams of Martial. Development of Silver Selected letters of Pliny and epigrams of Martial. Development of Silver torical trends in Rome of the first and early second century a.d. Pascal.
CL 343. Tacitus' Agricola and Germania. 3 hours. Close study of Tacitean style in the earlier works. Pascal.
CL 345. Ovid's Metamorphoses. 3 hours.
Reading of some of the major myths. Study of Ovid's storytelling technique. Pascal.
CL 346. Petronius' Cena Trimalchionis. 3 hours.
Reading of the entire Cena. Petronius' role in the development of the picaresque novel. Special attention to the colloquial Latin spoken by the characters in the Cena. Pascal

CL 347, 348, 349. Latin Composition. 2 hours each term.
Survey of classical Latin syntax; extensive practice in prose composition. Designed for majors and prospective teachers. Pascal.

## CL 361. Cicero's Philosophical Works. 3 hours.

Reading of the Tusculan Disputations and the De officiis. Cicero's role as an eclectic philosopher.
CL 362. Lucretius. 3 hours.
Reading of Book I and other selections from the De rerum natura. Review of ancient atomic theory. Close study of the Lucretian hexameter. Pascal.
CL 363. Catullus. 3 hours.
Reading and analysis of both the "personal" and Alexandrian poems. The political and social background of Catullus' poetry.
CL 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
CL 408. Latin Seminar. (G) Hours to be arranged.
CL 461. Propertius and Tibullus. (G) 3 hours.
Reading of works of Propertius and Tibullus. Comparison of the poetic styles of these two Augustan poets. Combellack.
CL 462. Juvenal. (G) 3 hours.
Reading of the selected satires. Juvenal's relation to the Roman tradition of satire. Pascal.
CL 463. Tacitus' Annals. (G) 3 hours.
Reading of the first six books of the Annals. Analysis of Tacitus' style. His importance as an interpreter of the early empire. Pascal.

## GRADUATE COURSES

*CL 503. Thesis. Hours to be arranged.
CL 505. Reading and Conference. Hours to be arranged.
CL 508. Latin Seminar. Hours to be arranged.
CL 511, 512, 513. Readings in Mediaeval Latin. Hours to be arranged.
CL 514, 515, 516. Studies in Latin Literature. Hours to be arranged.
Intensive study of one of the following, with special attention to literary problems: Latin epic, Augustan elegy. Combellack, Pascal.

## CHINESE AND JAPANESE

## LOWER-DIVISION COURSES

OL 50, 51, 52. First-Year Chinese. 5 hours each term.
Colloquial Chinese (Peking) ; approximately half the year devoted to the oral-aural approach to conversation, and the other half to the reading and writing of materials in Chinese characters. Palandri
OL 60, 61, 62. First-Year Japanese. 5 hours each term.
Colloquial Japanese (Tokyo) ; approximately half the year devoted to the oral-aural approach to conversation, and the other half to the reading and writing of materials in characters and the syllabaries. Miyaji.
OL $101,102,103$. Second-Year Chinese. 5 hours each term.
Continuation of OL $50,51,52$, with the systematic addition of new characters and styles; designed to increase fluency in conversation, reading, and writing. Palandri

[^28]OL 104, 105, 106. Second-Year Japanese. 5 hours each term.
Continuation of OL $60,61,62$, with the systematic addition of new characters and styles; designed to increase fluency in conversation, reading, and writing. Naff.

## UPPER-DIVISION COURSES

AL 301, 302, 303. Introduction to Japanese Literature. 3 hours each term. For description, see page 134. Naff.
AL 307, 308, 309. Introduction to Chinese Literature. 3 hours each term. For description, see page 134. Palandri.
OL 311, 312, 313. Third-Year Chinese. 3 hours each term. Advanced readings in contemporary Chinese ; introduction to classical, documentary, and historical texts. Palandri.
OL 314, 315, 316. Third-Year Japanese. 3 hours each term.
Introduction to modern documentary and literary Japanese; standard reference materials and elements of the classical language. Miyaji.
OL 405. Reading and Conference. Hours to be arranged.

## German and Russian <br> GERMAN <br> LOWER-DIVISION COURSES

GL 50, 51, 52. First-Year German. 4 hours each term.
Designed to provide a thorough grammatical foundation and an elementary reading knowledge of German, as well as an understanding of the spoken language. Bedwell, Behn, Dugger, Kasdorf, Lesér, Meyer, Stockman, Thresher, Walter.
GL 53, 54. First-Year German. 6 hours each term, winter and spring. A two-term sequence covering the work of GL 50, 51, 52. For students who wish to begin German in the winter term. Stockman.
GL 101, 102, 103. Second-Year German. 4 hours each term.
Review of grammar and composition; reading of selections from representa-
tive authors; conversation. Special section for Honors College students. Croes, Diller, Goebel, Moorad, McWilliams, Steiner, Stockman, Williams.

## UPPER-DIVISION COURSES

GL 301, 302, 303. Survey of German Literature. 3 hours each term. German literature from the Middle Ages to the present; readings from representative authors. One section conducted in German. Prerequisite : two years of college German. McWilliams, Williams.
AL 314, 315, 316. Introduction to Germanic Literature. 3 hours each term. For description, see page 134. Gontrum.
GL 320, 321, 322. Scientific German. 3 hours each term. Intensive practice in grammar, followed by the reading of texts in the student's major field. Intended principally for graduate students. Nicholls.
GL 334, 335, 336. German Composition and Conversation. 3 hours each term. Extensive practice in speaking and writing. Required of German majors. Conducted in German. Prerequisite: two years of college German. Diller, McWilliams.
GL 340, 341, 342. German Culture and Civilization. 2 hours each term. Historical and political backgrounds of German literature and art. Prerequisite : reading knowledge of German.

## GL 403. Thesis. Hours to be arranged.

## GL 405. Reading and Conference. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

GL 407. Seminar. (g) Hours to be arranged.
GL 411, 412, 413. The Age of Goethe. (G) 3 hours each term.
Readings in the main dramatic works of Lessing, Schiller, Kleist, and Goethe; Goethe's lyric poetry and selections from his prose. The spring term is devoted to the study of Faust. Prerequisite : Survey of German Literature. Leppmann.
GL 414, 415, 416. German Literature of the Nineteenth Century. (G) 3 hours each term.
Selections from significant authors from the death of Goethe to the flowering of naturalism. Plays of Hebbel and Grillparzer; Heine and the Young Germans; the novels and Novellen of Keller; the rise of naturalism and the young Hauptmann. Prerequisite: Survey of German Literature. Hahn.
GL 421, 422, 423. German Literature of the Twentieth Century. (G) 3 hours each term.
Representative prose, poetry, and drama by contemporary German authors and those of the recent past ; particular attention to experimental forms in the theater, from Hauptmann to Zuckmayer, and to the novels of Thomas Mann and Herman Hesse. Prerequisite: Survey of German Literature. Diller.
GL 424, 425, 426. Advanced German Composition and Conversation. (G) 2 hours each term.
Systematic review of grammar; historical survey of the German language; translation of modern literary texts into German; writing of original themes. Conducted in German. Normally required of German majors. Leppmann.
GL 427, 428, 429. German Romanticism. (G) 3 hours each term.
Readings in the works of Tieck, F. Schlegel, Novalis, Hoffmann, Mörike, and Eichendorff. Special emphasis on the romanticists' contributions to literary criticism, to music, and to the study of the German past. Prerequisite: Survey of German Literature. Hahn.
GL 430, 431, 432. The German Lyric. (G) 3 hours each term.
Study of German lyric poetry from the Middle Ages to the present, with readings from all major authors. Special emphasis on the Lied and the ballad and on the contemporary lyric poetry of George, Hofmannsthal, Rilke. Gontrum.

## GRADUATE COURSES

## *GL 503. Thesis. Hours to be arranged.

GL 505. Reading and Conference. Hours to be arranged.
GL 507. Seminar. Hours to be arranged.
Humanism and the Reformation.
The German Baroque.
History of the German Language.
GL $514,515,516$. Middle High German. 3 hours each term.
Literary and linguistic study of representative texts: the Nibelungenlied, Literary and linguistic study of representative texts: the Nibelungenlied,
Minnesang, popular and courtly epics and lyrics, didactic works.Nordmeyer.
GL 517. Modern German Drama. 3 hours.
Analysis of the structural elements of naturalistic and expressionistic drama, and of the work of Brecht, Borchert, Dürrenmatt, and Frisch. Gontrum.
GL 520. Contemporary German Lyric. 3 hours.
Problems of form in the longer poetic works of Rilke and George; Hofmannsthal, Trakl, and Benn. Gontrum.

[^29]GL 523. Modern German Novel. 3 hours.
Mann, Kafka, and Hesse, with emphasis on their contributions to the art of the novel ; Broch, Jünger, and Böll. Diller.
GL 524, 525, 526. German Literature 1500-1750. 3 hours each term.
The impact of Luther on German literature ; seventeenth-century German literature; the German Enlightenment, and its relation to the Enlightenment in England and France. Staff.
GL 527,528, 529. Goethe and Schiller. 3 hours each term.
Extensive reading of the works of Goethe and Schiller; special attention to Extensine reatific, political, and aesthetic views and to Schiller's critical
Goethe's scient Goethe's scientific,
writings. Nicholls.
GL 530, 531, 532. Germanic Philology. 3 hours each term.
Introduction to Gothic ; comparative Gothic and Old High German grammar ; Old High German literature. Nordmeyer.
GL $533,534,535$. History of the German Language. 3 hours each term.
Phonological, morphological, semantic, and syntactic development of German from the oldest records to the present; dialects and dialect geography; loan words from other languages; religious, philosophical, scientific, and other specialized vocabularies. Nordmeyer.
GL 536. Lessing. 3 hours.
Detailed study of Lessing's dramas, his theoretical and philosophical writings, and his contribution to German classicicism.
GL 537. Sturm und Drang. 3 hours.
The dramatic works of the Storm and Stress writers, and their contribution to a new understanding of literature.
GL 538. Hölderlin and Jean Paul. 3 hours.
Hölderlin's development as a lyrical poet ; the main themes and images of his odes. Jean Paul as a forerunner of romanticism, especially in connection with the novel and basic concepts of literature. The instruction may cover both or either of these authors.
GL 540,541,542. German Drama of the Nineteenth Century. 3 hours each term.
term.
Analysis of the dramas of Kleist, Büchner, Grabbe, Grillparzer, and Hebbel ; special emphasis on dramatic technique and on the individual contributions of these writers to the genre. Fall: Kleist; winter: Grillparzer; spring: Büchner, Grabhe, Hebbel.
GL 543. Rilke. 3 hours.
Study of Rilke's poetry, tracing the poet's progress from his earliest works to the Duineser Elegien.
GL 544. George and Hofmannsthal. 3 hours.
Reading and discussion of the lyrical poetry of these authors; their historical significance and influence.
GL 545. Benn, Trakl, and Contemporaries. 3 hours.
A thematic, structural study of Trakl and Benn, with special attention to their importance in the literary movements of their times.
GL 546. Thomas Mann. 3 hours.
Analysis of the style and structure of Mann's novels and an examination of Aneir significance for the twentieth century.
GL 547. Hesse. 3 hours.
Study of Hesse's thought as expressed in his major novels; close attention to their autobiographical, social, psychological, and religious elements.
GL 548. Kafka and Musil. 3 hours.
Study of the major novels of Kafka and Musil; their effect in breaking through established literary forms to new experimental forms.

GL 550. Hauptmann and Schnitzler. 3 hours.
Study of the early dramas of Hauptmann and Schnitzler; extent to which they reflect and transcend the naturalistic theories of the time.
GL 551. Wedekind and the Expressionists. 3 hours
History and theories of expressionism as contained in dramatic literature.
Gl 552. Brecht, Dürrenmatt, and Frisch. 3 hours.
Selected readings from the dramas of Brecht, Dürrenmatt, and Frisch; their criticism of society and their reflections on the craft of writing and presenting

## RUSSIAN

## LOWER-DIVISION COURSES

SL 50, 51, 52. First-Year Russian. 4 hours each term.
The elements of the Russian language. Elementary reading, composition, and conversation. Thresher, Tolson.
SL 60, 61, 62. Intensive Russian. 6 hours each term.
The elements of the Russian language. Elementary reading, composition, and conversation. Covers in one year the material of $\operatorname{SL} 50,51,52, \mathrm{SL} 101$,
SL 101, 102, 103. Second-Year Russian. 4 hours each term.
Continued study of grammar and composition; reading of representative works by great authors. Tolson, Steussy.
SL 201, 202, 203. Readings in Russian Literature. 3 hours each term
Study in Russian of selected literary masterpieces of the modern period. Same as S1 311, 312, 313, but may not be counted for upper-division credit. Chicherin.

## UPPER-DIVISION COURSES

SL 311, 312, 313. Readings in Russian Literature. 3 hours each term For description, see SL 201, 202, 203. Not open to students who have completed that sequence. Chicherin.
SL 314, 315, 316. Russian Composition and Conversation. 3 hours each term. Exercises in pronunciation, comprehension, and composition; ample opportunity for conversation. Conducted in Russian. Prerequisite: two years of college Russian or equivalent. Tolson.
SL 331, 332, 333. Russian Pronunciation and Phonetics. 2 hours each term, Study of the fundamentals of Russian pronunciation, with attention to each student's difficulties. Prerequisite: two years of college Russian or equivalent.
AL 331, 332, 333. Survey of Russian Literature. 3 hours each term.
Russian literature from 1825 to 1917 , with extensive reading in the works of Gogol, Dostoevsky, and Tolstoy. Steussy.
AL 340, 341, 342. Russian Culture and Civilization. 3 hours each term.
Main currents of Russian intellectual, literary, and artistic life. Steussy
SL 403. Thesis. Hours to be arranged.
SL 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
SL 407. Seminar. (g) Hours to be arranged.
SL 411, 412, 413. The Russian Novel. (g) 3 hours each term.
Fall: Pushkin, Gogol, Goncharov, Turgenev ; winter: Dostoevsky; spring: Tolstoy. Prerequisite: SL 311, 312, 313 or equivalent. Steussy.

SL 414, 415, 416. History of Russian Language. (g) 3 hours each term. History of the Russian language from proto-Slavic to contemporary standard Russian based on the Moscow dialect. Emphasis on Old Church Slavonic and Old Russian. Prerequisite : three years of college Russian or equivalent
AL 421, 422, 423. Modern Russian Short Story, Poetry, Drama. (g) 3 hours each term.
Fall: the short story-Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, Gorky, Soviet authors; winter: poetry-evolution of Russian poetry from the beginnings into the Soviet period, with selected readings; spring : dramamodern Russian drama from the eighteenth century. Knowledge of Russian not required; but Russian majors must do selected readings in the original Offered alternate years. Steussy.
SL 461, 462, 463. Advanced Russian Composition and Conversation. (g) 2 hours each term.
Extensive oral practice and composition of original themes. Conducted in Russian. Normally required of Russian majors. Prerequisite: SL 314, 315, 316 or equivalent. Tolson.

## SCANDINAVIAN

## LOWER-DIVISION COURSES

GL 60, 61, 62. First-Year Norwegian. 3 hours each term.
Designed to give a thorough grammatical foundation in idiomatic Norwegian with emphasis on both the reading and the speaking of the language. Williams.
GL 70, 71, 72. First-Year Swedish. 3 hours each term.
Designed to give a thorough grammatical foundation in idiomatic Swedish with emphasis on both the reading and the speaking of the language. Williams.
GL 104, 105, 106. Second-Year Norwegian. 3 hours each term.
Review of grammar, composition, conversation; study of selections from representative authors. Williams.
GL $107,108,109$. Second-Year Swedish. 3 hours each term.
Review of grammar, composition, conversation ; study of selections from representative authors. Williams.

## UPPER-DIVISION COURSES

AL 351, 352, 353. Scandinavian Literature in Translation. 3 hours each term. For description, see page 135. Williams.

## Romance Languages <br> FRENCH <br> LOWER-DIVISION COURSES

RL 50, 51, 52. First-Year French. 4 hours each term.
An introduction to French, stressing reading and speaking. Exercises in elementary composition and grammar. Conley, Couchman, Dam, Farnham, Fechner, Judd, Kaff, Marlow, Marvin, Thomson.
RL 53, 54. First-Year French. 6 hours each term, winter and spring. Covers in two terms the work of RL $50,51,52$. For students who wish to begin French in the winter term. Lesér.
RL 101, 102, 103. Second-Year French. 4 hours each term.
Study of selections from representative authors; review of grammar; considerable attention to oral use of the language. Special section for Honor College students. Birn, Cooper, Freitag, Jones, Manning, Marshall, Melim Risco, Simonin.

## UPPER-DIVISION COURSES

RL 301, 302, 303. Survey of French Literature. 3 hours each term.
French literature from the Middle Ages to the present ; readings from representative authors. Conducted in French. Prerequisite: two years of college French or equivalent. Birn, Marlow, Marshall.
RL 314, 315, 316. French Composition and Conversation. 3 hours each term.
Exercises in pronunciation, comprehension, and composition. Ample opportunity for conversation. Conducted in French. Prerequisite : two years of college French or equivalent. Jones, Manning, Marlow, Risco.
RL 331, 332, 333. French Pronunciation and Phonetics. 2 hours each term.
A thorough study of the fundamentals of French pronunciation, with personal attention to each student's difficulties. Prerequisite: two years of college
French or equivalent. Jones, Risco. French or equivalent. Jones, Risco

## RL 403. Thesis. Hours to be arranged.

RL 405. Reading and Conference. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

RL 407. Seminar. (G) Hours to be arranged.
RL 411, 412, 413. Seventeenth-Century French Literature. (G) 3 hours each term.
Systematic study of the principal movements, types, and writers in seven-teenth-century French literature, with special attention to Pascal, Corneille, Molière, and Racine. Prerequisite : Survey of French Literature. Simonin.
RL 417, 418, 419. Nineteenth-Century French Literature. (G) 3 hours each term.
The masterworks of prose fiction and selected works of the great poets and playwrights of the century. One term devoted to each type. Prerequisite: Survey of French Literature. Johnson.
RL 423, 424, 425. Twentieth-Century French Literature. (G) 3 hours each term.
Study of the writers and dominant literary currents in France since 1900. Readings, lectures, and recitations. Conducted in French. Prerequisite : Survey of French Literature. Marshall.
RL 429, 430, 431. French Culture and Civilization. (G) 3 hours each term. The political and social backgrounds of French literature ; introduction to French music and art. Prerequisite: RL 301, 302, 303, or RL 314, 315, 316, or equivalent. Johnson, Simonin.
RL 467, 468, 469. Advanced French Composition. (G) 2 or 3 hours each term. Translation of modern literary texts into French, and writing of original themes. Conducted in French. Normally required of French majors. Prerequisite: RL 314, 315, 316 or equivalent. Dougherty.

## GRaduate courses

*RL 503. Thesis. Hours to be arranged.
RL 505. Reading and Conference. Hours to be arranged.
RL 507. French Seminar. Hours to be arranged.
RL 514, 515, 516. Eighteenth-Century French Literature. 3 hours each term.
Study of the principal authors of the Enlightenment, particularly in their relationships to European currents of thought; emphasis on Montesquieu, Voltaire, Rousseau, and the Encyclopaedists. Desroches.
RL 517, 518, 519. Sixteenth-Century French Literature. 3 hours each term. A general survey of literature in the Renaissance, with emphasis on Margue-

[^30]rite de Navarre, Rabelais, Marot, Ronsard, Du Bellay, d'Aubigné, and Montaigne. Beall.
RL 538, 539, 540. Old French Readings. 2 hours each term Study of the principal mediaeval genres; epic, romance, cilironicles, lyric poetry, and drama. Special attention to works of fourteenth and fifteenth centuries. Dougherty.
RL 544. François Villon. 3 hours.
Study of the entire work of Villon. Johnson, Dougherty.
RL 545. Ronsard. 3 hours.
Study of the evolution of Ronsard's poetic genius, and of his role in acclimating classical and Italian verse in France. Particular attention to style and to characteristic Renaissance themes and motifs. Beall.
RL 546. Molière. 3 hours.
Study of the principal comedies of Molière.
RL 547. Voltaire. 3 hours.
Study of Voltaire's social satire and historical prose. Beall.
RL 548. Baudelaire. 3 hours.
Study of all the works of Baudelaire. Johnson.
RL 549. Paul Valéry. 3 hours.
Intensive study of representative works of Paul Valéry. Marshall.

## ITALIAN

## LOWER-DIVISION COURSES

RL 70, 71, 72. First-Year Italian. 4 hours each term Grammar, pronunciation, composition, and translation of modern authors. Casagrande, Giustina, Hatzantonis, Impey.
RL 73, 74. First-Year Italian. 6 hours each term, winter and spring. Covers in two terms the work of RL 70, 71, 72. Giustina.
RL 104, 105, 106. Second-Year Italian. 4 hours each term. Study of selections from representative authors. Composition, pronunciation, grammar. Casagrande, Hatzantonis, Impey.

## UPPER-DIVISION COURSES

RL 307, 308, 309. Survey of Italian Literature. 3 hours each term. Survey of Italian literature from the Middle Ages to the present; readings from representative texts. Prerequisite: two years of college Italian or equivalent. Hatzantonis.
RL 374,375 , 376. Italian Composition and Conversation, 3 hours each term. Instruction in Italian grammar and current idiomatic patterns; extensive exercises in oral communication and written composition. Conducted in Italian. Prerequisite : two years of college Italian or equivalent. Nobile.
RL 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
AL 477, 478, 479. Dante and His Times. (g) 3 hours each term. For description, see page 135. Beall.
RL 480, 481, 482. Italian Renaissance Literature. (G) 3 hours each term. Study of tragedy, comedy, epic, lyric, novella, historical and political prose, courtesy books, criticism. Ttalys role as the literary teacher of the rest of Renaissance Europe. Hatzantonis.

RL 483, 484, 485. Modern Italian Literature. (G) 3 hours each term.
Main currents and major figures of the post-baroque period; systematic and critical study of the lyric poetry, novel, and drama of the nineteenth and early twentieth century. Prerequisite: RL 371, 372, 373. Impey.

## PORTUGUESE

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

RL 471, 472, 473. Portuguese and Brazilian Literature. (G) 3 hours each term. Comparative structure of Portuguese. Reading of contos, writers of the classical period and of the nineteenth and twentieth centuries, and Brazilian literature. Prerequisite : facility in Spanish, Italian, French, or Latin. Rose.

## SPANISH

## LOWER-DIVISION COURSES

RL 60, 61, 62. First-Year Spanish. 4 hours each term.
An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. Butler, Class, Cortes, Stathatos.
RL 63, 64. First-Year Spanish. 6 hours each term, winter and spring, Covers in two terms the work of RL 60,61,62. For students who wish to begin Spanish in the winter term. Flores.
RL 107, 108, 109. Second-Year Spanish. 4 hours each term.
Intensive oral and written exercises designed to help the student acquire an accurate and fluent use of Spanish. Study of selections from representative accurate and fuent use of Spanish. Study of selections from representative
authors. Special section for Honors College students. Begher, Casagrande, Flores, Hwang, Palley, Risco, Rose.

## UPPER-DIVISION COURSES

RL 304, 305, 306. Survey of Spanish Literature. 3 hours each term.
Spanish literature from the Middle Ages to the present ; readings from representative texts. Prerequisite: two years of college Spanish or equivalent. Palley, Risco, Rose.
RL 347, 348, 349. Spanish Composition and Conversation. 3 hours each term.
Fundamentals of pronunciation. Extensive oral and written practice. Conducted in Spanish. Prerequisite: two years of college Spanish. Rangel, Risco.
RL 350, 351. Spanish Pronunciation and Phonetics. 2 hours each term. Scientific study of Spanish sounds, rhythms, and intonation. Supervised practice, with individual use of recording equipment. Prerequisite : consent of instructor.
RL 403. Thesis. Hours to be arranged.
RL 405. Reading and Conference. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

## RL 407. Seminar. Hours to be arranged

RL 432, 433, 434. Hispanic Culture and Civilization. (G) 3 hours each term. Intellectual, cultural, and historical backgrounds of Hispanic literatures. Fall: the mediaeval and Golden Age periods; winter: the eighteenth and nineteenth RL 304, 305,306 . Offered alternate years.
RL 438, 439, 440. Nineteenth-Century Spanish Literature. (G) 3 hours each term.
Reading and study of representative works in drama, poetry, and prose from
the romanticists to the Generation of 1898. Conducted in Spanish. Prerequisite: Survey of Spanish Literature. Risco.
RL 441, 442, 443. Modern Spanish Literature. (G) 3 hours each term. Modern Spanish literature beginning with the Generation of 1898. Principal types and authors. Extensive reading of texts. Conducted in Spanish. Prerequisite : Survey of Spanish Literature. Palley.
RL 444, 445, 446. Spanish-American Literature. (G) 3 hours each term.
Study of the principal authors of Spanish America since the beginning of the sixteenth century. Selections from the works of Ercilla, Sor Juana, Bello Heredia, Sarmiento, Dario, Silva, Nervo, Gonzalez Prad
others. Prerequisite: Survey of Spanish Literature. Lozano.
RL 451, 452, 453. Spanish Literature of the Golden Age. (G) 3 hours each term. Study of the outstanding authors of Spain's classical period: Garcilaso, Cervantes, Lope de Vega, Calderón, Quevedo, Góngora, and others. Prerequisite : Survey of Spanish Literature. Kerr, Powers.
RL 461, 462, 463. Advanced Spanish Composition and Conversation. (G) 2 or 3 hours each term.
Normally required of Spanish majors. Prerequisite: RL 347, 348, 349 or equivalent. Conducted in Spanish. Lozano, Nobile.

## GRADUATE COURSES

*RL 503. Thesis. Hours to be arranged.
RL 505. Reading and Conference. Hours to be arranged.
RL 508. Spanish Seminar. Hours to be arranged.
RL 541, 542, 543. Old Spanish Readings. 2 hours each term. Study of representative texts of the three centuries preceding the Golden Age. Development of the principal genres: the chronicle, the ballad, the romance. Detailed study of El Libro de Buen Amor, El Conde Lucanor, and Amadís de Gaula. Hart.

RL 554, 555, 556. Drama of the Golden Age. 3 hours each term.
Interpretation and criticism of selected comedies of Lope de Vega, Calderón, Tirso de Molina, Ruiz de Alarcón, Augustín Moreto, and Rojas Zorilla. Conducted in Spanish. Powers.
RL 557, 558, 559. The "Modernista" Movement. 3 hours each term. Interpretation and criticism of the work of leading Spanish American "modernista" writers: Martí, Silva, Julián del Casal, Gutiérrez Nájera, Darío, Lugones, and others. Lozano.
RT , 561, 562, 563. Spanish-American Novel. 3 hours each term. Study of the novel as a literary form in Spanish America. Lozano.
RL 564. The Enlightenment in Spain. 3 hours fall.
Study of the several genres, especially the essay, in eighteenth-century Spanish literature, with special attention to: Feijóo, Jovellanos, Cadalso, Maléndez Valdés, Forner, Moratín, Torres Villarroel, and the Fabulistas.

RL 565. Realismo. 3 hours winter.
Study of the realistic and naturalistic novel in the Spanish nineteenth century, with special attention to the works of Benito Pérez Galdós.

RL 566. Romanticismo y Costumbrismo. 3 hours spring.
Study of the origins and manfiestations of romanticism in Spain and of the tendency known as costumbrismo, which coincided with the romantic movement. Special attention to the works of Larra, Mesonero Romanos, and Bécquer.

* No-grade course.


## ROMANCE PHILOLOGY

## GRADUATE COURSES

RL 520, 521, 522. Old French. 3 hours each term.
Phonology and morphology. Reading of principal literary monuments. History of French literature through the thirteenth century. Dougherty.
RL 523, 524, 525. Vulgar Latin and Old Provençal. 2 hours each term.
RL 535, 536, 537. Old Spanish. 3 hours each term
Phonology, morphology, and syntax of early texts; ecclesiastical glosses, legal documents, Auto dc los Reyes Magos, the Roncesvalles fragment, the Cantar de Mio Cid, ancient ballads. Hart.

## Nursing, Preparatory

Professor: Jean E. Boyle (director).
Associate Professor: Guhli J. Olson (in charge of prenursing program). Assistant Professor: Ruth Branconi.

THE UNIVERSITY offers on the Eugene campus a three-term prenursing curriculum to prepare students for admission to the University of Oregon School of Nursing located on the campus of the Medical School in Portland. The student enters the School of Nursing in the summer term after her freshman year for continued liberal studies and professional courses leading to the B.S. degree. The total nursing curriculum requires four academic years and one summer term for completion.

The requirements for admission to the School of Nursing are as follows:
(1) Completion of a required freshman program at the University of Oregon or at any accredited junior college, college, or university whose program is acceptable for transfer of credit to the University of Oregon.
(2) A grade-point average of at least 2.00 for the freshman-year program.
(3) A satisfactory rating on the National League for Nursing Prenursing and Guidance Examination. This examination should be taken early in the student's freshman year; application to take the examination should be made well in advance. Prenursing students should consult their prenursing adviser or write to the School of Nursing concerning examination dates.

Initial application for admission to the School of Nursing should be made in January of the student's freshman year. A transcript showing completion of the prenursing requirements should be filed at the close of the spring term in June. Because of the professional nature of nursing and the responsibility of the profession to the public, the faculty of the school has established high standards of student selection.

The required freshman prenursing program is outlined below:

|  | Term Hour |
| :---: | :---: |
| Chemistry (Ch 101, 102, 103 or Ch 104, 105, 106) | 12 |
| English Composition (Wr 121, 122, 123) | 9 |
| Literature (Eng 101, 102, 103 or Eng 104, 105, 106 Eng 107, 108, 109) | 9 |
| Social science group | 9 |
| Nutrition (HEc 225) | 2 |
| Fundamentals of Speech (Sp 121) | 3 |
| Physical education | 3 |
| Electives--Background for Nursing (Nur | 3 |

For a detailed outline of the total nursing program, see the School of Nursing Catalog; copies of the Catalog may be obtained by writing to: Director, University of Oregon School of Nursing, 3181 S.W. Sam Jackson Park Road, Portland, Oregon.

## LOWER-DIVISION COURSE

Nur 121. Background for Nursing. 3 hours.
The historical background of modern social and health movements; the rela
tion of these to the evolution of nursing as a profession. Olson.

## Pharmacy, Preparatory

THE UNIVERSITY OF OREGON offers a one-year prepharmacy program to prepare students for admission to the Oregon State University School of Pharmacy or other accredited pharmacy schools. The following courses are required:


English Composition (Wr 121, 122, 123 )
Physical Education
The professional program in pharmacy at Oregon State University is a fouryear curriculum following one year of preprofessional work.

## Philosophy

Professor: B. E. Jessup.
Associate Professors: Henry Alexander (department head), F. B. Ebersole. Assistant Professors: John Соok, D. S. Levi, Arnulf Zweig.
Instructors: Robert Paul, J. K. Stephens.
Assistants: J. G. Alexander, J. 'T. Alexander, R. M. Davis, A. Drengson, J. T Hopkins, B. J. Kellenberger, N. Marshall, A. Rosen holm.

THE DEPARTMENT OF PHILOSOPHY offers a major program leading to the Bachelor of Arts or Bachelor of Science degree. The lower-division courses in philosophy provide an introductory survey; the upper-division courses provide a more intensive study of selected philosophical problems and authors.

The minimum major requirement is 45 term hours of work in philosophy with grades of C or better, including 36 hours in upper-division courses. The 45 -hour requirement must include History of Philosophy (Phl 301, 302, 303), Symbolic Logic (Phl 461, 462) or History of Logic (Phl 466, 467) , and 6 hours of courses on the works of specific authors. Courses of study must be arranged in consultation with department advisers.

The department also offers a graduate program leading to the Master of Arts and Doctor of Philosophy degrees. Programs are arranged in consultation with the department head.

Honors. See Honors College, pages 129 ff.

## LOWER-DIVISION COURSES

Phl 201, 202, 203. Problems of Philosophy. 3 hours each term.
An introduction to philosophical problems through the study of philosophical classics.
Phl 207, 208, 209. Introduction to Philosophy (Honors College). 3 hours each term.
Introduction to the study of some significant problems of philosophy and philosophical methods; concerned primarily with topics in logic, ethics, metaphysics, and theory of knowledge. Open only to students in the Honors College.
Phl 221. Elementary Logic. 3 hours.
An introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.
Phl 222. Elementary Aesthetics. 3 hours.
An elementary study of aesthetic fact and value, and of the relation of aesthetic interest to other human interests, such as the moral, the intellectual, and the religious. Jessup.

## UPPER-DIVISION COURSES

Phl 301, 302, 303. History of Philosophy. 3 hours each term.
Survey of Western philosophy from the Greeks to the twentieth century.
Phl 304, 305, 306. Social and Political Philosophy. 3 hours each term.
A survey of the major social and political theories from Plato through Marx. Inquiry into such ideas as justice, natural law, natural rights, and the social contract.

Phl 328, 329. Modern American Philosophy. 3 hours each term.
Intensive study of selected works of major American philosophers from the late nineteenth century to the present.
Phl 361,362 . Ethics. 3 hours each term.
Study of the most important traditional ethical theories; modern philosophical analysis of moral terms and statements.
Phl 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Phl 407. Seminar. (G) Hours to be arranged
Philosophy of Mathematics. Levi.
Locke. Cook.
Philosophy of History. Paul.
Kant. Zweig.
Kierkegaard. Jessup.
Kierkegaard. Jessup.
Philosophy of Religion. Cook.
Leibniz. Paul.
Phl 411, 412. Philosophy of Science. (G) 3 hours each term. Analysis of basic concepts of science, such as "explanation," "chance," "causation," etc. Nature of mathematics and its relation to science.

Phl 413, 414. Philosophy of Mind. (G) 3 hours each term.
Analysis of some basic concepts of psychology, such as "mind" and "behavior"; discussion of the mind-body problem and of methodological issues in psychology.
Phl 415. Plato. (G) 3 hours.
Analysis of Plato's major dialogues.

Phl 416. Aristotle. (G) 3 hours.
Aristotle's major writings on theory of knowledge, metaphysics, and ethics.
Phl 417. Hume. (G) 3 hours
Hume's writings on knowledge, morals, and religion.
Phl 418. Kant. (G) 3 hours.
Kant's writings on knowledge, morals, and religion. Zweig.
Phl 431, 432. Philosophy in Literature. (G) 3 hours each term. Selective study of major philosophical ideas and attitudes expressed in the literature of Europe and America. Jessup.

Phl 435. Existentialism. (G) 3 hours.
The basic ideas of the Christian and atheistics divisions of the existentialist movement ; reading of selected works of Kierkegaard, Jaspers, Heidegger, and Sartre; some attention to precursors and to the general modern philosophical situation which negatively has generated the existentialist "rebellion." Jessup.
Phl 441, 442, 443. Aesthetics. (G) 3 hours each term.
Systematic study of the meaning and value of aesthetic experience in everyday life and in the arts-painting, music, literature, etc. Jessup.
Phl 452. Philosophy of Language. (G) 3 hours.
Examination of philosophical theories of language and meaning; ideals and methods of clarification; definition, analysis; philosophy as study of language. Selected readings. Ebersole.
Phl 453, 454. Analytic Philosophy. (G) 3 hours each term.
A critical study of recent analytic philosophy, with special emphasis on the writings of the logical positivists and their predecessors and of contemporary British "linguistic" philosophers.

Phl 461, 462. Symbolic Logic. (G) 3 hours each term.
A consideration of the critical results of mathematical logic; e.g., the completeness and undecidability of the predicate calculus, the essential incompleteness of elementary number theory, set and recursive function theory.

Phl 465. Logical Theory. (G) 3 hours.
Formal and informal logic; proof; acceptability of logic; measuring, computing, formalizing and arguing, contradiction and paradox.
Phl 466, 467. History of Logic. (G) 3 hours each term.
A study of writers in the philosophy of logic ; e.g., Plato, Aristotle, the Stoics, Ockham, Frege, Strawson.

## GRADUATE COURSES

*Ph1 503. Thesis. Hours to be arranged.
Phl 505. Reading and Conference. Hours to be arranged.
Phl 507. Seminar. Hours to be arranged.
Aristotle. Levi.
Metaphysics. Alexander.
Analytic Aesthetics. Jessup.
Phl 511, 512, 513. Problems of Knowledge. 3 hours each term
Examinations of attempts at philosophical analysis and justification of knowledge; perception, memory, induction, the self and other selves.

Phl 514, 515, 516. Ethical Theory. 3 hours each term.
An examination of contemporary ethical theory.

* No-grade course.


## Physics

Professors: J. L. Powell (department head), Bernd Crasemann, S. Y. Ch'en, F. E. Dart,* E. G. Ebbighausen,* R.' T. Ellickson, I. E. McCarthy, J. W. McClure, G. H. Wannier.

Associate Professors: M. D. Girardeau, J. C. Kemp, H. W. Lefevre.
Assistant Professors: R. J. Higgins, D. K. McDaniels, D. O. Wells.
Instructors: J. C. Burg, R. J. Hardy.
Associate: P. V. Rao.
Fellows: C. O. Clark, J. C. Cooper, D. D. Davis, K. W. Dolan, V. O. Kostroun, C. J. Piluso.

Assistants: G. A Barnes, K. W. Battleson, J. L. Binney, S. D. Cloud, P. Deutchman, B. D. Evans, D. E. Gilbert, J. A. Glaze, Q. A. Holmes, D. T. hon, J. T. Hunt, H. D. Kaehn, D. W. Kneff, J. W. Leonard, Tsu-huei Liu, A. Lonseth, M. T. Lunnon, A. Mord, G. A. Moss, M. A. Philippas, Stephas, G. A. Stringer, D. K. Tan D. Thimondet, H. M. Spilman, P. Stephas, G. A. Stringer, D. K. Tan i D. Tanimoto, D. W. Terwilliger, Cheng-chih Yan, L. H. Ziegier, W. M. Ziniker.

COURSES OFFERED by the Department of Physics are planned to provide basic training for professional physics majors, for persons who wish to obtain a broad liberal arts education centered around a major in physics, for major students in other science fields, for premedical and predental students, and for students planning to teach the physical sciences in the secondary schools.

Preparation for Major Work. Students planning to major in physics at the University should take as much mathematics in high school as possible. Students entering with insufficient preparation in mathematics must remedy their deficiencies in elementary courses offered by the University. Substantial preparation in English and a foreign language is expected. High-school work in chemistry and physics is desirable but not required.

Requirements for Bachelor's Degree. To qualify for a bachelor's degree with a major in physics, a student must complete 39 term hours of work in the field, including General Physics (Ph 201, 202, 203), General Physics Laboratory ( $\mathrm{Ph} 204,205,206$ ), and at least 24 term hours in upper-division physics courses including Advanced General Physics (Ph 320, 321, 322). All physics majors must complete a year sequence in differential and integral calculus and a year sequence in chemistry, including laboratory.

Students preparing for graduate work in physics should include in their programs: Electricity and Magnetism (Ph 431, 432, 433), Modern Physics (Ph 411, 412,413 ), a year sequence in advanced mathematics (Mth 418, 419, 420), and at least one additional upper-division sequence in physics.

Science Group Requirement. Any one of the following sequences will satisfy the science group requirement : Essentials of Physics and General Physics Laboratory ( $\mathrm{Ph} 101,102,103, \mathrm{Ph} 204,205,206$ ) ; Descriptive Astronomy (Ph 104, 105, 106) ; General Physics (Ph 201, 202, 203).

Secondary-School Teaching of Physics. For certification as a teacher of physics in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certaill minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

* On sabbatical leave 1965-66.

For information concerning subject preparation required to meet state standards in physics and to obtain the recommendation of the University of Oregon, the student should consult the member of the faculty of the Department of Physics who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Graduate Work. The Department of Physics offers a program of graduate work leading to the M.A., M.S., and Ph.D. degrees, with a variety of opportunities for research. Some fields of current research interest in the department are the following: Nuclear physics-nuclear structure, including beta- and gamma-ray spectroscopy; nuclear theory. Solid state physics-optical and magnetic resonance properties of crystals; theory of the behavior of electrons in crystals. Optical spectroscopy-perturbation of atomic-energy levels due to high pressure and temperature.

A qualifying examination for first-year graduate students is given at the beginning of the fall term. The examination is restricted to questions in the fields of mechanics and electricity. Students who show a lack of adequate preparation in either of these fields are required to take an appropriate undergraduate course, for which no graduate credit is given.

Course requirements for a master's degree with a major in physics normally include, in addition to the substantial equivalent of the undergraduate requirements listed above: two year sequences in physics, at least one of which must be a 500 sequence : and one of the following sequences in mathematics-Advanced Calculus (Mth 431, 432, 433), seminar in applied mathematics (Mth 507), Theory of Functions of a Real Variable (Mth 551, 552,553), Theory of Functions of a Complex Variable (Mth 554, 555, 556), Topics in Classical Analysis (Mth 557, 558 559).

## LOWER-DIVISION COURSES

Ph 101, 102, 103. Essentials of Physics. 3 hours each term
Fundamental principles of physics, intended for students not majoring in science; requires less mathematical preparation than $\mathrm{Ph} 201,202,203$. 3 lec tures. Prerequisite: Mth 95. Ch'en.
Ph 104, 105, 106. Descriptive Astronomy. 4 hours each term.
Descriptive treatment of both the solar and stellar systems, including the earth, moon, sun, planets, comets and meteors, properties of individual stars, star clusters, bright and dark nebulae, double and multiple stars, variable sional viewing of celestial objects with a telescope. 4 lectures. Ebbighausen

Ph 201, 202, 203. General Physics. 4 hours each term.
First-year college physics. Special section for Honors College and other superior students. 4 lectures. Prerequisite: mathematics equivalent of Mth 104, 105 or consent of instructor. Powell, Ellickson.
Ph 204, 205, 206. General Physics Laboratory. 1 hour each term.
Planned to accompany Ph 101, 102, 103 or Ph 201, 202, 203. 1 two-hour laboratory period.

## UPPER-DIVISION COURSES

Unless an exception is noted in the course description, general physics and calculus
are prerequisite to all upper-division and graduate col:rses.)
Ph 320, 321, 322. Advanced General Physics. 4 hours each term
Fundamental principles of Newtonian mechanics; brief introduction to La grange's equations; thermodynamics and kinetic theory of gases ; introduction to statistical mechanics. 4 lectures. Lefevre

Ph 401. Research. Hours to be arranged.

Ph 405. Reading and Conference. Hours to be arranged.
Ph 409. Special Laboratory Problems. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Ph 407. Seminar. (G) Hours to be arranged.
Ph 411, 412, 413. Modern Physics. (G) 3 hours each term.
Brief introduction to special relativity. The experimental foundations of quantum physics. Basic ideas and methods of elementary quantum mechanics, with applications to atomic physics. Introductory nuclear physics. Prerequisite: Ph 320, 321, 322 or consent of instructor. Powell.
Ph 417, 418. Atomic and Nuclear Physics. (g) 3 hours each term.
Atomic structure, elements of spectroscopy. Radioactivity, nuclear reactions, nuclear structure; selected topics in quantum physics. Designed for students preparing for secondary-school teaching. 3 lectures.
Ph 427, 428, 429. Electronics and Electrical Measurements. (g) 2 hours each term.
Analysis and laboratory study of $D C$, transient, and $A C$ response of passive networks, and networks containing active elements such as vacuum tubes and transistors; measurement of electric and magnetic fields; use of transducers and electronic circuits for study and control of physical variables. 1 lecture ; 1 three-hour laboratory period. Kemp.
Ph 431, 432, 433. Electricity and Magnetism. (g) 3 hours each term.
Advanced undergraduate study of electromagnetic phenomena, with emphasis on vector methods; electrostatic potentials by solution of Laplace's and Poisson's equations ; field and potential changes produced by dielectric and magnetic materials; magnetic fields, potentials, and induced electromotive forces;
steady currents and transients using Kirchhoff's laws; AC circuit theory with steady currents and transients using Kirchhoff's laws; AC circuit theory with requisite: $\mathrm{Ph} 320,321,322$ or consent of instructor. McDaniels.
Ph 434, 435, 436. Advanced Physical Measurements. (G) 1 or 2 hours each term.
Primarily for advanced students interested in experimental physics. Selected topics in electronics and in nuclear and solid state physics instrumentation. Course material adapted to students' interests when possible. Lectures and laboratory.
Ph 441, 442, 443. Advanced Optics. (G) 4 hours each term.
Theory of optical images, aberrations; effects of apertures, optical instruments; interference, diffraction, polarization, double refraction, optical activity, dispersion, absorption, scattering, theory of reflection, the nature of light. Kemp.
Ph 444. Spectrochemical Analysis. (G) 3 hours.
Methods of excitation, qualitative analysis, photographic photometry, methods of quantitative analysis, analysis of absorption spectra, practical applicaods of quantitative analysis, analysis of absorption spectra, practical applica-
tions to various fields of industry and research. 2 lectures; 1 three-hour laboratory period. Ch'en.
Ph 451, 452, 453. Statistical Physics. (G) 3 hours each term.
Thermodynamics, statistical mechanics, kinetic theory; applications to gases, liquids, solids, atoms, molecules, and the structure of matter. Wannier.
Ph 471, 472, 473. Introduction to Theoretical Physics. (G) 3 hours each term. Elementary quantum mechanics; the Schroedinger equation, wave functions and wave packets, uncertainty principle, hermitian operators, one-dimensional problems, the WKBJ approximation, angular momentum and spin, the hydrogen atom, identical particles, approximate methods, scattering theory, electromagnetic radiation. Prerequisite: Ph $320,321,322$ and concurrent registration
in $\mathrm{Ph} 411,412,413$ or consent of instructor. Wells. in $\mathrm{Ph} 411,412,413$ or consent of instructor. Wells.
*Ph 501. Research. Hours to be arranged.
*Ph 503. Thesis. Hours to be arranged.
Ph 505. Reading and Conference. Hours to be arranged.
Ph 507. Seminar. Hours to be arranged.
Experimental Solid State Physics.
Nuclear Physics.
Advanced Quantum Theory.
Ph 517, 518, 519. Quantum Mechanics. 3 hours each term.
The physical basis of wave mechanics; the Schroedinger equation; the hydrogen atom and other problems with exact solutions; approximation methods; time-independent and time-dependent perturbation theory; collision theory; matrix mechanics; angular momentum, radiative transitions; relativistic quantum mechanics; field quantization. Prerequisite: $\mathrm{Ph} 471,472,473$ or consent of instructor. 3 lectures. McClure.
Ph 524, 525, 526. Nuclear Physics. 3 hours each term.
Properties of nuclei; two-body problem; nuclear forces; polarization phenomena; beta decay; electromagnetic interactions; nuclear models; scattering, nuclear reactions. 3 lectures. Prerequisite : concurrent enrollment in Ph $517,518,519$. McDaniels.

Ph 538, 539, 540. Theoretical Mechanics. 3 hours each term.
Lagrangian and Hamiltonian mechanics; rigid bodies; special relativity; canonical transformations; Hamilton-Jacobi th
Ph 541, 542, 543. Theoretical Nuclear Physics. 3 hours each term. Theory of nuclear reactions and their use in obtaining information about nuclear structure. 3 lectures. McCarthy.
Ph 544, 545, 546. Electromagnetic Theory. 3 hours each term.
Microscopic form of Maxwell's equations; derivation and solution of the wave equation; relativistic formulation; motion of charges in given felds; propagation and diffraction; radiation by given sources; coupled motion of source and fields; the electromagnetic field in dense media. 3 lectures. Girardeau.
Ph 551, 552, 553. Atomic Spectra. 3 hours each term.
Relation of observed spectra to the theory of atomic and molecular structure. quantum mechanical model, electron configurations, spectral terms, Zeeman effect, Stark effect, hyperfine structure, X-ray spectra, spectral line shape; rotational, vibrational, and electronic band spectra of diatomic molecules Ch'en.
Ph 554, 555, 556. Experimental Spectroscopy. 1 hour each term.
Spectroscopic instruments (prismatic and grating) ; flame, arc, and spark spectra of elements; analysis of series lines in atomic spectra; Zeeman effect, analysis of band spectra of diatomic molecules, absorption spectra, Raman spectra, and photographic photometry. 1 three-hour laboratory period Ch'en.
Ph 578, 579, 580. Solid State Physics. 3 hours each term.
Crystallography; thermal, electrical, optical, and magnetic properties of solids; band theory ; metals, semiconductors, and insulators; defects in solids. 3 lectures. Prerequisite: Ph 471, 472, 473 or equivalent. Higgins, Wannier.

## Political Science

Professors: J. C. Davies (department head), R. E. Agger,* A. S. Flemming, J. F Gange, Thomas Hovet, Jr., W. C. Mitchele, C. P. Schleicher, L. G. Seligman.
Associate Professors: Daniel Goldrich, Herman Kehrli, J. A. Kieffer, J. R. Klonoski, L. C. Marquis, $\dagger$ L. H. Ziegler.
Assistant Professors: D. J. Finlay, J. R. Fiszman,* A. M. Hanhardt, Jr., Joyce M. Mitchell.
Instructors: C. L. Kim, Joann Paine.
Fellows: Karen Lindenberg, Kathleen O’Brien, Joe Pullcrabek, Charles Schuller.
Assistants: Michael Baer, Barry Barlow, Judy Bertelson, Pete Bullard, Jr., Winston Cox, Donald Crawford, Randal Cruikshanks, James Hutter, Clifford Kaufman, Michael King, Roberta Koplin, F. D. Laws, James McKenney, Jerry Medler, Raymond Pratt, Barry Rundquist, Roland
Smith, Michal Sullivan Smith, Michael Sullivan.

THE UNDERGRADUATE PROGRAM in political science is designed : (1) to provide a systematic understanding of the political process; (2) to provide a basic background to students preparing for careers in government, law, journalism, and the teaching of social studies; (3) to prepare students for graduate work leading to professional careers in political science.

At the lower-division level, the department offers three terms of work in American governmental politics (PS 201, 202, 203), with an alternative, for the third term, of international relations (PS 205), and Introduction to Political Science (PS 206, 207, 208), a year sequence concerned with basic concepts and methods.

The advanced courses offered by the department fall into three groups-(1) Political theory and method: PS 311; PS 430, PS 431, PS 432; PS 433, 434, 435; PS 456, 457; PS 470; PS 492,493. (2) Comparative politics: PS 312; PS 330, 331, 332; PS 337, 338, 339; PS 351; PS 412, 413; PS 414, 415, 416; PS 424, PS 425, PS 426, PS 427, PS 428; PS 460, 461; PS 463, 464; PS 467, 468, 469; PS 475; PS 482; PS 483; PS 484, 485, 486; PS 487, 488, 489; PS 490, 491; PS 494, 495, 496. (3) International relations: PS 320, 321, PS 322; PS 391, 392, 393; PS 420, 421 ; PS 422; PS 440, 441, 442.

Undergraduate majors in political science build their programs on a base of a minimum of 9 term hours of lower-division courses in political science or Introduction to Social Science (Honors College) (SSc 201, 202, 203). Introduction to Political Analysis (PS 311), Introduction to Comparative Politics (PS 312), one term of World Politics (PS 320), and two additional terms of work in political theory are required of all majors. Courses presented in satisfaction of the minimum 36 -hour major requirement must be completed with a grade average of C or better.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in political science must complete the following program, selected from the fields of history, geography, political

[^31]science, economics, and sociology or anthropology, with a 2.50 GPA or higher : (1) work in political science required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upperdivision courses.

For further information, the student should consult the member of the political science faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Master's Degree. Normally, full-time advanced study for one year beyond the bachelor's degree will prepare a student for the final comprehensive written examination for the master's degree. A thesis is optional.

Doctor's Degree. Two years of full-time study beyond the bachelor's degree is normally required in preparation for the preliminary comprehensive examination for the Ph.D. degree. During these years the student is expected to take regular courses, seminars, and reading courses to prepare himself for the examination. After satisfaction of the language requirement and the preliminary examination, the student is expected to write a thesis. For advanced studies in political science, graduate students may draw upon the resources of the Institute for Community Studies and the Institute of International Studies and Overseas Administration.

## LOWER-DIVISION COURSES

PS 201, 202, 203. American Governments. 3 hours each term.
An introduction to the study of forms of government, public policy, public opinion, and community politics in the United States. Klonoski, staff.
PS 205. International Relations. 3 hours.
$A_{n}$ introduction to the intellectual tools for the analysis of relations among nations; the nature of international relations, with contemporary international issues used for reference and illustration. Finlay.
PS 206, 207, 208. Introduction to Political Science. 3 hours each term.
What political science is about: its basic concerns, fields, and methods of study. J. Mitchell, staff.

UPPER-DIVISION COURSES
PS 311. Introduction to Political Analysis. 3 hours fall.
Theoretical analysis of political action and systems, their nature, types, and functioning. Particular attention is paid to certain processes of action, including political socialization, the distribution of benefits and costs, integration and stability. Required of majors. W. Mitchell.
PS 312. Introduction to Comparative Politics. 3 hours, winter or spring.
Analysis of major concepts and approaches in the study of comparative government and politics. Required of majors. Hanhardt.
PS 320, 321. World Politics. 3 hours each term, fall and winter.
Systematic analysis of the nature of international society, and of the motivat-
ing and conditioning factors which explain interaction among states and other international entities. Required of majors. Schleicher.
PS 322. American Foreign Policy. 3 hours spring.
Contemporary foreign relations of the United States; objectives, world and
domestic factors affecting American foreign policy, governmental institutions
concerned with development and execution of foreign policy, major issues and problems. Schleicher.
PS 337, 338, 339. Southern Asia in Modern Times. 3 hours each term.
The political forces, institutions, and international relations of the inde-
pendent countries extending from Pakistan to the Philippines; emphasis on common problems and trends. Schleicher.
PS 340. Introduction to Public Policy. 3 hours.
An introduction to policy making as it reflects the sources and means of effective political action, the political resources and patterns of power in the society. Questions of initiation and change, interest-group patterns, and modes of policy resolution are compared in various policy areas. J. Mitchell.
PS 351. Introduction to Public Administration. 3 hours, fall.
Examination of various approaches to and conceptions of public administration; application of various theories of administration to the study of public organizations ; substantive problems of organizations; structure and internal administration; personnel and finance.
PS 391, 392, 393. Far East in Modern Times. 3 hours each term.
Political, economic, and diplomatic history of China, Japan, and Korea, with some attention to Asiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Dull, Falconeri.
PS 403. Thesis. Hours to be arranged.
PS 405. Reading and Conference. Hours to be arranged.
PS 407. Seminar. Hours to be arranged.
Field Studies in Public Administration
Policy Analysis. J. Mitchell.
Politics of Developing Nations. Davies, Goldrich.
Publics and Political Leadership. J. Mitchell.
Studies in the Judicial Process. Klonoski.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

PS 412, 413. Administrative Organization and Behavior. (G) 3 hours each term, winter and spring
A comparison of concepts and theories utilized in' the study of organizations and their environments; the problems of officials and employees in the organization setting and the factors influencing their behavior; an examination in depth of selected studies of organizations and their environments; problems of analysis and techniques.
PS 414, 415, 416. Political Parties and Public Opinion. (G) 3 or 4 hours each term.
Analysis of the structure and functions of political parties and public opinion to provide an understanding of the broad area of politics in various contexts and of the critical role of politics in society; the interrelationship of general ization and political experience. Seligman.
PS 420, 421. International Organization. ( $G$ ) 3 hours each term, fall and winter. The organization of interaction among nations; institutional structures, patterns of communications, processes of collaboration and integration; special attention to the United Nations and to problems arising from the UN system. Hovet.
PS 422. International Law. (G) 3 hours spring.
Introduction to international public law as an aspect of international organization; international law and the political process; the International Court of Justice.
PS 424. Government and Politics of Great Britain. (G) 3 hours.
Governmental institutions and political processes in Great Britain. Marquis.
PS 425. Government and Politics of France. (G) 3 hours.
Governmental institutions and political processes in France.
PS 426. Government and Politics of Germany. (G) 3 hours. Governmental institutions and political processes in Germany. Hanhardt.

PS 427, 428. Government and Politics of the Soviet Union. (G) 3 hours each term, fall and winter.
Governmental institutions and political processes in the Soviet Union. Fiszman.
PS 430. Political Theory: General Issues. (G) 3 hours fall.
Problems posited by political theorists, past and present; demands made upon political theory by society and by practitioners of political science; relations between political theory and political behavior. W. Mitchell.
PS 431. Political Theory: Values and Utopias. (G) 3 hours winter.
Ideals, rights, values, and moral imperatives; natural rights and natural law; utopian models and images of the good life and the good society; problem of ends, related means, and the necessary social and organizational conditions; selected theories from Plato to the modern theorists of the "ideal" social and political orders. W. Mitchell.
PS 432. Political Theory: Causes of Political and Social Change. (G) 3 hours spring.
Problem of identifying change-inevitability, gradualism, and rupture; Problem of identifying change-inevitability, gradualism, and rupture;
theories of change-historical, economic, social, and political; the roles of class, group, elite in relation to political power; techniques of change; levels of generality, testability and applicability; selected theories from Plato and Aristotle to the present. W. Mitchell
PS 433, 434, 435. Political Theory: The American Tradition. (G) 3 hours each term.
The development of American thought about government and its proper relation to life, liberty, and property.
PS 440, 441, 442. Foreign Policies of the Major Powers. (G) 3 hours each term. A systematic and comparative study of the foreign policies of the major world powers, in the light of the general world situation and the internal
PS 456, 457. Theory of Democracy. (G) 3 hours each term.
The internal functioning of democracy as a type of political system; social, economic, and psychological conditions which affect its development and maintenance. W. Mitchell.
PS 460, 461. Government and Politics of the Far East: China. (G) 3 hours each term.
The political organization of modern China and the political behavior of significant groups and elites within Communist China. The historical and ideological background, revolutions, the problems facing the present regime, the relationships with other Communist states. Special emphasis on the treatment of various classes and groups in terms of ideology as well as political practice. Fiszman.
PS 463, 464. Government and Politics of Latin America. (G) 3 hours each term.
Scope of government, regimes and power structures, political ideologies of dominant and aspiring leadership groups, and external sources of influence in Latin America; sources of stability and instability in Latin American politics. Goldrich.
PS 467, 468, 469. Federal Public Administration. (G) 3 hours each term.
Evolution of the Presidency, the executive departments, and various independent agencies in the United States government ; emphasis on the manner in which the President and his aides exercise their leadership and management responsibilities; analysis of the strengths and weaknesses of the system; proposals for change; relationships between the President and Congress, and the President and the departments. Kieffer.
PS 470. Political Behavior. (G) 3 hours.
Political behavior of individuals examined in the light of psychological and sociological theory; types of political institutions and kinds of government
adapted to the needs and behavioral tendencies of people living in modern industrial and technological society. Davies.
PS 475. Political Revolution. (G) 3 hours.
Analysis of causes of revolution, using historical, psychological, and sociological data to explain how violent changes in political power come about. Analysis of specific past revolutions in the search for common phenomena and general theory. Davies.
PS 482. Legislative Politics. (G) 3 hours.
The study of legislative operations in various governmental settings; their functions and exercises of power, composition, decision making, and influence in the political system. J. Mitchell
PS 483. Allocation of Justice. (G) 3 hours.
Analysis of interrelationships of legal and political systems; special attention to the lower courts, their agents, participants, and publics, in the allocation of justice among various social, economic, and political groupings at the community and state levels of government. Klonoski.
PS 484, 485, 486. The Supreme Court in American Government. (G) 3 hours each term.
The role of the Supreme Court in the American constitutional system; the nature of the judicial process; limitation of the powers of the national and state governments by guarantees of life, liberty, and property ; constitutiona
law and the shaping of public policy. Klonoski.

PS 488, 489. The Policy Process. (G) 3 hours each term
Systematic study of the factors involved in policy making. Sources of demands, nature of decisions, problems of effectuation, and political consequences compared in various policy areas. J. Mitchell.

PS 490, 491. Community Politics. (G) 3 hours each term, winter and spring. Systematic treatment of concepts, theories, and findings in studies of small, medium, and large communities as political systems, with emphasis on American communities.
PS 492, 493. Political Decision Making. (G) 3 hours each term.
The process of agreeing upon a course of group action; stages in the decisionmaking process, from individual preference formation through political participation to conflict resolution; methods of changing outcomes of a political process; special attention to the role of the mass media, power structures, political organizations, mass movements, and periods of crisis, as they effect changes in the decision-making process.
PS 494. Federal Education Policy. (G) 3 hours.
Factors in the development of education policy, with particular reference to the Federal government. Flemming.
PS 495. Federal Welfare Policy. (G) 3 hours.
Factors in the development of health and welfare policy, with particular reference to the Federal government. Flemming.
PS 496. National Security Policy. (G) 3 hours.
Factors in the development of national security policy, with special emphasis upon decision making, and the implications and consequences of such policies here and abroad. Flemming, J. Mitchell.

## GRADUATE COURSES

*PS 501. Research. Hours to be arranged.
*PS 503. Thesis. Hours to be arranged.
PS 505. Reading and Conference. Hours to be arranged.

[^32]PS 507. Seminar. Hours to be arranged.
Africa. Finlay.
Comparative Communist Systems. Fiszman.
Comparative Community Politics. Agger, Goldrich.
Comparative Labor Movements. Fiszman.
Comparative Political Elites. Seligman.
Comparative Studies in Public Administration.
Constitutional Law and the Judicial Process. Klonoski
Contemporary Political Theory. W. Mitchell.
International Politics. Schleicher.
International Relations Theory. Schleicher, Finlay
Leadership and Responsibility in U.S. Government. Kieffer.
Organization Theory.
Policy Implementation Abroad. Gange.
Political Development in the Newer
The Pont Mal System. Mitchell.
Scope and Methorice. Zeigler, Davies
Theored Stater Forein Polices. W. Mitchell.
United States Foreigu Policy. Schleicher.

## Psychology

Professors: R. A. Littman (department head), Fred Attneave,* Ray Hyman, F. R. Fosmire, $\dagger$ R. W. Leeper, Philip Runkel, N. D. Sundberg,* Leona E. Tyler, R. C. Żiller.
Associate Professors: J. S. Carlson, H. R. Crosland (emeritus), H. R. Dickman, $\ddagger$ R. F. Fagot, L. R. Goldberg, R. W. Leary,* P. Lewinsohn, Hayden Mees, G. R. Patterson, M. Posner, P. H. Schoggen, C. M. Slade.
Assistant Professors: B. F. Anderson, Louis Breger, W. A. Bricker, $\ddagger$ L. A. Davison, Susan K. Gilmore, R. D. Johnson, D. P. Kimble, Vello Sermat. Instructors: Ingeborg Casey, Eileen A. Crowley, Sydney Herbert, D. L. Slye.
Fellows: F. J. Clark, G. D. Coover, Robert Ells, Marcia Harrington, T. L. Harrington, Harold Hawkins, L. E. Moore, Douglas Mosher, Linda J. Rogers, Maynard Stewart, Jeannette Towery.
Assistants: R. N. Atwood, Garnet Beach, G. D. Brodsky, D. L. Davis, N. R. Denny, Richard Diller, W. E. Eichelman, S. L. Golding, E. G. Greene, gon, L. F. Hunt, W. L. Johnson, J. C. Keesey, D. H. Killian, Daniet Langmeyer, Isabelle Littman, Ronald Mitchell, L. E. Moore, R. K. Olson, Larry Parker, Linda Rogers, E. S. Shiman, Audrey Skaife, Malcolm Weinstein, Robert Welch, A. D. Well, Sheldon Zack.

THE UNDERGRADUATE COURSES in psychology offered by the University are designed to serve several different objectives: to provide a sound basis for later professional or graduate training in psychology; to satisfy the needs of students, majors and nonmajors, who are interested in psychology primarily as a part of a broad liberal education; and to provide a background in psychological principles and techniques as intellectual tools for work in other social and biological sciences and in such professional fields as education, business, law, and journalism.

Lower-Division Program. The lower-division courses are intended to facilitate the several objectives of the psychology curriculum. The six lecture courses at the lower-division level are offered in pairs: fall, Psy 211, Psy 212; winter,

[^33]Psy 214, Psy 215 ; spring, Psy 217, Psy 218. For a general introduction to psychology or for preparation for advanced courses, a student should take one of the courses in each pair in sequence. Psychology Laboratory is integrated with the two paired lecture courses offered each term: Psy 213 with Psy 211, Psy 212; Psy 216 with Psy 214, Psy 215; and Psy 219 with Psy 217, Psy 218.

For satisfaction of the social science or science group requirement, a student must elect a sequence including one of the two paired lecture courses offered each term. To satisfy the science group requirement, the student must also take the related laboratory courses. (A student may take a lower-division sequence in psychology to satisfy the social science or the science group requirement, but not both.)

Any one of the several patterns will ordinarily provide adequate preparation for upper-division courses in psychology. Students should consult their advisers in making their selections from the paired offerings each term.

Major Requirements. Majors in psychology are required to take at least three lower-division courses in psychology or equivalent and either the lowerdivision laboratory sequence (Psy 213, 216, 219) or an upper-division laboratory course. The minimum major requirement is 36 term hours in psychology, including at least 24 upper-division hours. The courses presented in satisfaction of the 36hour minimum requirement must be completed with a grade average of C or better.

Students who do not plan on graduate work in psychology may arrange a program of courses which will prepare them for a career in teaching, social service, or other professions. Such a program should be planned in consultation with the Department of Psychology.

Honors. See Honors College, pages 129 ff.
Preparation for Graduate Study. A bachelor's degree is seldom a sufficient qualification for professional work in psychology; even the simpler professional positions require at least a master's degree.

Students should not undertake graduate work unless their grades in undergraduate psychology and related courses have averaged better than B.

Prospective graduate students in psychology are advised to take only the minimum of 36 hours in psychology required for an undergraduate major (a suggested maximum is 42 hours)-leaving time for work in such related fields as anthropology, biology, chemistry, mathematics, physics, and sociology. Preparation for graduate work should include courses in quantitative methods and foreign languages. All prospective graduate students should take the Quantitative Methods in Psychology (Psy 313) and at least one upper-division laboratory course and are strongly urged to take at least two terms of statistics in the Department of Mathematics. A student who intends to work for a Ph.D. degree should acquire a reading knowledge of two foreign languages; languages with particular relevance for psychologists are German, French, Russian, and Japanese.

Graduate Work. The department offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. Candidates for graduate work are accepted in the following fields: clinical, cognition, counseling, developmental, differential, learning, perception, personality, physiological, quantitative, and social psychology. The department maintains a general experimental laboratory, rat and monkey laboratories, a child-study center, and a psychological clinic.

All students beginning graduate work in psychology, regardless of prior graduate training, are required to take a series of core seminars (see Psy 507 , below) which provide a breadth of background in psychology as well as an introduction to research. A thesis is required for all advanced degrees. Further information concerning the core program and other requirements may be obtained on request to the department. For general regulations governing graduate work at the University, see Graduate School, pages 112 ff .

All students applying for admission for graduate work in psychology must provide scores on the Graduate Record Examination, including psychology, verbal, and quantitative scores (the score on the Miller Analogies Test is also desirable) and three letters of recommendation on special forms provided by the department. Detailed information on admission, including application forms and information on awards and assistantships may be obtained from the Department of Psychology.

Clinical Psychology. Although the department's clinical program stresses the model of a clinical psychologist as a producer of knowledge through research and writing, as well as a consumer of knowledge, it recognizes that many students are interested principally in applied work. The newly admitted student is not required to commit himself to clinical or any other area of psychology. Prospective clinical students should take Foundations of Clinical and Counseling Practice (Psy 530) and practicum work in the University Psychology Clinic during their first year to explore the strength of their interest and ability in clinical psychology. Formal admission to the clinical program is granted in the second graduate year, upon successful completion of the work of the first graduate year.

Beyond the core program, clinical students have great freedom in choosing a study program. Some may concentrate on physiological psychology; others find that work in anthropology and sociology will contribute more to their vocational goals. The clinical preliminary examination consists of two parts, a written and a field examination. The written examination samples personality theory, assessment and diagnostics, psychotherapy, psychopathology, and professional problems and ethics. The field examination, in diagnosis and therapy, may be scheduled anytime after the written examination is passed. In the field examination the student is required to demonstrate that he has acquired practical clinical skills in addition to his academic knowledge.

Counseling Psychology Program. The Department of Psychology and the School of Education cooperate in a joint graduate program in counseling psychology, with a degree granted in either psychology or education. Students who elect a psychology major begin with the core program and the basic course in Foundations of Clinical and Counseling Practice, and take many of the same courses offered for clinical students.

Counseling students place somewhat more emphasis than clinical students on the positive aspects of personality development from youth to old age. They may elect courses in vocational psychology and career planning, marriage and family, community organization, rehabilitation, special education, personnel relations, and other related fields. As in other areas of specialization in the department, emphasis is placed on training for research.

Practicum training is given in the University Counseling Center, Veterans Administration hospitals, and in other school and community agencies.

School Psychologist Program. A special undergraduate and graduate program is offered, through the cooperation of the Department of Psychology and the School of Education, to prepare students for positions as school psychologists. Further information can be obtained from the School of Education or the Department of Psychology upon request.

Rehabilitation Counseling. The Department of Psychology and the School of Education sponsor jointly a two-year program of graduate training in rehabilitation counseling leading to a master's degree. The program is administered through the Center for Social Service Training and Research (see page 126).

## LOWER-DIVISION COURSES

Psy 211. Learning and Thinking. 3 hours fall
An introduction to the principles underlying the acquisition, retention, and utilization of information and behavior. Anderson, Hyman, Leeper, Littman.

Psy 212. Perception. 3 hours fall.
Introduction to principles and evidence concerning the way in which we sense and perceive the world around us. Attneave, Kimble, Leary.

## Psy 213. Psychology Laboratory. 1 hour fali.

Introduction to research methods; designed to familiarize the student with scientific approaches to problems in psychology. Integrated with Psy 211 and scientific approaches to problems in psychology. Integrated with Psy
Psy 212. Psy 213, 216, and 219 must be taken in sequence. Anderson.
Psy 214. Motivation and Physiological Psychology. 3 hours winter
Introduction to the basic issues concerning the relationship of the brain to behavior. Special emphasis on the role of physiological factors in motivated behavior. Kimble, Leary, Littman.
Psy 215. Social Psychology. 3 hours winter.
Introduction to social psychology as that part of general psychology concerned with how the individual behaves in relation to his culture. The features or and Rund communication, and to man's attitudes towards social issues. Hyman, Runkel, Ziller.
Psy 216. Psychology Laboratory. 1 hour winter.
For description, see Psy 213. Integrated with Psy 214 and Psy 215. Psy 213, 216 , and 219 must be taken in sequence. Anderson.
Psy 217. Human Development and Individual Differences. 3 hours spring.
An introductory survey of the changes in human behavior throughout the lifespan. Development of psychological processes in man from conception to senescence; emphasis on the origin of individual differences in the areas con sidered. Bricker, Schoggen, Tyler.

## Psy 218. Personality. 3 hours spring.

A general survey of principles in the development, structure, function, and alteration of adult character and personality. Davison, Leeper, Patterson, Sermat.
Psy 219. Psychology Laboratory. 1 hour spring.
For description, see Psy 213. Integrated with Psy 217, 218. Psy 213, 216, and 219 must be taken in sequence. Anderson.

## UPPER-DIVISION COURSES

Psy 313. Quantitative Methods in Psychology. 4 hours.
Methods which psychologists have devised for summarizing, describing, and interpreting information from field observations, clinical work, interviews, sensory judgments, learning trials, tests, and experiments. Lectures and supervised workshops. Hyman.
Psy 401. Research. Hours to be arranged.
Psy 403. Thesis. Hours to be arranged.
Open only to students elegible to work for honors.
Psy 405. Reading and Conference. Hours to be arranged.
Open only to students elegible to work for honors.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Psy 407. Seminar. (g) Hours to be arranged
Opportunity for small groups of students to pursue further the subject matter of an upper-division course or to explore in depth a specific topic arising out year depending upon interests and needs of students and upon availability of faculty.
Nature of Psychological Inquiry. Hyman.
Thinking. Anderson.

Mathematical Psychology. Fagot.
Assessment. Goldberg, Sundberg.
Character and Personality. Davison.
Abnormal Psychology. Fosmire.
Comparative Psychology. Kimble, Leary.
Physiological Psychology. Kimble, Leary.
Child and Developmental Psychology. Bricker, Patterson, Schoggen.
Motivation. Littman.
Learning. Anderson, Leeper.
Perception. Attneave.
Social Psychology. Hyman, Sermat, Ziller.
Psy 417, 418. Laboratory in Advanced Psychological Statistics. (G) 1 hour each term.
Designed to familiarize the student with the principal applications of statistical methods in psychological research. Emphasis on correlational methods including partial and multiple correlation, analysis of variance, and design of experiments. Prerequisite : enrollment in Mth 426,427 or completion of this sequence or equivalent. Fagot.
Psy 421. Principles and Methods of Psychological Assessment. (g) 3 hours. Application of psychological methods to the study of the individual; theoretical and statistical rationale of test construction and interpretation; problems involved in the prediction of human behavior; survey of psychological assessment techniques. Prerequisite: Psy 313 or Mth 425, or equivalent. Davison, Goldberg.
Psy 436. Character and Personality. (g) 3 hours.
An intensive study of selected topics in personality theory and related research. Prerequisites : 9 hours in psychology or consent of instructor. Breger, Davison, Leeper, Sermat.
Psy 437. Social Psychology. (g) 3 hours.
The relationship of the individual to his social environment, especially in his participation in small groups; social perception and motivation as shown in participation in small groups; social perception and motivation as shown in part played by the group in attitude change. Materials and issues treated in terms of basic psychological concepts. Hyman, Runkel, Ziller.
Psy 439. Somatopsychology. (G) 3 hours.
Psychological effects of marked physical deviations, including physical disability and chronic illness. Application of basic principles of motivation, perception, learning, socialization, and adjustment to the behavior and situations of disabled persons. Prerequisite: 9 hours in psychology. Schoggen.
Psy 441. Group and Individual Differences. (G) 3 hours.
Basic principles for quantitative assessment of human characteristics; research findings concerning intelligence, achievement, aptitudes, interests, and personality; group differences related to sex. age, social class, race, nationality. Psy 313 or equivalent recommended as preparation for this course. Tyler.
Psy 449. Occupational Choice and Psychology of Careers. (g) 3 hours.
Theories of occupational choice and their importance for the theory of counseling; factors related to vocational development and the patterning of careers; sources of vocational information, and its evaluation and uses in educational counseling situations. Tyler.
Psy 450. Abnormal Psychology. (g) 3 hours.
Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Normal motives and adjustments considered neurotic person. Psy 313 is recommended as preparation for this course. Fosmire, Patterson.
Psy 451. Physiological Psychology. (g) 3 hours
Study of relationships between nervous system functions and behavior. Em-
phasis on neuropsychological analysis of stimulus processing, motivation, phasis on neuropsychol
Psy 460. Developmental Psychology. (g) 3 hours.
Study of the development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence. Topics include development of language and cognition, socialization, emotional development, and the development of motor capabilities. Emphasis on social influences. Bricker, Patterson, Schoggen.
Psy 465. Motivation. (g) 3 hours.
Conceptions of motivation; human and animal research on instinct, arousal, motivational physiology, learned motives, conflict and stress, and organization of dispositions. Leeper, Littman.
Psy 470. Animal Psychology. (g) 3 hours.
Survey of learning, motivation, and perception in selected species of animals; phylogenetic comparison and the modern viewpoint. Concurrent enrollinent in Psy 471 normally required. Kimble, Leary.
Psy 471. Laboratory in Animal Psychology. (g) 2 hours.
Laboratory experience with rats and monkeys. Prerequisite: Psy 313. Kimble, Leary.
Psy 490. Psychology of Learning. (g) 3 hours.
Survey of fundamental concepts of conditioning, rote learning, discrimination, problem solving, memory, and motor skill. Theory and experimental literature. Psy 313 strongly recommended as preparation for this course. Anderson, Leeper, Littman.
Psy 491. Laboratory in Learning. (g) 2 hours.
Laboratory work in design, conduct, and analysis of experiments in learning. Prerequisite: Psy 313. Anderson.
Psy 492. Psychology of Perception. (g) 3 hours.
Survey of fundamental concepts of vision, audition, somesthesis, etc. Psychophysiological factors and psychophysical methodology. Psy 313 strongly recommended as preparation. Attneave, Kimble.
Psy 493. Laboratory in Perception. (g) 2 hours.
Laboratory work in design, conduct, and analysis of experiments in perception. Prerequisite: Psy 313. Attneave.

## GRADUATE COURSES

*Psy 501. Research. Hours to be arranged.
*Psy 502. Advanced Psychology Laboratory. Hours to be arranged.
*Psy 503. Thesis. Hours to be arranged.
*Psy 505. Reading and Conference. Hours to be arranged.
ical perspective. Topics vary from year to year. Leeper, Littman.
Psy 507. Seminar. Hours to be arranged.
Seminars offered vary from year to year, depending on faculty interests and student needs. Those most frequently offered are:
Advanced Counseling. Sundberg, Tyler.
Approaches to Structure and Systems. Attneave, Hyman.
Core Comparative. Leary.
Core Explopmental. Bricker, Patterson, Schoggen.
Core Experyental Design. Fagot, Hyman.
Core Individual Differences Sundberg Tyler
Core Learning. Anderson, Leary, Leeper, Littman.
Core Perception. Attneave.
Core Personality. Breger, Leeper.

[^34]Core Physiological. Kimble.
Core Psychopathology. Fosmire
Core Quantitative Methods. Fagot, Hyman.
Core Research. Anderson, Attneave, Breger, Davison, Fagot, Kimble, Leary, Patterson.
Core Social. Runkel
Early Experience. Littman.
Games and Interpersonal Behavior. Sermat
Mathematical Psychology. Fagot, Hyman.
Piaget. Hyman, Bricker.
Problem Solving and Thinking. Anderson, Hyman.
Psychological Ecology. Schoggen.
Psy 508. Clinical Work with Children. 3 hours any term.
Work in the University Psychology Clinic. Enrollment limited. Prerequisite : Psy 530, 531 ; consent of instructor.
Psy 509. Practicum Experience. Hours to be arranged.
Work in selected agencies providing diagnostic and counseling services. Enrollment limited. Prerequisite : consent of instructor.

Psy 521. History and Systems of Psychology. 3 hours.
Analysis of selected psychological problems in an historical and methodological perspective. Topics vary from year to year. Leeper, Littman.

Psy 524. Individual Intelligence Testing. 4 hours.
Supervised practice in the administration, scoring, and interpretation of the Wechsler Intelligence Scale for Children and the Wechsler Adult Intelligence Scale. Prerequisite: Ed 424 or Psy 421. Bricker.
Psy 525. Individual Intelligence Testing. 2 hours. Supervised practice in the administration, scoring, and interpretation of the Stanford-Binet Intelligence Scale. Prerequisite: Ed 424 or Psy 421.
Psy 527. The Counseling Process. 3 hours.
General orientation to counseling; theories of counseling; settings and roles of counselors; interviewing and the counseling process; tests and assessment ethics and values. Prerequisite : consent of instructor. Sundberg.
Psy 530, 531, 532. Foundations of Clinical and Counseling Practice. 3 hours. Basic concepts and principles of psychological work with individuals; the oles of clinicians and counselors in different settings; clinical and counseling degree in clinical and counseling psychology. Breger, staff.
Psy 533. Advanced Personality Assessment. 3 hours
Principles and practice of psychological assessment. Supervised individual practice in clinic-laboratory; covers intelligence testing, including Wechsler and Stanford-Binet tests, and a variety of personality tests. Breger, Goldberg, Sermat, staff.
Psy 535. Advanced Social Psychology. 3 hours. Social behavior in relation to current psychological theory and research. Hyman.
Psy 537, 538, 539. Personality Theory and Research. 4 hours fall; 2 hours each term, winter and spring
Intensive study of selected aspects of the various theories of personality which have been developed by academic, clinical, and psychiatric writers. Problems of formulating a theory and conducting research in the field of personality Review of selected studies. Breger, Patterson.

Psy 543, 544. Measurement: Theory and Application. 3 hours each term.
Nature of measurement; logic of measurement; the role of measurement in psychological theory; theory and application of psychological scaling methpsychological theory; theory and application of
ods. Prerequisite: Mth 426 or equivalent. Fagot.

Psy 545. Theory and Construction of Tests. 3 hours
Basic theory of test scores; reliability and validity of tests; methods of standardizing and equating test scores; problems of norms and units; weighting ardizing and equating test scores; problems of norms and units; weighting Fagot.
Psy 546. Factor Analysis. 3 hours.
Systematic and critical development of the theory of factor analysis ; applications in psychology. Prerequisite : Mth 426 or equivalent. Fagot.
Psy 560. Advanced Physiological Psychology. 3 hours.
Theory of nervous-system function in learning, motivation, and perception. Detailed study of special areas. Kimble.
Psy 566. Advanced Psychology of Perception. 3 hours.
Basic problems and phenomena of perception. Attneave.
Psy 570. Advanced Animal Psychology. 3 hours.
Special topics in animal learning, motivation, and species comparison. Leary.
Psy 572, 573, 574. Advanced Psychology of Learning and Thinking. 3 hours each term.
Detailed study of special topics in learning, thinking and problem solving. Anderson, Leary, Leeper, Littman.

## Religious Studies

Professor: P. B. Means (emeritus).
Associate Professor: Douglas Straton (department head).
Assistant Professor: Alfred Bloom.
THE DEPARTMENT OF RELIGIOUS STUDIES is nonsectarian in spirit, the aim being to acquaint students with the far-reaching influence of religion in the cultural history of the world. Its courses are planned in accordance with the same standards of authoritative scholarship recognized in other departments of the University.

Through these courses, the University seeks to develop an understanding of the nature and processes of religious thought and experience, and to relate these to the problems of our time. The courses are also intended to meet the needs of students whose major work in other fields fits them for positions of leadership, and who can become effective and influential in the religious and spiritual life of their communities through a better understanding of the power of religion in men's lives and in the destiny of civilization.

## LOWER-DIVISION COURSES

*R 201, 202, 203. Great Religions of the World. 3 hours each term.
Study of the Hindu-Buddhist, Confucian-Taoist, Zoroastrian, Judeo-Christian, and Islamic philosophic and religious systems. Special attention to the philosophy of these religions as shown in their classic scriptures; concluding resume of their present organization and major sectarian divergencies, analysis of their world views and conceptions of God, man, ethics, human destiny, and salvation. Must be taken in sequence
R 224, 225, 226. The Bible and Civilization. 3 hours each term.
Survey of the social and religious history of Israel through the time of Jesus. The growth of ethical and religious ideas, the origin and teachings of major Old and New Testament books; the historical background of Christianity, and the life and teachings of Jesus. Must be taken in sequence.

* Students who have taken R 201, 202, 203 may enroll for R 301 but not for R 302, 303.

CL 231, 232. New Testament Readings. 4 hours each term.
For description, see page 193.

## UPPER-DIVISION COURSES

*R 301, 302, 303. Religions of Mankind. 3 hours each term.
Major living and historical religions of mankind. Fall: primitive religion, the national religions of Egypt, Mesopotamia, Greece and Rome; winter: Oriental religions, including Hinduism, Buddhism, Confucianism, Taoism, and Shinto; spring: Zoroastrianism, Judaism, Christianity, and Islam. Attention to origins, religious ideas, organization, and sacred literature.
Eng 306, 307. The Literature of the English Bible. 3 hours each term. For description, see page 162.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
R 405. Reading and Conference. (g) Hours to be arranged.
R 407. Seminar. (g) Hours to be arranged.
Buddhist Philosophy in India. Bloom.
Religious Philosophy of China. Bloom.
Religions in Japan. Bloom.
R 419, 420. Philosophy of Religion. (g) 3 hours each term, fall and winter.
Concepts of reality and human nature within a religious perspective. Fall: major ideas of Deity, patterns of reasoning concerning God as personal being, the problem of evil; winter : idea of man as spiritual, moral, and religious
421. Contemporary Social Problems and Religion. (g) 3 hours spring.

The idea of ethical duty in a religious perspective; the New Testament and ethical problems, the ethics of the family, of race, of the political and economic orders; the concepts of history and human destiny in Judeo-Christian thought.
R 422. Psychology of Religion. (g) 3 hours.
Contributions of psychology to the understanding of various forms of religious behavior.
R 423, 424, 425. Contemporary Concepts of God. (g) 3 hours each term Contemporary philosophical thought concerning Deity, with special attention to naturalism, idealism, and existentialism; selected readings from repBoodin, Royce, Brightman, Underhill, Radhakrishnan, Niebuhr, Tillich, Buber, Maritain, etc. R 423 prerequisite to R 424 and R 425.
Anth 444. Religion and Magic of Primitives. (G) 3 hours. For description, see page 138.
Soc 461. Sociology of Religion. (G) 3 hours.
For description, see page 233.
Hst 471. Social Factors in American History. (G) 3 hours.
For description, see page 179.

## Sociology

Professors: W. T. Martin (department head), Harry Alpert, J. V. Berreman, Robert Dubin, R. A. Ellis, J. M. Foskett, J. M. Jackson, R. J. Pellegrin, W. S. Robinson.

Associate Professors: Herbert Bisno, $\dagger$ T. B. Johannis, Jr., Benton Johnson, $\ddagger$ Clayton Lane.
*Students who have taken R 201, 202, 203 may enroll for R 301 but not for R 302, 303.
$\ddagger$ On leave of absence 1965-66.
$\ddagger$ On sabbatical leave 1965-66.

Assistant Professors: J. M. Armer, J. R. Howard, John MacGregor, Kenneth Polk, R. H. Rodgers, George Rothbart, W. E. Schafer.
Associate: Frances S. Tcobert.
Instructor: Joan Acker.
Fellows: Charles Armsbury, Kennetif Berry, Lee Carter, Lawrence Gooding, Jack Gudeman, Leslie Hendrickson, Cecile Johnson, James John son, George Lewis, John McCarthy, Kenneth Mackintosh, Edward Stephan, Richard White.
Assistants: Richard Anderson, George Beisse, Steven Burkett, Douglas Card, Iain Couchman, Harrold Curl, Becky Darling, William Devall, Calvin Endo, Joseph Fashing, Gary Felerrerg, Mary Lou Finne, Dean Frease, Daniel Goldman, Theodore Goldman, George Gray, Karen Harding, Joseph Harry, Daniel Hodges, Merlin Hofstetter, Roger Irle, Ralph Jacobsen, Bryce Johnson, Don Johnston, John Klebe, Charles Langford, Lyle Larson, Mark Layman, Elaine Litman, Jennifer McDowell, Charles McGehee, Thomas Martin, Gordon Mullenix, R. A. Nauman, David Nikkel, Karen Oghalai, Dudley Poston, Ray Preston, Lynn Rich mond, Thomas Taveggia, Robert Thompson,
Havens Tipps, Fred Van Noy, Harold Weaver, John Westine.

SOCIOLOGY is the analytical study of the development, structure, and function of human groups and societies. It is concerned with the scientific understanding of human behavior as it relates to, and is a consequence of, interaction within groups.

The undergraduate program in sociology at the University is designed: (1) to prepare students for graduate work leading to professional careers in the field; (2) to provide a basic background for those preparing for careers in personnel work, journalism, organizational management, social work and public welfare, city and regional planning, teaching of social studies, and research in human relations; and (3) to provide a scientific basis, in knowledge and understanding, for constructive adult citizenship.

Alpha Kappa Delta, a national sociology honorary society, has a chapter on the University campus; all students who have had at least 15 term hours of work in sociology with a grade-point average of 3.00 or higher and a general scholastic average of 3.00 or higher are eligible for membership.

Interested sophomores and juniors should inquire about the availability of undergraduate research participation fellowships.

Brochures describing the undergraduate program in sociology are available in the department office on request.

Requirements for Bachelor's Degree. Candidates for the bachelor's degree with a major in sociology must satisfy all general requirements of the University and the College of Liberal Arts and complete the following required courses in sociology :


Majors in sociology are required to complete a minimum of 42 hours in sociology; not more than 54 hours in sociology may be counted toward a bachelor's degree

A grade-point average of 2.00 or higher in all sociology courses is required for graduation with a major in sociology.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, The Oregon Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in sociology must complete the following program, selected from the fields of history, geography, political science economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in sociology required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the sociology faculty who serves as adviser for prospective teachers.

Honors. See Honors College. pages 129 ff.
Undergraduate Concentration in Social Work. The department offers two sequences of special value for undergraduate students who are interested in careers in social welfare: The Social Welfare Institution (Soc 467, 468, 469) and Principles and Concepts of Social Work (Soc 425, 426). A strong background in several of the social sciences is recommended for all students interested in careers in social welfare.

The department does not offer graduate study in social work; students interested in graduate work in the field may consult the School of Social Work, Port land State College.

Areas of Study. The department offers introductory courses in General Sociology (Soc 204, 205, 206) and Principles of Sociology (Soc 300), and specialized upper-division and graduate courses in the following broad areas:

Methodology. Introduction to Social Research (Soc 311) ; Sociological Research Methods (Soc 411, 412, 413) ; Theory and Methods in Population and Ecology (Soc 415) ; Experimental Sociology (Soc 518)

Social Welfare and Social Work. The Social Welfare Institution (Soc 467, 468, 469) ; Principles and Concepts of Social Work (Soc 425, 426).

Social Psychology. Social Psychology (Soc 334, 335) ; Marriage and the Family (Soc 338) ; Theory of Small Groups (Soc 430) ; Group Dynamics (Soc 431 ) ; Collective Behavior (Soc 436) ; Social Psychology of the Family (Soc 438) ; Analytical Problems in Social Psychology (Soc 530) ; Propaganda and Social Control (Soc 532) ; Social Movements (Soc 537).

Social Structures and Processes. American Society (Soc 301) ; Social Organization (Soc 342, 343) ; World Population and Social Structure (Soc 303) ; The Community (Soc 304) ; Contemporary Social Problems (Soc 305) ; Criminology and Delinquency (Soc 440, 441) ; Urbanization and the City (Soc 442) ; Social Control (Soc 443) ; Social Stratification (Soc 451, 452) ; Sociology of Race Relations (Soc 445) ; Sociology of Work (Soc 446) ; Industrial Sociology (Soc 447) Sociology of Occupations (Soc 448) ; Social Change (Soc 449); Analytical Problems in Social Structures and Processes (Soc 540) ; Theory of Organization (Soc 541) ; Power and Influence in Society and Community (Soc 542).

Social Institutions. Social Institutions (Soc 460) ; Sociology of Religion (Soc 461 ) ; Sociology of the Family (Soc 462) ; Social Psychology of the Family (Soc 438) ; Political Sociology (Soc 465) ; Analytical Problems in Social Institutions (Soc 560) ; Values and Social Structure (Soc 561).

General Theory. Development of Sociology (Soc 470) ; Analytical Problems in Sociological Theory (Soc 570) ; History of Social Thought (Soc 571) ; Devel-
opment of American Sociology (Soc 572) ; Contemporary Sociology (Soc 573); Theory Building in Sociology (Soc 575).

Graduate Work. The graduate program of the Department of Sociology, leading to the M.A., M.S., and Ph.D. degrees, is an intensive program designed to train professional sociologists for teaching, research, and administrative posts in sociology and related fields. Most candidates for the Ph.D. degree first obtain a master's degree, but occasionally qualified students who have completed one year of work in residence are permitted to develop programs leading directly to the Ph.D.

Students are not advised to seek an advanced degree in sociology unless they have achieved a grade-point average of 3.00 or better in their undergraduate work in the field; students whose undergraduate major has been in another field should have a grade-point average of 3.00 in all social science courses taken.

Early in their undergraduate years, students interested in graduate work in preparation for careers as professional sociologists should consult an adviser in the department concerning the department's undergraduate preparatory program for research and teaching. Requirements include: (1) satisfaction of the language requirement for the B.A. degree; (2) a year sequence in mathematics; (3) at least one upper-division year sequence in two of the following fieldsanthropology, economics, political science, psychology.

Although the department accepts students who are interested only in the master's degree, its program is primarily intended for doctoral candidates. All students of good academic ability are encouraged to follow a course of study leading to the Ph.D. degree.

The Department of Sociology offers graduate study in four broad areas of concentration: theory and methodology, social psychology, social structures and processes, and social institutions. Theory and methodology are combined to insure that no student may concentrate in one without preparation in the other.

A core program, required of every graduate student, is provided in each of these broad areas. The graduate core courses are open only to students who have been accepted as candidates for an advanced degree. The core courses with their prerequisites insure that every graduate student will have at least a minimum exposure to the subject matter of each of the general areas. The doctoral candidate, in consultation with his adviser, selects a field of specialization within one of the four core areas; in his specialized field he is expected to achieve a high level of competence through an intensive program of study culminating in the doctoral dissertation.

The department offers two programs leading to the master's degree. One program, leading to the M.A. degree, is designed as a stepping stone to the Ph.D. degree. The other leads to a terminal master's degree for students preparing to enter professional positions other than college or university teaching or research. No thesis is required in the latter program.

Candidates for the doctor's degree must demonstrate clearly their basic and serious commitment to a professional career in the social sciences, with particular emphasis on sociology. The doctoral candidate's dissertation must embody the results of research and show evidence of originality and ability in independent investigation. It is recommended that work on the dissertation be begun early in the doctoral program, so that the candidate's research experience will be an integral part of his total program of study.

A broad range of research is carried on by members of the staff. Graduate students often have opportunities to participate in planning and carrying out research projects. Graduate awards of various kinds are available for well qualified students. Emphasis is placed on close working relationships between students and faculty.

A brochure describing the graduate program in sociology in more detail and specifying the materials that must be submitted with applications for admission
may be obtained from the department. All application material must be submitted at least two months before the student plans to begin graduate work; students wishing to apply for graduate assistantships nust submit these materials by March 1.

## LOWER-DIVISION COURSES

Soc 204, 205, 206. General Sociology. 3 hours each term.
Introduction to the sociological perspective; basic findings regarding the development, structure, and function of human groups and societies, with emphasis on the descriptive comparison of modern complex societies.

## UPPER-DIVISION COURSES

Soc 300. Principles of Sociology. 3 hours.
Fundamental concepts and empirical findings in the field of sociology. Not open to students who have completed Soc 204, 205.
Soc 301. American Society. 3 hours.
An analysis of American society in terms of its significant structural traits and their functions; major changes in American society and selected contemporary problems examined in their relation to institutional structures. Prerequisite: Soc 204, 205 or Soc 300.
Soc 303. World Population and Social Structure. 3 hours.
Introduction to population studies, providing within a sociological framework an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. Prerequisite : Soc 204, 205, 206 or Soc 300 . Martin.

## Soc 304. The Community. 3 hours.

Analysis of the structure and organization of human communities. Prerequisite : Soc 204, 205, 206 or Soc 300.
Soc 305. Contemporary Social Problems. 3 hours
Introduction to problems associated with the organization of social systems; deviant behavior and methods of social control. Prerequisite: Soc 204, 205, 206 or Soc 300.
Soc 311. Introduction to Social Research. 3 hours.
The development of social research; the nature of scientific inquiry and basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Prerequisite: Soc 204, 205, 206 or consent of instructor. Armer, Polk.
Soc 334, 335. Social Psychology. 3 hours each term.
Analysis of psychological processes in relation to social situations. How languages, perception, learning, thinking, motivation, and attitudes determine and result from social interaction and group processes. Prerequisite: Soc 204, 205 or Soc 300. Armer, Ellis, MacGregor.
Soc 338. Marriage and the Family. 3 hours.
The growth and development of the husband-wife relationship throughout the family life cycle. Special emphasis on the period from engagement through the birth of the first child. Prerequisite : Soc 204, 205; or Soc 300 ; or consent of instructor. Johannis, Rodgers.
Soc 342, 343. Social Organization. 3 hours each term.
Examination in depth of analytical concepts and tools and their application to theoretical materials dealing with social organization. Prerequisite: Soc 204, 205, 206. Howard.

Soc 401. Research. Hours to be arranged.
Soc 403. Thesis for Honors Candidates. Hours to be arranged.
Soc 405. Reading and Conference. Hours to be arranged.

Soc 406. Supervised Field Study. 1 hour each term
No more than three hours of Supervised Field Study may be counted toward a degree in sociology.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Soc 407. Seminar. (G) Hours to be arranged.
Sociology of Education. Armer, Schafer.
Sociology of Leisure. Johannis.
Juvenile Delinquency. Bisno.
Sociology of Illness and Health. Bisno, Howard.
Migration. Martin.
Soc 411, 412, 413. Sociological Research Methods. (G) 3 hours each term. Basic methodological problems such as the nature of science, the problem of meaning, formal and empirical systems, the use of models, causal inference under experimental and nonexperimental conditions, and field techniques of data collection. Prerequisite: elementary statistics; the work of each term is prerequisite to that of the following term. Ellis, Robinson.
Soc 415. Theory and Methods in Population and Ecology. (G) 3 hours. Methodological problems and techniques in demographic and ecological analysis. Prerequisite : Soc 204, 205 or Soc 303, elementary statistics. Martin.
Soc 425, 426. Principles and Concepts of Social Work. (g) 3 hours each term. Analysis of the major components in the social-work services, such as the community setting, the organizational context of services, and the methods of providing service, emphasis on basic concepts and principles. Prerequisite Soc 467, 468, 469. Acker, Bisno.
Soc 430. Theory of Small Groups. (G) 3 hours
A systematic review of the influential theoretical and empirical writings, classical and current, dealing with the structure and functioning of small groups. Prerequisite: Soc 334 or Psy 215. Jackson, Johannis.
Soc 431. Group Dynamics. (g) 3 hours.
Analysis of the dynamics of group participation and leadership and the characteristics of effective groups. Prerequisite: Soc 430. Jackson.
Soc 436. Collective Behavior. (g) 3 hours.
Social-psychological study of the behavior of persons in such collective contexts as crowds, mobs, publics, i.e., in the less stable and predictable phases of group life. Fads, crazes, rumor, panics, riots, and mass hysteria analyzed in terms of social and psychological determinants and consequences. Prerequisite: Soc 334 or Psy 219. Berreman.
Soc 438. Social Psychology of the Family. (G) 3 hours.
The dynamics of family interaction throughout the family life cycle. Prerequisite: 12 hours in sociology. Johannis, Rodgers.
Soc 440, 441. Criminology and Delinquency. (g) 3 hours each term
The nature and extent of delinquency and crime as forms of deviant social behavior; contributing factors; current prevention and treatment programs. Prerequisite: Soc 204, 205, 206 or Soc 300 . Polk, Rothbart
Soc 442. Urbanization and the City. (G) 3 hours.
Determinants and consequences of urbanization under different conditions; the city as a social and ecological system. Prerequisite : 9 hours in sociology Martin.
Soc 443. Social Control. (G) 3 hours.
Techniques and agencies by which the behavior of crowds, classes, associations, and publics is controlled. Prerequisite: Soc 334 or Psy 219, or consent of instructor. Berreman.
Soc 445. Sociology of Race Relations. (g) 3 hours.
The development of "race consciousness" and emergent problems of race-
culture contacts. Prerequisite: introductory course in sociology, anthropology, or psychology. Berreman.
Soc 446. Sociology of Work. (G) 3 hours.
Analysis of the basic sociological features of work in modern society. The theory of work organizations; the working population; technological, formal, theory of work organizations; the working population, thanagerial problem of directing working behavior. Dubin.
Soc 447. Industrial Sociology. (G) 3 hours.
Analysis of union-management relations in American society. The nature of industrial management and the bases of management's labor decisions; the origins, nature, and functions of labor unions; industrial relations; the consequences of union-management relations for social welfare. Dubin.
Soc 448. Sociology of Occupations. (G) 3 hours.
The nature, functions, and significance of occupational groupings in modern society; the relationships of occupation to other aspects of life; the significance of work for the various forms of social organization; the impac
change on individual occupations and oecupational categories. Pellegrin.
Soc 449. Social Change. (G) 3 hours
Analysis of the processes, characteristics, and conditions of change in large social systems; systematic examination of various theoretical problems and formulations. Prerequisite : 9 hours in sociology. Bisno.
Sóc 451, 452. Social Stratification. (G) 3 hours.
Systematic analysis of the nature of social classes and castes, their determinants and historical development, and their consequences. Prerequisite: Soc 204, 205, 206 or Soc 300. Ellis, Johnson.
Soc 460. Social Institutions. (G) 3 hours.
Analysis of social organization in terms of a system of interrelated and interdependent institutions; major focus on the development and utilization of an analytical framework in the examination of selected major institutions in American and other contemporary societies. Prerequisite: Soc 204, 205, 206 or Soc 300 . Johannis.
Soc 461. Sociology of Religion. (G) 3 hours.
Sociological analysis of religious belief and behavior; special attention to the relation between religious institutions and the larger societies of which the relation between religious institutions and the larger societ
they are a part. Prerequisite: Soc 204, 205 or Soc 300 . Johnson.
Soc 462. Sociology of the Family. (G) 3 hours.
The family as a social institution and its relationship to other social institutions. Prerequisite: 12 hours in sociology. Johannis, Rodgers.
Soc 465. Political Sociology. (G) 3 hours.
Sociological theories and concepts brought to bear on the analysis of various aspects of political theory and behavior; social bases of power and policy determination; institutional inter relationships; intellectuals and ideologies; political trends and change; political participation and membership. Prerequisite : 9 hours of sociology. Bisno, Howard.
Soc $467,468,469$. The Social Welfare Institution. (g) 3 hours each term.
Social work as a type of professional service offered within the framework of organized public and private programs, analyzed in terms of theory, principles, and methods past and present. Variations in ideology, organizational provisions, and practices related to the broader social milieu. Prerequisite : 9 hours in sociology; the work of each term is a prerequisite to
that of the following term. Acker, Bisno.
Soc 470. Development of Sociology. (g) 3 hours.
Major writers and ideas that have shaped contemporary sociology; recurrent concepts and issues that continue to challenge sociological inquiry. Prerequisite: 9 hours in upper-division sociology courses.

## GRADUATE COURSES

*Soc 501. Research. Hours to be arranged.
*Soc 502. Supervised College Teaching. Hours to be arranged.
*Soc 503. Thesis. Hours to be arranged.
Soc 505. Reading and Conference. Hours to be arranged.
Soc 506. Supervised Field Study. 1 hour each term.
Not available for social work experience. No more than three hours of Supervised Field Study may be counted toward a degree in sociology.
Soc 507. Seminar. Hours to be arranged.
Comparative Family Systems. Johannis.
Contemporary Research on Family Sociology. Johannis, Rodgers.
Population and Social Structure. Martin.
Sociology of Professions. Bisno.
Sociology of Religion. Johnson.
Sociology of Science. Alpert.
Sociology of Deviant Behavior. Rothbart.
Social Stratification. Ellis, Johnson.
Sociology of Education. Armer, Schafer.
Primary Human Interaction. Dubin.
Theory of Action. Johnson.
Urbanization. Martin.
Quantitative Sociology. Robinson.
Correctional Research. Rothbart.
Sociology of Adolescence. Polk.
College Teaching of Sociology. Rodgers.
Role Theory and Research. Jackson.
Social Influence. Jackson.
Organizational Communication. Jackson.

## Soc 518. Experimental Sociology. 3 hours.

Critical analysis of selected experiments in sociology; each student formulates a research problem and designs an experiment suitable for the testing
of the hypothesis. Prerequisite: elementary of the hypothesis. Prerequisite: elementary statistics. Dubin

## Soc 530. Analytical Problems in Social Psychology. 3 hours.

Core course providing basic graduate orientation in social psychology. Prerequisite: regular graduate standing; 9 hours in sociology; introductory psychology and social psychology. Jackson

## Soc 532. Propaganda and Social Control. 3 hours.

Propaganda as a means of social control ; the nature of propaganda, the techniques used and the psychological and sociological conditions of their effec tiveness; the implications of media of mass communication for stability and change of social systems. Prerequisites: Soc 334 or Psy 219, or consent of
instructor. Berreman.
Soc 537. Social Movements. 3 hours.
Study of the endeavors of groups of people to alter the course of events by their joint activities; social and psychological factors which give rise to social movements and determine their course; the relation of such purposive Soc 334, 335 or consent of instructor. Berreman cultural change. Prerequisite
Soc 540. Social Structure and Processes. 3 hours.
Core course providing basic graduate orientation in problems of social system organization, stability, and change. Prerequisite : regular graduate standing 9 hours in sociology, including at least one course in social structures or social processes. Pellegrin.
Soc 541. Theory of Organization. 3 hours.
The analysis of formal organizations, their functions in social organizations, their operating characteristics, and the person-organization linkage. Dubin.

[^35]Soc 542. Power and Influence in Community and Society. 3 hours. Critical examination and evaluation of studies of power structures and the decision-making process, particularly at the community level, in terms of theoretical and methodological considerations. Pellegrin.
Soc 560. Analytical Problems in Social Institutions. 3 hours.
Core course providing basic graduate orientation to conceptual and theoretical problems in the area of social institutions. Prerequisite: regular graduate standing, 9 hours of sociology, including one upper-division course in institutional area. Foskett.
Soc 561. Values and Social Structure. 3 hours.
Examination of value and belief systems as related to socially patterned behavior; consideration of major theoretical perspectives, methods of classifi cation, and selected empirical studies. Prerequisite: 9 hours in sociology. Johnson.
Soc 570. Analytical Problems in Sociological Theory. 3 hours.
Core course. The nature and purpose of scientific theory, with special reference to sociology; critique of existing theoretical models in the field. Prerequisite: regular graduate standing; at least two of the following: Soc 571 requisite: regular graduate standin
Soc 572 , Soc 573 . Dubin, Johnson.
Soc 571. History of Social Thought. 3 hours.
An historical analysis of Western social thought in terms of its recurren problems, its basic concepts, and its relation to contemporary sociological theory. Foskett.
Soc 572. Development of American Sociology. 3 hours.
The emergence of American sociology in the nineteenth century; the problems, concepts, and theories of leading American sociologists to 1930. Foskett
Soc 573. Contemporary Sociology. 3 hours.
Analysis of the work of leading contemporary sociologists, with special emphasis on the problems, concepts, and methods of sociological inquiry.
Soc 575. Theory Building in Sociology. 3 hours.
Analysis in relation to theories in the behavioral sciences: the components of a scientific theory; the relationship between theory and research; the nature of scientific tests of theories. Dubin.

## COURSE OFFERED ONLY IN SUMMER SESSIONS

Soc 508. Workshop. Hours to be arranged.

## Speech

Professors: Bower Aly,* Herman Cohen, R. P. Friedman, Horace W. Robinson, Glenn Starlin, K. S. Wood.
Associate Professors: C. A. Leistner (department head), Faber DeChaine, E. A. Kretsinger, $\dagger$ K. E. Montgomery, W. S. Nobles, Ottilie T. Seybolt (emeritus), J. R. Shepherd.
Assistant Professors: C. W. Carmichael, N. J. Christensen, J. V. Cutler, A. L. Kadlec, B. P. Ryan, R. E. Sherriffs.

Instructors: Celia Dorris, S. D. Elberson, W. R. Elwood, Betty E. Evans, L. R. Hennings, J. D. Hershberger, S. A. Kaye, T. C. Meador, Lucy A Melfuish, R. M. Reed, D. E. Steiner, P. R. Waldo.
Assistants: G. L. Austin, J. A. Bernardi, Linda Gay Farley, Karen A. Henderson, F. Q. Levin, P. S. Minty, Joan E. Orr, I. G. Simpson, B. A. Win ters.
*On leave of absence 1965-66
$\dagger$ On sabbatical leave, fall term, 1965-66.

THE DEPARTMENT OF SPEECH offers major curricula leading to the Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, and Doctor of Philosophy degrees, with opportunities for study in rhetoric and public address, radio and television broadcasting, speech pathology and audiology, and theater

Work in speech is also offered for students majoring in other fields. For these students, the department directs its efforts toward two principal objectives: (1) the development of the ability to communicate thought and feeling; and (2) the improvement of powers of appreciation and evaluation in listening.

Practical experience in the various phases of the departmental program is provided through the University Theater, the University Symposium and forcasic activities, the Division of Broadcast Services, and the Speech and Hearing Clinic.

In the planning of its major undergraduate programs, the Department of Speech recognizes three principal objectives
(1) The achievement, by all of its major students, of a broad liberal education. The following major requirements relate to this objective :
(a) To complement work in the department, the student must elect courses in other departments which are of substantial value in relation to his major program, including at least 18 term hours in upper-division courses in related fields.
(b) A maximum of 60 term hours of work in speech is recommended in the student's prograni for a bachelor's degree.
(2) Sufficient work in the several fields of speech instruction to provide an appreciation of the different areas of communication. The following major requirements relate to this objective
(a) The following basic courses are required of all majors: Fundamentals of Speech (Sp 121, 122) ; Theory and Literature of Rhetoric ( $S p 301$ ); Advanced Interpretation ( Sp 311 ) ; Speech Science ( Sp 371 ) ; Radio, Television and the Public ( $\mathrm{Sp}_{\mathrm{p}} 448$ ) ; History of the Theater ( $\mathrm{Sp}_{\mathrm{p}} 464$ ).
(b) A minimum of 40 term hours in speech courses is required of all majors, at least 24 of which must be upper-division courses.
(c) A minimum of 9 term hours of work in general psychology or in history is required of all majors.
(3) Concentration in at least one of the four following fields: rhetoric and public address, radio and television broadcasting, speech pathology and audiology theater. The minimum requirements in each of the four fields are as follows:
(a) Rhetoric and Public Address: Fundamentals of Speech ( $S_{p} 123$ ); Public Discussion ( $\mathrm{Sp}_{\mathrm{p}} 221$ ) or Advanced Public Discussion ( Sp 331 ) ; Argumentation, Persuasion, and Discussion (Sp 321, 322, 323) ; Theory and Literature of Rhetoric (Sp 302, 303) ; Classical Oratory ( $S_{p} 421$ ), British Oratory ( $S_{p} 422$ ), American Oratory (Sp 423).
(b) Radio and Television Broadcasting: Fundamentals of Broadcasting (Sp 241) ; Theater Principles (Sp 261, 262, 263) or Play Direction (Sp 364) ; Radio and Television Workshop ( Sp 341 ) ; Radio Workshop ( $\mathrm{Sp} 342,343$ ) or Television Workshop ( $\mathrm{Sp} 344,345$ ) ; Radio and Television Script Writing (Sp 347, 348, 349).
(c) Speech Pathology and Audiology: Phonetics (Sp 370) ; Speech Pathology ( $\mathrm{Sp} 481,482,483$ ) ; Clinical Speech Therapy ( $\mathrm{Sp} 484,485,486$ ) ; Audiology ( $\mathrm{Sp} 487,488$ ) ; Seminar: Teaching of Lip Reading ( Sp 407 ).
(d) Theater: Theater Principles (Sp 261, 262, 263) ; 6 term hours selected from Production Workshop (Sp 264, 265, 266), Costume Workshop (Sp 315) ; Elements of Acting ( $S_{p} 251$ ) ; 3 term hours selected from Technique of Acting ( $S_{p} 351,352$ ) ; Play Direction ( $S_{p} 364$ ); History of the Theater ( $S_{p} 465$ ).

Secondary-School Teaching of Speech and Drama. For certification as a teacher of speech and drama in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

For information concerning subject preparation required to meet state standards in speech and drama and to obtain the recommendation of the University of Oregon, the student should consult the member of the faculty of the Department of Speech who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Committee on Discussion and Debate. The national office of the Committee on Discussion and Debate of the National University Extension Association is located on the campus of the University of Oregon. The committee provides services to high-school debate leagues throughout the United States, including publication of The Forensic Quarterly and related books, distribution of discussion and debate materials, and maintenance of a forensics library.

## Rhetoric and Public Address

## LOWER-DIVISION COURSES

Sp 121, 122, 123. Fundamentals of Speech. 3 hours each term.
Projects in extempore speaking. $\mathrm{Sp} 121,122$ : emphasis on content, organization, performance, audience motivation, language, discussion, and parliamentary procedures. Sp 123: emphasis on voice and diction, bodily action and reading from the printed page; attention to style in the preparation and presen
tation of speeches. Special section for Honors College students. tation of speeches. Special section for Honors College students.
Sp 221. Public Discussion. 2 hours any term.
Preparation of speeches for delivery before public audiences in conjunction Preparation of speeches for delivery before pur with the University's forensic program. Nobles.
Sp 235. Public Speaking. 5 hours any term.
Theory and practice of public speaking, with constructive criticism of performance. Particular attention to individual problems in speechmaking. Not offered 1966-67.

## UPPER-DIVISION COURSES

Sp 301, 302, 303. Theory and Literature of Rhetoric. 3 hours each term.
Selected readings on the principles of rhetoric and public address from Plato to modern times. Cohen.
Sp 321, 322, 323. Argumentation, Persuasion, and Discussion. 3 hours each term.
Fall: argumentation; winter: audience motivation and audience response; spring: principles and practice in various discussion forms. Leistner, Nobles.
Sp 331, 332. Advanced Public Discussion. 2 hours each term, winter and spring. Preparation of speeches to be delivered before public audiences in conjunction with the University's forensic program. Prerequisite: consent of instructor. Nobles.
Sp 407. Seminar. Hours to be arranged.
Sp 416. Speech Composition. 3 hours any term.
Speech forms, types, and techniques; emphasis on application of basic rhetorical elements. Designed for prospective high-school teachers and other nonmajors. Prerequisite: upper-division standing. Montgomery.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Sp 421. Classical Oratory. (G) 3 hours.
Rhetorical criticism of masterpieces of Greek and Roman oratory. Prerequisite : Sp 301 or equivalent. Aly, Nobles.
Sp 422. British Oratory. (G) 3 hours.
British oratory from Pitt to modern times. Prerequisite: $S p 301$ or equiva lent. Aly, Cohen.
Sp 423. American Oratory. (G) 3 hours.
Study of selected American orations. Prerequisite: Sp 301 or equivalent. Aly, Leistner.

## GRADUATE COURSES

*Sp 501. Research. Hours to be arranged.
*Sp 503. Thesis. Hours to be arranged.
Sp 505. Reading and Conference. Hours to be arranged.
Sp 507. Seminar. Hours to be arranged.
Introduction to Graduate Study.
Communication Research Methods.
Studies of Attitude Changes.
American Oratory, 1840-1912
British Oratory from 1867.
Sp 511. Eighteenth-Century Rhetorical Theory. 3 hours
The neoclassical interpretation of the canons of ancient rhetorical theory; its relation to the literary criticism, aesthetics, and logic of the period. Cohen.
Sp 512. American Public Address. 3 hours.
The history of public speaking in the United States, with emphasis on the relation of historical development to current problems in criticism. Aly, Leistner.
Sp 513. Recent Rhetorical Criticism. 3 hours.
The revival of the Aristotle-Cicero canon; the impact of contemporary literary criticism on rhetoric; the relevance of content analysis to rhetorical criti cism. Nobles.

## COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Sp 225, 226. Public Speaking for Business and Professional Men and Women 2 hours each term.
Sp 424. Speech Forms and Techniques of Group Control. (g) 3 hours.

## Radio and Television Broadcasting

## LOWER-DIVISION COURSE

Sp 241. Fundamentals of Broadcasting. 2 hours any term
General survey of broadcasting, including history, growth, social aspects, laws and policies, station and network organization, programming, the advertiser the listener, public interest, standards of criticism, comparison of broadcas systems, international broadcasting and propaganda. Kretsinger, Starlin.

## UPPER-DIVISION COURSES

Sp 341. Radio and Television Workshop. 2 hours.
Broadcast performance technique; physical, acoustic, and mechanical theory and its application; interpretative theory and its application. Prerequisite : consent of instructor. Hershberger, Kretsinger, Sherriffs

[^36]Sp 342, 343. Radio Workshop. 2 hours each term.
Theory and practice of radio broadcasting. Prerequisite: Sp 341 . Shepherd.
$S_{p} 344,345$. Television Workshop. 2 hours each term.
Theory and practice of television broadcasting. Prerequisite: Sp 341. Hershberger, Kretsinger, Sherriffs.
Sp 347, 348, 349. Radio and Television Script Writing. 2 hours each term.
Radio and television writing techniques; theory and practice in the writing of
all major continuity types. Prerequisite: junior standing. Kretsinger, Starlin.
J 407. Seminar. Hours to be arranged
Television problems. Radio-television station policies.
Sp 407. Seminar. Hours to be arranged
I 431. Radio-Television News I. 3 hours For description see School of Journalism.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
J 432. Radio-Television News II. (G) 3 hours For description see School of Journalism.
Sp 444. Radio-Television Direction. (G) 3 hours.
Theory and technique involved in the broadcasting directional assignment. Practice in directing typical formats developed for radio and television. Prerequisite: consent of instructor. Shepherd.
Sp 445. Radio-Television Production. (G) 3 hours
Problems and procedures in the synthesis of talent, material, sponsorship, etc. in broadcast production. Preparation and production of live broadcasts. Prerequisite: $\mathrm{S}_{\mathrm{p}} 444$; consent of instructor. Shepherd.
Sp 446. Radio-Television Programming. (G) 3 hours. Analysis of values, trends, and procedures in programming broadcast schedules ; problems in planning program structure to meet community and public service needs. Prerequisite : consent of instructor. Starlin.
Sp 448. Radio and Television and the Public. (G) 3 hours spring. The influence and importance of broadcasting as a social, political, and culural force; the development of broadcasting; public-service broadcasting ; the rights and duties of listeners; public opinion and propaganda influence Shepherd, Starlin

Sp 469. Lighting for Television. (G) 2 hours
Functions of light in the television studio; theories, methods, and special equipment for lighting television productions. Prerequisite: Sp 263 or consent of instructor. Hershberger

GRADUATE COURSES
*Sp 501. Research. Hours to be arranged
*Sp 503. Thesis. Hours to be arranged.
$S_{p}$ 505. Reading and Conference. Hours to be arranged
Sp 507. Seminar. Hours to be arranged
Introduction to Graduate Study.
Problems of Education by Television.
Role of British Broadcasting.
Sp 541. Theory and Criticism of Broadcasting. 3 hours
A comparative study of systems of broadcasting; the development of ethical, artistic, and critical standards in radio and television. Starlin.

* No-grade course.


## Sp 544. Radio-Television Program Evaluation. 3 hours.

Background and development of broadcast measurements; experimental and survey procedures applicable to the testing of hypotheses in these media. Prerequisite : Mth 425 or equivalent. Kretsinger, Shepherd.

## Speech Pathology and Audiology

## LOWER-DIVISION COURSE

Sp 130. Voice and Articulation. 3 hours any term
Study and practice in the perception and production of the elements of American speech. Limited to students seeking articulatory or vocal improvement; special sections for foreign-born students. Montgomery, Ryan.

## UPPER-DIVISION COURSES

Sp 370. Phonetics. 3 hours.
Study of sounds used in speech. Determination of sounds; their symbolic nature; their production; physical and psychological problems involved in their perception; sectional differences. Ryan.
Sp 371. Speech Science. 3 hours.
A study of the anatomy, psychology, and physics of speech. Wood.
Sp 407. Seminar. Hours to be arranged.
Teaching of lip reading.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

## Sp 472. Experimental Phonetics. (G) 3 hours.

Experimental methods in voice and phonetics; analysis and measurement of variables in the production of speech. 1 hour of laboratory work requireri. Prerequisite: $\mathrm{Sp} 370, \mathrm{Sp} 371$ or consent of instructor. Wood.
Sp 481, 482, 483. Speech Pathology. (G) 3 hours each term.
Symptoms, causes, and treatment of speech abnormalities. Fall: functional articulatory defects, delayed speech, emotional speech disorders; winter: organic speech disorders, including deviations due to congenital malformation, organic speech dinjury, deafness, and neurological impairment; spring : public school speech correction, specific techniques in the diagnosis and treatment of major speech problems. Prerequisite: $\mathrm{Sp} 370, \mathrm{Sp} 371$ or consent of instructor. Christensen, Ryan, Wood.
Sp 484, 485, 486. Clinical Speech Therapy. (G) 2 hours each term.
Supervised clinical work with speech-defective children and adults, enrolled for counseling, testing, and treatment in the Speech and Hearing Clinic ; group discussion of case histories and techniques. Prerequisite: Sp 481, 482 or consent of instructor. Christensen, Ryan, Wood.
Sp 487, 488, 489. Audiology. (G) 3 hours each term.
The auditory function, hearing impairment, and the speech education or reeducation of persons with hearing loss. Fall: anatomy of the ear, psychophysics of hearing, physical attributes of speech sounds, types and causes of hearclinical interpretation, selection and use of hearing aids; spring: speech and auditory training, psychology of deafness, school and vocational problems. Prerequisite: $\mathrm{Sp} 370, \mathrm{Sp} 371$ or consent of instructor. Christensen, Ryan, Wood.

GRADUATE COURSES
*Sp 501. Research. Hours to be arranged.
*Sp 503. Thesis. Hours to be arranged.

[^37]Sp 505. Reading and Conference. Hours to be arranged.
$\mathrm{S}_{\mathrm{p}}$ 507. Seminar. Hours to be arranged.
Introduction to Graduate Study.
Psychology of Speech.
Auditory Disorders.
Stuttering.
Articulation.
Speech Development in Children.
COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION
Sp 392. Principles and Techniques of Speech Correction. 3 hours (extension and summer sessions).
Sp 490. Lip Reading for the Deaf and Hard-of-Hearing. (G) 3 hours (extension).
Sp 491. Advanced Language Development for the Deaf. (G) 3 hours (extension).
Sp 492. Voice and Speech for the Deaf. (G) 3 hours (extension).

## Theater

## LOWER-DIVISION COURSES

Sp 229. Interpretation. 2 hours.
The application of the principles of oral reading to literature.
Sp 251. Elements of Acting. 3 hours.
Elementary principles of acting technique.
Sp 252. Make-Up. 1 hour.
The history, purpose, and techniques of application of theatrical make-up; the use of make-up in the various theatrical media, with emphasis on stage antl television performers. DeChaine.
Sp 261, 262,263. Theater Principles. 1 hour each term.
Development of the physical theater; the mechanics of its stage and shops : planning and construction of stage setttings and properties; basic principles of stage lighting. Kadlec.
Sp 264, 265, 266. Production Workshop. 2 or 3 hours each term.
Practical experience in the construction, painting, and handling of scenery, and in the lighting of plays. Prerequisite: $S_{p} 261,262,263$, or concurrent registration. Kadlec.
Sp 267, 268. Appreciation of Drama. 2 hours each term.
Study of design, acting, and playwriting, for the purpose of achieving a better appreciation of the drama. Robinson.
Sp 269. Appreciation of the Motion Picture. 2 hours.
Study of the motion picture as a dramatic art form. Robinson.

## UPPER-DIVISION COURSES

Sp 311. Advanced Interpretation. 3 hours.
Instruction in the discovery and oral expression of meaning and feeling in prose, poetry, and dramatic literature. DeChaine.
Sp 315. Costume Workshop. 3 hours.
Instruction in the art and craft of stage costuming; practical experience in the design, construction, and maintenance of theatrical costumes. Kadlec.
Wr 321, 322, 323. Play Writing. 3 hours each term.
For description, see page 166.

## Sp 351. Technique of Acting: Voice. 3 hours.

Problems in the use of voice in dramatic roles. Cutler, DeChaine, Robinson.
Sp 352. Technique of Acting: Characterization. 3 hours.
Problems in the analysis and presentation of characters. Cutler, Robinson.
Sp 353. Advanced Acting. 3 hours.
Advanced problems in acting technique : study, rehearsal, and performance. Prerequisite : $\mathrm{Sp} 251, \mathrm{Sp} 351, \mathrm{Sp} 352$; consent of instructor. Cutler, DeChaine,
Robinson. Robinson.
Sp 364. Play Direction. 3 hours.
Sources of dramatic material, choice of plays, casting and rehearsal of players, production organization. DeChaine, Robinson.
Sp 365. Direction of Children's Theater. 3 hours.
History and objectives of theater for the child audience; survey of existing professional and community children's theater programs; techniques of acting, directing, and producing plays for and by children. DeChaine.
Sp 407 . Seminar. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Eng 411, 412, 413. English Drama. (G) 3 hours each term.
For description, see page 162.
Eng 420, 421, 422. Modern Drama. (G) 3 hours each term. For description, see page 162.
Sp 460. Advanced Play Direction. (G) 3 hours.
Advanced theory and practice in direction of plays for public performance. Prerequisite : Sp 364 or consent of instructor. Cutler, Robinson.
Sp 461. Introduction to Scene Design. (G) 3 hours.
Basic principles and techniques of theatrical design for the school and community theater. Prerequisite: Sp 261, 262, 263 or consent of instructor. Kadlec.
Sp 462. Styles in Scene Design. (G) 3 hours.
History of scene design; historical styles and their use in the design of productions of theater classics; twentieth-century approaches to production design ; the designer's analysis of the play script. Prerequisite: Sp 461. Kadlec.
Sp 463. Advanced Problems in Scene Design. (G) 3 hours.
Selected problems in the design of dramatic productions. Prerequisite: Sp 461, Sp 462; consent of instructor. Kadlec.
$S_{p} 464,465,466$. History of the Theater. (G) 3 hours each term.
An historical study of the theatre from ancient to modern times. Cutler,
DeChaine. DeChaine.
Sp 467, 468. Lighting for the Stage. (G) 2 hours each term.
The functions of lighting on the stage. Fall: the qualities of light, lighting instruments, control systems; winter: theories and methods of lighting stage productions. Prerequisite: Sp 263 or consent of instructor. Kadlec.

GRADUATE COURSES
*Sp 501. Research. Hours to be arranged.
*Sp 503. Thesis. Hours to be arranged.
Sp 505. Reading and Conference. Hours to be arranged.
Sp 507. Seminar. Hours to be arranged.
Introduction to Graduate Study.
Technical Problems of the Theater
Interpretation.

- No-grade course.

Cinematography.
Theater Structure.
Theater Management
History of the American Theater.
Sp 551, 552, 553. Theory of Dramatic Production. 3 hours each term.
Fall: theory of acting; winter: theory of dramatic direction; spring: theory of dramatic structure. Cutler, Robinson.

## Bureau of Municipal Research and Service

Herman Kehrli, M.A. ....Director Donald L. Jones, M.A. $\qquad$ Assistant Director Arnold M. Westling, B.S.......................................................................................................................... Ralph E. Miner, M.A....................................................................................Research Associate Kenneth C. Tollenafr, M.A.......................................................................... Research Associate


 Donald N. Johnson, B.A..................................Associate Director, Planning Assistance Program Robert E. Keith, M.Arch..................................................cociate Director, Planning Assistance Program Robert R. McAbee, B.A.........Planning Consultant, Assistant Coordinator, Assistance Program Planning Consultants: George J. Brenner, B.S.; Richard B. Hayward, M.C.P.; Cyrus R. Nims, B.Arch.; J. David Rowe, B.A.
Associate Planners: H. K. Beals, B.A.; Tony N. Kom, M.L.A.; Brian M. Mattson, B.S.;
R. E. Mitchell, M.U. P. E G. Watson Mat
R. E. Mitchell, M.U.P.; E. G. Watson, M.A.

Assistant Planners: Wayne V. Merchem, M.U.P.; George J. Otto, M.U.P.; Karen M. $\quad$ Seidel, B.A.; Floyd H. Smith, Jr., M.S.; J. Frank Thibel, MA Seidel, B.A.; Floyd H. Smith, Jr., M.S.; J. Frank Thibeau, M.A.
Planning Technicians: S. A. Couper, B.S.; W. A. Frazier, Jr., B.S.; L. E. Helber, B.A.;
Kerry L. Lay, B.S.; M. L. Pedersen, M.S.; G. A. Scott, B.S.
THE BUREAU OF MUNICIPAL RESEARCH AND SERVICE carries on a comprehensive program of research and service in the field of local government. A reference library is maintained and an information service provided for public officials and civic groups on various aspects of municipal administration, municipal law, local planning, and public finance. Special studies are conducted, at the request of legislative interim committees, state agencies, and public officials, in the broader fields of state government, public finance, public law, and planning. The bureau cooperates with the League of Oregon Cities and the Association of Oregon Counties in providing a consultation service on problems related to local legislation, charter revision, ordinance codification, finances, capital budgeting, public law and general administration. A program of planning assistance to city, county, and regional governmental agencies in Oregon, authorized by the Oregon Legislature, is administered by the bureau.

Assistance is provided in conducting in-service training programs for local officials in cooperation with the Oregon Finance Oflicers Association, the Oregon Association of City Police Officers, and other groups.

The bureau publishes special research studies and several series of bulletins, intended primarily as a service to city and county officials in the state of Oregon.

# School of Architecture and Allied Arts 

Walter L. Creese, Ph.D., Dean of the School of Architecture and Allied Arts Gborge M. Hodge, Jr, M.S., Assistant to the Dean.
Frances S. Newsom, M.A., Architecture and Allied Arts Librarian.

## Architecture

Professors: W. S. Hayden, George M. Hodge, Jr., G. F. Andrews, R. R. Ferens, F. T. HANNAFORD.

Associate Professors: Donlyn Lyndon (department head), J. L. Briscoe, Philip Dole, Eyler Brown (emeritus), S. W. Bryan, Brownell Frasier, E. E Moursund.
Assistant Professors: P. C. Gilmore, Peter Gygax, Harlow Hudson, T. W Kleinsasser, M. A. Milne, Jerry Nielson, D. L. Peting, Julio San José, Richard Smith, J. E. Stafford, Richard Únruh.
Instructors: Denison Cook, Ernest Muster, Michael Pease
Lecturers: Eugenio Batista, M. B. Campbell, Otto Poticha, J. H. Quiner, H De Norval Unthank.
Assistants: J. Evans, M. Herbst, Jeffrey Ollswang, N. S. Siini.

## Landscape Architecture and Urban Planning

Professors: F. A. Cuthbert (department head), H. W. Buford, G. S. Jette, W. M. Rurf.

Assistant Proefssors: Stephen Bochkor, R. J. Lovinger.
Assistants: John Gillifam, L. Wester.

## Fine and Applied Arts

Professors: Jack Wilkinson (department head), D. J. McCosh,* A. M. Vincent.
Associate Professors: D. C. Foster, R. C. James, C. M. Nixon, Victoria A. Ross (emeritus), C. B. Ryan, Jan Zach.
Assistant Professors: Paul Buckner, J. V. Sofier, D. R. Stannard, Morris Yarowsky.
Instructor: J. U. Starck.
Assistants: Thomas Blodgett, Owen Chamberlain, David Cotter, Jon Cruzon, Donald Duncan, Edwin Koch, R. B. Murrow, L. J. Petersen, J zon, donald Duncan, Edwin Koch, R. B.

## Art History

Professors: M. D. Ross (department head), W. S. Baldinger.
Assistant Professors: Edith Kramer, Patricia Lawrence. $\dagger$
' On sabbatical leave 1965-66.
t On leave of absence 1965-66.

Instructor: Judith Snyder.
Lecturers: Ellen Baldinger, Alice Lyndon.
Assistants: Joel Barber, Allison Hare.

## Art Education

Associate Professors: T. O. Ballinger (department head), J. W. Burgner, June K. McFee.

Assistant Professor: Jane Gehring.
Instructor: P. H. Tetzner.
Assistants: Peggy Clarke, James Lombard, Marie Pletchmy.
THE SCHOOL OF ARCHITECTURE AND ALLIED ARTS offers instruction leading to baccalaureate and advanced degrees in the fields of architecture, interior architecture, landscape architecture, urban planning, drawing and painting, sculpture, ceramics, weaving, jewelry and metalsmithing, art history, and art education. Most art studio courses and all courses in art history may be elected by nonmajors.

Admission. The major curricula in the fields listed above are organized on an upper-division and graduate basis. Freshman students intending to major in any of these fields are enrolled in the College of Liberal Arts and pursue, for two years, a program combining liberal arts courses with introductory preprofessional courses in the School of Architecture and Allied Arts.

The lower-division preprofessional courses are planned to provide continuity of training and experience in the several major fields throughout the student's undergraduate years. Educational continuity is further insured through the assignment of members of the faculty of the School of Architecture and Allied Arts as advisers to preprofessional students.

Before admission as professional majors, students are expected to satisfy all lower-division requirements of the University.

Students transferring to the University from other collegiate institutions for work in the School of Architecture and Allied Arts must satisfy the regular lowerdivision requirements, including both liberal arts and preprofessional requirements, before admission as professional majors. Students transferring from institutions outside the Oregon State System of Higher Education must have earned a 2.50 grade-point average for all courses for which credit is transferred. Credit may be transferred for courses that are the equivalent of University offerings; but transfer students wishing credit toward major requirements for upper-division professional work completed at another institution must first submit evidence of ability for performance at an advanced level.

Facilities. The school is housed in Lawrence Hall, named in memory of Ellis F. Lawrence, first dean of the School of Architecture and Allied Arts. The building contains drafting rooms, exhibition rooms, studios, classrooms, a library, and staff offices.

The school provides desks, easels, and certain materials that are not readily available for individual purchase. Students supply their own instruments and drawing materials; these materials are obtainable from a branch of the University Cooperative Store maintained in Lawrence Hall

The Architecture and Allied Arts Library is a reference collection of about 6,000 books, administered as a branch of the University Library.

All work done by students is the property of the school unless other arrangements are approved by the instructor.

Graduate Work. The School of Architecture and Allied Arts offers graduate work leading to master's degrees in architecture, landscape architecture,
urban planning, drawing and painting, sculpture, ceramics, weaving, art education, and art history. Graduate programs may emphasize either creative work or technical, theoretical, and historical studies. The following graduate degrees are granted:

Master of Architecture-for creative work in architectural design.
Master of Landscape Architecture-for creative work in landscape design.
Master of Fine Arts-for creative work in drawing and painting, sculpture, ceramics, or weaving.
Master of Urban Planning-for work in urban planning.
Master of Arts, Master of Science-for historical and theoretical studies in the visual arts or art education.
Graduate work in the school is governed by the regulations of the University Graduate School and by special requirements of the School of Architecture and Allied Arts. These special requirements, which apply particularly to graduate work of a creative nature leading to the M.Arch., M.L.Arch., or M.F.A. degree, are as follows:
(1) A student applying for admission for creative work at the graduate level must submit to the dean of the School of Architecture and Allied Arts photographs of recent work or other materials indicating creative ability.
(2) The student's qualifying examination must include a display of creative work dome both before and after admission to graduate standing.
(3) The requirements for the M.Arch, M.L.Arcb, and M.F.A. degree include the completion of a creative terminal project. The student's plan for his terminal project must be approved by his graduate committee before it is undertaken.
(4) On the completion of his terminal project, the student must submit as a supplement three copies of a typewritten report describing the development of the project, the materials and equipment employed, and the technical procedures followed, and give other essential information bearing on the project; the report should be documented by photographs.
(5) After the completion of the terminal project, but before his final examination, the student must install a public exhibition presenting the several parts of the project. The School
of Architecture and Allied Arts reserves the right to retain any part of the material exhibited of Architecture and Allied Arts reserves the right to retain any part of the material exhibited
as an indefinite loan.
(6) After the installation of the exhibition, but before public showing, the project is given a final review by the graduate committee, in the presence of the candidate. The review is accompanied by an oral examination of the candidate, which may be supplemented by a written examination.

## Architecture

THE CURRICULUM IN ARCHITECTURE, leading to the degree of Bachelor of Architecture, is a five-year program. The lower-division program includes courses which provide acquaintance with the elementary aspects of architecture; these courses are organized to insure continuity with the professional work begun in the third year. The following courses are required for admission to an upperdivision major in architecture:


Because the upper-division program is planned in continuity with the basic courses offered during the first two years, students intending to major in architecture at the University of Oregon are strongly advised to enter the University as freshmen, in order to profit by this continuous training. Students transferring from other institutions, with preprofessional preparation differing from the pattern indicated above, may be admitted to the professional curriculum upon examination. The following upper-division program is required :

Third Year Term Hours

Mechanical Equipment of Buildings (Arch 320, 321, 322)... $\begin{array}{r}12 \\ 9 \\ \hline\end{array}$
Theory of Structures I (Arch 369, 370, 371) $\ldots$,
History of Architecture I ( $\operatorname{ArH} 337,338,339$ )

Fourth Year
Architectural Design (Arch 487).......................................................................... 15
Theory of Structures II (Arch 469, 470, 471) .................................................................
History of Architecture II ( $\mathrm{ArH} 437,438,439$ )
Surveying for Architects (Arch 317)
Art $\&$ architecture e
Liberal-arts elective
Liberal-arts elective ...................
Fundamentals of Speech (Sp 121)

## Fifth Year

Architectural Design (Arch 587) (.......................................................................
Ethics \& Practice (Architecture) (Arch 529)...
18
2
Working Drawings, Specifications \& Estimating (Arch 417, 418, 419)
Architecture elective
Liberal-arts elective
The requirements for a structural option include the courses listed above and, in addition:

Graduate work is offered in architecture, leading to the Master of Architecture degree. For requirements, see pages 245-246.

The curriculum in architecture is accredited by the National Architectural Accrediting Board.

Business and Construction. Under the joint supervision of the School of Architecture and Allied Arts and the School of Business Administration, the University offers a five-year program of study for students who plan to enter the construction industry. The program, which leads to a bachelor's degree with a major in business administration, combines training in business methods and in the structural phases of architecture. For requirements see School of Business Administration.

## LOWER-DIVISION COURSES

*Arch 11, 12, 13. Design Orientation No credit.
Lectures on the theory and practice of planning and design, intended to acquaint the student with the scope and nature of the design professions. Required for majors in architecture, landscape architecture, and interior architecture. Normally taken concurrently with Arch 287. 1 hour. Dole.

## Arch 121. Construction Materials. 2 hours any term.

Materials and techniques of constructicn used in buildings and their furnish-
ings. Materials utilized in framing, fabrication, enveloping, surfacing, and
ings. Materials utilized in framing, fabrication, enveloping, surfacing, and
finishing. Aspects of color, scale, texture, techniques for use. Manufacture, finishing. Aspects of color, scale, texture, techniques for use. Manufacture,
distribution, availability, maintenance, and depreciation. Field trips, demondistribution, availability, maintenance, and depreciation. Fillos,
strations, illustrated lectures, and laboratory investigation.

* No-grade course.
*Arch 187. Design Studio I. 3 hours each term.
Execution of design projects and exercises intended to familiarize the student with fundamental form and space concepts of architecture; development of skill in control of proportion, scale, and design relationships. Students are encouraged to develop habits of problem formulation and sound bases for value judgments ; the release of the student's potential creative capacities is a primary concern of the course. Batista, Campbell, Ferens, Gilmore, Gygax,
Hudson, Kleinsasser, Pease, Smith.
Arch 231, 232, 233. Architectural Graphics. 2 hours each term.
Intensive study of systems of drawing. Orthographic projection, descriptive geometry. Integration of the media and methods controlling delineation and other expressions of architectural subjects. 6 hours required for majors in architecture. Cook, Bryan.
*Arch 287. Design Studio II. 3 hours each term.
The major factors which influence design decisions; relation of the physical and human environment to design ; integration of design considerations involved in the production of an art form. Required for majors in architecture, interior architecture, and landscape architecture. Prerequisite: Arch 187 or equivalent. Andrews, Cook, Dole, Hudson, Moursund, Pease, Peting, Unruh.


## UPPER-DIVISION COURSES

Arch 317. Surveying for Architects. 2 hours fall or spring.
Elements of plane surveying adapted to the needs of architects; field practice in the use of steel tape, level, and transit ; determination of building-plot contours and their interpretation on plot-plan drawings; methods of calculating excavations and fills for building purposes. Quiner.
Arch 320, 321, 322. Mechanical Equipment of Buildings. 3 hours each term.
Principles of plumbing, heating, ventilation, lighting, acoustics. Prerequisite :
Ph 101, 102, 103; Mth 104 Milne Ph 101, 102, 103 ; Mth 104. Milne.
Arch 369, 370, 371. Theory of Structures I. 4 hours each term.
Application of mathematics to the design of building structures. Wood and steel construction; beams, columns, and simple frames; the relationship of structural design to architectural design. Prerequisite: algebra, trigonom-
etry, physics. Briscoe, Peting.
*Arch 387. Architectural Design. 1 to 8 hours any term.
Exploration of the creative process in architecture through development of design projects. Methods of problem solution, visual communication; individual criticisms, review of drawings and models, group discussion, field trips. Prerequisite: Arch 287. Ferens, Gilmore, Hudson, Kleinsasser, Pease, Poticha, Stafford.
Arch 401. Special Studies. Hours to be arranged.
Arch 405. Reading and Conference. Hours to be arranged
Arch 407. Seminar. Hours to be arranged.
Arch 417, 418, 419. Working Drawings, Specifications, and Estimating. 2 hours each term.
The preparation of working drawings, including scale and full-sized details; architectural specifications; field supervision of building construction. Bryan.
Arch 420, 421, 422. Building Materials and Construction. (g) 3 hours each term.
Study of materials and methods of building construction. Contract documents and their use. Materials and labor estimating methods used by contractors and material dealers. Hannaford.

[^38]*Arch 487. Architectural Design. 1 to 10 hours any term.
Extension of creative processes; synthesis and coordination of technological, cultural, and social aspects of architecture; design projects, individual criticism, group discussions, lectures and discussions by visiting specialists, recism, , group discussions, lectures and discussions by visiting specialists, re-
views of projects. Prerequisite : 12 term hours in Arch 387 . Batista, Gygax, views of projects. Prerequis
Moursund, Smilh, Unthank.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Arch 469, 470, 471. Theory of Structures II. (G) 3 hours each term.
Wood and steel building trusses, reinforced-concrete building construction; retaining walls, footings, and foundations for buildings. Prerequisite : Arch 369, 370, 371. Hodge.
Arch $472,473,474$. Theory of Structures III. (G) 4 hours each term.
Continuous frames, rigid frames, and their effects on architectural design. A series of problems, presented in conjunction with fifth-year architectural design. Hannaford.

## GRADUATE COURSES

*Arch 501. Special Studies. Hours to be arranged.
Arch 505. Reading and Conference. Hours to be arranged.
Arch 507. Seminar. Hours to be arranged.
Arch 509. Terminal Creative Project. Hours to be arranged. Open only to master's degree candidates.
*Arch 529. Ethics and Practice (Architecture). 2 hours fall or spring. Problems of professional ethics, business relations, office management, etc. Open only to fifth-year students. Hayden.
Arch 541. Architecture as Amenity. 2-4 hours.
The effect of social theory on the planning and design of buildings for human use; concepts of social amenity as a factor in the architectural environment; direct relations of the field of architecture with the humanities and the sciences. Hayden.
Arch 542. Architecture as Form. 2-4 hours.
Form and space-ordering concepts in contemporary architecture; procedures for the solution of aesthetic problems in planning and design; analysis of the for the solution of aesthetic problems in planning
morphology of building space. Hayden, Lyndon.
*Arch 587. Architectural Design. 1 to 12 hours any term.
Relation of architecture to the immediate environment and to the city-scape: analysis of determinant factors influencing planning and design. One-half of the year is devoted to the solution of problems of extensive scale and broad scope. The terminal architectural design project is executed as a final halfyear problem under the direction of a thesis committee. Prerequisite: 15
Arch 599. Architecture Workshop. 2-4 hours any tern
Investigation of visual and tactile effects in architecture through experimental construction and demonstration; construction of full-scale mockups representing three-dimensional architectural space; integrated study of visual perception phenomena, light behavior, color influence, and perspective effect. Hayden.

## Interior Architecture

The school offers a five-year curriculum in interior architecture leading to the degree of Bachelor of Interior Architecture. The lower-division program includes courses which provide acquaintance with the more elementary aspects

[^39]of interior design, architectural design, and landscape design, organized to provide continuity with the professional design work begun in the third year. The curriculum is planned to prepare students for the professional practice of interior design.

For students who do not intend to practice professionally, the school also offers a two-year upper-division program in interior architecture, following two years of lower-division work; this program leads to a Bachelor of Science or Bachelor of Arts degree

The following courses are required for admission to an upper-division major in interior architecture.

| First Year T | Term H |
| :---: | :---: |
| Design Studio I (Arch 187) <br> Painting (Art 290) |  |
|  |  |
| Second Year |  |
| Design Studio II (Arch 287) .......................................................................-....... |  |
|  |  |
|  |  |
| Survey of Visual Arts (ArH 201, 202, 203) or History of Wcstern Art (ArH 204, 205, 206) |  |
| Design Orientation (Arch 11, 12, 13) ....................................................................................... | .. |

In the upper-division program, the student is assigned individual problems involving all phases of interior planning ; emphasis is placed on creative development. Individual criticism is supplemented by lectures and reviews by members of the design staff. The student works in the same drafting room with the students and instructors in architecture and landscape design. The program includes field trips to acquaint the students with outstanding examples of current professional work in interior architecture. Opportunities are provided for collaboration on design problems with students in other fields in the arts. Students transferring from other institutions, with preprofessional preparation differing in some respects from the pattern indicated above, may be admitted to the professional curriculum upon examination.

The following courses are required in the three-year upper-division program: Third Year

Term Hours

| Third Year | Term H |
| :---: | :---: |
| Interior Design (Arch 388) | 12 |
| Materials of Interior Design (Arch 330, 331, 332). | - 9 |
| Ceramics (Art 255) or Weaving (Art 256)....... | - 6 |
| History of Architecture I ( $\mathrm{ArH} 337,338,339$ ) | 9 |
| Liberal arts | 12 |
| Fourth Year |  |
| Interior Design (Arch 488) | 15 |
| History of Interior Architecture (ArH 443, 444, 445) |  |
| Furniture \& Accessories (Arch 424). | 2 |
| Custom Cabinet \& Furniture Design (Arch 425, 426) | 8 |
| Advanced Ceramics (Art 455) of Advanced Weaving (Art 456) | 6 |
| History of Architecture II (ArH 437, 438, 439). | 9 |
| Liberal arts (upper-division)................ | 9 |
| Fifth Year |  |
| Interior Design (Arch 588). |  |
| Ethics \& Office Practice (Interior) (Arch 530) |  |
| Working Drawings in Interior Arch. (Arch 462, 463, 464) | 18 9 |
| Workroom Procedures in Interior Design (Arch 449).... | - 1 |
| Art \& architecture electives (American Architecture, Background of Modern |  |
| Art, or Applied Design) .................................................................... |  |
| ts | 9 |

## LOWER-DIVISION COURSES

## Arch 223. Elements of Interior Design. 2 hours

Introduction to the scope, aim, and techniques of interior design, intended to provide a comprehensive understanding of the professional field. Open to nonmajor students with the consent of instructor. Frasier.
*Arch 288. Interior Design. 2 hours any term.
Introduction to the field of interior design; relation to architecture and the allied arts; the basic principles of design and planning processes by which interior spaces and forms are studied and executed. Frasier, Nielson.

## UPPER-DIVISION COURSES

Arch 330, 331, 332. Materials of Interior Design. 3 hours each term
Critical survey and study of the properties, manufacture, and application of materials used in interior design. Field trips to supply sources, etc. Open only to professional majors. Frasier.
*Arch 388. Interior Design. 1 to 8 hours any term.
A series of creative problems in interior design; intensive analysis of design; methods of problem solution ; individual criticism, review of design projects; group discussion and field trips. Prerequisite: Arch 287, 288. Frasier, Nielson.

Arch 401. Special Studies. Hours to be arranged
Arch 405. Reading and Conference. Hours to be arranged.
Arch 407. Seminar. Hours to be arranged.
Arch 424. Furniture and Accessories. 2 hours
Analysis of standard lines of furniture and accessories; emphasis on design and its development, materials, methods of manufacture and distribution; furniture construction and techniques of shop drawing. Neilson.

Arch 425, 426. Custom Cabinet and Furniture Design. 4 hours each term.
First term: projects involving the design of custom furniture, preparation of detailed shop drawings, shop procedure; second term: construction of furniture designed during first term. Prerequisite: Arch 424. Open to nonmajors with consent of instructor. Nielson, Muster, Frasier.
Arch 449. Workroom Procedure in Interior Design. 1 hour.
Technical study of old and new materials; design and installation; drawings and estimates. Visits to workrooms. For professional majors only. Frasier.
Arch 462, 463, 464. Working Drawings in Interior Architecture. 3 hours each term.
Preparation of working drawings, specifications, and estimates for materials and labor on projects in interior design. For professional majors only. Nielson.
*Arch 488. Interior Design. 1 to 10 hours any term.
A series of advanced creative design problems in interior architecture intended to develop the analytical approach; emphasis on integration with architecture and landscape design. Individual criticism, group discussions, and reviews. Prerequisite: 12 term hours in Arch 388. Frasier, Nielson.

## GRADUATE COURSES

*Arch 501. Special Studies. Hours to be arranged.
Arch 505. Reading and Conference. Hours to be arranged.
Arch 507. Seminar. Hours to be arranged.
Arch 509. Terminal Creative Project. Hours to be arranged.
Open only to master's degree candidates.
Arch 530. Ethics and Office Practice (Interior). 2 hours.
Ethics and office procedure for the interior designer in private practice; trade contracts, discounts, interprofessional relations; sources of materials. Frasier.

[^40]*Arch 588. Interior Design. 1 to 12 hours any term.
Professional interior design problems of increasing complexity for one-half of the year, involving collaborative problems, field trips, and reviews. A terminal design project executed as a final half-year problem under the direction of a thesis committee. Prerequisite : 15 term hours in Arch 488. Frasier, Nielson.

## Landscape Architecture and Urban Planning

THE CURRICULUM IN LANDSCAPE ARCHITECTURE, leading to the degree of Bachelor of Landscape Architecture, is a five-year program. The following courses are required for admission to an upper-division major in landscape architecture:

mours

Landscape Design (LA 289)


Architectural Graphics (Arch 231, 232, 233 )
Fundamentals of Speech (Sp 121)
The program provides the student with a broad educational background, together with technical studies essential for the professional practice of landscape architecture. Courses in the field are supplemented by courses in art, architectural design, construction, and city planning. Majors in landscape architecture work side by side with students of architecture and interior architecture, and have the benefit of design criticism from the entire faculty of the School of Architecture and Allied Arts. Opportunities are provided for collaboration on design problems by landscape and architecture students. The instructional program includes field trips to acquaint students with outstanding examples of the design and construction of parks, cemeteries, airports, private properties and subdivisions, golf courses, and planned civic developments-and for study of the use of various plant materials under difficult conditions of climate, soil, and exposure.

Students planning to major in landscape architecture may obtain necessary preparation in mathematics by completing courses in high-school mathematics through trigonometry.

The following upper-division courses are required for a major in landscape architecture :

| Third Year | Term Hours |
| :---: | :---: |
| Landscape Design (LA 389) | 12 |
| Plant Materials (LA 326, 327, 328) | 9 |
| Landscape Maintenance (LA 358, 359) | 4 |
| Landscape Construction I (LA 360, 361, 362) | 9 |
| City Planning I (LA 353, 354, 355) | 6 |
| History of Architecture II ( $\mathbf{A r H} 437,438,439$ ) | 9 |
| Fourth Year |  |
| Seminar: Landscape Design Theory (LA 407). | 3 |
| Landscape Design (LA 489)... | 12 |
| Plant Composition (LA 430, 431, 432). | 9 |
| Landscape Field Practice (LA 459). | 3 |
| Landscape Construction II (LA 460, 461) | 6 |
| History \& Literature of Landscape Architecture (ArH 453, 454) | 6 |
| Landscape Structures (LA 366).. | ... 3 |

[^41]
## Fifth Year



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City Planning II (LA 499) -...)(LA 508) or Seminar in Planning Adminis
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During the three upper-division years, the student must complete 6 term hours of work in sculpture or painting and 9 term hours in electives outside the school.

The curriculum in landscape architecture is accredited by the American Society of Landscape Architects.

Graduate work is offered in landscape architecture, leading to the degree of Master of Landscape Architecture, and in urban planning, leading to the degree of Master of Urban Planning. The graduate program in urban planning is described below.

Urban Planning. The University offers a program of graduate study leading to the degree of Master of Urban Planning, for students interested in professional careers in city planning and in the planning of other areas affected by urbanization.

The program usually requires two years for completion. It is interdisciplinary in approach, including studies in urban geography, land economics, state and local government, statistics, sociology, etc., in addition to studies in physical planning, civic design, and planning administration. A thesis or terminal planning project is required.

Undergraduate major work in architecture, landscape architecture, civil engineeering, economics, geography, or political science provides good preparation for graduate study of urban planning.

## LOWER-DIVISION COURSE

*LA 289. Landscape Design. 2 hours any term.
Study of the background and principles of landscape design; lectures, field trips, design of small properties. Open to nonmajors. Bochkor.

## UPPER-DIVISION COURSES

LA 326, 327, 328. Plant Materials. 3 hours each term.
The characteristics, identification, and design uses of trees, shrubs, vines, and flowers. Open to nonmajors with consent of instructor. Jette.
LA 353, 354, 355. City Planning I. 2 hours each term.
Fall and winter: history and significance of city planning; modern achievements in zoning, housing, and city and regional planning. Spring: economic, practical, and aesthetic factors. San José.
LA 358, 359. Landscape Maintenance. 2 hours each term
Cultivation of landscape plant materials; maintenance problems in relation to landscape architecture. Ruff.
LA 360, 361, 362. Landscape Construction I. 1 to 3 hours each term
Elementary problems in the construction of landscape features. Lovinger, Peting.
LA 366. Landscape Structures. 3 hours.
The design and construction of simple wood and masonry landscape structures. Peting.
*LA 389. Landscape Design. 1 to 8 hours any term.
A series of problems in landscape architecture, beginning a three-year sequence of intensive study in analysis, solution, and presentation. Seminars and field trips. Prerequisite : Arch 287

* No-grade course.

LA 401. Special Studies. Hours to be arranged.
LA 405. Reading and Conference. Hours to be arranged.
LA 407. Seminar. Hours to be arranged.
*LA 489. Landscape Design. 1 to 10 hours any term.
A series of advanced problems in landscape architecture, with emphasis on broad planning problems and integration with architecture. Field trips and seminars. Prerequisite: 9 term hours in LA 389.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

LA 411, 412, 413. Parks, School Grounds, and Recreation Areas. (g) 3 hours each term.
Principles of landscape design, related to the location and development of land for school, park, and recreation uses. Topographical factors and construction and maintenance problems. Planned for students in recreation, urban planning, and educational administration. Lectures, reports, study trips, projects. Jette .
*LA 430, 431, 432. Plant Composition. (G) 3 to 6 hours each term.
Design of plantings of trees, shrubs, and flowers. Lectures, field trips, and drafting. Prerequisite: LA 326, 327, 328. Bochkor.
LA 433, 434, 435. Ethics and Practice (Landscape). (G) 1 hour each term. Professional ethics, office management, and principles of superintendence. Cuthbert, Jette, Ruff.
LA 459. Landscape Field Practice. (G) 3 hours.
Problems in making surveys, calculating grading, road layout, and siting. Bochkor

LA 460, 461. Landscape Construction II. (G) 3 hours each term.
Advanced problems in landscape construction; retaining walls, drainage, irrigation; specification writing. Quiner.
*LA 499. City Planning II. (G) 1 to 6 hours any term.
Urban and regional planning. Seminars, field study, design laboratory. Prerequisite: LA 353, 354, 355. San José.

## GRADUATE COURSES

*LA 501. Special Studies. Hours to be arranged.
LA 505. Reading and Conference. Hours to be arranged.
LA 507. Seminar. Hours to be arranged.
Planning administration. Buford.
LA 508. Seminar in Planning and Housing. 2 to 3 hours any term.
Discussions of housing and of urban and regional planning problems, led by faculty members and consultants. Assigned reading. Prerequisite: LA 353, 354, 355 ; fifth-year or graduate standing ; consent of instructor. Cuthbert, Hudson.
LA 509. Terminal Creative Project. Hours to be arranged.
Open only to master's degree candidates.
*LA 589. Landscape Design. 1 to 12 hours any term.
Landscape-design problems of increasing complexity. Collaborative problems, field trips, seminars. Third term devoted to terminal project. Prerequisite: 12 hours in LA 489.

[^42]
## Fine and Applied Arts

## Drawing, Painting, and Graphic Arts

Work in drawing and painting at the lower-division level is offered both for students preparing for advanced professional study and for other University students who wish some experience in creative work as a part of a liberal education. Sufficient studio work is provided to insure adequate technical training as a basis for an upper-division major in drawing and painting.

At the upper-division level, the special interests of students (landscape, portraiture, mural design, commercial applications, etc.) are given attention and encouragement. All teaching is through individual criticsim. The student works at his easel or drawing board on his particular problem, and receives individual help from the instructor.

The following lower-division courses in art are required as preparation for a major in drawing and painting or in graphic arts :

|  | Term H |
| :---: | :---: |
| Basic Design (Art 295) | 6 |
| Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206) $\qquad$ |  |
| Painting (Art 290) | 12 |
| Drawing (Art 291) | 4 |
| Water Color (Art 292) | - 2 |

Drawing and Painting. The upper-division major program leading to a bachelor's degree with a major in drawing and painting must include a minimum of 75 hours, normally distributed as follows:


Graduate work leading to the degree of Master of Fine Arts is offered in the field of drawing and painting. For requirements, see pages 245-246.

Graphic Arts. The upper-division requirements for a bachelor's degree with a major in graphic arts are as follows:

> Third Year Term Hours

Composition \& Visual Theory (Art 392), Visual Continuity (Art 493)................ 12
Fundamentals of Print Making (Art 349) $\quad 12$
Calligraphy \& Letter Design (Art 382).
Drawing (Art 391)
Lithography (Art 480)
Studio elective
Fourth Year
Composition \& Visual Theory (Art 492), Visual Continuity (Art 493) Fundamentals of Print Making (Art 349)
Drawing (Art 491).
Painting (Art 490
Studio electiv
Art bistory
Art history

## LOWER-DIVISION COURSES

Art 290. Painting. 2 to 3 hours any term.
Instruction in the use of oil color, water color, and other media. Registration permitted any term, but it is desirable that the work be started in the fall. 12 term hours required for upper-division standing. Ryan, Soeder, Tetzner, Vincent, Wilkinson, Yarowsky.
Art 291. Drawing. 1 to 3 hours any term.
Training in observation and selection of significant elements. Registration permitted any term, but it is desirable that the work be started in the fall. 6 permitted any term, but it is desirable that the work be started in the fall.
term hours required for upper-division standing. Ryan, Soeder, Yarowsky.
Art 292. Water Color. 2 to 3 hours.
The technique and use of water color, with special attention to its characteristics as a painting medium. Emphasis on landscape material. May be substituted for a third term of Art 291 to meet lower-division major requirement. Open to nonmajors with 4 hours of work in Art 291 or with consent of instructor. Ryan, Yarowski.
*Art 295. Basic Design. 2 hours each term.
Studio participation exercises involving the basic principles of design; a three-term introductory sequence. Open to nonmajors. Special section for Honors College students. Foster, Ryan, Stannard, Starck, Tetzner, Yarowski.
*Art 298. Sketching. 1 hour any term.
Sketching from costumed models, to develop ability to observe clearly and record accurately. Offered especially for nonmajor students who have had no previous training in sketching or drawing.

## UPPER-DIVISION COURSES

Art 349. Fundamentals of Print Making. 3 hours.
Graphic reproduction and print techniques in silk screen, block printing, and photographic processes. Starck.
Art 381. Water Color. 2 to 3 hours.
Continuation of Art 292. The technique and use of water color, with particular attention to landscape material. Ryan, Soeder.
Art 382. Calligraphy and Letter Design. 1 to 3 hours.
Basic historical and contemporary determinants of letter forms; configuration and recognition in relation to communication problems; development of skill and expression in the formation of letters. Starck.
Art 390. Painting. 2 to 4 hours any term.
Third-year painting. Still life, figure, portrait, and landscape; pattern and space organization; color and design studies; various media and processes. Prerequisite: 9 hours in Art 290. Vincent, Wilkinson.

## Art 391. Drawing. 1 to 4 hours any term.

Second sequence in drawing. Space and form representation; analysis and statement of form; linear and total statement; structure and movement as factors in drawing; still life and figure; use of various media. Prerequisite 6 hours in Art 291 or Art 292. Ryan, Soeder.
Art 392. Composition and Visual Theory. 2 to 4 hours any term.
Light, color, and design as they relate to painting problems; relationship of painting to architecture; mural design and other problems. Open to nonmajors with consent of instructor. Wilkinson.
Art 401. Special Studies. Hours to be arranged.
Art 405. Reading and Conference. Hours to be arranged.
Art 407. Seminar. Hours to be arranged.

## * No-grade coarse.

Art 481. Water Color. 2 to 4 hours spring.
Advanced work in water color, with particular attention to landscape material. Open to nonmajors with consent of instructor. Continuation of Art 381. Ryan, Soeder.
Art 482. Anatomy for Artists. 2 to 4 hours winter.
Study of the principles and formation of the skeletal and muscular structure of the human figure, as an aid to observation for graphic statements. Pre requisite: Art 290 or Art 291.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Art 480. Lithography. (g) 2 to 4 hours any term.
Principles and methods of lithography; practice in all stages from the preparation of stones to the hand printing of editions. Special emphasis on the medium's contribution to drawing.
Art 490. Advanced Painting. (g) 2 to 4 hours any term
Advanced problems in portrait figure landscape, and still life, in all media Prerequisite : 12 hours in Art 290 or Ârt 390 . Vincent, Wilkinson.
Art 491. Advanced Drawing. (g) 1 to 4 hours any term.
Advanced work in drawing. Study of form from the figure. Prerequisite: 6 hours in Art 291 or Art 391. Ryan, Soeder.
Art 492. Composition and Visual Theory. (G). 2 to 4 hours any term. A study of light, color, and visual processes as they relate to easel and mural painting. Wilkinson.
Art 493. Visual Continuity. ( $G$ ) 1 to 3 hours any term.
Study of the problems of image sequence and continuity in printed material, display, photography, and film. Prerequisite: Art 295 or consent of instructor. Open to nonmajors. Foster.

## GRADUATE COURSES

*Art 501. Special Studies. Hours to be arranged.
Art 505. Reading and Conference. Hours to be arranged.
Art 507. Seminar. Hours to be arranged.
Art 509. Terminal Creative Project. Hours to be arranged.
Art 580. Graduate Studies in Print Making. Hours to be arranged.
Advanced work in lithography and engraving. Black-and-white and multiplecolor process.
Art 590. Graduate Studies in Painting, Drawing, and Design. Hours to be arranged.
Work at an advanced level with problems of color and form, techniques, processes, and visual theories. Vincent, Wilkinson, Ryan, Soeder.

## Sculpture and Applied Design

The program in sculpture and applied design includes instruction and major curricula in sculpture, ceramics, weaving, and jewelry and metalsmithing.

Sculpture. The degree program in sculpture is planned to provide a sound foundation for mature investigation of the practical, theoretical, and historical aspects of the discipline. The student is encouraged to take advantage of the opportunities offered by the University for liberal education, while at the same time developing appreciation and technique within the broad field of art.

* No-grade course.

In the lower-division classes, the emphasis is on elements in the language of form. Upper-division instruction enlarges upon theoretical perspectives, directing the student to personal investigations of the physical and expressive provinces of sculpture, to the study of constructive and destructive elements of light, and to the use of air as a plastic solid in equal partnership with the visible solid.

The following lower-division courses in art are required as preparation for a major in sculpture:

Term Hours
Basic Dcsign (Art 295) ............................................................................. 6
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH
$204,205,206$ )..............................................................................

The upper-division major program in sculpture, leading to a bachelor's degree, includes the following required courses:


For the requirements for the Master of Fine Arts degree with a major in sculpture, see pages 245-246

Applied Design. The University offers instruction and major programs in the following fields of applied-design: ceramics, weaving, and jewelry and metalsmithing. The following lower-division courses in art are required as preparation for a major:

The curriculum is designed to acquaint the student with the general character, techniques, and materials of applied design.

The upper-division major program in applied design, leading to a bachelor's degree, includes the following required courses:


For the requirements for the Master of Fine Arts degree with a major in ceramics or weaving, see pages 245-246.

## LOWER-DIVISION COURSES

Art 255. Ceramics. 2 to 4 hours any term.
Introduction to ceramic techniques and materials. Throwing, molding, and hand building. Surface decoration of two- and three-dimensional surfaces. Students participate in stacking, firing, and drawing the kilns. Open to nonmajors. James, Stannard.

Art 256. Weaving. 2 to 4 hours any term.
Introduction to basic weaving techniques. The dressing, care, and manipulation of several types of looms. Experimentation with a wide variety of fibers. Production of textiles of original design on 4 - and 8-harness looms. Nixon.
Art 257. Jewelry and Metalsmithing. 2 to 4 hours any term.
Introduction to the handworking of nonferrous metals-copper, brass, bronze, silver, gold; practical information about making jewelry and metal objectssiver, gold, practical ing, centrifuge casting, forging, raising. Nixon.
soldering, stone setting,
Art 293. Elementary Sculpture. 2 to 4 hours any term.
Introduction to materials. Elementary considerations of form; technical and compositional exercises in clay, plaster, wood, and stone. Sections for predental students and other nonmajors. Zach, Buckner.

## UPPER-DIVISION COURSES

Art 393. Techniques of Sculpture. 2 to 6 hours any term.
Modeling problems in portraiture, figure study, and group composition. Technical and aesthetic considerations of the several sculptural media. Buckner, Zach.
Art 401. Special Studies. Hours to be arranged.
Art 405. Reading and Conference. Hours to be arranged.
Art 407. Seminar. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 455. Advanced Ceramics. ( $G$ ) 2 to 4 hours any term.
Advanced studio work; individual projects. Emphasis on creative form. Study of material, texture, and functional relationships. Body and glaze making; earthenware, stoneware, and porcelain. Kiln atmosphere and effects on body and glaze Students assume responsibility for firing their own work. 30 term hours required for majors. Prerequisite : 6 term hours in Art 255. James.
Art 456. Advanced Weaving. (G) 2 to 4 hours any term.
Emphasis on creative work. Production of a wide variety of handwoven fabrics. Historical studies, fabric analysis, spinning, dyeing. 30 term hours required for majors. Nixon.
Art 457. Advanced Jewelry and Metalsmithing. (G) 2 to 4 hours any term. Emphasis on creative work. Advanced problems in forging, raising, centrifuge casting, enameling, etching, stone setting. Nixon.
Art 458. Textile Printing. (G) 2 to 4 hours.
Advanced problems in design and color, applied to standard textiles. Tech Aque in pattern design and yardage printing. Silk screen, block print, etc Gehring.
*Art 494. Advanced Sculpture. (G) 2 to 4 hours any term.
Coordination of sculpture with related fields of architectural, landscape, interior, and industrial design. Zach, Buckner.
Art 496. Ceramic Sculpture. (G) 2 hours any term.
Techniques in building, modeling, molding, and surfacing terra cotta. Emphasis on the character of the materials and their effectiveness as sculptural media. Study of forms appropriate to residential and civic design. Prerequisite: three terms of Art 293, three terms of Art 255.

## GRADUATE COURSES

*Art 501. Special Studies. Hours to be arranged.
Art 505. Reading and Conference. Hours to be arranged.

* No-grade course.

Art 507. Seminar. Hours to be arranged.
Art 509. Terminal Creative Project. Hours to be arranged.

## Art History

THE PROGRAM IN ART HISTORY provides: (1) instruction in this basic aspect of human culture for all University students (all courses in art history are open to nonmajors) ; (2) the historic background in art and architecture needed in the several major curricula of the School of Architecture and Allied Arts ; and (3) a core of studies for a major curriculum in the history of art.

The art-history major combines historical study with creative studio practice It is designed to provide a broad perspective for the understanding of the art of the past and present, and a basis for critical judgment of individual works of art. The following lower-division courses are required as preparation for a major:

Term Hours
Elementary studio courses (drawing, painting, sculpture, or applied design) ...... 12
Elementary studio courses (drawing, painting, sculpture, or applied design) ....
History of Western Art (ArH 204, 205, 206) or Survey of Visual Arts (ArH

The upper-division major program in art history, leading to a bachelor's degree, includes the following required courses:

| Third Year T | Term Hours |
| :---: | :---: |
| History of art (selected) | 18 |
| Language or literature. | 9 |
| Electives (recommended: art studio courses, history, anthropology, philosophy).. | .. 18 |
| Fourth Year |  |
| History of art (selected) | 8 |
| Aesthetics (Phl 441, 442, 443) | 9 |
| Electives (recommended: language or literature, history, anthropology, art studio courses) | r 18 |

## LOWER-DIVISION COURSES

*ArH 201, 202, 203. Survey of the Visual Arts. 3 hours each term.
Cultivation of understanding and intelligent enjoyment of the visual arts through a study of historical and contemporary works; consideration of motives, media, and forms. Baldinger.
*ArH 204, 205, 206. History of Western Art. 3 hours each term.
An historical survey of the visual arts from prehistoric to modern times. Selected works of painting, sculpture, architecture, and other arts are studied in relation to the cultures producing them. Designed for nonmajor students, as well as for majors in art history. Special section for Honors College stu-
dents. Kramer, Snyder. 246, 247
ArH 246, 247, 248. History of Oriental Art. 3 hours each term.
An historical survey of the visual arts of Greater India, China, and Japan, from prehistoric to modern times; selected works of painting, sculpture, architecture, and other arts studied in relation to the culture in which they were produced. Designed for nonmajors, as well as for majors in art history. Baldinger.

## UPPER-DIVISION COURSES

ArH 337,338, 339. History of Architecture 1. 3 hours each term.
Descriptive and critical analysis of architecture from prehistoric times to the Renaissance in Italy. Includes the study of ancient, mediaeval, Islamic, and pre-Columbian American architecture. M. D. Ross.
206.

ArH 346, 347, 348. History of Painting. 3 hours each term.
Chronological and interpretative study of the language of painting. Emphasis on the development of painting from the Renaissance to the nineteenth century. Snyder.
ArH 372, 373, 374. Ancient Art. 3 hours each term.
Art of Bronze and Iron Age cultures in Mediterranean lands from the third millenium B.C. to the fourth century A.D. Snyder
ArH 375, 376, 377. Mediaeval Art. 3 hours each term.
The art of the Middle Ages in Christian lands; early Christian, Byzantine, and early mediaeval art; Romanesque art; Gothic art.
ArH 378, 379, 380. Renaissance Art. 3 hours each term.
Origin and development of Renaissance art in Italy and northern Europe in the fifteenth and sixteenth centuries.
ArH 401. Special Studies. Hours to be arranged.
ArH 405. Reading and Conference. Hours to be arranged.
ArH 407. Seminar. Hours to be arranged.
ArH 437, 438, 439. History of Architecture II. 3 hours each term.
Descriptive and critical analysis of architecture from the Renaissance in Italy to the present day. Evolution of modern architecture. M. D. Ross.
ArH 443, 444, 445. History of Interior Architecture. 2 hours each term.
History of interior architecture, including the study of contemporary furniture, textiles, rugs, etc., as an art expression. Frasier.
ArH 453, 454. History and Literature of Landscape Architecture. 3 hours each term.
History of gardens and public open spaces. Fall: development of the formal garden from the end of tile Middle Ages to the eighteenth century; winter: the landscape garden since the eighteenth century, Oriental and modern garden design. Majors in landscape architecture complete a year sequence with ArH 439. M. D. Ross.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

ArH 440. American Architecture. (G) 3 hours.
History of architecture in the United States. Special emphasis on regional building in the Pacific Northwest. Seminar discussions and assigned research. Students wishing to devote additional time to special research projects may enroll also under ArH 401. M. D. Ross, Kramer.
ArH 446, 447, 448. Epochs in Oriental Art. (G) 3 hours each term.
Comparative study of architecture, sculpture, landscape design, and painting as expressions of individual and social experience in the cultures of the Far East. Fall: Indian and Indonesian; winter: Chinese; spring: Japanese Baldinger.
ArH 450, 451, 452. Art in Latin America. (G) 3 hours each term.
Preconquest art of the Andean, Mexican, Mayan, and related cultures. Development of architecture, painting, and sculpture in the Spanish and Portuguese colonies from the sixteenth to the nineteenth centuries, with emphasis on the fusion of European and indigenous elements. Development of modern art in the twentieth century in Mexico and Brazil. M. D. Ross.
ArH 476, 477, 478. Background of Modern Art. (G) 3 hours each term.
Intensive study of the development of art in the nineteenth and early twentieth centuries. Prerequisite : ArH 201, 202, 203 or ArH 204, 205, 206. Kramer.

## GRADUATE COURSES

*ArH 501. Special Studies. Hours to be arranged.
*ArH 503. Thesis. Hours to be arranged.

* No-grade course.

ArH 505. Reading and Conference. Hours to be arranged.
ArH 507. Seminar. Hours to be arranged.
ArH 511, 512, 513. The Art Museum. 3 hours each term.
Theories and techniques in the operation of art museums. Baldinger, Kramer.

## Art Education

THE CURRICULUM IN ART EDUCATION leads to the B.S. or B.A. degree. The program is designed to prepare students for teaching art in junior and senior high schools and to provide a background for the supervision of art in the elemen-tary-school program. The following lower-division courses are required as preparation for a major in art education and for admission to student teaching. Art electives must include 4 to 6 hours in each of the following areas: drawing and painting, sculpture, ceramics, jewelry or weaving.

erm Hours
Basic Design (Art 295).
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH
*Human Development \& Learning (Ed 315
Art electives (studio)
The following upper-division courses are required to complete requirements for a degree with a major in art education :

Third Year
Term Hours
Child Art Lab (ArE 314)
Introduction to Art Education (ArE 315)
Seminar: Student Teaching (ArE 407)
Art in the Junior High School (ArE 316)
Art in the Senior High School (ArE 414).
Art electives .....................................
*Student Teaching: Senior High (Ed 417).

## Fourth Year

Art electives chosen from: drawing, painting, lithography, water color, composi tion and visual theory, visual continuity, sculpture, ceramics, weaving, History of making or jewelry
History of art
Seminar: Meth
For certification as a teacher of art in Oregon secondary schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

Completion of the requirement for a major in art education at the University meets the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon.

A fifth year of preparation is required for permanent certification in Oregon. Students working toward the completion of fifth-year requirements are advised individually concerning the selection of courses. Students completing a properly planned fifth-year program may qualify for a master's degree.

## UPPER-DIVISION COURSES

Art 311, 312. Art in the Elementary School. 2 hours each term.
First term: introduction to the visual arts through laboratory experiences; design, drawing, painting, and other two-dimensional activities with materials appropriate for the primary- and intermediate-school child; lectures, group discussions, evaluations, studio work. Second term: continuation of art ex-
periences for the elementary-school child, with emphasis on three-dimensional form. Art 311 prerequisite to Art 312.

ArE 313. Art in the Elementary School. 3 hours.
Critical examination of individual and group activities currently offered in the elementary-school art program; lectures, curriculum design, evaluation of process and technique; literature in the field. Satisfies the Oregon State Department of Education methods-course requirement. Prerequisite: Art 311, 312 or consent of the instructor.
ArE 314. Children's Art Laboratory. 2 hours
Work with children in a supervised art laboratory; designed for students preparing for art teaching at both the elementary and secondary levels. Burgner.
ArE 315. Introduction to Art Education. 3 hours fall.
A lecture-laboratory-seminar study of the growth and developmental stages of children in relation to creative experience with visual-art materials. Required of all majors and students working for certification in secondary-school art. Prerequisites: Ed 310; two years of lower-division work in art studio and art history courses. Ballinger
ArE 316. Art in the Junior High School. 3 hours winter.
Critical evaluation of ideas, materials, and program content appropriate for art experiences of the pre-adolescent junior-high-school student. Offered concurrently with the first term of student teaching in junior high school. Lecture, laboratory course. Prerequisite: ArE 314. Ballinger, Gehring.
ArE 401. Special Studies. Hours to be arranged.
ArE 405. Reading and Conference. Hours to be arranged.
ArE 407. Seminar. Hours to be arranged.
Methods and Research in Secondary-School Art. Ballinger, Gehring.
*Ed 416. Supervised Teaching: Junior High School. 5 to 15 hours any term
*Ed 417. Supervised Teaching: Senior High School. 5 to 15 hours any term. Student teaching experience in the public schools. One hour a day, five days a week; first term junior high school, second term senior high school. Maximum credit, 15 hours for two terms. Permission for student teaching must be obtained from the art-education division. Gehring.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

## ArE 409. Practicum. (g) Hours to be arranged

Practicum experience provided in the use of creative activities as problemPracticum experience provided in the use of creative activities as problem-
solving opportunities for the mentally retarded child; laboratory experiences with art and craft materials. Ballinger, Gehring.
ArE 411. Methods and Research Materials: Art in Elementary Schools. (G) 3 hours fall.
A study of significant literature and research in the field; laboratory investigation of materials, ideas, and methods currently used in elementary schools. Satisfies state certification requirement for an elementary art-methods course. Prerequisite: Art 311, 312, previous teaching experience, or consent of the instructor. Burgner.
ArE 414. Art in the Senior High School. (G) 3 hours spring
A laboratory course designed to explore the possibilities of new and significant art activities appropriate for the adolescent. Prerequisite: ArE 314, ArE 315. Foster.

## GRADUATE COURSES

*ArE 501. Special Studies. Hours to be arranged ArE 505. Reading and Conference. Hours to be arranged.

[^43]ArE 507. Seminar. Hours to be arranged.
ArE 532. Supervision of Children's Art Laboratory. 3 hours any term.
Designed to provide an opportunity for work with children in a planned laboratory situation; responsibility for program design and supervision of children's art activities. Prerequisite : teaching experience or consent of instructor. Burgner.
ArE 535. Art and Architecture for the School Administrator. 3 hours.
Problems of the school administrator in the field of art programming; architectural principles in relation to school-plant design. Lectures and studiolaboratory demonstration.

## School of Business Administration

Richard W. Lindholm, Ph.D., Dean of the School of Business Administration.
Kenneth D. Ramsing, D.B.A., Assistant Dean of the School of Business Administration for Undergraduate Studies
Donald L. Thompson, Ph.D., Assistant Dean of the School of Business Administration for Graduate Studies.
Stuart U. Rich, D.B.A., Director of Forest Industries Management Center.
Harold $^{\text {Strom, Ph.D., Director of Transport and Logistics Research Center. }}$

## Accounting and Business Statistics

Professors: C. E. Johnson, C. E. Kelly (emeritus), A. E. Mace, A. B. Stillman (emeritus).
Associate Professors: D. S. Harwood, Jr. (department head), D. A. Baerncopf, E. H. Caplan, J. W. Soha.

Assistant Professors: C. J. Luneski, A. L. Peiterson, A. L. Thomas.
Instructors: R. L. Larson, D. R. Rogers.
Lecturer: R. E. Babcock.
Fellow: C. J. Dirksen, Jr.
Assistants: C. T. Blanchard, R. H. Hatlin, M. A. Housen, G. N. Miller, J. K. Moss, S. M. Ngola, E. B. Post, S. A. Wendell, D. C. Younce.

## Finance and Business Environment

Professors: W. J. Robert (department head), W. C. Ballaine, J. C. Clendenin, W. Grader, S. J. Kagan, R. W. Lindholm, V. P. Morris (emeritus), E. W' W. Gr

Associate Professors: L. P. Anderson, W. D. Richins, K. D. Skelton, D. A. Watson.
Assistant Professors: L. W. Ross, Jr.
Instructors: K. E. Neidert, M. J. Nelson, W. H. Parks, G. D. Weight.
Fellows: E. K. Gill, T. E. Stitzel.
Assistants: V. P. Apilado, B. J. Lindner, B. G. Longstroth, J. A. O’Brien, S. H. Partridge, Jr., D. J. Paynter, C.C. Wilberg.

## Marketing, Insurance, and Transportation

Professors: M. R. Greene (department head), N. H. Comish (emeritus), A. L. Lomax (emeritus), R. J. Sampion.*
Associate Professors: S. U. Rich, D. L. Thompson, H. K. Strom, C. F. Ziebarth.
Assistant Professor: N. R. Smith.
Instructors : I. M. Field, H. O. Pruden, P. Swadner, E. E. Teeple, H. E. TenNANT.
Lecturer: D. P. Remington.
${ }^{*}$ On sabbatical leave $1965-66$

Fellows: J. R. Burtt, T. D. Hinthorne, J. A. Martilla
Assistants: H. F. Cowley, T. L. Dolglas, R. J. English, G. J. Gruber, J. B. Mitchell, W. H. Slootweg.

## Personnel and Industrial Management

Professors: S. C. Vance (department head), E. F. Beal, J. B. Miner.
Associate Professors: F. J. Seubert, L. L. D. Shaffer.
Assistant Professors: C. M. Jones, K. D. Ramsing.
Instructors: W. C. Bessey, D. R. Brown, L. A. Swanson.
Lecturer: H. C. Pyron.
Fellows: W. A. Shrode, N. Siemens.
Assistants: C. J. Bellas, W. D. Crader, L. W. Jacobs, G. M. Myers, G. O. Rholl, T. L. Sopwith

## Secretarial Science

Instructor: L. R. Needham.
THE SCHOOL OF BUSINESS ADMINISTRATION recognizes, as its primary function in the University, the provision of the broad education and understanding essential for responsible careers in the business world, in which leaders must be capable of continued adjustment to changing conditions in the firm and in the general social, economic, and political environment within which the firm operates.*

To insure such an education for its students, the school requires that undergraduate majors take one-half of their work in the liberal arts and sciences. Within the school, professional courses relate new insights and developments in the social and natural sciences to the needs of business firms in meeting their responsibilities to their owners, employees, and customers.

Although the school is primarily concerned with providing capable administrative, research, and technical personnel for business, its curricula also provide excellent preparation for careers in government and education

The instructional program of the school is organized in two divisions: the Division of Undergraduate Studies and the Division of Graduate Studies. The Division of Graduate Studies operates under the general direction of the Graduate School of the University.

The School of Business Administration was established in 1914 as the School of Commerce; the present name was adopted in 1921. Its undergraduate program was accredited in 1923, and its M.B.A. program in 1962, by the American Association of Collegiate Schools of Business.

The following business honorary and professional societies have active chapters at the University: Alpha Kappa Psi, men's business fraternity; Beta Gamma Sigma, business administration scholastic honorary; Beta Alpha Psi, accounting; Delta Nu Alpha, transportation; Eta Mu Pi , merchandising; Insurance Society; Phi Chi Theta, business women; Propeller Club, foreign trade.

Scholarships and Awards. For scholarships and fellowships established specifically for students in business administration, see page 102. For business administration prizes and awards, see pages 108-109.

* An undergraduate program, combining courses in business and courses in a technical field, is offered at Oregon State University, Corvallis, through the School of Business and Technology. Technical "minors" are available in science, agriculture, engineering, forestry, and home economics; 27 term hours in the technical minor are required, in addition to courses in business. The Oregon State progran leads to a bachelor's degree; by action of the State Board of Higher Education, graduate major work in business is offered exclusively at the University of Oregon.

Forest Industries Management Center. The major activities of the Forest Industries Management Center include instruction, research, and industry conferences. Introductory training is provided to undergraduate students interested in job opportunities in forest products companies (lumber, plywood, pulp and paper).

At the graduate level, the Center offers work leading to the M.B.A. degree with a major in forest industries management. This program, which supplements the regular core curriculum in business administration, is open to students with an undergraduate forestry major.

The education, research, and conference programs of the Center are planned and conducted with the support of executives in the forest industries of the Pacific Northwest, through the Forest Industries Management Center Advisory Committee. The current members of this committee are: James R. Turnbull, executive vice-president, American Plywood Association; Edward A. Stamm, general sales manager, Boise-Cascade Corporation; Lester E. Anderson, publisher, Random Lengths; Ehrman V. Giustina, partner, Giustina Brothers Lumber and Plywood Company; Donald S. Andrews, western manager, National-American Wholesale Lumber Association ; Carl A. Newport, chief, Division of Forest Economics Research, Pacific Northwest Forest and Range Experiment Station; G. Cleveland Edgett, vice-president, Promotion, Western Wood Products Association ; Leonard M. Guss, manager, Marketing Research, Weyerhaeuser Company.

Conferences and Lectures. Frequent conferences on general and specialized business problems are sponsored each year by the School of Business Administration, with the cooperation of business leaders of the Pacific Northwest. These conferences are usually open to students in the school.

Leaders in various fields of business are regularly invited to the campus to discuss new developments and professional opportunities with undergraduate and graduate students.

## Division of Undergraduate Studies

THE DIVISION OF UNDERGRADUATE STUDIES of the School of Business Administration includes four departments, each of which offers several major options, leading to the Bachelor of Business Administration, Bachelor of Arts, or Bachelor of Science degrees:

Accounting and Business Statistics-accounting; professional accounting ; business statistics.
Finance and Business Environment-banking ; investments; finance management; international business; business economics; business teacher education.
Marketing, Insurance, and Transportation-marketing ; insurance ; transportation, traffic management, and utilities; real estate; business and construction.
Personnel and Industrial Management-production; personnel; management ; office administration.
Degrees. The School of Business Administration offers undergraduate major work leading to the Bachelor of Business Administration, Bachelor of Science, and Bachelor of Arts degrees.

Honors: See Honors College, pages 129 ff.
Admission. The undergraduate major curricula in business administration are organized on an upper-division basis. Freshman students intending to major in business administration are enrolled in the College of Liberal Arts for a two-
year prebusiness program, which combines liberal arts courses with introductory preprofessional courses in the School of Business Administration. The lowerdivision prebusiness courses are planned to provide continuity of training throughout the student's undergraduate years. Educational continuity is further insured through the assignment of members of the faculty of the School of Business Administration as advisers to prebusiness students.

Students planning to enroll in the School of Business Administration for upper-division major studies leading to a bachelor's degree must make formal application to the dean of the school after the completion of two years in which work, but not later than one month betore the opening of the made when eligibility has admission is sou
been established.

To be eligible for admission, the student must have satisfied all lower-division requirements of the University, must have maintained a $C$ average in English Composition ( $\mathrm{Wr} 121,122,123$ ), and must have completed the following required prebusiness courses:

Term Hours


Business Environment, (MIT 125, 126) is recommended as a freshman elective, but is not required.

Major Requirements. To qualify for a bachelor's degree with a major in the School of Business Administration, the student must complete: (1) a group of core courses required of all majors, (2) the specialized courses required in one of the several major options offered by the school, (3) a minimum of 66 term hours therk in business administration after formal admission as an upper-division of work in busins outside the School of major, and (4) a minimulative 2.00 grade-point Business Administration. The student must also earn a cumulative 2.00 grade-point average in business courses and a 2.00 GPA in business courses taken at the University of Oregon. The upper-division core courses are :

$$
\text { Junior Year } \quad \text { Term Hours }
$$

Organization \& Interpersonal Relations (PIM 321)
Organization \& Interpersonal Relat
Financial Institutions (FBE 320)
Elements of Marketing (MIT 323, 32
$\dagger$ Production Management (PIM 329)...
Elementary Inf. in Bus. Stat. (BS 333)
Managerial Accounting (Ac 313)
Business Finance (FBE 322)
Business Law II (FBE 326).
$\qquad$

Senior Year
Two of the following courses:
Term Hours

The core courses provide all able graduates with a general education for the management of business firms and a sound management background for careers in government and education and for life in our highly competitive and technical society. The major options offered by the several departments provide specialized training for a variety of careers in business.

* Students who receive a grade of 4 on a mathematics placement test given all entering students are exempt from this requirement.

Not required for the option in business teaeher education.

## Accounting and Business Statistics

THE PROGRAM IN ACCOUNTING and business statistics is designed to prepare students for professional careers in these fields and to provide all students of business with an understanding of the theory and techniques of quantitative analysis as a basis for administrative decision making.

General Accounting. The major curriculum in accounting is a four-year program designed for students who wish to prepare for a professional career in business or government service with an emphasis on accounting and quantitative analysis of business data. The major requirements, in addition to the core program of the school, are listed below:

Term Hours 6
6 6
3
4
11 $\frac{1}{30}$ 3
2
2

All majors in general accounting are required to take one year of college mathematics during their lower-division years. Courses in mathematics of finance or similar courses may not be counted toward the satisfaction of this requirement.

Professional Accounting. A special five-year program in professional accounting is offered for students who wish to prepare for careers as certified public accountants or accounting executives. Students who satisfy the requirements of the Graduate School and the School of Business Administration may earn the M.B.A. degree at the end of the fifth year. The major requirements, in addition to the core program of the school, are as follows :

| Asset Valuation \& Income Measurement (Ac 350, 351) Corporate Accounts \& Statements (Ac 352) |  |
| :---: | :---: |
|  |  |
| Principles of Cost Accounting (Ac 360, 361) |  |
| Income-Tax Procedures (Ac 411, 412, 413).................................................... |  |
| Special Topics in Accounting (Ac 450) ............................................................ |  |
| Accounting Verifieation (Ac 440, 441) |  |
| Minimum of 15 term hours selected from electives listed below, of which 9 hours must be in courses numbered 500 and above... |  |
| electives |  |
| Introduction to Numeric Computation (Mth 233).......................................... |  |
| Management Information Systems ( $\mathrm{Ac} 420,421$ ) ...................................-....... |  |
|  |  |
|  |  |
| Advanced Aeeounting Problems (Ac 480) .............................................................. |  |
| Cost Analysis \& Interpretation (Ac 562) <br> Administrative Controls (Ac 540) |  |
|  |  |
| Advanced Business Law (FBE 418) |  |
|  | Quantitative Analysis for Business Decisions (BS |

Introduction to Numeric Computation (Mth 233)
Fund Accounting (Ac 430 )
Scial Topics in Accounting (Ac 451).
Cost Analysis \& Interpretation (Ac 562)
Advanced Business Law (FBE 418)
Quantitative Analysis for Business Decisions (BS 432).

Economic Theory (Ec 375, 376, 377)
Seminar: Operations Research (PIM 407)
Problems in Production Management (PIM 430)
Seminar: Development of Accounting Thought (Ac 50
Accounting Verification (Ac 542)
Aceounting Theory (Ac 552)...
All professional accounting majors are required to take one year of college mathematics during their lower-division years. Courses in mathematics of finance or similar courses may not be counted toward the satisfaction of this requirement.

Business Statistics. The major program in business statistics is designed to prepare the student for a career in business research; primary emphasis is on the application of modern statistical methods to business problems. Majors in business statistics must complete work in basic mathematics through calculus (equivalent of Mth 201, 202, 203 or Mth 204, 205, 206). Additional courses in mathematics, accounting, and quantitative methods in economics or other social sciences are highly recommended. The major requirements, in addition to the core program of the school, are as follows:

Term Hours
Quantitative Analysis for Business Decisions (BS 432) ...
Special Topics in Business Statistics (BS 433) $\qquad$ ... 3
Special Topics in Business Statistics
Principles of Cost Accounting (Ac 360
Principles of Cost Accounting (Ac 360) (M...........
Introduction to Numerical Computation (Mth 233 )
Economic Theory (Ec 375, 376).
Minimum of 9 term hours selected from electives listed below.

## electives

Management Information Systems (Ac 420, 421)
Introduction to Statistical Theory (Mth 441, 442)
Economic Theory (Ec 377)
Linear Algebra \& Coordinate Geometry (Mth 316)
Computing (Mth 444)...
Mathematical Economics (Ec 480).
Principles of Cost Accounting (Ac 361)
Taxation \& Business Policy (Ac 311)
National Income \& Business Cycles (Ec 483, 484, 485) .................................................
Majors in business statistics must include Business Fluctuations and Expansion (FBE 466) as a part of their senior core program

## Accounting LOWER-DIVISION COURSES

Ac 221, 222. Fundamentals of Accounting. 3 hours each term.
Function of accounting as a tool for the planning and administration of organizations; primary emphasis on analysis and interpretation of financial data. First term: position and income statements, conceptual bases for collecting and presenting data, flows of cost, the accounting cycle, depreciation, formation of working capital; second term: inventory and its control, debtequity relationships, interest, asset valuation problems, manufacturing costs.
Special sections for Honors College students. Prerequisite : sophomore standSpec

## UPPER-DIVISION COURSES

Ac 311. Taxation and Business Policy. 3 hours.
Designed for students not specializing in accounting. Emphasis on the impact of Federal income and estate taxes on decisions of business management such as decisions to invest, to merge, to distribute earnings, to establish re tirement programs. Prerequisite: Ac 223 or Ac 313. Lindholm, Peiterson.

Ac 313. Managerial Accounting. 3 hours.
Cost concepts and decision-making ; survey of taxation for its effect on planning; break-even analysis for planning and reporting; internal control; cri tique of accounting reports as elements of information systems; analysis of students. Special section for Honors College students. Required of all transfer students. Special section for Honors College students. Prerequisite : Ac 222.
Ac 314. Financial Accounting Analysis. 3 hours.
Underlying concepts; preparation of financial statements from the point of in accounting. Prerequisite : Ac 223 or Ac 313 .
Ac 315. Managerial Accounting Analysis. 3 hours.
Uses of cost data for control and decision making, from the point of view of management; collection and transmission of quantitative information to meet various needs within the firm. Planned for students who are not majors in accounting. Prerequisite: Ac 223 or Ac 313.
Ac 350, 351. Asset Valuation and Income Measurement. 3 hours each term Accounting principles and procedures in asset valuation and management and in the determination of periodic income; problems of measurement and of inter pretation of financial accounting data. Prerequisite: Ac 223 or Ac 313. Luneski, Caplan, Thomas.
Ae 352. Corporate Accounts and Statements. 3 hours.
Special problems of accounting for corporations; preparation and analysis of corporate financial statements; use of cash-flow and fund statements. Prerequisite : Ac 351. Luneski, Thomas, Caplan
Ac 360, 361. Principles of Cost Accounting. 3 hours each term.
Development, presentation, and interpretation of cost information to aid management in planning and controlling business operations; methods of collecting of cost allocation, basic principles of cost reports to management, problems pacity in relation to overhead allocation, cost-volume relationships, variable budgeting, and analysis of differential costs. Prerequisite: Ac 223 or Ac 313 . Harwood, Caplan.
Ac 407. Seminar. Hours to be arranged
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For 500 courses, open only to graduate students, see pages 292-293)
Ac 411, 412, 413. Income-Tax Procedures. (G) 2 hours each term.
Professional study and analysis of the Federal and Oregon income-tax structure, and of the problems involved in determining income-tax liabilities; determination of taxable income and computation of taxes for individuals, partnerships, corporations, estates, and trust ; introduction to tax research. Pre-
requisite: Ac 223 or Ac 313 . Peiterson. requisite. Ac 223 or Ac 313. Peiterson.
Ac 420, 421. Management Information Systems. (G) 3 hours each term.
Study and analysis of information models for the management of complex organizations; secondary research on problems arising from indiscriminate information; adjustment to particularized definitions ; total-systems fow charting; primary research into particularized information systems Prerequ site: computer course work or experience with mechanized mas. Prerequitems; senior standing or consent of instructor Harwood
Ac 430. Fund Accounting. (G) 3 hours
Financial administration and reporting requirements of governmental and nonprofit entities, emphasizing the use of fund accounting as a basis for budgetary control. Consideration of broader theoretical aspects of fund accounting and its possible extension to profit-oriented entities. Prerequisite: Ac 313. Thomas, Harwood.

## Ac 440, 441. Accounting Verification. (G) 3 hours each term

Auditing standards and procedures observed by certified public accountants in the examination of the financial statements of business and other organizations; audit standards and objectives, collection of evidence, evaluation of internal control, problems of verification and application of procedures, preparation of programs, work papers, and reports. Prerequisite: Ac 352, Ac 361. Soha.
Ac 450, 451. Special Topics in Accounting. (G) 3 hours each term.
Advanced topics in financial accounting analysis of cash flows and the capital budgeting decision; special problems in partnership accounting; accounting reports for firms in financial difficulties; consolidated financial statements; estate and trust accounts and reports. Prerequisite: Ac 352; one year of college mathematics. Johnson.

Ac 480, 481. Advanced Accounting Problems. (G) Hours to be arranged. Problems in professional examinations given by the American Institute of Certified Public Accountants; emphasis on problem analysis and development
of working papers. Prerequisite: consent of instructor. Luneski.

## Business Statistics

## LOWER-DIVISION COURSE

## BS 232. Introduction to Business Statistics. 3 hours.

Modern business decision theory, and statistics as a tool for business decision making. Primary emphasis on statistical description (tables, charts, and frequency distributions) and the elements of probability; consideration also of modern data processing, index numbers and time series analysis (trend, cyclical, and seasonal adjustments) of business data. Special section for
Honors College students. Baerncopf, Browning, Luneski, Mace.

## UPPER-DIVISION COURSE

BS 333. Elementary Inference in Business Statistics. 3 hours.
Applications of statistical inference and regression analysis to business situations; sampling and its role in estimation and hypothesis testing; uses of subjective probability for business decisions; simple linear regression analysis and correlation. Special section for Honors College students. Prerequisite: BS 232. Baerncopf, Christy, Mace.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For 500 courses, open only to graduate students, sce pasles 292-293)
BS 432. Quantitative Analysis for Business Decisions. (G) 3 hours.
Uses of subjective probability and modern utility theory in dealing with conditions of risk and uncertainty in business situations; elementary mathematical lems. Prerequisite : one year of college mathematics; BS 232, BS 333, or equivalent. Baerncopf.
BS 433. Special Topics in Business Statistics. (G) 3 hours
Developmerit of competence in applying the ideas of probability and statistical inference to problems in business administration; mathematical models in business, regression analysis, elementary considerations of game theory, timeseries analysis. Prerequisite: one year of college mathematics; BS 232, BS 333, or equivalent. Baerncopf, Mace.

## Finance and Business Environment

THE PROGRAM offered by the Department of Finance and Business Environment is designed to prepare students for careers in the basic fields of domestic and foreign finance and managerial economics. The courses provide a fundamental understanding of the application of economic analysis to the solution of problems of business management and of business finance and financial institutions, with special attention to the relation of financial policies and operations to the functioning of the economic system as a whole.

The department offers five major options: banking, investments, finance management, international business, and business economics.

Banking. The option in banking is designed to prepare students for careers in banks and related financial institutions. The major requirements, in addition to the core program of the school, are listed below:

| Introduction to Real Estate \& Urban Land Use (MIT 322) <br> Risk \& Insurance (MIT 354) |  |
| :---: | :---: |
|  |  |
| Nonbank Financial Intermediaries (FBE 450) Commercial Bank Management (FBE 460) |  |
|  |  |
| Minimum of 12 term hours selected from electives listed helow....................................................... |  |
|  | electives |
| Managerial Accounting (AC. 313)Taxation and Fiscal Policy ( ${ }^{\text {ac 319)... }}$ |  |
|  |  |
| Advanced Business Law (FBE 418) |  |
| Investrnents (FBE 464)... |  |
|  | Problems in Business Finance (FBE 459) |



Investments. The option in investments is designed to prepare students for careers in investment banking, investment management, and stock brokerage. The major requirements, in addition to the core program of the school, are listed below:

|  | Term Hours |
| :---: | :---: |
| Financial Problems Analysis (FBE 459). | -. 3 |
| Nonbank Financial Intermediaries (FBE 450) | .. 3 |
| Taxation \& Business Policy (Ac 311) ............ | 3 |
| Investments (FBE 463, 464) | 6 |
| A minimum of 9 term hours selected from electives listed below..... | -. 9 |
|  | 24 |
| electives |  |
| Public Finance (Ec 319) | 3 |
| Commercial Bank Management (FBE 460) | 3 |
| Introduction to Real Estate \& Urban Land Use (MIT 322) | 3 |
| Life \& Health Insurance (MIT 456) | 3 |
| Industrial Organization and Public Policy (Ec 460, 461) | - 6 |
| Public Utility Management (MIT 467) . |  |

Financial Management. The option in financial management prepares students for careers as financial analysts, administrators, and officers in business enterprises. The major requirements, in addition to the core program of the school, are listed below:

|  | Term Hour |
| :---: | :---: |
| Problems in Business Finance (FBE 459). | . 3 |
| Commercial Bank Management (FBE 460) | - 3 |
| Risk and Insurance (MIT 354) | 3 |
| Taxation \& Business Policy (Ac 311) | 3 |
| Minimum of 12 term hours selected from el | 12 |



International Business. The option in international business is designed to prepare students for careers in overseas and foreign divisions of domestic businesses. The major requirements, in addition to the core program of the school, are listed below :

|  | erm Hours |
| :---: | :---: |
| International Finance Management (FBE 474) | 3 |
| Foreign Trade Marketing (FBE 475) | 3 |
| Foreign Business Operations (FBE 476) | 3 |
| Foreign Commercial Law (FBE 407) | 3 |
| Ocean Transportation \& Distribution Management (MIT 351) | 3 |
| Money \& Banking (Ec 318) | 3 |
| Minimum of 12 term hours selected from electives listed below | - 6 |
|  | 30 |

## electives


Foreign language or courses in foreign cultur 3

Students are advised to enrich their training through a wide selection of courses in foreign languages, geography, history, and political science and additional courses in economics and business administration.

Business Economics. The option in business economics is designed to integrate economic theory with business practice; the courses provide a broad background in the principles of economics, with special attention to the relation of these principles to the management of industrial firms. The student should satisfy the science group requirement with a year sequence in mathematics. The major requirements, in addition to the core program of the school, are listed below:


Industrial Organization and Public Policy (Ec 461) ........................................................
Economic Theory (Ec 375, 376, 377)
Mgt. Information Systems (Ac 420,
Mgt. Information Systems (Ac ${ }^{\text {Marketing Research (MIT 415) }}$
Seminar: Operations Research (PIM 407)
Taxation \& Business Policy (Ac 311)
Taxation \& Business Policy (Ac 311) ................................
Minimum of 3 term hours selected from electives listed below
electives
Intro. to Statistical Theory (Mth 441, 442, 443)
National Income \& Business Cycles (Ec 484, 485)
Quantitative Economic Analysis (Ec 464, 465, 466)
Majors in business economics are required to take Business Fluctuations and Expansion (FBE 466) as one of their senior-year core courses.

## LOWER-DIVISION COURSE

## FBE 226. Business Law I. 3 hours.

Forms and functions of the law in society. Examination of the American legal environment: structure of the courts; trial and appellate procedure; origin of rules; methods of legal reasoning; roles of trial participants. Emphasis on the law of contracts. Robert, Ross, Skelton.

## UPPER-DIVISION COURSES

FBE 320. Financial Institutions. 3 hours
Study of the commercial banking system. Survey of monetary policy and its Study of the to individual banks and the banking system; analysis of the nature relationship to individual and credit and the interrelationship of money, credit, and functions of money and cred the sources and uses of funds by financial inand the price level; analysis of the se institutions. Anderson, Parks, Reed.
BE 322. Business Finance. 3 hours.
Policies and practices required to plan and control the sources and uses of a frm's funds. Emphasis on formulation, implementation, and modification of corporate financial policies; management of liquid assets; selection among alternative investment opportunities; funds acquisition; dividend policies; determination of the optimal debt-equity mix. Economic, accounting, and statistical tools and concepts studied and related to the process. Prerequisites: FBE 320,
FBE 326. Business Law II. 3 hours. The law of agency; the master-servant relationship, including elementary labor law; the law of businessings association; applications of the Uniform ships, and other forms of topics. Robert, Ross, Skelton.
FEE 340. Financial Problems Analysis. 3 hours.
Analysis of selected problems in financial management of the firm, including Analysis of selected prond fong-termancial requirements, trade credit analysis, special short- and loug-term fand budgeting, and profit analysis. Prerequisites: FBE 322. Anderson, Parks.

FBE 407. Seminar. Hours to be arranged.
FBE 434. Business Enterprise and Social Responsibility. 3 hours.
Analysis of specific management policies as they relate to social objectives; Analysis of specific management policies as itical activities of trade associapatterns of governmential regulations groups; relation of the growth of corporate tions and other specialinterest to the responsibilities of business management. Prerequisite : senior standing. Richins.

## FBE 440. Mortgage Lending. 3 hours.

The role of mortgage lending in our economy; organization and operation of public and private lending agencies in the residential and commercial real estate markets ; legal aspects of real estate lending.
FBE 450. Nonbank Financial Intermediaries. 3 hours.
Function, structure, portfolio composition, and investment and lending policies of financial intermediaries, such as savings and loan associations, sales finance of financial intermediaries, such as life insurance companies, leasing companies, companies, mutual savings banks, Ife insurance companions on the money and pension plans, ards. Prerequisite: FBE 320. Reed.
FBE 459. Problems in Business Finance. 3 hours Analysis of the financial aspects of business decisions; cases, problems, and diversified reading in the literature in the field. Prerequisite: FBE 322. Anderson.
FBE 463. Investments. 3 hours.
Determination of individual and institutional investment objectives and reuirements. id of
 iventribution of securities and other ind appraisal of general market
 201, 202, 203; Ac 313. Anderson, Clendenin, Parks.
FBE 466. Business Fluctuations and Expansion. 3 hours.
Designed to prepare the student to plan successfully in a dynamic business environment. Analysis of forces that cause pervasive fluctuations in aggregate
business activity ; the effects of these fluctuations on individual business firms and industries. The relationships among long-run trends and shorter cycles; forecasting techniques and policy measures. The growing impact of governmevels related to business acts of a particular business and on price and income levels related to business actions such as inventory and investment income which affect economic stability. Prerequisite: senior standing. Kagan, Lind-
holm. holm.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For 500 courses, open only to graduate students,
FRE 418. Advanced Business Law. (G) 3 hours.
Study of the several fields of law related to business: negotiable instruments sales of personal property; real property, including landlord and tenant and mechanic's liens; security devices for credit transactions; business torts government regulation of business ; labor law. Prerequisite: FBE 226, 326.
Robert. Robert.
FBE 420. Law of Administrative Agencies. (G) 3 hours
History and philosophy of administrative law; delegation of powers and scope of the administrative program as determined legislatively ; promulgations and the right to be heard; administrative agencies that affect business; licensing bodies-development, powers, and procedures; zoning, planning, and the BE 460. Commercial Bank the businessman as an interested party. Skelton.

## FBE 460. Commercial Bank Management. (g) 3 hours.

Practices, policies, and problems of commercial bank management and operaings, expense, and dividend policies ; the regulation and supervision; earnthe commercial banking system as the ceconomic and social importance of tem. Prerequisite: FBE 322 ; senior standing. Reed. American financial sys-
FBE 464. Investments. (G) 3 hours.
Problems of security selection; analysis of individual securities and other investment media; consequences of existing tax'treatment in security and media selection; portfolio changes related to general economic trends and FBE 465 . Inves. Prerequisite: FBE 463. Anderson, Clendenin, Parks.
465. Investment Banking and Capital Markets. (G) 3 hours.

Historical background of investment banking institutions; legal and reguissues; methods of the origination, syndication, and distribution of security including municipal and corporate bation of the principal types of securities, Clendenin.
FBE 474. International Finance Management. (G) 3 hours.
The role played by commercial and central banks in various nations of the world; special emphasis on the methods by which these banks finance the in ternational flow of goods, services, and investment. The instruments of foreign exchange, the setting of exchange rates, and the institutions, both national and international, which participate in the worldwide flow of funds and goods.
Kagan. Kagan.
FBE 475. Foreign-Trade Marketing. (G) 3 hours.
Commercial policies of nations and their effects on the decision of foreign and stability; government controls ; composition of trade between nations agreements ; global and regional and promotion; international commodity dustrialization of emerging nations. Kagan. BE 476. Foreign Business Operations. (G)
BE 476. Foreign Business Operations. (G) 3 hours.
Determinants of foreign business decision making in light of case studies ; operations versus licensing; control versus joint venture; problems of taxation, labor, and marketing; partners-in-progress approach; skill formation, managerial training, cooperation with national planning authorities; public
development banks and industrial development banks and industrial corporations; emphasis throughout upon
the individual business unit. Kagan.

## Marketing, Insurance, and Transportation

THE EDUCATIONAL OBJECTIVES of the Department of Marketing, Insurance, and Transportation are: (1) to provide the student with an understanding of the basic functions of management as they are applied in the areas of marketing, insurance, transportation, and real estate; (2) to give the student an opportunity to develop fruitful approaches to the solution of specialized management problems in these areas; and (3) to enable the student to develop his capacity for research and scientific analysis of basic problems in the areas of capacity for research and scientific analysis of basic
marketing, insurance, transportation, and real estate.

The department offers major options in marketing, insurance, transportation, real estate, and business and construction.

Markcting Advisory Council. The department is aided in its program by the continuous advice and assistance of a Marketing Advisory Council composed of prominent representatives from the business community. The members of the council are: Don Alvey, Tektronix, Inc. ; Donn D. Ankrom, Ankrom Drug, Inc.; John L. Aram, vice-president, Weyerhaeuser Company ; C. M. Bishop, Jr., manager of sales, Pendleton Woolen Mills; Lawrence Black, president, Black and Company, Investments ; F. W. Brunner, president, Chet's Famous Foods; Joe B. Callihan, general manager, Benson Hotel; Philip Corbit, division general manager, Page \& Page Company; R. V. Cummins, vice-president and sales director, Standard Insurance Company; Douglas David, president, North Pacific Lumber Company; Robert P. DeKoning, director of research, Jantzen, Incorporated; R. W. de Weese, vice-president, sales, Esco Corporation; Henry T. Eaton, president, Eaton Young; F. Nephi Grigg, president, Ore-Ida Foods, Inc.; Harold Hirsch, president, White Stag Manufacturing Company ; Charles R. Holloway, Jr., vice-president, Northwest Natural Gas Company; Donald E. Kennedy, director of sales, Sportswear and Skiwear Division, White Stag Manufacturing Company ; Roald G. L.und, president, R. G. Lund Company ; Arthur F. McGarr, president, Lomac Motors; Palmer C. Macdonald, general merchandising manager, Blake-Moffit \& Towne; Jon Miller, sales manager, Boise Cascade Corporation ; William Moore, vice-president, Portland Bottling Company; Richard Nelson, director, personnel and marketing research, warehouse division, Georgia-Pacific Corporation; Joseph Todd, vice-president, marketing, Omark Industries, Inc.; Jack J. Saltzman, president, Oregon-Pacific Forest Products Company ; Robert Saunders, manager, Eugene branch, McDonald Candy Company ; Robert E. Smith, president, Crow's Digest; Frank M. Warren, Jr., president, Portland General Electric Company; Tom Williams, president, Williams Bakery; Robert Wong, Kubla Khan Food Company.

Marketing. The option in marketing is designed to provide preparation for careers in the complex of functions in which the producer and the consumer are related. There are opportunities for student emphasis on sales and marketing management, marketing research, advertising, retailing, and foreign marketing. Special attention is given to the contributions of the behavioral sciences to the study of marketing. The program includes intensive study of the application of principles of management to marketing problems. The major requirements, in addition to the core program of the school, are listed below:

Psychology or General Sociology (Soc 204, 205)
Term Hours
Marketing Communications (MIT 442)
Marketing Research (MIT 415).
Marketing Analysis II (MIT 443)
Marketing Analysis II (MIT 444)
Analysis of Consumer Behavior (MIT 341)
Retail Administration (MIT 330) or
Industrial Marketing (MIT 336)
3

Social Psychology (Soc 334) or Social Institutions (Soc 460) or
Social Stratification (Soc 444) Social Stratification (Soc 444)...................3
6
electives


Risk and Insurance. The risk and insurance option is designed to provide specialized education for the student interested in a career in the insurance industry or as an insurance specialist in business or government. The major requirements, in addition to the core program of the school, are listed below:


Term Hours
Business Insurance \& Risk Management (MIT 455)
Lise \& Health Insurance (MIT 456)
Special Topics in Risk \& In
*Minimum of 9 term hours selected from electives listed bclow

## electives



Students who select the risk and insurance option, and who expect to enter actuarial and statistical work, should take mathematics to satisfy the science group requirement.

Students interested in qualifying for certification as a C.L.U. (chartered life underwriter) or a C.P.C.U. (chartered property casualty underwriter) should consult their adviser concerning courses outside the School of Business Administration which are of special value in meeting the requirements for these certificates.

Transportation, Traffic Management, and Utilities. This option is designed to prepare students for careers with transportation or utility companies, for traffic positions with industrial or commercial firms or trade associations, and for governmental positions with regulatory agencies or publicly owned utilities. American Governments (PS 201, 202, 203), and Introductory College Mathematics (Mth $104,105,106$ ) are recommended as lower-division electives. The major requirements, in addition to the core program of the school, are listed below :

[^44]
electives
Ocility Management (MIT 467) or
Ocean Transportation \& Distribution Management (M1T 351) ................. Special Problems in Transportation 4

- Air Transportation (MIT 448)

Principles of Cost Accounting (Ac 360)
Quantitative Analysis for Business Decisions (MIT 455)
Business Insurance \& Risk Management
Computing (Mth 444) ...................
Advanced Business Law (FBE
Economic Geography (Geog 434)
Real Estate. The option in real estate is designed to provide professional raining in the development, financing, marketing, and management of real estate. The major requirements, in addition to the core program of the school, are listed below:

Advanced Business Law (FBE 418)
Advanced Business Law (FBE 418) .................... ${ }^{\text {In }}$ )
Antranced Real Estate \& Urban Land Use (MIT 430)
Advanced Real Estate \& Urbal Location (MIT 418)
Taxation \& Business Policy (Ac 311)
Minimu 9 term hours selected from electives listed below
$-\frac{1}{27}$

## electives

Business Insurance \& Risk Management (MIT 45
Public Finance (Ec 319)...........................
Commercial Bank Mana
Analysis of Consumer Behavior (MIT 341)
Building Mat. \& Construction (AA 420)
Residential Property Development (MIT 431
Business and Construction. A five-year program of study for students who to enter the construction industry is offered under the joint supervision of the plan to enter the construction indion and the School of Architecture and Allied Sher bachelor's degree with a major in business Arts. Ihe program, which leads to phases of architecture.

The major requirements, in addition to the core program of the School of Business Administration, are listed below:

| Lower Division | Term Hours |
| :---: | :---: |
| Design Studio I (Arch 187) | 2 |
| Graphics (Arch 231) | 3 |
| Design Studio II (Arch 287) | 12 |
| Mathematics (Mth 104, 105, 106) | 9 |
| Essentials of Physics (Ph 101, 102, 103) |  |
| Upper Division |  |
| Commercial \& Industrial Site Location (MIT 418) | 3 3 |
| Advanced Business Law (FBE 418) |  |

[^45]

## LOWER-DIVISION COURSES

MIT 125, 126. Business Environment. 3 hours each term.
The role and responsibilities of business in society; influence of the historical social, political, and economic environments within which business operates adjustments to changes in these environments; interrelationships of major functional areas of business. Sampson, Tennant.

## UPPER-DIVISION COURSES

MIT 322. Introduction to Real Estate and Urban Land Use. 3 hours.
Real-estate principles and practices, with special emphasis on urban land-use analysis; nature of real property and property rights; organization of the real-estate industry and real-estate markets; the urban spatial structure and division and land development; real-estate financing ; the impact of geverndivision and land development ; real-estate financing; the impact of govern-
MIT 323. Elements of Marketing I. 3 hours.
The American marketing system in historical perspective; structure of marketing institutions; introduction to analysis of consumer behavior.
MIT 324. Elements of Marketing II. 3 hours.
Marketing problems of the individual firm; determination of marketing objectives and programs; analysis of the management functions of marketing; product policy, selection of distribution channels, promotion, and pricing strategy; introduction to the use of marketing research.

## MIT 330. Retail Administration. 3 hours.

Composition of the retailing structure; institutional types currently operating in industrial societies; economic, social, and commercial role of retailing and its effectiveness in meeting society's changing needs. Thompson.

## MIT 336. Industrial Marketing. 3 hours.

The marketing problems of manufacturers of industrial goods, such as machinery and equipment, raw and semifabricated materials, industrial supplies, and component parts; special marketing problems of companies in the defense industry. Rich.
MIT 341. Analysis of Consumer Behavior. 3 hours
The consumer-firm relationship analyzed through the application of concepts
drawn from contemporary behavioral science to concrete business cases and practices; role theory, theories of attitude, change, and principles of perception given primary emphasis; analysis directed to advertising, display, layout, packaging, design of retail establishments, interpersonal relations of consumer and seller, and business 'image." Prerequisite: Psy 201, 202 or Soc 204, 205; Psy or Soc 334. Smith.
MIT 349, 350. Domestic Transportation and Distribution Management. 3 hours each term.
Designed to acquaint the student with principles and practices of transportation which should be known to every businessmen engaged in production or distribution. The physical transportation plant of the United States and its performance; carrier responsibilities, services, and cooperation; economic and legal bases of rates, freight classification and tariff preparation and interpretation, rate structures, and relationships between transportation and the location of economic activity. Organization, management, and services of indistribution. Prerequisite: Ec 201, 202, 203 or consent of instructor. Sampson, Strom, Ziebarth.
MIT 351. Ocean Transportation and Distribution Management. 3 hours.
The role of United States and world ocean shipping in international trade and development; basic international and United States maritime laws, policies, and regulations; principal world and United States trade routes; construction and operating subsidies; terminal activities, documentation, conferences, rates, and charters; ocean carrier operations and supporting land-based organizations ; principles of marine insurance. Emphasis on the use of ocean transport in exporting and importing. Prerequisite: Ec 201, 202, 203 or consent of instructor. Sampson, Strom, Ziebarth.

## MIT 354. Risk and Insurance. 3 hours.

Introduction to the basic principles of insurance from the viewpoint of the consumer ; risk and risk bearing; ways of handling risk; insurance as a device to handle risk; principles of insurance buying, including carrier and agency selection; major types of private insurance-life, property, and liability-with emphasis on the underlying economic problems each type is designed to meet; the insurance contract and its legal basis, with emphasis on the elements common to all insurance contracts ; economic and historical significance of insurance ; insurance regulation. Greene, Swadener.

## MIT 407. Seminar. Hours to be arranged.

MIT 415. Marketing Research. 3 hours.
Influence of marketing research on the decision-making process; effect on the executive who must use it; uses and misuses. Problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and reporting. Cases analyzed by sturequisites : BS 232, BS 333, MIT 323, MIT 324, or consent of instructor. Remington.
MIT 436. Retailing Institutions in the Marketing System. 3 hours.
Internal adjustments of the retail institution to its dynamic external socioeconomic environment ; focus on adjustments the retailer must make in his internal organization and mode of operation for effective adaptation to his external environment. Thompson.
MIT 442. Marketing Communications. 3 hours.
Problems of marketing to consumers considered as problems in communiction; advertising and sales promotion as formal channels of communication; economics of advertising and sales promotion; marketing communications as they relate to the public and to public policy. Prerequisite: MIT 341. Smith.
MIT 443. Marketing Analysis I. 3 hours.
The techniques, problems, tools, and broad policies of marketing management. Basic marketing forces; standards for judging marketing perform-
ance; merchandising tactics; methods of developing coordinated strategies; practice in research, decision making, and oral and written communication. Prerequisite: MIT 324, senior standing. Greene, Thompson.

## MIT 444. Marketing Analysis II. 3 hours.

Problem areas and problem-solving techniques in marketing. Analysis of marketing cases in product planning, pricing, distribution channels, consumer attitudes, advertising, and personal selling. Simple marketing models; application of analytical tools developed in economics, mathematics, psychology, sociology, and other disciplines. Emphasis on the management decisionmaking process in marketing. Prerequisite: MIT 443. Greene, Thompson, Remington.
MIT 470. Cases in Forest Industries Management. 3 hours.
General management problems in the forest products industries-lumber, plywood, pulp and paper, construction, and housing; marketing, production, finance, control, human relations; major emphasis on marketing problems.
Cases, supplemented by field trips. Rich Cases, supplemented by field trips. Rich.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

$$
\text { (For } 500 \text { courses, open only to graduate students, sec pages } 295-296 \text { ) }
$$

MIT 418. Commercial and Industrial Site Location. (G) 3 hours.
Major principles and practices in the site-selection decision-making process, considered in the light of general location theory, the overall pattern of urban land use, specific types of business, consumer shopping behavior, real-estate considerations, and government policy ; emphasis on problems of intraregional rather than interregional site selection and on urban developments.

## MIT 430. Advanced Real Estate and Urban Land Use. (G) 3 hours.

Principles and practices of real-property valuation; factors affecting realproperty values and incomes; relationship between land use and land values; the appraisal process; policies and problems of real-estate taxation; trends in real-property values and appraisal procedures. Prerequisite: FBE 330 or consent of instructor.
MIT 431. Residential Property Development. (G) 3 hours.
The process of residential property development; management aspects of the home building industry; property development considered in terms of market analysis, site selection, land planning, financing, and legal controls; construction management considered in the light of characteristics of the home building industry; organization for production, construction methods, trends in the industry and in merchandising; governmental influence in property development and construction. Extensive use of cases and readings.
MIT 451. Transportation Regulatory Laws and Procedures. (G) 3 hours.
The historical background and present status of state and Federal transport regulation, with particular attention to the Interstate Commerce Act and other pertinent Federal and state statutes. The organization and procedure of Prerequisite: MIT 350, Ec 463, or consent of instructor. Sampson, Ziebarth
MIT 452. Special Problems in Transportation and Traffic Management. (G) 3 hours.
Major national and regional transportation problems. In addition to classroom work, each student makes an intensive exploration of a particular problem or phase of transport or traffic management of regional or national economic significance, or a detailed study of a type of carrier related to his specific career interest. Prerequisite: MIT 350 ; MIT 351 or MIT 467; or consent of instructor. Sampson, Strom.
MIT 455. Business Insurance and Risk Management. (G) 3 hours.
The more important methods of reducing business and personal risks from physical and moral hazards; major contracts of insurance to indemnify for liability, dishonesty, and insolvency of others; loss adjustment practices,
underwriting problems, reinsurance, rate making, consequential losses. Prerequisite : MIT 354 or consent of instructor. Greene, Swadener.
MIT 456. Life and Health Insurance. (G) 3 hours.
The chief methods of handling personal risks, in business as well as individual application. Analysis of life insurance, annuity, and health insurance contracts from the viewpoint of the insurance consumer; legal and economic importance of rate making and reserve practices to the policy holder. integration of private policies with social-insurance coverages; estate planning and the role of income and estate taxation. business and personal uses of wills and trusts; settlement options. pension planning Prerequisite: MIT 354 or and trest instructor Greene Swadener consent of instructor. Greene, Swadener.
MIT 457. Special Topics in Risk and Insurance. (G) 3 hours.
Analysis of underwriting capaçity, writing powers of insurers, insurance of hold-harmless agreements, causes of insurer failure, insuring of special risks, selection of flexible forms of coverage, international insurance coverage, theory of regulation, tax problems in insurance. Greene, Swadener.
MIT 458. Social Insurance. (G) 3 hours.
Analysis of the major kinds of compulsory insurance and their interrelations : old-age and survivors' insurance, unemployment insurance, workmen's compensation, nonoccupational disability insurance, and compulsory automobile insurance; comparison of social and private insurance. Prerequisite: MIT 354 or consent of instructor. Greene, Swadener.
MIT 467. Public Utility Management. (G) 3 hours
Review of historical and present regulatory laws, agencies, and procedures; problems and policies of municipal, state, and Federal ownership; management of various kinds of privately owned utility firms (electric, gas, communications, etc.). Organizational structures, price policies, marketing of services, short- and long-range planning, public relations. Particular emphasis on problems affecting the Pacific Northwest. Prerequisite: Ec 201, 202, 203 or consent of instructor. Sampson, Strom.

## COURSES OFFERED ONLY IN EXTENSION

MIT 425. Real-Estate Fundamentals. 3 hours (extension).
MIT 426. Real-Estate Practice. 3 hours (extension).
MIT 427. Real-Estate Appraising. 3 hours (extension).
MIT 447. Highway Transportation. (G) 3 hours (extension).
MIT 448. Air Transportation. (G) 3 hours (extension).

## Personnel and Industrial Management

THE EDUCATIONAL OBJECTIVE of the Department of Personnel and Industrial Management is to provide an understanding of basic management functions and techniques in the use of people, materials, and equipment in the operation of a business enterprise.

The department offers major options in production, personnel, management, and office administration.

Management Development Committee. The School of Business Administration participates actively in development programs for industrial executives through seminars and conferences on the campus. In these programs and in the planning of the regular instructional program in management, the school is assisted by a Management Development Committee, a group of Pacific Northwest busi-
nessmen. The members of the committee are: F. O. Boylon, vice-president, manufacturing, Crown-Zellerbach Corporation; J. O. Julson, branch manager, Pulp Division, Weyerhaeuser Company ; E. E. Coleman, general manager for Oregon, Hanna Mining Company; Marshall Leeper, vice-president, United States Plywood Corporation; C. E. Sheldon, assistant manufacturing manager, Aero-Space Division, Boeing Company; W. J. William, vice-president. Harry and David at Bear Creek Orchards; Warne Nunn, executive assistant to the Governor, state of Oregon ; Dwight E. Haugen, president, Wedgwood Homes.

Production. The production option provides specialized knowledge in preparation for careers in production management in manufacturing, with emphasis on such areas as methods-time analysis, production control, and quality control.

The major requirements for the production option, in addition to the core pro-
m of the school, are listed below gram of the school, are listed below :

| Principles of Cost Accounting (Ac 360). <br> The following seminars: Computer in Business, Methods-Time Analysis, <br> Operations Research, Production Control, Quality Control (PIM 407) <br> Introduction to Numerical Control (Mth 233) |  |
| :---: | :---: |
|  |  |
|  |  |
| electives |  |
| Wage \& Salary Administration (PIM 413).................................................. |  |
|  |  |
|  |  |
| Risk \& Insurance (MIT 354) .......................................................................... |  |
|  |  |
|  |  |
|  |  |

Term Hours
Principles of Cost Accounting (Ac 360)
3 15 15
3
6 $\begin{array}{r}3 \\ 6 \\ \hline\end{array}$ $\overline{27}$

$$
27
$$

Wage \& Salary Administration (PIM 413)....
Quantitative Analysis for Business Decisions (BS 432)
Problems in Personnel Management (PIM 414)
Problems in Personnel Manage
Risk \& Insurance (MIT 354)
Domestic Transportation \& Distribution Mgt. (MIT 349, 350)
Computing (Mth 444)

Personnel. The personnel option is designed to prepare students for careers in personnel management and labor relations in business, government, and labor organizations. The major requirements, in addition to the core program of the school, are listed below :

|  | Term Hours |
| :---: | :---: |
| Introduction to Numerical Computation (Mth 233) | .. 3 |
| Personnel Management (PIM 412)...................... | .. 3 |
| Wage \& Salary Administration (PIM 413) | - 3 |
| Problems in Personnel Management (PIM 414) | - 3 |
| Seminar: Personnel Psychology (PIM 407). | - 3 |
| Organized Labor (Ec 445) or Labor Legislation (Ec 446). | 3 |
| Minimum of 9 term hours selected from electives listed belo | - 9 |
|  | 27 |

electives

| sy 448 |  |
| :---: | :---: |
| Social Psychology (Soc 334, 335) |  |
| Social Insurance (MIT 458). |  |
| Industrial Sociology (Soc 456). |  |
| Organized Labor (Ec 445). | - |
| Labor Legislation (Ec 446). |  |
| Seminar: Problems in Interpers |  |

Management. The objective of the management option is to provide education in business administration with emphasis on management techniques in major areas, on the application of quantitative methods to managerial problems, and on an integrated view of business problems confronting top management and the ways in which they are solved. The major requirements, in addition to the core program of the school, are listed below :

Introduction to Numerical Computation (Mth 233)
Office Organization and Management (PIM 333)
 Personnel Management (PIM 412)
Two of the following Seminars: Organization Psychology (PIM 407) MethodsTime Analysis (PIM 407), Production Control (PIM 407), Quality
Control (PIM 407), Personel Psychology (PIM 407). Control (PIM 407), Personnel Psychology (PIM 407).
Minimum of 6 term hours from electives listed below..
electives
Economic Theory (Ec 375)....................................
Problems in Personnel Management (PIM 414)
Problems in Personnel Management (PIM 414) ...
Management Information Systems (Ac 420, 421)
Wage \& Salary Administration (PIM 413).
Organized Labor (Ec 445)....
Labor Legislation (Ec 446)
Students who select the management option are required to take Business Policies (PIM 453) as a part of their senior core program.

## UPPER-DIVISION COURSES

PIM 321. Organization and Interpersonal Relations 3 hours.
Principles of management applied to commercial and industrial concerns; business planning, policy formulation, establishment of procedures, operaplans, leadership patterns, and control systems upon human behavior. Seubert, plans, lear
PIM 323. Business Machines. 2 hour:
Study of ten-key and full-key adding machines and the rotary calculator; development of operating skills; practical applications to business procedures.
PIM 324, 325. Office Practice. 2 hours each term.
Advanced secretarial instruction; general secretarial duties, responsibilities, Advanced secretarial instruction; general secretarial duties, responsibilities,
and procedures; different methods of duplicating; filing systems and their and procedures; different methods of duplicating; filing systems and their practical ap
PIM 329. Production Management. 3 hours.
Survey of planning, operations, and control of mass-production manufacturing; procurement, handling, and control of materials and control of quantity and quality. Ways of setting standards and improving methods; use of motion and time study ; automation and automatic processing equipment. Supervision of operating employees and personnel relations as they affect production work. Emphasis on principles and relationships rather than specific techniques. Laboratory sessions (including field trips) illustrate selected methods, techniques. and management tools. Vance, Shaffer, Ramsing.
PIM 333. Office Organization and Management. 2 hours.
Management and organization of the office, with special attention to the scientific approach to analysis and control; functional office layout and equipment; selection, training, and supervision of office personnel ; place of automation in the office; planning, organizing, and controlling office services, junior standing. Jones. junior standing. Jones.
PIM 407. Seminar. Hours to be arranged. Operations Research. Vance, Ramsing.
Methods-Time Analysis. Shaffer.
Production Control. Ramsing.
Quality Control. Ramsing.
Organizational Psychology. Miner
Personnel Psychology.

PIM 430. Problems in Production Management. 3 hours
A "model enterprise" built, and its production management problems analyzed, with the use of methods of operations research, statistics, and economics. Planned to acquaint the students with tools of scientific analysis and techniques of management which are applicable to problems in production management.
PIM 453. Business Policies. 3 hours.
The interdependence of the different departments of a business concern. Designed to provide an integrated view of business operations, and to coordinate the more specialized instruction of the school. Prerequisite: senior standing Vance.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For 500 courses, open ontly to graduate students, see pages 296-297)
PIM 412. Personnel Management. (g) 3 hours.
Personnel management in the modern business organization; personnel policies and practices conducive to good relations with employees; personne problems of small organizations. Shaffer.
PIM 413. Wage and Salary Administration. (G) 3 hours.
Systematic administration of wages and salaries as a means of motivation and control in the business enterprise. Job analysis, description, and specifications; job evaluation methods; community wage and salary surveys; establishing wage structures by job evaluation and wage levels by collective bargaining and other methods; principles and administration of wage incentive plans; evaluating the results of wage incentives; compensating clerical upervisory, and management personnel. Prerequisite: PIM 412 or consen of the instructor. Shaffer.
PIM 414. Problems in Personnel Management. (g) 3 hours.
Major areas of personnel policy determination, with special emphasis on relations with organized employees at the enterprise level and within the en terprise. The impact of union practices on personnel policy and procedures in both unionized and nonunion enterprises. Prerequisite: PIM 412 or consent of the instructor. Seubert.
PIM 480. Business History. (G) 3 hours.
Evolving business systems in the changing American business environment since the colonial period; study of individual business firms and businessmen that inustrate these systems at critical times in their development, the result of decisions made at such

## Business Education and Secretarial Science

THE SCHOOL OF BUSINESS ADMINISTRATION offers major options in business teacher education and in office administration and service courses in secretarial science.

Business Teacher Education. The option in business teacher education provides a thorough background in business administration and professional courses in education to prepare students for the teaching of business and economic subjects in the secondary schools. Two programs have been arranged, one emphasizing the teaching of secretarial subjects, the other emphasizing the teaching of bookkeeping and basic business; both programs offer preparation for the teaching of typing.

Secretarial. The requirements are as follows: (1) completion of the core program of the School of Business Administration (except Production Manage-
ment), (2) the specialized courses listed below, (3) competence in the skill subjects prerequisite to Applied Stenography (SS 223), demonstrated by examination or by college-level courses, and (4) completion of the general requirements for secondary teacher certification.


Bookkeeping and Basic Business. The requirements are as follows: (1) completion of the core program of the School of Business Administration (except Production Management), (2) the specialized courses listed below, (3) completion of the general requirements for secondary teacher certification.


For certification as a teacher of business education in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation. The programs outlined above satisfy the state standards and the requirements for recommendation by the University of Oregon. For further information, the student should consult a member of the business education faculty who serves as adviser to prospective teachers.

Office Administration. The option in office administration is intended to develop in the student an understanding of scientific management systems as they apply to business problems, with particular emphasis on office systems and on the role of automatic data processing. The major requirements, in addition to the core program of the School of Business Administration, are as follows :


| electives | Term Hours |
| :---: | :---: |
| Wage \& Salary Administration (PIM 413) | .. 3 |
| Problems in Personnel Management (PIM 414) | 3 |
| Management Information Systems (Ac 420, 421) | . 6 |
| Risk \& Insurance (MIT 354) | 3 |

## Business Education <br> UPPER-DIVISION COURSES

BEd 371. Typewriting for Business Teachers. 3 hours. Principles underlying development of typing skill; standards of achievement; methods and materials of instruction; selection of equipment; analysis of research studies in the field; individual technique improvement; labora tory. Prerequisite : consent of instructor. Jones.

## BEd 372. Bookkeeping for Business Teachers. 3 hours.

Methods and materials of instruction; handling student differences; trend affecting teaching of bookkeeping. Prerequisite : consent of instructor. Jones
BEd 373. Shorthand for Business Teachers. 3 hours.
Problems in the development of occupational proficiency in shorthand; standards of achievement; transcription problems; integration of shorthand, typing, and English; comparison and evaluation of methods; instructional maJones. individual technique improvement. Prerequisite. consent of instructor. Jones.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

BEd 407. Seminar. (g) Hours to be arranged.
BEd 421. Foundations of Business Education. (g) 3 hours.
Objectives of business education; history, trends, issues; professional organizations; contribution of business education to general education; curriculum construction at the junior and senior high-school and junior-college levels; measurement in business education; administrative problems of supervision; significant related research. Prerequisite: senior standing, consent of instructor. Jones.
BEd 422. Business Education and the Community. (g) 3 hours.
Types of institutions offering business education; current educational attitudes of business and labor; community surveys and analysis of local needs; guidance programs; placement and followup; school and business standards;
work experience programs; distributive-education programs on local, state, and national levels; effects of automation on business education. Prerequisites: senior standing, consent of instructor. Jones.
COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION
BEd 508. Workshop. Hours to be arranged.

## Secretarial Science <br> LOWER-DIVISION COURSES

SS 10. Beginning Typing. No credit.
Principles of touch typing; emphasis on development of speed and accuracy. 5 hours laboratory.
SS 122, 123. Advanced Typing. 2 hours each term.
Typing of business letters, manuscripts, and various kinds of business forms; development of speed and accuracy in production. 5 hours laboratory.
SS 126, 127, 128. Stenography. 3 hours each term.
Gregg shorthand. SS 126, 127 devoted to the study of basic shorthand theory ; SS 128 devoted to the development of speed in business letter dictation and
transcription. Students must also take SS 122, 123, unless they have had equivalent training. Students who have had one year of high-school shorthand may not take SS 126 for credit. Section of SS 126 also offered in Briefhand, a system of abbreviating longhand, using only alphabetical characters. 4 recitations.
SS 221, 222, 223. Applied Stenography. 3 hours each term.
Combination of shorthand, typewriting, and English into an employable skill; emphasis on speed development in dictation and transcription; phrasing tech-
niques, vocabulary development; efficient and correct procedures for the preparation of business letters, forms, manuscripts, and reports. Prerequisite: SS 128, SS 122, or equivalent. 4 hours recitation.

## Division of Graduate Studies

THE DIVISION OF GRADUATE STUDIES provides: (1) basic professional business education for entering graduate students who have had little or no undergraduate work in business administration; (2) advanced work in general management and in business specialties for students who have completed an undergraduate major in business administration; (3) studies planned to invigorate and modernize the business skills of experienced business managers; and (4) preparation for careers in college teaching and research.

Instruction is offered through the Division of Graduate Studies in the fields listed below. In all fields, instruction in the School of Business Administration is supported by courses in cognate fields offered by other divisions of the University.

Accounting-public, industrial and governmental accounting, control theory.
Business Statistics-quantitative analysis for business decisions.
Finance-banking, investments, real estate, finance management.
Forest Industries Management-management of forest products industries (lumber, plywood, pulp and paper, construction and housing).
Managerial Economics-economic principles of business management, business planning, forecasting, business fluctuations.
International Business-finance, trade, management, foreign commercial law.
Risk and Insurance-risk management, personal and property insurance, pensions and group insurance, social insurance.
Marketing-marketing theory, marketing research, market communications, price and product policy, consumer behavior.
Business Organization Theory-management functions, organizational conflict and change, leadership, group behavior.
Transportation-industrial traffic management, highway, rail, air, and ocean transportation, public utilities.
Production-operations research, production programming, industrial management, industrial structure and policy.
Personnel-selection, training, wage and salary administration, labor relations.

Information concerning financial aid available to graduate students is available on request at the School of Business Administration.

Research and Consultation. Faculty research interests include: impact of of computerization, marketing forest products, labor benefit programs, international taxation, the commercial code, bank reserves, accounting theory, forecasting techniques, role of the board of directors, consumer behavior, inefficient per-
formance, regional growth patterns, cybernetics, investment patterns, commodity flow trends, transportation pricing. Faculty members are consultants for commercial banks, the insurance industry, company training groups, the central banking system, the lumber industry, retail stores, tax departreats, the Federal employment service, trade organizations, manufacturing firms, and community planning groups.

## Master's Program

THE DIVISION OF GRADUATE STUDIES offers a two-year prograin leading to the Master of Business Administration, Master of Science, or Master of Arts degree. For students entering with little or no undergraduate work in business, a total of 75 term hours of work is required, including a 30 -hour firstyear core program, all or part of which may be waived for students who have had equivalent work as undergraduates.

Admission. For admission to the master's program, the student must satisfy the general requirements for admission to the Graduate School (see pages 113-114), and must submit an acceptable score on the Admission Test for Graduate Study in Business, a letter of purpose, and three letters of recommendation.

Graduate work taken in summer sessions before a student is admitted formally to a graduate program in business must have prior approval of the dean in order to be counted as credit toward an advanced degree.

Core Programs. The first year of the master's program includes a series of core courses and two terms of work in Principles of Economics, planned especially for students whose undergraduate studies have been in fields other than business administration. For these students, the first-year core program is required; all or part of the requirement may be waived for students who have had equivalent instruction as undergraduates at the University of Oregon or another institution. The first-year core requirement is as follows:

| Accounting in Administration (Ac 511, 512) Statistics for Business Decisions (BS 511). |  |
| :---: | :---: |
|  |  |
| Financial Environment (FBE 514) |  |
| Financial Management ( FBE 516 ) |  |
|  |  |
|  |  |
| Administration of Marketing Function (MIT 511).............................................. |  |
|  |  |

Master of Business Administration. The program leading to the M.B.A. degree emphasizes the development of breadth of understanding of business problems and of general management skills; the program is well adapted to the needs of students who have earned their bachelor's degree in the social sciences, humanities, sciences, or engineering.

The requirements are: (1) completion of the first-year core program or equivalent; (2) a minimum of 45 term hours, including completion of a major in a specialized area of business of not more than 18 hours. A thesis is not required; if the student elects to submit a thesis, thesis credit ( 9 term hours) is counted as part of the 18 -hour maximum in his field of specialization.

All candidates for the M.B.A. degree are required to take a final written comprehensive examination, covering the field of specialization and a final oral examination.

Master of Science or Master of Arts. The program leading to the M.S. or M.A. degree allows more specialization than the M.B.A. program, and is especially adapted to the needs of students interested in careers in accounting, business statistics and research, and industrial management.

The requirements are: (1) completion of the first-year core program or equivalent ; (2) a minimum of 45 term hours, including completion of a major in a specialized area of business, normally 15 hours; (3) a thesis, 9 term hours, in the area of specialization; (4) completion of a minor in the school or in a cognate field (minimum, 12 term hours) ; (5) for the M.A. degree, competence in a foreign language.

Candidates for the M.S. or M.A. degree are required to take a final written comprehensive examination covering the major field of specialization and an oral examination on the thesis.

Minor in Business Administration. A master's candidate with a major in another field may elect a minor in business administration. The minor may consist of 15 term hours in one general field of specialization. The adequacy of the candidate's preparation is reviewed by the school before admission to work for a minor.

Foreign Students. The work of foreign graduate students (other than Canadians) during their first year of residence is considered probational. A foreign student will be admitted to candidacy for a master's degree only after the faculty has had an opportunity to judge the adequacy of his background in business education, his facility in the English language, and his ability to adjust to an unfamiliar educational environment. In the program of the Division of Graduate Studies, considerable attention is given to individual student problems, and especially to the problems of foreign students.

## Doctoral Program

THE DIVISION OF GRADUATE STUDIES offers a program of advanced graduate study and research leading to the degree of Doctor of Business Administration, to careers in college teaching and administration, and to responsible research positions in business and government.

Admission. For admission to the doctoral program, the student must (1) satisfy the admission requirements of the Graduate School, and (2) have the background of graduate work required for a master's degree in business administration.

Degree Requirements. Course requirements for the D.B.A. degree are not rigidly specified. The student's program of studies is developed under the guidance of an advisory committee. It is, however, generally recommended that the student complete studies in each of the following five areas: business organization theory and policy; a major functional area of business (e.g., accounting, finance, or marketing) ; statistics and quantitative control ; advanced economic theory; a field of study other than business.*

Candidates must also: (1) submit a thesis presenting an original contribution to the understanding of the thesis subject, for a minimum of 18 term hours of credit (the student must enroll for 3 term hours in Thesis in each term the thesis is uncompleted after he has passed his comprehensive examinations, up to a maxi-
*Facility in the reading of business and economic studies in a foreign language and a general knowledge of the culture of the region
for work in a field of study other than business.
mum of 36 term hours) ; (2) pass the following examinations: (a) a qualifying examination, normally taken during the student's second term of doctoral studies (b) written comprehensive examinations, not less than one academic year before the student expects to complete work for the degree, covering the five areas of study-see above; (c) a final oral examination on the thesis.

Reading knowledge of foreign languages is not required.
Research. Doctoral candidates are expected to become actively engaged in the research program of the school. Opportunities for research experience are provided in connection with projects of individual faculty members and in the comprehensive program of the Bureau of Business Research.

## Graduate Courses

## Accounting and Business Statistics

*Ac 501. Research. Hours to be arranged.
*Ac 503. Thesis. Hours to be arranged.
Ac 507. Seminar. Hours to be arranged.
Development of Accounting Thought. Caplan.
Managerial Cost and Budget Analysis. Thomas, Caplan, Soha.
BS 507. Seminar. Hours to be arranged.
Industrial Dynamics. Mace.
Quantitative Analysis for Business Decisions. Baerncopf
Ac 511, 512. Accounting in Administration. (p) 3 hours each term. Accelerated introduction to principles and procedures of accounting and the use of accounting data as a basis for business decisions; intensive survey of measurement cost analysis and control and budgeting Open only to, raduate students who have not completed a college-level course in accounting.
BS 511. Statistics for Business Decisions. (p) 3 hours.
Accelerated study of business statistics; decision theory applications in business; probability, estimation, hypothesis testing, uses of subjective probability, introduction to regression analysis. Open only to graduate students who have not completed BS 232, BS 333 or equivalent. Prerequisite: one year of college mathematics.
Ac 540. Administrative Control. 3 hours.
Descriptive cybernetics and the concept of control as a property of all organized behavior; control attitudes and practices in human organizations; tra ditional and emerging view's of the role of control in administration; problems of performance measurement ; military command and control systems; rudi ments of information and communication theory; computer abuses; role o man in a controlled system; student papers usually theoretical and related to
major fields. Harwood.
Ac 542. Accounting Verification. 3 hours.
Analysis of the problems encountered in examining and reporting on the financial statements of a business enterprise, verification standards, theory and application of sampling techniques, problems posed by data-processing machine systems, innovations in auditing concepts; selection, scope, and application of auditing procedures in the continued examination approach Prerequisite: Ac 440, 441. Soha.
Ac 552. Accounting Theory. 3 hours.
Examination of some of the elements of the conceptual framework underlying financial accounting reports, viewed in part as a postulate structure, in part

[^46]as a series of decisions as to how and when changes in assets and liabilities shall be recognized. Readings in accounting literature, study of some current controversial areas in financial accounting theory. Course content varies somewhat from year to year with changing interests of participants. Prerequisite : Ac 450. Thomas.
Ac 562. Cost Analysis and Interpretation. 3 hours.
Theory of cost analysis and the problem of determining cost for various de-cision-making purposes; the function of the comptroller in management planning and control, marginal and differential costs, the joint-cost problem, direct costing, budgeting, intrafirm pricing and pricing policy. Readigs in cost ac-

## COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Ac 508. Workshop. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For descriptions, see pages 271-272)
Ac 411, 412, 413. Income-Tax Procedures. (G) 2 hours each term.
Ac 420, 421. Management Information Systems. (G) 3 hours each term.
Ac 430. Fund Accounting. (G) 3 hours.
BS 432. Quantitative Analysis for Business Decisions. (G) 3 hours.
BS 433. Special Topics in Business Statistics. (G) 3 hours.
Ac 440, 441. Accounting Verification. (G) 3 hours each term.
Ac 450, 451. Special Topics in Accounting. (G) 3 hours each term.
Ac 480, 481. Advanced Accounting Problems. (G) Hours to be arranged.

## Finance and Business Environment

*FBE 501. Research. Hours to be arranged
*FBE 503. Thesis. Hours to be arranged.
FBE 507. Seminar. Hours to be arranged.
Legal and Social Philosophy of Business. Richins.
Foreign Exchange and International Finance Management. Kagan.
International Trade Marketing. Kagan.
International Business Operations. Kagan.
FBE 514. Financial Environment. (p) 3 hours.
The financial system as an external environment affecting business and financial decisions. Characteristics of the overall financial system of an enterprise economy; nature and functions of money and credit, and their influence on product demand and the supply of finance from the standpoint of the individual business; roles of monetary and fiscal policy, debt management, and the money and capital markets. Reed.
FBE 516. Financial Management. (p) 3 hours.
Objectives, tools, methods, and problems of financial management from the viewpoint of the firm; special problems, including funds acquisition, dividend policy, capital acquisitions, taxes, mergers, forecasting, and investment banking. Anderson, Parks.
FBE 517. Legal Environment of Business. (p) 3 hours.
Designed to provide a basic legal background for the study of business administration; contracts, agency, business organization, and fields within the framework of the Uniform Commercial Code; international aspects of law and business. Robert.

[^47]FBE 520. Methods in Business Research. 3 hours
Research techniques in business; project design, analysis of data, presenta tion of research findings. Ballaine.

## FBE 525. Managerial Economics. 3 hours.

The varied forms in which economic concepts appear in the operation of individual business units; emphasis on the approach to problems of management decision making and forward planning through formulation of problems in a conceptually quantitative manner capable of numerical solution. Integration of economic principles with various areas of business administration; the role of uncertainty given particular attention. Ballaine, Richins.
FBE 530. Problems in Business Planning and Forecasting. 3 hours.
Establishment of business plans for expansion and development on the basis of economic and market data; planning fundamentals, forecasting procedures interrelations of marketing, financial and personnel planning, organization of the planning and forecasting process: theories of business cycles and economic growth. Lindholm.

## FBE 540. Theory of Financial Management. 3 hours.

Finance function and its relationship to the firm's objectives; asset valuation; profit analysis; choice of capital acquisitions under uncertainty; the influence of the capital structure, dividend policy, and growth on the cost of capital ; maximization of stock value; cash flow models of the firm; decision rules for controlling investment in receivables and inventories. Anderson.
FBE 545. Problerns in Business Finance. 3 hours.
Application of financial principles to business problems such as : evaluation of financial objectives; dividend policies; analysis of capital acquisitions; specialized financing media; problems of valuation, merger, and reorganization; role and behavior of capital markets; analysis of cases. Anderson.
FBE 550. Foreign Cornmercial Law. 3 hours.
Basic legal concepts applicable to commercial transactions in foreign trade; comparison of commercial law and legal institutions of foreign countries and the United States; major legal systems, including civil law, Islamic law, and common law; legal documents involved in foreign-trade transactions; anti-
FBE 560. Taxation and Business Management. 3 hours.
Obligations of the business manager to his government and firm in connection with tax legislation and administration; role of the business institution in the tax collection process; impact of personal and business taxes on business organization, capital sources, profit distribution, labor contracts, management compensation, inventory valuation, capital goods purchases, product developcase decisions. Prerequisite: Ec 429 or equivalent. Lindholm, Reed.
FBE 565. Security Analysis. 3 hours.
Comprehensive analysis of specific industries; critical evaluation of firms within these industries; comparative analysis of these firms' securities and their potential contribution to stipulated investment objectives. Anderson, Parks, Clendenin.
FBE 566. Investment Policy. 3 hours.
Development of sound principles of investment management: relation of investment policy to money and capital markets and business fluctuations; selection of securities for investment portfolios in the light of long- and short-range objectives of the investor. Anderson, Parks, Clendenin.

## FBE 570. Commercial Banking. 3 hours

The role of commercial banks in the economy as suppliers of credit to consumers, business firms, and governments; emphasis on factors involved in managing the sources and use of funds, bank liquidity, and efficacy of the
banking structure; analysis of loan and investment policies, capital structure and adequacy, supervision and regulation, and profitability. Reed.

FBE 575. The Money Market. 3 hours.
Money-market instruments and institutions, and the part they play in the money market of the nation; analysis of the factors that influence the cost and availability of credit and money, including the influence of the Federal Reserve System and the Treasury. The aim is to develop an ability to analyze and appraise money-market trends and developments. Reed, Lindholm.
FBE 580. Government and Private Financial Institutions. 3 hours.
The place and functions of government and private financial institutions in a business economy; emphasis on their influence in the saving-investment
process and on the implications of their lending and investing policies on the process and on the implications of their lending and investing policies on the
level of employment and allocation of resources; current problems and proslevel of employment and allocation of resources; current problems and prospective developments.
COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION
FBE 508. Workshop. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For descriftions, see page 276)

FBE 418. Advanced Business Law. (G) 3 hours
FBE 420. Law of Administrative Agencies. (G) 3 hours.
FBE 460. Commercial Bank Management. (g) 3 hours.
FBE 464. Investments. (G) 3 hours.
FBE 465. Investment Banking and Capital Markets. (G) 3 hours.
FBE 474. Foreign Exchange and International Finance Management. (G) 3 hours.
FBE 475. Foreign-Trade Marketing. (G) 3 hours.
FBE 476. Foreign Business Operations. (G) 3 hours.

## Marketing, Insurance, and Transportation

*MIT 501. Research. Hours to be arranged.
*MIT 503. Thesis. Hours to be arranged.
MIT 507. Seminar. Hours to be arranged.
Marketing Theory. Remington.
Consumer Behavior. Smith.
Marketing Communication. Smith.
Risk Management. Greene.
Industrial Marketing. Rich.
Transportation Problems. Sampson.
Physical Distribution Management. Strom.
Management of Forest Products Companies. Rich
Marketing Research. Remington.
MIT 511. Administration of the Marketing Function. (p) 3 hours. Significance of marketing in an industrialized economy; marketing strategy and its relationship to profits and competition; consumer demand and motivathe sales function; location decisions and demographic influences.

## MIT 520. Marketing Problems and Policies. 3 hours.

Cost controls in distribution, delineation of market areas for the firm and industry, trade-channel analysis, organization for distribution, market-share analysis, product development and innovation, interregional trends. Greene, Smith.

* No-grade course.

MIT 521. Pricing Policies. 3 hours.
The development of individual company pricing policies; intra-industry pricing policies and their competitive aspects; influence of trade associations in price determination; legislation and pricing ; effect of specific court rulings on price policy. Remington.
MIT 520. Problems in Industrial Marketing. 3 hours.
The marketing of industrial goods; environmental effects on marketing major issues of product policy, pricing, marketing programs, and marketing organization.
MIT 540. Problems in Forest Industries Management. 3 hours.
Historical, economic, social, and technological factors affecting the current and future operations of the forest products industry.
MIT 549. Transportation Theory and Practice. 3 hours.
For graduate students with little or no undergraduate background in transportation. Two hours of lecture-discussion weekly, plus individual consultations. Extensive reading.
MIT 555. Risk and Insurance Theory. 3 hours.
Major problems of insurance theory; mathematical, psychological, economic, statistical, and legal aspects; relation of business organization to theory in risk and insurance; application of theory to practical problems of insurers
and the insured. Greene.
MIT 556. Pensions and Group Insurance. 3 hours.
Economic and business conditions giving rise to the pension movement. The role of private pension plans and group life and disability insurance in overall employee benefit plans. Funding, tax, actuarial, and legal problems in pensions and group insurance. Profit-sharing and labor-negotiated plans. Case studies of industrial retirement plans. Greene.
COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION
MIT 508. Workshop. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT (For descriptions, see pages 282-283)
MIT 418. Commercial and Industrial Site Location. (G) 3 hours.
MIT 430. Advanced Real Estate and Urban Land Use. (G) 3 hours.
MIT 431. Residential Property Development. (G) 3 hours.
MIT 447. Highway Transportation. (G) 3 hours (extension).
MIT 448. Air Transportation. (G) 3 hours (extension).
MIT 451. Transportation Regulatory Laws and Procedures. (G) 3 hours.
MIT 452. Special Problems in Transportation and Traffic Management (G) 3 hours.
MIT 455. Business Insurance and Risk Management. (G) 3 hours.
MIT 456. Life and Health Insurance. (G) 3 hours.
MIT 457. Special Topics in Risk and Insurance. (G) 3 hours.
MIT 458. Social Insurance. (G) 3 hours.
MIT 467. Public Utility Management. (G) 3 hours.

## Personnel and Industrial Management

*PIM 501. Research. Hours to be arranged.
*PIM 503. Thesis. Hours to be arranged.

PIM 507. Seminar. Hours to be arranged.
Research Design: Shaffer.
Computer in Business. Ramsing.
Industrial Management Concepts. Vance
Comparative Management Systems. Seubert.
PIM 511. Industrial Administration. (p) 3 hours.
Concepts and techniques basic to sound industrial administration ; scientific management, technological change, organization structure and dynamics, decision making; techniques of production control, work measurement, statistical quality control, newer quantitative tools such as linear programming. Case studies. Vance.
PIM 530. Production Programming. 3 hours.
Analysis of schematic and mathematical models in the allocation of productive resources in the manufacturing process; linear programming, statistical techniques, and other quantitative norms applied in production control, equipment replacement analysis, economic lot size determination, and quality control. Vance.
PIM 531. Theory of Business Organization. 3 hours.
The role of theory in the social sciences; research and theory dealing with organizational structure, leadership, communication, evaluation. decision making, control; an attempt to integrate traditional and behavioral-science approaches to organization and organizational behavior. Miner, Seubert.
PIM 532. Problems in Business Policies. 3 hours.
Business policy formulation considered as a derivative of corporate objectives and philosophy; emphasis on the effects of intra- and extra-organizational and philosophy; emphasis on the eftects of intra- and extra-organizational
forces which require periodic policy modifications. Analysis of specific case fillustrations on a company and an industry basis. Research into the conceptual and operational ramifications of a current problem. Seubert, Vance.
PIM 533. Theory of the Industrial Work Group. 3 hours.
Major theories of group formation and behavior considered in terms of their implications for business management; analysis of the literature concerning supervisory behavior and leadership, characteristics of managers, group cohesiveness, conformity, productivity standards, problem-solving efficiency, and morale. Miner, Shaffer.
PIM 534. Personnel Administration. 3 hours.
Mobilizing and deploying the human resources of the enterprise, from the standpoint of the personnel-administration specialist; employment, training, evaluation, wage and salary administration; labor relations from the standpoint of the firm; specialist contributions to personnel programs. Shaffer.
PIM 535. Personnel Psychology. 3 hours.
Analysis of studies in psychological literature concerning techniques of personnel selection and screening, methods of evaluating employee and managerial performance, training and management development, effects of working conditions on performance, job and equipment design in relation to employee characteristics, and attitude and morale measures. Miner.
PIM 536. Organizational Conflict and Change. 3 hours.
Factors contributing to internal conflict and to changed patterns of behavior within organizations, from the viewpoint of business management. managerial decision making and conflict; implications of cultural values for the adial decision making and confict; implications of cultural values or the adercion and manipulation ; plamed change. Miner, Shaffer.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
(For descriptions, see page 286)
PIM 412. Personnel Management. (g) 3 hours.
PIM 413. Wage and Salary Administration. (G) 3 hours.
PIM 414. Problems in Personnel Management. (g) 3 hours.
PIM 480. Business History. (G) 3 hours.

[^48]
## Dental School

Harold J. Noyes, D.D.S., M.D., Dean of the Dental School.
Louis G. Terkla, D.M.D., Assistant to the Dean.
Eugene W. Bauer, B.S., Business Manager ; Assistant to the Dean.
Ernest A. Hurley, D.M.D., Registrar.
Robert M. Donnell, M.A., Librarian.
THE UNIVERSITY OF OREGON DENTAL SCHOOL, located in Portland, was established through an act of the 1945 Oregon Legislature; the act accepted the gift of the property of the North Pacific College of Oregon, and incorported the college into the Oregon State System of Higher Education as a school of the University. The North Pacific College was the outgrowth of the merger in 1900 of the Tacoma Dental College (founded in 1893) and the Oregon College of Dentistry (founded in 1898).

The Dental School offers a professional curriculum in dentistry, leading to the degree of Doctor of Dental Medicine, graduate programs leading to the Master of Science degree with majors in the fields of anatomy, bacteriology, biochemistry, dental materials, oral pathology, orthodontics, pedodontics, pharmacology, and physiology, and a two-year program for the training of dental hygienists.

The professional curriculum is organized to provide the basic scientific knowledge, the mechanical skills, and the clinical experience essential for competence and success in dentistry. The curriculum requires iour years of didactic and clinical training, following two or more academic years of preprofessional work in liberal arts in an accredited college or university. The University offers, on the Eugene campus, a three-year predental curriculum which satisfies the admission requirements of the Dental School (see page 154).

Students completing the two-year dental-hygiene program may, by taking two additional years of work on the Eugene campus, satisfy the requirements for the Bachelor of Science degree with a major in health education (see School of Health, Physical Education, and Recreation).

Detailed information concerning the Dental School is published in a separate catalog; copies will be furnished on request.

## School of Education

Paul B. Jacobson, Ph.D., Dean of the School of Education.
Clarence Hines, D.Ed., Associate Dean of the School of Education. Keith Goldhammer, Ph.D., Associate Dean of the School of Education.

Professors: Harold Abel, C. E. Avery, I. B. Berkson, F. L. Brissey, H. H. Clarke, Keith Goldhammer, Grace Graham, F. B. Haar, Ray, Hawk, A. C. Hearn, Clarence Hines, C. W. Hintz, C. . L. Huffaker (emeritus), P. B. Jacobson, P. E. Kambly, Carl Lang, R. N. Lowe, R. E. Nye, Arthur Pearl, J. F. Rummel, A. A. Sandin, P. B. Simpson, V. S. Sprague, F. L. Stetson (emeritus), Harold Stoke, J. B. Stroud, Charles Teckman, D. E. Tope, W. L. Van Loan, H. B. Wood.

Associate Professors: M. H. Acker, F. C. Anmerws, Dorothy N. Candland,* R. O. Carlson,* J. E. de Jung, E. W. Dils, Frank Farner,* Elizabeth Findly, L. D. Fish, J. M. Gustafson, Richard Hills, John Lallas, L. L. Lovell, R. C. Mattson, Arthur Mittman, R. P. Nelson, Vernice T. Nye, Henry Osibov, Herbert Prehm, Jessie Puckett, O. F. Schaaf, Clarence Schminke, Frances G. Scott, Guy Shellenbarger, J. E. Suttle, Virginia Whitfield, Ruth Willard, Mildred H. Williams.
Assistant Professors: Abby Adams, T. C. Anderson, M. B. Berryhill, H. J. Carlson, O. C. Christensen, Barton Clements, John Croft, R. G. Cunningham, Knute Espeseth, Vern Farrow, Jane Gehring, Susan GilMatin, M C Martinson B Myers Gerge Petersen Ione F. Pier-
 Jond Usey, Kenneth Weomer, H F Wo wott
enior Instructors: Hazel E. Holboke, Susan Miller.
Instructors: J. R. Boothi, Chester Bumbarger, Marilyn Dunn, Joanne Lambeth, Fred Lamson, Margaret Nielsen, Eva M. O’Neil, E. J. Skinner, beth, fred Lamson, Margaret Nielsen, Eva Milian L. Weathers.
Fellows: William Arnold, Russell Bishop, Leonard Breen, Douglas Cruikshank, Salvador Flores, Carlton Knight II, Paul Lundy, Walter Lusetti, Pat Maney, Will Riggin, Jesee White.
Assistants: G. L. Becker, P. E. Beil, K. R. Bond, Fannie Canson, James Fisher, R. E. Hamill, Frank Heesacker, Earl Heusser, Gary Horton, Robert Hostetter, Alvin Howard, H. D. Jacobs, G. A. Keith, J. A. Koelling, Benjamin La wrence, H. E. May, Willson Maynard, James Miller, Gerald Murphy, G. R. Nelson, W. A. Nelson, C. G. Paetz, Stanley Perkins, P. K. Piele, E. A. Ritter, G. W. Robertson, J. S. Rose, Milton Seligman, A. D. Selinger, M. H. Smith, F. K. Stearns, R. J. Usitalo, H. M. Walker, Dennis Warner, B. R. Wolff.

THE SCHOOL OF EDUCATION offers undergraduate and graduate work in teacher education at the elementary and secondary levels. Instruction is also offered, principally at the graduate level, in the fields of school administration, school psychological services, and higher education. Through the Department of Librarianship, undergraduate and graduate professional education is provided for librarians, with particular emphasis on the preparation of school librarians.

The University of Oregon is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary and secondary teachers, school administrators, and specialists in school personnel services. The

* On sabbatical leave 1965-66.
council has also approved the graduate programs in these fields leading to the master's and doctor's degree.

Admission to Teacher Education. Students may enroll in methods courses in the School of Education only after they have been admitted to the teacher education program. Admission requirements include (1) at least sophomore standing, (2) a cumulative GPA of at least 2.25 , (3) speech clearance, and (4) writing clearance. Further information and admission application forms may be obtained in the Teacher Education Office in the School of Education.

Undergraduate Program. In planning its teacher education program, the University recognizes three qualifications for a good teacher: (1) a broad and liberal education; (2) a mastery of subject matter; (3) a knowledge of child and adolescent psychology and an understanding of professional problems and techniques.

Students preparing for secondary-school teaching are usually required to complete their work for a bachelor's degree with a major in a subject fieldtaking as electives the professional courses in education required for teacher certification. An undergraduate major program in education is, however, available principally for students preparing for elementary-school teaching. The program leads to the Bachelor of Arts, Bachelor of Science, or Bachelor of Education degree.

## Honors. See Honors College, pages 129 ff.

Graduate Program. Professional work in education beyond the undergraduate courses required for certification is offered principally at the graduate level. Specialized graduate work is offered in school administration and supervision, librarianship, school psychological services, curriculum and instruction, elementary education, secondary education, higher education, history and philosophy of education. Graduate work in education leads to the following degrees: Master of Arts, Master of Science, Master of Education, Doctor of Philosophy, Doctor of Education.

Special programs of graduate study are also offered toward the satisfaction of the Oregon state requirement of a fifth year of college work for the standard sec-ondary-school certificate. The student may qualify, on the completion of the fifth year, for an interdisciplinary M.A. or M.S. in a program planned especially for teachers or for a departmental degree with a major in a subject field or in education.

Bureau of Educational Research. The Bureau of Educational Research conducts basic research in the field of education and provides consultant and field services to the schools of the state for the solution of problems related to the administration, organization, and operation of educational programs.

Affiliated with the Bureau is the Oregon School Study Council, a research and service agency sponsored by the Oregon State Department of Education, the Oregon School Boards Association, and the University of Oregon. Its program is supported by dues paid by participating school districts

Curriculum Library. The Curriculum Library, located in the University Library, provides facilities for specialized study of the public school curriculum and for practical research on curriculum problems. The materials of the library include: (1) recent and important courses of study, units, and other curriculum materials available in the United States; (2) a comprehensive collection of ele-mentary- and secondary-school textbooks; (3) an extensive file of standardized texts and other instruments of pupil evaluation; (4) a large collection of free and inexpensive pamphlets, maps, exhibits, and other material suitable for use in the classroom; (5) bibliographies on various phases of the public school curriculum.

Placement Service. The University maintains a central Placement Service which provides assistance to graduating students and alumni who are seeking new or better teaching and administrative positions at the elementary, secondary, and college levels. See page 88 .

## Teacher Education

## Foundations of Education

Broad fundamental courses offered by the School of Education for students preparing for teaching and administration at all levels of education are listed below.

## UPPER-DIVISION COURSES

Ed 310. The School in American Life. 3 hours.
The school as a social institution; the impact of dominant characteristics of American society on the school; historical developments of elementary and secondary education; patterns of curriculum development; school organization ; school law; current issues in education. Wolcott.

## Ed 315. Human Development and Learning. 5 hours.

The understanding of children's behavior at various developmental levels during the school years; learning theories and principles, and application to classroom situations; individual differences as they effect developmental and learning patterns; methods of evaluating changes in children's behavior. Rummel.
Ed 317, 318. Social Foundations of Teaching. 3 hours each term.
First term : the nature and influence of such social determinants of child beFirst havior as tamily, ctass of childhood, emerging rights, agencies concerned with
etc.; the social status etc.; the socialdren. Second term : the social role of the school, including a study of community-analysis techniques as an approach to the school environment; community resources for teaching, and ways of utilizing these resources; educational implication of children's out-of-school activities and problems; community beliefs and practices, and their relation to the curriculum. Graham.
Ed 405. Reading and Conference. Hours to be arranged.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. Seminar. (G) Hours to be arranged.

## Logic and Learning

Ed 435. Audio-Visual Aids. (G) 4 hours.
The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc. are utilized. Sources of materials and equipment; administration of audio-visual programs. Anderson.
Ed 440 . History of Education. ( $G$ ) 3 hours.
A general review of the growth and development of education in relation to e civilization of the times: emphasis on development of educational philosophies.
Ed 441. History of American Education. (G) 3 hours.
The intellectual development of the United States, with special reference to the development of the school system. Prerequisite : knowledge of American history.
Ed 445. Modern Philosophies of Education. (G) 3 hours.
An examination of educational philosophies proposed by recent leaders and critics of American educational theory and practice.

Ed 476. School Law and Organization. (G) 2 hours any term.
Oregon laws applying to schools and teachers; teacher personnel policies and practices; professional organizations; means for continued professional growth.
Ed 491. Social Education. (G) 3 hours.
Structure and functioning of society, as a background for the study and evaluation of education in its varied forms; the contribution of sociological principles and findings to the improvement of educational practices. Graham.

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
*Ed 508. Workshop. Hours to be arranged.
Opportunity for group work on special problems.
Ed 542. Urbanization, the Pupil, and the School. 3 hours.
Prevailing social patterns in urban society that are pertinent to an understanding of what pupils learn and study, pupil behavior in general, and school problems; impact of urbanization on the changing American family, teenage culture, population migrations, and the school. Emphasis on effects on children. Graham.
Ed 545. School and Society in the Recent Past. 3 hours.
The liberal evolution in modern education; the state and education; freedom in teaching ; education and social ends; the place of religion in secular education.

## Ed 598. Comparative Education. 3 hours

Educational systems, philosophies, curricula, and recent developments in European, Asian, African, Pan-American, and other countries of the world; origins; factors underlying common and unique characteristics of various educational systems. Wood.

## COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Ed 475. Parent-Teacher Organizations. 2 hours (extension and summer sessions).
Ed 478. Improvement of Instruction in Reading. (G) 3 hours (extension)

## Elementary Education

In the field of elementary education the University offers (1) a four-year program leading to a bachelor's degree and (2) a full program of graduate work leading to advanced degrees.

Undergraduate Program. The undergraduate program in elementary education is planned to meet the requirements of the Oregon State Board of Education for a basic certificate. The program includes: (1) a broad distribution of studies in subject fields, (2) three integrated blocks of professional courses, and (3) an additional group of professional courses. The three blocks must be taken in sequence, and the instruction included in each block must be taken concurrently.

## Arts and Letters: <br> General Education Courses $\dagger$

English Composition (Wr 121, 122, 123)
Term Hours

## * No-grade course.

$\dagger$ Honors College courses may he taken in place of the courses in literature, social science, and science listed below as requirements.

Literature (Eng 101, 102, 103, Eng 104, 105, 106, or Eng 107, 108, 109).... Art in the Elementary Schoo (Art 311, 312)

Social Science:
History of the United States (one term)
Introduction to Geography (one term) ...........................................................................................
Sequence in social science-completion of history or geography sequence or any year sequence which satisfies the social
Social science electives (total of 27 term hours in
Science
General Biology ( Bi 101 ) ...............
Physical science-Physical-Sc. Survey (GS 104) or Elem. Chemistry
(Ch 101) or Gen. Geology (Geol 101) or Ess. of Physics,
with laboratory ( Ph 101, Ph 204 )...............................
ance
quence in science-completion of biology or physical science
sequence or any year sequence, except psychology, which
satisfies the science group requircment .....................

Health and Physical Education:
Games for the Elementary School (PE 221), Rhythms for the
Eles for the Elementary School (PE 221), Rhythms for the
Elementary School (PE 222), Fund. Body Movement, Posture,
Elementary School (PE 223) ,
Tumbling (PE
Elementary-School Health Education (HE 450) ...................................................... 3
Block I: Professional Courses
Human Development \& Learning (Ed 315) ...
Basic Classroom Procedures (Ed 331) .
Teach II:
Teacial Studies \& Science in the Element. School (Ed 334).
Student Teaching (Ed 415) ...................................................................................
Block III:

Student Teaching (Ed 415) .......................................................................................... 10
Additional Professional Courses:
Social Foundations of Teaching (Ed 317)
eaching Mathematics in the Elementary School (Ed 333)
Music Methods for Elementary Teachers (MuE 383)
Methods in Elementary-School Phys. Ed. (PE 420)
Children's Literature (Lib 490)

The University also has an elementary teacher education program that includes a period of internship. For information concerning this program, consult the Teacher Education Office, School of Education.

Graduate Program. The graduate program in the field of elementary education is designed to provide continued study opportunities for professional personnel in the field and, with the cooperation of other divisions of the University, to prepare master elementary-school teachers, elementary-school principals, supervisors, and directors, college teachers in the field of elementary education, and other specialists with responsibilities for the education of children. A brochure describing the graduate program in elementary education will be furnished on request to the School of Education.

## UPPER-DIVISION COURSES

## Ed 330. Field Experience. 1-2 hours.

Direct experience with children of all ages, with selection of setting determined by student needs; work with hospitalized, mentally retarded, or delin${ }^{*}$ Students who have had equivalent work in mathematics are exempt from this requirement.
quent children; September experience in a regular classroom during the first two weeks of the school year; leadership in recreational activities. Holboke.
Ed 331. Introduction to Basic Classroom Procedures. 2 hours.
The elementary teacher's role in the organization of time, space, and materials. To accompany directed observation and participation in elementary-school classroom activities, one-half day a week.
Ed 332. Teaching Language Arts in the Elementary School. 3 hours.
Language development from kindergarten through elementary school; emphasis on language as a means of thinking and communication. Curriculum, methods, materials, and evaluation in the teaching of speaking, listening, handwriting, spelling, correct language usage, etc. Carlson.
Ed 333. Teaching Mathematics in the Elementary School. 3 hours.
Arithmetic in the elementary-school program. Types of instruction, criteria for selection, placement, and organization of content. Prerequisite: Ed 315. Schminke.
Ed 334. Teaching Social Studies and Science in the Elementary School. 5 hours.
Social studies and science in the elementary-school curriculum. Ways of developing basic concepts in human relationships and community living. Emphasis on the effective use of instructional media and on related problems of individual differences, cultivation of critical thinking, provision for growth and retention, and methods of evaluating results of instruction. Prerequisite: Ed 315.
Ed 335. Teaching Reading in the Elementary School. 3 hours.
The nature of the reading process; development of reading readiness, word recognition, study skills, vocabulary, comprehension, and reading interest. Methods of diagnosing difficulties; evaluation of programs; selection of materials. Utsey.
*Ed 404. Seminar: Elementary Student Teaching. 2 hours
Ed 405. Reading and Conference. Hours to be arranged.
*Ed 414. Student Teaching: Kindergarten. 3-15 hours ( 15 hours maximum credit).
*Ed 415. Student Teaching : Grades 1-6. 3-15 hours ( 15 hours maximum credit). UPPER-DIVISION COURSE CARRYING GRADUATE CREDIT
Ed 407. Seminar. (G) Hours to be arranged.
Ed 451. Early Childhood Education. (G) 3 hours.
Relationship of the development of young children to the educational programs provided for them. Program planning; group behavior; individual behavior; the place of the teacher; equipment; activities; books and music
for young children.

GRADUATE COURSES
*Ed 501. Research. Hours to be arranged.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged
Independent study for graduate students interested in special problems or topics in elementary education.
Ed 507. Seminar. Hours to be ar ranged.
*Ed 508. Workshop. Hours to be arranged.
Opportunity for group work on special problems.
Ed 534. Science in the Elementary School. 3 hours
The place of science in the elementary school, with particular reference to the value of science in the lives of children. Selecting and organizing content; co-

[^49]ordinating science with elementary-school activities; methods and materials; rooms and equipment. Suttle.
Ed 535. Social Studies in the Elementary School. 3 hours.
Social-education objectives; children's social problems; unit development; work-study skills: organization of the program; materials; research findings
basic to the social education of children. Willard.
Ed 536. Language Arts in the Elementary School. 3 hours.
The role of language arts in the elementary-school program; objectives; research findings on language development; the teaching of spelling, writing, and speaking-listening skills; newer instructional materials; testing and evaluation. Carlson.
Ed 537. Reading in the Elementary School. 3 hours.
Nature of the reading process, objectives, organization of a desirable reading program; reading readiness, reading skills; procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. Willard.
Ed 538. Mathematics in the Elementary School. 3 hours.
Number abilities needed by children; research findings in mathematics education; designing number experiences; theories of teaching, desirable teaching procedures, selection and use of materials. Schminke.

## Secondary Education

Under Oregon school law, five years of collegiate preparation, including specified work in education and in subject fields, is required for a standard teacher's certificate. However, graduates of accredited colleges and universities who have completed a four-year teacher-education program may, on graduation, be granted a basic certificate, which is valid for three years. For renewal of the basic certificate after three years, 24 term hours of work toward the completion of the fifth-year program are required.

The following education courses are recommended as part of the preparation of junior high-school teachers:

Senior Year
The Junior High School (Ed 484)
The Junior High School (
Electives in education
Graduate Year
Junior High School Curriculum (Ed 571)

1) ...............

Principles Practices of Guidance Services (Ed 485)
Electives in education
The following education courses are recommended as part of the preparation of secondary teachers:


## Senior Year

*Special Secondary Methods (Ed 408) ...
*Student Teaching: Junior High (Ed 416) or Senior High (Ed 417).......................................................... 10

* This work may be taken in the graduate year, but may not be applied toward a graduate degree; Ed 416 or Ed 417 is required for the basic certificate.


## Graduate Year

 teaching media

A student who has completed the courses listed under "junior year" and "senior year," has attained adequate preparation in a subject field, has earned a bachelor's degree, and has been recommended to the Oregon State Department of Education by the University, is eligible for a basic certificate. A student who has taken part of his preparatory work at another institution, especially an out-of-state institution, should consult the School of Education concerning allowed equivalents for the satisfaction of Oregon requirements.

Before assignment to student teaching, a student must obtain the recommendation of his major school or department.

Subject Preparation. Under regulations adopted by the Oregon State Board of Education, new teachers employed in approved high schools may be assigned to teach only in those subject fields in which they have been recommended by the University as having adequate preparation.

One of the student's subject fields must be a field in which the University offers supervised teaching: art, biology, business, chemistry, English, French, general science, German, health education, journalism, Latin, librarianship, mathematics, music, physical education, physics, social studies, Spanish, or speech and drama. For specific requirements in these fields the student should consult the special advisers for prospective teachers in each field. Names of advisers are available upon inquiry at the Certification Office in the School of Education.

The University also has a secondary teacher education program that includes a period of internship. For details of this program, consult the School of Education.

Graduate Work. Most students, while meeting the fifth-year requirements for standard secondary teacher certification, find it possible to satisfy, at the same time, the requirements for an interdisciplinary master's degree or for a departmental master's degree in a subject field or in education.

## UPPER-DIVISION COURSES

Ed 314. Principles of Secondary Teaching. 3 hours.
Study of the actual classroom teaching process, including classroom organization and management, planning teaching units, evaluating pupil learning, and similar problems. Prerequisite: Ed 315. Kambly.
Ed 405. Reading and Conference. Hours to be arranged.

## Ed 408. Special Secondary Methods. 1 to 3 hours.

## Prerequisite: Ed 315.

*Ed 416. Student Teaching: Junior High School. 3-15 hours.
15 hours maximum credit for Ed 416 or Ed 417 or any combination of these courses.
*Ed 417. Student Teaching: Senior High School. 3-15 hours.
15 hours maximum credit for Ed 416 or Ed 417 or any combination of these courses.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Ed 407. Seminar. (G) Hours to be arranged.

[^50]Ed 427. School Activities. (G) 3 hours.
Principles and purposes of school activities; pupil participation in school government; assemblies; clubs, social activities; athletics, speech activities, ernment; assembles; chabs, soluation of the school activity program. Hearn.
Ed 484. The Junior High School. (G). 3 hours.
Origin and functions of the junior high school ; characteristics and needs of the early adolescent; administration of the junior high school; curriculum the early adolescent; administration of instruction; guidance; school activities; evaluation. Hansen.

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
*Ed 508. Workshop. Hours to be arranged.
Opportunity for group work on special problems.
Ed 593. Methods in Secondary-School Language Arts. 3 hours.
Review of research in the problems of teaching language arts in the secondary schools; observation and participation in demonstration teaching of literature, grammar, and composition. Designed for administrators and as classroom teachers. Prequisite : teaching experience or consent as well as cla
of instructor.
Ed 594. Methods in Secondary-School Mathematics. 3 hours.
Development of proficiency in the use of the problem-solving approach to the teaching of topics in arithmetic, algebra, geometry, and advanced high-school mathematics. Consideration of the strengths, inadequacies, and needed revisions of the present-day mathematics curriculum. Prerequisite : teaching experience or consent of instructor. Schaaf.
Ed 595. Methods in Secondary-School Science. 3 hours.
Selection of materials for secondary-school science teaching, demonstrations, science test construction, instructional devices; use and care of microscopes, meters, and other equipment. Prerequisite : teaching experience or consent of instructor. Ten Brinke.
Ed 596. Methods in Secondary-School Social Studies. 3 hours.
Trends in the social-studies curriculum; the unit method of teaching; the Trends in the social-studies curriculum; the unit method of teaching; the
core curriculum; social-studies materials and teaching techniques; teaching core curriculum; social-studies mative thinking; teaching current affairs. Students may work on problems reflective thinking; teaching current affairs. Students may work on problems school classes. Prerequisite: teaching experience or consent of instructor. Williams.

## School Psychological Services

THE DIVISION OF SCHOOL PSYCHOLOGICAL SERVICES offers programs leading to master's and doctor's degrees in the following areas: educational psychology, counseling, remedial education, and education of exceptional children. The division coordinates instruction and clinics in such fields as remedial education, school psychology, school and rehabilitation counseling, mental retardation, and emotional disturbance. The clinical services operate through the DeBusk Memorial Center, named for its founder and first director, the late Dr. Burchard W. DeBusk.

The program, in all of its phases, is interdisciplinary in character, involving cooperation of the faculties of the School of Education and of several departments
of the College of Liberal Arts. The courses listed below are those for which the School of Education has the principal responsibility; students working in the several fields also take selected courses offered in the college.

A doctoral program in counseling psychology and two-year programs in rehabilitation counseling and in school psychology, leading to the master's degree, are offered jointly by the Department of Psychology and the School of Education. Graduate programs in speech pathology and audiology are offered through the School of Education in collaboration with the Department of Speech and the University of Oregon Medical School.

Programs of students in the Division of School Psychological Services are planned according to the student's academic background, experience, and professional objectives. Courses offered satisfy needs of students completing degree or certification requirements in elementary education, secondary education, and school administration.

In all fields, supervised practical experience is provided in schools, hospitals, mental health agencies, juvenile departments, rehabilitation centers, and other agencies concerned with learning and adjustment problems of children and adults.

Practicum instruction is organized on two levels. Students who are receiving their first experience in a field and require relatively close supervision are enrolled in Ed 409; advanced students who are able to work more independently are enrolled in Ed 509.

The programs in rehabilitation counseling and in juvenile correction are administered through the Center for Social Service Training and Research. Both programs lead to the master's degree, and normally require two years for completion. For further information see Center for Social Service Training and Research, page 126.

## Remedial Education <br> UPPER-DIVISION COURSE

Ed 405. Reading and Conference. Hours to be arranged

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. Seminar. (G) Hours to be arranged.
Ed 409. Practicum. (G) Hours to be arranged.
Remedial Clinic-Remediation. O'Neil.
Remedial Clinic-Diagnosis. O'Neil.
Ed 428. Psychology of Reading Instruction. (G) 3 hours
Nature of the reading process; factors of learning and development related to reading achievement; psychological foundations of methods and materials of reading instruction; nature and treatment of reading disability.
Ed 429. Principles of Remedial Education. (G) 3 hours.
Survey of remedial education; factors associated with underachievement; general principles of diagnosis and remediation; diagnostic instruments and remedial resources. A first course in remedial education, with application to both elementary and secondary education. O'Neil.
Ed 465. Diagnostic Techniques in the Basic Skills. (G) 3 hours.
Analysis of difficulty in the skills of reading, and related skills; selection, administration, and interpretation of group and individual diagnostic achievement tests; diagnostic procedures; development of the diagnostic report. Conquired. O'Neil.
Ed 468. Remedial Techniques in the Basic Skills. (G) 3 hours.
Organization and implementation of the remedial program; specific pro-
cedures in the remediation of difficulty in the skills of reading, and related cedures in the remediation of in Practicum: Remedial Clinic-Remediation (Ed 409) required. O'Neil.
Ed 469. Reading in High School and College. (G) 3 hours.
Basic principles of reading instruction; nature and scope of the total reading program; methods, materials, and organization of the developmental and corrective reading programs in high school and college.

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged.
Word Perception.
Disability Syndromes.
Basic Skills Assessment.
Early Learning Problems.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Intensive study of problems relating to the education of children with difficulties in the mastery of the basic skills, including reading, arithmetic, spelling, etc.
Ed 507. Seminar. Hours to be arranged.
Problems in Remedial Instruction. Staff.
Problems in Educational Diagnosis. Staff
*Ed 508. Workshop. Hours to be arranged.
Ed 509. Practicum. Hours to be arranged.
Diagnosis and Treatment of Underachievement. O'Neil
Extreme Learning Problems.
Ed 562. Issues in Extreme Learning Difficulty. 3 hours.
Theory and research concerning extreme learning problems in the basic skills; analysis of differential learning capacity; reading-listening relationships; sensory-motor modes of remediations; social-emotional correlates of skills disability ; therapeutic elements of remediation.

## Education of Exceptional Children

## UPPER-DIVISION COURSE

Ed 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Ed 407. Seminar. (G) Hours to be arranged.
Teaching-Mental Retardation, Espeseth.
Teaching-Gifted. Lovell.
Teaching-Social-Emotional Problems. Brissey.
Teaching-Physical Disability. Sheperd.
Education of Exceptional Children
Research-Exceptional Children
Physical Disability. Sheperd.
Ed 409. Practicum. (G) Hours to be arranged.
Exceptional Children-Mental Retardation. Espeseth.
Exceptional Children-Social-Emotional Problems. Stone.
Exceptional Children-Physical Disability. Sheperd.
Administration of Programs for Exceptional Children. Martinson
Supervision of Special Educational Personnel. Martinson.
*No-grade course.

Ed 439. The Gifted Child. (G) 3 hours.
The psychology, education, and guidance of the mentally superior and the extraordinarily gifted child. Lovell.
Ed 462. Psychology of Exceptional Children. (G) 3 hours.
Characteristics and problems of all types of exceptional children, with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Mattson.
Ed 463. The Maladjusted Child. (G) 3 hours.
The discovery and treatment of the emotionally and socially maladjusted child the home, school, and community in relation to the child's mental health. Opportunities for the observation of family counseling techniques. Lowe, Christensen.
Ed 464. The Mentally Retarded Child. (G) 3 hours.
The psychology, education, and guidance of the mentally retarded child Espeseth.

Ed 471. Administration of Special Education. (G) 3 hours. Organizing, financing, housing, equipping, staffing, and supervising the
special-education program; desirable educational provisions for each type of handicapped child; legal provisions for special education. Martinson
Ed 489. Curriculum for the Mentally Retarded. (G) 3 hours.
Curriculum, methods, and materials for special classes, developed on the basis of the diagnosed characteristics of mentally retarded children. Prerequisite:
Ed 464. Espeseth, Sheperd.

## GRADUATE COURSES

Ed 505. Reading and Conference. Hours to be arranged.
Intensive study of problems relating to educating the handicapped. Areas of study are selected in light of the student's interests and professional plans. Mattson.
Ed 507. Seminar. Hours to be arranged.
Teaching-Mental Retardation. Espeseth, Sheperd.
Teaching-Gifted. Lovell.
Teaching—Social-Emotional Problems. Brissey.
Teaching-Physical Disability. Sheperd.
Counseling-Education of Exceptional Children. Hamerlynck
Extreme Learning Disability.
Problems in Education of Exceptional Children.
Research-Exceptional Children.
Neurological Impairment.
Administration of Pupil Personnel Services.
*Ed 508. Workshop. Hours to be arranged.
Ed 509. Practicum. Hours to be arranged.
Exceptional Children-Mental Retardation. Espeseth.
Exceptional Children-Gifted. Lovell.
Exceptional Children-Social-Emotional Problems. Brissey, Stone.
Exceptional Children-Physical Disability. Sheperd.
Administration of Programs for Exceptional Children. Martinson.
Supervision of Special Educational Personnel Martinson.
Supervision of Special Educational Personnel. Martinson.

## Ed 563. Diagnosis in Mental Retardation. 3 hours.

Critical evaluation of instruments and techniques used in the identification and diagnosis of mentally retarded children; practice in the solution of problems involving the mentally retarded. Prerequisite: Ed 424, Ed 464, Ed 489; or consent of instructor

[^51]
## Educational Psychology

## UPPER-DIVISION COURSE

Ed 405. Reading and Conference. Hours to be arranged.
UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Ed 407. Seminar. (G) Hours to be arranged.
Educational Psychology
Ed 409. Practicum. (G) Hours to be arranged.
Psychometry. Lovell, Lowe, Mittman.
Clinical Procedures in Education. Waugh.
Ed 424. Measurement in Education. (G) 3 hours.
Use and interpretation of informal and standardized tests as supervisory and guidance instruments for the diagnosis, analysis, evaluation, and improvement of instruction in the elementary and secondary schools. Test planning, item writing, essay testing, administration and scoring, analysis of scores and grade assignment. The course includes simple statistics of test interpretation. Mittman.

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged
School Psychology. Lovell
Problems in Learning. Lovell, Mittman.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
Adlerian Theory. Lowe.
*Ed 508. Workshop. Hours to be arranged.
Ed 509. Practicum. Hours to be arranged.
Psychometry. Lovell, Lowe, Mittman.
School Psychology. Lovell, Waugh.
Ed 512. Research Procedures in Education. 3 hours.
The nature and procedures of research in education. Open to graduate students majoring in other fields. Does not take the place of individual supervision of the student's thesis. An introductory course in statistics is desirable preparation. Mittman.
Ed $515,516,517$. Educational Statistics. 3 hours each term.
Technique in quantitative and experimental methods. Calculus not required. Admission after fall term only with consent of instructor

Ed 525. Theory and Technique of Educational Measurement. 3 hours.
The theoretical bases and principles of educational measurement test theory; item selection techniques; nature of measurement ; units and norms; reliability and validity; batteries and profiles. Designed primarily for advanced students in educational psychology and human developnent. Prerequisite: Ed 424, Ed 515 , or equivalent. Lovell, Mittman.
Ed 528. Group Testing in Schools and Colleges. 3 hours.
An intensive study of the purposes, uses, administration, scoring, and interpretation of group tests commonly used in public schools and colleges. Testing in the areas of achievement, aptitudes, interests, and personality. Designed primarily for advanced students in educational psychology, human development, psychometrics, and counseling. Prerequisite: Ed 424. Christensen, Hamerlynck.
"No-grade course.

Ed 529, 530, 531. Advanced Educational Psychology. 2 hours each term. Review of some modern viewpoints in educational psychology, with particular attention to theories of learning and their application to problems of school learning. Must be completed in sequence; students who have had a course in the psychology of learning may be permitted to enter in the winter term. Prerequisites : courses in educational or general psychology ; statistics. Lovell.
Ed 549. Principles and Practices in School Psychology. 2 hours.
Primarily for students majoring in school psychology. Applications of psychological knowledge to the educational process; roles of the school psychologist, relationships to other professional personnel in school and community.
Lovell
Ed 564. Mental Tests. 4 hours.
Selection, administration, and interpretation of individual tests utilized in testing exceptional and extremely deviate children. Prerequisite: Ed 424, Psy 524 or Psy 525.

## Counseling

UPPER-DIVISION COURSE
Ed 405. Reading and Conference. Hours to be arranged. UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Ed 407. Seminar. (G) Hours to be arranged.
Introduction to Rehabilitation. Acker.
Research in Counseling. Loughary.
Elementary Counseling. Christensen.
Culture of Poverty. Pearl.
Counseling Marginal Youth. Pearl.
Ed 409. Practicum. Hours to be arranged.
Secondary-School Counseling. Acker, Christensen, Clements, Dunn, Toobert, Thomas.
Elementary-School Counseling. Christensen
Family Counseling. Lowe, Christensen.
Rehabilitation Counseling. Acker, Dunn, Thomas, Hamerlynck.
Procedures in Counseling. Gilmore
College Counseling. Gilmore, Thompson.
Ed 485. Principles and Practices of Guidance Services. (G) 3 hours.
The need for guidance services in the schools; tests, inventories, questionnaires, and records; the role of the home and the community in guidance; counseling the individual student. Clements.
Ed 488. Educational and Vocational Guidance. (G) 3 hours.
Designed primarily for advanced students preparing for positions as counselors. A study of current materials and trends in educational and vocational opportunities. Prerequisite: Ed 424, Ed 485. Acker, Thomas.

## Ed 492. Functional Aspects of Physical Disability. (G) 3 hours

Designed to familiarize the student with the impact of physical disability and chronic illness on vocational capacity; review of basic anatomy and physiology of several major medical conditions which frequently result in impairment of physical function. Toobert.

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged.
Problems in Rehabilitation Counseling.
Problems in School Counseling.
Pupil Personnel Services.

* No-grade course.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
Elementary School Guidance. Christensen.
Utilization of Community Resources. Hamerlynck.
Counseling Supervision. Acker.
Reserach in Counseling. Loughary, staff.
Evaluation of Work Potential. Acker, staff.
*Ed 508. Workshop. Hours to be arranged.
Ed 509. Practicum. Hours to be arranged.
Secondary-School Counseling. Acker, Christensen, Clements, Dunn, Toobert, Thomas.
Elementary-School Counseling. Christensen, Toobert.
Family Counseling. Lowe, Christensen.
Group Counseling. Clements, Toobert.
Rehabilitation Counseling. Acker, Dunn.
Field Instruction. Dunn, Hamerlynck
Counseling Supervision. Acker.
College Counseling. Gilmore, Thompson.
Ed 526. Counseling Theories. 3 hours.
Designed primarily for students preparing for positions in counseling in both school and nonschool settings; major emphasis placed upon counseling points of view ; consideration given to purposes, techniques, and processes of counselof view; consideration given to purposes, techniques, and p.
ing. Prerequisites: Ed 424, Ed 485, and Psy 527 . Gilmore.
Ed 570. Advanced Functional Aspects of Physical Disability. 3 hours.
Review of the historical and contemporary structures of medical practice, and of the influence of these structures on patient-physician and physiciancounselor relationships; principles of consultation, with special reference to medical consultation in counseling; application of the principles of vocational evaluation, with specific emphasis on the most effective incorporation of medical data. Thomas.
Ed 589. Organization and Administration of Guidance Services. 3 hours.
Principles and functions of guidance; organizing the guidance program; guidance personnel; evaluation of the school's guidance services.


## Educational Administration, Curriculum, and Supervision

THE SCHOOL OF EDUCATION offers a comprehensive graduate program in educational administration. The program, which is accredited by the National Council for Accreditation of Teacher Education, includes two-year programs, which satisfy requirements for administrative certificates issued by the Oregon State Department of Education and the membership requirements of the American Association of School Administrators, and work leading to the Ph.D. and D.Ed. degrees.

By act of the Oregon Legislature, all persons employed in the Oregon public schools in administrative or supervisory positions must hold an administrative certificate. To qualify for an administrative certificate, the applicant must: (1) hold a valid Oregon standard teacher's certificate or an Oregon certificate based on a five-year program of teacher preparation; (2) have had five years of successful teaching and administrative experience, at least three years of which has been successful experience in some supervisory or administrative capacity; (3) have completed, for a principal's certificate, 33 term hours or, for a superintend-

[^52]ent's certificate, 45 term hours of upper-division or graduate study in educational administration in a collcge or university approved by the State Board of Education after earning the master's degree (this preparation must include emphasis on administrative processes such as communicating, building morale, administering change, decision making, personnel and staff relations, finance and budgeting, research procedures, school law, administrative organization for education, school building, curriculum, and evaluation, and work in the behavioral sciences and other disciplines with a bearing on educational administration and administrative problems) ; (4) be recommended by the college or university in which he has completed his graduate program as having the qualifications essential for an educational administrator; (5) have completed specialization requirements set by the State Board of Education.

The two-year programs outlined below meet the Oregon State Department of Education requirements for superintendent's and principal's certificates

Superintendent's Certificate. The following program satisfies the requirements for the superintendent's certificate:
(1) Nine term hours in the following introductory courses: Public School Administration (Ed 572), Public School Organization (Ed 573), Secondary School Administration (Ed 527), or Elementary School Administration (Ed 554).
(2) Not less than 9 term hours in fields of specialization, selected from the following courses.
School Finance (Ed 575)
Seminar: Problens of Government Finance

Seminar: Advanced School Law (Ed 507 )
Seminar: Change \& Organization (Ed 507)
Seminar: Problems of Staff Organization (Ed 507)
(3) Not less than 12 term hours in the field of curriculum and supervision, including the following: Secondary School Curriculum (Ed 522), Elementary School Curriculum (Ed 553), and School Supervision (Ed 574). The remainder may be selected from the following courses:
Elementary-School Problems (Ed 552) Seminar: Evaluation of the Elementary-School Evaluation of Secondary-School Programs (Ed 559)
econdary-Schoor Problems (Ed 560)
Junior High-School Curriculum (Ed 571)
Program (Ed 507)
Seminar: Pupil Personnel Policies \& Services Seminar: Pupil Personnel Policies \& Ser
in the Elementary School (Ed 507)
Seminar: The Community College (Ed 507)
Seminar: Procedures of Classroom Observation \& Analysis of Teaching (Ed 507)
(4) Fifteen term hours in advanced graduate seminars, including 9 hours in: Seminar: Administrative Problems (Ed 507). The remainder may be selected from the following:
Scminar: The Nature \& Problems of Admin istrative Behavior (Ed 507)

Seminar: The Scope $\&$ Method of the Social Sciences (Ed 507) Seminar: Curriculum \& Supervision (Ed 507)
(5) Six term hours in research methods and field services, selected from the following ( 3 term hours must be in field services) :
$\underset{\text { (Ed 507) }}{\text { Seminar: Adyanced Research Desigu }} \quad \begin{aligned} & \text { Educational Statistics (Ed 515, 516, 517) }\end{aligned}$ (Ed 507) Research: Field Studies (Ed 501)
(6) Nine term hours in behavioral sciences and humanities, including Group Dynamics (Soc 431), and Seminar: The Humanities and Education (Ed 507) or approved substitutes.

On completion of the required course work outlined above, the candidate is given a comprehensive written examination covering the entire field of educational administration.

Principal's Certificate. The following program satisfies the requirements for the principal's certificate.
(1) Nine term hours in the following introductory courses: Public School Administration (Ed 572), Public School Organization (Ed 573), Secondary School Administration (Ed 527) or Elementary School Administration (Ed 554).
(2) Twelve term hours in Curriculum and Supervision, including: Secondary School Curriculum (Ed 522) or Elementary School Curriculum (Ed 553) or Junior High School Curriculum (Ed 571) ; Evaluation of the Secondary School Program (Ed 559) or Evaluation of the Elementary School Program (Ed 507) ; Procedures of Classroom Observation and Analysis of Teaching (Ed 507); School Supervision (Ed 574).
(3) Three term hours in research methods and field services, including Research Procedures in Education (Ed 512) or an approved substitute.
(4) Six term hours in the behavioral sciences and humanities.
(5) Three term hours in other administrative courses selected with approval of the student's adviser

Admission. For admission to the graduate program in educational administration, the student must: (1) provide evidence of successful completion of work for the master's degree in a standard college or university, or equivalent; (2) file formal application for admission, on a form provided by the School of Education; (3) provide a satisfactory score on the Miller Analogies Test and evidence of effective ability in written communication; (4) provide recommendations from at least three persons, capable of evaluating the candidate's teaching and administrative experience, of his satisfactory professional performance; (5) present a complete program of studies for either (a) the two-year graduate program in educational administration or (b) the doctoral program in educational administration, with the approval of his adviser; (6) be recommended for admission by the Committee on Advanced Administrative Programs of the School of Education.

Approximately two-thirds of the candidate's program must be completed after he has received formal notification of admission. Candidates must have an adequate background in the foundation areas of philosophy, psychology (learning), and sociology. Deficiencies in these areas must be remedied prior to or concurrent with advanced work.

## Educational Administration

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
Administrative Problems. Jacobson, Tope, Carlson.
Advanced School Law. Farner.
Change in Organizations. Carlson.
Education and the Humanities. Goldhammer.
Nature and Problems of Administrative Behavior. Jacobson, staff.
Problems of Staff Personnel. Tope.
Problems of Government Finance.
Research Design. Farner.
Scope and Method of the Social Sciences. Tope, staff
School Business Administration. Hines.

[^53]*Ed 508. Workshop. Hours to be arranged.
Ed 572. Public School Administration. 3 hours.
Interpersonal relationships in administration; school-board powers, duties, roles, relationships; the superintendency-roles, responsibilities, issues, problems; problems of staff personnel; student personnel problems at the local school-community relationships. Tope.
Ed 573. Public School Organization. 3 hours.
The schools in relation to state and Federal agencies; the intermediate unit, its purposes, organization, trends; local school districts-problems of organization, plant planning and management, school business administration, transportation, school finance, textbooks and supplies; extralegal agencies affecting education. Tope.
Ed 575. School Finance. 3 hours.
The problems of school finance and business management; sources of school income: relationship to the state financial structure; expenditure analysis; budgeting and accounting. Includes the construction of a school budget. PrereFarner.
Ed 576. School Buildings. 3 hours.
Study of the problems involved in planning, financing, and construction of school buildings; care and maintenance of buildings ; problems of equipment. Includes analysis of the problems of a specific district. Prerequisite: work in administration and organization; or consent of instructor. Hines.
See also under School Psychological Services, Ed 471, Ed 485, Ed 589 ; under Higher Education, Ed 592; under Librarianship, Lib 484.

## Curriculum and Supervision

graduate courses
*Ed 501. Research. Hours to be arranged.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
*Ed 508. Workshop. Hours to be arranged.
Ed 522. Secondary-School Curriculum. 3 hours.
Overview of the secondary-school curriculum, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the course of study; evaluation of the secondary-school curriculum. Hearn.
Ed 527. Secondary-School Administration and Supervision. 3 hours.
The secondary-school principalship; principles of administration, staff relationships, public relations, and professional growth; business administration; administration of guidance services, curriculum, and school activities; evalua-
tion of the secondary school. Hearn. tion of the secondary school. Hearn.
Ed 552. Elementary-School Problems. 4 hours.
A study of current problems, issues, significant research, and theories in the field of elementary education. Sandin.
Ed 553. Elementary-School Curriculum. 4 hours.
A systematic study of the elementary-school curriculum, including pupil needs in everyday life situations, objectives, essentials of a good program, varying curriculum designs, organization of learning experiences, evaluation of learning, and appraisal of newer curriculum practices. Sandin.

* No-grade course.

Ed 554. Elementary-School Supervision and Administration. 4 hours.
For mature students of elementary education who are preparing for administrative or supervisory positions. Characteristics of good elementary schools, leadership responsibilities and processes, school organization patterns, pupil personnel policies, school-community relationships. Sandin.
Ed 559. Evaluation of Secondary-School Programs. 3 hours.
Appraisal of secondary schools on the basis of evaluative criteria, with special attention to the work of the National Study of Secondary School Evaluation. Hearn.
Ed 560. Secondary-School Problems. 3 hours.
Current problems in the field of secondary education. Hearn.
Ed 565. Curriculum Foundations. 4 hours.
Implications of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning. Wood.
Ed 566. Curriculum Construction. 4 hours.
Survey and appraisal of curricular patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning.
Wood.
Ed 567. Curriculum Materials. 4 hours.
Effective use and organization of curriculum materials; text and reference books, supplementary pamphlet materials, films and slides, records and recordings, pictures, radio, etc.; programmed learning; techniques of unit construction. Wood.
Ed 571. Junior High-School Curriculum. 3 hours.
Instructional programs appropriate for the early adolescent years, with emphasis upon the various subject fields. Hearn.
Ed 574. School Supervision. 3 hours.
The role of the supervisor in keeping education geared to the changing demands of society; theories of leadership; group processes and individual conference techniques; action research and related approaches to curriculum change; analysis of concrete supervisory problems. Prerequisite: Teaching or administrative experience or consent of instructor. Fish.

## Higher Education

The program in higher education, offered at the graduate level, includes the following courses, together with seminars, individual study, and research.

## GRADUATE COURSES

*Ed 501. Research. Hours to be arranged
*Ed 502. Supervised College Teaching. Hours to be arranged. Lovell, Tope.
*Ed 503. Thesis. Hours to be arranged.
Ed 505. Reading and Conference. Hours to be arranged.
Ed 507. Seminar. Hours to be arranged.
Administration of the Community College. Van Loan.
Adult Education. Dahl.
College Student Personnel. Hawk
Education in Developing Countries. Wood.
Programs in the Community College. Van Loan.
Ed 508. Workshop. Hours to be arranged.

[^54]Ed 509. Practicum. Hours to be arranged.
Ed 590. Higher-Education Survey. 3 hours.
Problems of higher education. Organization, administration, finance; philosophy, purposes, curricula; student and faculty personnel; extension and special services. Wood.
Ed 591. Teacher-Education Survey. 3 hours.
Purposes, needs, and objectives of teacher education; present facilities and types of organization; student-selection procedures; staff; curriculum. Relationships of preservice undergraduate, preservice graduate, in-service campus, and in-service field training. Kambly.
Ed 592. Administration of Colleges and Universities. 3 hours.
The administration of liberal arts colleges and of complex institutions, such as universities; business affairs; administration of schools and departments. Stoke

## Librarianship*

Professor: C. W. Hintz.
Associate Professors: Elizabeth Findly, R. R. McCollough, Ione F. Pierron, A. W. Roecker.

Assistant Professors: Holway Jones, Margaret Lane, Elizabeth E. Martin, Mary C. Meyer.

THE DEPARTMENT OF LIBRARIANSHIP offers courses designed for: (1) graduate students, who may complete a program leading to the M.A. or the M.S. degree with a major in librarianship; (2) students preparing for certification as librarians and teacher librarians in the public schools, as a part of their undergraduate program (an undergraduate major in librarianship is not offered) (3) teachers and prospective teachers who wish to become better acquainted with books and other library materials suitable for children and young people; (4) school administrators who wish to explore, from an administrative viewpoint the place of the library in the instructional program of the school; (5) students preparing for intermediate positions in public libraries; (6) University students in general, to acquaint them with the resources of the University Library and the literature of subject fields, together with instruction in their efficient use.

Subject Preparation for School Librarians. For certification as a school librarian in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of preparation in library science and (2) the recommendation of the institution at which the studeut com pletes his work in library science.

To meet the state standards and the reguirements for recommendation by the University of Oregon, the student should complete the following courses in library science: Undergraduate-Bibliography and Reference (Lib 481) ; School Library Administration (Lib 484); Introduction to Cataloging and Classification (Lib 486) ; Audio-Visual Aids (Ed 435) ; two of the following three courses-Books and Related Materials for Young People (Lib 488), Children's Literature (Lib 490), Storytelling (Lib 491). Fifth year-Cataloging and Classification (Lib 487) ; Library in the Community (Lib 496) ; electives, 6 term hours.

## LOWER-DIVISION COURSE

Lib 127. Use of Library. 1 hour any term.
Training in the use of the card catalog, periodical indexes, and reference books; experience in the preparation of bibliographies. As far as possible, books; experience in the preparation of bibliographies. As far as possible,
problems are coordinated with the individual student's study program. Meyer. * At its Jan. 1966 meeting, the Oregon State Board of Higher Education authorized the University of Oregon to reorganize the Department of Librarianship as a professional School
of Librarianship.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Lib 481. Bibliography and Reference. (G) 3 hours.
Introduction to reference services; evaluation and use of reference materials; correct bibliographical forms; practical problems in the use of reference books in school and other small libraries. Martin.
Lib 483. Principles of Book Selection. (G) 3 hours.
Analysis of criteria for book selection in the light of library objectives; reading habits and interests of adults; use of selection aids and reviewing media; ing habits and interests of adults; use of selection aids and reviewing media;
Lib 484. School Library Administration. (G) 3 hours.
Introduction to school librarianship and to the objectives of the school library in the instructional program ; problems relating to budget and finance, housing and equipment, personnel, etc. Emphasis on national and state standards for the instructional materials center. Lane.
Lib 485. Advanced Bibliography and Reference. (G) 3 hours.
Reference books in the various subject fields; theory and history of bibliography; interlibrary loan. Prerequisite: Lib 481 or consent of instructor. Martin.
Lib 486. Introduction to Cataloging and Classification. (G) 3 hours.
Instruction and practice in simplified procedures for the classification and cataloging of books, films, filmstrips, phonorecords, and maps. Procedure for ordering and using Library of Congress and Wilson cards. Martin.

## Lib 487. Cataloging and Classification. (G) 3 hours.

More-difficult problems in the cataloging and classification of books and other library materials; brief survey of theories and experiments in cataloging and classification and their implications for the future. Prerequisite: Lib 486 or consent of the instructor. Martin.
Lib 488. Books and Related Materials for Young People. (G) 3 hours. Survey of books and nonbook materials suitable for students of junior and senior high-school age; emphasis on selection and evaluation of books, adolescent reading interests, and reading guidance for curricular and personal needs. Lane, Martin.
Lib 490. Children's Literature. (G) 3 hours.
Survey of children's literature, with emphasis on selection and evaluation of books suitable for public and school libraries; reading guidance in relation to both personal and curricular needs. Lane.
Lib 491. Storytelling. (G) 3 hours.
Fundamental principles of the art of storytelling, including the planning of a story hour, location of suitable materials for use, and the techniques of learning and presenting the story; study and selection of literature appropriate for oral presentation to children of all ages. Lane.
Lib 493. Literature of the Humanities. (G) 3 hours.
The role of the humanities in modern life; survey and evaluation of library resources in the humanistic disciplines. McCollough.
Lib 494. Literature of the Sciences. (G) 3 hours.
Survey and evaluation of library materials in the fields of science and technology ; problems of scientific documentation; literature searching methods; compilation, classification, and reporting of information. Roecker.
Lib 495. Literature of the Social Sciences. (G) 3 hours.
Survey of key men and ideas in the social sciences, with emphasis on past development and present tendencies; source materials for research; selection of books, maps, periodicals, etc. for school and college libraries and for personal reading ; introduction to the bibliography of each of the social sciences. Designed for all interested students as well as library majors. Jones.

## Lib 496. The Library in the Modern Community. (G) 3 hours.

The development of American libraries; their present-day functions as educational and cultural institutions; legal structure ; interlibrary cooperation; relations with the mass media; librarianship as a profession. Martin.

## GRADUATE COURSES

*Lib 503. Thesis. Hours to be arranged.
Lib 505. Reading and Conference. Hours to be arranged.
Lib 507. Seminar. Hours to be arranged.
Lib 511. History of the Book. 3 hours.
Development of the book in its various forms from earliest times to the resent ; origin and evolution of the alphabet and scripts; history of manuscript books; invention and spread of printing; production and distribution of printed books. Emphasis on the relation of books to social conditions in

Lib 512. Government Publications. 3 hours.
The acquisition, organization, and use of government publications of the United States, selected foreign countries, and international organizations, with special attention to United States government documents. Prerequisite: Lib 481 or consent of instructor. Findly.
Lib 514. Library Administration. 3 hours.
Principles of administration as applied to the government, organization,
staffing, financing, housing, interpretation, and evaluation of libraries. Student projects relate the principles to specific types of libraries. Prerequisite: 9
hours in librarianship. Pierron.

## COURSE OFFERED ONLY IN SUMMER SESSIONS

Lib 508. Workshop. Hours to be arranged.
*No-grade course.

## School of Health, Physical Education, and Recreation

Arthur A. Esslinger, Ph.D., Dean of the School of Health, Physical Education, and Recreation.

## Health Education

Professor: F. B. HaAr (department head).
Associate Professors: E. D. Furrer, D. K. Gillespie, W. E. Smith, Miriam L Тиск.

Assistant Professors: L. D. Jacobson, R. E. Kime.
nstructor: B. C. Smith.

## Physical Education

Professors : Florence D. Alden (emeritus), W. J. Bowerman, L. J. Casanova, H. H. Clarke, M. Frances Dougherty, A. A. Esslinger, L. A. Harkis, D. H. Kirsch, E. R. Knollin (emeritus), W. P. Rhoda, P. O. Sigerseth V. S. Sprague, Harriet W. Thomson (emeritus), P. R. Washike, Janet G. Woodruff
Associate Professors : Stephen Belko, W. B. Brumbach, Jessie Puckett, Edna Wooten.
Assistant Professors: J. W. Borchardt, M. B. Coley, K. Wright Dunkley, G. L. Frei, Joan Harristhal, Theresa M. Malumphy,* Patricia Montgomery, $\dagger$ R. A. Munroe, Collee Munson,* E. R. Reuter, J. J. Roche, J. S Schendel, D. P. Van Rossen, Lois J. Youncen
Instructors: R. B. Ballou, L. A. Bellisimo, John Bloomfield, Jan Broekhoff, Elizabeth Glover, Linda Hearn, P. I. McHugh, R. O. Officer, Marilyn Parrish, Sue Prince, J. A. Robinson, R. J. Smith
Lecturers: R. O. Rankin, D. B. Slocum.
Assistants: Jack Adler, Edward Bilik, Sheila Brewer, Clifford Brubaker, Brent Carder, Nicola Cutter, Pat Downie, James Gallagher, Linda Hackbarth, Dorian Harris, Dwayne Head, Richard Irvin, John Kelso, Herbert Lawrence, Alexander McNeill, Jeffrey Miller, Sylvia Moore, Alan Morton, Donna Pickel, Stanley Rasmussen, Laine Santa Maria, Gary Sinclair, Patricia Small, Robert Wilberg.

## Recreation and Park Management

Professors: L. S. Rodney (department head), F. B. Nickerson.
Associate Professor: A. L. Ellingson.
Assistant Professors: P. M. Ford, Adell McMillan.
Instructor: L. L. Neal.
Lecturers: R. M. Artz, P. R. Beistel, Gerald Jacobson.

THE SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION is responsible for three programs: (1) service courses in health education and physical education for men and women; (2) intramural sports for

[^55]men and women; (3) professional study, both undergraduate and graduate, in health education, physical education, dance, and recreation and park management.

Service Courses. Courses providing instruction in recreational skills and in the principles of physical conditioning and health are offered for all students.

The University graduation requirements for all students include five term of physical education and a course in health education, unless the student is ex cused by the dean of the school.* Students may be exempted from one o: mo:e terms of the physical-education requirement and from the health-education require ment on the basis of proficiency examinations.

Courses which satisfy the physical-education requirement are: PE 180 for women, PE 190 for men; not more than 1 hour of credit may be earned in these courses in any one term. The student's program in physical education is adjusted to his needs and abilities; whenever possible, the work is adapted to remedy physical disabilities. Majors and other students preparing for the teaching of physical education in the schools satisfy the requirement with a series of professional activity courses. A student may not take a service course and a professional activity course for credit at the same time.

Both men and women students satisfy the health-education requirement with HE 150 or HE 250. Students are urged to satisfy this requirement during their freshman year

Elective service courses (regularly scheduled classes) in physical activities are offered for juniors and seniors. A total of not more than 12 term hours may be earned toward graduation in lower-division and upper-division service courses in physical education. Not more than 1 hour of credit may be earned in any one term.

Intramural Sports. The School of Health, Physical Education, and Recreation sponsors a comprehensive program of intramural sports. A primary purpose of the program is to encourage sportsmanship and friendly relations among the students of the University through athletic competition. Individual and group competitive sports for men are organized under the guidance of the department for men. The department for women provides a wide variety of sports for women students. Student leadership for women's athletics is furnished by the Women's Recreational Association.

Undergraduate Study. Undergraduate major programs are offered in the fields of health education, physical education, dance, and recreation and park management. Graduates of the school hold positions as: high-school teachers of physical education and health education; athletic coaches; directors of high-school athletics; supervisors of health and physical education; community recreation and playground directors; leaders in Y.M.C.A., Y.W C.A, and other youth-organiza tion work; directors of restricted and corrective physical education; workers in the field of physical therapy; college and university teachers and research worker in child growth, health education, physical education, and dance.

Graduate Study. The School of Health, Physical Education, and Recreation offers graduate work leading to the Master of Arts, Master of Science, Doctor of Education, and Doctor of Philosophy degrees

Candidates for the master's degree may major in one of the following seve areas or in a combination of related areas: (1) administration of programs, build ings and grounds; (2) school health education; (3) corrective activities and physical therapy; (4) recreation and park management; (5) anatomy, kinesiology, and physiological training and conditioning factors; (6) morphological, physiological, and motor aspects of child growth; (7) measurement and evaluation in physical education.
$\mathrm{Ph} . \mathrm{D}$. and D.Ed. candidates are expected to concentrate in one of the follow-

[^56]ing fields of specialization: (1) administration; (2) health education; (3) child growth and development ; (4) corrective physical education; (5) scientific base of physical education ; (6) recreation and park management. The $\mathrm{Ph} . \mathrm{D}$. disserta tion must be an original contribution to knowledge.

Advance study in dance may be arranged under the interdisciplinary master's rogram (see page 118)

Fees. Payment of regular University registration fees entitles every student to the use of gymnasiums, pools, and showers, to the use of gymnasium and swimming suits and towels, and to laundry service, whether or not they are registered for physical-education courses. Students are urged to make full use of the gymnasium facilities for exercise and recreation

Facilities. The University's buildings and playfields devoted to physicaleducation instruction and recreation occupy a 42-acre tract at the southeast corner of the campus. The Physical Education Building provides offices, classrooms, study halls, and research laboratories for the school and gymnasium facilities for men The building is planned especially for the professional preparation in physical education, as well as for the recreational needs of students. The men's swimming pool is adjacent to the Physical Education Building.

The women's gymnasium and the women's swimming pool are in Gerlinger Hall, west of the Physical Education Building across University Street. There are playing fields for women south and west of Gerlinger.

Adjoining the Physical Education Building to the south is McArthur Court, basketball pavilion and athletic center of the Associated Students. McArthur Court seats over 10,000 spectators.

Playing fields located east and south of the Physical Education Building provide excellent facilities for outdoor class instruction and for intramural and intercollegiate sports. Hayward Stadium, the Associated Students' athletic field, has seats for 23,000 spectators. North of Hayward Stadium are six standard concrete tennis courts. Eight additional courts are located south of the Education Building.

Institute of Recreation Research and Service. The Institute of Recreation Research and Service, maintained by the School of Health, Physical Education and Recreation in conjunction with its instructional program in recreation and park management, assists comnunities in the development of recreation, park, and youth-service resources, conducts research in various aspects of recreation development, and provides information on research findings ald nation-wide community experience as a basis for the solution of recreation problems. The Institute sponsors conferences and workshops, and weicomes requests for information and assistance from public and private recreation agencies.

Secondary-School Teaching of Health and Physical Education. For certi fication as a teacher of health and physical education in Oregon high schools, the Oregon State Department of Education recuuires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation. The following programs meet state standards and the requirements for recommendation by the University of Oregon.

Physical Education. The program includes required undergraduate courses and additional courses required for permanent certification after a fifth year of preparation:

| undergraduate | Term Hours |
| :---: | :---: |
| Principles \& Practices of Physical Education (PE 341) | 3 |
| Class Techniques in Physical Education (PE 342) | - 3 |
| Organization \& Admin. of Physical Educ. ( PE 343 ) | .. 3 |
| The School Program (PE 445) | 3 |
| Human Anatomy (Bi 391, 392) | - 6 |
| Human Physiology ( $\mathrm{Bi}^{\text {312, 313 }}$ ) | - 6 |

## Fundamentals of Body Movement \& Ga mes, Track and Fiel

Elementary Apparatus (PE 295) ........ nes, Track and Field (PE 195)
ara Sports Square Dance (PE 395)
Wrestling \& Weight Training (PE 495)

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            95)
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            95)
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            95)
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            95)
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            95)
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                    professional
    Tumbling, Apparatus, Track \& Field,
Individual \& Dual Sports Swime
Individual \& Dual Sports, Swimming (PE 294 )
Basic Physical Education, Field Sports. Tric (PE 294)
Square \& Ballroom Dancing, Softhall
Contemporary Dance, Basketball, Volleyball (PE 4ing (PE 394) 394) $\qquad$
Corrective Phy fifth vear
Corrective Physical Education (PE 444)
Tests \& Measurements in Physical Education (PE 446)
Kinesiology (PE 472)
coucation. The program includes required undergraduate courses and tion:


## fifth year

Advanced Health Instruction (HE 543) ...
Mental Health (HE 540)
(HE 552) ....................................................
Health and Physical Education. The Oregon State Department of Education has set special subject-preparation requirements for positions involving the teaching of both health and physical education. A program for the satisfaction of these requirements may be arranged with advisers in the School of Health, Physical Education, and Recreation.

## Physical Education

THE BASIC UNDERGRADUATE CURRICULUM in physical education, leading to the Bachelor of Science or Bachelor of Physical Education degree, provides a strong program of professional work. During his freshman and sophomore years, the student obtains a sound foundation in the liberal arts and in the sciences basic to professional studies, supplemented by introductory instruction in physicaleducation theory and activities. The upper-division program is devoted principally to professional studies.

The basic program is planned to satisfy the usual needs of the student planning to teach physical education in the public schools; it includes sufficient work in health education to enable him to qualify for positions which require the teaching of both physical education and health education. Modifications of this program may be arranged for students with special interests in such fields as the dance social studies, and physical therapy. Students who elect a minor in a field other than health education are required to complete an approved program in the second feld, including 21 term hours of work beyond the introductory sequence in the field.

Superior students who are interested in preparing for careers in the scientific and research aspects of physical education may arrange a program in which greater concentration in bio'ogy, physiology, chemistry, and mathematics is substituted for certain courses directly related to preparation for secondary-school teaching.

| Lower Division T | Term Hours |
| :---: | :---: |
| General Biology (Bi 101, 102, 103) | 12 |
| Elementary Chemistry (Ch 101, 102, 103) | 12 |
| Nutrition (HEc 225) | -. 2 |
| Psychology | 9 |
| Introduction to Health \& Physical Education (PE 131) | 2 |
| First Aid (HE 252) | 3 |
| Professional activities | 12 |
| Upper Division |  |
| Human Anatomy (Bi 391, 392). | - 6 |
| Human Physiology (Bi 312, 313) | 6 |
| Princ. \& Practices of Physical Education (PE 341) | 3 |
| Class Techniques in Physical Education (PE 342) | 3 |
| Organ. \& Admin. of Physical Education (PE 343) | 3 |
| Tests \& Measurements in Physical Educ. (PE 446) | 3 |
| Scbool Program (PE 445) | 3 |
| Corrective Physical Education (PE 444) | 3 |
| Kinesiology (PE. 472), Physiology of Exercise (PE 473) <br> Personal Health Problems (HE 361), Community Health Problems (HE 362), <br> Communicable \& Noncommunicable Diseases (HE 363). |  |
|  |  |
| Health Instruction (HE 464), School Health Service (HE 465).................. | -. 6 |
| Professional activities | 12 |

Social Science Option. Majors in physical education who wish to place an emphasis on the social sciences in their studies in the liberal arts may, with the approval of the dean of the School of Health, Physical Education, and Recreation, substitute selected social science courses for a portion of the science requirement in the basic undergraduate curriculum.

Dance Option. The dance option combines professional work in physical education with special instruction in dance and related arts. There are excellent vocational opportunities in the fields of physical education and recreation for persons whose professional training includes this instruction. In addition to the dance option, the School of Health, Physical Education, and Recreation offers a major curriculum in the dance as a contemporary art form (see pages 331-333).

Pre-Physical Therapy Option. Standard schools of physical therapy, which are usually operated in conjunction with medical schools, have admission requirements with strong emphasis on foundation work in the basic sciences. The sciences included in the basic curriculum in physical education, together with the understanding of body movement and exercise activities gained in professional physicaleducation courses, provide excellent preparation for physical-therapy training. Students interested in this work may arrange a special program, within the general framework of the physical-education major, but excluding courses especially designed to meet the requirement for a teacher's certificate.

Minor for Elementary Teachers. Majors in elementary education may, in consultation with advisers in the School of Health, Physical Education, and Recreation, arrange a minor in physical education, including selected theory and activities courses in addition to work required for elementary teacher certification.

## Service Courses for Men

## LOWER-DIVISION COURSES

PE 190. Physical Education (Men). 1 hour each term, six terms.
A variety of activities taught for physiological and recreational values. Spe-
cial sections for restricted and corrective work. A total of five terms required for all lower-division men students. 3 hours a week.

## UPPER-DIVISION COURSES

PE 390. Physical Education for Junior and Senior Men. 1 hour each term, six terms.
3 hours a week

## Service Courses for Women

## LOWER-DIVISION COURSES

PE 180. Physical Education (Women). 1 hour each term, six terms
A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required
for all lower-division women students. 3 hours a week.

## UPPER-DIVISION COURSES

PE 380. Physical Education for Junior and Senior Women. 1 hour each term, six terms.
3 hours a week.

## Professional Courses <br> Lower-division courses

PE 131. Introduction to Health and Physical Education. 2 hours fall or spring. Professional orientation; basic philosophy and objectives; professional opportunities and qualifications. Puckett, Schendel.
PE 194. Professional Activities (Women). 1-2 hours each term, three terms. For professional students. Instruction and practice. Fall: field sports, basic physical education. Winter: tumbling, basketball. Spring : elementary contemporary dance, tennis.
PE 195. Professional Activities (Men). 2 hours each term, three terms. For professional students. Methods, teaching techniques, and basic skills. Fall: fundamentals of body movement, games. Winter: elementary aquatics.
Spring : track and field Spring: track and field.
PE 221. Games for the Elementary School 1 hour. Creative games, games of low organization, and fundamental sport skills suitable for elementary children. Munson.
PE 223. Fundamental Body Movement, Posture, and Tumbling. 1 hour. The mechanics of movement, posture, conditioning exercises, stunts, tumbling, son

PE 291. Life Saving in Aquatic Programs. 2 hours. Basic skills of life saving in aquatic programs; leads to American Red Cross
certification in senior life saving Open certification in senior life saving. Open to men and women students who pass
qualifying tests in swimming.
PE 292. Swimming and Water Safety Instruction. 2 hours.
Analysis, methods of instruction, and evaluation at all age levels; leads to American Red Cross certification in water safety instruction. Open to men and women students who pass qualifying tests in swimming and life saving.
PE 294. Professional Activities (Women). 1-2 hours each term, three terms. For professional students. Instruction and practice. Fall: swimming, badminton. Winter: tumbling, trampoline, and apparatus. Spring: track and field,
golf.

PE 295. Professional Activities (Men). 2 hours each term, three terms. For professional students. Methods, teaching techniques, and basic skills. Fall baseball, basketball. Winter: elementary apparatus. Spring: football and touch football.

## UPPER-DIVISION COURSES

PE 341. Principles and Practices of Physical Education. 3 hours fall.
An interpretative study and analysis of the principles and practices of physical education, through their historical development and in their present application and significance. Sprague.
PE 342. Class Techniques in Physical Education. 3 hours winter.
Organizing and conducting physical-education classes in secondary schools. Sprague, Puckett.

PE 343. Organization and Administration of Physical Education. 3 hours spring.
Planning and organizing the use of buildings, grounds, and recreational areas for the physical-education program; purchase and care of equipment; budgeting equipment and operating costs. Sprague.
PE 344. Administration of Aquatic Programs. 3 hours spring.
Organization and administration of aquatic programs. Open to men and women majors, and to others with consent of instructor.
PE 361. Care and Prevention of Injuries. 3 hours winter.
Bandaging, massage, and other specialized mechanical aids for the prevention of injuries. Analysis of types of injuries; emergency procedures. Prerequisite : Bi 391, 392. Rhoda, Sigerseth.
PE 394. Professional Activities (Women). 1-2 hours each term, three terms. For professional students. Advanced practice and teaching techniques. Fall undamental activities, held sports, or dance composition. Winter: folk, square, and ballroom dance. Spring : softball, swimming.
PE 395. Professional Activities (Men). 2 hours each term, three terms.
For professional students. Methods, teaching techniques and basic skills. Fall tennis and soccer. Winter : dance. Spring : badminton and volleyball.
PE 403. Thesis. Hours to be arranged.
Thesis based on student's own investigation. Subject chosen after consultation with adviser. Credit determined by quality of work done.
PE 405. Reading and Conference. Hours to be arranged.
Reading and assignments in connection with other courses for extra credit. Honors readings. Prerequisite: consent of instructor; approval of the dean.
PE 406. Special Problems. Hours to be arranged.
Prerequisite: approval of the dean.
PE 420. Methods in Elementary-School Physical Education. 3 hours.
Program development; methods of instruction in elementary-school physical education. The purposes and requirements of the elementary physical-education program, with emphasis on program planning, methods, and materials of instruction. Munson.
PE 444. Corrective Physical Education. 3 hours spring.
Survey of common deviations of posture and feet, functional disturbances, and crippling conditions found in school children. Consideration of the extent and limitations of the teacher's responsibility for their amelioration or improvement. Prerequisite: Bi 391, 392 ; PE 472.

## PE 445. The School Program. 3 hours winter.

Construction of physical-education and intramural programs, on the basis of accepted principles, criteria, functions, and evaluations; emphasis on integration with the total school program. Prerequisite: PE 341, PE 342. Sprague.

PE 465. Football Coaching. 3 hours winter.
Systems of play, strategy, responsibilities of the coach, public relations, conference organization. Casanova.
PE 466. Basketball Coaching. 2 hours winter.
Coaching methods and problems. Fuludamentals of team play; comparison of systems; strategy; training, conditioning; selection of inent for positious. Belko.
PE 467. Baseball Coaching. 2 hours spring.
Review of fundamentals, with emphasis on methods of instruction; problems and duties of the baseball coach, including baseball strategy, baseball psychology, training, conditioning. Kirsch.
PE 468. Track Coaching. 2 hours spring.
Principles of training; development of performance for each track event; selection of men for different events; conducting meets. Laboratory experi-
ence in PE 195 . Bowerman ence in PE 195. Bowerman.
PE 472. Kinesiology. 3 hours spring
Action of muscles involved in fundamental movements, calisthenics, gymnas tics, and athletics. Prerequisite: Bi 391, 392. Sigerseth
PE 473. Physiology of Exercise. 3 hours spring.
Physiological effects of muscular exercise, physical conditioning, and training; significance of these effects for health and for performance in activity programs. Prerequisite: Bi 312, 313. Sigerseth.
PE 494. Professional Activities (Wornen). 1-2 hours each term, three terns.
For professional students. Advanced practice and teaching techniques. Fall: basketball-volleyball officiating, intermediate contemporary dance. Winter: contemporary dance. Spring : archery, bowling, tennis.
PE 495. Professional Activities (Men). 2 hours each term, three terms.
For professional students. Methods, teaching techniques, and basic skills. Fall: wrestling and weight training. Winter: advanced apparatus. Spring: advanced aquatics or golf, handball, archery.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

PE 408. Workshop. (g) Hours to be arranged.
PE 421, 422, 423. Foundations of Elementary-School Physical Education. (g) hours each term.
Anatomical and physiological factors basic to physical education in the elementary schools; motor-skill development in children.
PE 424. Administration of Elementary-School Physical Education. (g) 3 hours.
Modern trends in elementary-school physical education ; duties of the physicaleducation specialist; organization and administration at the primary, intermediate, and upper-grade levels; evaluative procedures and techniques; the role of elementary physical education in outdoor education. Prerequisite PE 221, PE 223, PE 420, or consent of instructor. Munson.
PE 446. Tests and Measurements in Physical Education. (G) 3 hours.
Use of tests and measurement in physical education; evaluation of objectives,
programs, and student achievement through measurement techniques. Reuter.

## GRADUATE COURSES

*PE 501. Research. Hours to be arranged.
*PE 503. Thesis. Hours to be arranged.
PE 505. Reading and Conference. Hours to be arranged.
Prerequisite : approval of the dean.

* No-grade course.

PE 506. Special Problems. Hours to be arranged.
Study of selected problems in the field of physical education. Prerequisite: approval of the dean.
PE 507. Seminar. Hours to be arranged.
Anatomical, Physiological, and Kinesiological Bases of Physical Education Body Growth and Development through Physical Education.
Administration of Physical Education Service Programs.
Philosophy of Physical Education.
Advanced Study in Motor Learning.
PE 508. Workshop. Hours to be arranged.
PE 509. Practicum. Hours to be arranged.
Practical experience in handling corrective cases; to be taken in conjunction with PE 521, PE 522. PE 523.
PE 515. History and Theories of Physical Education. 3 hours fall.
The history of physical education from tlie Greeks to modern times; emphasis on modern development. Washke.
PE 516. Intramural Organization and Management. 3 hours.
Nature and purposes of intramural programs; history of their development. Departmental organization. Relationship of the program to physical-education instruction. Administrative problems. Washke.

## PE 517. Methods of Research. 3 hours.

Study of the methods and techniques of research in health, physical education, and recreation; practice in application to problems of current interest. Clarke
PE 521. Basic Procedures in Corrective Physical Education. 3 hours.
Common postural deviations; causes: basic principles underlying the prescription of exercise for those conditions which may be handled safely by the physical-education teacher; metlods of referral when advisable. Prerequisite : Bi 391, 392; PE 472.
PE 522. Advanced Corrective Procedures. 3 hours.
Survey of the orthopaedic conditions which fall in the province of the corrective physical-education specialist; recommended therapeutic procedures; he orthopaedic examination; organization of the corrective physical-education program in schools and colleges. Prerequisite: PE 521 or consent of instructor.
PE 523. Physical Education of the Handicapped. 3 hours.
The major crippling conditions, such as cerebral palsy and poliomyelitis, and functional disturbances, such as cardiac and respiratory conditions; planning the physical-education program for these conditions.
PE 530. Developmental Program in Physical Education. 3 hours.
Programs to meet individual physical-fitness and social needs through physi-cal-education activities; case-study techniques, developmental programs, development of social traits; administrative problems. Prerequisite: PE 444, PE 446. Clarke.
PE 531. Muscle Testing and Therapeutic Exercise. 3 hours.
Fundamentals of muscle re-education. Methods of determining specific muscle weaknesses ; restoration of normal function following injury.
PE 532. Heat Therapy and Massage. 3 hours.
The theory and technique of the use of heat and cold as first-aid measures and as adjuncts to rehabilitative procedures practiced by physical educators. The commonly used techniques of massage, their physiological and meclanical effect, and their application by physical educators.
PE 533. Techniques of Relaxation. 3 hours.
The common causes of fatigue and neuromuscular hypertension; methods of combating them. Theories underlying techniques of relaxation; application of these techniques in daily living and in activities.

PE 540. Statistical Methods in Physical Education. 3 hours fall.
Elementary statistics applied to research, including central tendency, variability, normal probability curve, reliability and correlation. Prerequisite : gradu-

PE 541. Statistical Methods in Physical Education. 3 hours winter.
Advanced statistics applied to research, including variance analysis, co-vari ance analysis, partial and multiple correlation, regression equations, chi square, special correlational techniques, and non-parametric processes. Prerequisite: PE 540. Clarke.
PE 542. Experimental Design in Physical-Education Research. 4 hours. Techniques and procedures of laboratory research in physical education; construction of tests; technical laboratory tests and their use; design of experiPE 540,541. Clarke.

E 550. Current Movements in Physical Education. 3 hours. The different schools of thought and practice which determine the purposes and procedures in the professional field of physical education. Analysis of the Oregon and other regional public school physical-education programs

PE 551. Administration of Physical Education. 3 hours winter Organization and administration of the physical-education program at the college level. Esslinger, Rhoda.
PE 552. Administration of Athletics. 3 hours
Historical development of athletics and their control. Place of athletics in education; purposes, administrative control, management, operational policies, care of equipment and facilities. Sprague.
PE 553. Motor Skill Learning. 3 hours.
Review of the psychology of learning as it pertains to motor skills; research PE 517, Pe pe the teaching and learning of gross motor skills. Prerequisites : PE 517, PE 540, at least one year's teaching experience. Brumbach.
PE 556. Administration of Buildings and Facilities. 3 hours,
Building layout and equipment; the relationship of the various functional units-equipment service, dressing facilities, activity spaces, administrative units, permanent and dismantleable equipment. Rhoda.
PE 557. Supervision of Physical Education for City Supervisors. 3 hours. The purpose of supervision; supervision of staff, facilities, and areas; departmental organization, regulations, and policies. Sprague.
PE 558. Curriculum Construction in Physical Education. 3 hours.
Basic elements and procedures of curriculum construction in physical educaand administrators of physical-education prond state levels. For supervisors
PE 559. Professional Preparation in Physical Education. 3 hour
Historical development of professional preparation in the field of physical education; curriculum, evaluation, and recruitment in the development and conduct of teacher-education programs in physical education. Sprague.
PE 561. Foundations of Physical Growth. 3 hours.
Concept of growth, objectives in studying growth, procedures in collection and analysis of growth data. Physical growth from the beginning of prenatal life to the close of infancy. Prerequisite: $\mathrm{Bi} 391,392, \mathrm{PE} 472, \mathrm{PE} 540$.
PE 562. Changes in Body Size and Form During Childhood and Adolescence. 3 hours.
Growth in external dimensions and proportions from late infancy to early adulthood. Differences associated with sex, puberty, socio-economic status, race, secular periods, health regimen. Prerequisite: PE 561.

PE 563. Growth of Body Tissues and Organs. 3 hours.
Study of materials important to teachers and others concerned with child growth. Ossification of the child's skeleton, calcification and eruption of teeth, morphologic development of heart and voluntary musculature, age changes in subcutaneous adipose tissue. Prerequisite: PE 561.
PE 564. Morphologic and Physiologic Appraisement of School Children. 3 hours.
Critical examination of various proposals for evaluating individual status and progress; emphasis on measurement proposals suitable for use in school health progress; emphasis on measurement proposals suitable for use in sch
and physical-education programs. Prerequisite: PE 446 or HE 465.
PE 566. Research Methodology for Child Growth. 3 hours.
Anthropometric instruments, landmarks, and methods; reliability of measurements and ratings; application of biometric procedures.
PE 567. Motor Development in Infancy and Childhood. 3 hours
Study of the acquisition of motor skills during the first decade of life. Prerequisite : PE 446 or Psy 460, or consent of instructor.
PE 572, 573. Gross Anatomy. 3 hours each term.
Principles and facts in the fields of myology, osteology, arthrology, neurology, and angiology of importance to college teachers of physical education who give instruction in anatomy, kinesiology, and physiology of exercise. Application to body movement and performance. Prerequisite: Bi 391, 392, or equivalent. Sigerseth.
PE 574. Physiological Principles of Advanced Conditioning. 3 hours.
Physiological principles and facts upon which conditioning for competition in athletic activities and physical performances should be based. Direct application to training for competition in major sports and individual activities. Prerequisite: Bi 312, 313: PE 473. Sigerseth.

## PE 575. Mechanical Analysis of Motor Skills. 3 hours.

Analysis of various physical-education activities to determine their relation to laws of physics concerning motion, force, inertia, levers, etc. Prerequisite: Bi 391, 392, PE 472, or equivalent. Sigerseth.

## Dance

A MAJOR CURRICULUM IN THE DANCE as a contemporary art form and a major option combining work in physical education and the dance (see page 325 ) are offered by the School of Health, Physical Education, and Recreation. The major curriculum provides a broad cultural education and instruction in related arts; the requirements are:

Lower Division
Term Hours
General Biology (Bi 101, 102, 103) or foreign language.
Personal Health (HE 250)
Introduction to Musie \& Its Literature (Mus 201, 202, 203
12

Professional activities
Electives in supporting fields.....................................
Intro. to Cultural Anthropolog (Ant 207, 209)
Intro. to Cultural Anthro
Psychology ..................
Psychology ................
Survey of Visual Arts (ArH 201, 202, 203) or foreign language
Introduction to Darce (PE 251)
Fundamentals of Rhythm (PE 252)
Rhythms for the Elementary School (PE 222).
Professional aetivities
Electives in supporting fields
Upper Division
History of Philosophy (Phl 301, 302, 303).
Peoples of the World (Anth 314, 315, 316). $\qquad$
degree.

Elementary Dance Composition (PE 351)
Advanced Dance Composition (PE 352)
Dance Accompaniment (PE 353)...
Aesthetics (Phl $441{ }_{442}$ 443) ${ }^{\text {ance }}$.
Techniques of Teaching Contemp
Dance Programs and Production (Pary Dance (PE 494)
History of Dance to 1900 (PE 452).
History of Dance since 1900 (PE 453).
Human Anatory (Bi 391, 392), Kinesiology (PE 472), or year sequence in art, Dance \& P.E. Lab. (PE
lectives in supporting fields 455,456 )

## LOWER-DIVISION COURSES

## PE 222. Rhythms for the Elementary School. 1 hour spring

The dance program for children in the elementary school, grades one through six. Locomotor and nonlocomotor movement; dramatization and creative child
PE 251. Introduction to the Dance. 2 hours fall.
An overview of the dance. Introduction to dance history and to the significance of dance as an art form. Dougherty.
PE 252. Fundamentals of Rhythm. 2 hours spring.
Rhythm as a basic factor for movement. Rhythmic devices used in the dance. Notation and rhythrnic analysis. Offered alternate years.
PE 254, 255, 256. Dance and Physical Education Laboratories. 2 hours each term.
Instruction and practice. Fall : contemporary dance; winter : folk and square dance; spring : contemporary dance.
PE 257. Movement Notation. 3 hours.
Instruction and practice in labanotation, a process of recording bodily movement on paper; the conversion of the elements of space, time, and bodily movement into symbols which can be read back and reinterpreted into
movement.

## UPPER-DIVISION COURSES

PE 351. Elementary Dance Composition. 3 hours fall.
Analysis of the dance medium, and the relationship of the aspects of time space, and force to that medium. Principles of form basic to dance composition.
PE 352. Advanced Dance Composition. 3 hours winter.
Compositional forms and styles in dance. Preclassic and modern dance forms. Prerequisite: PE 351.
PE 353. Dance Accompaniment. 3 hours spring
Function of accompaniment for dance skills and composition. Types of accom-paniment-instrumental, percussion, voice. Prerequisite: PE 351. Dougherty
PE 354, 355, 356. Dance and Physical-Education Laboratories. 2 hours each term.
Advanced instruction and practice. Fall and winter: dance, composition; spring : ballroom dance
PE 403. Thesis. Hours to be arranged.
PE 406. Special Problems. Hours to be arranged.
PE 451. Dance Programs and Production. 3 hours winter.
Production problems of staging, lighting, and costuming for the dance; dance demonstration and concert. Construction of a dance program as a part of the physical-education program for the secondary schools.

PE 452. History of the Dance to 1900. 3 hours fall.
Historical survey of the dance and its relationship to other arts from the basic cultures through the late Middle Ages. Dougherty.
PE 453. History of the Dance since 1900. 3 hours spring.
Development of the dance in America. Influences of leading dance artists; dance in education ; dance in psychotherapy. Dougherty.
PE 454, 455, 456. Dance and Physical-Education Laboratories. 2 hours each
Advanced instruction and practice. Fall: technique of teaching contemporary dance; winter : dance workshop; spring : dance workshop.

## Health Education

A MAJOR PROGRAM OF UNDERGRADUATE STUDY is offered for students who wish to specialize in health education. A few Oregon public school systems and many schools in other states organize their health instruction as the responsibility of one specially trained teacher. Excellent vocational opportunities are available in such schools and with public and voluntary health agencies for persons with professional training in health education. The curriculum provides a strong basis for graduate work in health education, public health, physical therapy, and the health sciences. The requirements are as follows:

Lower Division Term Hours


Dental-Hygiene Option. Students who complete the two-year curriculum in dental hygiene, offered by the University of Oregon Dental School in Portland, may satisfy the requirement for a B.S. degree, with a major in health education, on the satisfactory completion of two additional years of work on the Eugene campus of the University. Under an alternative plan, dental-hygiene students may begin their University work with one year of study on the Eugene campus, transfer to the Dental School for two years, and return to the Eugene campus in their senior year to complete general University and professional requirements for a bachelor's degree and requirements for a major in health education.

## Service Courses

## LOWER-DIVISION COURSES

## HE 150. Health Education. 1 hour any term

Study of personal health problems which confront the college student; the
basic scientific principles of healthful living. Meets the health-education requirement for men or women. Furrer, Jacobson, Kime
HE 250. Personal Health. 3 hours any term.
Study of the personal health problems of university men and women, with emphasis on implications for family life. Mental health, communicable diseases, degenerative diseases, nutrition. Satisfies the University requirement in health education for men or women. Furrer, Gillespie, Haar, Jacobson, Malumphy, Kime, Puckett, Smith, Tuck.
HE 251. Community Health. 3 hours winter.
Methods of handling health and sanitation problems in the community, with special reference to water supply, food and milk sanitation, sewage disposal, insect and rodent control ; state and county health departments. Kime.
HE 252. First Aid. 3 hours any term.
Immediate and temporary care for a wide variety of injuries or illnesses; control of bleeding, care for poisoning, and proper methods of transportation, splinting, and bandaging. Successful completion of course leads to Red Cross standard, advanced, and instructors' certificates. Brumbach, Schendel, Smith, Washke.

## Professional Courses

## UPPER-DIVISION COURSES

HE 359. Safety Education. 3 hours spring
Basic principles of safety education; current safety programs as they apply to
the school, home, and community Individual and the school, home, and community. Individual and group projects in the or-
ganization of materials for teaching safety education in public schools. Smith.
HE 361. Personal Health Problems. 3 hours fall.
For health teachers in the public schools. Hygienic care of the body and other personal health problems important in health instruction. Prerequisite : junior standing in health or physical education, or consent of instructor. Kime.
HE 362. Community Health Problems. 3 hours winter.
Basic community health problems important in public school health instruction. Designed primarily for teachers and community leaders. Prerequisite : junior standing or consent of instructor. Gillespie.
HE 363. Communicable and Noncommunicable Diseases. 3 hours spring. Nature, prevention, and control of common communicable diseases, considered in relation to health instruction in the public schools. Prerequisite: junior standing in science or health and physical education. Gillespie.
HE 364, 365, 366. Introduction to Public Health. 3 hours each term.
Functions and organization of public health; vital statistics; consumer health problems; functions of voluntary and governmental health organizations; health education in Oregon public schools, with special emphasis on health teaching in the junior and senior high schools. Admission after fall term only with consent of instructor. Prerequisite: junior standing in science or health and physical education. Haar.
HE 405. Reading and Conference. Hours to be arranged.
HE 407. Seminar. Hours to be arranged.
HE 467. Driver Education. 3 hours.
Designed to prepare teachers to conduct driver-education courses in the secondary schools. Use of teaching devices, development of instructional units, behind-the-wheel instruction. Kime.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

HE 408. Workshop. (g) Hours to be arranged.

HE 450. Elementary-School Health Education. (g) 3 hours
The purposes and requirements of the school health service program, with emphasis on organization and procedures for the school health examination. Organization and presentation of teaching materials based on the health needs of the child, community needs, and school health services. Tuck.
HE 463. Social Health. (G) 3 hours.
Social-health content, methods, and materials appropriate for junior and senior high schools. Prerequisite: senior standing in health education or biology; graduate standing in education or physical education. Tuck.
HE 464. Health Instruction. (G) 3 hours fall.
Methods and materials in health instruction for junior and senior high schools. Special emphasis on the construction of health teaching units for Oregon secondary schools. Prerequisite: HE 361, 362, 363 or consent of instructor. Gillespie.
HE 465. School Health Service. (G) 3 hours winter.
Purpose and procedures of health service in the schools; control of common communicable diseases; technique of pupil health appraisal by the teacher. Prerequisite: HE 361, 362,363 or consent of instructor. Haar, Tuck.

## HE 466. Evaluation of School Health Education. (G) 3 hours

Appraisal and evaluation of the program in terms of objectives and standards, with special emphasis on health education in Oregon junior and senior high schools. Prerequisite : HE 361, 362, 363, HE 464, 465; or consent of instructor. Kime.

## GRADUATE COURSES

*HE 501. Research. Hours to be arranged.
*HE 503. Thesis. Hours to be arranged.
HE 505. Reading and Conference. Hours to be arranged.
HE 506. Special Problems. Hours to be arranged.
Study of selected problems in the field of health education.
HE 507. Seminar. Hours to be arranged.
Seminars dealing with special aspects of health education are conducted each term. Open to qualified graduate students.
HE 508. Workshop. Hours to be arranged.
HE 540. Mental Health. 3 hours.
The scope of the mental health problem; techniques of identification and methods of preservation and improvement of the well-being of individuals. Smith.
HE 542. Basic Issues in Health Education. 3 hours.
Current basic issues and problems in school health education; economic and social forces affecting health education; implications for programs. Haar,
HE 543. Advanced Health Instruction. 3 hours spring.
Organization of the public-school health-instruction program; for health teachers, supervisors, and coordinators. Basic steps in the development of the program. Prerequisite : HE 464 or consent of instructor. Smith.
HE 552. Administration of School Health Education. 3 hours winter. Organization and administration of the school health program. Haar.

## Recreation and Park Management

THE DEPARTMENT OF RECREATION AND PARK MANAGEMENT offers programs of undergraduate and graduate professional study planned to * No-grade course.
prepare young men and women for careers in leadership, supervision, and management of recreation, park, and youth-serving agencies. The programs provide a broad liberal education, together with professional and technical studies essential for careers in the field. Graduates in recreation and park management become recreation directors in community centers, playgrounds, the armed forces, industries, hospitals, churches, and institutions; directors, supervisors, and secretaries in youth-serving agencies; superintendents and managers of park departments and districts; administrators of recreation in cities, counties, and state agencies; and directors of camping and outdoor education.

The undergraduate major programs lead to the Bachelor of Science degree and provide a foundation for graduate work leading to the Master of Science and doctoral degrees.

Requirements for Bachelor's Degree. The undergraduate curriculum in recreation management places strong emphasis on courses designed to give the student a broad liberal education, together with professional study in recreation leadership and management. The requirements include: (1) courses in liberal arts which satisfy general University requirements for a bachelor's degree; (2) a core of basic professional courses ; (3) a minimum of 36 term hours in recreation management, including (a) a core of basic professional courses and (b) courses providing concentration in one of five professional options; (4) a minimum GPA of 2.50 in recreational management courses; (5) a minimum of 93 term hours of work outside the School of Health, Physical Education, and Recreation.

Liberal arts requirements include Fundamentals of Speech ( $S_{p} 121$ ) and minimum of 36 term hours in social science, including General Sociology (Soc 204, 205, 206) and one term of introductory psychology.

The professional core required of all majors includes the following courses:

|  | Term Hours |
| :---: | :---: |
| Recreation in Society (RM 150) |  |
| History \& Theory of Recreation (RM 251) | 3 |
| Recreation Leadership (RM352) | 3 |
| Organization \& Administration of Recreation (RM 370) | 3 |
| School \& Community Recreation Programs (RM499) | 3 |
| Recreation Field Work (RM 415) | 9 |

Options are offered in the following five areas of concentration:
Park and Recreation Administration. The option in park and recreation administration is designed to provide preparation for careers in the management of public park and recreation programs and in the supervision and administration of recreation in public and private agencies or institutions. Emphasis is placed on management techniques, managerial problems, park and recreation organization and operation, and recreation programs and service. The work includes training in phases of landscape architecture and urban planning related to recreation. The major requirements, in addition to the core program, are:

|  | Term Hours |
| :---: | :---: |
| Parks, School Grounds \& Recreation Areas (LA 411 412 | 6 |
| Recreation \& Natural Resources (RM 492) or Youth Agencies (RM 395) | 9 3 |
| Recreation \& Park Facilities (RM 497) .......................................... | 3 |

Youth Agencies. The youth-agencies option provides preparation for careers in voluntary youth-serving recreation organizations and clubs (Y.M.C.A., Y.W.C.A., Boy and Girl Scouts, etc.). Emphasis is placed on community leadership, group work, and the role of recreation in the social structure of the community. The major requirements, in addition to the core program, are :

|  | Term Hou |
| :---: | :---: |
| Camp Counseling (RM 290) or approved elective | .. 3 |
| Camp Administration (RM 391) | 3 |
| Youth Agencies (RM 394, 395) | 6 |
| Human Development \& Learning (Ed 315) | 5 |
| Professional activities | . 6 |

Recreation Leadership. The option in recreation leadership is designed to prepare students for leadership in recreation programs in community and youth centers, playgrounds, hospitals, institutions, service clubs in the armed forces, etc. The major requirements, in addition to the core program, are:

Program Specialties. The option in program specialties is designed to prepare students for careers in special recreation program areas such as music, arts and crafts, dance, drama, physical education, or athletics. Emphasis is placed on the development of a high degree of competency in a field of specialization currently represented in recreation programs. In consultation with his adviser, the student elects from 24 to 35 hours in courses in a field of specialization. The major requirements, in addition to the core program, are:

|  | Term Hour |
| :---: | :---: |
| Camp Counscting (RM 290) or approved elective |  |
| Youth Agencies (RM 394). | - 3 |
| Recreation Leadership (RM 352) | 3 |
| Human Development \& Learning (Ed 315) | 5 |
| urses in area of specializa |  |

Camping and Outdoor Education. The option in camping and outdoor education is designed to prepare students for careers in camp management, supervision, or outdoor education in the public schools. The major requirements, in addition to the core program, are :

```
Music Fundamentals (Mus
Camp Counseling (RM 290)
Org \& Adming (RM 290)
Org. \& Admin. of Camping (RM 391
Camp Administration (RM 391 )
Principles of Outdoor Education (RM 490)
Recreation \& Natural Resources (RM 492)
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$-12$

## LOWER-DIVISION COURSES

RM 150. Recreation in Society. 3 hours.
Concept of community recreation; scope of recreation in American life; the role of recreation, parks, and sports in human experience and in the structure of community living. Rodney, Neal.
RM 251. History and Theory of Recreation. 3 hours fall
Introduction to the basic historical and philosophical foundations of leisure and recreation. Neal.
RM 290. Camp Counseling. 3 hours winter.
Orientation to youth work in camps; examination of the values and objectives of organized camps; understanding campers, camp programs, and staff responsibilities. Ford.
*RM 503. Thesis. Hours to be arranged
RM 505. Reading and Conference. Hours to be arranged
Prerequisite: approval of department head.
RM 506. Special Problems. Hours to be arranged.
Study of selected problems in recreation. Prerequisite: approval of depart ment head.
RM 507. Seminar. Hours to be arranged
Basic Issues in Parks and Recreation.
Public Park Administration.
Problems of Recreation Finance
Administrative Problems of Recreation.
Foundations of Recreation.
Youth and Leadership.
RM 508. Workshop. Hours to be arranged.
RM 552. Principles and Problems of Recreation Supervision. 3 hours.
The purpose of supervision; principles ànd techniques of supervision in a modern program of recreation; staff relationships; departmental organization policies, regulations, problems. Rodney
RM 553. Administration of Recreation. 3 hours winter.
Organization and administration of recreation programs in recreational districts, communities, and municipalities; legal aspects, source of funds, types of programs. Rodney.
RM 554. Problems of Camp Management. 3 hours.
Analysis of problems under various types of camp sponsorship; principles echniques, resources, administrative practices, principles and problems of leadership and group behavior. Rodney, Ford.

* No-grade course.


## School of Journalism

John L. Hulteng, M.S., Dean of the School of Journalism

Professors: C. T. Duncan, J. L. Hulteng, W. C. Price, W. F. G. Thacher (emeritus), G. S. Turnbull (emeritus), R. M. Wales.*
Associate Professors: B. L. Freemesser, R. C. Hall (emeritus), R. P. Nelson, G. R. Rarick, C. C. Webb. $\dagger$

Assistant Professors: J. D. Ewan, K. J. Nestvold.
Lecturer: F. H. Loggan.
Instructor: M. M. Norton.
Assistants: G. T. Carver, Barbara L. Cloud, R. E. Heller, R. V. Hudson, J. J. O'Brien.

A DEPARTMENT OF JOURNALISM was organized at the University of Oregon in 1912, and was raised to the rank of a professional school in 1916. The school is accredited by the American Council on Education in Journalism.

Admission. The major program in journalism is organized on an upperdivision and graduate basis. During his freshman and sophomore years, a student planning to specialize in journalism pursues a preprofessional program which will insure a sound educational basis for professional study at the upper-division level.

Introduction to Journalism (J 224, 225, 226) is required of all prejournalism students. The following basic courses are open to sophomores: Mechanics of Publishing (J 321) ; Reporting I (J 361) ; Principles of Advertising (J 341); Copy Editing I (J 371).

Prejournalism students are advised: (1) to complete as many as possible of the courses in liberal arts which are required and recommended by the school; (2) to gain proficiency in the use of the typewriter; and (3) to participate in extracurricular journalistic activities.

Requirements for Bachelor's Degree. In its requirements for an undergraduate major, the School of Journalism places strong emphasis on courses which will provide a broad liberal education. The requirements in liberal arts are as follows:

Lower Division-(1) English or American literature, 18 term hours; (2) history, 9 term hours; (3) economics and political science, 9 term hours in each field, or 9 term hours in either economics or political science and 9 term hours in one of the following fields: anthropology, geography, philosophy, psychology, sociology. All journalism majors are encouraged to study one foreign language through the second-year college level.

Upper Dizision-At least two 9-hour sequences in liberal arts courses.
The professional requirements for a bachelor's degree with a major in journalism are as follows :
(1) Introduction to Journalism (J 224, 225, 226).
(2) A minimum of 33 term hours in upper-division professional courses (the

[^57][340]
total number of upper- and lower-division hours combined should be limited to 46 hours within the first 186 hours of an undergraduate program).
(3) At least two courses or sequences chosen from each of the following three groups: Group A-Reporting I (J 361) ; Reporting II (J 462); Magazine and Feature Writing I (J 468) ; Advertising Copy Writing (J 446) ; Radio-Television News I (J 431). Group B-Copy Editing I (J 371) ; Copy Editing II (J 372) ; Magazine Editing (J 470) ; Seminar: Picture Editing (J 407). Group C-Law of the Press ( J 485) ; History of Journalism (J 487) ; Journalism and Public Opinion (J 494) ; Senior Thesis (J 403).
(4) A minimum cumulative grade-point average of 2.25 .

In consultation with his adviser, a journalism major selects professional courses which will provide a measure of concentration in a special field of journalism. The following concentration programs are recommended :

Advertising-Principles of Advertising (J 341) ; Advertising Copy Writing ( J 446) ; Advertising Layout (J 447). Courses selected from the following: Media of Advertising (J 441, 442, 443), Advertising Production (J 440), Advertising Agencies and Departments (J 445), Advertising Problems (J 444), Photography (J 335), Reporting I (J 361), Mechanics of Publishing (J 321).

News-Editorial-Reporting I (J 361) ; Copy Editing I and II (J 371, 372) ; Reporting II (J 462) ; History of Journalism (J 487) ; courses selected from the following: Mechanics of Publishing (J 321), Law of the Press (J 485), Magazine and Feature Writing (J 468, 469), The Community Newspaper (J 424), Photography (J 335)

Newspaper Management-Mechanics of Publishing (J 321); Principles of Advertisilig (J 341) ; Reporting I (J 361) ; Copy Editing I (J 371) ; The Community Newspaper (J 424) ; Newspaper Management (J 421) ; courses selected from the following : Reporting II (J 462), Photography (J 335), Law of the Press ( J 485), Advertising Copy Writing (J 446) ; Advertising Layout (J 447), Advertising Production (J 440).

Radio-Television Journalism-Radio-Television News I and II (J 431, 432) ; Seminar: Radio-Television Station Management ( J 407 ) ; courses selected from the following : Radio and Television Workshop ( $S_{p}$ 341, $S_{p} 345$ ), Photography (J 335), Reporting II (J 462), Radio-Television Direction (Sp 444), Radio-Television Production (Sp 445), Radio-Television Programming (Sp 446), Seminar: Television News Film (J 407), Media of Advertising (J 441, 442, 443), Radio and Television Script Writing ( $\mathrm{Sp} 347,348,349$ ).

Magazine Journalism-Magazine and Feature Writing (J 468, 469) ; Magazine Editing ( J 470 ) ; courses selected from the following : Mechanics of Publishing (J 321), Principles of Advertising (J 341), Copy Editing I (J 371), Seminar : Industrial Editing (J 407), Advertising Copy Writing (J 446), Advertising Layout (J 447), Law of the Press ( J 485 ).

Public Relations-Principles of Public Relations (J 459) ; Public Relations Problems (J 483) ; courses selected from the following: Mechanics of Publishing (J 321), Principles of Advertising (J 341), Reporting I (J 361), Seminar: Industrial Editing (J 407), Seminar : Documentary News Film (J 407), Advertising Production (J 440), Media of Advertising (J 443), Advertising Copy Writing ( J 446), Advertising Layout (J 447).

Visual Communication-Photography (J 335); Photojournalism (J 336); Seminar : Picture Editing (J 407) ; courses selected from the following : Seminar: Television News Film (J 407), Reporting I (J 361), Radio and Television Work-
shop (Sp 341, Sp 345), Principles of Advertising (J 241), Advertising Layout (J 447), Public Relations Problems (J 483), Magazine Editing (J 470), History of Journalism (J 487).

Secondary-School Teaching of Journalism. For certification as a teacher of journalism in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation

To meet the state standards in journalism and the requirements for recommendation by the University of Oregon, the student should complete the following program: undergraduate--Reporting I (J 361). Copy Editing I (J 371), The Press and Society (J 450) ; fifth year-Reporting II (J 462), Copy Editing II (J 372), Supervision of School Publications (J 455) ; additional recommended preparation-Mechanics of Publishing (J 321), Photography (J 335), Principles of Advertising (J 341).

For further information, the student should consult a member of the journalsim faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Graduate Study. The School of Journalism offers work leading to the Master of Arts or Master of Science degree. Programs are provided for candidates with considerable journalistic experience and for those with little experience, under the following plans:

Plan $A$. Thesis required. Designed for students with an extensive background in journalism. The candidate may, on request, be permitted to satisfy the major requirement with less than the normal 30 term hours of work in journalism.

Plan B. Thesis optional. Designed for students with little or no journalistic background. The candidate may take a maximum of 40 term hours of work in journalism. If he elects not to write a thesis, he must submit three term papers, written under the supervision of his adviser.

Facilities. The School of Journalism is housed in Eric W. Allen Hall, a threestory brick structure erected in 1954 and named in memory of the late Eric W. Allen, the first dean of the School of Journalism. Fully equipped laboratories are provided for newswriting, editing, advertising, radio-television news (the school has its own broadcasting studios), photography, and typography. Current files of newspaper and trade publications are maintained in the Journalism Reading Room; University Library has an excellent collection of the literature of mass the University Limmuncations. The School of Journalism receives the regular newspaper, radiocommunications. The School of Journalism receives the regular newspaper, radioUnited Press International. Offices of the Oregon Daily Emerald, the University student newspaper, are located on the third floor of Allen Hall. The Eric W. Allen Seminar Room, furnished by contributions from friends and alumni of the school, is a center for meetings of journalism seminars and student groups.

The Oregon Newspaper Publishers Association and the Oregon Association of Broadcasters have their offices in Allen Hall. The school and these associations cooperate in providing placement services for journalism graduates. The Oregon Scholastic Press also has its headquarters in Allen Hall.

Scholarships, Awards, and Financial Aid. For scholarships established specifically for students of journalism, see pages 102-103; for journalism prizes and awards, see page 109 .
'rhe interest from a $\$ 15,000$ endowment fund, bequeathed to the University by the late Mrs. C. S. Jackson, widow of the founder of the Oregon Journal, provide! no-interest loans to men students majoring in journalism.

A fund established by Zeta chapter of Gamma Alpha Chi, professional society for women in advertising, provides loans for women students majoring in journalism. A fund established and administered by the Oregon Press Women provides loans for senior women majoring in journalism.

LOWER-DIVISION COURSE
J 224, 225, 226. Introduction to Journalism. 2 hours each term.
Required of prejournalism majors; open to nonmajors. Survey of journalistic fields; discussion of the fundamentals of reporting. copyediting, advertising, and technical processes. The terms need not be taken in sequence. Nelson, staff.

## UPPER-DIVISION COURSES

J 321. Mechanics of Publishing. 3 hours.
Printing processes and machinery, including their history; recognition of type faces, typographical display, copy fitting; typesetting machines, stereotyping, letterpress, off set, rotogravure, engraving; paper and ink; relationship of mechanical to business and editorial departments. Lectures and laboratory. Webb.
J 335. Photography. 3 hours.
Study of principles of photography, emphasizing processing and printing of pictures. Consideration given to photographic criticism and communicative aspects of photography. Lectures and laboratory. Freemesser.
J 336. Photojournalism. 3 hours.
Study of the documentary and informational aspects of photojournalism. Creation and editing of a photographic essay; use of color in photography; trends in pictorial journalism. Prerequisite: J 335 or consent of instructor.
Freemesser.
J 341. Principles of Advertising. 3 hours.
Advertising as a factor in the distributive process; the advertising agency; the "campaign"; the funiction of research and testing; the selection of media: newspaper, magazine, broadcasting, outdoor advertising, direct mail. Ewan, Wales.
Sp 341. Radio and Television Workshop. 2 hours.
For description, see Speech.
Sp 347. Radio and Television Script Writing. 2 hours.
For description, see Speech.

## J 361. Reporting I. 4 hours.

Basic training in news writing and reporting; coverage of city and county affairs; reporting of special news. Lectures, individual conferences, laboratory. affairs; re
Hulteng.
J 371. Copy Editing I. 3 hours.
Instruction and practice in copyreading and headline writing for the newspaper; emphasis on grammar and style. The class edits the daily teleprinter report of the Associated Press or the United Press. Lectures and laboratory. Prerequisite: J 321, J 361. Price.
J 372. Copy Editing II. 3 hours.
Instruction and practice in technical and subjective problems involved in evaluation, display, make-up, and processing of written and pictorial news matter under time pressure. Prerequisite: J 371. Price.
J 401. Research. Hours to be arranged.
J 403. Thesis. Hours to be arranged.
J 405. Reading and Conference. Hours to be arranged.
*J 425. Advanced Practice. 1 to 3 hours
Field experience in news and advertising practice. Prerequisite: consent of instructor.
J 431. Radio-Television News I. 3 hours
Gathering and writing news for broadcast media. Emphasis on broadcast style, basic aspects of radio-television news writing, and radio news operation. Lectures, individual conferences, and laboratory. Nestvold.

## UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 407. Seminar. (G) Hours to be arranged.
Editorial Cartooning
Industrial Editing.
Documentary News Film.
Picture Editing.
Radio-TV Station Management
Radio-TV Problems.
History of Photography.
Visual Communication Survey.
J 421. Newspaper Management. (G) 3 hours.
Management problems of the newspaper; plant and equipment ; personnel ; administration and coordination of editorial, advertising, and mechanical departments; business office operations. Webb

## J 424. The Community Newspaper. (G) 3 hours.

The weekly, semiweekly, and small daily newspaper in America; historical development and social role, past and present; problems of news and editorial policy peculiar to this distinctive form of journalism
J 432. Radio-Television News II. (G) 3 hours.
Advanced aspects of the preparation, reporting, and broadcasting of radiotelevision news. Emphasis on television news writing and reporting, the broadcast documentary, and radio-television news interviewing. Lectures and laboratory. Prerequisite : J 361 or J 431. Nestvold.
J 440. Advertising Production. (G) 3 hours.
Instruction in the technical aspects of advertising. Printing and engraving, lithography, rotogravure, silk-screen process, paper, ink, and color. Production planning of advertising materials. Lectures and laboratory. Prerequisite
J 321, J 341. Webb.
J 441, 442, 443. Media of Advertising. (G) 2 hours each term.
Examination and evaluation of the principal media of advertising, including newspapers and magazines, radio and television, outdoor, point-of-sale direct mail; organization, operation, policy, and problems. Prerequisite: J 341 Ewan, Wales.
J 444. Advertising Problems. (G) 3 hours.
The student is given an opportunity to cultivate his judgment through consideration of actual marketing and merchandising problems, in the solution of which advertising may be a factor. Prerequisite: J 341. Wales.
Sp 444. Radio-Television Direction. (G) 3 hours.
For description, see Speech.
Sp 445. Radio-Television Production. (G) 3 hours. For description, see Speech.
Sp 446. Radio-Television Programming. (G) 3 hours. For description, see Speech.
J 445. Advertising Agencies and Departments. (G) 3 hours.
The role of the advertising agency in the creation of advertising materials, marketing plans, and research; structure and function of the agency; client

[^58]relations; merchandising; personinel; fuancial operations; legal problems. The company advertising department. Wales.
J 446. Advertising Copy Writing. (G) 3 hours.
Theory and practice in writing advertising copy. Study of style and structure, with emphasis on persuasive writing. Lectures and laboratory. Prerequisite: with emphasis on per
J 447. Advertising Layout. (G) 3 hours.
Instruction and practice in graphic design for advertising. Work with type and illustrations. Consideration given to all media. Prerequisite : J 341. Ewan, Nelson.
J 450. The Press and Society. (g) 3 hours.
The organization and operation of American newspapers, leading national magazines, and the media of commercial broadcasting; evaluation of their functions, duties, and responsibilities in contemporary society. Not open to journalism majors. Nelson, staff.
J 455. Supervision of School Publications. (G) 2-3 hours.
The teacher's role in guiding student publications in secondary schools. Norton.
J 459. Principles of Public Relations. (G) 3 hours.
Theory and practice of public relations as viewed by business, government, and civic organizations; study of mass media as publicity channels; role of the public relations practitioner; public relations departments and agencies. Ewan, Nelson.
J 462. Reporting II. (G) 4 hours.
Newspaper reporting of legislative and executive governmental bodies; political news and other special news areas; civil and criminal courts and appellate procedure. Prerequisite: J 361. Price, Rarick.
J 468. Magazine and Feature Writing I. (G) 3 hours.
Writing newspaper and magazine feature articles; book and movie reviewing for the mass media; study of the problems of marketing magazine and book manuscripts. Nelson.
J 469. Magazine and Feature Writing II. (G) 2 hours.
Writing and marketing magazine articles. Individual conferences. Prerequisite : J 468. Nelson.
J 470. Magazine Editing. (G) 3 hours.
Principles and problems of magazine editing ; content selection, use of pictures, headline writing, caption writing, layout, make-up, typography; editorial responsibility. Lectures and laboratory. Nelson.
J 483. Public Relations Problems. (G) 3 hours.
Principles of public relations in contemporary American society, with emphasis on individual projects; the growing need for public relations activities by profit and nonprofit institutions; techniques and methods; role of the media; ethics of public relations. Wales.
J 485. Law of the Press. (G) 3 hours.
The constitutional guarantee of freedom of the press; principal Supreme Court decisions; legal status of the press as a private business and as a public utility; governmental activity toward improving the press; legal controls of publication; libel, right of privacy, copyright, contempt of court, censorship, and radio news regulation. Price.
J 487. History of Journalism. (G) 3 hours.
Study of the changing character of the newspaper, with emphasis on the contributions of outstanding editors, publishers, and inventors. The evolution of freedom of the press, editorial and business standards, mechanics, and advertising practices. Price.
J 494. Journalism and Public Opinion. (G) 3 hours.
Opinion-shaping role of major communications media; theories of public
opinion and propaganda; activities of pressure groups and other organized groups. Rarick.
J 495, 496. Journalism and Contemporary Affairs. (G) 2 hours each term. Examination of current problems in journalism; evaluation of governmental and other public policies affecting the mass media; trends in mass communiand other public policies a
cations. Duncan, Hulteng.

GRADUATE COURSES
*J 501. Research in Journalism. Hours to be arranged.
*J 503. Thesis. Hours to be arranged.
J 505. Reading and Conference. Hours to be arranged.
J 507. Seminar. Hours to be arranged.
Public Opinion Measurement.
Advertising Research.
History of Journalism
Propaganda.
The Photo Essay.
Visual Communication Research.
J 512. Communication Theories and Research Methods. 3 hours.
Selection of research problems; planning the study; field research methods, experimental methods, sampling and measurement problems; theories of communication; effects of mass communication. Rarick.

## J 564. Editorial Writing. 3 hours.

Analysis and interpretation of news for media of mass communication; ediAnalysis and interpretation of news for media of mass comr
torial policy formulation; editorial page operation. Hulteng.

## J 589. Comparative Foreign Journalism. 3 hours.

History of and contemporary structure of international communications facilities: the fow of worldwide news; conficting theories of press control, foreign correspondence, international censorship, major world newspapers and broadcasting systems, and historical and contemporary leaders of the world press. Price.

* No-grade course.


## School of Law

Orlando J. Hollis, B.S., J.D., Dean of the School of Law.
Lois I. Baker, M.A., Law Librarian.
Professors: W. M. Basye, O. J. Hollis, C. G. Howard (emeritus), F. R. Lacy, H. A. Linde.

Associate Professors : C. D. Clark, P. L. Larsen, T. W. Mapp, R. S. Summers. Special Lecturer: E. C. Harms.

THE UNIVERSITY OF OREGON SCHOOL OF LAW, established in 1884 as a night law school in the city of Portland, was moved to the Eugene campus in 1915 and reorganized as a regular division of the University. The School of Law was admitted to the Association of American Law Schools in December 1919; the standards of the school were approved by the American Bar Association in August 1923.

Facilities. The School of Law is housed in Fenton Hall, a three-story brick structure, with a fireproof annex in which the main book collection of the Law Library is located: Fenton Hall, named in honor of the late William David Fenton, Oregon attorney and benefactor of the school, was formerly the University Library. The building was extensively remodeled in 1938 to provide a permanent home for the School of Law. A new Law Library reading room with modern facilities was provided in 1953.

The holdings of the Law Library total 61,198 volumes, including complete case reports of the National Reporter System, complete state reports from colonial times to the establishment of the Reporter System, a substantial collection of English and Canadian case law, codes and compilations of state and Federal statute law, standard legal digests and encyclopaedias, etc. Its periodical collection includes files of about 335 legal journals. An excellent collection of publications relating to Oregon territorial and state law includes an extensive file of Oregon Supreme Court briefs.

The Law Library reading rooms are adjacent to the stacks, allowing students direct and easy access to the book collections.

Admission to the School of Law. The minimum requirement for admission to the School of Law is three-fourths of the total credit required for a Bachelor of Arts or Bachelor of Science degree from the institution at which the student completes his prelegal work-but not less than 140 term hours (the requirement for a student completing his prelegal work at the University of Oregon). The minimum requirement may include no work taken by correspondence, and may include a maximum of 14 term hours in nontheory courses in military science, hygiene, domestic arts, physical education, vocal or instrumental music, or other subjects of a nontheoretical nature.

The student's prelegal program must include: (1) courses satisfying all lower-division requirements of the University; (2) the basic college course in accounting (Ac 221, 222, 223 or equivalent) ; (3) a minimum of 36 term hours of credit in courses in the general field of social science. An applicant who has a baccalaureate degree need not comply with requirement (1) above.

For admission to the School of Law, a student must have, for all prelegal work, a cumulative grade-point average of at least 2.25 (computed in accordance with the system of grade-point-average determination used by the University of

Oregon). This requirement applies to all applicants, including those who hold degrees.

Applicants for admission to the School of Law must take the uniform Law School Admission Test administered by the Educational Testing Service, and have a report of the test score sent to the School of Law prior to the first day of June preceding the fall term for which admission is sought. Inquiries concerning the dates, places, and fee for the Law School Admission Test should be addressed directly to the Educational Testing Service, Box 944, Princeton, N. J. 94704.

An applicant who receives a score of less than 475 on the Law School Admission Test will not be admitted unless his academic record, when considered together with his test score, is of such quality as to justify a prediction of probable success in the study of law.

All students intending to enter the School of Law must file a formal application for admission with the dean of the school, from whom official application forms may be obtained. Applications should be filed before the first day of May preceding the fall term in which the student intends to enroll.

A student intending to transfer to the University of Oregon from another institution and to enter the School of Law must also submit, to the dean of the school, complete records of all school work beyond the eighth grade. For failure to submit complete records, the University may cancel the student's registration This regulation applies to work taken at other law schools, whether or not the student wishes to transfer credit.

Admission to the School of Law is restricted to students who are candidates for a professional law degree. Students are admitted to the professional study of law only at the opening of the fall term of each academic year.

Prelegal Program. Students pursuing prelegal studies at the University of Oregon are enrolled in the College of Liberal Arts during the three years of the required preparatory program. They are, however, assigned academic advisers from the faculty of the School of Law. The student is allowed considerable freedom of choice in selecting his courses, as long as his program provides a substantial cultural background. The prelegal adviser, after considering the student's high-school record and any available evidence of his native abilities, assists him in working out a program that will provide such a background. The student's proram should include courses which will enable him to meet all lower-division requirements by the end of the second year of his prelegal studies.

Law students may qualify for a nonprofessional baccalaureate degree after the satisfactory completion of prelegal requirements and one year of professional work in the School of Law, provided that they have satisfied all general University requirements for such a degree. For a nonprofessional degree, the major requirement in law is 36 term hours (unweighted) in professional courses. The dean of the School of Law will not recommend a student for the B.A. or B.S. degree with a major in law who has been awarded, or is a candidate for, either of these degrees with a major in another field.

Registration and Fees. Law students register and pay their fees at the times set in the University calendar for registration. Law students pay the regular fees prescribed for all students. Nonresident law students who hold a bachelor's degree from an accredited college or university are not required to pay the nonresident fee.

Curriculum and Degrees. The School of Law offers a standard professional curriculum leading to the Doctor of Jurisprudence degree. A total of three years of resident professional study in the University of Oregon or another law school of recognized standing is required for a law degree, of which, normally, the two last years must be in residence at the University of Oregon. The curriculum is ar-
ranged, as far as possible, to present the fundamental topics of the law during the first year, and the more specialized subjects during the second and third years.

Since the school owes its primary responsibility to the people of the state of Oregon, special emphasis is placed on Oregon substantive law and on Oregon procedure. Courses based upon the common law are organized to provide the student a thorough foundation in the fundamental principles of the common law and an understanding of the modification of these principles in Oregon by judicial decisions and statutes.

In the list of courses on pages $350-353$, elective courses are indicated with an asterisk $\left(^{*}\right)$. All other courses are required. The school reserves the right to make any desirable or necessary changes in courses as listed and described.

A student admitted without a baccalaureate degree must obtain that degree before entering upon his second year of study in the School of Law.

The School of Law reserves the right to withhold recommendation for the granting of a degree to any student who, in the opinion of the faculty of the school, does not possess the character and abilities essential to the maintenance of the public trust in the legal profession. Regular class attendance is required of students in the School of Law. Credit for any course may be denied for irregular attendance. Classes are regularly scheduled Monday through Saturday.

An honor system, which has been in operation in the School of Law for more than forty years, is applicable to all students in the school. The system is explained to first-year students at an assembly at the opening of the fall term of each year.

Students who have met the requirements for admission to the School of Law, and who have successfully completed courses in law aggregating 123 hours and have otherwise satisfied the requirements of the University and the School of Law, will be granted the degree of Doctor of Jurisprudence (J.D.), provided that they:
(1) Obtain (at least two years before completing work for the law degree) the Bachelor of Arts, Bachelor of Science, or an equivalent degree from this University or some other institution of recognized collegiate rank.
(2) Earn a minimum grade-point average of 2.00 in the School of Law.
(3) Comply with such other requirements as the law faculty may from time to time impose.

Transferred Credit. A student as a general rule may transfer not to exceed one year of credit earned in another law school of recognized standing, provided that, at the time he was admitted to the law school from which he wishes to transfer credit, he could have met the then-existing admission requirements of the University of Oregon School of Law. In exceptional cases only, a student may be permitted to transfer not to exceed two years of credit. The right to reject any and all such credit is reserved.

Application for admission by a student who has attended another law school will not be considered unless: (1) the school from which transfer is sought is on the list of schools approved by the American Bar Association and is a member of the Association of American Law Schools; (2) the student is eligible for readmission in good standing to the school previously attended; and (3) the student's cumulative grade-point average for all professional law courses completed is at least 2.00 , when computed on the basis of the system of grade-point-average determination used by the University of Oregon. Transferred credit will be accepted, however, only if the student's professional law-school record is of high quality.

In determining whether a student who has transferred credit from another law school has satisfied the 2.00 grade-point-ave-age requirement for the J.D. degree, only grades earned at the University of Oregon will be considered.

Oregon Law Review. The Oregon Law Review is published quarterly under the editorship of the faculty of the School of Law, with the assistance of a
student editorial staff, as a service to the members of the Oregon bar and as a stimulus to legal research and productive scholarship on the part of students. The Law Review has been published continuously since 1921.

Legal Aid. Members of the third-year law class each year have the opportunity to participate on a voluntary, noncredit basis in the legal-aid program operated by the Lane County Bar Association. For several years the voluntary cooperation of third-year students has been 100 per cent.

Oral Case Analysis Contest. Law students entering the Lane County Bar Association Oral Case Analysis Contest are afforded the unique opportunity of discussing a recent case or legal topic of interest with an audience composed entirely of lawyers. Any registered law student may enter the contest. The Lane County Bar Association offers each year cash prizes of $\$ 65$, $\$ 40$, and $\$ 25$ to the three students judged to have made the best presentations at the weekly luncheon meetings of the bar association.

Order of the Coif. The Order of the Coif, national law-school honor society, maintains a chapter in the University of Oregon School of Law. The Order of the Coif was founded to encourage high scholarship and to advance the ethical standards of the legal profession. Members are selected by the faculty during the spring term each year from the ten per cent of the third-year class who rank highest in scholarship. Character, as well as scholarship, is considered in selecting members.

Scholarships and Awards. For scholarships and fellowships established specifically for students in the School of Law, see pages 103-105. For prizes and awards for law students, see pages 109-110.

Placement. The School of Law maintains its own placement service for its graduates, under the personal direction of the dean of the school. Individual attention is given to the wishes of each graduate concerning his placement. No substantial problem in finding suitable opportunities to practice law has been experienced since the depression days of the 1930s. During the last few years, graduates of the school going into law offices and government positions have received starting salaries ranging from $\$ 475$ to $\$ 600$ a month. A very large proportion of the school's graduates enter the private practice of law.

## FIRST-YEAR COURSES

L 411, 412. 413. Contracts. 3 hours fall, 2 hours winter, 3 hours spring.
Formation of simple contracts; consideration; third-party beneficiaries; assignments ; the Statute of Frauds; performance and breach; illegality; discharge.
L 414, 415, 416. Property. 3 hours each term.
Possession as a concept in acquisition, retention, transfer, and loss of chattels. Requisites of valid acquisition and transfer of nonderivative and derivative titles to land; descriptions; covenants of title; fixtures. Landowners' incorporeal interests; easements ; licenses, covenants. Creation and characteristics of common-law estates. Classification and protection of nonpossessory future interests. Class gifts; construction problems; rule against perpetuities; powers of appointment ; restraints on alienation. Clark.
L 417, 418. Legal Bibliography and Writing. 1 hour each term.
Legal reference materials: legislative enactments; judicial precedents; classes of law books; training in their use. Preparation of an original manuscript dealing with a legal subject. Clark, Mapp.
L 419. Civil Procedure. 4 hours fall.
Introductory study of procedure in actions at law. The court system; methods of trial and appellate review; detailed study of common-law actions and pleadings. Hiollis.

L 420, 421. Criminal Law and Procedure. 3 hours fall, 2 hours winter.
Source and function of criminal law; elements of specific crimes and factors limiting culpability; criminal law and its administration as a technique of constitutional and other legal limitations on criminal law enforcement. Linde.
L 422, 423, 424. Torts. 3 hours fall, 2 hours winter, 3 hours spring.
Intentional invasion of interests of personality and property; negligence and causation; plaintiff's conduct as a bar to recovery; liability without legal fault ; fraud and deceit; defamation; malicious prosecution; interference with advantageous relations. Lacy.
L 427. Agency. 3 hours spring.
Nature of agency; creation; agent's duty to principal; rights of agent against principal ; claims of third persons; ratification; undisclosed principal; termination.
L 429. Equity. 4 hours spring.
General nature and availability of equitable remedies; historical background. specific performance of contracts; injunctions; interests typically protected specific performance of contr
by courts of equity. Sumniers.

## SECOND-YEAR COURSES

L 434. Secured Land Transactions. 4 hours fall.
Vendor-purchaser and mortgage law; emphasis on functional comparison of land sale contracts, mortgages, and deeds of trust as real property security devices in the market place. Clark.
L 435, 436. Commercial Transactions. 3 hours fall, 4 hours winter. Uniform Commercial Code: sales, secured transactions, commercial paper documents of title; commercial insurance. Summers.
*L 440. Insurance. 3 hours.
The insurance business; insurable interest ; coverage of contract as to event and insured; subrogation; warranties, representations, and concealment. Mapp.
*L 441. Land and Water Resources. 3 hours
The legal aspects of problems arising in land, timber, minerals, and water utilization, with special attention to the effect of Federal, state, and local legislation on such problems. Clark.
*L 444. Restitution. 3 hours.
Historical background; availability and operation of quasi contracts and other remedies for unjust enrichment; restitution of benefits tortiously acquired or conferred upon unenforceable contracts or because of mistake or duress. Lacy.
*L 446. Domestic Relations and Persons. 3 hours.
Nature of marriage; annulment; divorce ; adoption; legal incidents of status of husband and wife and parent and child.
L 447, 448. Partnerships and Corporations. 4 hours fall, 3 hours winter.
A comparative study of partnerships, corporations, and other business associations in launching the enterprise and in transactions prior to formation; management, control, and transfer of control in a going concern; managers' benefits and hazards; asset distributions to members; reorganization of a solvent enterprise ; solvent dissolution. Basye.
L 449, 450. Constitutional Law. 3 hours each term.
The Federal system under the Constitution of the United States; judicial review in constitutional cases; national and state control over the economy under the commerce clause; the power to tax and spend and other powers of Congress; national power in international relations; guarantees of individual

[^59]liberty by limitations on governmental power; constitutional issues in state courts. Linde.
L 453. Code Pleading. 4 hours spring.
Pleading under the codes and the Federal rules of civil procedure; parties; joinder of causes; the pleadings; objections to pleadings; amendments. Hollis.
L 454, 455. Trusts and Estates. 3 hours winter, 4 hours spring.
First term : execution and construction of testamentary and trust instruments ; resulting and constructive trusts. Second term: administration of decedents and fiduciary estates; law of intestate succession. Mapp.

## THIRD-YEAR COURSES

L 458, 459. Conflict of Laws. 3 hours each term, fall and winter.
Theoretical basis of decision; jurisdiction; foreign judgments; right under foreign law in torts, contracts, sales, security transactions, business organizations, family law. Hollis.
L 460, 461. Trial Practice. 3 hours each term, winter and spring.
Jurisdiction; venue; process; judgments; juries; introduction of evidence; exceptions; findings; verdicts; motions after verdict. Moot court jury trial spring term. Hollis.
L 462. Creditors' Rights. 4 hours.
Remedies of and priorities between unsecured creditors; exemptions, fraudulent conveyances; general assignments and creditors' agreements; bankruptcy.
*L 471. Legislation. 3 hours spring.
The legislative process; the lawyer's role in policy formulation and law making in contrast to litigation; drafting; presentations before legislative committees and other law-making bodies; lobbying and its regulation; legislative history and the interpretation
*L 476. Labor Law. 3 hours.
The law of labor-management relations; common-law background and modern development; Federal and state regulation of collective bargaining, strikes, and picketing, and of specific employment conditions and practices; the N.L.R.B. and other agencies of labor-law administration. Linde.

L 477. The Legal Profession. 2 hours.
Organization of bench and bar; functions of the legal profession in the administration of justice; canons and other standards of professional ethics. Linde.
L 478, 479. Evidence. 3 hours each term, fall and winter.
Presumptions ; burden of proof; judicial notice; hearsay, opinion, and character evidence; admissions ; real evidence ; best-evidence rule; parole-evidence acter evidence; admissi
rule; witnesses. Lacy.
*L 481. Trade Regulation. 4 hours.
Survey of the effect of the major Federal legislation (Sherman, Clayton, Robinson-Patman, Federal Trade Commission Acts) in the anti-trust and unfair-competition areas.
L 482, 483. Federal Taxation. 3 hours each term
What is income and whose income is it under the Federal income tax ; deductions and credits; when is it income or deductible-accounting problems; capital gains and losses; income-tax problems in corporate distributions and reorganization; the Federal estate tax-concepts of gross estate, valuation, deductions, credits, and computation of tax; the Federal gift tax; collection of Federal taxes, transferee liability, and criminal penalties. Basye.
*L 484. Administrative Law. 4 hours.
The administrative process; delegation of administrative functions and legislative and executive control of agency action; formulation and enforcement

[^60]of the administrative program; procedural standards of administrative action; the nature and scope of judicial review. Linde.
*L 485. Future Interests and Estate Planning. 4 hours.
Recognition and solution of practical problems in lifetime and testamentary disposition of property; development of the law of future interests within the overall framework of estate planning. Individual student assignment of a practical problem in preparing a family estate plan, including the drafting of necessary legal instruments. Basye.
*L 487. Law of Municipal Corporations. 3 hours spring.
The nature, constitution, powers, and liabilities of municipal corporations. Harms.
L 488. Legal Writing. 1 hour.
Preparation, under the supervision of a member of the faculty, of a manuPreparation, under the supervision of a member of the faculty, of a manu-
script in the form of a "Note and Comment" suitable for submission to the script in the form of a Note and Comment
Board of Editors of the Oregon Law Review.
*L 501. Research. Hours to be arranged.
Open to third-year students, by special arrangement only. The student works under the supervision of the instructor in whose field the problem is selected. Not more than 3 hours per term or a total of 9 term hours of credit may be earned.
${ }^{*}$ L 503. Thesis. Hours to be arranged.
A maximum total of 3 hours of credit may be earned.
*L 507. Seminar. Hours to be arranged.
Seminars offered in the following subjects as student interest and other conditions may make the instruction feasible:
Administration of Criminal Justice. Lacy.
Compensation for Personal Ínjuries. Lacy.
Copyright, Trade Mark, and Patent Law
Current Constitutional Fro
International Law. Linde.
Legal Problems of Business Planning.
Social Legislation.

* Elective courses.


## Medical School

David W. E. Baird, M.D., LL.D., Dean of the Medical School.
Charles N. Holman, M.D., Associate Dean of the Medical School: Medical Director of Hospitals and Clinics.
William A. Zimmerman, B.S., Associate Dean for Business Affairs.
Joseph J. Adams, B.B.A., Assistant Dean for Institutional Relations.
Caroline H. Pommarane, B.S., Registrar
Margaret Hughes, b.S., Librarian.
THE UNIVERSITY OF OREGON MEDICAL SCHOOL, located in Portland, was chartered in 1887, as Oregon's second medical school. The first, the medical department of Willamette University, was merged with the University of Oregon Medical School in 1913. The campus is a 101 -acre tract overlooking the city in Sam Jackson Park. Located on the same campus are the University of Oregon Dental School and the University of Oregon School of Nursing.

The Medical School offers a standard curriculum in medicine, leading to the M.D. degree, a special five-year combined medical and graduate program leading to the M.S. and M.D. degrees, graduate studies in the basic sciences leading to the M.S. and Ph.D. degrees, programs in medical technology leading to the B.S. and M.S. degrees, a two-year program in radiologic technology, an internship in hospital dietetics, and training in occupational therapy, cytotechnology, and orthoptic technique. The school's internship and residency programs provide more than 180 appointments to qualified physicians. Extensive continuing education programs are conducted for physicians and medical technologists.

The Medical School's hospitals and clinics, located on the campus, provide teaching laboratories for clinical studies; 13,000 patients receive medical services and treatment annually in the school's hospitals; recorded visits to the school's outpatient clinics total more than 200,000 each year. The Medical School's research program is supported through funds provided by the state and Federal governments and by foundations and private donors; research grants total more than $\$ 7,500,000$ annually.

Curriculum in Medicine. The curriculum in medicine leading to the M.D. degree requires a minimum of three years of premedical studies, followed by four years of work at the Medical School.

A student entering the Medical School without a Bachelor of Arts or Bachelor of Science degree must complete the work required for one of these degrees at the University of Oregon or at the institution at which he received his premedical preparation, before entering upon the work of the third year in the Medical School.

The University of Oregon and most of the colleges and universities of the Pacific Northwest recognize credit earned by a student during his first two years at the Medical School as credit earned in residence toward the bachelor's degree.

A suggested premedical curriculum for students planning to enter the Medical School is presented on pages 190-191 of this Catalog.

Curriculum in Medical Technology. The curriculum in medical technology leading to the bachelor's degree is a four-year program, including three years of work on the Eugene campus of the University, followed by one year at the Medical School. See pages 189-190 of this Catalog.

Medical School Catalogs. Separate catalogs describing the curriculum in medicine and the graduate programs in the basic sciences may be obtained from the Medical School.

## School of Music

Robert M. Trotter, Ph.D., Dean of the School of Music.
Professors: E. A. Cykler, Milton Dieterich (emeritus), George Hopkins, Homer Keller, R. E. Nye, Jane Thacher (emeritus), R. M. Trotter, R. S. Vagner.
Associate Professors: Exine A. Bailey, F. W. Bittner, George Boughton, Floyd Ellefson, J. M. Gustafson, John Hamilton, J. R. Hladky, I. D. Lee, M. D. Risinger, Royce Saltzman, Virginia Whitfield, N. E. Wilson, W. C. Woods.
Assistant Professors: Peter Bergquist, R. G. Cunningham, La wrence Maves, James Miller.
Instructors: Gabriel Chodos,* Robert Hurwitz, David Schrader, Richard Trombley.
Assistants: Catherine Arnold, Sue Culbertson, D. D. Farr, Jerry Harris, M. A. Hedegaard, H. C. Hunt, Sharon Jarman, Karen Kammerer, K. E. M. A. Hedegaard, H. C. Hunt, Sharon Jarman, Karen Kamme
McGillivray, Patricia Myers, T. S. Stanford, H. G. vom Hoff.

IN THE SCHOOL OF MUSIC, students learn by performing and by listening to music, by analyzing musical style, and by examining the historical contextsartistic, philosophical, social, political, technological-in which our musical heritage has developed. Courses and curricula are planned to provide a vital unity of musical education and technical training, emphasizing the juncture where ideas and understanding meet direct experience of musical beauty.

The school recognizes two basic obligations: (1) the preparation of professional musicians for careers as performers, teachers, composers, scholars, and critics; (2) as a part of the University's program of liberal education, instruction in the history and understanding of music for all students and instruction in musical performance for students interested in performance as an avocation.

A department of music was established at the University of Oregon in 1886. The School of Music was organized in 1902, and was admitted to membership in the National Association of Schools of Music in 1928; the standards of the school are in accordance with the standards set by the association.

Instruction for Nonmajors. The following courses offered by the School of Music are planned especially for nonmajor students who have had little or no previous musical instruction : Introduction to Music and Its Literature (Mus 201, 202, 203) ; Music Fundamentals (Mus 321, 322) ; Listening with Understanding (Mus 450) ; The Music of Bach and Handel (Mus 451) ; The Classic Symphony and Sonata (Mus 452) ; Introduction to Opera (Mus 453) ; Introduction to Twentieth-Century Music (Mus 454).

Nonmajor students who meet proficiency requirements may also enroll for private performance instruction and for work in several ensemble groups, including band, orchestra, chorus, chamber ensemble, and opera workshop.

Admission to Major Curricula. The major curricula in music are organized on an upper-division and graduate basis. Preparation for the major consists of two years of work in the College of Liberal Arts, under the guidance of a faculty adviser from the School of Music. The lower-division program includes introductory work in music history, theory, and performance, in addition to studies in

[^61]the arts and sciences providing a broad intellectual basis for advanced work in the music major.

It is important that high-school students planning to major in music acquire, hefore entering the University, a thorough knowledge of standard musical symbols and terminology, some knowledge of the piano keyboard, considerable proficiency in performance, and as wide an acquaintance as possible with great music.

During registration week, all new students are given auditions to determine their eligibility for private performance studies and examinations in basic musical grammer and keyboard knowledge to test their aptitude and readiness for introductory theoretical studies (information concerning these examinations may be obtained from the School of Music office). Exceptionally well-prepared and gifted students may be granted advanced placement or exemption from certain introductory studies on the basis of the examinations.

Because the upper-division program is planned in continuity with basic courses taken during the first two years, students planning to major in music at the University of Oregon are strongly advised to enter the University as freshmen. Students transferring from other institutions with preprofessional preparation differing from the University pattern may, however, be admitted to the professional curriculum if they show satisfactory proficiency by examination.

The proficiency examinations are required of all students, including transfers and students who have taken their lower-division work at the University, before admission to upper-division major programs (information concerning these examinations may be obtained from the School of Music office).

All degree candidates in music are required to attend campus musical events each year of residence as follows: 12 or more credits, 10 events per term; 8-11 units, 8 events per term; $1-7$ credits; 5 events per term.

Facilities. The School of Music is housed in a building complex designed for instruction, practice, and performance-including an auditorium seating 600 persons, rehearsal rooms, studio-offices, classrooms, and more than fifty practice rooms. The school's equipment includes William Dowd and Wittmayer concert harpsichords, a two-manual Schlicker organ, a four-manual Reuter organ, and a number of Steinway grand pianos. The University Theater in Villard Hall provides facilities for operas and other stage productions.

The music holdings of the University Library include a large collection of scores, complete critical editions of the works of the great composers, standard reference works, and extensive collections of periodicals, recordings, and books on music. The music collection is supported by gifts from Phi Beta and Mu Phi Epsilon and a bequest from the late Matthew H. Douglas, former University librarian. Through acquisitions under the Farmington Plan, the Library has á particularly strong and growing collection of contemporary foreign books on music.

Musical Organizations. The University Symphony and String Orchestras, the University Singers, the University Chorale, University bands, and the Opera Workshop offer membership and performance opportunities to all qualified students. Collegium Musicum, a vocal-instrumental group, provides opportunity for the study of mediaeval, Rennaissance, and baroque music. The work of these organizations is planned to complement the theoretical and historical courses offered by the school.

Concerts and Recitals. Frequent concerts and recitals are presented on the campus throughout the year, by visiting artists, members of the faculty of the School of Music, and advanced music students. Regularly scheduled concerts include performances by artists of international fame sponsored by the EugeneUniversity Civic Music Association, the Little Concert Series, and concerts by the University Trio, three artist members of the School of Music faculty.

Music Fees. Music students pay special fees, in addition to regular registration fees, for private performance instruction. These fees are due at the time of registration each term.

Fees for private instruction in piano, voice, violin, cello, organ, and harpsichord are: ten half-hour lessons, $\$ 30.00$ per term; twenty half-hour lessons, $\$ 50.00$ per term.

Fees for private instruction in wind and percussion instruments are: ten half-hour lessons, $\$ 20.00$ per term; twenty half-hour lessons, $\$ 40.00$ per term.

Fees for the use of practice rooms, paid by all students enrolled for private instruction, are : $\$ 5.00$ per term for one hour a day ( $\$ 3.00$ for rooms without a piano) ; $\$ 9.00$ per term for two hours ( $\$ 6.00$ without a piano) ; $\$ 12.00$ per term for three hours; $\$ 15.00$ per term for four hours. The organ practice fee is $\$ 12.00$ per term for one hour a day.

## Curricula in Music

THE SCHOOL OF MUSIC offers undergraduate curricula leading to the Bachelor of Arts and Bachelor of Music degrees and graduate work leading to the Master of Arts and Master of Music degrees.

In the undergraduate program, the candidate for the B.A. degree takes approximately one-third of his work in music and two-thirds in fields outside the school. B.A. candidates are advised to plan their programs to broaden their understanding of music in its relations to other humanistic fields; studies in art, philosophy, history, languages and literature, speech and drama, and the dance are especially recommended.

The curricula leading to the B.Mus. degree are more rigorously professional ; the student takes approximately two-thirds of his work in the School of Music and one-third in fields outside the school.

The programs outlined below show only the minimum requirements; additional studies may be required in the light of individual needs.

Lower-Division Major Requirements. Completion of the following lowerdivision work in music is required for admission to all upper-division degree programs:


All entering students are required to pass a test in piano proficiency or enroll in Basic Piano (Mus 50) until they have attained the required proficiency. The test must be passed before enrollment in Music Theory II.

History of Western Civilization (Hst 101, 102, 103) or Problems of Philosophy ( $\mathrm{Phl} 201,202,203$ ) is recommended for the satisfaction of the social science group requirement ; psychology with laboratory is recommended for the satisfaction of the science group requirement.

Candidates for the B.A. degree and voice majors working toward the B.Mus degree must acquire proficiency in French, German, or Italian equivalent to that expected after two years of college study of the language.

Aesthetics (Phl 211) and either History of Western Art (ArH 204, 205, 206) or World Literature (Eng 107, 108, 109) are required for all candidates for the B.A. degree.

All candidates for the B.Mus. degree specializing in performance must, dur ing their lower-division years, attain performance proficiency equivalent to that required for the completion of Mus 290 . Definitions of competencies at all levels are available in the School of Music office.

Upper-Division Major Requirements. Completion of the following upperdivision work is required of all candidates for a bachelor's degree with a major in music :


All candidates for the B.A. degree must, in addition, complete a senior project demonstrating a satisfactory level of achievement as performer, scholar, or com poser.

During their upper-division years, candidates for the B.Mus. degree in all specialties must, in addition: (1) complete a minimum of 12 term hours in private performance study on a major instrument or in voice and achieve a proficiency equivalent to that required for the completion of Mus 290; (2) complete a minimum of 3 term hours of work with an ensemble group chosen from Mus 395, Mus 396, Mus 397. Additional requirements in the several specialties are as follows

Performance. (1) Achievement of proficiency on a major instrument or in voice equivalent to that required for the completion of Mus 490; (2) senior recital; (3) for students specializing in voice, proficiency in piano equivalent to that required for completion of Mus 190

Music Theory. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434) ; (2) Composition (Mus 340, 341, 342) ; (3) Instrumentation and Orchestration (Mus 336, 337, 338) ; (4) upper-division theory or history courses, 6 term hours; (5) senior lecture-recital.

Composition. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434) ; (2) Composition (Mus 340, 341, 342), Composition (Mus 440, 441 . 442) ; (3) Instrumentation and Orchestration (Mus 336, 337, 338) ; (4) senior presentation of an original work.

School Music, All Ficlds. (1) Satisfaction of education requirements for an Oregon secondary-teaching certificate (see page 305) ; (2) 6 term hours selected from Choral Conducting (Mus 385, 386), Instrumental Conducting (Mus 387, 388) ; (3) class instruction in techniques (voice, 3 term hours; instrumental, 3 term hours) (Mus 392) ; (4) Special Teaching Methods (MuE 408), 3-4 term hours; (5) ensemble (Mus 395, Mus 396, Mus 397, or Mus 398), 3 term hours;* (6) additional requirements as stated below.

School Music, Choral-General. (1) Choral Arranging (Mus 439) ; (2) Teaching of Music (MuE 317, 318, 319).

School Music, Elementary Choral. (1) Choral Arranging (Mus 439) ; (2) Teaching of Music (MuE 317, 318) ; (3) Choral Materials for Schools (MuE 444).

School Music, Instrumental. (1) Instrumentation and Orchestration (Mus 336, 337) ; (2) Instrumental Techniques (Class Instruction) (Mus 392), 6 term hours; (3) The General Music Program (MuE 426) ; (4) Special Teaching Methods (MuE 408), 3 hours; $\dagger$ (5) of the 12 term hours in private performance

- In addition to ensemble requirement for all B.Mus. candidates
$\dagger$ In addition to special-methods requirement for all school-music specialists.
studies required of all B. Mus. candidates, a minimum of 9 hours in Mus 390 , Mus 391, or Mus 490.

School Music, Instrumental-Choral. (1) Instrumentation and Orchestration (Mus 336, 337) ; (2) The General Music Progrann (MuE 426) ; (3) Instrumental Techniques (Class Instruction) (Mus 392), 6 hours; (4) String Materials for Schools (MuE 445) or Wind-Instrument Materials for Schools (MuE 446) 2 hours; (5) achievement of proficiency in piano or voice and in a string or wind instrument equivalent to that required for the completion of Mus 290.

Secondary-School Teaching of Music. For certification as a teacher of music in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in music and the requirements for recommendation by the University of Oregon, the student should complete the general requiremonts for a major in music and the requirements for a school music option, listed above.

For further information, the student should consult a member of the music faculty who serves as adviser for prospective teachers.

Honors. See Honors College, pages 129 ff .
Minor for Elementary Teachers and Others. Majors in elementary educa tion may, in consultation with advisers in the School of Music, arrange a minor in music, including selected courses in theory, literature, performance and pedagogy

Graduate Work. The School of Music offers graduate work leading to the M.A., M.Mus., and D.M.A. degrees.

Master of Arts-music history, music theory, music education.
Master of Music-composition, music education, performance and music literature, church music

Doctor of Musical Arts-college teaching in the field of performance or of public school music. Requirements include work in music history and literature, music theory, music pedagogy and curriculum planning; performance, composition, conducting, or arranging. For further information, see the Graduate School Catalog or consult the School of Music.

Candidates for the Doctor of Education degree or the Doctor of Philosophy degree in the School of Education may choose music education as a field of major specialization.

During fall-term registration week and the first week of summer session, all entering candidates for graduate degrees in music, including graduates of the University of Oregon, are required to take a series of examinations to test the adequacy of their preparation for graduate study. Deficiencies shown by the examinations must be remedied before the student is formally admitted to candidacy for a graduate degree. Information concerning the examinations and guides for study are available in the School of Music office.

## Music

## LOWER-DIVISION COURSES

*Mus 50. Basic Piano. 1 hour any term ( 3 hours maximum credit.)
Classroom instruction for music majors who receive a low rating on a test of

[^62]keyboard proficiency, and for other students ineligible for piano instruction at the level of Mus 190. Woods
*Mus 51. Basic Voice. 1 hour any term ( 3 hours maximum credit)
Classroom instruction for students ineligible for voice instruction at the level
of Mus 190 of Mus 190.
Mus 121, 122, 123. Music Theory I. 4 hours each term.
Study of diatonic functional triadic harmony, including modulation to related keys, secondary dominants, two-part counterpoint. Written work correlated with sight singing, analysis, aural comprehension, and keyboard application.
Cunningham, Hurwitz, Trotter.
Mus 190. Performance Studies (Private Instruction). 1-4 hours any term. Individual instruction in the technical and stylistic aspects of artistic solo performance. Students specializing in performance normally enroll for two half-hour lessons a week ( 2 term hours of credit) in their major instrument each term during their undergraduate years. Maximum credit in performance studies for nonmajors, 12 term hours; for candidates for B.A. degree with a major in music, 24 term hours, including not more than 12 hours during freshman and sophomore years. Information concerning required levels of proficiency at each level (Mus 190 through Mus 590) may be obtained in the School of Music office. Prerequisite : audition.
Piano-Bittner, Farmer, Hopkins, Cello-Hladky.
Woods.
Voice-Bailey, Miller, Wilson
Organ-Hamilton.
Harpsichord-Hamilton.
Violin-Boughton, Maves.
Viola-Boughton.
String Bass-Hladky.
Woodwind Instruments-Bergquist.
Cunningham, Trombley, Vagner.
Brass Instruments-Lee, Lewis.
Percussion Instruments-Schrader.
Нагр.
Mus 195. Band. 1 hour each term ( 6 hours maximum credit).
Fall: marching band, laboratory band ; winter and spring : concert band, symphonic band. No prerequisites for marching band; audition required for Mus 395 . Lee, Vagner. Mus 395 . Lee, V agner.
Mus 196. Orchestra. 1 hour each term ( 6 hours maximum credit).
Prerequisite: audition ; consent of instructor. Upper-division students enrol in Mus 396. Boughton, Maves.
Mus 197. Chorus. 1 hour each term ( 6 hours maximum credit).
Prerequisite : audition; consent of instructor. Upper-division students enroll in Mus 397. Risinger, Saltzman, Wilson.
Mus 201, 202, 203. Introduction to Music and Its Literature. 3 hours each term. Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles. For nonmajors; music majors enroll in Mus 204, 205, 206. Farmer.
Mus 204, 205, 206. History of Music. 3 hours each term.
Fall : basic stylistic concepts ; the classical period through Beethoven. Winter : the romantic period through Brahms and Mahler. Spring: conservative trends in the twentieth century. Primarily for music majors. Not open to students who have had Mus 201, 202, 203. Prerequisite: Mus 121, 122, 123. Bergquist
Mus 221, 222, 223. Music Theory II. 3 hours each term.
Harmonic, melodic, rhythmic, and basic formal practices since 1700. Written requisite: Mus 123 or equivalent; analysis, and aural comprehension. Preficiency. Bergquist, Bittner, Maves.
Mus 224, 225, 226. Keyboard Harmony
Keyboard
223; exercises in figured-bass realization principles studied in Mus 221, 222

[^63]score reading; development of extempore playing. To be taken concurrently with Mus 221, 222, 223. Prerequisite: Mus 123 or equivalent ; satisfactory rating in test of keyboard proficiency. Bittner.
Mus 290. Performance (Private Instruction), 1-4 hours any term Prerequisite: proficiency required for satisfactory completion of Mus 190. For further information, see Mus 190.

## UPPER-DIVISION COURSES

Mus 321, 322. Music Fundamentals. 2 hours each term.
Study of musical notation and terminology; rudiments of sight singing and ear training; introduction to simple melodic and rhythmic instruments. Designed to provide students without ргevious musical training with some insight into musical language and basic performance skills. Not open to music majors. Required in the elementary education program and for majors in recreation leadership and in camping and outdoor education. 1 recitation; 1 two-hour laboratory. Gustafson, Nye, staff.
Mus 330, 331, 332. Form and Analysis. 2 hours each term.
Stylistic analytical technique, including formal structures and harmonic, melodic, and rhythmic practices, applied to compositions from representative periods and media. Prerequisite: Mus 223. Bergquist.
Mus 333, 334, 335. Counterpoint I. 2 hours each term.
Techniques of two- and three-voice contrapuntal writing as exemplified in sixteenth-, eighteenth-, and twentieth-century practice. Prerequisite: Mus 223. Hurwitz.

Mus 336. 337, 338. Instrumentation and Orchestration. 2 hours each term.
Study of the instruments of the orchestra and band; the practical art of scoring for various instrumental choirs and large ensembles. Prerequisite: Mus 223. Keller
Mus 340, 341, 342. Composition I. 2 hours each term.
Composition in the smaller forms for piano, voice, and small ensembles. Prerequisite: Mus 223. Keller.
Mus 360. Music Before 1600. 3 hours.
Plainsong; sacred and secular monody and polyphony through Lassus, the Gabrielis, Dowland, and Gibbons; instrumental music of the sixteenth century; music of the Reformation. Primarily for music majors. Prerequisite :
Mus 206. Hamilton.

## Mus 361. Music from 1600 to 1750 . 3 hours.

Analysis of representative works from Monteverdi to Domenico Scarlatti. Differentiation of musical styles; various national schools; performance practices and musical thought; development of forms and procedures that continue into the twentieth century, such as opera, concerto, fugue, sonata, etc. Primarily for music majors. Prerequisite: Mus 360 . Hamilton.
Mus 362. Avant-garde Music in the Twentieth Century. 3 hours.
The concept of newness in music viewed historically and in the styles of representative composers from Satie and Debussy to Stockhausen and Cage. Primarily for music majors. Prerequisite: Mus 361. Hamilton, staff.
Mus 385, 386. Choral Conducting. 2 hours each term.
Study of conducting techniques, with emphasis on practical application to choral organizations; score reading; analysis and interpretation of choral literature. Conducting experience with laboratory chorus. Prerequisite: Mus 223 ; consent of instructor. Risinger, Saltzman.

Mus 387, 388. Instrumental Conducting. 2 hours each term.
Baton techniques, with emphasis on practical application to instrumental organizations; score reading; general problems of the conductor of larger instrumental ensembles. Conducting experience with laboratory ensembles. Prerequisite: Mus 223; consent of instructor. Lee, Vagner.

Mus 390. Performance Studies (Private Instruction). 2-4 hours any term. Prerequisite : proficiency required for satisfactory completion of Mus 290; jury audition. For further information, see Mus 190
Mus 391. Performance Studies (Private Instruction). 2 hours any term. Prerequisite : successful completion of Mus 290. For instructors, see Mus. 190.
Mus 392. Instrumental Techniques (Class Instruction). 1 hour any term. Elementary instruction in orchestral instruments and voice. Primarily for majors in school music, instrumental option. 2 recitations.
Violin and Viola. Boughton. Oboe and Bassoon. Cunningham.
Clarinet and Saxophone. Vagner, Cunningham.
Trumpet and Trombone. Lee, Lewis.
Cello and String Bass. Hladky.
Flute. Trombley.
French Horn. Lee.
Percussion Instruments. Schrader. Voice. Miller.
Mus 394. Chamber Ensemble. 1 hour each term ( 6 hours maximum credit). Study of masterpieces of music through small group rehearsal. For stringedinstrument and wind-instrument players, pianists, and singers. Prerequisite: audition.
Mus 395. Band. 1 hour each term ( 6 hours maximum credit).
Fall : marching band, laboratory band ; winter and spring : concert band, symphonic band. Prerequisite: marching band, upper-division standing; laboratory, concert, and symphonic band, upper-division standing and audition. Lee, Vagner.
Mus 396. Orchestra. 1 hour each term ( 6 hours maximum credit).
Prerequisite : upper-division standing : audition. Boughton.
Mus 397. Chorus. 1 hour each term ( 6 hours maximum credit). Prerequisite : upper-division standing ; audition. Gustafson, Risinger, Wilson.
Mus 398. Opera Workshop. 1 hour each term ( 6 hours maximum credit).
Study of traditional and contemporary operatic literature through analysis, rehearsal, and performance of complete operas and excerpts; training in stage movement, diction, and rehearsal techniques. Prerequisite: upper-division standing; consent of instructor. Miller.
Mus 405. Reading and Conference. Hours to be arranged. Prerequisite : consent of dean.
Mus 490. Performance Studies (Private Instruction). 2-4 hours any term. Prerequisite : proficiency required for satisfactory completion of Mus 390; consent of instructor. For further information, see Mus 190.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
Mus 407. Seminar. (G) Hours to be arranged.
Mus 433, 434. Counterpoint II. (G) 2 hours each term.
Writing of instrumental polyphony, based on the style of J. S. Bach; study of invertible counterpoint and other contrapuntal techniques, with application in the canon, two- and three-part invention, and fugue. Prerequisite: IIus 335 . Keller.
Mus 436, 437. Advanced Orchestration. (G) 2 hours each term.
Continuation of Mus 338. Emphasis on the scoring of original work and on the arranging of major works from other media; study of various styles of scoring by master composers. Prerequisite : Mus 338 . Keller.
Mus 438. Band Arranging. (G) 3 hours.
Scoring for larger combinations of wind instruments, including the concert band, the marching band, and the stage band. Prerequisite : Mus 337. Lewis, Vagner.
Mus 439. Choral Arranging. (G) 3 hours.
Techniques of arranging for various types of choral groups, both accompanied and a cappella. Prerequisite: Mus 223. Keller.

Mus 440, 441, 442. Composition II. (G) 2 hours each term.
Composition in larger forms for large instrumental combinations. Prerequisite: Mus 342. Keller.
Mus 450 . Listening with Understanding. (g) 3 hours, fall or winter.
Designed for undergraduate and graduate students with limited musical background. Introduction to perceptive listening through analysis of various types music (Gregoriall chant through jazz) ; collateral reading, class discussion and individual presentation. Not open to music majors or students with credit in Mus 201, 202, 203. Trombley.
Mus 451. The Music of Bach and Handel. (g) 3 hours, winter.
Theatrical, churchly, and chamber styles in Germany, France, and Italy, as represented by selected masterpieces of Bach and Handel; concerto grosso, dance suite, organ chorale, cantata, oratorio, and mass. Primarily for nonmajors. Prerequisite: Mus 203 or Mus 450. Offered alternate years.
Mus 452. The Classic Symphony and Sonata. (g) 3 hours spring.
The classic symphony and sonata as developed by Haydn, Mozart, and Beethoven; elements of style in the Viennese classic period, and its legacy in the oven, entment century. Primarily for nonnajors. Prerequisite: Mus 203 or Mus 450. Offered alternate years.

Mus 453. Introduction to Opera. (g) 3 hours winter.
The fusion of theatrical and musical modes of dramatic expression; clas study of such masterpieces as Le nozse di Figaro, Carmen, Otello, T ristan und Isolde, Wozzeck, Pélleas et Mélisande. The Rake's Progress. Primarily for nonmajors. Prerequisite: Mus 203 or Mus 450 . Offered alternate years.
Mus 454. Introduction to Twentieth-Century Music. (g) 3 hours spring. Evolution and revolution in musical style since Debussy and Mahler; study of selected masterpieces by such composers as Stravinsky, Bartok, Schoen berg, Copland, and Varèse. Primarily for nolimajors. Prerequisite: Mus 203 or Mus 450 . Offered alternate years.
Mus 455, 456, 457. Orchestral Literature. (G) 2 hours each term.
Major types of orchestral music, from the eighteenth to the twentieth century; dance suite, symphony, tone poem, descriptive suite; pieces for string orchestra. Prerequisite: Mus 361. Offered alternate years. Hladky.
Mus 458. Organ Literature. (G) 3 hours.
The organ in church and concert; organ repertoire from the fifteenth century to the present. Prerequisite: Mus 361 . Hamilton.
Mus 459. Wind-Instrument Literature. (G) 3 hours.
Survey of literature for brass instruments and woodwinds from the sixteenth century to post-World War II; emphasis on style as it affects performance and on the development of bases for critical judgment. Prerequisite : Mus 361 . Vagner.
Mus 460. Song Literature. (G) 3 hours.
Solo songs with accompaniment; the lute air and Purcell ; the nineteenthcentury art song in Germany and France; twentieth-century British, American, and continental song literature; development of bases for artistic performance and sound critical judgment through study of text, voice, and accompaniment. Prerequisite: Mus 361 Miller, Wilson.
Mus 461, 462, 463. Chamber-Music Literature. (G) 2 hours each term. Basic literature of the string quartet and other ensembles using piano and strings ; emphasis on style as it affects performance and on the development of bases for artistic performance and critical judgment. Prerequisite: Mus 361. Hladky.

Mus 464. 465.466. Piano Literature. (G) 2 hours each term.
Solo sonatas, character pieces, the dance suite, theme and variations, from Bach to the present ; original works for four hands and for two pianos; keyboard idioms and musical styles; development of bases for artistic performance and sound critical julgment. Prerequisite: Mus 361. Woods.

Mus 467. Liturgics. (G) 3 hours.
Study of formal rituals of worship in Eastern and Western churches from the pre-Christian era to the present, with particular reference to the forms and styles of their associated music. Saltzman.
Mus 468. Hymnology. (G) 3 hours.
History and interpretation of the Christian hymn, both as literature and music; criteria for the selection of hymn texts and tunes; various denominational hymnals; the use of hymns in worship. Saltzman
Mus 469. Sacred Choral Music. (G) 3 hours.
Survey of choral music for church and concert use based on liturgical and nonliturgical sacred themes; performance practices of various styles; development of criteria for judging aesthetic quality of the music and its performance. Saltzman.
Mus 470. Administration of Church Music. (G) 2 hours
Developing the music program of the church; relation of the ministry of music to the music committee, pastor, and parish; volunteer choir organization; music in the church school. Saltzman.

Mus 485, 486. Advanced Conducting. (G) 3 hours each term.
First term: choral ; second term: instrumental. Prerequisite: Mus 386 or Mus 388; consent of instructor. Risinger, Vagner.
Mus 493. Collegium Musicum. (G) 1 hour each term.
Study of music literature of the mediaeval, Renaissance, and baroque periods through rehearsals and extensive sight reading ; vocal and instrumental repertoire. Cykler.

## GRADUATE COURSES

*Mus 501. Research. Hours to be arranged.
*Mus 503. Thesis. Hours to be arranged.
Mus 505. Reading and Conference. Hours to be arranged.
Mus 507. Seminar. Hours to be arranged.
Composition.
Music History
Church Music.
Mus 511,512,513. Research Methods in Music. 3 hours each term.
Mus 511: use of general bibliographical sources and reference materials in music. Prerequisite to either Mus 512, a consideration of research methods in music history and theory, or Mus 513, a consideration of methodological problems in studies of music in relation to acoustics, psychology, aesthetics, and pedagogy. Cykler, Trombley.
Mus 533, 534. Twentieth-Century Counterpoint. 2 hours each term.
Techniques of present-day contrapuntal practice; application in larger contrapuntal forms. Prerequisite: Mus 434. Keller.
Mus 540, 541,542. Composition for Electronic Media. 3 hours each term.
Electronic-music instruments and techniques; creative use of sound generators and tape-recording equipment. Prerequisite: graduate standing ; consent of instructor. Keller, Hunter.
Mus 560. Music in the Middle Ages. 3 hours fall.
Music in the quadrivium; the writings of Boethius; varieties of liturgical music, particularly Gregorian; performance theories. Pitch notation, rhythmic theory and early polyphony at Notre Dame ; poetic influences on musical form ; French and Italian Ars nova. Hamilton

[^64]Mus 561. Music in the Renaissance. 3 hours winter
The influence of Italian humanism on continental and English styles. Poetic and musical practice in mass, motet, and secular choral song. Notational developments ; music printing. Luther and music; neo-Aristotelian rhetorical theory; Counter-Reformation in Rome and Venice. Hamilton.

Mus 562. Music in the Baroque Era. 3 hours spring.
Musica poetica and humanistic traditions; florid gesture and large statement in the arts. Monody, concertato, Affektenlehre, fugal textures; growth, transfer, and fusion of national and generic styles; performance practices; the rococo in France and Italy. Hamilton.
Mus 563. Music in the Classical Period. 3 hours fall
Philosophical sources of classic style in Kant and Rousseau; sensibility, Sturm und Drang, the gallant style; dramatic forms and procedures in opera, sonata, and concerto. Bergquist
Mus 564. Music in the Romantic Era. 3 hours winter.
The heritage of Beethoven; virtuosic and lyric extremes in instrumental and vocal styles. Literary romanticism, descriptive music and the Lied; opera in vocal styles. Literary romanticism, descriptive music and the Lied; opera in France as philosopher, critic and political figure; the rise of music nationalism; Wagnerism in France ; symbolism and Debussy. Bergquist.
Mus 565. Music in the Twentieth Century. 3 hours spring.
The continuation of romantic ideals; Freud and musical expressionism; political, sociological, and scholarly infuences on composing and performing style ; eclecticism and Stiavinsky. Implications of recent developments. Bergquist.
Mus 590. Performance Studies (Private Instruction). 2-4 hours any term
Prerecuisite: proficiency required for satisfactory completion of Mus 490; sufficient talent to justify the undertaking of graduate studies in performance; jury audition. For instructors, see Mus 190.
Mus 591. Performance Studies (Private Instruction). 1 hour any term (3 hours maximum credit).
For graduate students not specializing in performance. Prerequisite: proficiency required to complete Mus 290 ; jury audition
Mus 592. Performance Studies (Private Instruction). (p) 1 hour any term (3 hours maximum credit).
For graduate students who need instruction in a supplementary performance area. Prerequisite: proficiency in another instrument or voice required for admission to Mus 390 or Mus 391 ; jury audition.
Mus 594. Chamber Ensemble. 1 hour any term.
Mus 595. Concert Band. 1 hour any term.
Mus 596. Orchestra. 1 hour any term.
Mus 597. Chorus. 1 hour any term.
Mus 598. Opera Workshop. 1 hour any term.

## Music Education

## UPPER-DIVISION COURSES

MuE 317. Teaching of Music: Elementary School. 3 hours.
Survey of methods and materials used in the teaching of vocal music in the schools, with emphasis on supervision. Nye.
MuE 318. Teaching of Music: Secondary Schools. 3 hours.
Continuation of MuE 317. Gustafson, Whitfield.

MuE 383. Music Methods for Elementary Teachers. 3 hours.
Methods of teaching music activities in elementary schools. Required for students preparing for elementary-school teaching. Prerequisite: Mus 321, 322 or consent of instructor. Gustafson, Nye, Whitfield.
MuE 405. Reading and Conference. Hours to be arranged. Prerequisite: consent of dean.
MuE 408. Special Teaching Methods. 1-3 hours any term.
Parallels student teaching in the elementary and secondary schools. Observation, reports, and conferences on materials and procedures used in music teaching. Instrumental: Cumingham, staff; vocal: Ellefson, Gustafson, staff.
MuE 426. The General Music Program. 3 hours.
The general music class in elementary and secondary schools; organization, content, and teaching procedures. Gustafson.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT
MuE 407. Seminar. (G) Hours to be arranged.
MuE 444. Choral Materials for Schools. (G) 2 hours.
Repertoire for choral groups in secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Risinger.
MuE 445. String Materials for Schools. (G) 2 hours.
Repertoire for orchestra and other stringed-instrument groups in elementary and secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Hladky.
MuE 446. Wind-Instrument Materials for Schools. (G) 2 hours.
Repertoire for bands and other wind-instrument groups in elementary and secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Cunningham, Lee, Vagner.

## GRADUATE COURSES

*MuE 501. Research. Hours to be arranged
Prerequisite: consent of dean.
*MuE 503. Thesis. Hours to be arranged.
MuE 505. Reading and Conference. Hours to be arranged.
Prerequisite: consent of dean.
MuE 507. Seminar. Hours to be arranged.
MuE 532. Basic Concepts in the Teaching of Music. 3 hours.
Principles and issues in the teaching of music at all levels. Gustafson, Nye, Whitfield.
MuE 533, Music in the Elementary School. 3 hours.
Theory, supervision, curriculum, materials, and procedures of vocal-music teaching in the elementary school. Nye.
MuE 534. Music in the Junior High School. 3 hours.
Continuation of MuE 533. Whitfield.
MuE 535. Music in the Senior High School. 3 hours.
Curricula, organization, methods, and materials in senior high-school music, both vocal and instrumental. Gustafson.
MuE 536. Administration of School Music. 3 hours
Principles underlying a sound policy in the administration of school music programs; budgets, personnel, curriculum, facilities. Gustafson, Nye.

* No-grade course.

MuE 537. Comparative Music Pedagogy. 3 hours.
Comparative study of the teaching of school music in different cultures; critical judgment of curricula and methods. Cykler.
MuE 591. College Music Teaching. 3 hours any term ( 9 hours maximum credit). The teaching of music at the college and university level; development of teaching methods from the eighteenth century to the present; artistic and niques; physiological and mechanical problems in performance. Classes in: music theory, music literature, piano, voice, woodwind instruments, stringed instruments, brass instruments.

## School of Nursing

## Jean E. Boyle, M.N., Director of the School of Nursing

THE UNIVERSITY OF OREGON has offered professional instruction in nursing in Portland since 1919; a degree curriculum was established in 1926. Until 1932 the program in nursing was administered through the Portland Division of the School of Sociology and the Portland School of Social Work. When the social-work program was discontinued in 1932, instruction in nursing was transferred to the University of Oregon Medical School, where it was offered through the Department of Nursing Education. A graduate program, leading to the Master of Science degree, was established in 1955. In the fall of 1960, the department was reorganized as the University of Oregon School of Nursing.

The School of Nursing offers two curricula which lead to the Bachelor of Science degree-one for basic students with no previous preparation in nursing and one for registered nurses from diploma schools of nursing. These programs include preparation for beginning positions in public health nursing. An advanced curriculum leading to the Master of Science degree provides graduate study and advanced professional education.

The first year of the basic degree program is offered on the Eugene campus of the University of Oregon ( see pages 206-207) and by other accredited colleges and universities. The following three years of the basic program and all other nursing programs of the School of Nursing are offered on the campus of the University of Oregon Medical School in Portland. The School of Nursing utilizes the teaching resources of the hospitals and clinics of the Medical School, the Division of Continuing Education of the Oregon State System of Higher Education and Portland State College.

Upper-division courses in public health nursing are offered on the Eugene campus for senior students in the School of Nursing who are assigned to health agencies in Eugene for clinical experience

The programs of the School of Nursing are accredited by the National Accreditation Service and the Oregon State Board of Nursing; the school is a member of the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing.

Detailed information concerning the School of Nursing is published in a separate catalog, copies of which will be furnished by writing to: Director, University of Oregon School of Nursing, 3181 S.W. Sam Jackson Park Road, Portland, Oregon.

## Department of Military Science and Aerospace Studies

Embert A. Fossum, B.A., Colonel, U.S. Army ; Head of Department; In Charge of Army R.O.T.C. Program.
John W. Kreitz, M.S., Lieutenant Colonel, U.S. Air Force; In Charge of Air Force R.O.T.C. Program

THE DEPARTMENT OF MILITARY SCIENCE AND AEROSPACE STUDIES is organized as a regular instructional division of the University. The department includes a U.S. Army Instructor Group, Senior Division Reserve Officers' Training Corps, offering instruction in military science, and a unit of the Air Force Reserve Officers' Training Corps, offering instruction in aerospace studies.

The mission of the department is to select and prepare students to serve as commissioned officers in the United States Army and the United States Air Force, and to promote understanding of problems and policies of national security. The instruction includes a two-year lower-division program and a two-year upperdivision program.

Lower-Division Program. The lower-division program is elective for men students who are under 23 years of age on first enrollment in the University, who are citizens of the United States, and who meet prescribed physical standards. Students who are members of any of the reserve forces of the armed services or who have served on active duty in any of the armed services should consult the department concerning eligibility for advanced standing.

Upper-Division Program. The upper-division program includes two years of instruction on the University campus, plus a summer training period. Completion of the upper-division program and academic requirements for a bachelor's degree qualifies the student for appointment as a commissioned reserve officer.

The summer training period, normally in the summer between the student's junior andsenior years, is conducted at one of the regular installations of the Army or Air Force. It provides application of theory and familiarization with weapons, operations, organizational methods, and installational activities.

Students enrolled in the upper-division program receive retainer pay for a total period of not to exceed twenty months (the current rate is $\$ 40$ a month). Students are issued all required textbooks and uniforms. During the summer training period, students are rationed and quartered, are paid at the rate for service academy cadets, and receive a travel allowance of 6 cents a mile to and from the training installation.

Admission to Upper-Division Program. To be admitted to the upperdivision program, a student must have completed either (1) the lower-division program offered by the University or (2) a six-week field training course at an Army or Air Force installation during the summer between his sophomore and junior years. Other qualifications for eligibility are as follows
(1) Acceptance by the University of Oregon as a regularly enrolled student.
(2) Selection for advanced training by R.O.T.C. and University officials, with the con currence of the President of the University of Oregon.
(3) Ability to complete all requirements for appointment as a second lieutenant before reaching 28 years of age (if scheduled for Air Force flight training, the student must be able to complete all requirements for appointment as a reserve officer before reaching the age of 26 years, 6 months).
(4) Successful completion of such survey or general screening tests as may be prescribed.
(5) United States citizenship.
(6) Physical qualification for appointment as a commissioned officer.
(7) Execution of a written agreement with the United States government to complete the two-year upper-division program, including attendance at the summer training period, and to satisfy the service obligation after graduation.

Relation of R.O.T.C. to Selective Service. Enrollment in the R.O.T.C. program does not waive the requirement for registration under the Universal Military Training and Service Act of 1951; all students who are 18 years of age must register with their local draft boards.

Students accepted for enrollment in the lower-division program may be granted draft deferment. Students enrolled in the upper-division program are enlisted in the armed services reserves until completion of the program. Students receiving R.O.T.C. deferment are required to satisfy their service obligations as commissioned officers after graduation and appointment.

## Military Science

Professor: Colonel E. A. Fossum.
Assistant Professors: Captain K. W. Champion, Major H. C. Todd, Captain D. K. Wells.

Administrative Specialist: Sergeant Major J. J. Freitag.
Technical Specialists: Master Sergeant J. N. Barnett, Staff Sergeant D. H.
Palmer, Staff Sergeant C. G. McHendry.
THE MILITARY SCIENCE PROGRAM has as its principal objective the production of junior officers who, by their education, training, and inherent qualities, are capable of filling positions of leadership in the active and reserve components of the United States Army. For students who take only the lower-division program, a second objective is to provide a broad concept of the role and problems of the United States Army and the part it plays in national defense.

Students who complete the upper-division program, receive a baccalaureate degree from the University, and qualify for designation as distinguished military graduates may apply for appointment as commissioned officers in the regular Army.

Flight Training. A program of flight training is offered, without charge, to selected students who are enrolled in Military Science IV (Mil 411, 412, 413) or have completed Military Science IV and are still enrolled in the University as undergraduates. Information concerning eligibility requirements may be obtained in the Army R.O.T.C. office.

## LOWER-DIVISION COURSES

Mil 121, 122, 123. Military Science I. 1 hour each term
Organization of the Army and the Army R.O.T.C.; indivjdual weapons and marksmanship; United States Army and national security; counterinsurgency; leadership laboratory. Students enrolled must also take a course within the general academic area of effective communications, general psychology, science comprehension, or political institutions and political development which carries 2 or more term hours of credit and satisfies the University group requirement.

Mil 221, 222, 223. Military Science II. 1 hour each term.
Map and aerial photograph reading; American military history; introduction to basic tactics and techniques; counterinsurgency ; leadership laboratory.

## UPPER-DIVISION COURSES

Mil 311,312 , 313. Military Science III. 4 hours each term.
Leadership; military teaching principles; branches of the Army; small-unit tactics and communications; counterinsurgency; precamp orientation; leadership laboratory.
Mil 411, 412, 413. Military Science IV. 4 hours each term.
Operations: logistics; Army administration; military law; the role of the United States in world affairs; counterinsurgency; service orientation; lead.. ership laboratory.

## Aerospace Studies

Professor: Lieutenant Colonel J. W. Kreitz
Assistant Professors: Major P. E. Gushwa, Major M. S. Nicholson, Captain W. E. Cunliffe.

Administrative Specialists: Technical. Sergeant V. B. Thornton, Staff Sergeant K. W. Bastion, Staff Sergeant C. B. Wood.

THE AEROSPACE STUDIES CURRICULUM is designed to provide education that will develop skills and attitudes vital to the career of the professional Air Force officer, and to qualify college men for commissions in the United States Air Force. It includes two major activities, University and aerospace instruction and leadership laboratory

Students qualify for appointment as commissioned reserve officers upon completion of the upper-division program and the award of the baccalaureate degree. Students designated as distinguished military graduates may apply for commis sions in the regular Air Force.

Flight Training. The Air Force offers a flight instruction program to senior cadets who will enter pilot training after commissioning. The flight training, con ducted at a local F.A.A.-approved civilian flying school, provides flight instruction of sufficient scope to qualify the student in the basic principles of flying in aircraft of $65-200$ horsepower. Students who successfully complete the flight instruction program may qualify for a private pilot's license.

## LOWER-DIVISION COURSES

AS 121. Aerospace Studies I. 1 hour fall.
Causes of the present world conflict, the role and relationship of military power to that conflict, and the responsibility of an Air Force officer. Discussion of the factors from which differing political philosophies have evolved; analysis of the three prime political philosophies which have guided segments of society in the twentieth century.
AS 122. Aerospace Studies I. 1 hour winter
Discussion of the means that nations develop to pursue their objectives, and how they confront each other in the use of these means; various military systems, with emphasis on the U.S. Department of Defense and the U.S. Air
Force.
AS 123. Aerospace Studies I. 1 hour spring.
Leadership laboratory, 1 hour a week. Students enrolled must also take a course which satisfies the University group requirement, contributes to the
professional education of an Air Force officer, and carries 2 or more term hours of credit.
AS 221, 222. Aerospace Studies II. 1 hour each term, fall and winter.
Leadership laboratory, 1 hour a week. Students enrolled must also take a course which satisfies the University group requirement, contributes to the professional education of an Air Force officer, and carries 2 or more term hours of credit.
AS 223. Aerospace Studies II. 1 hour spring
Study of world military forces and related political-military issues. The U.S. Army and the U.S. Navy, their doctrines, missions, and employment concepts; the military forces of NATO, CENTO, and SEATO, and their role
in free world security; the military forces of the U.S.S.R., the Soviet satellite armies, and the Chinese Communist army. Analysis of the trends and implications of world military power.

## UPPER-DIVISION COURSES

AS 311, 312, 313. Aerospace Studies III. 3 hours each term.
The nature of war; development of air power in the United States; mission and organization of the Defense Department; Air Force concepts, doctrine, and employment ; astronautics and space operations; the future development of aerospace power; United States space programs, vehicles, systems, and problems in space exploration.
AS $411,412,413$. Aerospace Studies IV. 3 hours each term.
Study of professionalism, leadership, and management; the meaning of professionalism, professional responsibilities, the military justice system, leadership theory, functions, and practices, management principles and functions,
problem solving, and management tools, practices, and controls.

## Summary of Enrollment and Degrees Granted 1964-65

ENROLLMENT BY CLASS AND MAJOR, REGULAR SESSIONS, 1964-65

| Division | Sp | Fr | So | Jr | Sr | Gr | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| College of Liberal Arts: |  |  |  |  |  |  |  |
| Lower Division ..................................... | 138 | 2,257 | 2,483 |  |  |  | 4,878 |
| Anthropology |  |  |  | 23 | 26 | 67 | 116 |
| Biology ........ | ..... | ..... | ..... | 28 | 38 | 98 | 164 |
| Chemistry | ..... | ..... | $\ldots$ | 18 | 18 | 103 | 139 |
| East Asian Studies |  |  |  | 7 | 6 |  | 13 |
| Economics | $\cdots$ | -..... | $\cdots$ | 52 | 45 | 86 | 183 |
| English |  | .-... | $\ldots$ | 133 | 107 | 176 | 416 |
| Foreign Languages |  | $\therefore$ | .... | 84 | 61 | 88 | 233 |
| General Arts \& Letters | ..... | ...... | ...... | 9 | ${ }^{6}$ |  | 15 |
| General Science |  | -.... | ...... | 29 | 35 | ...... | 64 |
| General Social Science | ..... | $\cdots$ | ...... | 63 | 50 |  | 113 |
| Geography .......................................... | ..... | ...... | ...... | 10 | 8 | 36 | 54 |
| Geology | -... | ...... | ...... | 8 | 18 | 28 | 54 |
| History |  | ...... | ...... | 96 | 91 | 92 | 279 |
| Mathematics |  |  |  | 59 | 52 | 110 | 221 |
| Medical Technology ............................. | 2 | 30 | 26 | 13 |  |  | 71 |
| Philosophy |  |  |  | 10 | 11 | 21 | 42 |
| Physics | ...... | ...... | ...... | 14 | 25 | 71 | 110 |
| Political Science | -.... |  |  | 55 | 46 | 69 | 170 |
| Predentistry |  | 49 | 54 | 27 | 11 | 4 | 145 |
| Prelaw |  | 145 | 147 | 35 | 4 | 1 | 333 |
| Premedicine ......................................... | 2 | 130 | 115 | 46 | 21 | 8 | 322 |
| Prenursing |  | 72 | 25 | 3 | 12 | 2 | 114 |
| Psychology |  |  |  | 79 | 49 | 107 | 235 |
| Sociology | .... | --.... | -..... | 89 | 94 | 65 | 248 |
| Speech |  | ..... | ..... | 26 | 31 | 64 | 121 |
| Total, College of Liberal Arts | 142 | 2,684 | 2,850 | 1,016 | 865 | 1,296 | 8,853 |
| School of Architecture \& Allied Arts ............. |  | $\ldots$ | ..... | 141 | 231 | 114 | 486 |
| School of Business Administration | ..... | ...... | ...... | 205 | 188 | 241 | 634 |
| School of Edueation |  |  |  | 147 | 164 | 477 | 788 |
| School of Health, Phys. Ed. \& Recreation | 7 | 101 | 110 | 65 | 62 | 111 | 456 |
| School of Journalism | $\ldots$ | ...... | ...... | 66 | 40 | 34 | 140 |
| School of Law ............................................. |  | ..... |  |  | 27 | 157 | 184 |
| School of Music | .... |  | ..... | 29 | 41 | 52 | 122 |
| Interdisciplinary Studies | .... |  |  |  |  | 84 | 84 |
| Total Eugene campus | 149 | 2,785 | 2,960 | 1,669 | 1,618 | 2,566 | 11,747 |
| Dental School (Portland) ....................................................................................... *390 |  |  |  |  |  |  |  |
| Medical School (Portland) ...................................................................................................................................... ${ }^{\text {* }} 445$ |  |  |  |  |  |  |  |
| School of Nursing (Portland) |  |  |  |  |  |  | *415 |
| Total, University of Oregon ....................................................................... 12,997 |  |  |  |  |  |  |  |

## ENROLLMENT BY PROFESSIONAL OBJECTIVE, EUGENE CAMPUS,

REGULAR SESSIONS, 1964-65

| Field | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| Liberal arts \& interdisciplinary studies | 3,477 | 2,507 | 5,984 |
| Architecture \& allied arts ....................................................... | 723 | 281 | 1,004 |
| Business administration. | 1,175 | 149 | 1,324 |
| Dentistry .............................................................................. | 142 | 3 | 145 |
| Education ............................................................................. | 343 | 885 | 1,228 |
| Health, physical education \& recreation ..................................... | 267 | 189 | 456 |
| Journalism | 199 | 138 | 337 |
| Law | 497 | 20 | 517 |
| Medicine \& medical technology ................................................. | 300 | 93 | 393 |
| Music | 116 | 129 | 245 |
| Nursing .......................................... ..................................... | 1 | 113 | 114 |
| Total | 7,240 | 4,507 | 11,747 |

ENROLLMENT BY SEX, ALL SESSIONS, 1964-65

| Session | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| Summer session at Eugene, 1964 | 2,730 | 2,060 | 4,790 |
| Fall term at Eugene, 1964-65 | 6,582 | 4,090 | 10,672 |
| Winter term at Eugenc, 1964-65 | 6,267 | 3.858 | 10,125 |
| Spring term at Eugene, 1964-65 | 5,314 | 3,649 | 9,463 |
| Net total, regular sessions at Eugene, 1964-65 | 7,240 | 4,507 | 11,747 |
| Net all sessions, Portland schools, 1964-65 | 706 | 544 | 1,250 |
| Net total, all sessions, University of Oregon 1964-65 | 9,668 | 6,460 | 16,128 |

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[^0]:    * On sabbatical leave 1965-66.

[^1]:    * On leave of absence 1965-67.

[^2]:    * On sabbatical leave 1965 -66.

[^3]:    * On sabbatical leave, fall term, 1965-66.

[^4]:    * On leave of absence 1965-66.

[^5]:    * On sabbatical leave 1965 -66.

[^6]:    * On leave of absence 1965-66.
    + On sabbatical leave 1965.66.
    $\dagger$ On sabbatical leave 1965-66.

[^7]:    * On sabbatical leave, fall and winter terms, 1965 -66

[^8]:    * On sabbatical leave, fall term, 1965-66.

[^9]:    * A nonresident student who is not eligible for admission under the stated conditions may be admitted if a faculty committee determines that he can probably pursue University studies with profit.

[^10]:    * Information concerning scheduled test dates and the location of testing centers may be 592, Princeton, N.J., or 1947 Center St., Berkeley, Calif.
    + See note (*), page 73 .

[^11]:    *See note ( $\ddagger$ ), p. 77.

[^12]:    * Courses numbered $300-310$ satisfy only second-sequence requirements.

[^13]:    * On sabluatical leave, fall term, 1965-66.

[^14]:    * See also University of Oregon Medical School Catalog.

[^15]:    * No-grade course.

[^16]:    * No-grade course

[^17]:    On leave of absence 1965-66.

[^18]:    * SSc 201, 202, 203 satisfies prerequisite requirements for upper-division courses in anthro-

[^19]:    * For major program in general social science, see pages 168-169.

[^20]:    * No-grade course.

[^21]:    - No-grade course.

[^22]:    - Offered at the Institute of Marine Biology
    $\dagger$ On sabhatical leave 1965-66.

[^23]:    * No-grade course

[^24]:    * No-grade course.

[^25]:    * No-grade course.

[^26]:    * On sabbatical leave, fall term, 1965-66
    $\dagger$ On sabbatical leave 1965-66.

[^27]:    * No-grade course.

[^28]:    * No-grade course.

[^29]:    * No-grade course.

[^30]:    * No-grade course.

[^31]:    * On sabbatical leave 1965-66.
    + 
    + On leave of absence
    $\dagger$ On leave of absence 1965-66.

[^32]:    * No-grade course

[^33]:    *On sabbatical leave 1965-66.
    $\dagger$ On sabbatical leave, winter and spring terms, 1965-66.
    $\ddagger$ On leave of absence 1965-66.

[^34]:    * No-grade course.

[^35]:    * No-grade course.

[^36]:    * No-grade course.

[^37]:    * No-grade course

[^38]:    ${ }^{*}$ No-grade course.

[^39]:    * No-grade course.

[^40]:    * No-grade course.

[^41]:    * No-grade course.

[^42]:    * No-grade course.

[^43]:    * No-grade course.

[^44]:    *Students interested in actuarial work may elect certain courses in mathematics for the atisfaction of this requirement

[^45]:    - Offered in the Portland Center

[^46]:    * No-grade course

[^47]:    * No-grade course

[^48]:    * No.grade course.

[^49]:    * No-grade course.

[^50]:    * No-grade course.

[^51]:    * No-grade course.

[^52]:    * No-grade course.

[^53]:    * Nograde course.

[^54]:    * No-grade course.

[^55]:    On sabbatical leave 1965-66
    On leave of absence $1965-66$.

[^56]:    Students who have completed six nonths of active military service in the Armed Forces

[^57]:    *On sabbatical leave, fall term, 1965-66.
    † On sabbatical leave, spring term, 1965-66.

[^58]:    No-grade course

[^59]:    * Elective courses.

[^60]:    * Elective courses.

[^61]:    * On leave of absence 1965-66

[^62]:    * No-grade course.

[^63]:    * No-grade course.

[^64]:    *No-grade course

