

CATALOG
ISSUE
1957-59

GRADUATE SCHOOL

EUGENE,
OREGON

BULLETIN

UNIVERSITY OF OREGON



OREGON STATE SYSTEM OF HIGHER EDUCATION

UNIVERSITY
OF OREGON
GRADUATE
SCHOOL

1957-59 CATALOG

UNIVERSITY OF OREGON BULLETIN

NUMBER 64

NOVEMBER 1957

Entered as second-class matter, January 18, 1950, at the post office at Eugene, Oregon, under act of August 24, 1912. Issued eight times a year, in January, March, April, May (two numbers), June, July, and November. Published by the Oregon State Board of Higher Education, at the University of Oregon, Eugene, Oregon.

EUGENE, OREGON

Table of Contents

STATE SYSTEM OF HIGHER EDUCATION.....	5
STATE SYSTEM OFFICERS OF ADMINISTRATION.....	6
STATE BOARD OF HIGHER EDUCATION.....	7
UNIVERSITY OFFICERS OF ADMINISTRATION.....	8
GRADUATE SCHOOL OFFICIALS.....	8
CALENDAR.....	9
GENERAL INFORMATION.....	10
History of Graduate School.....	10
University Campus.....	10
Libraries.....	11
Research.....	11
Individualized Study.....	12
Special Programs.....	12
Summer Session.....	12
Foreign Students.....	12
Fees and Deposits.....	13
Living Accommodations.....	13
Assistantships, Scholarships, Fellowships.....	13
Loan Funds.....	15
Health Service.....	15
Placement Services.....	15
Cultural and Recreational Programs.....	15
DEGREES AND REGULATIONS.....	18
General Regulations.....	18
Special Requirements.....	20
INSTRUCTION.....	26
Anthropology.....	26
Architecture and Allied Arts.....	27
Biology.....	31
Business Administration.....	33
Chemistry.....	35
Dental Sciences.....	37
Economics.....	37
Education.....	39
English.....	43
Foreign Languages.....	45
General Studies.....	47
Geography and Geology.....	47
Health and Physical Education.....	49
History.....	52
Journalism.....	54
Mathematics.....	56
Medical Sciences.....	57
Music.....	58
Philosophy.....	59
Physics.....	60

INSTRUCTION (Continued)	
Political Science.....	61
Psychology.....	62
Religion.....	64
Sociology.....	65
Speech.....	66
INDEX.....	68

Oregon State System of Higher Education

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

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

Each of the institutions provides the general studies fundamental to a well-rounded education. At Oregon College of Education, Southern Oregon College, Eastern Oregon College, and Portland State College, students who do not plan to become teachers may devote their time to general studies or semiprofessional work.

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

An interinstitutional booklet, *Your Education*, which outlines the curricula of the several institutions and contains other information concerning the State System, is available. For a copy, write to Division of Information, Oregon State Board of Higher Education, Eugene, Oregon.

State System of Higher Education Officers

JOHN R. RICHARDS, Ph.D., Chancellor

O. MEREDITH WILSON, Ph.D. President, University of Oregon	AUGUST L. STRAND, Ph.D. President, Oregon State College
DAVID W. E. BAIRD, M.D., LL.D. Dean, Medical School	ELMO N. STEVENSON, Ed.D. President, Southern Oregon College
HAROLD J. NOYES, D.D.S., M.D. Dean, Dental School	FRANK B. BENNETT, Ed.D. President, Eastern Oregon College
JOHN F. CRAMER, D.Ed. President, Portland State College	ROY E. LIEUALLEN, Ed.D. President, Oregon College of Education

JAMES W. SHERBURNE, Ph.D.
 Dean, General Extension Division

HERBERT A. BORK, M.S., C.P.A.....	Comptroller and Bursar
RICHARD L. COLLINS, M.A., C.P.A.....	Budget Director
EARL M. PALLETT, Ph.D.....	Secretary, Board of Higher Education
WILLIAM H. CARLSON, M.A.....	Director of Libraries
FRANCIS B. NICKERSON, M.S.....	Executive Secretary, High School-College Relations Committee
WOLF D. VON OTTERSTEDT, LL.B.....	Assistant Attorney General, assigned to Board Office

Former Chancellors

Oregon State System of Higher Education

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

State Board of Higher Education

	Term Expires
ALLAN HART, Portland.....	1958
LEIF S. FINSETH, Dallas.....	1958
R. E. KLEINSORGE, Silverton.....	1959
WILLIAM E. WALSH, Coos Bay.....	1959
HENRY F. CABELL, Portland.....	1960
CHARLES HOLLOWAY, JR., Portland.....	1961
A. S. GRANT, Baker.....	1962
CHERYL S. MACNAUGHTON, Portland.....	1963
J. W. FORRESTER, JR., Pendleton.....	1963

Officers

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

Executive Committee

President, Vice-President, and LEIF S. FINSETH

JOHN R. RICHARDS, Ph.D., Chancellor
 EARL M. PALLETT, Ph.D., Secretary of Board

Office of the State Board of Higher Education
 Eugene, Oregon

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

University of Oregon

Officers of Administration

O. MEREDITH WILSON, Ph.D.....President, University of Oregon
 WILLIAM C. JONES, Ph.D.....Dean of Administration

*HARRY ALPERT, Ph.D.....Dean, Graduate School
 DAVID W. E. BAIRD, M.D., LL.D.....Dean, Medical School
 ROBERT D. CLARK, Ph.D.....Dean, College of Liberal Arts
 CHARLES T. DUNCAN, M.A.....Dean, School of Journalism
 DONALD M. DUSHANE, M.A.....Dean of Students
 ARTHUR A. ESSLINGER, Ph.D.....Dean, School of Health and Physical Education
 ORLANDO J. HOLLIS, B.S., J.D.....Dean, School of Law
 PAUL B. JACOBSON, Ph.D., Dean, School of Education; Director, Summer Sessions
 THEODORE KRATT, MUS.M., MUS.D.....Dean, School of Music
 *RICHARD W. LINDHOLM, Ph.D.....Dean, School of Business Administration
 SIDNEY W. LITTLE, M.Arch.....Dean, School of Architecture and Allied Arts
 HAROLD J. NOYES, D.D.S., M.D.....Dean, Dental School

J. SPENCER CARLSON, M.A.....Director of Admissions
 CLIFFORD L. CONSTANCE, M.A.....Registrar
 CARL W. HINTZ, Ph.D.....Librarian
 J. ORVILLE LINDSTROM, B.S.....Business Manager

Graduate School

*HARRY ALPERT, Ph.D.....Dean
 RAYMOND T. ELLICKSON, Ph.D.....Acting Dean
 JEAN F. BROWN.....Secretary

Graduate Council

RAYMOND T. ELLICKSON, Ph.D., Professor of Physics, Chairman; FREDERICK M. COMBELLACK, Ph.D., Professor of Classical Languages; RICHARD M. DAVID, Ph.D., Associate Professor of Economics; STACEY L. GREEN, M.Mus., Associate Professor of Music; CARL W. HINTZ, Ph.D., Librarian; HUBERT H. HOELTJE, COMBELLACK, Ph.D., Professor of Classical Languages; RICHARD M. DAVIS, Ph.D., Professor of English; RAYMOND F. MIKESELL, Professor of Economics; MARGARET S. POLEY, Ph.D., Professor of Physical Education; JOHN L. POWELL, Ph.D., Professor of Physics; D. DWAIN RICHINS, Ph.D., Associate Professor of Business Administration; MILES C. ROMNEY, Ph.D., Professor of Education; JOHN W. SHERBURNE, Ph.D., Dean, General Extension Division.

* Appointment effective July 1, 1958.

Calendar

Fall Term, 1957-58

September 22-28, *Sunday* to *Saturday*.....New Student and Registration Week
 September 25-28, *Wednesday* to *Saturday* noon.....Regular registration
 September 30, *Monday*.....Classes begin; late registration begins
 October 14, *Monday*.....Last day to register or change program
 October 16, *Wednesday*.....University Charter Day
 November 28-December 1, *Thursday* to *Sunday*.....Thanksgiving vacation
 December 16-21, *Wednesday* to *Tuesday*.....Final examinations

Winter Term, 1957-58

January 6, *Monday*.....Regular registration
 January 7, *Tuesday*.....Classes begin; late registration begins
 January 20, *Monday*.....Last day to register or change program
 March 17-22, *Monday* to *Saturday*.....Final examinations

Spring Term, 1957-58

March 31, *Monday*.....Regular registration
 April 1, *Tuesday*.....Classes begin; late registration begins
 April 14, *Monday*.....Last day to register or change program
 May 10, *Saturday*.....Last day for filing doctoral theses
 May 24, *Saturday*.....Last day for filing master's theses
 June 7, *Saturday*.....Last day for master's and doctor's final oral examinations
 June 9-14, *Monday* to *Saturday*.....Final examinations
 June 15, *Sunday*.....Baccalaureate and Commencement Day

Summer Session, 1958

June 23, *Monday*.....Registration
 June 24, *Tuesday*.....Classes begin
 July 21, *Monday*.....Last day for filing doctoral theses
 July 31, *Thursday*.....Last day for filing master's theses
 August 13, *Wednesday*.....Last day for master's and doctor's final oral examinations
 August 14-15, *Thursday* and *Friday*.....Final examinations

Fall Term, 1958-59

September 21-27, *Sunday* to *Saturday*.....New Student and Registration Week
 September 29, *Monday*.....Classes begin
 October 13, *Monday*.....Last day to register or change program
 October 22, *Wednesday*.....University Charter Day
 November 27-30, *Thursday* to *Sunday*.....Thanksgiving vacation
 December 15-20, *Monday* to *Saturday*.....Final examinations

General Information

The Graduate School, coordinating the graduate efforts of six professional schools and the departments of the College of Liberal Arts, exists to further the University of Oregon's fundamental objective of discovering, conserving, and disseminating knowledge. Its program provides opportunity for scholarly specialization, for mastery of a particular field, for such study in depth as will complement the breadth of preparatory college education and enrich both professional and cultural life.

With its land-grant counterpart in the Oregon State System of Higher Education, the Graduate School of the University of Oregon stands at the apex of the system of publicly supported education in the state of Oregon. Within the Oregon State System of Higher Education it has sole responsibility for graduate education in all fields represented by its social-science and humanities departments and by all its professional schools except education. It shares with Oregon State College advanced study and research in education, geology, physics, chemistry, mathematics, and biology.

With an enrollment of from 500 to 600 students in the regular sessions and 1,500 in the summer sessions, the Graduate School is large enough to provide competitive stimulation and cooperative exchanges, yet small enough to maintain a close professor-student relationship in classes, seminars, laboratories, and in advanced study and research. The University takes pride in its ability to maintain this relationship.

Of the total number of degrees conferred by the University of Oregon in June 1957, almost a third were graduate degrees. More than half of its graduate students come from outside the state of Oregon and two-thirds of them receive their bachelor's degrees at institutions other than the University of Oregon. In the fall term, 1956, students came from 40 states and 13 foreign countries. A quarter of the total were planning to earn the Ph.D. or D.Ed. degrees, with three-quarters of these in the Ph.D. group.

History of Graduate School

The Graduate School was organized in 1900. Prior to that time, honorary master's and doctor's degrees were conferred in the 1880s and two master's degrees, with definite residence requirements, were conferred in 1899. After two decades of concentration on the master's degree, the Graduate School announced requirements for the Doctor of Philosophy degree in 1920. The first degree under these standards was granted in 1926. Of the seventeen fields in which the Ph.D. degree is now authorized, six have been added in the last decade.

University Campus

The University of Oregon is fortunate in its location, equidistant from the Pacific Ocean and the Cascade Mountains—at the head of the Willamette Valley, 120 miles south of Portland, on the main line of the Southern Pacific Railroad and on the Pacific Highway, US 99. Its easy accessibility is also enhanced by the service of United Air Lines and West Coast Air Lines. The city of Eugene, with a population of approximately 46,000, lies in a rapidly developing metropolitan area of more than twice the city's population. The Willamette Valley enjoys a mild climate, with moderate winters and cool summers. The average rainfall is less than 40 inches, with the heaviest in the winter months, November, December, and January.

The University campus is noted for the beauty of its landscaping. It occupies 187 acres in the eastern section of Eugene. Since World War II, the following facilities of particular interest to graduate students have been added to the campus: Commonwealth Hall (business administration and the social sciences), the University Theater and completely remodeled Villard Hall (speech), the Science Building, an addition to the Library, the incorporation of the old University High School Building into the School of Education plant, the Student Union, Eric Allen Hall (journalism), a new wing for the School of Music, Lawrence Hall, a building for the School of Architecture and Allied Arts, several residence halls, reconstructed Friendly Hall (English and foreign languages), reconstructed Deady Hall (mathematics), remodeled Condon Hall (psychology and geography and geology), and new quarters for the Department of Anthropology and the Museum of Natural History.

Libraries

The organization of the University of Oregon Library into three broad subject divisions—Humanities, Social Science, and Science—supplemented by the General Reference Division, the Special Collections Division, and the Audio-Visual Department, is particularly well suited to the requirements of graduate study. Each of these divisions and departments is manned by specialists competent to give bibliographical advice and assistance to students. Physical facilities for study and research are housed in a modern building, which will accommodate 1,300 readers and approximately 700,000 books.

Holdings on the Eugene campus now total 606,405 volumes; 3,892 serials are currently received. In addition to books and periodicals, resources for research include maps, photos, pictures, prints, sound recordings, slides, filmstrips, motion picture films, archives, manuscripts, and pamphlets, which collectively number nearly 500,000 items. The University of Oregon Library is a member of the Pacific Northwest Bibliographic Center, and has ready access to resources of other major libraries in this region and elsewhere through a system of interlibrary loan.

The University Library has been a depository for U. S. Government Documents for many years and has an almost complete file of the Congressional Serial Set. Beginning in January 1953, all nondepository Federal government publications are now received in microprint. League of Nations and United Nations publications are well represented.

The Special Collections Division, with some 300,000 manuscripts and 100,000 photographs chiefly relating to Oregon and the Pacific Northwest, in addition to a large collection of printed material, is a valuable resource for regional research.

Research

Research at the University of Oregon is supported by funds in the regular budgets of schools and departments, by special grants from a central fund administered by the dean of the Graduate School, and by grants from agencies outside the University. Among outside agencies which have provided generous grants in the last few years are the U. S. Public Health Service, the National Science Foundation, the Office of Ordnance Research, the U. S. Signal Corps, the E. C. Brown Trust, the Office of Naval Research, the Atomic Energy Commission, the U. S. Air Force, the American Cancer Society, the American Chemical Society, the National Park Service, the Research Corporation, and the Social Science Research Council. Such grants usually provide funds for research assistantships for graduate students.

Individualized Study

Graduate students may, at the discretion of the several schools or departments, arrange for directed study and research on an individualized basis. Research (501) and Reading and Conference (505) are courses especially designed for this purpose, as is also Thesis (503). The student is placed on his own resources, in a particular project, under the guidance of a professor with special competence in the field of study being pursued.

Such study, coupled with the seminars (507), constitute a major share of the graduate work in many University departments and schools. The University of Oregon has generally discouraged the practice of proliferating graduate courses under a host of specialized titles in the Catalog. It has generally preferred instead reliance on seminars, research, and directed study under "open content" numbers in the course listings.

Special Programs

The University of Oregon has served as the Northwest center for the W. K. Kellogg Foundation's research program in school administration, known as the Cooperative Program in Educational Administration. This activity was carried on under an original five-year grant—from 1951 to 1956. The Foundation has recently made an extension of research grants to the University of Oregon for continuing research in educational administration. These research funds make possible a continuation of the Oregon Community Study Project, involving the common interests of an interdisciplinary group of faculty members and graduate students in the social sciences and in education. Graduate assistantships are available under this continuing program.

The Kellogg Foundation also makes available five faculty study scholarships each summer for regular faculty members of universities and colleges interested in pursuing an interdisciplinary approach to problems of educational administration.

These continuing activities will extend the Kellogg Project from 1957 to 1960.

Summer Session

Courses and research opportunities are available to degree candidates in the summer, in an eight-week session. Supplemented by individualized study arrangements, the summer offerings enable the graduate student to make uninterrupted progress toward his degree.

Summer opportunities are unusually extensive for students in all phases of professional education. Visiting professors and special lectures enrich the program especially designed to meet the needs of teachers and educational administrators. Teachers who wish subject-matter concentration are accommodated through courses from all segments of the curriculum and through the special program leading to the Master of Science in General Studies degree (see page 21).

Foreign Students

Graduate students from foreign lands are welcome at the University of Oregon. They are eligible for assistantships and fellowships and are otherwise con-

sidered as an integral part of the graduate student body. Foreign students who have special problems connected with their alien status, such as visas, government regulations, employment, and general orientation, are invited to use the services of the Foreign Student Adviser, a member of the staff of the Office of Student Affairs.

Fees and Deposits

Regular fees and tuition for students in the Graduate School total \$71.00 a term. Students holding graduate or research assistantships or fellowships pay a special reduced fee of \$25.00 a term. The nonresident fee does not apply to students enrolled in the Graduate School. For six term hours of work or less, students pay the regular part-time fee, ranging from a minimum of \$18.00 to a maximum of \$54.00 for 6 term hours. Payment of full-time or part-time fees entitles a graduate student to all services maintained by the University for the benefit of students.

Graduate students must make a \$10.00 deposit once each year at the time of first registration, as a protection to the University against the loss of or damage to institutional property.

The fee for the eight-week summer session is \$71.00. The part-time fee in the summer is \$9.00 per credit hour, with a minimum fee of \$18.00 and a maximum of \$54.00 for 6 term hours.

A special fee of \$20.00 is paid by all students who are granted the Ph.D. or D.Ed. degree (except majors in physical education) to cover the cost of the micro-filming of their theses; the theses of physical-education majors are reproduced on microcards under a national program sponsored by the profession.

Living Accommodations

Graduate students may live in the dormitories, which accommodate 1,651 students; in facilities for married students, accommodating 375 families; or in rooms in private homes. The University maintains five dining halls for students.

Board is available at \$51.00 a month, payable in advance. Room rent in the dormitories ranges from \$62.00 to \$80.00 a term in multiple units and from \$80.00 to \$120.00 a term in single rooms, payable in two equal installments each term.

Dormitory applications should be made as early as possible before the opening of the school year, on an official form supplied by the Housing Department, University Business Office, and must be accompanied by a room deposit of \$15.00. This deposit is refunded six weeks after termination of occupancy. It is forfeited if the reservations are canceled less than two weeks before the opening of the dormitory at the beginning of the term for which registration was made.

Facilities for married students include a wide variety of accommodations. The rents range from \$32.00 to \$52.00. Applications should be made to the Housing Department, University Business Office.

The Office of Student Affairs maintains a file of rooms available in private homes in Eugene.

Assistantships, Scholarships, Fellowships

Teaching and research assistantships, scholarships, and fellowships are awarded annually to graduates of accredited universities and colleges who have superior records in their undergraduate work. All persons holding these positions are expected to register in the Graduate School, and to become candidates for ad-

vanced degrees. Applications should be made before March 1. Application blanks are furnished on request by the Graduate School.

Teaching Assistantships. A number of teaching assistantships are available to well-qualified graduate students in nearly all schools and departments. Stipends range from \$1,100 to \$1,400 a year; assistants are charged a special reduced fee of \$25.00 per term. Teaching assistants are allowed to register for a maximum of 12 term hours of course work. Duties, which are limited to 15 hours a week, consist of reading papers, supervising laboratory and quiz sections, etc.

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

Teaching and Research Fellowships. Fellows are normally candidates for the doctorate, with at least one year of superior work completed toward that degree. Teaching fellows give instructional assistance in their departments. Research fellows have duties similar to those of research assistants; fellows are, however, expected to assume greater responsibility in connection with the research projects to which they are assigned. Stipends range from \$1,400 to \$1,800 a year. Fees and enrollment limitations are the same as for teaching and research assistants.

State Scholarships. A limited number of scholarships covering tuition and laboratory and course fees are available to graduate students. All applicants, to be eligible, must be in need of financial assistance, and must show evidence of superior scholarship. Application should be made to the chairman, Committee on Scholarships and Grants in Aid, on official blanks furnished by his office, and must be filed before March 1.

Other Scholarships and Fellowships. A number of special scholarships and fellowships are available to graduate students. Information and application blanks for these may be obtained from the chairman, Committee on Scholarships and Financial Aid. These special awards include:

Eric W. Allen Memorial Fellowship. This fellowship, supported by the Eugene *Register-Guard*, pays up to \$1,000 for a year's study in the School of Journalism. Fellows are selected primarily on the basis of the service they may subsequently offer to the profession of journalism. The award is ordinarily made to an Oregon newspaper man. Study programs may be at the graduate or undergraduate level, and need not lead to a degree. The fellowship is named in memory of Eric W. Allen, the first dean of the School of Journalism and a member of the University faculty from 1912 until his death in 1944.

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

Thomas Condon Fellowship in Palaeontology. This fellowship, normally carrying a stipend of \$500, is endowed through a bequest from the late Mrs. Ellen Condon McCornack and is named in memory of her father, Dr. Thomas Condon, member of the University faculty from 1876 until his death in 1906.

Maud Densmore Music Fellowship. This \$1,500 fellowship, awarded annually to a graduate student in music, is supported by Harvey B. Densmore, Class of 1903, as a memorial to his sister, the late Miss Maud Densmore.

Arthur P. Pratt 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 Pratt 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, and is named in honor of Arthur P. Pratt of Los Angeles, California.

Zimmerman Scholarship. The Joseph P. and Eva Zimmerman Scholarship, a \$500 award, is given annually to a senior student, and may be renewed for a year of graduate study (or it may be divided among two or more senior students). The scholarship is supported through a bequest of the late Miss Lois Zimmerman, graduate of the University in the Class of 1928, and is named in memory of her father and mother.

Loan Funds

The University of Oregon administers student loan funds totaling approximately \$275,000. These funds are available for two types of loans: regular loans for a period of six months to two years; and emergency loans of small amounts for a period of ninety days or less. Inquiry and applications should be made through the Office of Student Affairs.

Health Service

The regular Student Health Service of the University, including the hospital facilities of the Infirmary, is available to graduate students on the same terms as other students. Before admission, each entering student is required to have a physical examination by a physician of his choice, and to present a record of this examination on a form provided by the University.

Placement Services

The University assists its students and graduates in obtaining employment, through a Student Employment Service for those seeking part-time and vacation positions, a Graduate Placement Service for those seeking professional employment in nonteaching fields, and a Teacher Placement Service for those interested in teaching, from the elementary to college levels, or in administrative positions in public and private education.

Cultural and Recreational Programs

The University of Oregon takes justifiable pride in the quality and comprehensiveness of its cultural and recreational programs, which it considers an intrinsic part of its educational function, for all students, graduate and undergraduate.

Lectures. The University places heavy emphasis on its lecture program and has been able to obtain support of unusual strength and talent of unusual quality.

The Failing Distinguished Lectures Fund brings lecturers and artists of national and international reputation to the campus for public performances and for

small-group meetings with students and faculty in the guest's special field of study. Visitors under the Failing Fund in recent years have included Arnold Toynbee, Julian Huxley, Ralph Bunche, William Faulkner, John Dos Passos, Lester Pearson, Henry Steel Commager, Zechariah Chafee, Jr., Harold Urey, Sidney Hook, Robert Redfield, Herbert Morrison, Mark Van Doren, Lee Du Bridge, Paul Tillich, Robert Frost, the Budapest String Quartet, the Griller Quartet, the Eger Players, and the Julliard Quartet.

Carnegie Corporation funds for a special graduate social-science program, a visiting graduate professorship, student assembly and University Lectures funds, departmental resources, Art Festival funds, Sigma Xi, and other funds are also used in all possible ways to enrich the student's intellectual opportunities. Through these funds there have been brought to the campus distinguished professors recently retired from other institutions, such as George Sabine from Cornell, Ronald Crane from Chicago, and Warren Thompson from Scripps Foundation, Miami University; scholars from abroad, such as Herman Mannheim from the London School of Economics and Kenneth Lindsay, former member of the British Parliament and Undersecretary of Education; creative writers, such as Saul Bellow, Walter Van Tilburg Clark, and William Carlos Williams; composers, such as Ingolf Dahl, Ernest Bloch, Bela Bartok, Ernst Toch, and Roger Sessions; architects and designers, such as Richard Neutra and Buckminster Fuller; philosophers, such as F. S. C. Northrop and T. V. Smith; economists such as Edwin Nourse and Beardsley Ruml; political figures, such as Norman Thomas, Thomas E. Dewey, John Sparkman, Paul Douglas, Earl Warren, and Averill Harriman; scientists, such as Alan Waterman, Linus Pauling, Wendell Stanley, and J. Robert Oppenheimer; educators, such as James Conant, Clarence Faust, Robert Hutchins, and Barnaby Keeney; and journalists, such as Roscoe Drummond, Marquis Childs, and Henry Luce.

In addition, a score or more of lectures are delivered each year by faculty members, under the auspices of the Association of Patrons and Friends of the University of Oregon Library, the Student Union, and the several departments. All these events are open to students without charge.

Musical Activities. Graduate students automatically become members of the Eugene and University Civic Music Association, which brings to McArthur Court each year six or seven outstanding artists or musical groups, including, in recent years, the Minneapolis Symphony Orchestra; the Philadelphia Symphony Orchestra; the New York Philharmonic Orchestra; Raymond Massey, Anne Baxter, and Tyrone Power in *John Brown's Body*; the Ballet Russe de Monte Carlo Concert Group; Marian Anderson; and soloists from the Metropolitan Opera Company.

In addition, the Failing Fund brings outstanding musical talent to the campus. The faculty and students of the School of Music also present a variety of musical programs each year.

The University Concert Band, the University Symphony Orchestra, the University Choral Union, the University Singers, and smaller ensembles provide membership for all who can qualify and wish to participate.

A circulating collection of records is maintained by the University. Listening devices are available in the Student Union and in the Douglass Room of the Library.

All these events and facilities are open to graduate students without charge.

Theater. The University Theater players present programs ranging from the classical to Broadway hits and musical comedies, in an excellent new, well-equipped theater. Students and townspeople are admitted by ticket. Summer productions are also provided. Graduate students are invited to participate in these dramatic productions.

Museums and Collections. The University maintains two museums, the Museum of Art and the Museum of Natural History. The Museum of Art houses the Warner Collection of Oriental Art. The Museum of Natural History has divisions of anthropology, botany, geology, palaeontology, and zoology.

Loan exhibitions and student art work are shown in the Art Gallery in the Art and Architecture Building. A permanent collection of contemporary paintings is exhibited in the Art and Architecture Library. Art exhibits are also shown in the gallery in the Student Union.

Athletic Activities. Graduate students, through payment of regular fees, may attend all intercollegiate athletic contests, chiefly Pacific Coast Conference competition. They are also entitled, without further charge, to use all the recreational facilities of the University, including swimming pools.

Degrees and Regulations

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 and physical education, journalism, medical sciences and nursing education (at the Medical School in Portland), and music. The degrees granted, and the fields in which programs of study leading to the respective degrees are currently offered, are listed below :

Doctor of Philosophy: anthropology, biology, chemistry, economics, education, English, geology, history, mathematics, medical sciences, physical education, physics, political science, psychology, Romance languages, sociology.

Doctor of Education: education.

Master of Arts (departmental): anthropology, architecture, art, biology, business administration, chemistry, classical languages, economics, education, English, geography, geology, Germanic languages, health and physical education, history, journalism, landscape architecture, mathematics, medical sciences, music, philosophy, physics, political science, psychology, Romance languages, sociology, speech, urban planning.

Master of Arts in General Studies: see page 21.

Master of Science (departmental): anthropology, architecture, art, biology, business administration, chemistry, dental sciences, economics, education, geography, geology, health and physical education, journalism, landscape architecture, mathematics, medical sciences, music, nursing education, physics, political science, psychology, sociology, speech, urban planning.

Master of Science in General Studies: see page 21.

Master of Architecture: architecture.

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

Master of Business Administration: business administration.

Master of Education: education.

Master of Landscape Architecture: landscape architecture.

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

General Regulations

Three classes of graduate students are recognized: (1) those wishing to become candidates for a master's degree; (2) those wishing to become candidates for a doctor's degree; and (3) those wishing merely to take work beyond the requirements for the bachelor's degree. Students of the first and second classes follow programs organized in conformity with the rules stated below. Students of the third class register for the courses they desire, with the understanding that the institution is under no implied obligation to accept credit earned as credit toward a degree. Whether a student is adequately prepared to enroll for a particular course is determined by the instructor in charge and the head of the department.



DEADY HALL, HOME OF THE DEPARTMENT OF MATHEMATICS

Admission. A graduate of any accredited college or university will be admitted to the Graduate School if his credentials indicate that he will be able to maintain a satisfactory scholastic average as a graduate student.

No student, whether or not he is a candidate for a degree, may register in the Graduate School until he has been formally admitted as a graduate student through the Office of Admissions. The student should submit his credentials early enough to allow adequate time for the clearance of admission (not less than three weeks) before he expects to enter the Graduate School.

Admission to the Graduate School does not in itself entitle a student to become a candidate for a degree. Admission to candidacy for an advanced degree is granted only after the student has demonstrated, by passing a qualifying examination, the thoroughness of his preparation and his ability to do graduate work.

Admission as special students may be granted to graduates of nonaccredited institutions. After at least one term of satisfactory graduate work in the University, such students may petition for regular graduate standing, and for credit in courses completed acceptably as a special student. The Graduate Record Examination may be required as additional validation.

Applicants who wish to work toward the Ph.D. degree, and who are not graduates of the University of Oregon, are requested to come to the campus for interviews, whenever possible.

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

Reservation of Graduate Credit. A senior student who has satisfied all requirements for a bachelor's degree except 6 term hours of credit or less may, on petition to the Graduate School, be allowed to reserve credit in graduate courses for which he is registered for later application as part of his graduate program. The petition must be filed in the Graduate Office before the end of the term in which the courses are taken.

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

Because graduate courses generally require more outside preparation than work at the undergraduate level, the maximum course load is set at 16 term hours for a graduate student devoting all of his time to graduate study, and 12 term hours for a graduate assistant or fellow. Only under unusual circumstances may advisers approve study loads in excess of these limits.

Grade Requirements. An accumulation of 9 term hours of grades below B in his major field disqualifies a student for further graduate work toward the master's degree. To be eligible for a master's degree, a student must present 45 term hours of graduate work with grades of A or B.

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



Undergraduate enrollment in 400 courses designated (G) is restricted to seniors; undergraduate enrollment in 400 courses designated (g) is restricted to juniors and seniors.

Special Requirements

Master of Arts, Master of Science

Credit Requirements. For the departmental Master of Arts or Master of Science degree, the student must complete a program of study totaling not less than 45 term hours in courses approved for graduate credit. 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 for all other Master's Degrees except the M.Ed. and the M.A. in General Studies is 30 term hours of work on the Eugene campus or at the Medical or Dental schools in Portland.

Transferred Credit. Credit earned at other accredited institutions, or in the General Extension Division of the Oregon State System of Higher Education, may be counted toward the master's degree under the following conditions: (1) total of transferred credit may not exceed 15 term hours; (2) the courses must be relevant to the degree program as a whole; (3) the transfer must be approved by the student's major department and by 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 one foreign language, preferably French or German. 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. For the M.S. degree there is no foreign-language requirement, unless a language is required by the school or department.

Course Requirements. For the departmental M.A. or M.S. degree, at least one year sequence in the 500-599 series (normally of seminar or research nature and for 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, the student's thesis, and the final examination) must be completed within a period of seven years.

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

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

Thesis. In some schools and departments, 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 copies of the complete thesis must be distributed by the candidate to the members of his examining committee. 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.

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.

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 at least three members, two in the student's major field and one in the minor field. The examining committee is 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.

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

Master of Arts in General Studies

The University offers the degree of Master of Arts in General Studies in fields in which graduate work is allocated to the institution. This degree is granted for achievement in cultural scholarship, not for specialized work in one of the traditional fields of learning. The student pursues a program of study selected from the offerings of not less than three departments or schools. The requirements are flexible, but the work must be integrated. The student's thesis provides the focus which determines the selection of courses for his program. On the recommendation of the student's adviser, the foreign-language requirement may be waived.

The residence requirement for the M.A. in General Studies is the same as for a departmental master's degree (see page 20, except that 33 of the 45 term hours of work required may be taken in the Portland Extension Center or in approved courses in the General Extension Division. The remaining 12 hours must be earned on the Eugene campus, and of these 12 hours at least 10 must be earned in one term or summer session.

The program is supervised by the Committee on General Studies, of which Dr. Joel V. Berreman, professor of sociology, is chairman.

Master of Science in General Studies

The University offers a program of graduate study planned especially for students working toward the satisfaction of the Oregon state requirement of a fifth year of college work for regular high-school teacher certification. The program leads to the degree of Master of Science in General Studies.

Enrollment in the program is open to any person who is eligible for admission

to the Graduate School; the student must, however, have a reasonable background of undergraduate study in the fields or departments in which he proposes to work, and must complete prerequisites for specific courses. The requirements for the degree of M.S. in General Studies are:

(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 graduate courses in two fields of study (other than education), including normally not more than 21 term hours in one field. At least 6 term hours must be in 500 courses in one department or school; the student's program must be planned to provide well-rounded knowledge and must not be made up of scattered, unrelated courses.

(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 work in education completed by the student as an undergraduate. (The Oregon state teacher's certification requirement specifies 9 term hours of graduate work in education and 6 term hours in education electives, which may be taken either at the undergraduate or graduate level; students who take these electives in the fifth year must complete a total of 15 term hours of graduate work in education to qualify for the degree of M.S. in General Studies.

(2) Satisfaction of the regular requirements of the Graduate School for the master's degree, except that no thesis is required.

The program is administered by the dean of the Graduate School and supervised by the Committee on General Studies, of which Dr. Joel V. Berreman, professor of sociology, is chairman.

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. Two written comprehensive final examinations are required, one in the candidate's area of concentration, the other in the more general functional areas of teaching.

The residence requirement for the M.Ed. degree is the same as for the M.A. or M.S. degree (see page 20), except that 33 of the 45 term hours of work required may be taken in the Portland Extension Center or in approved courses in the General Extension Division. The remaining 12 hours must be earned on the Eugene campus, and of these 12 hours at least 10 must be earned in one term or summer session.

Master of Fine Arts

Work leading to the Master of Fine Arts degree is offered in four fields: drawing and painting, sculpture, ceramics, weaving. The requirements include the completion of an extended creative project of professional character, instead of a thesis. After a qualifying examination, a minimum of three terms are devoted to the terminal creative project and related course work. Since, however, the degree is awarded primarily for creative achievement, there is considerable individual variation in the time required. The student chooses his project and related courses with the advice of a committee of members of the faculty of the School of Architecture and Allied Arts. For further information, see page 29.

Master of Architecture

For information concerning the aims and requirements of programs leading to the Master of Architecture degree, see Architecture and Allied Arts below, page 28.

Master of Landscape Architecture

For information concerning the aims and requirements of programs leading to the Master of Landscape Architecture degree, see Architecture and Allied Arts below, page 28.

Master of Music

Work leading to the degree of Master of Music is offered in three fields: composition, instrumental music, and vocal music. To be admitted to candidacy for the M.Mus. degree in the field of composition, the student must demonstrate the requisite skills and abilities for creative work, and must submit two original compositions. To be admitted to candidacy for the degree in the field of instrumental or vocal music, the student must demonstrate the requisite skills and abilities for professional performance, and must submit a complete repertory. The "thesis" for the M.Mus. degree may be a research paper, an original composition in the large form, or a public instrumental or vocal performance. The student of vocal music must demonstrate a reading knowledge of at least two foreign languages and satisfactory diction in a third.

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 doctor's degree. Exception to this rule may be made by the graduate dean upon the recommendation of the major school or department.

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

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

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

Comprehensive Examinations. The student working toward the Ph.D. degree must pass a group of comprehensive preliminary 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.

Language Requirements. For the Ph.D. degree, a student must demonstrate by formal examination a reading knowledge of two languages other than his native language. The candidate's advisory committee, with the approval of the graduate dean, will certify the two languages most appropriate to his program. Examinations in these two languages must be passed before the comprehensive examination may be taken.

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

Three copies of the thesis, approved 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 are deposited in the Graduate Office. Seven copies of an abstract of the approved thesis (not longer than 600 words) must be filed in the Graduate Office four weeks before the examination.

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

The degree of Doctor of Education is granted in recognition of mastery of theory, practices, and research in professional education. Programs of study are offered with primary areas of specialization in general administration and supervision, curriculum and instruction, elementary education, secondary education, educational psychology and measurement, special education, music education, and 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 held for a demonstration of 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.

Admission to the D.Ed. Program. A student seeking admission to the program leading to the D.Ed. degree should obtain from the School of Education a mimeographed statement of the basic requirements for doctoral degrees in education and an application form for admission to the degree program. The student should then seek the assistance of a member of the faculty to aid him in developing a tentative doctoral program. As soon as he has completed his qualifying examinations he may meet with the Doctoral Admissions Committee of the School of Education. This committee will consider the student's qualifications for admission and determine the nature and extent of work to be completed for the 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 the 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 proposed by his committee, and (4) received the consent of his adviser to take the examinations.

Instruction

Anthropology

Professors: LUTHER S. CRESSMAN (department head), HOMER G. BARNETT.

Associate Professor: THEODORE STERN.

Assistant Professor: VERNON R. DORJAHN.

Graduate work leading to the M.A. and the Ph.D. degree is offered with choice of specialization in archaeology, cultural anthropology, ethnology, linguistics, and physical anthropology. All degrees are in anthropology; this means that the student must demonstrate competence in archaeology, cultural anthropology, ethnology, linguistics, and physical anthropology, and will then choose a field for specialization based on this broad foundation. Old World archaeology is not offered as a special field at the Ph.D. level.

Ordinarily two years will be required for completion of the work leading to the master's degree and four for the Ph.D. The Ph.D. candidate may bypass the master's degree on recommendation of the department, if he shows a superior performance on an appraisal examination near the completion of the third term of graduate study.

Field work is ordinarily expected of all students as the basis for theses. Summer field work in archaeology, cultural anthropology, and linguistics is usually offered in connection with the summer session of the University. This is frequently integrated with a faculty research project and provides the opportunity for selected students to receive supervised early training in various field methods.

The department's osteology and serology laboratories are excellently equipped for instruction and research.

The presence in Oregon of three Indian reservations provides convenient facilities for field work. The changing status of these Indian populations offer opportunities for research in problems of cultural and social dynamics, in addition to work in conventional areas of interest. Oregon also offers a rich field for archaeology, which is being exploited in the research and instructional program.

A detailed statement of requirements and procedures for graduate students in anthropology will be furnished upon request to the department.

- Anth 408. **Field Work in Anthropology.** (G) Hours to be arranged.
Anth 411, 412, 413. **World Prehistory.** (g) 2 hours each term. Cressman.
Anth 414. **Race and Culture.** (G) 2 hours. Stern.
Anth 415. **Socialization in Primitive Society.** (G) 2 hours. Stern.
Anth 416. **History of Anthropology.** (G) 2 hours. Stern.
Anth 417, 418, 419. **The American Indian.** (G) 3 hours each term. Stern.
Anth 420, 421, 422. **Beginnings and Development of Civilizations.** (G) 2 hours each term. Cressman.
Anth 423, 424, 425. **Peoples of the Pacific.** (G) 3 hours each term. Barnett.
Anth 435. **Peoples of Africa.** (G) 3 hours fall. Stern.
Anth 436. **Peoples of the Near East.** (G) 3 hours winter. Dorjahn.
Anth 437. **Peoples of Interior Asia.** (G) 3 hours spring. Dorjahn.

ARCHITECTURE AND ALLIED ARTS

27

- Anth 438, 439, 440. **Peoples of Southern and Eastern Asia.** (G) 3 hours each term. Stern.
Anth 441, 442, 443. **Linguistics.** (G) 3 hours each term. Stern.
Anth 444. **Religion and Magic of Primitives.** (G) 3 hours fall. Stern.
Anth 445. **Folklore and Mythology of Primitives.** (G) 3 hours winter. Stern.
Anth 446. **Art Among Primitives.** (G) 3 hours spring. Stern.
Anth 450, 451, 452. **Cultural Dynamics.** (G) 3 hours each term. Barnett.
Anth 453. **Primitive Value Systems.** (G) 3 hours. Barnett.
Anth 454. **Applied Anthropology.** (G) 3 hours. Barnett.
Anth 455. **Anthropology and Native Administration.** (G) 3 hours. Barnett.
Anth 501. **Research.** Hours to be arranged.
Anth 502. **Research Methods in Anthropology.** Hours to be arranged. Dorjahn.
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.** 3 hours any term.
Theory and Method in Archaeology: Cressman. *Culture and Personality:* Stern, Littmann. *Anthropological Theory:* Barnett. *Field Methods in Ethnology:* Barnett. *Innovation:* Barnett. *Economics of Primitive Peoples:* Dorjahn. *The Negro in the New World:* Dorjahn.
Anth 511. **Culture, Society, and the Individual.** 3 hours. Barnett.
Anth 520, 521, 522. **Advanced Physical Anthropology.** 4 hours each term. Dorjahn.
Bi 522. **Advanced Genetics.** 2 hours.

Architecture and Allied Arts

Professors: SIDNEY W. LITTLE (dean), WALLACE S. BALDINGER, FREDERICK A. CUTHBERT, FREDERICK T. HANNAFORD, WALLACE S. HAYDEN, DAVID McCOSH, MARION D. ROSS, ANDREW M. VINCENT.
Associate Professors: GEORGE F. ANDREWS, EYLER BROWN, ROBERT R. FERENS, BROWNELL FRASIER, GEORGE S. JETTE, MAUDE I. KERNS (emeritus), VICTORIA A. ROSS, WALLACE M. RUFF, MARK R. SPONENBURGH, JACK WILKINSON.
Assistant Professors: THOMAS O. BALLINGER, DALE BENEDICT, TING-LI CHO, PHILIP DOLE, DAVID P. HATCH, NORMAN JOHNSON, DONALD POE, C. BRYAN RYAN.

Graduate work in the School of Architecture and Allied Arts is offered in each of the eight divisions of the school: architecture, landscape architecture, interior architecture, drawing and painting, sculpture, applied design, art education, art history.

Programs combining work in the divisions of the school are encouraged. Programs may also include work of parallel interest from University offerings outside the school.

All graduate study in the creative fields is conducted on an individual basis between the student and the particular faculty member responsible for the work.

Enrollment in seminars and research courses is held to small groups, usually not exceeding ten students each. In all cases where the student pursues a terminal creative project, a multiple-staff assignment is made. For example, in the field of architecture, not less than two faculty members are assigned to each graduate student at the earliest stage of his program; through this arrangement, a breadth of criticism is assured throughout the student's work on his terminal creative project.

The graduate program in the school is currently limited to an enrollment of about forty students. Usually twenty per cent of these are scholarship students, with another twenty per cent selected from applicants from outside the continental United States. An applicant for graduate study in a creative field may be asked to send a small exhibit of recent work (photographs rather than original material). When accepted, the student should plan to bring with him a small exhibit of original material to facilitate advisory discussions on the scope of his graduate study program.

The dean of the School of Architecture and Allied Arts assigns each graduate student to a faculty adviser, who serves during the student's entire program and consults, at the end of the first term, with the Graduate Committee of the school to determine the student's status for degree candidacy. In addition to his regular courses during the term prior to acceptance as a degree candidate, the student also develops his program for a terminal creative project (or thesis). Upon approval of the project and the student's general program, after a qualifying examination, the Graduate Committee of the school appoints a final committee of five faculty members. This group serves as a jury and consulting body during the development of the program. One of the five members of the project jury must be from outside the faculty of the School of Architecture and Allied Arts and one member may be selected by the candidate.

During the period before the qualifying examination, work undertaken by the student is acceptable for graduate credit either in whole or in part, depending upon academic deficiencies or need for background material in certain creative areas. After acceptance of the project outline and satisfactory completion of the qualifying examination, the minimum further time required to complete all degree requirements is three terms. Graduate assistants and other part-time students spend proportionately longer time.

The graduate program of the school falls into three general categories:

(1) For students who enter graduate work from any one of the regular five-year undergraduate curricula having strictly professional content:

(a) *Master of Architecture.* (i) For original work in architectural design, requiring presentation of a terminal creative project in design, consisting of a problem of complexity and breadth selected, initiated, developed, and publicly presented by the student; more than one student may collaborate on such a project. (ii) For a project involving original research into some special phase of the building industry, construction methods, structural design, building types, etc.; the requirements for such a project include the presentation of a thesis rather than a design project.

(b) *Master of Landscape Architecture.* For original work in landscape design, requiring presentation of a terminal creative project in design, selected and developed by the student; this may be integrated with a parallel architectural project or may be collaborative with a group of students in either field.

(c) *Master of Science (in Urban Planning).* (i) For creative design in city or regional planning; work is accomplished through development of a selected project in design with a public presentation by the student. (ii) For research in some phase of regional or urban planning, which need not always be accompanied by creative design considerations; this type of program normally requires presen-

tation of a thesis. (When appropriate, two or more students representing common interests may collaborate on a single project or thesis and make a joint presentation.)

(2) For students who enter graduate work from any one of the regular four-year undergraduate curricula and desire an entirely creative approach:

Master of Fine Arts. For creative work only, requiring a terminal creative project, having its focus in painting or drawing, graphic arts, mural design, sculpture, or applied design. The M.F.A. degree may also be awarded upon completion of combinations of study in the above fields. For example, a student whose major concentration is in sculpture may elect to arrange his project to include some work in ceramics, in order to investigate glazes and firing as they apply to problems in ceramic sculpture. Development of such secondary interests is encouraged throughout the school. All candidates for the M.F.A. degree are required to install a public exhibition of the several parts of the terminal creative project. All such exhibitions are scheduled for hanging in the school gallery. Two pieces from each exhibit are retained by the School of Architecture and Allied Arts for its permanent records and for future exhibitions. All other work is returned to the student after the exhibit is closed.

(3) For students who enter graduate work from any of the regular four-year undergraduate curricula and desire an approach not necessarily creative:

(a) *Master of Arts.* For graduate study with emphasis on the history of art and architecture or on theoretical studies in any of the visual arts.

(b) *Master of Science.* For other approved programs, usually involving special combinations of interests between professional and nonprofessional areas.

(c) *Master of Science (in Art Education).* For programs of advanced study planned especially for public school teachers. Graduate work is available to meet the needs of junior high, senior high, and junior college teachers.

(d) *Master of Science in General Studies.* For graduate work in art education where a distributed major is desirable and, chiefly, to satisfy the Oregon state requirement of fifth-year college work for regular high-school teacher certification. In programs leading to this degree, attention may also be given to the art needs of recreational directors, occupational therapists, etc.

A reference library of 4,500 volumes, covering interests of all divisions, is permanently housed in the school. Two research librarians are available. The school collection of lantern slides numbers well over 30,000, and is recognized as one of the best in the region. Photographic laboratory, wood shop, gallery workroom, and other supplemental facilities are available.

The building industry supports research projects in architecture. Visiting lecturers and critics in all professional areas are frequent guests of the school and are available for consultation by graduate students. The gallery is scheduled for regular exhibitions on tour from important galleries and other sources, as well as specially arranged exhibits of regional or local interest.

Lawrence Hall the home of the School of Architecture and Allied Arts has recently undergone a substantial remodeling and rehabilitation, including the construction of a new wing.

Architecture

AA 469, 470, 471. **Theory of Structures II.** (G) 3 hours each term.

AA 472, 473, 474. **Theory of Structures III.** (G) 4 hours each term.

AA 501. **Special Studies.** Hours to be arranged.

- AA 505. **Assigned Reading.** Hours to be arranged.
 AA 507. **Seminar.** Hours to be arranged.
 AA 509. **Terminal Creative Project.** Hours to be arranged.
 AA 529. **Ethics and Practice (Architecture).** 2 hours fall or spring.
 AA 587. **Architectural Design.** 1 to 12 hours any term.

Interior Architecture

- AA 465, 466, 467. **Interior-Design Professional Practice.** (G) 3 hours each term.
 AA 501. **Special Studies.** Hours to be arranged.
 AA 505. **Assigned Reading.** Hours to be arranged.
 AA 507. **Seminar.** Hours to be arranged.
 AA 509. **Terminal Creative Project.** Hours to be arranged.
 AA 588. **Interior Design.** 1 to 12 hours any term.

Landscape Architecture and Urban Planning

- AA 411. **Housing I.** (G) 3 hours fall.
 AA 412. **Housing II.** (G) 3 hours winter.
 AA 430, 431, 432. **Plant Composition.** (G) 3 to 6 hours each term.
 AA 433, 434, 435. **Ethics and Practice (Landscape).** (G) 1 hour each term.
 AA 459. **Landscape Field Practice.** (G) 3 hours.
 AA 460, 461. **Landscape Construction II.** 3 hours each term.
 AA 499. **City Planning II.** (G) 1 to 6 hours any term.
 AA 501. **Special Studies.** Hours to be arranged.
 AA 505. **Assigned Reading.** Hours to be arranged.
 AA 507. **Seminar.** Hours to be arranged.
 AA 508. **Seminar in Planning and Housing.** 2 or 3 hours any term.
 AA 509. **Terminal Creative Project.** Hours to be arranged.
 AA 589. **Landscape Design.** 1 to 12 hours any term.

Drawing, Painting, and Graphic Arts

- AA 480. **Graphic Arts.** (g) 2 to 4 hours any term.
 AA 490. **Advanced Painting.** (g) 2 to 4 hours any term.
 AA 491. **Advanced Drawing.** (g) 1 to 4 hours any term.
 AA 492. **Composition and Visual Theory.** (g) 2 to 4 hours any term.
 AA 501. **Special Studies.** Hours to be arranged.
 AA 505. **Assigned Reading.** Hours to be arranged.
 AA 507. **Seminar.** Hours to be arranged.
 AA 509. **Terminal Creative Project.** Hours to be arranged.
 AA 580. **Graduate Studies in Print Making.** Hours to be arranged.

- AA 590. **Graduate Studies in Painting, Drawing, and Design.** Hours to be arranged.

Sculpture and Applied Design

- AA 455. **Advanced Ceramics.** (G) 2 to 6 hours any term.
 AA 456. **Advanced Weaving.** (G) 2 to 6 hours any term.
 AA 457. **Advanced Jewelry and Metalsmithing.** (G) 2 to 6 hours any term.
 AA 458. **Textile Printing.** (G) 2 to 4 hours.
 AA 494. **Advanced Sculpture.** (G) 2 to 8 hours any term.
 AA 496. **Ceramic Sculpture.** (G) 2 hours any term.
 AA 501. **Special Studies.** Hours to be arranged.
 AA 505. **Assigned Reading.** Hours to be arranged.
 AA 507. **Seminar.** Hours to be arranged.
 AA 509. **Terminal Creative Project.** Hours to be arranged.

Art History

- AA 440. **American Architecture.** (G) 3 hours.
 AA 446, 447, 448. **History of Oriental Art.** (G) 3 hours each term.
 AA 450, 451, 452. **Art in Latin America.** (G) 3 hours each term.
 AA 476, 477, 478. **Background of Modern Art.** (G) 3 hours each term.
 AA 501. **Special Studies.** Hours to be arranged.
 AA 503. **Thesis.** Hours to be arranged.
 AA 505. **Assigned Reading.** Hours to be arranged.
 AA 507. **Seminar.** Hours to be arranged.

Art Education

- ArE 411. **Methods and Research Materials: Art in the Elementary Schools.** (G) 3 hours.
 ArE 414, 415, 416. **Art Education in the Senior High School.** (G) 3 hours each term.
 ArE 501. **Special Studies.** Hours to be arranged.
 ArE 505. **Assigned Reading.** Hours to be arranged.
 ArE 532, 533. **Art in the Elementary School.** 3 hours each term.
 ArE 535. **Art and Architecture for the School Administrator.** 3 hours

Biology

- Professors: R. R. HUESTIS (emeritus), A. RUSSELL MOORE (emeritus), P. L. RISLEY, BRADLEY T. SCHEER, H. B. YOCUM (emeritus).
 Associate Professors: C. W. CLANCY (acting department head), LEROY E. DETLING, PETER FRANK, JAMES KEZER, FRANK P. SIPE (emeritus), A. L. SODERWALL.
 Assistant Professors: MELVIN COHEN, BAYARD H. MCCONNAUGHEY, ROBERT W. MORRIS, RICHARD L. SCHULTZ, J. ARNOLD SHOTWELL, JACOB STRAUS, SANFORD S. TEPFER.

Graduate work leading to the degrees of M.A., M.S., and Ph.D. is offered in the fields of aquatic biology, botany, cytology and genetics, ecology, physiology, and vertebrate zoology.

Candidates for a master's degree are expected to have met undergraduate major requirements or their equivalents (determined by examination) before or as soon as possible after beginning graduate study. These requirements include: (1) one year of general biology; (2) 28 term hours in upper-division courses in biology, including 12 hours selected from courses in plant or animal structure and classification, and 4 hours in each of the fields of ecology, genetics, and animal or plant physiology; (3) one year of college French or German; (4) one year of college mathematics; (5) one year of general chemistry, one term of quantitative analysis, and two terms of organic chemistry.

Facilities for research and study include the Museum of Natural History, an herbarium containing large collections from the Pacific area, an aquarium room, a small plant preparation room, photographic dark rooms, and laboratories equipped for mammalian, comparative, and general physiology. Animal colonies of *Drosophila*, with an extensive stock of mutant types, and of mutant and feral *Peromyscus* are maintained for genetic experiments. Stocks of *Cricetus* and *Mus* are available for physiological research. In a rich collecting area on the Oregon Coast, the University operates an Institute of Marine Biology, providing instructional and research facilities for all the institutions of the State System of Higher Education.

- Bi 408. **Laboratory Projects.** (G) Hours to be arranged.
- Bi 412, 413. **Microbiology.** (g) 3 hours each term, winter and spring. McConnaughey.
- Bi 421, 422. **Microtechnique.** (G) 2 hours each term. Tepfer, Kezer.
- Bi 441. **Introduction to Mammalian Physiology.** (g) 4 hours fall. Soderwall.
- Bi 442. **Introduction to Genetics.** (g) 3 hours fall. Clancy.
- Bi 443. **Genetics Laboratory.** (g) 2 hours fall. Clancy.
- Bi 444. **Genetics.** (G) 4 hours spring.
- Bi 447. **Plant Physiology.** (G) 4 hours.
- Bi 448, 449. **Cytology.** (G) 4 hours each term.
- Bi 450. **Marine Invertebrate Types.** (g) 3 hours (marine institute).
- Bi 454. **Algae.** (G) 4 hours.
- Bi 455. **Fungi.** (G) 4 hours.
- Bi 456. **Natural History of Marine Organisms.** (G) 9 hours (marine institute).
- Bi 457. **Planktonology.** (G) 6 hours (marine institute).
- Bi 458. **Biology of Fishes.** (G) 3 hours (marine institute).
- Bi 459. **Marine Ecology.** (G) 6 hours (marine institute).
- Bi 461, 462. **Invertebrate Zoology.** (G) 4 hour each term, fall and winter.
- Bi 463. **Parasitology.** (G) 4 hours. McConnaughey.
- Bi 464, 465, 466. **Principles of Ecology.** (G) 4 hours each term. Frank.
- Bi 467, 468, 469. **Historical Biogeography.** (G) 3 hours each term. Shotwell.
- Bi 470. **Field Botany.** (G) 3 hours (summer sessions).
- Bi 471, 472, 473. **Advanced Systematic Botany.** (G) 4 hours each term. Detling.
- Bi 475. **Plant Anatomy.** (G) 4 hours fall. Tepfer.

- Bi 476, 477. **Advanced Plant Morphology.** (G) 4 hours each term. Detling.
- Bi 481. **Mammalian Embryology.** (G) 3 hours. Huestis.
- Bi 482. **Invertebrate Embryology.** (G) 4 hours.
- Bi 485. **Endocrinology.** (G) 4 hours spring. Soderwall.
- Bi 486. **Field Ornithology.** (G) 3 hours (summer sessions).
- Bi 491, 492, 493. **General and Comparative Physiology.** (G) 3 hours each term. Scheer.
- Bi 494. **Field and Laboratory Methods in Biology.** (g) 3 hours (summer sessions).
- Bi 501. **Research.** Hours to be arranged.
- Bi 502. **Research Methods in Biology.** Hours to be arranged. Scheer.
- Bi 503. **Thesis.** Hours to be arranged.
- Bi 505. **Reading and Conference.** Hours to be arranged.
- Bi 507. **Seminar.** Hours to be arranged.
- Bi 520, 521, 522. **Advanced Genetics.** 2 hours each term. Clancy.
- Bi 525. **Experimental Morphogenesis.** 4 hours. Risley.
- Bi 526. **Developmental Genetics.** 4 hours. Clancy.
- Bi 531, 532, 533. **Advanced Physiology.** 2 hours each term. Scheer, Cohen.

Business Administration

Professors: RICHARD W. LINDHOLM,* (dean), WESLEY C. BALLAINE, O. K. BURRELL, N. H. COMISH (emeritus), C. E. JOHNSON, C. E. KELLY (emeritus), A. L. LOMAX, VICTOR P. MORRIS, A. B. STILLMAN (emeritus).

Associate Professors: MARK R. GREENE, W. DWAIN RICHINS, W. J. ROBERT, F. J. SEUBERT, JESSIE MAY SMITH, J. W. SOHA, S. D. WALTON, C. F. ZIEBARTH.

Assistant Professors: D. A. CALLIS, ROBERT E. DODGE, S. T. FORD, LEEVERN R. JOHNSON, CATHERINE M. JONES, M. F. MOSS, A. L. PEITERTSON, W. W. PYLE, DONALD A. WATSON.

A strong faculty of specialists, a good research program, an adequate library, and a strong cooperating Department of Economics constitute the bases for the effective graduate program of the School of Business Administration. Through this graduate program the school hopes to meet the rapidly increasing demand for men and women with master's degrees in business, a demand which results from the need for teachers, for research specialists in government, both Federal and state, and for leaders in the commerce and industry of the country.

Major work leading to the master's degree is provided in each of the following fields of instruction: accounting, business education, finance and investments, foreign trade, personnel management, production management, industrial traffic management and transportation, merchandising and marketing, real estate and insurance. Minor work in such fields as economics, political science, sociology, and other branches of the social sciences is encouraged.

A student with adequate background may complete the work for a master's degree in one year. Additional time may be needed, depending upon the student's undergraduate preparation.

* Appointment effective July 1, 1958.

In addition to the written qualifying and final oral examination usually required of master's candidates, each student must take comprehensive written examinations in at least three general fields within the school. The School of Business Administration requires a thesis from every candidate; the thesis is the basis for the final oral examination.

The graduate program is intimately related to work being done by the school on state-wide and community problems involved in the rapid economic development of Oregon. The needs of the state provide an important source of vital and interesting problems for theses and special research.

- BA 407. **Seminar in Business Problems.** (G) hours to be arranged.
- BA 412. **Personnel Management.** (G) 3 hours. Ford, Walton.
- BA 413. **Wage and Salary Administration.** (G) 3 hours. Ford.
- BA 414. **Problems in Personnel Management.** (G) 3 hours. Ford.
- BA 415. **Regional Studies in Business.** (G) 3 hours. Lomax.
- BA 416, 417, 418. **Business Law.** (G) 4 hours each term. Robert.
- BA 421. **Principles of Business Education.** (G) 3 hours. Smith.
- BA 422, 423. **Problems in Business Education.** (G) 3 hours each term. Smith.
- BA 425. **Real-Estate Fundamentals.** (G) 3 hours. L. R. Johnson.
- BA 426. **Real-Estate Practice.** (G) 3 hours. L. R. Johnson.
- BA 427. **Real-Estate Appraising.** (G) 3 hours. L. R. Johnson.
- BA 428. **Manufacturing.** (G) 4 hours. Lomax.
- BA 429. **Production Management.** (G) 3 hours. Seubert.
- BA 430. **Problems in Production Management.** (G) 3 hours. Seubert.
- BA 433. **Advanced Business Statistics.** (G) 3 hours. Ballaine.
- BA 434. **Problems in Distribution.** (G) 4 hours. Richins.
- BA 435. **Sales Management.** (G) 4 hours. Dodge.
- BA 436. **Retail Store Management.** (G) 4 hours. Dodge.
- BA 437. **Credits and Collections.** (G) 3 hours.
- BA 439. **Retail Buying.** (G) 3 hours. Dodge.
- BA 442. **Principles of Salesmanship.** (G) 3 hours. Dodge.
- BA 444. **Advertising Problems.** (G) 3 hours. Wales.
- BA 445. **Retail Advertising.** (G) 3 hours. Wales.
- BA 448. **Air Transportation.** (G) 3 hours. Ziebarth.
- BA 449, 450, 451. **Industrial Traffic Management.** (G) 3 hours each term. Ziebarth.
- BA 452. **Advanced Industrial Traffic Management.** (G) 3 hours. Ziebarth.
- BA 453. **Business Policy.** (G) 3 hours. Ziebarth.
- BA 454. **Fundamentals of Risk and Insurance.** (G) 4 hours. Greene.
- BA 455. **Casualty Insurance.** (G) 3 hours. Greene.
- BA 456. **Life Insurance.** (G) 3 hours. Greene.
- BA 457. **Property Insurance.** (G) 3 hours. Greene.
- BA 459. **Finance Management.** (G) 5 hours. Watson.

- BA 460. **Financial Institutions.** (G) 3 hours. Watson.
- BA 463, 464, 465. **Investments.** (G) 3 hours each term. Burrell.
- BA 466. **Business Cycles.** (G) 3 hours. Ballaine, Watson.
- BA 467. **Public-Utility Management.** (G) 3 hours. Callis.
- BA 471, 472, 473. **Management of Ocean Shipping.** (G) 3 hours each term. Lomax.
- BA 474. **Foreign Exchange and International Finance.** (G) 3 hours.
- BA 475, 476, 477. **Foreign-Trade Marketing.** (G) 3 hours each term. Lomax.
- BA 479, 480, 481. **Income-Tax Procedure.** (G) 2 hours each term. Peiterson.
- BA 483, 484, 485. **Accounting Theory and Practice.** (G) 3 hours each term. Burrell.
- BA 486. **Municipal Accounts and Audits.** (G) 3 hours. Moss.
- BA 487. **Cost Accounting Problems.** (G) 3 hours. Moss.
- BA 488. **Cost Analysis and Control.** (G) 3 hours. Moss.
- BA 489, 490. **Advanced Accounting Problems.** (G) 3 hours each term. C. E. Johnson.
- BA 491. **Advanced Accounting Theory.** (G) 3 hours. C. E. Johnson.
- BA 492, 493, 494. **Auditing.** (G) 3 hours each term. Soha, Callis.
- BA 496, 497, 498. **Internal Accounting.** (G) 3 hours each term. Soha.
- BA 499. **Advanced Accounting Problems.** (G) 3 hours (summer sessions).
- BA 501. **Advanced Business Research.** Hours to be arranged.
- BA 503. **Graduate Thesis.** Hours to be arranged.
- BA 505. **Reading and Conference.** Hours to be arranged.
- BA 507. **Graduate Seminar.** Hours to be arranged.
- BA 520, 521, 522. **C.P.A. Problems.** Hours to be arranged. C. E. Johnson, Moss.
- BA 530. **Managerial Economics.** 3 hours. Ballaine.
- BA 531. **Theory of Business Organization.** 3 hours. Richins.
- BA 532. **Problems in Business Policies.** 3 hours. Ziebarth.

Chemistry

Professors: FRANCIS J. REITHEL (department head), TERRELL L. HILL.
 Associate Professors: LEROY H. KLEMM, DONALD F. SWINEHART, E. V. WHITE.
 Assistant Professors: GEORGE B. ADAMS, WENDELL M. GRAVEN, NORMAN M. VAN GULICK, RAYMOND G. WOLFE.

Graduate work leading to the M.A., M.S., and Ph.D. degrees is offered in inorganic, analytical, organic, physical, and biochemistry. Well-qualified students may complete the requirements for the master's degree in one academic year of full-time work, or in one school year and one summer session if serving as an assistant. The master's degree may be earned with or without the presentation of a thesis. A qualified student may proceed directly to the Ph.D. without first taking the master's degree.

Course requirements for the Ph.D. degree are not rigidly specified. A pro-

gram of study is developed by the student and an advisory faculty committee appointed to supervise his progress. It is customary for the Ph.D. candidate to earn about 75 term hours in formal courses (including approximately 18 hours or two one-year sequences in allied fields outside of chemistry) beyond the bachelor's degree and 60 term hours in graduate research and thesis.

All entering graduate students are required to take three orientation examinations covering standard undergraduate work in physical, organic, and analytical-inorganic chemistry. These examinations are given during fall-term registration week and again in February. They serve both as a basis for student advising and as a qualifying examination for admission to candidacy for a graduate degree. The master's final examination may serve as the Ph.D. qualifying examination.

The University of Oregon is on the list of schools approved by the Committee on the Professional Training of Chemists of the American Chemical Society. The Department of Chemistry is housed in the modern Science Building, which has ample facilities for research and study, including an excellent machine shop under the supervision of two skilled instrument makers and an adjoining "student" shop (directly accessible to graduate students). Graduate students also benefit from the presence of several chemistry postdoctoral research fellows on the staff.

Teaching and research assistantships and fellowships are available. Although subject to variation, stipends of assistants and fellows, who may often have summer employment, range up to \$2,500 for the calendar year. During 1956-57 research projects in the Department of Chemistry were sponsored by the American Chemical Society, the Atomic Energy Commission, the Lalor Foundation, the National Institutes of Health, the National Science Foundation, the Office of Ordnance Research, and the Research Corporation.

Current research interests of the department include: carbohydrate chemistry, complex compounds, corrosion, enzyme purification and kinetics, gas and solution chromatography, intermediary and microbial metabolism, kinetics of anodic oxidation of metals, kinetics of reactions in the gas phase and in solution, mass spectrometry, molecular rearrangements, nucleophilic additions to alkenes, organic polarography and spectroscopy, photochemistry, photovoltaic effects, polynuclear carbocyclic compounds, stereochemistry and sterically hindered molecules, structural evaluation of polysaccharides and other natural products, sugar phosphates, synthesis of tumor-inhibiting compounds, thermodynamics of dilute electrolytic solutions, trace metal analysis, (statistical mechanics, theoretical chemistry, surface chemistry, physical biochemistry.

A brochure on opportunities for graduate study in chemistry and requirements for degrees may be obtained on request to the department.

Ch 411, 412, 413. **Advanced Inorganic Chemistry.** (G) 2 or 3 hours each term. Graven.

Ch 414, 415, 416. **Advanced Inorganic Laboratory.** (G) 1 or 2 hours each term. Graven.

Ch 419. **Advanced General Chemistry.** (g) 4 or 5 hours (summer sessions).

Ch 426. **Instrumental Analysis.** (G) 3 hours.

Ch 429. **Survey of Analytical Chemistry.** (g) 4 or 5 hours (summer sessions).

Ch 435. **Organic Qualitative Analysis.** (G) 3 hours. White.

Ch 439. **Survey of Organic Chemistry.** (g) 4 or 5 hours (summer sessions).

Ch 440. **Survey of Physical Chemistry.** (g) 4 hours.

Ch 441, 442, 443. **Physical Chemistry.** (g) 3 hours each term. Hill.

Ch 444, 445, 446. **Physical-Chemical Measurements.** (g) 1 hour each term. Graven.

Ch 461, 462, 463. **Biochemistry.** (G) 3 hours each term. Reithel, Wolfe.

Ch 464, 465, 466. **Biochemistry Laboratory.** (G) 1 or 2 hours each term. Reithel, Wolfe.

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.** Hours to be arranged. Reithel.

Ch 521, 522, 523. **Advanced Analytical Chemistry.** 2 or 3 hours each term.

Ch 531, 532, 533. **Advanced Organic Chemistry.** 2 or 3 hours each term, Klemm, van Gulick.

Ch 534, 535, 536. **Special Topics in Organic Chemistry.** 2 or 3 hours each term. Klemm, van Gulick, White.

Ch 537, 538, 539. **Advanced Organic Laboratory.** 2 hours each term, Klemm, van Gulick.

Ch 541, 542, 543. **Chemical Kinetics.** 2 or 3 hours each term. Swinehart.

Ch 544, 545, 546. **Quantum Chemistry.** 3 hours each term. Swinehart.

Ch 551, 552. **Chemical Thermodynamics.** 3 hours each term, winter and spring. Hill.

Ch 553. **Statistical Thermodynamics.** 3 hours. Hill.

Ch 554, 555, 556. **Electrochemistry.** 2 hours each term.

Ch 557, 558, 559. **Thermodynamics of Irreversible Processes.** 2 hours each term.

Ch 561, 562, 563. **Enzymes and Intermediary Metabolism.** 2 or 3 hours each term. Reithel, Wolfe.

Ch 564, 565, 566. **Proteins.** 2 or 3 hours each term. Reithel, Wolfe.

Dental Sciences

The University of Oregon Dental School in Portland offers graduate work leading to the M.S. degree for students planning careers in dental education and research. Graduate major programs have been arranged in the fields of anatomy, bacteriology, biochemistry, oral pathology, pedodontics, pharmacology, and physiology; supplementary courses carrying graduate credit are offered in public health and dental materials. For requirements and courses see the Dental School Catalog.

Economics

Professors: C. WARD MACY (department head), CALVIN CRUMBAKER (emeritus), JAMES H. GILBERT (emeritus), PAUL L. KLEINSORGE, RAYMOND F. MIKESSELL, VICTOR P. MORRIS, PAUL B. SIMPSON.

Associate Professors: RICHARD M. DAVIS, MARSHALL D. WATTLES.

Assistant Professors: ROBERT CAMPBELL, H. T. KOPLIN.

Instructor: JAMES N. TATTERSALL.

The Department of Economics offers graduate studies leading to the M.A., M.S., and Ph.D. degrees. The program for each degree permits a wide choice of fields within the area usually covered by economics. Cognate work in other departments and schools of the University may be taken as a part of the required work.

Economic theory, as a foundation for graduate study in economics and related fields, is emphasized in all graduate programs. Other fields in which concentrated work may be done are: history of economic thought, monetary and banking theory, international economics, public finance and fiscal policy, labor economics, government regulation of business, national income analysis, business fluctuations, mathematical economics, economic systems, and economic history. The thesis, which is required for the master's degree, and the dissertation for doctoral candidates may be written in any one of the above-listed fields.

A candidate for the Ph.D. degree with a major in economics must select six fields of study, one or two of which may be in other departments or schools. Economic theory and the history of economic thought must be included in the programs of all candidates; the additional fields may be chosen by the student. A working knowledge of statistics and accounting is required.

Students in economics who are candidates for the doctorate must take the Graduate Record Examination soon after the beginning of work beyond the master's degree or its equivalent level. Both written and oral preliminary examinations over the selected fields are required.

Library facilities for research in economics are excellent. The economics collection in the University Library is growing rapidly, and is varied enough to enable students to pursue research in all major areas.

The number of graduate students in economics is small enough to allow careful supervision and individual attention by all members of the faculty.

- Ec 407. **Seminar.** (g) Hours to be arranged.
- Ec 411, 412, 413. **Monetary and Banking Theory.** (G) 3 hours each term. Simpson.
- Ec 414. **National Income Analysis.** (G) 3 hours fall. Simpson.
- Ec 415. **Economy of the Pacific Northwest.** (G) 3 hours winter. Simpson, Tattersall.
- Ec 416. **Economics of Conservation.** (G) 3 hours spring. Simpson.
- Ec 417. **Contemporary Economic Problems.** (g) 3 hours. Campbell.
- Ec 418, 419, 420. **Taxation and Fiscal Policy.** (G) 3 hours each term. Macy.
- Ec 437, 438, 439. **Economic Problems of Government Regulation.** (G) 2 hours each term. Koplin.
- Ec 440, 441, 442. **International Economics.** (G) 3 hours each term. Wattles.
- Ec 447, 448, 449. **Collective Bargaining.** (G) 2 hours each term. Kleinsorge.
- Ec 450, 451, 452. **Comparative Economic Systems.** (g) 2 hours each term. Davis.
- Ec 453. **Land Economics.** (G) 3 hours fall.
- Ec 460. **Theories of Economic Instability.** (G) 3 hours spring. Davis.
- Ec 466, 467, 468. **Economic History of Modern Europe.** (G) 3 hours each term.
- Ec 470, 471, 472. **History of Economic Thought.** (G) 3 hours each term. Campbell.
- Ec 475, 476, 477. **Recent Economic Theories.** (G) 2 hours each term. Koplin.
- Ec 480, 481. **Mathematical Economics.** (G) 3 hours each term, winter and spring. Simpson.

- Ec 483. **Compilation of Economic Data.** (G) 3 hours fall. Simpson.
- Ec 484. **Correlation Analysis of Economic Data.** (G) 3 hours winter. Simpson.
- Ec 485. **Research and Survey Methods in Economics.** (G) 3 hours spring. Simpson.
- Ec 487, 488, 489. **American Economic History.** (G) 3 hours each term.
- 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 Theory:* Davis. *Government Regulations:* Koplin. *Industrial Relations:* Kleinsorge. *International Economics:* Mikesell, Wattles. *Money and Credit:* Simpson. *Statistical Economics:* Simpson.
- Ec 518, 519, 520. **Fiscal Theory and Policy.** 3 hours each term. Macy.
- Ec 521, 522, 523. **National-Income Analysis and Forecasting.** 2 hours each term. Simpson.

Education

Professors: P. B. JACOBSON (dean), QUIRINUS BREEN, ALBUREY CASTELL, H. H. CLARKE, FRANKLIN B. HAAR, ARTHUR C. HEARN, CARL W. HINTZ C. L. HUFFAKER (emeritus), J. R. JEWELL (emeritus), PAUL E. KAMBLY, P. A. KILLGALLON, ROBERT E. NYE, MILES C. ROMNEY, VERNON S. SPRAGUE, F. L. STETSON (emeritus), DONALD E. TOPE, HUGH B. WOOD.

Associate Professors: DANIEL W. FULLMER, KEITH GOLDHAMMER, GRACE GRAHAM, RAYMOND N. LOWE, CLIFFORD E. ROBINSON, J. FRANCIS RUMMEL, ADOLPH A. SANDIN, RUTH A. WILLARD.

Assistant Professors: THOMAS O. BALLINGER, JACK W. BURGNER, MARY A. CHOATE, JACK A. CULBERTSON, BERT Y. KERSH, WINIFRED LADLEY, JOHN LALLAS, VERNICE NYE, JOHN W. STARR III.

Graduate work in the School of Education is offered for the preparation of teachers, supervisors, guidance workers, administrators, and other educational specialists, and leads to the M.A., M.S., M.Ed., Ph.D., and D.Ed. degrees.

Candidates for advanced degrees should plan to specialize in the field of their professional interest, preparing for some line of professional activity and at the same time securing a mastery of an organized body of knowledge. The programs of study in the various fields of concentration are somewhat flexible, allowing a graduate student, in consultation with his adviser, to place emphasis on those aspects of the field of education which represent his special interests and his professional objective.

The fields of concentration are listed below; members of the faculty of the School of Education who teach courses that fall within a particular field may serve as advisers to students who have selected that field of concentration: general school administration, elementary education, secondary education, special education, health and physical education, business education, higher education, curriculum and instruction, guidance and counseling, educational psychology and measurement, music education, art education.

Master's Degree. In the master's degree programs all students are expected to complete, as early in their programs as possible, at least one 3-hour course

of instruction in each of the following foundational areas: psychological foundations; research and measurement; historical, philosophical, and social foundations.

Each student has complete freedom to elect the area of education specialization in which he wishes to prepare himself. However, within each selected area the student is expected to complete a basic core of specified courses. The remaining courses necessary for a minimum of 45 term hours of graduate work for a master's degree may be elected, but should be planned with the aid of an adviser to provide for a rationally unified program of study. The requirement of a research project, field study, or thesis is optional at the discretion of the adviser, depending on the student's area of specialization.

Doctor's Degree. In the programs leading to the doctor's degree, students are required to complete the equivalent of three years of full-time work beyond the bachelor's degree. Candidates for a doctor's degree are expected to organize their programs in conference with an adviser in their field of specialization. While there is considerable flexibility in the development of a program to meet the specific needs of each individual in terms of his professional objective, each program is expected to include the areas of study listed below. In all areas a large selection of courses is available outside the School of Education and recommended to the student to supplement and buttress his academic program in education.

Primary Area. A minimum of 30 hours of course work is required in one of the following areas: general school administration; curriculum and instruction; elementary education; secondary education; educational psychology and measurement; special education; health and physical education; music education; educational guidance and counseling.

Supporting Area. A minimum of 30 hours of course work is required from the following areas: any of the primary areas except the area of specialization; higher education; business education; art education.

Foundation Area. A minimum of one course from each of the following foundational areas is required: psychological theories and processes in education; structure and function of society in relation to education; nature of the American educational system; history and philosophy of education.

Research Area. The following are required: research techniques (minimum of 9 hours for the Ph.D. and 3 hours for the D.Ed.; thesis seminar (minimum of three terms for the Ph.D. and one term for the D.Ed.); doctoral dissertation (15 hours of credit may be granted for the dissertation).

The doctoral dissertation may be either a report of the results of research which makes a substantial contribution to knowledge (for the Ph.D. or D.Ed. degree), or a study in which the student deals effectively with knowledge already available and produces a constructive result of importance and value to educational practice (for the D.Ed. degree).

Complete information concerning the organization of graduate study in education may be secured from the personnel director of the School of Education.

General Education

- Ed 424. **Measurement in Education.** (G) 3 hours. Rummel.
- Ed 435. **Audio-Visual Aids.** (G) 4 hours.
- Ed 440. **History of Education.** (G) 3 hours. Breen.
- Ed 441. **History of American Education.** (G) 3 hours.
- Ed 446. **Modern Philosophies of Education.** (G) 3 hours. Castell.

- Ed 447. **Radio Education.** (G) 3 hours (extension and summer sessions).
- Ed 476. **School Law and Organization.** (G) 2 hours.
- Ed 478. **Improvement of Instruction in Reading.** (G) 3 hours (extension).
- Ed 482. **Intercultural Education.** (G) 3 hours (extension and summer sessions).
- Ed 491. **Social Education.** (G) 3 hours. Graham.
- Ed 493. **Utilization of Regional Resources.** (G) 3 hours (extension and summer sessions).
- Ed 501. **Educational Research.** Hours to be arranged.
College Teaching: Jacobson. *Curriculum, Instruction:* Sandin. *Educational Psychology:* Kersh, Lallas. *Elementary Education:* Sandin, Willard, Choate, Culbertson. *History of Education:* Breen. *Measurements:* Rummel. *Philosophy of Education:* Castell. *Psycho-Educational Problems:* Killgallon. *Pupil Evaluation:* Rummel. *School Administration:* Goldhammer, Jacobson, Romney, Tope. *Science Education:* Kambly. *Secondary Education:* Jacobson, Hearn. *Teacher Education:* Kambly.
- Ed 503. **Thesis.** Hours to be arranged.
- Ed 505. **Reading and Conference.** Hours to be arranged.
- Ed 507. **Education Seminar.** Hours to be arranged.
- Ed 508. **Workshop.** Hours to be arranged.
- Ed 512. **Research Procedures in Education.** 3 hours. Rummel.
- Ed 515, 516, 517. **Educational Statistics.** 3 hours each term. Clarke, Bharucha-Reid, Simpson, Rummel.
- Ed 529, 530, 531. **Advanced Educational Psychology.** 2 hours each term. Kersh.
- Ed 546. **School and Society in the Recent Past.** 3 hours.
- Ed 565. **Curriculum Foundations.** 4 hours Sandin.
- Ed 566. **Curriculum Construction.** 4 hours. Sandin.
- Ed 567. **Curriculum Materials.** 4 hours. Sandin.
- Ed 587. **Adult Education.** 3 hours.

Elementary Education

- Ed 451. **Preprimary Education.** (G) 3 hours.
- Ed 455. **Primary-Education Workshop.** (G) 5 hours (extension).
- Ed 457. **Intermediate and Upper-Grade Education Workshop.** (G) 2 to 5 hours (extension).
- Psy 460. **Developmental Psychology I: Infancy and Childhood.** (g) 3 hours. Patterson.
- Ed 534. **Science in the Elementary School.** 3 hours. Kambly.
- Ed 535. **Social Studies in the Elementary School.** 3 hours. Willard.
- Ed 536. **Language Arts in the Elementary School.** 3 hours. Choate.
- Ed 537. **Reading in the Elementary School.** 3 hours. Willard.
- Ed 538. **Mathematics in the Elementary School.** 3 hours. Willard.
- Ed 552. **Elementary-School Problems.** 4 hours. Sandin.
- Ed 553. **Elementary-School Curriculum.** 4 hours. Sandin.

Ed 554. **Elementary-School Supervision and Administration.** 4 hours. Sandin.

Secondary Education

- Ed 453. **Secondary-Education Workshop.** (G) 5 hours (extension).
 Psy 461. **Developmental Psychology II: Adolescence and Maturity.** (g) 3 hours. Luchins.
 Ed 469. **Reading in High School and College.** (G) 3 hours. Killgallon.
 Ed 484. **The Junior High School.** (G) 3 hours. Hearn.
 Ed 485. **Principles and Practices of Guidance Services.** (G) 3 hours. Lowe.
 Ed 488. **Educational and Vocational Guidance.** (G) 3 hours. Lowe.
 Ed 522. **Secondary-School Curriculum.** 3 hours. Hearn.
 Ed 523. **School Activities.** 3 hours. Hearn.
 Ed 526. **High-School Counseling.** 3 hours. Lallas.
 Ed 527. **Secondary-School Administration and Supervision.** 3 hours. Hearn.
 Ed 589. **Organization and Administration of Guidance Services.** 3 hours.

Special Education

- Ed 409. **Psychology-Educational Clinic.** (G) Hours to be arranged (9 hours maximum credit). Killgallon.
 Ed 436. **Education of the Handicapped Child.** (G) 3 hours (extension).
 Ed 462. **Psychology of Exceptional Children.** (G) 3 hours. Killgallon.
 Ed 463. **The Maladjusted Child.** (G) 3 hours. Lowe.
 Ed 464. **The Mentally Deviate Child.** (G) 3 hours. Killgallon.
 Ed 465. **Diagnostic and Remedial Techniques.** (G) 3 hours. Killgallon.
 Ed 471. **Administration of Special Education.** (G) 3 hours.
 Ed 480. **Psychology of Reading Instruction.** (G) 3 hours.
 Ed 509. **School Psychologist Practicum.** 2 to 6 hours. Kersh.
 Ed 564. **Mental Tests.** 3 hours. Killgallon.

Higher Education

- Ed 556. **Higher-Education Survey.** 3 hours. Jacobson.
 Ed 557. **Teacher-Education Survey.** 3 hours. Kambly.
 Ed 558. **College and University Teaching.** 3 hours. Jacobson.

Educational Administration

- Ed 572. **Public School Administration.** 3 hours. Romney.
 Ed 573. **Public School Organization.** 3 hours. Romney.
 Ed 574. **School Supervision.** 3 hours. Culbertson.
 Ed 575. **School Finance.** 3 hours. Romney.
 Ed 576. **School Buildings.** 3 hours. Romney.

Library Education

- Lib 482. **The Elementary-School Library.** (g) 3 hours. Ladley.
 Lib 483. **Children's Literature.** (g) 3 hours. Ladley.
 Lib 484. **School Library Administration.** (g) 3 hours. Ladley.
 Lib 485. **Advanced Bibliography and Reference.** (g) 3 hours. Findly.
 Lib 487. **Cataloging and Classification.** (g) 3 hours. Ladley.
 Lib 488. **Books and Related Materials for Young People.** (g) 3 hours. Ladley.
 Lib 505. **Reading and Conference.** Hours to be arranged. Hintz, Ladley.
 Lib 508. **Library Workshop.** Hours to be arranged (summer sessions).

English

Professors: ERNEST G. MOLL (acting department head), FRANK G. BLACK, ARTHUR G. BRODEUR, R. H. ERNST (emeritus), HUBERT H. HOELTJE, ROBERT D. HORN, JOHN C. McCLOSKEY, MARY H. PERKINS (emeritus), W. F. G. THACHER (emeritus).

Associate Professors: ALICE H. ERNST (emeritus), CARLISLE MOORE, JOHN C. SHERWOOD, CHRISTOF A. WEGELIN, OLIVER M. WILLABD.

Assistant Professors: ROLAND C. BALL, ROLAND BARTEL, F. M. DICKEY, JAMES B. HALL, SYLVAN N. KARCHMER, EDWARD D. KITTOE, THOMAS F. MUNDLE, NORMAN H. OSWALD, HELEN SOEHREN.

The Department of English offers graduate work in English literature, American literature, and the English language, leading to the M.A. and Ph.D. degrees.

The emphasis is upon literary studies. The department expects the recipients of its degrees to have a comprehensive knowledge of English and American literature and a reading knowledge of the English language in all periods of its development.

The department may allow, upon petition, the waiving of the requirement for a thesis for the M.A. degree.

For the Ph.D. degree the department requires, in addition to the reading knowledge of two modern languages, an elementary knowledge of Latin or Greek.

Each student who intends to work for a Ph.D. is assigned a supervisory committee of five, which controls his program and guides his development. A student does not become a candidate for the degree until he has passed his examination in ancient and modern languages and his preliminary examinations. After the dissertation has been accepted, the student takes an oral examination, which is primarily on his dissertation, but may also cover other material at the discretion of the committee.

English Literature

- Eng 407. **Seminar in Special Authors.** (G) Hours to be arranged.
 Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.
 Eng 414, 415, 416. **History of Literary Criticism.** (G) 3 hours each term. Sherwood.
 Eng 420, 421, 422. **Anglo-Saxon.** (G) 3 hours each term. Brodeur.
 Eng 423, 424. **Types of Prose Fiction.** (G) 3 hours each term (summer sessions).

- Eng 425. **Late Mediaeval Literature.** (G) 3 hours. Brodeur.
 Eng 428. **Chaucer.** (G) 3 hours. Brodeur.
 Eng 430, 431, 432. **Literature of the Renaissance.** (G) 3 hours each term.
 Eng 434. **Spenser.** (G) 3 hours.
 Eng 436. **Advanced Shakespeare.** (G) 3 hours.
 Eng 440, 441, 442. **Seventeenth-Century Literature.** (G) 3 hours each term. Black.
 Eng 444. **Milton.** (G) 3 hours.
 Eng 450, 451, 452. **Eighteenth-Century Literature.** (G) 3 hours each term. Horn.
 Eng 455. **Pope.** (G) 3 hours.
 Eng 460, 461, 462. **The Romantic Poets.** (G) 3 hours each term. Moll.
 Eng 463, 464, 465. **The Later Nineteenth-Century Poets.** (G) 3 hours each term. Moll.
 Eng 470, 471, 472. **Nineteenth-Century Prose.** (G) 3 hours each term. Mundle.
 Eng 488. **Literature for Teachers.** (g) 3 hours. Oswald.
 Eng 490. **Introduction to Modern English.** (g) 3 hours. Oswald, Willard.
 Eng 491, 492. **The Modern English Language.** (G) 3 hours each term. Willard.
 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.
Old and Middle English. Sixteenth Century. Seventeenth Century. Eighteenth Century. Nineteenth Century. Drama. Criticism.
 Eng 540. **Problems and Methods of Literary Study.** 2 hours fall.

American Literature

- Eng 407. **Seminar in Special Authors.** (G) Hours to be arranged.
 Eng 475, 476, 477. **Literary Foundations of American Life.** (G) 3 hours each term. Hoeltje.
 Eng 478, 479, 480. **The Modern Spirit in American Literature.** (G) 3 hours each term. Wegelin.
 Eng 481, 482, 483. **Major American Writers: The Romantic Idealists.** (G) 3 hours each term. Hoeltje.
 Eng 484, 485, 486. **Major American Writers: The Realists.** (G) 3 hours each term. McCloskey.
 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.

Writing

- Wr 411. **English Composition for Teachers.** (g) 3 or 4 hours any term. Oswald.

Foreign Languages

Professors: DAVID M. DOUGHERTY (department head), CHANDLER B. BEALL, FREDERICK M. COMBELLACK, CARL L. JOHNSON, EDMUND P. KRAMER, LEAVITT O. WRIGHT (emeritus).

Associate Professors: PERRY J. POWERS, DONALD S. WILLIS.

Assistant Professors: PAUL M. ARRIOLA, HERBERT E. BOWMAN, NED J. DAVISON, EDNA LANDROS (emeritus), MAURICE A. LECUYER, WOLFGANG A. LEPPMANN, ASTRID M. WILLIAMS.

Instructor: FRANZ LANGHAMMER.

The Department of Foreign Languages offers programs of study leading to the M.A. degree in classical languages, French, German, Spanish, and Romance Languages, and to the degree of Doctor of Philosophy in Romance languages.

The program for the master's degree, usually completed in from three to six terms, the exact length of time depending largely upon the candidate's undergraduate preparation, includes courses in the languages and literatures of Greece, Rome, France, Germany, Spain, or Spanish-America, frequently in two of these fields. It may also include courses in philology and civilization, according to the student's choice, and it may be planned to terminate formal education or to prepare for further advanced study. The master's thesis may be written in such fields as literary history or literary criticism, philology, or comparative literature.

The program for the doctorate, directed by a departmental committee, comprises course and seminar work at an advanced level in the French and Spanish fields, as well as some study of Italian and Latin. Intended primarily to prepare research scholars and college teachers, this program may emphasize regular courses in broad or in restricted fields. It may also center in the investigation of a single problem, the results of which will be embodied in the dissertation, or it may be broadly cultural, with less emphasis upon the results of personal research. Literary studies are pursued according to various methods—historical, comparative, aesthetic—depending on the preference of the student. The dissertation must demonstrate the candidate's capacity for original investigation and effectiveness of presentation.

The resources of the University Library are fully adequate for the department's graduate programs; in some fields they are outstanding. The holdings in learned journals are extensive; one quarterly journal, *Comparative Literature*, is edited in the department.

Graduate students who intend to teach may gain valuable experience in connection with the undergraduate program of the department. Those who hold assistantships serve as readers, supervisors of audio-visual assignments, and, if qualified, regular teachers of elementary classes under the guidance of senior members of the department.

Classical Languages

Greek

- CL 407. **Seminar.** (g) Hours to be arranged.
 CL 411, 412, 413. **Plato and Aristotle.** (G) 3 hours each term. Combellack.
 CL 414, 415, 416. **Attic Orators.** (G) 2 hours each term. Combellack.
 CL 503. **Thesis.** Hours to be arranged.
 CL 505. **Reading and Conference.** Hours to be arranged.
 CL 507. **Seminar.** Hours to be arranged.
 CL 517, 518, 519. **Greek Literature.** Hours to be arranged. Combellack.

Latin

- CL 407. **Seminar.** (g) Hours to be arranged.
 CL 461, 462, 463. **Latin Literature: Historians.** (G) 3 hours each term. Combellack.
 CL 503. **Thesis.** Hours to be arranged.
 CL 505. **Reading and Conference.** Hours to be arranged.
 CL 508. **Seminar.** Hours to be arranged.
 CL 511, 512, 513. **Readings in Mediaeval Latin.** Hours to be arranged.

Germanic Languages

- GL 407. **Seminar.** (g) Hours to be arranged.
 GL 411, 412, 413. **The Age of Goethe.** (G) 3 hours each term. Leppmann.
 GL 421, 422, 423. **Modern German Literature.** (g) 3 hours each term. Leppmann.
 GL 503. **Thesis.** Hours to be arranged.
 GL 505. **Reading and Conference.** 1 to 3 hours any term.
 GL 507. **Seminar.** Hours to be arranged.
 GL 508. **Seminar: German Philology.** 3 hours any term. Langhammer.

Romance Languages**French**

- RL 411, 412, 413. **Seventeenth-Century French Literature.** (G) 3 hours each term. Dougherty.
 RL 417, 418, 419. **Nineteenth-Century French Literature.** (G) 3 hours each term. Johnson.
 RL 423, 424, 425. **Twentieth-Century French Literature.** (G) 3 hours each term. Lecuyer.
 RL 429, 430, 431. **French Culture and Civilization.** (G) 3 hours each term. Johnson.
 RL 467, 468, 469. **Advanced French Composition.** (G) 2 or 3 hours each term. Lecuyer.
 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. Beall.
 RL 517, 518, 519. **Sixteenth-Century French Literature.** 3 hours each term. Beall.
 RL 538, 539, 540. **Old French Readings.** 2 hours each term. Dougherty.

Italian

- AL 407. **Seminar.** (g) Hours to be arranged.

GENERAL STUDIES

- RL 474, 475, 476. **Fourth-Year Italian.** (g) 2 hours each term. Beall.
 AL 477, 478, 479. **Dante and His Times.** (g) 3 hours each term. Beall.
Spanish
 RL 438, 439, 440. **Nineteenth-Century Spanish Literature.** (G) 3 hours each term. Arriola.
 RL 441, 442, 443. **Modern Spanish Literature.** (G) 3 hours each term. Arriola.
 RL 444, 445, 446. **Spanish-American Literature.** (G) 3 hours each term. Davison.
 RL 451, 452, 453. **Spanish Literature of the Golden Age.** (G) 3 hours each term. Powers.
 RL 461, 462, 463. **Advanced Spanish Composition and Conversation.** (G) 2 or 3 hours each term. Arriola.
 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.
 RL 554, 555, 556. **Drama of the Golden Age.** 3 hours each term. Powers.
 RL 557, 558, 559. **The "Modernista" Movement.** 3 hours each term. Davison.
 RL 561, 562, 563. **Spanish-American Novel.** 3 hours each term. Davison.

Romance Philology

- RL 520, 521, 522. **Old French.** 3 hours each term. Dougherty.
 RL 523, 524, 525. **Vulgar Latin and Old Provençal.** 2 hours each term.
 RL 535, 536, 537. **Old Spanish.** 3 hours each term.

General Studies

Graduate students working toward a master's degree in general studies may supplement work selected from the course offerings of the several departments or schools with individualized studies, for which they enroll under the course numbers listed below. For the requirements for a master's degree in general studies, see pages 21-22.

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

Geography and Geology

Professors: SAMUEL N. DICKEN (department head), LLOYD W. STAPLES.
 Associate Professors: EWART M. BALDWIN, ERNEST H. LUND, WALTER L. YOUNGQUIST.
 Assistant Professors: GENE E. MARTIN, FORREST R. PITTS, JAMES C. STOVALL.

Graduate work in the fields of physical, economic, and regional geography, and in petrology, mineralogy, economic geology, historical geology, and palaeontology is offered toward the M.A. or M.S. degree; graduate work in geology is offered toward the Ph.D. degree. Students with the bachelor's degree and an undergraduate major are accepted as graduate students, but each student must pass an oral or written examination in order to qualify as a candidate for the master's degree.

Geography. Graduate work in geography is based on field studies and laboratory work. The state of Oregon offers a wide variety of opportunities for geographic studies in climatology, geomorphology, economic geography, regional geography, and other fields. Graduate students are especially encouraged to make detailed studies of small regions in order to gain experience in field observation in the various phases of geography. Theses may be prepared also on the basis of library work alone. An excellent opportunity is afforded in the department for theses on borderline problems of geography and geology.

The department is well equipped with maps, cartographic materials, and instruments, and has a large working collection of aerial photographs.

The University Library is well supplied with geographic publications, including books and periodicals from various geographic centers throughout the world.

Geology. Graduate work in geology permits specialization in either field studies or laboratory studies. A thesis is required.

Most students select for their thesis a field problem from an area chosen with the approval of the department. The state of Oregon has many excellent areas available for mapping; these permit selection by a student of types which contain an abundance of problems of a stratigraphic, palaeontological, or petrological nature. There are numerous mining areas in the region which provide materials for study and research in the field of economic geology.

Adequate laboratory facilities are available. Excellent palaeontological collections are available for study both in the department and in the Museum of Natural History, as well as good collections of rocks, minerals, and suites for the study of economic geology.

Research is supported by excellent Library facilities, which provide current issues of all geological journals as well as extensive sets of reference volumes. The departments of Chemistry, Physics, Mathematics, and Biology offer supporting courses.

Facilities are available for rock cutting and the preparation of thin sections, as well as dark-room facilities for special studies with the goniometer and other optical instruments. The department operates a summer camp as a base from which field investigations can be made; the facilities and equipment of the summer camp are available to students for field problems in other areas when the camp itself is not in session.

Geography

- Geog 406. **Advanced Field Geography.** (G) Hours to be arranged. Martin.
 Geog 425. **Geography of Conservation.** (g) 3 hours. Stovall.
 Geog 426. **Geography of Europe.** (G) 3 hours.
 Geog 427. **Geography of the Soviet Union.** (G) 3 hours. Martin.
 Geog 428. **Geography of the Pacific.** (G) 3 hours. Pitts.
 Geog 429. **Geography of North America.** (g) 3 hours. Dicken.
 Geog 430. **Geography of South America.** (G) 3 hours. Martin.

HEALTH AND PHYSICAL EDUCATION

- Geog 431. **Geography of Asia.** (G) 3 hours. Pitts.
 Geog 432. **Geography of Africa.** (G) 3 hours. Pitts.
 Geog 433. **Geography of Middle America.** (g) 3 hours. Martin.
 Geog 435. **Urban Geography.** (G) 3 hours. Pitts.
 Geog 501. **Research.** 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.
Principles of Geography. Periodical Literature. Historical Geography. History of Geography.
 Geog 511, 512, 513. **Advanced Physical Geography.** 3 hours each term. Dicken.
 Geog 515, 516, 517. **Advanced Cultural Geography.** 3 hours each term. Pitts.

Geology

- Geol 414, 415, 416. **Petrology and Petrography.** (G) 4 hours each term. Lund.
 Geol 421, 422, 423. **Economic Geology.** (G) 3 hours each term. Baldwin, Staples.
 Geol 451, 452. **Pacific Geology.** (G) 3 hours each term. Baldwin, Youngquist.
 Geol 491. **Structural Geology.** (G) 3 hours. Baldwin.
 Geol 492. **Advanced Stratigraphy.** (G) 3 hours. Baldwin.
 Geol 493. **Petroleum Geology.** (G) 3 hours. Baldwin.
 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.
Periodical Literature. Founders of Geology. Regional Geologic Studies. Classical Geologic Studies. Classical Problems in Geology. Structural Geology.
 Geol 511, 512, 513. **Advanced Microscopy.** 4 hours each term. Staples.
 Geol 514, 515, 516. **Advanced Petrology and Petrography.** 3 hours each term. Lund.
 Geol 520. **Advanced Economic Geology.** 3 hours. Staples.
 Geol 531, 532, 533. **Advanced Palaeontology.** 3 hours each term. Youngquist.
 Geol 551. **Advanced Physical Geology.** 3 hours. Lund.

Health and Physical Education

Professors: ARTHUR A. ESSLINGER (dean), FLORENCE D. ALDEN (emeritus), H. HARRISON CLARKE, FRANKLIN B. HAAR, E. R. KNOLLIN (emeritus), R. W. LEIGHTON (emeritus), HARRIET W. THOMSON (emeritus), PAUL R. WASHKE, JANET G. WOODRUFF, MARGARET S. POLEY, PETER O. SIGERSETH, VERNON S. SPRAGUE.
 Associate Professors: JESSIE PUCKETT, WILLIAM P. RHODA, LYNN S. RODNEY, ROSAMOND WENTWORTH.

The School of Health and Physical Education offers graduate work leading to the M.A., M.S., and Ph.D. degrees. By arrangement with the School of Education, candidates for the D.Ed. degree may select health education or physical education as a major field of study; the major program is directed by the School of Health and Physical Education.

For the master's degrees preparation of a thesis is optional. If a thesis is presented, 45 term hours of graduate credit are required for the degree; if a thesis is not presented, 54 term hours of graduate work are required. Students writing a thesis must have a 9-hour concentration in one of the following areas: (1) administration of programs, buildings and grounds; (2) school health education; (3) corrective activities and physical therapy; (4) physiological sciences; (5) child growth and development, or history, principles, and philosophy of health and physical education. Students who do not write a thesis are required to have three 9-hour concentrations in the above areas.

The program for candidates for the Doctor of Philosophy degree includes: (1) a strong emphasis in research methodology and research; (2) an area of concentration or specialization in health education or physical education (four areas are available: administration, health education, child growth and development, and corrective physical education); (3) supporting work in related areas of health education, physical education, or education; and (4) cognate courses for their contribution to the cultural background and understanding of the candidate. The work must be distributed as follows: research methodology (12-18 hours); research (15-30 hours); area of concentration (20-40 hours); supporting area (20-30 hours); cognate areas (20-48 hours).

The School of Health and Physical Education has excellent facilities for research. A newly constructed research laboratory has been equipped with the most modern scientific instruments and equipment. An excellent library is available. The library is supplemented by a comprehensive collection of microcards in health education, physical education, and recreation.

Health Education

HE 411, 412, 413. **Health-Education Workshop.** (g) 9 hours total credit (extension and summer sessions).

HE 450. **Elementary-School Health Education.** (g) 3 hours. Haar.

HE 463. **Social Hygiene.** (G) 3 hours. Haar.

HE 464. **Health Instruction.** (G) 3 hours fall. Haar.

HE 465. **School Health Service.** (G) 3 hours winter. Haar.

HE 466. **Organization and Evaluation of School Health Education.** (G) 3 hours. Haar.

HE 501. **Research in Health Education.** Hours to be arranged.

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

HE 505. **Reading and Conference.** Hours to be arranged.

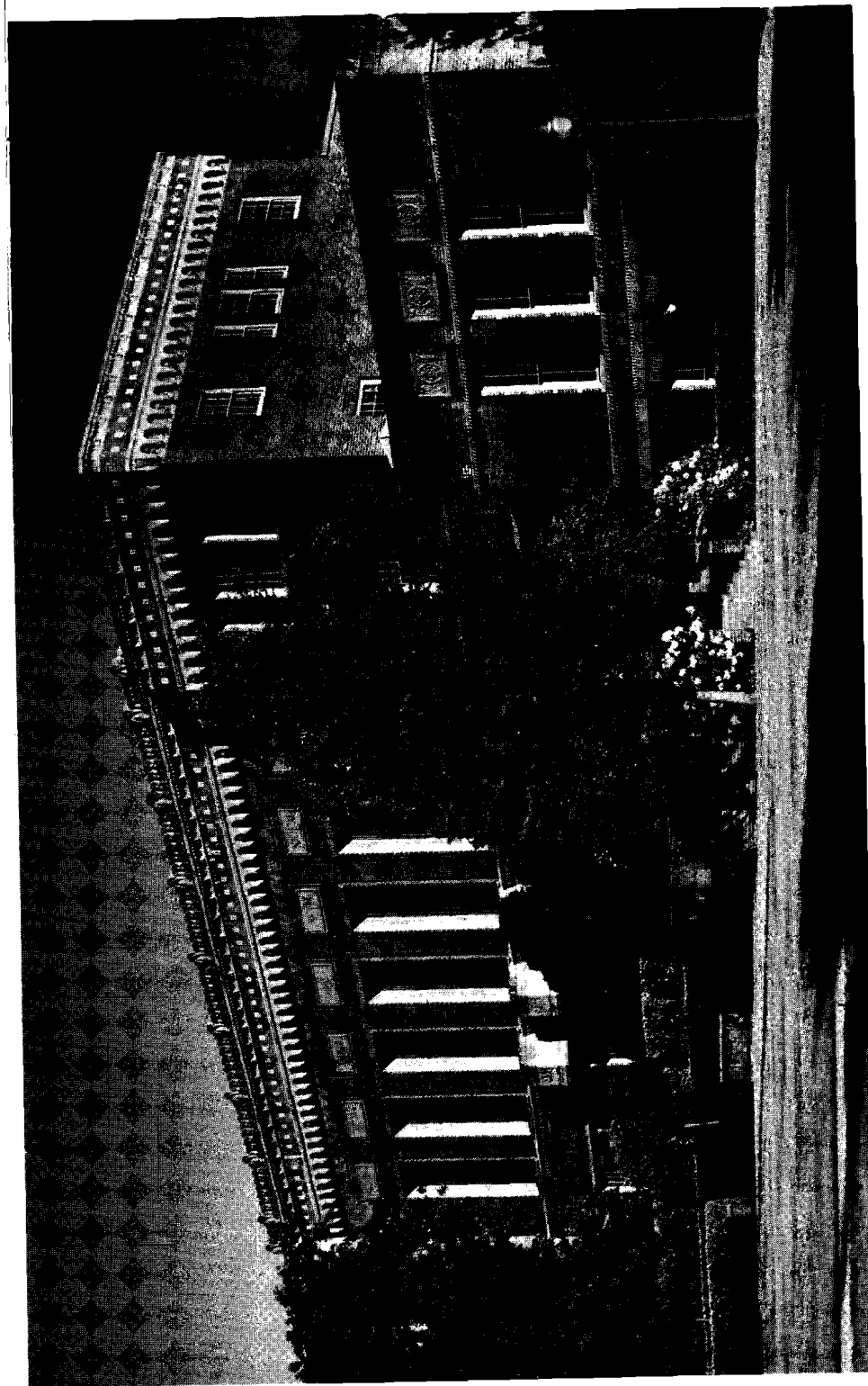
HE 506. **Special Problems.** Hours to be arranged.

HE 507. **Seminar.** Hours to be arranged.

HE 542. **Basic Issues in Health Education.** 3 hours. Haar.

HE 543. **Advanced Health Instruction.** 3 hours spring. Haar.

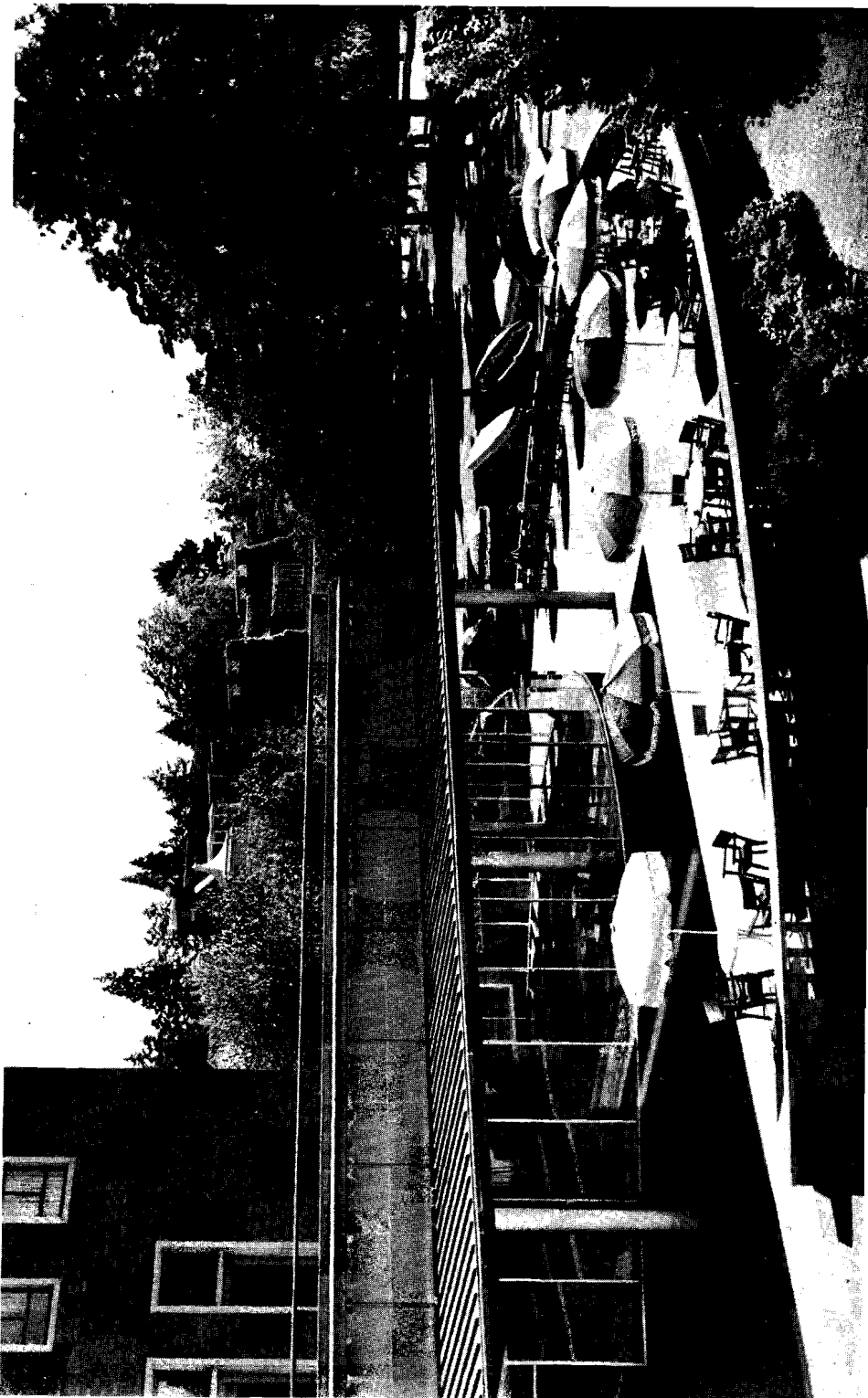
HE 552. **Administration of School Health Education.** 3 hours winter. Haar.



Physical Education

- PE 411, 412, 413. **Physical-Education Workshop.** (g) 9 hours total credit (extension and summer sessions).
- PE 444. **Tests and Measurements in Physical Education.** (G) 3 hours fall. Clarke.
- PE 460. **Physical Education in the Elementary School.** (g) 3 hours. Sprague.
- PE 501. **Research in Physical Education.** Hours to be arranged.
- PE 503. **Thesis.** Hours to be arranged.
- PE 505. **Reading and Conference.** Hours to be arranged.
- PE 506. **Special Problems.** Hours to be arranged.
- PE 507. **Seminar.** Hours to be arranged.
Anatomical and Physiological Bases of Physical Education. Body Growth and Development through Physical Education. Physiology of Exercise. Physical Conditioning, Correctives, Reconditioning. Body Mechanics and Body Movement. Administration of Physical Education. Recreation.
- PE 515. **History and Theories of Physical Education.** 3 hours fall. Washke.
- PE 516. **Intramural Organization and Management.** 3 hours. Washke.
- PE 517. **Methods of Research.** 3 hours. Clarke.
- PE 521. **Basic Procedures in Corrective Physical Education.** 3 hours. Poley.
- PE 522. **Advanced Corrective Procedures.** 3 hours. Poley.
- PE 523. **Physical Education of the Handicapped.** 3 hours. Poley.
- PE 524, 525, 526. **Correctives Laboratory.** 1 hour each term. Poley.
- PE 530. **Developmental and Remedial Physical Education.** 3 hours. Clarke.
- PE 531. **Muscle Testing and Therapeutic Exercise.** 3 hours. Poley.
- PE 532. **Heat Therapy and Massage.** 3 hours. Poley.
- PE 533. **Techniques of Relaxation.** 3 hours. Poley.
- PE 540, 541. **Statistical Methods in Physical Education.** 3 hours each term. Clarke.
- PE 542. **Experimental Design in Physical-Education Research.** 4 hours. Clarke.
- PE 550. **Current Movements in Physical Education.** 3 hours. Washke.
- PE 551. **Administration of Physical Education.** 3 hours fall. Esslinger.
- PE 556. **Administration of Buildings and Facilities.** 3 hours winter. Rhoda.
- PE 557. **Supervision of Physical Education for City Supervisors.** 3 hours. Sprague.
- PE 558. **Curriculum Construction in Physical Education.** 3 hours.
- PE 559. **Professional Preparation in Physical Education.** 3 hours. Sprague.
- PE 561. **Foundations of Physical Growth.** 3 hours fall. Poley.
- PE 562. **Changes in Body Size and Form During Childhood and Adolescence.** 3 hours. Poley.
- PE 563. **Growth and Body Tissues and Organs.** 3 hours. Poley.
- PE 564. **Morphologic and Physiologic Appraisalment of School Children.** 3 hours. Sigersteth.

THE ERB MEMORIAL UNION—"FISHBOWL" AND TERRACE



- PE 566. **Research Methodology for Child Growth.** 3 hours. Rhoda.
 PE 567. **Motor Development in Infancy and Childhood.** 3 hours. Poley.
 PE 572. **Gross Anatomy Basis to Physical Performance.** 3 hours. Sigerseith.
 PE 573. **Advanced Kinesiology.** 3 hours. Sigerseith.
 PE 574. **Physiological Principles of Advanced Conditioning.** 3 hours. Sigerseith.
 PE 575. **Mechanical Analysis of Motor Skills.** 3 hours. Sigerseith.

Recreation

- Rec 553. **Administration of Recreation.** 3 hours. Rodney.

History

Professors: EARL POMEROY (department head), QUIRINUS BREEN, PAUL S. DULL, VAL R. LORWIN, WILLIAM O. SHANAHAN, WENDELL H. STEPHENSON, O. MEREDITH WILSON.

Associate Professors: E. R. BINGHAM, LLOYD R. SORENSON, PAUL A. VARG.

Assistant Professors: STANLEY A. PIERSON, JOHN E. SELBY, ROBERT W. SMITH, VERNON F. SNOW.

Instructors: GUSTAVE ALEF, WILLIAM M. BOWSKY, JOSEPH M. GALLANAR, RAMSAY MACMULLEN.

The Department of History offers instruction at the graduate level in the fields of European, American, and Far Eastern history, leading to the M.A. (and in special cases, the M.S.) and the Ph.D. degrees. Faculty and library resources most adequately support dissertations in the fields of nineteenth- and twentieth-century America, the Far Western United States, the Pacific Northwest, American foreign relations since 1914, twentieth-century Western Europe, mediaeval and Renaissance Europe, modern Britain, and Japan since 1921.

History is one of the strongest fields in the University Library. The Special Collections Division of the Library includes over 300,000 manuscripts and over 100,000 photographs, chiefly pertaining to Western American history and the history of the Pacific Northwest. Microcard and microfilm series being received include the British sessional papers, the books, pamphlets, and periodicals published 1639-1799 as listed in Evans' *American Bibliography*, and the Adams family papers.

The graduate program in history is planned to provide students with unusual opportunities for individual attention at all stages. Seminars and graduate courses are limited to small enrollments. A representative selection of graduate offerings is available in the summer session. The department invites distinguished historians from other universities each year, primarily to meet with graduate students, for periods ranging from a few days to a full term. Usually one or two visiting professors are included in the summer staff.

Basic undergraduate work in European and American history or its equivalent is prerequisite to candidacy for a graduate degree in history. Students who plan to do graduate work are urged to select well-balanced liberal-arts programs as undergraduates, including work in foreign languages. While the M.S. degree is available for students who do not contemplate further graduate work, the department strongly recommends the M.A. degree, which requires a reading knowledge of one foreign language. Students who have not taken a substantial under-

graduate course in historical method are required to take Historical Method (Hst 520).

The qualifying examination for admission to candidacy for the master's degree covers the general areas of European and American history. Each candidate for a master's degree must present courses in three different fields of history and must be prepared for a final examination in these fields as well as upon the thesis.

A candidate for the doctor's degree must take seminar work in at least two fields of history and pass written preliminary examinations in four fields of history. The Department of History expects candidates for the doctorate to take supporting work, the equivalent of a minor, in one or more related outside fields.

- Hst 411. **History of Greece.** (G) 3 hours. MacMullen.
 Hst 412, 413. **History of Rome.** (G) 3 hours each term. MacMullen.
 Hst 418, 419. **Studies in Western Civilization.** (g) 4 hours each term (summer sessions). Smith.
 Hst 421, 422, 423. **Middle Ages.** (G) 3 hours each term. Breen, Bowsky.
 Hst 430, 431. **Renaissance.** (G) 3 hours each term. Breen.
 Hst 432. **Reformation.** (G) 3 hours. Breen.
 Hst 433. **Europe 1600-1789.** (G) 3 hours. Snow.
 Hst 434, 435, 436. **Western Institutions and Ideas.** (G) 3 hours each term. Sorenson.
 Hst 437, 438, 439. **Economic History of Modern Europe.** (G) 3 hours each term. Lorwin.
 Hst 441, 442, 443. **History of France.** (G) 3 hours each term. Lorwin.
 Hst 445. **Europe since 1939.** (g) 3 hours. Lorwin, Shanahan.
 Hst 446. **Modern Germany.** (g) 3 hours. Lorwin, Shanahan.
 Hst 447, 448, 449. **History of Russia.** (G) 3 hours each term. Alef.
 Hst 460, 461, 462. **History of American Thought and Culture.** (g) 3 hours each term. Bingham.
 Hst 463. **History of Canada.** (g) 3 hours. Smith.
 Hst 464, 465. **British Empire.** (g) 3 hours each term. Smith.
 Hst 466. **Tudor England.** (G) 3 hours. Smith.
 Hst 468. **Victorian England.** (G) 3 hours. Smith.
 Hst 469. **Twentieth-Century England.** (g) 3 hours. Smith.
 Hst 470, 471, 472. **American Political Parties and Leaders.** (G) 3 hours each term. Stephenson.
 Hst 473, 474, 475. **American Foreign Relations.** (g) 3 hours each term. Varg.
 Hst 476, 477. **History of the West.** (G) 3 hours each term. Pomeroy.
 Hst 478. **History of the Pacific Northwest.** (G) 3 hours. Bingham.
 Hst 479. **Forces and Influences in American History.** (G) 3 hours. Selby.
 Hst 480, 481, 482. **The United States in the Twentieth Century.** (G) 3 hours each term. Pomeroy.
 Hst 483. **American Constitutional History.** (g) 3 hours. Selby.

- Hst 486. **Colonial North America.** (G) 3 hours. Selby.
- Hst 487, 488, 489. **American Economic History.** (G) 3 hours each term. Selby.
- Hst 490. **Problems of the Pacific.** (g) 4 hours (summer sessions). Dull.
- Hst 494, 495, 496. **History of China.** (G) 3 hours each term. Dull.
- Hst 497, 498, 499. **History of Japan.** (G) 3 hours each term. Dull.
- Hst 501. **Research.** 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.
European History: Alef, Breen, Lorwin, Shanahan, Snow. *English History:* Smith. *American History:* Bingham, Pomeroy, Selby, Stephenson, Varg. *History of the Far East:* Dull.
- Hst 520. **Historical Method.** 3 hours. Stephenson, Pomeroy.
- Hst 530, 531, 532. **European History: Problems and Interpretations.** 3 hours each term. Breen, Snow, Shanahan.

Journalism

Professors: CHARLES T. DUNCAN (dean), W. F. G. THATCHER (emeritus), GEORGE S. TURNBULL (emeritus).

Associate Professors: ROBERT C. HALL (emeritus), JOHN L. HULTENG, WARREN C. PRICE, WILLARD L. THOMPSON, R. M. WALES.

Assistant Professors: JAMES W. FROST, ROY P. NELSON, CARL C. WEBB.

Graduate work in the School of Journalism leads to the M.A. or M.S. degree. By special arrangement the student may offer a journalism minor toward the Ph.D. degree in certain fields. Areas of study cover all major aspects of the press and the broadcast media except strictly technological aspects. Emphasis is placed upon the social significance and responsibilities of journalistic fields, rather than upon techniques. Basic skills and methods, however, are not ignored.

The graduate curriculum in journalism is sufficiently flexible to meet the needs of:

- (1) The student who has a strong undergraduate major in the liberal arts, and who wishes a fifth-year concentration on journalism. (Such a student will usually need one or two extra terms for certain basic courses which do not carry graduate credit.)
- (2) The student who has had substantial professional experience and who wishes advanced study as preparation for specialized work or as a supplement to previous academic training.
- (3) The student who had an undergraduate major in journalism and who, after several years' experience in the field, wishes a fifth year of advanced study. (The school does not recommend that students with undergraduate majors in journalism begin graduate work without first having had professional experience.
- (4) The student who contemplates a career in teaching or communications research.

Graduate students in journalism are expected to have a broad undergraduate background and to be acquainted with the fundamentals of reporting, editing, and

advertising. Previous training and experiences are weighed individually in planning the study program of each degree candidate.

The school is housed in Eric W. Allen Hall. Facilities include individual study accommodations for graduate students, a reading-reference room with important newspapers and magazines, and laboratories. The *Oregon Daily Emerald* and the University Press are also housed in Allen Hall.

- J 421. **Community Newspaper: Editorial Problems.** (G) 3 hours.
- J 422. **Community Newspaper: Business Problems.** (G) 3 hours.
- J 423. **Community Newspaper: Production Problems.** (G) 3 hours.
- J 432. **Radio-Television News II.** (G) 3 hours.
- J 440. **Advertising Production.** (G) 3 hours.
- J 441. **Radio-Television Advertising.** (G) 3 hours.
- J 443. **Newspaper Advertising.** (G) 3 hours.
- J 444. **Advertising Problems.** (G) 3 hours.
- J 445. **Retail Advertising.** (G) 3 hours.
- J 446, 447. **Advertising Copy and Layout.** (G) 3 hours each term.
- J 455. **Supervision of School Publications.** (g) 3 hours.
- J 457. **The Public and the Press.** (g) 3 hours.
- J 459. **Publicity and Public Relations.** (g) 3 hours.
- J 462. **Reporting of Public Affairs I.** (G) 3 hours.
- J 463. **Reporting of Public Affairs II.** (G) 3 hours.
- J 464. **Interpretive Writing.** (G) 3 hours.
- J 468, 469. **Magazine Article Writing.** (G) 2 hours each term.
- J 470. **Magazine Editing.** (G) 3 hours.
- J 481. **Newsroom Policies.** (G) 2 hours.
- J 483. **Public Relations Problems.** (G) 3 hours.
- J 485. **Law of the Press.** (G) 3 hours.
- J 487. **History of Journalism.** (G) 3 hours.
- J 489. **Comparative Foreign Journalism.** (G) 3 hours.
- J 494. **Journalism and Public Opinion.** (G) 3 hours.
- J 495, 496. **Journalism and Contemporary Affairs.** (G) 3 hours each term.
- 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. Interpretive Writing. Communications Research Methods. Advertising Problems. Literature of Journalism. The Foreign Press. History of Journalism. Propaganda. Current Problems in Journalism.

Mathematics

Professors: ANDREW F. MOURSUND (department head), PAUL CIVIN, IVAN M. NIVEN, PAUL B. SIMPSON.

Associate Professors: FRED C. ANDREWS, KENNETH S. GHENT, HERMAN RUBIN, BERTRAM YOOD.

Assistant Professors: FRANK W. ANDERSON, LEE W. ANDERSON, ROBERT L. BLAIR.

Instructor: ALBERT T. BHARUCHA-REID.

The University offers graduate work in mathematics leading to the M.A., M.S., and Ph.D., degrees.

Programs for the M.A. and M.S. degrees may be arranged with or without thesis. In most cases the department recommends the degree without thesis; when a thesis is not presented, an expository essay is required. Final written and oral comprehensive examinations covering all of the student's graduate work are a part of the requirement for all master's degrees.

Work for the Ph.D. degree is offered in algebra, analysis, number theory, and mathematical statistics. The required comprehensive examination generally covers a broad area from the fields of abstract algebra, analysis, statistics, and topology. The candidate's advisory committee may, however, approve certain modifications of the program. Courses offered in other departments which involve applications of mathematics may be substituted for work in mathematical statistics. A large portion of the work beyond the basic courses is done in seminars which reflect the current research interests of the faculty.

New graduate students are required to take qualifying-placement examinations appropriate to their level of achievement in mathematics soon after they arrive on the campus.

The department is housed in Deady Hall, the oldest campus building, which has recently been completely remodeled and modernized. The mathematics library is excellent. Two well-equipped statistical laboratories are provided for the use of students. Desk space is available for graduate students who desire to study in the building, who thus have the advantage of close contacts with other graduate students and with the faculty.

- Mth 411. **Number Theory.** (G) 3 hours. Ghent, Niven.
 Mth 412, 413, 414. **Higher Algebra.** (G) 3 hours each term. F. Anderson, Ghent.
 Mth 415. **Advanced Euclidean Geometry.** (g) 3 hours. Ghent.
 Mth 416, 417. **Projective Geometry.** (G) 3 hours each term. Ghent.
 Mth 421, 422, 423. **Introduction to Applied Mathematics.** (g) 3 hours each term. Niven.
 Mth 425, 426, 427. **Elements of Statistical Methods.** (g) 3 hours each term. Andrews, Bharucha-Reid, Rubin.
 Mth 431, 432, 433. **Advanced Calculus.** (G) 3 hours each term. Moursund, Yood.
 Mth 441, 442, 443. **Introduction to Statistical Theory.** (g) 3 hours each term. Andrews, Rubin.
 Mth 447, 448, 449. **Mathematical Statistics.** (G) 3 hours each term. Andrews, Rubin.
 Mth 479. **Algebra.** (g) 3 hours (summer sessions).
 Mth 489. **Geometry.** (g) 3 hours (summer sessions).

- Mth 499. **Foundations of Mathematics.** (g) 3 hours (summer sessions).
 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.

Algebra and Number Theory: Blair, Niven, F. Anderson. *Applied Mathematics:* Bharucha-Reid, Niven. *Probability and Measure Theory:* Rubin. *Banach Algebras:* Yood. *Harmonic Analysis:* Civin. *Statistical and Stochastic Process:* Andrews, Rubin, Bharucha-Reid. *Topological Algebras:* Blair, Civin, Yood.

- Mth 541, 542, 543. **Abstract Algebra.** 3 hours each term. Ghent, Niven, Blair.
 Mth 544, 545, 546. **Structure of Rings and Algebras.** 3 hours each term. Blair, Yood.
 Mth 547, 548, 549. **Algebraic Number Theory.** 3 hours each term. Niven.
 Mth 551, 552, 553. **Theory of Functions.** 3 hours each term. Civin, Moursund, Yood.
 Mth 557, 558, 559. **Topics in Classical Analysis.** 3 hours each term. Civin, Yood.
 Mth 561, 562, 563. **Modern Theories in Analysis.** 3 hours each term. Civin, Yood.
 Mth 571, 572, 573. **Topology.** 3 hours each term. L. Anderson, Civin.
 Mth 579. **Algebra.** 3 hours (summer sessions).
 Mth 581, 582, 583. **Theory of Estimation and Testing Hypotheses.** 3 hours each term. Andrews, Rubin.
 Mth 589. **Geometry.** 3 hours (summer sessions).
 Mth 591, 592, 593. **Advanced Mathematical Statistics.** 3 hours each term. Andrews, Rubin.
 Mth 594. **Theory of Games.** 3 hours. Rubin.
 Mth 595, 596. **Statistical Decision Theory.** 3 hours each term. Rubin.
 Mth 599. **Foundations of Mathematics.** 3 hours (summer sessions).

Medical Sciences

The University of Oregon Medical School in Portland offers graduate instruction leading to the M.A., M.S., and Ph.D. degrees in the medical sciences (anatomy, bacteriology, biochemistry, pathology, pharmacology, and physiology) and to the M.S. degree in nursing education. Graduate degrees earned at the Medical School are conferred by the University of Oregon, upon recommendation by the faculty of the Medical School. In addition to opportunities for graduate study and research in the preclinical departments, arrangements may be made for special study of clinical problems by experimental methods, through the cooperation of the preclinical and clinical departments. In some cases, students doing work of this kind may qualify for graduate degrees. For graduate requirements and courses see the Medical School Catalog or the Department of Nursing Education Catalog.

Music

Professors: THEODORE KRATT (dean), E. A. CYKLER, GEORGE HOPKINS, ROBERT E. NYE, JANE THACHER (emeritus).

Associate Professors: GEORGE BOUGHTON, ARNOLD ELSTON, S. L. GREEN, R. S. VAGNER.

Assistant Professors: EXINE BAILEY, F. W. BITTNER, MILTON DIETERICH, I. D. LEE, MAX D. RISINGER.

The School of Music offers graduate work in the following fields: theory and composition, music history and literature, instrumental and vocal performance, and music education. Its major graduate programs lead to the M.A., M.S., and M.Mus. degrees. Programs may also be arranged, leading to the M.S. in General Studies, for public school teachers who find it necessary to combine two teaching assignments, one of which may be music. The School of Music also cooperates with the School of Education in arranging programs leading to the D.Ed. degree for those students who wish to do a major part of their work in the field of music education.

The University Library and the instrumental and physical facilities of the School of Music make possible a wide variety of musical research. Instruction on the graduate level is offered in all the fields of applied music, including work in ensembles which vary from small select chamber groups to larger groups, including chorus, orchestra, and symphonic band. Graduate students are offered opportunities not only to participate in but also to direct such performing groups.

All graduate work in the School of Music is recognized and fully accredited by the National Association of Schools of Music, of which the University of Oregon School of Music has been a member since 1930.

Music

- Mus 408. **Seminar in Music History.** (G) 3 hours each term. Cykler, staff.
- Mus 414, 415, 416. **Composition I.** (G) 2 hours each term. Elston.
- Mus 420, 421, 422. **Counterpoint II.** (G) 2 hours each term. Elston.
- Mus 428, 429, 430. **Introduction to Musicology.** (G) 3 hours each term. Cykler.
- Mus 434, 435, 436. **Applied Theory.** (G) 3 hours each term (summer sessions).
- Mus 441, 442, 443. **Advanced Conducting.** (G) 2 or 3 hours each term. Kratt, Risinger.
- 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 Literature. Music Education. Music Theory.*
- Mus 511, 512, 513. **Applied Counterpoint.** 2 or 3 hours each term. Elston.
- Mus 514, 515, 516. **Composition II.** 2 hours each term. Elston.
- Mus 520, 521, 522. **Interpretation of Symphonic Literature.** 2 or 3 hours each term. Kratt.
- Mus 523, 524, 525. **Interpretation of Choral Literature.** 2 or 3 hours each term. Kratt.
- Mus 526, 527, 528. **Composition III.** 2 hours each term. Elston.

Mus 590. **Applied Music.** 1 to 4 hours any term. Bailey, Bittner, Boughton, Green, Hopkins, Lee, Myrick, Vagner.

Music Education

- MuE 426. **Supervision of the General Music Program.** (G) 3 hours. Nye.
- MuE 444. **Choral Literature for Public Schools.** (G) 2 hours. Risinger.
- MuE 445. **String Literature for Public Schools.** (G) 2 hours. Boughton.
- MuE 446. **Wind Literature for Public Schools.** (G) 2 hours. Vagner, Lee.
- MuE 501. **Research.** Hours to be arranged.
- MuE 503. **Thesis.** Hours to be arranged.
- MuE 505. **Reading and Conference.** Hours to be arranged.
- MuE 507. **Seminar.** Hours to be arranged.
- MuE 532. **Problems in Music Education.** 3 hours. Nye.
- MuE 533. **Music in the Elementary School.** 3 hours. Nye.
- MuE 534. **Music in the Junior High School.** 3 hours. Nye.
- MuE 535. **Music in the Senior High School.** 3 hours. Nye.

Philosophy

Professors: ALBUREY CASTELL (department head), BERTRAM JESSUP.
Assistant Professors: VERGIL DYKSTRA, ROBERT RICHMAN.

The Department of Philosophy offers graduate work leading to the M.A. and M.S. degrees. All candidates for the master's degree in philosophy are required to write a thesis.

The department's graduate offerings are intended to meet the needs of three classes of students: (1) those preparing to work for the Ph.D. in philosophy with a view to teaching and research; (2) those interested in securing a master's degree but not intending to proceed to further graduate work in philosophy; (3) those interested in philosophy as part of a program with a major in some other department.

Students preparing for work for the Ph.D. degree in philosophy are required to take the M.A. degree and to include graduate work in logic and a seminar in British empiricism in their programs.

- Phl 411, 412. **English Social Philosophy.** (G) 3 hours each term. Castell.
- Phl 431, 432, 433. **Philosophy and Literature.** (G) 2 hours each term. Jessup.
- Phl 441, 442, 443. **Aesthetics.** (G) 3 hours each term. Jessup.
- Phl 461, 462. **Symbolic Logic.** (G) 3 hours each term. Richman.
- Phl 471. **Philosophy of Science.** (G) 3 hours. Richman.
- Phl 503. **Thesis.** Hours to be arranged.
- Phl 505. **Reading and Conference.** Hours to be arranged.
- Phl 507. **Seminar.** Hours to be arranged.
- Philosophy of Education:* Castell. *Seventeenth-Century Political Philosophy:* Castell. *Seventeenth-Century Philosophy:* Richman. *Contemporary Value Theory:* Jessup.

Physics

Professors: RAYMOND T. ELLICKSON (department head), S. Y. CH'EN, EDWIN G. EBBIGHAUSEN, JOHN L. POWELL.

Associate Professor: FRANCIS E. DART.

Assistant Professors: DWIGHT W. BERREMAN, BERND CRASEMANN, HARRY T. EASTERDAY, H. S. VALK.

Instructor: HARRY A. ATWATER.

The Department of Physics offers graduate work leading to the M.A., M.S., and Ph.D. degrees. The department is housed in the new Science Building, which provides excellent facilities for both instruction and research. The department is especially well equipped for research in spectroscopy, X-rays, solid-state physics, and beta-ray spectroscopy. Among the major items of equipment available for research are several spectrographs, including a 35-foot grating spectrograph, an X-ray diffraction unit, an infra-red spectrograph, and an induction furnace for preparation of single crystals of metals and intermetallic compounds. The department has a well-equipped shop with a skilled instrument maker in charge, as well as a student shop open to qualified graduate students.

Several research assistantships are available on projects supported by such agencies as the National Science Foundation, the Signal Corps, and the Atomic Energy Commission.

Research in progress in the department includes a broad program of study of the effects of gases at high pressures on the absorption spectra of metallic vapors. Other programs are concerned with the semiconducting properties of intermetallic compounds, the fluorescence and photoconductivity of single crystals of various salts, and beta-ray spectroscopy. Although no graduate work is offered in the field of astronomy, a program of research is under way on the motion of certain double and triple star systems.

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 two fields are required to take an appropriate undergraduate course, for which no graduate credit is given.

Further information regarding the requirements for advanced degrees in physics may be obtained by addressing an inquiry to the department.

Ph 411, 412, 413. **Modern Physics.** (G) 3 hours each term. Easterday.

Ph 431, 432, 433. **Electricity and Electronics.** (g) 4 hours each term. Atwater.

Ph 441, 442, 443. **Advanced Optics.** (G) 4 hours each term. Ch'en.

Ph 444. **Spectrochemical Analysis.** (G) 3 hours. Ch'en.

Ph 451, 452, 453. **Thermodynamics and Chemical Physics.** (G) 3 hours each term. Atwater.

Ph 471, 472, 473. **Introduction to Theoretical Physics.** (G) 3 hours each term. Berreman.

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.

Current Periodical Literature. Theory of Relativity. Quantum Theory of Radiation. Physics of Solids. Microwave Spectroscopy. X-Rays and Crystal Structure.

Ph 511, 512, 513. **Theoretical Mechanics.** 3 hours each term. Powell.

Ph 516, 517, 518. **Advanced Physical Measurements.** 1 or 2 hours each term.

Ph 521, 522, 523. **Theory of Electricity and Magnetism.** 3 hours each term. Valk.

Ph 524, 525, 526. **Experimental Nuclear Physics.** 3 hours each term. Crasemann.

Ph 531, 532, 533. **Quantum Mechanics.** 3 hours each term. Powell.

Ph 541, 542, 543. **Theoretical Nuclear Physics.** 3 hours each term. Powell.

Ph 551, 552, 553. **Atomic and Molecular Spectra.** 3 hours each term. Ch'en.

Ph 554, 555, 556. **Experimental Spectroscopy.** 1 hour each term. Ch'en.

Political Science

Professors: EGBERT S. WENGERT (department head), PAUL S. DULL, CHARLES P. SCHLEICHER, WALDO SCHUMACHER.

Associate Professors: HERMAN KEHRLI, VINCENT A. OSTROM, HOWARD E. DEAN.

Assistant Professors: IRENE BLUMENTHAL, LESTER G. SELIGMAN.

Instructor: LUCIAN MARQUIS.

Graduate education in political science focuses on the study of three major areas or aspects of political science: political theory, political institutions and behavior, and public law and policy. Courses, seminars, and individual instruction aid candidates for advanced degrees to acquire a broad knowledge of these fields. Students are also expected to be able to relate the findings and methods of the other social sciences to political science.

Graduate students are encouraged to use to best advantage all relevant intellectual resources—regular faculty, distinguished visitors, current research, and facilities for field study—wherever they may be found in the University. Other departments provide important tools, such as languages, mathematics, studies in method, and other supporting materials, for the study of political science. The special research interests of political-science faculty members may have particular relevance for a student's program. Current faculty interests which illustrate some of the resources available for intensive study are: the development of theoretical approaches to political science; American constitutionalism as political thought; empirical study of political behavior, e.g., methodology, the local community, policy formation, public opinion, leadership; comparative study of political behavior and institutions; theory of public administration; theory of policy formation; foreign policy; policy and administration of natural resources; structure and functions of political institutions.

Candidates for the master's degree are expected to show such competence in political theory, political institutions and behavior, and public law and policy as might be achieved through a year of courses or seminar work in these areas. A master's thesis is required to demonstrate the student's ability in independent analysis and presentation of complex materials.

Doctoral candidates are required to demonstrate both comprehensive knowledge of the whole field of political science and substantial understanding of two related fields in other social sciences. The dissertation is a measure of the student's depth of study and is expected to be a significant original contribution to knowledge.

PS 411, 412, 413. **Introduction to Public Administration.** (G) 3 hours each term. Wengert.

- PS 414. **Political Parties and Election Problems.** (G) 4 hours fall. Schumacher.
- PS 415. **Public Opinion.** (G) 4 hours winter. Schumacher.
- PS 416. **Urban Politics.** (G) 3 hours spring. Seligman.
- PS 419, 420. **International Organization.** (G) 3 hours each term, fall and winter. Blumenthal.
- PS 421. **International Law.** (G) 3 hours spring. Blumenthal.
- PS 424. **The Struggle for Asia: Democracy vs. Communism.** (g) 4 hours (summer sessions). Dull.
- PS 430, 431, 432. **Political Theory: The Western Tradition.** (G) 3 hours each term. Dean.
- PS 433. **American Political Theory.** (G) 3 hours fall or spring. Dean.
- PS 440. **Competing Ideologies in the World Today.** (G) 3 hours (extension).
- PS 441. **Area Tensions in the World Today.** (G) 3 hours (extension).
- PS 482. **The Legislature in American Government.** (G) 3 hours fall. Schumacher.
- PS 483. **The Executive in American Government.** (G) 3 hours spring. Wengert.
- PS 484, 485, 486. **The Supreme Court in American Government.** (G) 3 hours each term. Dean.
- PS 501. **Research.** Hours to be arranged.
- PS 503. **Thesis.** Hours to be arranged.
- PS 505. **Reading and Conference.** Hours to be arranged.
- PS 507. **Seminar.** Hours to be arranged.

Psychology

Professors: ROBERT LEEPER (department head), LEONA E. TYLER.

Associate Professors: ROY E. BUEHLER, J. SPENCER CARLSON, H. R. CROSLAND, KENNETH D. GAVER, RICHARD A. LITTMAN, A. S. LUCHINS, NORMAN D. SUNDBERG.

Assistant Professors: ROBERT F. FAGOT, PAUL J. HOFFMAN, REID KIMBALL, ROBERT W. LEARY, GERALD R. PATTERSON, PHIL H. SCHOGGEN, HENRY W. VON HOLT, JR., CHARLES F. WARNATH.

The Department of Psychology offers work leading to the M.A., M.S., and Ph.D. degrees. Candidates are accepted in the fields of general-experimental psychology (especially learning and perception), clinical psychology, counseling, personality, and social psychology.

Graduate work in psychology has been well established at the University since the early 1920s. The present policy of the department aims at a maximum enrollment of about fifty students, an efficient number for the faculty and physical facilities. This limitation permits both the close individual supervision of graduate work and the close relationships between faculty and students which have been so important in the past work of the department.

At least half of the present graduate student group have a primary interest in clinical and counseling psychology. The department recognizes that a large proportion of its graduate students will wish to prepare for clinical and counseling

work because of the expanding demand for workers in these areas. Within the clinical area, the department is attempting to develop a strong program of training for students interested in clinical work with children. To facilitate such training, a small clinic has been established within the department. Graduate clinical students may also take work in the clinic maintained by the Department of Speech for children with difficulties of speech and hearing, and in the Reading Clinic maintained by the School of Education. Facilities for practicum experience with adults are provided by the University Counseling Center. Arrangements for internships have been developed at the Oregon State Hospital in Salem, at the Community Child Guidance Clinic in Portland, and in the State Psychiatric Services for Children at the University of Oregon Medical School in Portland.

Work in general-experimental psychology continues to be a major interest of the department, both as a field deserving attention in its own right and as an indispensable part of the training of clinical and counseling students. The areas of general psychology which are emphasized by the department include: learning, perception, physiological psychology, personality theory, and personality development. Active research programs now being conducted include the following: a longitudinal study of the development of interests in children; a study of personality development by direct observation of infants in their own homes; study of the effects of tranquilizing drugs in monkeys; studies of decision making and judgment; and studies of family attitudes toward child-rearing practices.

The University also offers a two-year program of graduate study, leading to the master's degree, to prepare students for positions as counselors for handicapped persons in vocational rehabilitation programs. The work includes courses in psychology, supplemented by study of medical, legal, and other aspects of rehabilitation and by supervised experience in rehabilitation agencies. Traineeships are available.

All students applying for admission for graduate work in psychology should supply scores on either the Miller Analogies Test or the Graduate Record Examination (preferably the former), as well as transcripts of previous academic work.

- Psy 405. **Seminar.** (G) Hours to be arranged.
- Psy 421, 422. **Principles and Methods of Psychological Assessment.** (g) 3 hours each term. Buehler, von Holt.
- Psy 424, 425. **Individual Intelligence Testing.** (G) 3 hours each term. Patterson, von Holt.
- Psy 435. **Counseling Procedures.** (G) 3 hours. Buehler.
- Psy 436. **Character and Personality.** (g) 3 hours fall. Schoggen.
- Psy 443, 444, 445. **Psychometrics.** (G) 3 hours each term. Fagot.
- Psy 447, 448. **Industrial Psychology.** (G) 3 hours each term. Warnath.
- Psy 449. **Counseling Uses of Occupational Materials.** (G) 3 hours. Warnath.
- Psy 450. **Abnormal Psychology.** (G) 3 hours fall or spring. Buehler.
- Psy 451, 452. **Physiological Psychology.** (G) 3 hours each term. Leary.
- Psy 460. **Developmental Psychology I: Infancy and Childhood.** (g) 3 hours. Patterson.
- Psy 461. **Developmental Psychology II: Adolescence and Maturity.** (g) 3 hours. Luchins.
- Psy 465. **Motivation.** (G) 2 hours spring. Littman.
- Psy 467, 468, 469. **Learning.** (G) 2 hours each term. Littman.

- Psy 470, 471. **Comparative Psychology.** (G) 3 hours each term. Leary.
- Psy 473, 474, 475. **History of Psychology.** (G) 2 hours each term. Crosland.
- Psy 481. **Psychology of Pain.** (G) 3 hours. Crosland.
- Psy 491. **Psychology of Testimony.** (G) 3 hours fall. Crosland.
- Psy 501. **Research.** Hours to be arranged.
- Psy 502. **Research Symposium.** Hours to be arranged.
- Psy 503. **Thesis.** Hours to be arranged.
- Psy 505. **Reading and Conference.** Hours to be arranged.
- Psy 507. **Seminar.** Hours to be arranged.
Teaching Psychology: Hoffman. *Proseminar:* Leeper. *Perception:* Luchins. *Psychiatric Treatment Methods:* Gaver. *Medical Aspects of Rehabilitation:* Schoggen. *Basic Concepts of Rehabilitation:* Schoggen. *Contemporary Literature:* Littman. *Child Therapy:* Patterson, Sundberg. *Experimental Design:* Fagot. *Personality Theory:* von Holt. *Psychotherapy:* Kimball. *Social Behavior of Primates:* Leary. *Group Therapy:* Buehler. *Diagnostic Testing:* Luchins. *Psychosomatic Aspects:* Schoggen. *Subcortical Mechanisms:* Leary.
- Psy 508. **Clinical Work with Children.** 3 hours any term. Patterson, Sundberg.
- Psy 509. **Practical Clinical Experience.** 3 hours any term. Luchins, von Holt.
- Psy 511. **Psychology of Attention and Perception.** 2 hours fall. Crosland.
- Psy 512. **Psychology of Memory and the Image.** 2 hours winter. Crosland.
- Psy 518. **Association.** 2 hours spring. Crosland.
- Psy 521, 522, 523. **Systematic Psychology.** 2 hours each term. Littman.
- Psy 525, 526. **Group and Individual Differences.** 3 hours each term. Tyler.
- Psy 530, 531. **Foundations of Clinical Practice.** 3 hours each term. Buehler.
- Psy 532. **Projective Approaches to Personality.** 3 hours. Sundberg.
- Psy 533. **Projective-Techniques Laboratory.** 3 hours. Sundberg.
- Psy 551, 552, 553. **Advanced Experimental Psychology.** 3 hours each term. Crosland.

Religion

Professor: PAUL B. MEANS (department head).

The University of Oregon does not offer major graduate work in religion. However, several courses carrying graduate credit are offered by the Department of Religion, which may be taken as part of the minor requirement for a master's degree.

- R 421. **Religion in Contemporary Society.** (g) 3 hours.
- R 422. **Psychology of Religion.** (g) 3 hours winter.
- R 423. **Philosophy of Religion.** (g) 3 hours spring.

Sociology

Professors: JOEL V. BERREMAN, ROBERT DUBIN, JOHN M. FOSKETT.

Associate Professor: WALTER T. MARTIN (department head).

Assistant Professors: HERBERT BISNO, THEODORE B. JOHANNIS, JR., BENTON JOHNSON.

Instructor: JAMES L. PRICE.

The graduate program in the Department of Sociology leads to the M.A., M.S., and Ph.D. degrees. The program is of an intensive character designed to train professional sociologists fully prepared for teaching, research, and administrative posts in this and related fields. The department's course offerings for graduate students are divided into four areas: (1) theory and methodology, (2) social institutions, (3) social organization, and (4) social interaction and human relations. Students are expected to be competent in all four broad areas of the field, and to seek their preparation both in the sociology courses in the several fields and in related courses in other departments. Emphasis is placed on broad preparation in related social sciences and in scientific method.

In addition to the formal courses of instruction, the graduate training places considerable emphasis upon personal contact between student and faculty in a variety of "apprenticeship" relationships. Qualified graduate students have opportunities to learn teaching through teaching assignments, research through research assistantships, and general faculty functions through departmental assistantships. In addition to regular teaching and research assistantships and fellowships, a \$2,000 E. C. Brown Trust Fellowship is available for doctoral candidates studying in the field of the family.

A broad range of research is in progress in the department, including research projects of the faculty as well as research for masters' theses and doctoral dissertations. Advanced students are encouraged to begin their own research projects early in their programs. They will find ample facilities for research and study in the University Library and the workrooms of the department.

Recognizing the growing need for soundly trained college teachers, the department encourages candidates whose special interests lie in teaching as their major professional goal to orient their educational programs toward that goal.

Soc 407. **Seminar.** (G) Hours to be arranged.

Family Life Education: Johannis. *Penological Systems:* Martin. *Collective Behavior:* Berreman. *Juvenile Delinquency:* Bisno. *Contemporary Social Thought:* Price. *Sociology of Work:* Dubin. *Industrial Sociology:* Dubin. *Sociology of Religion:* Johnson. *Theory of Deviant Behavior:* Price. *Social Stratification:* Johnson. *Population Estimation:* Martin. *Interviewing:* Bisno. *Social Aspects of Mental Health:* Bisno. *Social Aspects of Family Economics:* Johannis.

Soc 414. **Social Institutions.** (G) 3 hours. Fockett.

Soc 416, 417. **Criminology and Delinquency.** (G) 3 hours each term. Price.

Soc 421. **Social Change.** (G) 3 hours. Bisno.

Soc 425, 426, 427. **Theory of Social Groups.** (G) 3 hours each term. Dubin.

Soc 431, 432, 433. **Community Structure and Organization.** (G) 3 hours each term. Martin.

Soc 435. **Theory and Methods of Population Analysis.** (G) 3 hours. Martin.

Soc 436. **Social Control.** (G) 3 hours. Berreman.

Soc 437. **Sociology of Race Relations.** (G) 3 hours. Berreman.

- Soc 440, 441. **Group Dynamics.** (G) 3 hours each term. Bisno.
- Soc 442. **Community Welfare Organization.** (g) 3 hours. Bisno.
- Soc 444, 445, 446. **Sociology of Social Work.** (g) 3 hours each term. Johnson.
- Soc 448, 449. **Social Analysis.** (G) 3 hours each term. Martin.
- Soc 450, 451, 452. **History of Social Thought.** (G) 3 hours each term. Foskett.
- Soc 465, 466. **The Family in American Culture.** (G) 3 hours each term. Johannis.
- Soc 501. **Research.** Hours to be arranged.
- Soc 503. **Thesis.** Hours to be arranged.
- Soc 505. **Reading and Conference.** Hours to be arranged.
- Soc 507. **Seminar.** Hours to be arranged.
- Community Research:* Foskett, Johannis, Martin. *Theory Building:* Dubin. *Urbanization:* Martin. *United States Population Movements:* Martin. *The Professions:* Dubin. *Marriage and Family Counseling:* Johannis. *Psychotherapy and Social Structure:* Bisno, Sundberg. *Primary Human Interaction:* Dubin. *Propaganda and Social Control:* Berreman. *Comparative Family Systems:* Johannis.
- Soc 537. **Social Movements.** 3 hours. Berreman.
- Soc 556. **Experimental Sociology.** 3 hours. Dubin.

Speech

- Professors: BOWER ALY, ROBERT D. CLARK, HORACE W. ROBINSON, KENNETH S. WOOD.
- Associate Professors: WALFRED A. DAHLBERG, E. A. KRETSINGER, KIRT E. MONTGOMERY, OTTILIE T. SEYBOLT (emeritus), D. GLENN STARLIN (department head).
- Assistant Professors: HERMAN COHEN, LEROY HINZE, DANIEL KREMPPEL, SCOTT NOBLES, CLEMEN PECK, JOHN R. SHEPHERD.
- Instructor: NORTON B. YOUNG.

The Department of Speech offers graduate work leading to the M.A. and M.S. degrees. The fields of study are: public speaking, radio and television broadcasting, speech and hearing therapy, theater.

Students concentrate their studies in one of these four fields, but also elect courses in one or more of the other subject fields of the department. Candidates for the master's degree are normally required to write a thesis. Research projects for the thesis include: play production in drama; experimental studies in speech correction, radio and television, and public address; and studies in the history of theater and of oratory.

The activities and special services of the department provide laboratories in which students may gain experience in direction as well as in limited participation. The University Theater, one of the best-equipped in the West, has three producing areas: the main theater, the laboratory theater, and the arena theater. The University has its own television studios and FM radio station (KWAX), as well as local studios for the state-owned radio and television stations (KOAC and KOAC-TV), and outlets through commercial radio and television. The Speech Correction and Hearing Clinic gives students opportunity to work with actual cases of speech-handicapped children and adults. The forensics program includes not only traditional debate and speech contests, but the University Symposium,

a group which takes the discussion of critical public issues to the communities of Oregon. Graduate students are given special responsibility in the direction of these activities, and find in them problems for their research projects.

The instruction and activities of the department are housed in Villard Hall, recently remodeled to meet the needs of instruction in speech, and in the adjacent and newly constructed University Theater.

- Sp 421, 422, 423. **History and Literature of Oratory.** (G) 3 hours each term. Aly, Dahlberg, Montgomery.
- Sp 444, 445, 446. **Radio and Television Program Production.** (G) 3 hours each term. Shepherd.
- Sp 448. **Radio and Television and the Public.** (G) 3 hours spring. Shepherd.
- Sp 451, 452, 453. **Theory of Dramatic Production,** (G) 3 hours each term. Robinson.
- Sp 461, 462, 463. **Scene Design.** (G) 3 hours each term. Krempel.
- Sp 464, 465, 466. **History of the Theater.** (G) 3 hours each term.
- Sp 467, 468, 469. **Lighting for Stage and Television.** (G) 2 hours each term.
- Sp 472. **Experimental Phonetics.** (G) 3 hours. Wood.
- Sp 481, 482. **Speech Defects and Disorders.** (G) 3 hours each term. Wood.
- Sp 483. **Clinical Methods in Speech Correction.** (G) 3 hours. Wood.
- Sp 484, 485, 486. **Clinical Practice in Speech Correction.** (G) 2 hours each term. Wood.
- Sp 487, 488. **Rehabilitation of the Hard-of-Hearing.** (G) 3 hours each term. Young.
- 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).
- 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:* Aly, Cohen. *American Public Address:* Aly. *Rhetorical Criticism:* Clark. *Eighteenth-Century Rhetorical Critics:* Cohen. *Argumentation and Debate:* Cohen, Dahlberg. *Speech Forms and Techniques in Group Control:* Dahlberg. *Technical Problems of the Theater:* Robinson. *Problems in Education by Television:* Shepherd. *Experimental Methods:* Wood.

Index

- Administrative Officers, 8
Admission, 19
American Literature, 44
Anthropology, 26
Architecture, 29
Architecture, Interior, 30
Architecture, Landscape, 30
Architecture and Allied Arts, 27
Art Education, 31
Art History, 31
Assistantships, 13
Athletic Activities, 17
Biology, 31
Business Administration, 33
Calendar, 9
Campus, 10
Chemistry, 35
Classical Languages, 45
Course-Numbering System, 19
Cultural Programs, 15
Degrees, 18
Dental Sciences, 37
Design, Applied, 31
Doctor of Education, 24, 40
Doctor of Philosophy, 23
Drawing, 30
Economics, 37
Education, 39
Education, Elementary, 41
Education, General, 40
Education, Higher, 42
Education, Secondary, 42
Education, Special, 42
Educational Administration, 42
English, 43
Fees and Deposits, 13
Fellowships, 13
Foreign Languages, 45
Foreign Students, 12
French, 46
General Studies, 47
Geography, 47, 48
Geology, 47, 49
Germanic Languages, 46
Graduate Council, 8
Graduate School, History of, 10
Graphic Arts, 30
Greek, 45
Health Education, 49, 50
Health Service, 15
History, 52
Individualized Study, 12
Interior Architecture, 30
Italian, 46
Journalism, 54
Landscape Architecture, 30
Latin, 46
Lectures, 15
Libraries, 11
Library Education, 43
Living Accommodations, 13
Loan Funds, 15
Master of Architecture, 28
Master of Arts, 20
Master of Arts in General Studies, 21
Master of Education, 22
Master of Fine Arts, 22, 29
Master of Landscape Architecture, 28
Master of Music, 23
Master of Science, 20
Master of Science in General Studies, 21
Mathematics, 56
Medical Sciences, 57
Museums and Collections, 17
Music, 58
Music Education, 59
Musical Activities, 16
Nursing Education, 57
Painting, 30
Philosophy, 59
Physical Education, 49, 51
Physics, 60
Placement Services, 15
Political Science, 61
Psychology, 62
Recreation, 52
Recreational Programs, 15
Regulations, 18
Religion, 64
Research, 11
Residence Requirements, 20, 23
Romance Languages, 46
Romance Philology, 47
Scholarships, 13
Sculpture, 31
Sociology, 65
Spanish, 47
Speech, 66
State System of Higher
Education, 5, 6, 7
Summer Session, 12
Theater, 16
Urban Planning, 28, 30
Writing, 44