

GENERAL EXTENSION DIVISION

BULLETIN

Portland Extension Center Evening Classes

Portland, Oregon

CATALOG I S S U E 1956-57

GENERAL EXTENSION DIVISION

BULLETIN

Portland Extension Center Evening Classes

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

ANNOUNCEMENTS 1956-57

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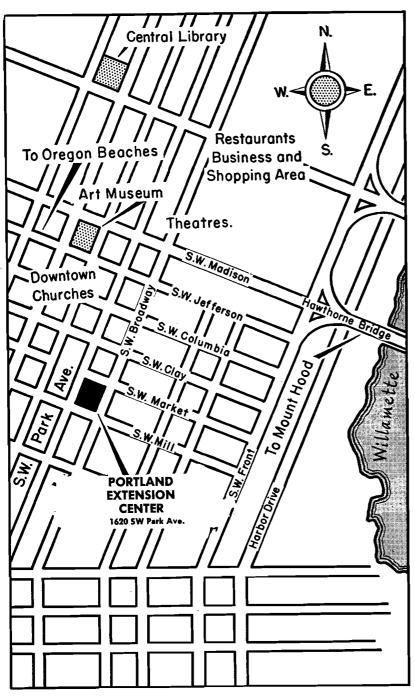


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Oregon State System of Higher Education

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

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

Each of the institutions provides the general studies fundamental to a well-rounded education. At the three colleges of education and Portland State College, students may complete major work in teacher education or general studies or enroll in a preprofessional program.

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

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

State Board of Higher Education*

	Term Expires
CHERYL S. MACNAUGHTON, Portland	1957
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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.

Academic Calendar

September 1956		
s m t w t f s	•	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Fall Quarter 1956	•
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	*Evening class counseling	September 4-29
October 1956	Registration	September 4-29
SMTWTFS	Classes begin	September 24-29
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Late fee begins	October 1
21 22 23 24 25 26 27 28 29 30 31	Last day to register or add a course	October 6
November 1956	Last day to drop a course	
SMTWTFS	without responsibility for grades	November 3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Thanksgiving vacation	November 22-25
18 19 20 21 22 23 24 25 26 27 28 29 30	Final examinations	December 10-15
December 1956	Term ends	December 15
Determber 1750		
SMTWTFS		•
	Winter Quarter 195	57
S M T W T F S 1 2 3 4 5 6 7 8	Winter Quarter 195	
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		January 2-8
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S	Registration	January 2-8
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Registration	January 2-8January 2-8January 9
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12	Registration Classes begin Late fee begins Last day to register or add a course Last day to drop a course	January 2-8January 2-8January 9January 12
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Registration Classes begin Late fee begins Last day to register or add a course	January 2-8January 2-8January 9January 12
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 February 1957	Registration Classes begin Late fee begins Last day to register or add a course Last day to drop a course without responsibility for grades	January 2-8 January 2-8 January 9 January 12
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Registration Classes begin Late fee begins Last day to register or add a course Last day to drop a course	January 2-8 January 2-8 January 9 January 12
S M T W T F S 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 January 1957 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 February 1957 S M T W T F S	Registration Classes begin Late fee begins Last day to register or add a course Last day to drop a course without responsibility for grades	January 2-8January 2-8January 9January 12January 12January 12

^{*}Counseling: September 4-15--9:00 a.m.-4:30 p.m. daily except Saturdays when the hours are 9:00-11:30 a.m. September 17-22-9:00 a.m.-8:30 p.m. daily except Saturdays when the hours are 9:00-11:30 a.m.

Portland Extension Center

	•
Spring Quarter 1957	March 1957
RegistrationMarch 25-30	S M T W T F S
Classes beginMarch 25-30	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Late fee begins	24 25 26 27 28 29 30 31
Last day to register or add a courseApril 6	•
Look don to don a service	April 1957
Last day to drop a course without responsibility for grades	SMTWTFS
Memorial DayMay 30	1 2 3 4 5 6 7 8 9 10 11 12 13
Final examinationsJune 3-8	14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Term endsJune 8	
Summer Session 1957	May 1957
Jumer Jession 1A9/	SMTWTFS
	1 2 3 4
RegistrationJune 17	5 6 7 8 9 10 11
June 17	12 13 14 15 16 17 18
Classes beginJune 18	19 20 21 22 23 24 25
June 18	26 27 28 29 30 31
Holiday—Independence DayJuly 4	
Final examinationsAugust 8-9	June 1957
Term endsAugust 9	S M T W T F S
	2 3 4 5 6 7 8
	9 10 11 12 13 14 15
	16 17 18 19 20 21 22 23 24 25 26 27 28 29
	30
August 1957	July 1957
_	
SMTWTFS	SMTWTFS
1 2 3	1 2 3 4 5 6
4 5 6 7 8 9 10 11 12 13 14 15 16 17	7 8 9 10 11 12 13
18 19 20 21 22 23 24	14 15 16 17 18 19 20
25 26 27 28 29 30 31	21 22 23 24 25 26 27 28 29 30 31
[7]	
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Portland Extension Center

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General Information

Portland Extension Center, an activity of General Extension Division in the Oregon State System of Higher Education, extends the resources, curricula and facilities of the system's six institutions of higher education for those students who desire evening classes in the metropolitan area of Portland. This service is continued throughout the academic year and in the Portland Summer Session. Information regarding the summer session is contained in a special bulletin.

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

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

Recent legislation which established Portland State College as a degreegranting institution within the system has affected Portland Extension Center only in that six campuses instead of five now are represented.

Location. Portland Extension Center occupies the classroom building at 1620 S.W. Park Avenue, Portland 1, Oregon, which is the mailing address. The telephone number is CApitol 2-3201. Administrative, business and registrar offices are in adjacent buildings.

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

Institutional Residence Requirement. Courses available at Portland Extension Center which are drawn from the various study areas and professional schools of the system institutions may, with the approval of the institutions, be used to complete all but 12 term hours of the total baccalaureate degree program.*

Fee Schedule

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

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

ACADEMIC PROCEDURES

 Item	Per Term \$ 8.00
Per credit hour rate	cated State d Ex- n are

SPECIAL FEES AND CHARGES

Late registration fee (includes auditors), per week (\$3.00 during second week of each term; additional \$1.00 for each week thereafter) If institutional charges are met by a check which is returned because of any irregularity for which the student is responsible (NSF, illegible signature, improper bank account number, etc.), a fine of \$1.00 per business day will be charged. (Maximum penalty, \$5.00)	1.00 1.00 2.00
Reinstatement fee	3.00
No deposit for breakage or loss, etc.	

Fee Refunds

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

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

Academic Regulations

Admission Requirements. Portland Extension Center exists to serve those who desire to take the courses offered and who are able to profit by them. Except for those who are degree candidates, there are no formal requirements for ad-

mission. Students may audit any course, i.e. register on a non-credit basis in order to receive instruction and gain value from the course without regard to credit. In some courses the instructor may require evidence of ability to do the work or may require that certain prerequisite work has been accomplished. Transcripts are required only from students who are regularly enrolled at Portland State College, and from veterans who enroll under any of the veterans' federal educational benefits. Permission of the instructor is required for admission to classes after the first meeting of the class.

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

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

Registration. Students may register during the day in accordance with the academic calendar on pages 6-7, and until 8:30 p.m. during the first week of each term.

In order to be assured of admission to a class, students must be present at the first meeting each term; otherwise written approval must be obtained from the instructor for either subsequent admission or delayed registration. Instructors are present at the Center only for their classes; many come from other cities. Students not present at the first class meeting should expect to pay late fees inasmuch as the instructor's signature for approval of admission may not be obtainable between class meetings. In all cases attendance and not prior registration is the criterion for admission to a class, but attendance without registration does not provide a basis for waiving of late fees. This applies to audit registrations, as well, although registrations for audit or non-credit courses may be completed at any time.

Credit Hour Load. Students at Portland Extension Center normally may enroll for not more than six term hours if employed full time or if attending the Center for the first time. Students who are qualified and have adequate study time available, and who are unable to enroll at a campus institution, may, however, petition the registrar for permission to take more than six term hours. In no case may graduate students employed full time register for more than six term hours of graduate credit. Students taking two or more courses which are duplicates, even in part, will receive credit only for one of the courses.

Definitions and Explanations

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

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

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

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

A limited number of courses are designated "non-credit" in the course descriptions. Students in non-credit courses are rated NC in the term grade reports. Non-credit courses are not considered in computing the grade-point average.

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

Course Numbering System. Courses are numbered in accordance with the course numbering systems of the Oregon State System of Higher Education.

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

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

A student electing graduate credit in a (G) or (g) course must so indicate at the time of registration; otherwise graduate credit in such courses cannot be granted. Graduate credit is not retroactively granted.

Graduate Courses are numbered from 500 to 599.

Facilities and Activities

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

Library Fines and Charges

The following regulations govern library fines and charges:

- (1) A fine of five cents per day is charged for all overdue books other than reserve and "Reading Room Use Only" books.
- (2) A fine of 25c per day for the "Reading Room Use Only" books taken from building.
 - (3) The following fines will be charged for violation of reserve book rules:
- (a) For overdue books, a regular fine of twenty-five cents for the first hour and five cents for each succeeding hour, or fraction thereof, until the book is returned or reported lost. A maximum charge of one dollar per hour may be made in cases of flagrant violation of the rules; (b) For failure to return books to proper department desk, when building is open, a fine of twenty-five cents.
- (4) Books needed for use in library are subject to recall at any time. A maximum fine of one dollar per day may be imposed for failure to return promptly.
- (5) A service charge of 10c is added to all fines reported to the business office for collection,
- (6) Borrowers losing books will be charged the replacement cost of the book plus the amount of fine incurred up to the time the book is reported missing. In addition a charge of \$1.00 will be made to cover the cost of cataloging and processing the replacement copy.
- (7) When a lost book for which the borrower has been billed is returned before replacement has been ordered, a refund not exceeding the replacement cost plus the cataloging and processing charge of \$1 may be made at the discretion of the librarian. In cases where a replacement has been ordered, refunds to the borrower may be made at the discretion of the librarian.

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

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

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

Veterans

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

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

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

^{*} Term hours ("quarter hours") may be converted to semester hours by multiplying the number of term hours by $\frac{2}{3}$. Semester hours may be converted to term hours by multiplying the number of semester hours by $\frac{1}{2}$.

Programs of Study

Advanced Degree Programs

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

Education

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

Those students seeking the Master of Science in Education degree from the University of Oregon must complete at least thirty hours in residence on the

campus.

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

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

General Studies

Master of Arts in General Studies. This research degree is designed for students whose broad academic background makes them eligible for graduate work embracing several major departments. The degree is awarded by both the University of Oregon and Oregon State College; both institutions require a thesis. Under favorable circumstances all work toward this degree at Oregon State College may be taken at Portland Extension Center. However, an option (under Master of Arts in General Studies at Oregon State College), designed to meet the needs of people working in the nursery school field, requires that a minimum of 9 hours be completed in residence at Oregon State College within a single summer session or within one regular term. The University of Oregon requires that candidates for the Master of Arts in General Studies earn at least 12 term hours in on-campus enrollment.

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

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

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

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

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

Graduate Credit Requirements

Courses numbered 500 to 599 are graduate courses. Certain courses numbered 400 to 499 may be taken for graduate credit, in which case the course is designated (G) if approved for graduate major credit or (g) if approved for graduate minor credit. A student electing graduate credit in a (G) or (g) course must so indicate at the time of registration; otherwise, graduate credit in such courses cannot be granted. Graduate credit is not retroactively granted.

Graduate students enrolling in Portland Extension Center as candidates for advanced degrees at institutions within the state system of higher education must make application for admission to the graduate school selected, and make arrangements to take the graduate qualifying examination at the earliest opportunity.

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

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

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

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

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

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

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

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

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

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

Teacher Programs

Elementary and Secondary Certification. Portland Extension Center is authorized to offer all work required for both elementary and secondary teaching certificates in Oregon with the exception of supervised teaching. Portland State College and the Center's Portland Summer Session, however, do offer supervised teaching and a limited number of students may meet supervised teaching requirements through these facilities.

Training in Pre-School Education. Although Portland Extension Center does not offer a complete program in pre-school education, certain courses (and an option under the Master of Arts in General Studies at Oregon State College) which are applicable to the nursery or kindergarten field are available. Interested students should consult an elementary education adviser at the Center.

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

Cooperative and Certificate Programs

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

Certificate Program. The Certificate Program is designed for those who do not expect degrees but who can benefit from a specific concentration of courses. Students who complete the Center's approved multi-course program with emphasis on a variety of business and industrial areas, will be granted certificates of accomplishment.

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

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

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

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

Other General Extension Division Services

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

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

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

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

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

Institute of International Affairs. The institute serves to effect close cooperation with national, state and civic organizations related to international affairs, and as a distribution point for U.S. State Department and UNESCO publications.

Telecourses. Closely paralleled to offerings available for college credit through the Office of Correspondence Study, General Extension Division telecourses are offered in several localities in the state through public service facilities of commercial television outlets.

Description of Courses

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

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

An explanation of the course numbering system appears on page 24. The numbers following the course title represent the term hours of credit which may be earned in the course. The letters (U), (S), (C), (P), and (E) which appear in the left hand margin before each course description refer to: (U) the University of Oregon, (S) to Oregon State College, (C) to the Colleges of Education, (P) to Portland State College, and (E) to General Extension Division. They indicate that the accompanying course appears in the catalog of the institution designated and is a regular offering of that institution.

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

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

Anthropology

Lower-Division Courses

(U) Anth 207, 208, 209. Introduction to Cultural Anthropology. 3 hours each term.

The meaning of culture; its significance for human beings; its diverse forms and degrees of elaboration among different groups of men; its processes of growth and expansion.

Upper-Division Courses

(U) Anth 314, 315, 316. Peoples of the World. 3 hours each term.

Historical treatment of world culture areas, exclusive of Europe. Regional variations in culture, their backgrounds, and their significance in contemporary world affairs. Materials drawn from Africa, Asia, Oceania, and the Americas. Prerequisite: upper-division standing.

Art

Professor: REYNOLDS. Instructors: Bunce, Givler, Izquierdo, Jolliver, Kennedy, Littman, Lynch, McLarty, Russo, Welsh.

The following classes are given in cooperation with the Museum Art School. The registration fee is \$16.00 per term for each class, plus a special course fee as indicated for some of the courses. (However, in no case will students registering for work in the Museum Art School and Portland State College or Portland Ex-

tension Center pay more than \$65.00.) Students register at the Museum Art School, S.W. Park avenue at Madison street, where the classes are held.

Lower-Division Courses

(U) AA 201a, 201b, 201c. Survey of the Visual Arts. 1 hour any term.

For beginners and laymen. A survey of many aspects of the arts, with discussion and practice in drawing, composition, painting, and sculpture, for the purpose of increasing the student's powers of observation and expression and leading to a better understanding of the arts, 7:30-9:30. Section I: Tuesday. Section II: Thursday. Course fee, \$3.00 in addition to registration fee. Staff.

(U) *AA 255. Ceramics. 1 hour any term.

Creative approach to ceramics, including knowledge of various clays, building forms by hand, and experience with glazes. Section I: Wednesday. Section II: Thursday. Course fee \$3.00 in addition to registration fee. 7:30-9:30. Staff.

(U) *AA 290. Painting. 1 hour any term.

Problems of the individual student; instruction in the use of a variety of mediums. 7:30-9:30. Section I: Tuesday. Section II: Wednesday. Section III: Thursday. Staff.

(U) *AA 291. Drawing. 1 hour any term.

Life drawing; emphasis on drawing from live models. 7:30-9:30. Section I: Wednesday. Section II: Thursday. Staff.

(U) *AA 293. Elementary Sculpture. 1 hour any term.

Experience with modeling from the figure and from imagination and practice in casting. Progressive series of problems in sculpture, 7:30-9:30. Section I: Tuesday. Section II: Thursday. Course fee, \$3.00 in addition to registration fee. Staff.

Upper-Division Courses

(U) AA 390. Painting. 1 hour fall term.

Problems in portrait, figure, landscape, and still life, in all media. Monday, 7:30-9:30. Prerequisite: 12 term hours in AA 290 or consent of instructor. Staff.

(U) AA 401. Special Studies. 1 hour any term.

Lettering and calligraphy. Tuesday, 7:30-9:30. Staff.

(U) AA 480. Graphic Arts. 1 hour any term.

Design and technical problems in the graphic arts fields. Lithography, etching, woodblock, and silk screen printing. Wednesday, 7:30-9:30. Course fee \$2.00 in addition to registration fee. Staff.

(E) A 0313. Commercial Design. No credit, any term.

Commercial design including posters, cartoons and book jackets. Prerequisite: previous training. Wednesday, 7:30-9:30. Staff.

Art Education

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

Lower-Division Courses

(S) AA 160, 161. Color and Composition. 3 hours fall and winter.

Studio classes in the everyday use of the principles of composing or creating with lines, colors, and textures. Required in the School of Home Economics.

(S) AA 178. House Planning and Architectural Drawing. 3 hours fall.

Appreciation and criticism of domestic architecture. Small-house planning and drawing with reference to the needs of students in agriculture, education, engineering, forestry, and home economics. Wasson.

Upper-Division Courses

(C) A 321. Art Fundamentals. 3 hours fall.

Basic information on elements of design, and representation as they are related to the needs of the student. Creative work is stressed, the student receiving actual experience in different media in studio situations. Dietz, Smith.

(C) A 322. Art Fundamentals. 3 hours winter.

Extension of the principles of design, structural and decorative; application through various media; foundation material for design in school work. Prerequisite: A 321. Dietz, Smith.

(C) A 323. Art Fundamentals. 3 hours spring. (Art education.)

Evaluation of the various approaches to the creative art experiences made possible in the flexible course of study. Lectures, reading, and discussions deal with recent trends of art expression in public schools. Prerequisite: A 321, 322. Dietz. Smith.

(C) A 447, 448, 449. Crafts for Teachers. 2 hours each term.

Application of original designs to glass, metal and wood etchings; foil metal tapping and plastic carving; work with leather, stencil, plastics, wood, art metal and sheet metal; selection and organization of curriculum content of industrial arts as an expressional medium, giving motivation to other elements of the curriculum and serving as an integrating agency. Halvorsen.

See also:

Home Economics
Landscape Architecture

Bacteriology

Assistant Professor: Roberti.

Lower-Division Courses

(S) Bac 204, 205. General Bacteriology. 3 hours fall and winter.

Bac 204. Characteristics of bacteria, yeasts, molds, viruses, and related organisms; elementary technique in cytology, taxonomy, and physiology. Bac 205. Application of microbiology to dairy, soils, industry, sanitation, and the home. Prerequisite: one year of chemistry.

Biology

Professor: MACY. Associate Professor: SIGERSETH.

Upper-Division Courses

(U) Bi 371, 372. Human Anatomy. 3 hours fall and winter.

Gross anatomy; the skeletal and muscular structure; the circulatory, respiratory, digestive, and neural systems and their functioning in physical activities. Prerequisite: junior standing, one year of biology. Sigerseth.

(U) Bi 463. Parasitology. (G) 4 hours winter.

Biological relationships of parasite and host, and the effect of such relationships on each. 2 lectures: 2 three-hour laboratory periods. Prerequisite: one year of biology, senior standing. Macy.

See also:

Zoology General Science

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

Business Administration

Professors: Ballaine, Boyd, Lomax, Maser. Associate Professors: Greene, Richins, Smith, Ziebarth. Assistant Professors: Dodge, Ford, Johnson, Parker. Instructors: Allyn, Booth, Conkling, Dickinson, Eklem, Milkes, Pattullo, Skelton, Stout, Teeter, Wallsinger, Weber, Williams.

ACCOUNTING

Lower-Division Courses

(U) BA 111, 112, 113. Constructive Accounting. 3 hours each term.

Technique of account construction; preparation of financial statements. Application of accounting principles to practical business problems. Required of majors; prerequisite to advanced work in business. Each part is available any term. Booth, Milkes, Parker, Skelton, Weber.

Upper-Division Courses

(U) BA 312. Principles of Cost Accounting. 3 hours fall.

Basic principles of cost accounting; departmentalization; expense allocation; designed primarily for students interested in general accounting. Prerequisite: BA 111, 112, 113. Boyd.

(U) BA 313. Analysis of Financial Statements. 3 hours spring.

Managerial accounting for effective management and control of industrial and trading concerns. Preparation, analysis, and interpretation of balance sheets and operating reports. Prerequisite: BA 111, 112, 113.

(U) BA 479, 480. Income-Tax Procedures. 3 hours fall and winter.

Income-tax laws of the United States and the State of Oregon. Facts involved in making up the various returns; use of the various sources of information. Prerequisite: senior standing in BA 483, 484, 485, or equivalent. Pattullo.

(U) BA 483, 484, 485. Accounting Theory and Practice. (G) 3 hours each term.

The theory of accounting records and statements; statements of affairs, depreciation, analysis of profit-and-loss accounts, receiverships, balance-sheet construction and problems. Required of students majoring in accounting. Teeter.

(U) BA 486. Municipal Accounts and Audits. (G) 3 hours spring.

Principles of fund accounting and budgetary control. Oregon laws and decisions of the attorney general relative to accounts, finance, and auditing of municipalities. Audit procedures incident to municipal accounts. Principles and procedures applicable to governmental units and non-profit organizations. Prerequisite: BA 111, 112, 113. Boyd.

(U) BA 488. Cost Analysis and Control. (G) 3 hours winter.

Standard costs, simple and flexible budgets, analysis and control of distribution costs, gross-profit analysis, break-even analysis, profit-volume relationships, and differential cost analysis. Designed for students in the field of management as well as accounting. Prerequisite: BA 312. Boyd.

(U) BA 489, 490. Advanced Accounting Problems. (G) 3 hours fall and win-

Application of the technical phases of accountancy. Professional training in practical accounting theory and auditing. Prerequisite: BA 483, 484, 485. Required of accounting majors. Williams.

(U) BA 491. Advanced Accounting Theory. (G) 3 hours spring. Continuation of BA 489, 490. Williams. (U) BA 492, 493, 494. Auditing. (G) 3 hours each term.

The auditing standards and procedures currently followed by public accountants; the working papers developed in connection with an audit; the various types of audit reports. Prerequisite: BA 483, 484, 485. Boyd.

GENERAL BUSINESS COURSES

Lower-Division Courses

(S) BA 111. Introduction to Business and Industry. 3 hours fall.

Survey of business organization, operation and management intended to orient the student in the field of business and to help him determine a field of

major concentration. Maser.

(U) BA 221. Elements of Organization and Production. 3 hours fall.

Principles of management as applied to commercial and industrial concerns.

(U) BA 222. Elements of Finance. 3 hours spring.

The financial problems of corporations. Organization of corporations; how they obtain long-term funds, management of working capital, and distribution of securities. Required of all majors. Prerequisite: BA 111, 112, 113 or consent of instructor.

(U) BA 223. Elements of Marketing. 3 hours winter.

Methods, policies, and problems. Private and cooperative channels, auctions, exchanges, middlemen; demand creation, assembly, standardization, packaging, financing, risk taking, distribution. Required of all majors.

Upper-Division Courses

(U) BA 323. Office Organization and Management. 2 hours spring.

Elements of office organization, office management, office records and systems. Special study of the office manager as an executive, and his qualifications. Prerequisite: consent of instructor. Wallsinger.

(U) BA 339. Principles of Advertising. 3 hours winter.

Advertising as a factor in the distribution process; the advertising agency; the "campaign"; the function of research and testing; the selection of media—newspapers, magazines, broadcasting, outdoor advertising, direct mail.

- (U) BA 407. Seminar: Problems of Ocean Shipping. 3 hours spring. Lomax.
- (E) BA 407. Seminar in Business Problems: Credit Unions. 3 hours spring.

 An introductory course in credit union management and operation technique.

History of credit union development. The position of credit unions in current economic development. Basic differences between federal and state charters. Examination of typical by-laws. Organization procedures under federal and state charters. Duties and responsibilities of officers. Bookkeeping procedure. Preparation of monthly and annual reports. Figuring interest in a credit union. A non-technical course with seminar for officers and directors of existing credit unions who desire to discuss advanced projects in connection with their present operations. Stout.

(U) BA 411. Business Public Relations. 3 hours fall.

Public relations of business firms; tools and techniques for determining public reactions; methods of securing good public relations. Open to non-majors with consent of instructor. Ford.

(U) BA 412. Personnel Management. (G) 3 hours winter.

The place and significance of personnel management in the modern business organizations; personnel policies and practices conducive to good relations with employees. Personnel problems of small organizations. Prerequisite: BA 222, 223, or consent of instructor. Ford.

- (U) BA 413. Wage and Salary Administration. (G) 3 hours spring.

 Systematic wage and salary program as an essential part of an efficient personnel program. Basic methods for determining individual wage rates and wage structures; job evaluation, Prerequisite: BA 412.
- (U) BA 414. Problems in Personnel Management. (G) 3 hours spring.

 Specific personnel problems at various organization levels. Each student proposes solutions, and group solutions are attempted through class discussion, in the light of various viewpoints and sound personnel principles. Prerequisite: BA 411, 412, and consent of instructor. Ford.
- (U) BA 415. Regional Studies in Business. (G) 3 hours winter.

 A study of the regional resources of the Pacific Northwest, as they are related to industry and commerce, Lomax.
- (U) BA 416, 417, 418. Business Law. (G) 3 hours each term.

 Application of fundamental legal principles to typical business situations; illustrated by selected cases. The following topics are considered: contracts, bankruptcy, insurance, suretyship, sales, agency, personal property, real property, business organizations, partnerships, corporations, associations, trusts, joint stock companies, negotiable instruments. Dickinson.
- (U) BA 421. Principles of Business Education. (G) 3 hours fall. Aims and objectives of business education; history, trends, issues; curriculum construction at high-school and junior-college levels; instructional problems; research in business education. Prerequisite: senior standing and consent of instructor. Smith.
- (U) BA 425. Real-Estate Fundamentals. (G) 3 hours fall. Problems relating to the purchase, transfer, lease, and financing of land and buildings; home building, site selection, principles of house-and-lot evaluation. Open to non-majors. Johnson.
- (U) BA 426. Real-Estate Practice. (G) 3 hours winter. Application of the principles of land and building management from the stand-point of the broker and owner-operator; real-estate practices and institutions. Prerequisite: BA 425. Allyn.
- (U) BA 427. Real-Estate Appraising. (G) 3 hours spring.

 Specific factors affecting the value of land and buildings; the effect of city structure, zoning and city planning; demonstrations of various techniques in appraising; preparation of an appraisal report. Prerequisite: BA 425. Johnson.
- (U) BA 428. Manufacturing. (G) 3 hours fall. Manufacturing industries of the United States; their raw materials, processes, and current technological and marketing developments. Prerequisite: BA 222, 223. Lomax.
- (U) BA 429. Production Management. (G) 3 hours winter. Nature and scope of production processes; economics, technological, regional, and managerial organization of production; plant location; design and layout; control of plant investment; working-capital investment and labor costs; planning production operations. Prerequisite: BA 111, 112, 113; BA 222, 223. Ziebarth.
- (U) BA 432. Business Statistics. 3 hours fall.

 Emphasis on appreciation and understanding of statistical methods. Charts and tables; sampling; averages, time-series analysis; index numbers; a brief introduction to the concept of linear correlation. Ballaine.
- (U) BA 434. Problems in Distribution. (G) 3 hours winter.

 Critical study of marketing problems. Strength and weakness of various retail marketing channels; merits and limitations of wholesale marketing channels; extent and adaptability of direct marketing. Prerequisite: BA 223. Richins.

- (U) BA 435. Sales Management. (G) 3 hours fall. Structure of sales organizations; sales policies; control of sales operations; sales planning; market analysis; coordination of production and sales; selection, training, and management of salesmen. Prerequisite: BA 223 or consent of instructor. Richins.
- (U) BA 436. Retail Store Management. (G) 3 hours winter.

 Retail policies and problems. Stock-control systems, buying, methods of sales promotion, plant operation, personnel, credit, turnover, pricing, expense, classification and distribution. Prerequisite: BA 223. Dodge.
- (U) BA 437. Credits and Collections. (G) 3 hours winter.

 The credit and collection policies of wholesale concerns, retail firms, and banks. The sources of credit information, the use of agency reports, interpretation of financial statements; collection tools and their uses. Prerequisite. BA 222, 223, or consent of instructor. Ballaine.
- (U) BA 442. Principles of Salesmanship. (G) 3 hours spring.

 Principles and techniques of personal salesmanship; selling reactions. From the standpoints of seller and buyer. Prerequisite: BA 223 or consent of instructor. Richins.
- (U) BA 445. Retail Advertising. (G) 3 hours spring.
 Study of management problems of the retail advertising department. Advanced practice in layout, copy writing, and production of retail advertising for newspapers, radio, television, and direct mail. Prerequisite: BA 339 or consent of instructor. Not open to students who have had BA 441 or BA 443.
- (U) BA 449. Industrial Traffic Management. (G) 3 hours fall.

 Organization of a traffic department; organization and services of rail, truck, and air lines; theory and application of freight rates; shipping documents; routing; materials, handling; claims; classification and rate-committee procedures. Prerequisite: BA 222, 223; BA 450 prerequisite to BA 451. Ziebarth.
- (U) BA 453. Business Policy. (G) 3 hours spring.

 Coordination of the specialized work given in the school; the interdependence of different departments of a business concern. Open to senior majors who have had or are taking Business Law. Prerequisite: BA 222, 223; Ec 201, 202, 203. Ziebarth.
- (U) BA 454. Fundamentals of Risk and Insurance. (G) 3 hours fall. Basic principles of insurance and risk bearing; major areas of private insurance—property, casualty, life, marine; emphasis on elements common to all fields. Insurance in the economy, various ways of handling risk, types of insurance carriers, reinsurance, major contract provisions, insurance regulation. Greene.
- (U) BA 456. Life Insurance. (G) 3 hours winter. Types of life insurance, contracts, rate making, reserves, selections or risks, life insurance and the state. Prerequisite: consent of instructor. Greene.
- (U) BA 457. Property Insurance. (G) 3 hours spring.
 Nature of coverage, types of underwriters, types of contracts; analysis of the policy contract, special endorsements and factors determining rates and adjustment of losses. Prerequisite: consent of instructor. Greene.
- (S) BA 461. Industrial Purchasing. 3 hours winter. Significant managerial problems raised by purchase and control of materials for industrial use as they affect control of quality of products, maintenance of operating efficiency, and quotation of competitive prices.
- (U) BA 463, 464, 465. Investments. 3 hours each term. Methods for evaluating various kinds of investment securities; formulation of an investment policy. Detailed study of the special phases of investments including taxation, brokerage services, and security markets. Application of investment principles to the analysis of specific securities in the industrial public-utility, and railroad fields. Eklem.

(U) BA 466. Business Cycles. (G) 3 hours spring.

Study of economic changes; classification and analysis of business cycle theories. The availability, use, and limitations of business barometers in forecasting; their possible application to the business enterprise. Prerequisite: senior standing or consent of instructor. Ballaine.

(U) BA 467. Public-Utility Management. (G) 3 hours spring.

Production, distribution, and finance problems of public utilities; rates, accounting methods, flotation of securities, public relations, and consolidations. Prerequisite: BA 222, 223 or consent of instructor. Conkling.

(S) BA 497. Human Relations in Business and Industry. (g) 3 hours spring. Relationships among managerial, supervisory and other workers; actual cases used to help develop attitudes, frames of reference, and approaches which will be useful in solving human relations problems in business. Prerequisite: senior standing or consent of instructor. Ford.

See also:

Economics Secretarial Science

Chemistry

Associate Professor: Johnson.

Lower-Division Courses

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

Drama

(See Speech)

Economics

Professor: Elkinton. Associate Professor: Wattles. Assistant Professors: Campbell, Koplin, Lovell.

Lower-Division Courses

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

Upper-Division Courses

- (U) Ec 325. Labor Economics. 3 hours fall. Conditions of labor since the industrial revolution. The labor market; wages, hours, conditions of work; unemployment; etc. Prerequisite: Ec 201, 202, 203. Loyell.
- (U) Ec 326. Organized Labor. 3 hours winter. History of the labor movement; aims, methods, and policies of trade unions, conservative and radical. Prerequisite: Ec 201, 202, 203. Lovell.
- (U) Ec 327. Labor Legislation. 3 hours spring.

 Labor legislation in the United States; problems facing employee, employer, and public which call for regulation through public authority. Prerequisite: Ec 201. 202. 203. Loyell.
- (U) Ec 332. Economics of Business Organization and Finance. 3 hours fall.

 A descriptive study of the principal characteristics of the several types of business organization; the rights, duties, and obligations of investors and

managing officials; the problems of promoting, organizing, and financing business; the political and economic problems of the modern giant corporation. Prerequisite: Ec 201, 202, 203. Wattles.

- (U) Ec 334. Government Control of Private Business. 3 hours winter.

 Survey of the general movement to subject business and personal and property rights to regulation by state or Federal agencies. Prerequisite: Ec 201, 202, 203. Koplin.
- (U) Ec 415. Economy of the Pacific Northwest. (G) 3 hours spring. Changes in and sources of personal income in the Pacific Northwest; industrial basis of the regional product; balance of payments; development of wood products. Prerequisite: Ec 201, 202, 203. Campbell.

Education

Professors: Bernard, Caughlan, Killgallon, Sherburne, Spalding. Associate Professors: Ferrier, Hearn, Leavitt, Malter, Petersen, Phelps, Sandin, Somerville, Wiegman. Assistant Professors: Ahlers, Cheney, Culbertson, Dietz, Fullmer, Guy. Instructors: Condit, DeBernardis, Jenne, Lezak, Sullivan, Taylor.

Lower-Division Course

(P) Ed 111. Orientation to Teaching. 3 hours winter.

The importance of public education and the teacher's part in the child's learning experiences. Time will be devoted to a study of the teacher in school and community and to the demands and rewards of the teaching profession. Tests will be given in order that each student may understand how nearly his speech, hearing, vision, and personality fit him for teaching. Sullivan.

Upper-Division Courses

- (U) Ed 310. The School in American Life. 3 hours fall and winter.
 - Education as a career; function of education in a democracy; curriculum and organization of schools; current educational trends and contemporary problems; financing public education; the characteristics, needs, and interests of pupils by age groupings; general principles of growth and learning, and relation to current practices. Guy.
- (S) Ed 312. Educational Psychology. 3 hours any term.

 Laws of learning and application to classroom; motivation; transfer of training; memory; forgetting; psychology of secondary school subjects. Prerequisite: Psy 201, 202 or Psy 205, 206, 207. Fall: Sullivan. Winter and spring: Bernard.
- (S) Ed 314. Principles of Secondary Teaching. 3 hours spring.

 Different methods of presentation of subject-matter; values and weaknesses of each method; individual and group differences; extracurricular activity programs; measuring the results of teaching. Prerequisite: Ed 311, 312.
- (S) Ed 316. Oregon School Law and Oregon System of Education. 2 hours any term.

Oregon school system and laws on which it is based; problems of Oregon schools; plans for solution; course of study; trends in educational development. Prerequisite: junior standing. Condit.

- (C) Ed 344. Physical Education in the Grades. 3 hours winter and spring. Theory and practice in rhythm; singing games, group and folk dancing; stunts, games, self-testing activities, tumbling; materials; planning and evaluating programs with reference to basic principles of physical education. Jenne.
- (C) Ed 351. Health Education. 2 hours winter. Teaching of health education with emphasis on health knowledge, health attitudes and health habits of school children, and the development of a health service program. Special study of the state health-education program. Prerequisite: Sc 101, 102, 103.

(C) Ed 357. Methods and Materials: Reading. 3 hours fall.

A development of techniques and methods of teaching for both elementary and secondary teachers with particular attention to the development of reading at various levels. Some observation of children required. Phelps.

(C) Ed 358. Methods and Materials: Language Arts and Social Science. 3 hours winter.

Provides the student with definite and specific understanding of the four Language Arts and the skills involved in each. Introduces the student to the needs and capacities of children of elementary school age and the skills and understanding required of the teacher to foster the most economical learning of the language skills. Phelps.

- (C) Ed 359. Methods and Materials: Science and Arithmetic. 3 hours spring. A course designed to present modern methods of instruction at the elementary school level, based upon recent research and writing. Attention will be given to the meaning of theory in the teaching of arithmetic and to the problem approach to the teaching of science.
- (U)(C) Ed 405. Reading and Conference. Terms and hours to be arranged.
- (C) Ed 407. Seminar: Enriching Children's Reading. 3 hours winter. A study of the enrichment of children's reading through literature. An advanced course designed for parents and teachers of nursery, kindergarten, and elementary school children. Prerequisite: Eng 388 or consent of instructor. Petersen.
- (C) Ed 407. Seminar: Reading and Telling Children's Stories. 3 hours spring. An introduction to the collection of old folk and modern fanciful tales, with laboratory practice in the reading and telling of stories for children through the elementary grades. Prerequisite: Eng 388 or consent of instructor. Enrollment limited to 20. Petersen.
- (U) Ed 408. Special Secondary Methods. 1 to 3 hours.

Six hours maximum allowed toward education requirement for certification. Not more than 3 hours credit may be earned in any one field. Prerequisite: Ed 311, 312, 313.

English-Winter, Franchere.

(C) Ed 410. Methods and Research Materials. (G) 3 hours.

Emphasis for graduate students will be placed upon recent research and literature dealing with instructional materials, methods, and facilities, including the completion of a special project. Maximum 6 hours undergraduate and 9 hours graduate credit.

Arithmetic: Fall Language Arts: Winter Reading: Spring Science: Winter Social Science: Spring

(U) Ed 424. Measurement in Education. (G) 3 hours fall or spring.

Use and interpretation of informal and standardized tests as supervisory and guidance instruments for the diagnosis, analysis, evaluation, and improvement of instruction in the elementary and secondary schools. Test planning, item writing, essay testing, administration and scoring, analysis of scores and grade assignment. Simple statistics of test interpretation. Fall: Guy. Spring: Wiegman.

(S) Ed 435. Audio-Visual Aids. (G) 3 hours any term.

Film, slide, chart, and other visual materials; selection and use to best advantage; operation of projectors and other equipment. Prerequisite: senior standing or consent of instructor. Somerville.

- (U) Ed 440. **History of Education**. (G) 3 hours fall.

 A general review of the growth and development of education in relation to the civilization of the times; emphasis on development of educational philosophies. Guy.
- (C) Ed 451. Preprimary Education. (G) 3 hours fall.

 An evaluation of the preprimary period in terms of the opportunities it affords to build good attitudes toward school life, to help the child adjust himself to the group, to build good habits of work, and to develop a readiness for subjects in the first-grade curriculum, such as reading, numbers, and language. Prerequisite: Psy 311, Ed 311, Ed 312 or consent of instructor. Petersen.
- (U) Ed 461. Psychology of Reading Instruction. (G) 3 hours spring.

 The fundamental nature of the reading process; principles of growth, adjustment, and learning basic to reading achievement; psychological foundations of methods of reading instruction. Phelps.
- (U) Ed 462. Psychology of Exceptional Children. (G) 3 hours fall.

 Survey of characteristics and problems of all types of exceptional children with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Taylor.
- (S) (U) Ed 463. The Maladjusted Child. (G) 3 hours winter.

 The discovery and treatment of the emotionally maladjusted child; the home, school, and community in relation to the child's mental health. Kiligallon.
- (U) Ed 464. The Mentally Deviate Child. (G) 3 hours spring. Identification and guidance of the mentally deficient and slow learner. Taylor.
- (S) (U) Ed 465. Diagnostic and Remedial Techniques. (G) 3 hours fall. See Ed 468. Phelps.
- (C) Ed 467. Applied Mental Hygiene. (G) 3 hours spring.
 A study of the development of personality, personality conflicts, mechanisms of adjustment, and the basic principles of mental hygiene. Emphasis is placed on application of mental hygiene principles to personality development of teachers and of children. Sherburne.
- (C) Ed 468. Diagnostic and Remedial Instruction in Reading. (G) 3 hours fall.
 Opportunities for experienced teachers to consider the typical causes of difficulty in the reading program and to evaluate procedures to be used in remedial classes by means of lectures, demonstrations, readings, and case studies. This course is essentially the same as Ed 465. Students may register for Ed 465 if they prefer. Phelps.
- (S) SEd 481. Alcohol Studies in the School Curriculum. (G) 3 hours winter. Incorporation of scientific information about alcohol in the school curriculum; physiological, sociological, legal aspects of alcoholism. Ferrier.
- (C) Ed 484. Junior High School. (G) 3 hours winter.

 Development of the junior high school, its purposes and objectives. The general organization of the school; courses of study; present practices in leading representative junior high schools; the direction of classroom activities; provision for individual differences; pupil guidance, and socialization. Wiegman.
- (S) Ed 485. Principles and Practices of Guidance Services. (G) 3 hours fall. Overview of guidance and personnel work. Attention given to vocational, educational, health, social, personality, recreational, and other aspects of individual development. Participation of teachers, counselors, administrators, parents, and community organizations in a program of guidance. For all teachers and administrators. Students specializing in guidance should begin with this course. Prerequisite: senior standing. Cheney.

- (U) Ed 486. Educational and Vocational Guidance. (G) 3 hours winter.

 The place of school records, test results, interests, aptitudes, abilities, and personal characteristics in the appraisal of educational and vocational potentialities; sources of current materials relating to educational opportunities and occupational trends. Cheney.
- (S) Ed 486. Occupational and Educational Information. (G) 3 hours winter. Materials available regarding occupations; interpretations of present trends; value and usefulness for high-school and college students. Prerequisite: senior standing. Chency.
- (S) Ed 487. Counseling Techniques. (G) 3 hours spring.

 Mental, achievement, trade, and other tests; administration of such tests; classifications, methods in educational and vocational counseling. Prerequisite: Ed 485. Cheney.
- (U) Ed 490. Social Education. (G) 3 hours spring. Structure and functioning of society, as a background for the study and evaluation of education in its varied forms; the contribution of sociological principles and findings to the improvement of educational practices. Guy.

Graduate Courses

- (U) Ed 501. Educational Research. Terms and hours to be arranged.

 Prerequisite: graduate standing in education; consent of instructor. The Master of Education candidate will work with an instructor assigned by the Dean upon recommendation of his major adviser. Adult Education, Caughlan; Curriculum, Guy, Leavitt, Petersen, Spalding; Educational Psychology. Bernard; School Administration, Leavitt, Phelps, Spalding; Secondary Education, Guy, Spalding, Wiegman; Elementary Education, Leavitt, Malter, Petersen, Phelps.
- (U) Ed 501. Educational Research. (Field Study) Terms and hours to be arranged.
 (See Ed 501 Educational Research for areas.)
 Field study for graduate students who plan to take the Master of Education degree from the University of Oregon.
- (U)(S)(C) Ed 503. Thesis. Terms and hours to be arranged.
- (U)(S) Ed 505. Reading and Conference. Terms and hours to be arranged.
- (C) Ed 506. Special Individual Studies. Maximum of 6 hours. Terms and hours to be arranged. (See Ed 501 Educational Research for areas). Registration only after adviser's approval of student's project.
- (C) Ed 506. Special Individual Studies: Play Therapy. 3 hours spring.

 An introduction to the theory and methods of play therapy. Emphasis on the observation, analysis, and interpretation of children's behavior both in and out of play situations to help the student develop skill in awareness and understanding of emotional expression. By consent of instructor only. Lezak.
- (U) Ed 507. Education Seminar: Problems of Public School Supervision. 3 hours winter.
 - This course is intended for advanced students of school supervision and for persons who hold supervisory positions. Students are expected to become familiar with basic theory of supervision and to apply this thory to selected problems from the field. Prerequisite: consent of instructor. Leavitt.
- (U) Ed 507. Education Seminar: Unit Construction. 3 hours winter
 This course is intended to acquaint students with a theory of teaching and
 with construction of units based upon this theory. It is open only to persons
 who are currently employed in the field of education. Each student is expected
 to prepare a unit. Sandin.

- (U) Ed 507. Education Seminar: Problems of Public School Administration. 3 hours spring.
 - This course is intended for advanced students of public school administration and for persons who hold administrative positions. Students are expected to become familiar with basic theory of organization and to apply this theory to selected problems from the field. Prerequisite: consent of instructor. Spalding.
- (U) Ed 507. Education Seminar: Problems in Curriculum Development. 3 hours spring.
 - A study of conditions affecting curriculum as well as means used in affecting curriculum change. This study will be based upon previous work taken in curriculum by the various class members. Prerequisite: consent of instructor. Leavitt.
- (U) Ed 507. Education Seminar: Teaching in the Elementary School. 3 hours

A study-discussion seminar devoted to an intense survey of the teaching-learning situations found in our elementary schools. Previous teaching experience is required. Prerequisite: consent of instructor. Leavitt.

- (S) Ed 512. Research Procedures in Education. 3 hours spring.

 Methods, techniques, and tools for doing research work; meaning of scientific method; ways of locating and formulating problems; necessary statistical tools; collections and interpretations of data; preparation of research reports.
- (U) Ed 512. Research Procedures in Education. 3 hours fall.

 The nature and procedures of research in education; special techniques of thesis, field study, research paper, and dissertation. Open to graduate students majoring in other fields. Does not take the place of individual supervision of the student's thesis. An introductory course in statistics is desirable preparation. Wiegman.
- (U) Ed 515. Educational Statistics. 3 hours winter.

 Technique in quantitative and experimental methods. Calculus not required.

 Prerequisite: graduate standing. Fullmer.
- (U) Ed 522. Secondary-School Curriculum. 3 hours winter.

 An advanced course for experienced teachers. The school in the community; guidance activities in the school, extra class activities; the role of the school in contemporary society; the teacher in the local community. Guy.
- (U) Ed 523. School Activities. 3 hours fall.

 Principles and purposes of school activities; pupil participation in school government; assemblies; clubs, social activities; athletics, speech activities, drama. music, publications: evaluation of the school activity program. Hearn.
- (U) Ed 527. Secondary-School Administration and Supervision. 3 hours spring.
 The secondary-school principalship; principles of administration, staff relationships, public relations, and professional growth; business administration; administration of guidance services, curriculum, and school activities; evalua-

tion of the secondary school. Hearn.

- (U) Ed 537. Reading in the Elementary School. 3 hours winter. Nature of the reading process; objectives, organization of a desirable reading program; reading readiness; reading skills; procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. Phelos.
- (S) Ed 543. History of American Education. 3 hours winter. Intellectual development of America with special reference to education. Prerequisite: graduate standing in education. Guy.

(S) Ed 546. Philosophy of Education. 3 hours spring.

Fundamental problems of education, with some attempt at their solution; meaning of philosophy; philosophy of education; value for teacher and administrator. Prerequisite: graduate standing in education. Guy.

(U) Ed 552. Elementary-School Problems. 3-4 hours winter.

Selected current problems; issues and theories of elementary education; characteristics of modern teaching; major trends in elementary education. Leavitt.

(U) Ed 553. Elementary-School Curriculum. 3-4 hours spring.

A systematic study of the elementary-school curriculum, including pupil needs in everyday life situations, objectives, essentials of a good program, varying curriculum designs, organizations of learning experiences, evaluation of learning, and appraisal of newer curriculum practices. Leavitt.

(U) Ed 554. Elementary-School Supervision and Administration. 3-4 hours fall.

The role, duties, needs, and problems of modern supervision, including the evaluation and improvement of the teaching-learning situation. Leavitt.

(S) Ed 561. Advanced Educational Psychology. 3 hours spring.

Experimental material that seems most useful and relevant to educational psychology. Prerequisite: graduate standing in education. Brody.

(U) Ed 565. Curriculum Foundations. 3 hours fall.

Implication of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning. Spalding.

(U) Ed 566. Curriculum Construction. 3 hours winter.

Survey and appraisal of curriculum patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning. Spalding.

(U) Ed 567. Curriculum Materials. 3 hours spring.

Effective use and organization of curriculum materials; text and reference books, supplementary pamphlet material, films and slides, records and recordings, pictures, radio, etc.; techniques of unit construction and community survey. Malter.

(U) Ed 572. Public-School Administration. 3 hours fall.

Duties and responsibilities of school administrators. Relationships with board, staff, and community. Consideration of the professional and non-professional problems of school administration. Spalding.

(U) Ed 573. Public-School Organization. 3 hours winter.

The organizational patterns and programs of both elementary and secondary schools. Details of administration, including scheduling, records, and accounts, public accounting, personnel and guidance programs, activity programs, etc. Spalding.

(U) Ed 574. School Supervision. 3 hours spring.

Purposes and techniques of school supervision, as applied both to elementary and secondary schools. The organization of supervisory programs and diagnosis of both teacher and pupil difficulties. Spalding.

(U) Ed 575. School Finance. 3 hours fall.

The problems of school finance and business management; sources of school income, relationship to the state financial structure, budgeting and accounting, as effected by the school program. Construction of a budget is a part of the course. Culbertson.

(U) Ed 576. School Buildings. 3 hours winter.

A study of the problems involved in planning, financing, and construction of school buildings; the care and maintenance of buildings; problems of equipment. An analysis of problems in a specific district is a part of the course. DeBernardis.

(U) Ed 587. Adult Education. 3 hours spring.

History and philosophy of the adult-education movement; its aims, ranging from the specifically vocational to the cultural. Representative work and methods in adult education. Guy.

Library Courses

Assistant Professor: AHLERS.

Upper-Division Course

(U) Lib 386. Organization of Library Materials. 3 hours fall.

Instruction and practice in simplified procedures for the acquisition, preparation, organization, and circulation of books and related library materials. Ahlers.

In-Service Training Courses

Portland Public Schools

Instructors: Carpenter, Dobson, Hamilton, Hoel, Jenne, McGill, O'Gara, O'Reilly, Schaper, Smith, Stotler, Swenson, Zollinger.

The following courses, arranged in cooperation with the Portland Public Schools are given for in-service training of Portland teachers. They also are open to other qualified students. Most classes are held Tuesday afternoon, from 4:00 to 6:15 in one of the public schools. Meeting times and places are detailed in the Class Schedule published prior to each term. Students who expect academic credit must complete their registration with the registrar at Portland Extension Center in accordance with the Center's established registration procedures. Students who seek In-Service credit only must comply with the established procedures of the Portland Public Schools.

Lower-Division Courses

(U) PE 282. Fundamentals of Rhythm. (Kindergarten and Primary) 2 hours winter.

Study of rhythm as a basic factor of movement. Specific rhythmic devices used in the dance.

(U) PE 283. Dance for the Elementary School. 2 hours spring.

The dance program for children in the elementary school, grades one through six. Locomotor and nonlocomotor movement; dramatization and creative dance studies; singing games; traditional dance skills and folk dances for children of the intermediate grades. Jenne.

Upper-Division Courses

- (S) BEd 407. Seminar: Business Education. 2 hours winter. Techniques and materials for teaching the various courses in business education will be studied. Problems related to business education will be investi-
- gated. Carpenter.

 (S) Ed 407. Seminar: Group Procedures and Counseling. 2 hours fall.

 McGill and Dobson.
- (E) Ed 450. Radio Education. 2 hours winter or spring.
 Use of radio programs in the classroom, techniques of broadcasting procedures, preparation of scripts and use of transcriptions. Home radio and television utilization. Green-Swenson.

(C) Ed 455. Primary Education Workshop. 2 hours winter.

Designed for primary teachers. Problems dealing with the unit approach to teaching and the skill areas, arithmetic and language arts, will be studied. In programs leading to degrees in education this course is acceptable for elective credit only. Hamilton and staff.

(C) Ed 459. Intermediate and Upper-Grade Education Workshop. 2 hours winter.

Designed for elementary teachers who are new in the district. Problems dealing with the unit approach to teaching and the skill areas, arithmetic and language arts, will be studied. Groups will be organized in intermediate and upper-grade levels. In programs leading to degrees in education this course is acceptable for elective credit only. Hamilton and staff.

(U) Ed 465. Diagnostic and Remedial Techniques: Arithmetic. 2 hours spring.

Diagnostic, remedial, and corrective techniques in arithmetic; application of techniques to actual cases. Hoel.

Graduate Courses

- (S) Ed 502. **Tests and Measurements.** (Industrial Arts). 2 hours winter. A study of standardized tests, diagnostic pretests and testing procedures; the form of objective tests for industrial arts subjects; the administration of tests and testing materials, with reference to the interpretation of results. Prerequisite: Ed 416 and teaching experience in industrial arts. O'Gara.
- (U) Ed 507. Education Seminar: Science. 2 hours fall or spring. Fall: Secondary school science. Spring: Elementary school science. Stotler.
- (S) Ed 507. Seminar: Group Procedures and Counseling. 2 hours fall. McGill and Dobson.
- (S) HEd 507. Seminar: Home and Community Experiences. 2 hours fall. Developing techniques for using school, home and community experiences in the Home Economics instructional program. O'Reilly.
- (U) Ed 508. Workshop: Social Studies for Ninth Grade Teachers. 2 hours fall.

The workshop will provide teachers an opportunity to investigate the methods and materials most applicable to the combined language arts-social studies program and to increase their knowledge of the special social studies content areas included in this program. Smith.

- (U) Ed 508. Workshop: Unit Preparation and Teaching. 2 hours spring.

 Techniques and materials for unit teaching in the primary, intermediate and upper grades. Problems will be developed to show how a unit may be taught in a classroom. Schaper.
- (S) Ed 508. Workshop: Home Economics Curriculum. 2 hours winter. Consideration of the sociological and psychological foundations of the elementary and secondary curriculum. Study of current trends in curriculum development. Application of basic principles to curriculum problems in home economics as identified by class members. Individual and small group work in developing and revising curriculum plans and materials for specific situations. O'Reilly.
- (U) Ed 508. Workshop: Reading Instruction in the Elementary School. 2 hours spring.

Instruction in reading for intermediate and upper-grade teachers. Zollinger.

Multnomah County Schools

Instructor: Martin.

The following courses, arranged in cooperation with the Multnomah School Health Agency, are offered at *Russellville School*, 124 S. E. 102nd Avenue, Portland. Classes meet from 4:00 to 6:45 p.m.

(C) Ed 424. Measurement in Education. (G) 3 hours winter.

Use and interpretation of informal and standardized tests as supervisory and guidance instruments for the diagnosis, analysis, evaluation, and improvement of instruction in the elementary and secondary schools. Test planning, item writing, essay testing, administration and scoring, analysis of scores and grade assignment. Simple statistics of test interpretation.

(C) Ed 468. Diagnostic and Remedial Instruction in Reading. (G) 3 hours fall.

Opportunity for experienced teachers to consider the typical causes of difficulty in the reading program and to evaluate procedures to be used in remedial classes, by means of lectures, demonstrations, readings, and case studies.

(U) Psy 450. Abnormal Psychology. (G) 3 hours spring.

Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Normal motives and adjustment mechanisms as they are exaggerated in the so-called neurotic person.

Engineering*

Professors: Barnett, Engesser, Martin. Associate Professors: Othus, Paasche. Assistant Professors: Shirley, Smith, Westgarth. Instructors: Amberg, Burgess, MacDonald, Ring.

GENERAL ENGINEERING COURSES

- (S) GE 104, 105,106. Engineering Fundamentals. 3 hours each term.

 Basic concepts and principles of physical science; elementary technical problems; algebraic composition; training in use of slide rule.
- (S) GE 111, 112, 113. Engineering Drawing. 2 hours each term. Fundamental principles and the rules of composition of the graphic language of engineering.
- (E) GE 049. Principles of Nuclear Power. Non-credit (2) fall.

A descriptive course intended for graduate engineers interested in basic principles underlying generation of power by use of nuclear materials. Course will cover principles of reactors and application of various types to the production of power. Economics, licensing, government regulations, and security considerations will be discussed. Wednesday. MacDonald.

CIVIL ENGINEERING COURSES

- (E) CE 011. Civil Engineers Review. Non-credit (3) fall.

 Designed to prepare civil engineering graduates for examinations administered by the Board of Engineering Examiners of Oregon, Wednesday, Ring.
- (E) CE 023. Basic Water Works Operation. Non-credit (3) fall. For operators in water works plants. Wednesday. Westgarth.
- (S) CE 405. Reading and Conference: Soil Mechanics and Foundations. 3 hours winter.

Wednesday, Ring.

^{*} Courses listed under Civil, Electrical, Industrial, and Mechanical Engineering are designed for advanced engineering students or for persons with practical experience in the field. Students interested in lower-division work toward an engineering degree should also see: Chemistry, Mathematics, and Physics.

(S) CE 405. Reading and Conference: Basic Sanitary Engineering. 3 hours winter.

Wednesday. Burgess.

(S) CE 405. Reading and Conference: Industrial Wastes Treatment. 3 hours spring.

Wednesday, Amberg.

ELECTRICAL ENGINEERING COURSES

(E) EE 012. Electrical Engineers Review. Non-credit (2) fall.

Designed to prepare electrical engineering graduates for examinations administered by the Board of Engineering Examiners of Oregon. Monday. Othus and staff.

(This course will begin on Monday, November 5, 1956, and will extend into February, 1957.)

(S) EE 405, 505. Reading and Conference: Principles of Illumination. 3 hours spring.

Wednesday. Shirley.

(S) EE 541. Electric Power Systems. 3 hours winter. Advanced study of electric power distribution. Wednesday. Barnett.

INDUSTRIAL ENGINEERING COURSES

- (S) IE 405, 505. Reading and Conference: Time and Cost Study. 3 hours fall. Tuesday. Engesser and staff.
- (S) IE 405, 505. Reading and Conference: Engineering Economy. 3 hours spring. Tuesday. Engesser and staff.
- (S) IE 405, 505. Reading and Conference: Statistical Quality Control. 3 hours winter. Tuesday, Smith.
- (S) IE 405, 505. Reading and Conference: Operation Analysis. 3 hours winter.

Current operation analysis techniques; application of methods and cost studies to advanced problems. Tuesday. Engesser and staff.

MECHANICAL ENGINEERING COURSES

- (S) ME 335. Refrigeration and Cold Storage. 3 hours spring.

 A practical course in principles of refrigeration and cold storage designed particularly for users of the equipment. Tuesday. Martin.
- (S) ME 405. Reading and Conference: Engineering Metallurgy. 3 hours fall. Tuesday. Paasche.

English

Professors: Dahlstrom, Franchere, Oliver, Powers, Yerian. Associate Professor, Petersen. Assistant Professors: Bierman, Boggs, Johnson, Metzger, Scharbach. Instructors: Clarke, Ford, Hart, Lottridge, Muirden, Netboy, Yorks.

LITERATURE

Lower-Division Courses

(U) Eng 101, 102, 103. Survey of English Literature. 3 hours each term. Study of the principal works of English literature based on readings selected to represent great writers, literary forms, and significant currents of thought. Provides both an introduction to literature and a background that will be

- useful in the study of other literature and other fields of cultural history. Fall: Anglo-Saxon beginnings to the Renaissance; winter: Milton to Wordsworth; spring: Byron to the present, Ford.
- (U) Eng 104, 105, 106. Appreciation of Literature. 3 hours each term. Study of literature and the nature of literary experience through the reading of great works of prose and poetry, drawn from English and other literatures. Works representing the principal literary types are read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery, and symbolism.
- (C) Eng 107, 108, 109. World Literature. 3 hours each term.

 A sequence in narrative prose, drama, and poetry. Complete books are studied so that the student may be familiar with some of the masterpieces in Western world literature. (Offered Saturday, 9:00-11:40 a.m.). Netboy.
- (U) Eng 201, 202, 203. Shakespeare. 3 hours each term. Study of the important plays—comedies, histories, and tragedies. Required for majors, Dahlstrom.

Upper-Division Courses

- (U) Eng 320, 321, 322. English Novel. 3 hours each term. From Richardson and Fielding to the present. Boggs.
- (U) Eng 323. American Satire. 3 hours fall.

 Satire in American literature; its nature, development, and significant contributions to the interpretation of American life. Oliver.
- (U) Eng 328. American Drama. 3 hours winter. A study of major American dramatists. Oliver.
- (U) Eng 329. Literature of the West. 3 hours spring.
 The literature of the West, in relation to the frontier, to regionalism, and to contemporary movements in our national literature. From Irving and Parkman to Willa Cather and Steinbeck. Oliver.
- (C) Eng 388. Children's Literature and Library. 3 hours fall. Designed to give an acquaintance with good books and magazines for children, and procedures in introducing them to children. Experience with and knowledge of school library procedures. Petersen.
- (U) Eng 394, 395, 396. Twentieth Century Literature. 3 hours each term. British and American literature since 1900. This sequence may not be offered toward the satisfaction of the minimum requirement for a major in English. Johnson.
- (U) Eng 428. Chaucer. (G) 3 hours fall.
 As much of Chaucer's work read as time permits. Required for graduate students in English. Franchere.
- (U) Eng 440, 441, 442. Seventeenth Century Literature. (g) 3 hours each term. The poetry and prose from Johnson to Dryden studied in relation to the trends of thought and feeling which characterize the century. Bierman.
- (U) Eng 481, 482, 483. Major American Writers: The Romantic Idealists.
 (G) 3 hours each term.

Fall: Emerson and Thoreau; winter: Hawthorne and Melville; spring: Poe and Lowell. Oliver.

WRITING

Lower-Division Courses

(U) Wr 111, 112, 113. English Composition. 3 hours each term.

The fundamentals of English composition; frequent written themes, Special

The fundamentals of English composition; frequent written themes. Special attention to correctness in fundamentals and to the organization of papers. Staff.

Fall: Wr 111, Wr 113 Winter: Wr 111, Wr 112 Spring: Wr 111, Wr 112, Wr 113

- (S) Eng 211. Vocabulary Building. 3 hours fall or spring.

 Through analysis of words and meanings in context, seeks to increase vocabulary, reading comprehension, and effective use of language. Yorks.
- (S) Wr 213, 214, 215. Short Story Writing. 2 hours each term.

 Analysis of short story and fiction techniques. Designed to develop proficiency in art of writing short story. Courses in sequence but may be taken separately. Prerequisite: Wr 113 or consent of instructor. Powers.
- (S) Wr 217. Business English. 3 hours winter or spring.

 Analysis and writing of all types of modern business correspondence. Prerequisite: Wr 113 or consent of instructor. Netboy, Yerian.
- (S) Wr 227. Technical Report Writing. 3 hours spring. Application of principles to specific needs and interests of students. Prerequisite: Wr 113. Netboy.

Upper-Division Courses

- (U) Wr 341. Versification. (First Term) 2 hours spring.
 Verse writing; study of various verse forms as mediums of expression. Analysis of class work. Open to freshmen and sophomores. Prerequisite: consent of instructor. Powers.
- (E) Wr 354. Advanced Creative Writing. 2 hours fall.

 Writing in the various forms to provide increased ease, certainty, and force in written expression. A continuation, with emphasis on effectiveness and craftsmanship, for those who have taken lower-division courses in rhetoric. Prerequisite: consent of instructor. Powers.
- (E) Wr 056. Television, Radio and Related Writing. Non Credit (2) winter. Powers.

Family Life

(See Home Economics)

Foreign Languages

Professor: Dougherty. Assistant Professors: Kraft, Leppmann. Instructors: Herman, Krivoshein

FRENCH

Lower-Division Courses

- (U) RL 1a, 1b, 2a. First-Year French. (First Course) 2 hours each term. An introduction to French, stressing reading and speaking. Exercises in elementary composition and grammar.
- (U) RL 2b, 3a, 3b. First-Year French. (Second Course) 2 hours each term. Continuation of RL 1a, 1b, 2a. Dougherty.

GERMAN

Lower-Division Courses

(U) GL 1a, 1b, 2a. First-Year German. (First Course) 2 hours each term. Provides a thorough grammatical foundation and an elementary reading knowledge of German as well as an understanding of the spoken language. Leppmann. (U) GL 2b, 3a, 3b. First-Year German. (Second Course) 2 hours each term. Continuation of GL 1a, 1b, 2a.

RUSSIAN

Lower-Division Courses

- (U) SL 11a, 11b, 12a. First-Year Russian. (First Course) 2 hours each term.

 The elements of the Russian language. Elementary reading, composition, and conversation. Krivoshein.
- (U) SL 12b, 13a, 13b. First-Year Russian. (Second Course). 2 hours each term. Continuation of SL 11a, 11b, 12a. Krivoshein.

SPANISH

Lower-Division Courses

- (U) RL 11a, 11b, 12a. First-Year Spanish. '(First Course) 2 hours each term. An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. Herman.
- (U) RL 12b, 13a, 13b. First Year Spanish. (Second Course) 2 hours each term. Continuation of RL 11a, 11b, 12a. Kraft.

General Science

Professor: Hansen. Associate Professor: Hopson, Instructor: Clarkson.

Lower-Division Courses

- (C) Sc 101, 102, 103. Biological Science Survey. 3 hours each term. Place of man in relation to other forms of life, with particular reference to heredity, nervous systems, organic evolution; importance of animal and plant forms and sources of food, shelter, clothing, and medicines, and as sources of disease. Two lectures: 1 two-hour laboratory period. Clarkson.
- (C) Sc 201, 202, 203. Foundations of Physical Science. 3 hours each term.

 A course in the elements of the branches of physical science, i.e., astronomy, chemistry, geology, meteorology, and physics. Study of the development of these fields from their earliest historical beginnings to their present-day positions and effects on society. Particular emphasis is placed on the development of scientific attitudes. Two lectures; 1 two-hour laboratory period.
- (S) NR 261, 262, 263. Cartography. 3 hours each term.
 Study and practice in using and compiling maps. NR 261: map drawing, materials, layout, graphs and statistical maps; reading and using maps. NR 262: Projections, mechanical aids to cartography; aerial photography. NR 263: special mapping projects.

Upper-Division Courses

- (C) GS 311, 312, 313. Natural History of Oregon. 3 hours each term.

 The earth and life history of Oregon; kinds and distribution of contemporary plant and animal life; man and his relation to the environment; conservation of natural resources. Prerequisite: upper-division standing and a year sequence in general biology, or consent of instructor. Hopson.
- (S) GS 405, 505. Reading and Conference: Paleobotany and Bioecology of The Pacific Northwest. 3 hours winter. Interrelations of plants and animals in their life processes and their reaction upon the environment; human relations and bioeconomics. Prerequisite: one
- (S) GS 407. Seminar: Natural Resources of the United States. 3 hours spring. Hopson.

year of biological science and junior standing. Hansen,

General Studies

Portland Extension Center Adviser: Dr. James C. Caughlan. University Committee: Dr. Joel V. Berreman, Chairman State College Committee: Dr. E. A. Yunker, Chairman

Graduate Courses

GSt 501. Research in General Studies. Terms and hours to be arranged.

GSt 503. Graduate Thesis. Terms and hours to be arranged.

GSt 505. Reading and Conference. Terms and hours to be arranged.

Geography

Assistant Professor: DART. Instructor: Newhouse.

Lower-Division Courses

(U) Geog 105, 106, 107. Introductory Geography. 3 hours each term. A general introduction to the field of geography in sequence as follows: Geog 105, physical elements; Geog 106, earth resources; Geog 107, cultural elements. Newhouse.

Upper-Division Courses

- (U) Geog 301. Geography of the Pacific Northwest. (Oregon) 3 hours spring. A study of the land forms, climates, population, resources, products, and lines of communication of the Pacific Northwest. Dart.
- (U) Geog 391. Geomorphology. 3 hours fall. Systematic study of land forms. Field trips, 1 two-hour laboratory period. Prerequisite: one year of geology or consent of instructor. Dart.
- (U) Geog 392. Regional Geomorphology. 3 hours winter. Continuation of Geog 391. Detailed study of the geomorphology of the United States. Dart.
- (U) Geog 405. Reading and Conference. Terms and hours to be arranged.
- (U) Geog 426. Geography of Europe. (G) 3 hours fall.

 Some of the special problems of Europe today studied in light of the geographic background of the continent. Prerequisite: Geog 105, 106, 107 or Geog 201, 202, 203.
- (U) Geog 428. Geography of the Pacific. (G) 3 hours spring.

 Physical geography and natural resources of the Pacific region; social, economic, and political problems related to the geography of the region. Prerequisite: Geog 105, 106, 107 or Geog 201, 202, 203. Dart.
- (U) Geog 431. Geography of Asia. (G) 3 hours winter.

 Physical geography of the continent; the main economic, social, and political problems viewed in relation to geography. Prerequisite: Geog 105, 106, 107 or Geog 201, 202, 203.
- (U) Geog 435. Urban Geography. (G) 3 hours winter.
 World distribution of great cities; urban patterns, forms, and functions; systems of urban land classification; forces affecting urban land use; geographic aspects of city planning. Prerequisite: Geog 101, 102, 103; Geog 219 or consent of instructor.

See also:

General Science: NR 261, 262, 263 Cartography.

Geology

Instructor : MASON

Lower-Division Courses

(S) G 201, 202, 203. **Geology.** 3 hours each term.

Processes of nature by which earth's surface has been built up, deformed, and torn down; natural history and occurrence of common rocks and useful minerals: outline of history of earth and life. Mason.

Upper-Division Courses

(S) G 350. Rocks and Minerals. 3 hours fall.

Opportunity to become acquainted with rocks and minerals without having to meet the requirements of the more technical courses. Especially useful to students expecting to teach general science. Prerequisite: upper-division standing.

(S) G 352. Geology of Oregon. 3 hours winter.

Affords opportunity to obtain a general knowledge of the geology of the state without having to meet the technical requirements imposed for a professional geology major. Prerequisite: upper-division standing.

(S) G 405. Reading and Conference. Terms and hours to be arranged.

Health and Physical Education

Professor: Washke. Associate Professors: Rhoda, Rodney, Sigerseth. Assistant Professors: Holland, Hudson.

Lower-Division Courses

(U) HE 252. First Aid. 3 hours fall.

American Red Cross first aid, lectures, demonstration, and practices leading to standard and advanced first-aid certificates. Holland,

Upper-Division Courses

(U) Rec 350. Sports in American Life. 3 hours fall.

The role of sports in American culture, significance of sports in human experience and in the structure of community living; historical analysis. Rodney.

(U) HE 358. Safety Education. 3 hours winter.

Basic principles of safety education; current safety programs as they apply to the school, home and community. Designed to develop competencies in skills and knowledges for meeting individual and mass emergency situations; also to prepare teachers to present this unit in their classes. First aid procedures; emergency procedures; safety phases of civil defense program. Minimum: 20 students,

- (U) Rec 393. Organization and Administration of Camping. 3 hours spring. Selected organizational and administrative aspects of organized camping, including camp committees, personnel, budgets, camp sites, publicity, recruitment, insurance, nutrition, health and safety, and policies. Rodney.
- (U) PE 411, 412, 413. Physical-Education Workshop. (g) 3 hours each term. Hudson.

A workshop for physical-education teachers in the public schools. Each teacher works out and organizes the complete program for his school in light of the objectives, standards, and purposes of the Oregon physical-education program. Open to men and women. (May be substituted for College of Education Ed 344.) Content of the course is as follows:

PE 411. Rhythmics and folk dancing.

PE 412. Games of low organization.

PE 413. Individual team sports and games.

(U) PE 472. Kinesiology. 3 hours spring.

Action of muscles involved in fundamental movements, calisthenics, gymnastics, and athletics. Prerequisite: Bi 371, 372. Sigerseth.

(U) Rec 497. Recreational Facilities. 3 hours winter.

Acquisition, development, construction, and maintenance of recreational areas, facilities, and buildings. Rodney.

Graduate Courses

(U) PE 550. Current Movements in Physical Education. 3 hours fall.

The different schools of thought and practice which determine the purposes and procedures in the professional field of physical education. Analysis of the Oregon and other regional public school programs. Prerequisite: graduate standing in physical education. Washke.

(U) PE 551. Administration of Physical Education. 3 hours spring.

Organization and administration of the physical-education program at the college level. Rhoda.

See also:

Biology Education

History

Professor: Hoffmann. Associate Professor: Johansen. Assistant Professor: Gilmore. Instructor: Webb.

Lower-Division Courses

- (C) Hst 101, 102, 103. History of World Civilization. 3 hours each term.

 The development of Western civilization from early beginnings to the present time; political, social and cultural factors; present conditions and problems. The three terms constitute a sequence but may be taken separately.
- (C) Hst 201, 202, 203. United States History and Government. 3 hours each term.

A study of the development of the American nation, with emphasis on its political and social concepts. Attention is given to the factual and causal functions of its government, and to the adaptations that have been made to changing social and economic conditions.

Upper-Division Courses

- (U) Hst 445. Europe since 1939. (g) 3 hours fall.

 Origins and course of World War II; postwar developments in the European states. Webb.
- (U) Hst 448. Soviet Union. (G) 3 hours winter. The revolution of 1917; Russian domestic and foreign policies from 1917 to the present. Webb.
- (U) Hst 473, 474, 475. American Foreign Relations. (g) 3 hours each term. The origins, character, and consequences of American foreign policies from the Revolutionary War to the present.
- (U) Hst 476, 477. History of the West. (G) 3 hours fall and winter.

 The American frontier. First term: the early American frontier; second term: the trans-Mississippi West. Hoffmann.
- (U) Hst 478. History of the Pacific Northwest. (G) 3 hours any term. Detailed study of the building of civilization in the Pacific Northwest. Prerequisite: Hst 201, 202, 203, or consent of instructor. Johansen, Gilmore.

- (U) Hst 479. Forces and Influences in American History. (G) 3 hours spring. Geographic influences; influence of the frontier; inheritance and tradition; economic forces; nationalism; sectionalism; manifest destiny; democracy. Hoffmann.
- (C) Hst 492. World Problems. (g) 3 hours spring.

Consideration given to current and significant political, economic, and social problems of the nations in relation to American culture. Not open to students who have taken SSc 411. Webb

See also.

Political Science

Home Economics

Professor: Bernard. Assistant Professors: AIKEN, GRANT, WASSON.

Lower-Division Course

(S) CT 250. Textiles. 3 hours winter.

Properties, uses, selection and care of textile fibers and fabrics. No prerequisite, but chemistry is desirable. Grant.

Upper-Division Courses

(S) FL 311. Child Development. 3 hours fall. Growth and development of normal preschool children. Prerequisite: Psy 207 or 202. Bernard.

(S) CT 331. Home Furnishing. 3 hours spring.

Furnishing a small home from standpoint of comfort, beauty, and economy; influence of historic design. Prerequisite: CT 212, 250, AA 161, 178, or consent of instructor. Wasson.

- (S) FL 428. Curriculum Enrichment for Young Children. (G) 2 hours spring. Methods of relating literature, art, music, and science activities to child interests; projects for nursery school. Prerequisite or parallel: FL 425.
- (S) FL 481. Selected Topics in Child Development. (G) 3 hours winter. Reading and interpretation of current literature on child development. Prerequisite: FL 312 or consent of instructor. Aikin.

See also:

Art Education Education Sociology

Horticulture

Professor: Bouquet.

Lower-Division Course

(E) Hrt 101. Home Horticulture. 2 hours spring.

Introduction to principles underlying the culture of fruits, nuts, vegetables and ornamental plants, with emphasis on flowers and home gardens.

Journalism

Assistant Professor: LARSON.

Lower-Division Courses

(U) J 211. Introduction to Journalism. 3 hours fall.

An introduction to media of mass communication, including news, editorial, pictorial, business, and advertising aspects. No prerequisite. Larson.

(S) J 211. Copyediting. 3 hours winter.

Copy reading, head writing, proof reading, and make-up; actual experience in editing copy. Prerequisite: J 111. Two lectures; 1 laboratory period. Larson.

Upper-Division Courses

(U) J 339. Principles of Advertising. 3 hours winter.

Advertising as a factor in the distributive process; the advertising agency; the "campaign"; the function of research and testing; the selection of media—newspaper, magazine, broadcasting, outdoor advertising, direct mail.

(U) 1445. Retail Advertising. (G) 3 hours spring.

Study of management problems of the retail advertising department. Advanced practice in layout, copywriting, and production of retail advertising for newspapers, radio, television, and direct mail. Prerequisite: J 339. Not open to students who have had J 441 or J 443.

Landscape Architecture

Associate Professor: MARTEL. Instructor: GERKE

Lower-Division Courses

(S) LA 279. Home-Ground Planning. 2 hours fall.

The principles of good design in home grounds; arrangement of the site for modern living, adapted particularly to this locality. Relationship between house and garden, space uses, study of materials which are used in garden development—plants, pavings, masonry, wood. Gerke.

(S) LA 290. Lower-Division Landscape Design. 2 hours winter.

Design of city and suburban residence properties and other design problems of three acres or less. Prerequisite: LA 279 or consent of instructor. Martel.

Upper-Division Course

(S) LA 326. Plant Materials. 3 hours spring.

Trees, shrubs, vines, and perennials and their uses in plant composition. Martel.

See also:

Art Education
Horticulture

Library

(See EDUCATION)

Mathematics

Professor: Peterson. Associate Professor: Vanderburg. Assistant Professor: Dudman.

Lower-Division Courses

- (S) Mth 10. Elementary Algebra. 4 hours fall.
- (S) Mth 100. Intermediate Algebra. 4 hours winter.
- (S) Mth 101, 102, 103. Elementary Algebra. 4 hours each term.
 College algebra, trigonometry, analytic geometry. Prerequisite: Mth 100 or equivalent.
- (S) Mth 201, 202, 203. Differential and Integral Calculus. 4 hours each term. Prerequisite: Elementary Analysis or equivalent.

Upper-Division Courses

- (S) Mth 421, 422. Differential Equations. (g) 3 hours fall and winter. Ordinary differential equations for mathematics and science majors and others who plan further study in mathematics. Prerequisite: calculus. Vanderburg.
- (S) Mth 423. Partial Differential Equations. (G) 3 hours spring.

 Introduction to concepts and methods of partial differential equations of first and higher orders; applications to problems of physics and engineering. Prerequisite: differential equations. Vanderburg.
- (U) Mth 425. Elements of Statistical Methods. (g) 3 hours winter.

A basic course in statistical analysis. Presentation of data; sampling theory; tests of significance; analysis of variance and covariance; regression and correlation; sequential analysis; design of experiments; distribution-free techniques. Prerequisite: one year of high-school algebra; junior standing or consent of instructor. Students who have received credit for Mth 301, 302, 303 may not receive credit for Mth 425.

See also:

Engineering: Statistical Quality Control

Music

Professors: Nye, Stehn. Asssistant Professors: Albertson, Bittner, Smith.

Lower-Division Courses

(U) Mus 111, 112, 113. Music Theory. 3 hours each term.

Theory I and II are basic courses for all majors in the School of Music. They provide a thorough groundwork in the elements of music science—melodic, harmonic, and rhythmic—taught through the analysis of the styles of Bach, Haydn, Mozart, Beethoven, and other eighteenth- and nineteenth-century composers. Stehn.

(U) Mus 190. Applied Music. 1 hour any term.

Freshman year. Individual instruction in organ, piano, violin, cello, harp, voice, orchestral and band instruments. Prerequisite: qualifying examination; consent of instructor. Stehn.

- (U) Mus 196. Orchestra. 1 hour any term.
 - Six hours maximum credit. Stehn.
- (U) Mus 290. Applied Music. 1 to 2 hours any term.

Sophomore year. Continuation of Mus 190, which is prerequisite. Consent of instructor. Stehn.

Upper-Division Courses

- (U) Mus 360, 361, 362. History of Music. 3 hours each term.
 - A study of the development of music from primitive times to the present day. Bittner.
- (C) Mus 381. Music Fundamentals. 3 hours fall. (Introductory course.)
 - A musical background for the elementary-school teacher; singing children's song material; acquiring good vocal habits; reading music; experiencing simple problems in rhythm; listening to music; analyzing its forms; learning keys, scales, intervals, primary chords, and their application to the piano keyboard. Nye, Smith.
- (C) Mus 382. Music Fundamentals. 3 hours winter. (Music reading and ear training.)

Acquiring more skill in reading song material; more advanced rhythmic patterns; major and minor modes; two-, three-, and four-part music; chording; ear training; dictation. Albertson, Smith.

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- (C) Mus 383. Music Fundamentals. 3 hours spring. (Music education.)

 The close relationship between music education and other areas in education; planning a music environment; directing the experiences of children in music; studying principles and procedures in teaching music skills. Nye, Smith.
- (U) Mus 390. Applied Music. 1 to 4 hours any term. Junior year. Individual instruction in organ, piano, violin, cello, harp, voice, orchestral and band instruments. For music majors. One or two lessons a week. Attendance at class sessions and recitals required. Prerequisite: Mus 290 or equivalent and qualifying examination for upper-division standing. Stehn.

Nursing Education

Associate Professor: Gregerson.

(U) Nur 428. Organization of Schools of Nursing. (G) 3 hours winter.

The objectives of the modern school of nursing; organization patterns; support and control; faculty qualifications, organization, and responsibilities; student selection, guidance, welfare; facilities for conducting a school.

Philosophy

Associate Professor: Newhall.

Lower-Division Courses

- (U) Phl 201. Elementary Logic. 3 hours spring.

 An introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.
- (U) Phl 202. Problems of Philosophy. 3 hours fall.
 An introduction to the study of some of the persistent problems of philosophy.
- (U) Phl 203. Elementary Ethics. 3 hours winter.

 An introduction to the philosophical study of morality, e.g., right and wrong, free will and determinism, morals and society, etc.

Upper-Division Courses

(U) Phl 331, 332, 333. Contemporary Philosophy. 2 hours each term.

Some common phases of recent philosophical theory. No prerequisites, but not open to lower-division students.

See also:

Religion

Physical Education

(See HEALTH AND PHYSICAL EDUCATION)

Physics

Assistant Professors: Coombs, Long. Instructor: Lynott.

Lower-Division Courses

- (E) Ph 062. Rudiments of Photography. Non Credit (2) spring.
 The miniature camera and its use. The making of pleasing pictures. Study of lighting effects and composition. Prerequisite: Ph 161. Coombs.
- (S) Ph 101, 102, 103. Engineering Physics. 4 hours each term. Studies in general physics adapted to students in engineering. Prerequisite: Mth 101 or equivalent, previously or concurrently. Long and Coombs.

- (S) Ph 161. Rudiments of Photography. 2 hours winter. Hand camera and its use, developing, printing. For students not having the science prerequisite for Ph 361. Does not admit to Ph 362. Coombs.
- (S) Ph 191. Rudiments of Meteorology. 1 hour winter.

 A descriptive treatment of meteorological phenomena including winds, air masses, fronts, clouds, the wave cyclone, precipitation. Lynott.
- (S) Ph 201, 202, 203. General Physics. 4 hours each term. Mechanics, sound, heat, light, electricity and magnetism. Prerequisite: Mth 100 or equivalent. Long and Coombs.

Political Science

Assistant Professors: DIXON, WIDMAYER. Instructors: HAGGARD, MARQUIS.

Upper-Division Courses

- (U) PS 320, 321. World Politics. 3 hours winter and spring.

 Basic principles of the modern state system; analysis of factors making for conflict and cooperation. Emphasis, during second term, on the foreign policies of the leading states, exclusive of the United States. Widmayer.
- (U) PS 405. Reading and Conference. Terms and hours to be arranged.
- (U) PS 411, 412, 413. Public Administration. (G) 3 hours each term.

 Study of the organization and activities of government in carrying out public policy, with special reference to the Federal government and to the government of Oregon. Marquis.
- (U) PS 414. Political Parties and Election Problems. (G) 3 hours fall.

 The nature, organization, and operation of political parties; election and recall of officers; proportional representation; initiative and referendum; civil-service reform. Haggard.
- (U) PS 415. Public Opinion. (G) 3 hours winter. Study of the methods of formation and control of public opinion. Haggard.
- (U) PS 416. Urban Politics. (G) 3 hours spring.

 The consequences for politics and administration of urbanism, with particular reference to cities of the West and the Pacific Northwest. Urban social trends and urban living treated as factors basic to an understanding of public opinion, policy formation, the structure of political influence and important policy issues in the urban community. Haggard.
- (U) PS 440. Competing Ideologies in the World Today. (G) 3 hours fall.

 An analysis of the most important political ideas and ideals in the world today, including various democratic beliefs, various forms of communism, and the Indian and Moslem approaches. Widmayer.
- (U) PS 483. The Executive in American Government. (G) 3 hours spring. Study of the executive branch in American government, with particular emphasis on the part played by the executive, and agencies attached to it, in legislative and judicial matters. Dixon.
- (U) PS 484, 485. The Supreme Court in American Government. (G) 3 hours fall and winter.

The part of the Supreme Court in shaping American public policy; study of leading cases and other materials. Dixon.

See also:

History

Psychology

Professors: Bernard, Sherburne. Associate Professors: Boyd, Brody, Courts, Crooks, Heist, Wilcox. Assistant Professor: Powloski. Instructor: Smith.

Lower-Division Courses

(U) Psy 201, 202. General Psychology. 3 hours each term.

Introductory study of behavior and conscious processes. Survey of experimental studies with reference to motivation, learning, thinking, perceiving, and individual differences. Wilcox, Smith, Powloski.

Fall: Psy 201

Winter: Psy 201, Psy 202 Spring: Psy 201, Psy 202

(U) Psy 204. Psychology of Adjustment. 3 hours fall or spring.

The nature and origins of differences in personality; means of making desired changes. Smith.

(U) Psy 205. Applied Psychology. 3 hours winter.

A survey of the ways in which psychology is applied in advertising, salesmanship, market research, measurement of opinion, occupational placement, development of personal efficiency. Courts.

Upper-Division Courses

(C) Psy 311. Human Development. 3 hours fall or spring.

Consideration of the child as an individual and as a member of social groups. Included is a study of the kinds of home and school environment essential to the best intellectual, physical, and emotional development of the child. Prerequisite: Psy 201, 202. Bernard.

- (U) Psy 405. Reading and Conference. Terms and hours to be arranged.
- (S) Psy 411. Mental Hygiene. (g) 3 hours spring.

Principles and application of mental hygiene to problems of the individual in home, school, and occupational situations. Prerequisite: Psy 202 or Psy 207. Sherburne.

(U) Psy 421, 422. Principles and Methods of Psychological Assessment. (g) 3 hours fall and winter.

Application of psychological methods to the study of the individual; survey of intelligence, achievement, special-aptitude, and personality tests; theoretical and statistical background for interpretation of test scores; training in diagnosis of actual cases. Must be taken in sequence. Prerequisite: General Psychology and consent of instructor. Statistics course is desirable. Boyd.

(U) Psy 424, 425. Individual Intelligence Testing. (G) 3 hours fall and winter.

Supervised practice in the administration and scoring of individual and group intelligence tests and various tests of achievement, special aptitude, and personality. 2 three-hour laboratory periods. Prerequisite. Psy 421 previously or concurrently or consent of instructor. Boyd.

(S) Psy 431. Industrial Psychology. (g) 3 hours winter.

Psychological characteristics of employees and psychological requirements of occupations; employee appraisal through development and use of evaluating instruments and recording of evaluations; psychological factors involved in maintaining employee fitness and morale. Prerequisite: Psy 202 or Psy 207. Heist.

(U) Psy 450. Abnormal Psychology. (G) 3 hours winter.

Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Normal motives and adjustment mechanisms as they are exaggerated in the so-called neurotic person. Smith.

- (U) Psy 460. Developmental Psychology I: Infancy and Childhood. (g) 3 hours fall.
 - Development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence, maturity, and old age. Changes of intelligences, motor capacity, emotional response, language, and social behavior. Emphasis on social influence. Bernard.
- (U) Psy 461. Developmental Psychology II: Adolescence and Maturity. (g) 3 hours winter.

Continuation of Psy 460. Bernard.

(S) Psy 472. Individual Differences. (g) 3 hours fall.

Theories of individual differences; experimental evidence; importance in personal, educational, and social adjustments; guiding and directing normal development. Prerequisite. Psy 371 or equivalent. Crooks.

Graduate Courses

- (U) Psy 507. Seminar: Personal Adjustment Counseling. 3 hours winter. This seminar is designed to cut across professional lines and to afford a discussion of counseling problems common to psychologists, educators, social workers, public health nurses and ministers. Primary emphasis will be on the counseling interview. Brody.
- (C) Psy 519. Research Studies in Child Development. 3 hours fall.

 Study of current research studies and experimental programs concerned with the physical, emotional, intellectual, and social development of children. Individual studies by students, case studies and model experimental projects with children in the laboratory school will supplement library resources. Brody.
- (C) Psy 520. Psychology of Learning. 3 hours spring. Introduction to the major theories of learning current among psychologists doing research in the field. Experimentation and research underlying these theories will be studied and applied to modern educational practices. Includes learning theory and practices at all age levels through adulthood. Brody.

Public Health

Instructor: Moser.

(E) PH 041. Health Problems in Modern Industry. Non-credit (2) spring. History of industrial health. Health legislation. Toxic materials: fumes, dusts, gases and irritants. Physical conditions: ventilation, sanitation, radiation and noise. Corrective measures for unhealthful working conditions.

Public Speaking

(see Speech)

Religion

Associate Professor: HOVLAND.

Upper-Division Courses

(U) R 421. Religion in Contemporary Society. (g) 3 hours winter.

The relation of religion to social institutions. Religion and the state, totalitarian and democratic. The social teachings of the various churches and religious groups. The religious situation today. Criteria for evaluating religion as a social force.

(S) R 462. History of Great Religions. 3 hours fall.

Comparative study of religions that command a large following today, such as Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam.

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(S) R 463. Psychology of Religion. 3 hours spring.

Bearing of psychology on religious thought and action, both past and present; psychology of prayer, conversion, faith, mysticism, and worship.

Science

(See Bacteriology, Biology, Chemistry, General Science, Physics, Zoology)

Secretarial Science

Professor: Yerian, Assistant Professor: Smith. Instructor: Carpenter.

Lower-Division Courses

(S) SS 111, 112, 113. Stenography. 3 hours each term.

Theory of shorthand; practical applications in sentence dictation. SS 121, 122, 123 must be taken concurrently unless the student has had the equivalent. Students with one year of high school shorthand may receive credit for SS 111 only upon recommendation of instructor. Smith.

(E) SS 021. Personal Typing. Non-credit (2) any term. Designed to enable students to acquire basic typing proficiency.

(S) SS 121, 122, 123. **Typing.** 2 hours each term.

Theory and practice of touch typing; rhythmical drills, dictation exercises; writing paragraphs; punctuation and mechanical arrangement of business correspondence, legal forms, tabulating, manifolding, speed practice. Students who have had one year of typing may receive credit for SS 121 only upon recommendation of instructor. Carpenter.

Upper-Division Courses

In addition to the fall term offering shown, a graduate offering in Business Education for each of the remaining terms will be announced.

(S) SS 411. Secretarial Problems. 3 hours fall.

Duties and problems of the secretary in business and professions; relation to employer and fellow employees; office supervision. Yerian.

Sociology and Social Work

Associate Professors: Drum, James, Parks. Instructor: Juras.

SOCIOLOGY

Lower-Division Courses

(U) Soc 204, 205, 206. General Sociology. 3 hours each term.

The basic findings of sociology concerning the individual, culture, group life, social institutions, and factors of social change. Required of all majors. Prerequisite: sophomore standing or consent of instructor. Parks.

Upper-Division Courses

(U) Soc 308. World Population and Social Structure. 3 hours winter.

Introduction to the general field of population studies, providing within a sociological framework an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. Required of all majors. Prerequisite: Soc 204, 205, 206 or Soc 307. Parks.

(U) Soc 327. Introduction to Social Research. 3 hours winter.

The development of social research; the nature of scientific inquiry and basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Required of all majors. Prerequisite: Soc 204, 205, 206 or consent of instructor. James.

- (U) Soc 338. Marriage and the Family. 3 hours any term.
 - The growth and development of the family throughout its life cycle. The family and personality development, dating, courtship, selection of marital partner, engagement, wedding and honeymoon, adjustment processes in marriage and family living, family crises. Prerequisite: junior standing. Drum.
- (U) Soc 346. Social Case Methods Applied to Nursing. 3 hours winter.

 History and current concepts of case-work theory; social problems related to illness; principles of interviewing; relationships between nurses and social workers. Offered at the University of Oregon Medical School.
- (U) Soc 407. Seminar. (G) Terms and hours to be arranged.
- (U) Soc 407. Seminar: Penological Systems. (G) 3 hours spring.
- (U) Soc 407. Seminar: Social Welfare Resources and Organization. (Use of Social Agencies by Teachers, Nurses, and Other Professionals). (G) 3 hours spring.

The various types of social welfare resources which teachers, nurses and other professionals can use to help people with social and emotional problems, methods of organizing these resources for the meeting of human needs. Drum.

(U) Soc 411. Social Institutions. (G) 3 hours fall.

Analysis of social organization in terms of a system of inter-related and inter-dependent institutions; structural and functional components of institutional complexes; institutions as systems of patterned relations; the institutional basis of personality; processes of institutional change and social disorganization. Parks.

- (U) Soc 416, 417. Criminology and Delinquency. (G) 3 hours fall and winter. The nature and extent of delinquency and crime as forms of deviant social behavior; contributing factors; current prevention and treatment programs. Prerequisite: General Sociology or General Psychology or Principles of Sociology or consent of instructor. Drum.
- (U) Soc 421. Social Change. (G) 3 hours spring. Sociological analysis of purposive social change as manifest in various programs of social reform and reconstruction. Doctrines examined in relation to the contexts, historical and contemporary, out of which they emerged and have evolved. Prerequisite: 9 hours in sociology or consent of instructor. Parks.
- (U) Soc 436. Social Control. (G) 3 hours spring.
 Techniques and agencies by which the behavior of crowds, classes, associations, and publics is controlled. Prerequisite: Soc or Psy 334, 335 or consent of instructor. James.
- (U) Soc 440. Group Dynamics. (G) 3 hours fall.

 Analysis of the dynamics of group interaction; significance and applications of the principles of group behavior for the group worker. Prerequisite: 9 hours in sociology or psychology; or consent of instructor. James.

SOCIAL WORK

(Open to students in other fields)

Graduate Courses

- (U) SW 507. Seminar. Terms and hours to be arranged.
- (U) SW 507. Seminar: Public Assistance and Social Insurance Programs in the United States. 3 hours winter. Juras.
- (U) SW 511, 512. Social Case Work. 3 hours fall and winter.

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

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

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

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

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

(U) SW 572. Community Organization for Social Welfare. 3 hours spring. Problems involved in bringing about an adjustment between social welfare needs and resources; understanding the social forces of the community; methods used by public and private agencies to meet these needs; interpretation of agency problems to the community. Drum.

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

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

(U) SW 581. The Child and the State. 3 hours spring.

The development of the rights of the child in relation to those of the parents; the responsibilities of the state in safeguarding those rights; social services to children by public and voluntary agencies. Juras.

Speech and Drama

Associate Professors: GAUPP, LILLYWHITE, ROBERTS.
Instructor: McAnallen.

Lower-Division Courses

(U) Sp 111, 112, 113. Fundamentals of Speech. 3 hours each term. Projects in extempore speaking. Primary emphasis on content and organization, with attention also to the student's adjustment to the speaking situation.

tion, with attention also to the student's adjustment to the speaking situat effective delivery, audience motivation, and language of the speech.

(S) Sp 120. Voice and Diction. 3 hours spring.

Production of vocal tone and correct speech sounds, pronunciation standards, vocabulary building, and word usage in relation to social integration of student; principles underlying good business and technical speaking on platform and radio.

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

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

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

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

(U) Sp 267, 268, 269. Appreciation of Drama. 2 hours each term. Study of design, acting, playwriting, criticism. Appreciation of drama, motion picture, and radio plays as art forms. Gaupp.

Upper-Division Courses

(U) Sp 351, 352, 353. Technique of Acting. 3 hours each term. Principles of acting technique. Problems in the analysis and presentation of character. Registration by consent of instructor only. Gaupp.

- (U) Sp 364, 365, 366. Play Direction. 3 hours each term.

 Sources of dramatic material, choice of play, casting and rehearsal of players, production organization. Practical experience in direction for the production of the produ
 - production organization. Practical experience in directing. 6 or more laboratory periods. Registration by consent of instructor only. McAnallen.

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

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

- (U) Sp 481, 482. Speech Defects and Disorders. (G) 3 hours winter and spring. First term: symptoms and causes of speech abnormalities; emphasis on diagnosis and basic pathology of articulatory defects and delayed speech, with discussion of methods of treatment limited to general principles. Second term: emphasis on speech problems resulting from cleft-palate and cerebral-palsied speech, aphasia, stuttering, and neurological speech disorders. Must be taken in sequence. Prerequisite: Sp 370; Sp 481 prerequisite for Sp 482. Registration by consent of instructor only. Lillywhite.
- (U) Sp 484, 485, 486. Clinical Practice in Speech Correction. (G) 2 hours each term.

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

(C) Sp 492. Principles and Techniques of Speech Correction. (g) 3 hours winter.

Designed to survey the field of speech defects and to acquaint classroom teachers with an understanding of typical speech defects among children and basic techniques for their prevention and correction. Emphasis placed on those areas of speech correction to aid classroom teachers including analysis of speech mechanics, recognition of defects, formation of sounds, testing devices, and parent cooperation.

Zoology

Professors: MACNAB, MACY.

Upper-Division Courses

(S) Z 341. Genetics. 3 hours winter.

Principles of heredity and their application to agriculture, medicine, and human eugenics; nature of gene action; genetics and evolution. Prerequisite: Z 200 or Z 202 or Z 116, or consent of instructor. Macnab.

(S) Z 345. Evolution. 3 hours fall.

Evidences of evolution; mechanisms of evolution, including genetic variation, selection, isolation, etc. Prerequisite: Z 341. Macnab.

(S) Z 442. Drosophila Genetics. (G) 2 hours spring.

Experiments on Drosophila to illustrate operation of hereditary mechanisms. Prerequisite: Z 341. Macnab.

(S) Z 456. Parasites of Man. (G) 4 hours spring.

Identification, bionomics, prophylaxis, treatment, and geographic distribution. Prerequisite: two years of biology. Macy.

(S) Z 462. Microtechnique. (G) 4 hours fall.

Principles and practice in methods of preparing histological, embryological and cytological specimens for microscopic study. Prerequisite: two years of biology. Macy.

See also:

Biology General Science

General Extension Division

Administration

PHILIP G. HOFFMAN, Ph.D., Dean, General Extension Division.
VIRON A. MOORE, Ed.D., Assistant Dean, Director State-Wide Services.

JAMES C. CAUGHLAN, Ph.D., Assistant Dean, Director Portland Extension Center.

Donald R. Larson, B.A., Assistant to the Dean, Director Information Services.

Howard Impecoven, Ed.D., Registrar, General Extension Division.

LESLIE B. NEWHOUSE, M.B.A., Business Manager, General Extension Division.

JEAN PHYLLIS BLACK, Ph.D., Librarian, General Extension Division.

Portland Extension Center

JAMES C. CAUGHLAN, Ph.D., Assistant Dean, Director.

CLARK P. SPURLOCK, Ed.D., Assistant Director.

HUGH G. LOVELL, Ph.D., Head, Business and Labor Programs.

Department of State-Wide Services

VIRON A. MOORE, Ed.D., Assistant Dean, Director.

Howard J. Akers, D.Ed., Administrative Assistant, Head, Office of Correspondence Study.

ROBERT J. GRIDLEY, Ed.M., Field Representative.

JOHN A. SCHULZ, Ed.D., Field Representative.

Radio Station KOAC

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

Department of Visual Instruction

WILLIAM CURTIS REID, Ph.D., Director.

Institute of International Affairs

DONALD R. LARSON, B.A., Assistant to the Dean, Head.

Oregon State System of Higher Education

JOHN R. RICHARDS, Ph.D., Chancellor

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

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

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

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

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

August L. Strand, Ph.D. President, Oregon State College

ELMO N. STEVENSON, Ed.D.

President, Southern Oregon College
of Education

FRANK B. BENNETT, Ed.D.

President, Eastern Oregon College of Education

ROY E. LIEUALLEN, Ed.D.

President, Oregon College of Education

HEBRERT A. BORK, M.S., C.P.A	Comptroller and Bursar
RICHARD L. COLLINS, M.A., C.P.A	Budget Director
TRAVIS CROSS, B.AAssistant to the	Chancellor; Director of Information
WILLIAM H. CARLSON, M.A	Director of Libraries
	_
EARL M. PALLETT, Ph.D	High School-College Relations Committee
Francis B. Nickerson, M.S	Executive Secretary High School-College Relations Committee

Former Chancellors Oregon State System of Higher Education

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

Oregon State System of Higher Education

JOHN REESE RICHARDS, Ph.D., Chancellor, State System of Higher Education; Professor.

B.A. (1929), M.S. (1931), Pennsylvania State; Ph.D. (1936), Chicago. With System since 1953, chancellor since 1955.

DAVID W. E. BAIRD, M.D., LL.D., Dean of Medical School; Professor of Medicine.

M.D. (1926), Oregon; LL.D. (1946), Portland. With System since 1927, dean, Medical School, since 1943.

Frank Brown Bennett, Ed.D., President, Eastern Oregon College of Education;
Professor.

B.A. (1921), Willamette; M.A. (1933), Oregon; Ed.D. (1948), Willamette. With System since 1952, president, Eastern Oregon, since 1952.

HERBERT ARNOLD BORK, M.S., C.P.A., Comptroller and Bursar, State System of Higher Education: Dean: Professor.

B.A. (1924), Wisconsin; C.P.A. (1926); M.S. (1940), Oregon State. With System since 1934, comptroller since 1934.

RICHARD LYLE COLLINS, M.A., C.P.A., Budget Director, State System of Higher Education: Professor.

B.B.A. (1927), Oregon; C.P.A. (1931); M.A. (1940), Columbia. With System 1927-29 and since 1932, budget director since 1948.

JOHN FRANCIS CRAMER, D.Ed., President, Portland State College, Professor.

A.B. (1920), Willamette; A.M. (1921), M.Ed. (1932), D.Ed. (1937), Oregon. With System since 1944, president, Portland State, since 1955.

(WILLIAM) TRAVIS CROSS, B.A., Assistant to the Chancellor and Director of Information: Assistant Professor.

B.A. (1949), Stanford. With System since 1950, assistant to chancellor since 1953.

PHILIP G. HOFFMAN, Ph.D., Dean, General Extension Division, Professor of History.

B.A. (1938), Pacific; M.A. (1941), Southern California; Ph.D. (1948), Ohio. With System since 1953, dean, General Extension, since 1955.

ROY ELWAYNE LIEUALLEN, Ed.D., President, Oregon College of Education; Professor.

B.S. (1940), Pacific; M.S. (1947), Oregon; Ph.D. (1955), Stanford. With System since 1946, president, Oregon College, since 1955.

HAROLD J. NOYES, D.D.S., M.D., Dean of Dental School; Professor of Dentistry. Ph.B. (1923), M.D. (1933), Chicago; B.S. (1928), D.D.S. (1928), Illinois. With System since 1946, dean, Dental School, since 1946.

EARL M. PALLETT, Ph.D., Secretary of Board and Chairman, High School-College Relations Committee; Professor.

B.S. (1921), M.S. (1922), Wisconsin; Ph.D. (1931), Oregon. With System since 1927, Secretary of Board since 1955.

ELMO NALL STEVENSON, Ed.D., President, Southern Oregon College of Education;
Professor

A.B. (1927), San Jose State; A.M. (1929), Ed.D. (1938), Stanford. With System since 1929, president, Southern Oregon, since 1945.

August Leroy Strand, Ph.D., President, Oregon State College; Professor. B.S. (1917), Montana State; M.S. (1925), Ph.D. (1928), Minnesota. With System since 1942, president, Oregon State, since 1942.

O. MEREDITH WILSON, Ph.D., President, University of Oregon; Professor. B.A. (1934), Brigham Young; Ph.D. (1943), California. With System since 1954, president, University, since 1954.

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