



GENERAL
EXTENSION
DIVISION

BULLETIN

Portland State
Extension Center

PORTLAND • OREGON

CATALOG ISSUE

1953 - 1954

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MAY, 1953

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Portland State Extension Center

**University of Oregon
Oregon State College
Oregon Colleges of Education**

ANNOUNCEMENTS

1953-54

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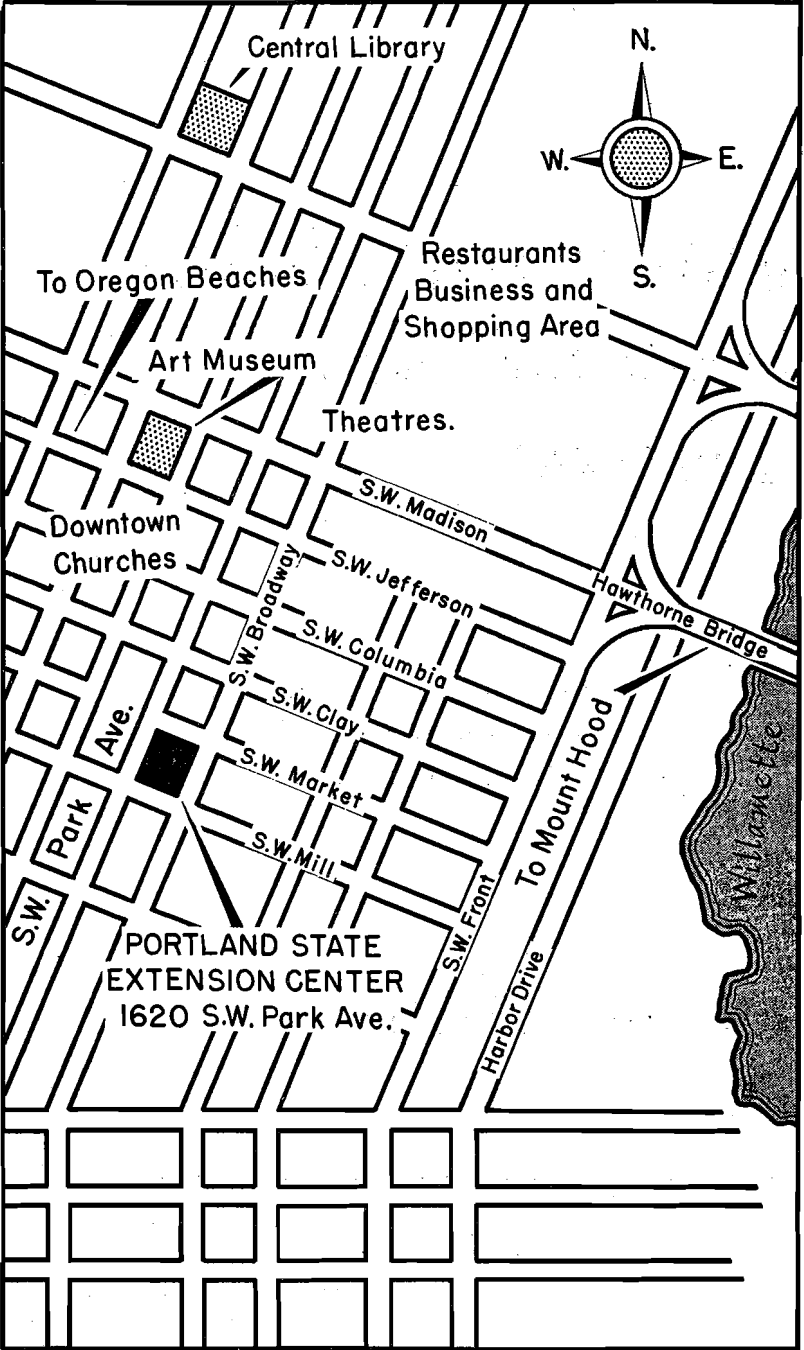


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Academic Calendar 1953-54

FALL

	Day Classes	Night Classes
Counselling and advisement.....	Sept 14-17	Sept 14-19
Registration.....	Sept 18	Sept 14-19
Classes begin.....	Sept 21	Sept 14-19
Late fee begins.....	Sept 22	Sept 28
Last day for registration or change of program.....	Oct 3	Oct 3
Thanksgiving vacation.....	Nov 26-29	Nov 26-29
Final examinations.....	Dec 14-19	Dec 7-12
Fall term ends.....	Dec 19	Dec 12

WINTER

Registration.....	Jan 4	Jan 4-9
Classes begin.....	Jan 5	Jan 4-9
Late fee begins.....	Jan 6	Jan 18
Last day for registration or change of program.....	Jan 16	Jan 16
Final examinations.....	Mar 15-20	Mar 15-20
Winter term ends.....	Mar 20	Mar 20

SPRING

Registration.....	Mar 29	Mr 29-Apr 3
Classes begin.....	Mar 30	Mar 29
Late fee begins.....	Mar 31	Apr 12
Last day for registration or change of program.....	Apr 10	Apr 10
Memorial Day holiday.....	May 31	May 31
Final examinations.....	June 7-12	June 7-12
Spring term ends.....	June 12	June 12

SEPTEMBER 1953

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OCTOBER

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NOVEMBER

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DECEMBER

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JANUARY 1954

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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27	28	29	30			

Portland Summer Session 1954

Registration.....	June 21
Classes begin.....	June 22
Final Examinations.....	Aug 12-13
Summer Session ends.....	Aug 13

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 federal survey of higher education in Oregon, includes all the state-supported institutions of higher learning. The several institutions are now elements in an articulated system, parts of an integrated whole. The educational program is so organized as to distribute as widely as possible throughout the state the opportunities for general education and to center on a particular campus specialized, technical, and professional curricula closely related to one another.

The institutions of the State System of Higher Education are the University of Oregon at Eugene, Oregon State College at Corvallis, the Oregon College of Education at Monmouth, the Southern Oregon College of Education at Ashland, and the Eastern Oregon College of Education at La Grande. The University of Oregon Medical School, the Portland State Extension Center, and the University of Oregon Dental School are located in Portland.

Each of the five institutions provides the general studies fundamental to a well-rounded education. At the three colleges of education general and professional studies are combined in the teacher-training curriculum; students who do not plan to become elementary-school teachers may devote their time exclusively to lower-division studies in the liberal arts and sciences or (at Southern Oregon and Eastern Oregon colleges of education) to approved lower-division programs in semiprofessional fields.

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

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

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General Information

HISTORY. Portland State Extension Center is an undergraduate and graduate collegiate instructional program which has combined the offerings of the former Portland and Vanport Extension centers. It is operated by the General Extension Division of the Oregon State System of Higher Education. This is the agency by which the University of Oregon, Oregon State College, and the three Oregon Colleges of Education serve the people of Oregon through extension classes, short courses, correspondence study, visual instruction, radio programs, summer sessions, and special activities.

Portland Extension Center, the earliest of the elements forming the Portland State Extension Center, was established by the University of Oregon in 1917 in response to war-time educational needs in the Portland metropolitan region. The center remained as an extension service of the University of Oregon until 1932 when the Oregon State System of Higher Education was formed. Thereafter, until 1952, the Portland Center continued as a service of the General Extension Division of the state's unified system. For a total of thirty-five years the Portland Extension Center offered the undergraduate and graduate courses at night to adults in the Portland area. Most of the classes during that period were held in the Lincoln High School building.

Meanwhile, during World War II, the State Board of Higher Education gave consideration to an expected increase in enrollments after the war. Anticipating particularly that returning veterans might tax the facilities of campus institutions and communities, the State Board of Higher Education at its January, 1944, meeting, authorized strengthened offerings by the General Extension Division. Provision was made for two-year terminal courses and for the establishment of centers anywhere in the state that enrollment would warrant. Accordingly, at its March meeting two years later the board approved the establishment of a lower-division daytime extension center at Vanport. The new center opened for the 1946 summer session.

In 1949 the State Legislature appropriated funds to purchase a permanent, central location for all the extension services existing in the Portland area and made Vanport Extension Center a permanent part of the Oregon State System of Higher Education. The State Board of Higher Education purchased the former Lincoln High School, the downtown site long utilized by the Portland Extension center for its night classes, and plans were made for combining the two centers.

In 1952 Portland Extension Center and Vanport Extension Center were merged by action of the State Board into an integrated program offering both day and night classes. The new Portland State Extension Center began operating as a unit in its own building in September of 1952 with an

enrollment of some 1300 day-time students and more than 2900 night-time students.

The *day program* offers lower-division work for full-time students. Entrance requirements, instructional programs, and co-curricular activities are similar to those offered full-time students on the freshman and sophomore levels on other campuses of the Oregon State System of Higher Education.

The *night program* offers approximately 250 courses in more than 30 departments and professional schools. Both graduate and undergraduate classes are scheduled, and the work of these classes is of standard college or university grade.

LOCATION. The Portland State Extension Center building is located at 1620 S. W. Park Avenue, Portland 1, Oregon. The telephone number is Capitol 4251. Administrative offices and the majority of the classes are housed in this location.

ACCREDITATION. The Portland State Extension Center is a fully accredited instructional program. As one of the correlated units of the Oregon State System of Higher Education, it draws upon the resources, the curricula, and the facilities of all of the state higher educational institutions.

Portland State Extension Center does not grant degrees, but credits earned at the center are accepted as residence credit toward a degree when transferred to the University of Oregon, Oregon State College, or any of the three Oregon Colleges of Education providing they have been earned as a part of a planned grade program. If transferred outside of Oregon, credits earned at the center may be accepted on the same basis as credits transferred from any of the other schools in the Oregon State System of Higher Education.

A limited number of courses in the day program carry the statement "terminal credit". These are for students who plan to attend college only two years. Such courses may not be acceptable in some colleges to meet the requirements of a four-year degree program.

Veterans

Portland State Extension Center is approved by the Veterans Administration for the training of veterans under P. L. 346 and P. L. 550, the World War II and the "Korean" G.I. Bills respectively, and under P. L. 16 and P. L. 894, the latter two being specifically for disabled veterans. Detailed information on educational eligibility and entitlement under these Acts may be obtained from the Veterans Administration, 208 S. W. 5th Avenue (telephone AT 9131) Portland, Oregon.

The State of Oregon also has legislation affording educational assistance to veterans. The State Department of Veterans Affairs, State Office

building, 1400 S. W. 5th Avenue (telephone CO 2161) Portland, Oregon will provide information.

The Portland Guidance Center of the Veterans Administration is housed in the Portland State Extension Center building. Veterans are eligible for the counseling and guidance services of this facility.

Services and Facilities

COUNSELING. Portland State Extension Center provides academic counseling for both undergraduate and graduate students. Day program students will have an adviser assigned at registration to guide them in the selection of courses. The adviser assigned the individual day program student at registration may continue as his adviser as long as the student is an undergraduate.

Night program students who are working toward a degree should confer with an adviser regarding the requirements of the school or department in which their majors have been selected. Graduate students particularly should seek the assistance of an adviser.

LIBRARY. The Portland State Extension Center library houses the collections and provides library service to the entire General Extension Division. Approximately 14,000 volumes and 275 periodicals are available to students. The resources of the Portland Public Library and of other municipal, state, and federal agencies may also be utilized by students.

The library is located on the second floor, Park Avenue side, and is open from 8:00 a.m. to 9:00 p.m., Monday through Friday when classes are in session. The central room will seat 170 readers and there is a listening room for recordings. Audio Visual Instructional materials and equipment are housed in the library. Requests for their use should be made to the library staff.

BOOKSTORE AND STUDENT COOPERATIVE. The student-operated bookstore and cooperative on the lower floor of the building has available all assigned textbooks, school supplies, and instructional materials, plus a wide selection of non-required books and miscellaneous articles needed by the students.

CAFETERIA. A modern cafeteria and soda fountain are available on the lower level of the Center building both day and evening for meals, hot and cold beverages, sandwiches and snacks. The area is arranged to provide the students with an informal lounge and gathering place.

Fee Schedule

Fees and deposits in all state institutions of higher education are charged according to a uniform plan, varying on different campuses according to differences in conditions or nature of work offered. The State

Board of Higher Education reserves the right to change the schedule of tuition and fees without notice.

A. DAY CLASSES—PORTLAND STATE EXTENSION CENTER

1. FULL-TIME STUDENTS (7 credit hours or more)

<i>Item</i>	<i>Per Term</i>	<i>Per Year</i>
Tuition.....	\$ 10.00	\$ 30.00
Laboratory and Course fee.....	20.00	60.00
Incidental fee.....	17.00	51.00
Building fee.....	5.00	15.00
Total for Oregon residents.....	52.00	156.00
Additional fee for nonresidents.....	60.00	180.00
Total for nonresidents.....	\$112.00	\$336.00

REGULATIONS GOVERNING NONRESIDENT FEE. The Oregon State Board of Higher Education has defined a nonresident student as a person who comes into Oregon from another state for the purpose of attending one of the institutions under the control of the Board.

In order to draw a clear line between resident and nonresident students the Board has ordered that all students in the institutions under its control who have not been domiciled in Oregon for more than one year immediately preceding the day of their first enrollment in the institution shall be termed nonresident students, with the following exceptions:

- (1) Students whose fathers (or mothers, if the father is not living) are domiciled in the state of Oregon.
- (2) Children of regular employees of the federal government stationed in the state of Oregon.
- (3) Students holding bachelor's or higher degrees from higher educational institutions whose work is acceptable as preparation for graduate work.
- (4) Students in summer sessions.

2. PART-TIME STUDENTS (6 credit hours or less)

Undergraduates, Graduates and Auditors, per credit hour.....	\$ 6.00
Minimum charge for 1 or 2 credit hours for any student.....	\$12.00
Day class students are entitled to services of the Student Union Health Service, Gym Suit Service, and Educational and Athletic Activities.	

B. NIGHT CLASSES—PORTLAND STATE EXTENSION CENTER

<i>Item</i>	<i>Per Term</i>
Regular registration and course fees, tuition not included, applicable to undergraduates, graduates and auditors.	
Per credit hour rate.....	\$ 6.00
Minimum charge for 1 or 2 credit hours for any student.....	12.00
Charge for students carrying 7 credit hours or more.....	52.00

Night class students are entitled to services of Student Union, but not to Health Service, Gym Suit Service and Educational and Athletic Activities.

C. PART-TIME STUDENTS AND FULL-TIME STUDENTS—Combination Day and Night Classes

Students carrying 7 credit hours or more in the day, evening, or any combination are considered to be full-time students and pay a total fee of \$52.00.

Students carrying 4 credit hours or more in day classes together with any number of night classes are considered to be day students.

Students carrying 3 credit hours or less of day classes together with any number of credit hours of night classes are considered to be night students.

D. SPECIAL FEES AND CHARGES—Day and Night Classes

Late registration fee, for day classes, per day..... \$1.00

Late registration fee, for night classes, per week,

(\$3.00 first week and \$1.00 additional per week thereafter) 3.00-1.00

If registration charges are met by a N.S.F. check, the late registration fee will apply.

Change of Program Fee

(assessable for each change of program after last day to add courses)

1.00

Reinstatement Fee

2.00

Transcript fee50-1.00

(One transcript of a student's record will be furnished by the registrar without charge. Thereafter a fee of \$1.00 will be charged for each transcript furnished, except that for second and additional copies at any one time, only \$.50 is charged.)

Graduate qualifying examination fee 1.00-15.00

Staff fee, per credit hour 3.00

(Available, with a five-credit hour limitation per quarter and by approval of the Dean, to full-time academic and non-academic employees. Staff members on leave may obtain a waiver of the credit hour limitation but not of the fee. Subject to the approval of the Dean's Office, retired employees may obtain a waiver of both the credit hour limitation and of the fee. Registrants under the staff fee are not entitled to the privileges of the incidental fee.)

Fee Refunds

Students who withdraw from Portland State Extension Center and who have complied with the regulations governing withdrawals are entitled to certain refunds of fees paid, depending on the time of withdrawal. The refund schedule has been established by the State Board of Higher Education and is on file in the Business Office. *Refunds in all cases are calculated from the date of application for the refund and not from the date the student ceased attending classes.* Claims for refunds must be made *in writing*.

Definitions

A TERM is a division of the academic year and is approximately three months in length.

A **COURSE** is a subject, or an instructional subdivision of a subject, offered through a single term.

A **YEAR SEQUENCE** consists of three closely articulated courses extending through three terms of the academic year.

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

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 in the registrar's bookkeeping. 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 or laboratory or to outside preparation. The number of lecture, recitation, laboratory, or other periods per week for any course may be found in the course descriptions given in this Bulletin.

A **GRADE** is a mark used to measure the quality of a student's work in an academic course: *A*, exceptional accomplishment; *B*, superior; *C*, average; *D*, inferior; *F*, failure; *Inc*, incomplete; *W*, withdrawn. When a course has not been completed for reasons acceptable to the instructor, a report of *Inc* may be made and additional time granted. A student who 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" and certain others as "no-grade" in the course description. Students in no-grade courses are rated "pass" (*P*) or "not-pass" (*NP*) in the term grade reports. Non-credit and no-grade courses are not considered in computing the grade-point average.

A **GRADE POINT** is a numerical system of computing the quality of a student's work. Grade points are computed 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 the computation of grade 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. The grade point average that marks the standard of acceptable scholarship is computed on all work for which the student receives credit, including work for which credit is transferred, correspondence study, and work validated by special examination.

A **GROUP REQUIREMENT** refers to the basic courses listed under three

* 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 $1\frac{1}{2}$.

classifications: (I) Humanities, (II) Social Science, and (III) Science and Mathematics. Any year sequence listed under one of these groups may be taken to satisfy that group requirement. (See page 33.)

COURSE NUMBERING SYSTEM. Courses are numbered in accordance with the course numbering system 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 the lower-division group requirements in humanities, social science, and science and mathematics groups; and 111-199, 211-299 are other courses offered at first-year and second-year levels.

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

Graduate courses are numbered from 500 to 599.

Other General Extension Division Facilities and Services

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. Students may frequently find a schedule of correspondence courses through which to continue their program of study when not in residence. Conferences are conducted for business and professional groups and in-service institutes and workshops are organized to assist school districts.

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

RADIO STATION KOAC. Radio Station KOAC is Oregon's state-owned station of which the State Board of Higher Education is the managing agency. The station is located at Corvallis on the campus of Oregon State College, the licensee and operator of the physical plant, and the General Extension Division of the State System of Higher Education directs the program service. Program talent is drawn from Oregon State College,

University of Oregon, the three Oregon Colleges of Education, Portland State Extension Center, and from various departments of the state government. Many other public agencies, organizations, and individuals contribute frequently to broadcasts. KOAC operates with 5,000 watts power on a frequency of 550 kilocycles by authority of the Federal Communications Commission. The station is operated in the interest of the Oregon public, and programs are free of commercialism. Program schedules are issued periodically and will be furnished on request. Studios are located at Corvallis, Eugene, Monmouth, Portland, and Salem. "Tapes for Teaching" are provided for the schools of Oregon as a special service.

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

Day Program

See pages 61 to 103 for Night Program

See pages 20 to 27 for General Information

Day Program

(All students are expected to be familiar with the regulations and requirements given in the section of this Bulletin entitled "General Information." They apply to both day program and night program students.)

The day program of Portland State Extension Center offers lower-division work which is the practical equivalent of the courses currently available during a student's first two years of academic training at the University of Oregon, Oregon State College, and the Oregon Colleges of Education. Other courses and curricula authorized by the State Board of Higher Education are added to the program. Accordingly, a student at the Center may complete the first two-years of work in most of the fields found elsewhere in Oregon State System institutions. Preprofessional fields include business administration, business and technology, liberal arts, elementary education, prelaw, science, social science, pre-engineering, preforestry, prenursing and prepharmacy. Terminal fields requiring two years or less, and which may thus be completed at the Center include secretarial science, courses for dental and medical assistants, merchandising, and police training.

Students often find Portland State Extension Center affords them many advantages. The metropolitan location makes possible a combination of inexpensive living costs and great opportunities for part-time employment. The two-year feature is attractive to many students who do not plan a full four-year college program but who desire courses useful either in the vocations they intend to follow or in their cultural development and citizenship.

Services

STUDENT LOANS. Students who need short term loans may borrow from the Portland State Extension Center Loan Fund made available from gifts and other sources including the Portland State Mothers' Club and the Portland State Cooperative.

SCHOLARSHIPS. The Oregon State System of Higher Education awards a limited number of scholarships annually. These are open both to old and to new students. The scholarship pays \$90.00 for the academic year for each recipient and is awarded on the basis of financial need and academic achievement. Scholarships are also awarded by other organizations.

HEALTH AND MEDICAL PLAN. All full-time students are covered by a plan that provides hospital, medical, and nursing care. The health office is

maintained by a registered nurse. Students are encouraged to consult with the nurse to learn the extent of coverage of this health plan. The regular fees paid by the student cover the costs of the health service.

STUDENT EMPLOYMENT. Part-time jobs are listed in the counselling office. A wide selection is usually available to students desiring part-time work.

Activities

ATHLETICS. Athletics include the major sports of baseball, football, basketball, track and wrestling, and a wide variety of minor sports such as golf, skiing, tennis, and swimming. Entering freshmen may qualify for varsity participation. The varsity "P" is awarded to those who earn letters in the major or minor sports. There is an intramural sports program for all students which includes football, basketball, baseball, tennis, gymnastics, golf, and other sports. Intramural sports and physical education are available for women as well as for men.

MILITARY TRAINING. The day program does not require military training of its students. However, many opportunities are open to students in the Portland area on a voluntary basis. These include the Naval Reserve—which maintains an excellent training center at Swan Island—the U. S. Army, the U. S. Air Force, Marines, Coast Guard, and the National Guard. Qualified students interested in officer training will find a number of opportunities available.

PUBLICATIONS. Students publish a weekly newspaper and a yearbook. Those interested in writing and journalism may become members of the staffs of these two publications.

COCURRICULAR ACTIVITIES. Cocurricular activities are a definite and essential part of the program. There are club activities for all tastes and personalities; thus, there are Forestry, Engineering, Speech clubs, and a great number of social and service clubs. Other activities are dramatics, dances, and music. Opportunity for participation in student government is open to all students.

Academic Regulations

ADMISSION REQUIREMENTS. To be admitted to the day program of the Portland State Extension Center, a student must be of good moral character and must present evidence of acceptable preparation for work at the college level.

Any person seeking admission as a full-time day student must: (1) submit an original application form which may be obtained by writing to the Registrar, General Extension Division, 1620 S. W. Park Avenue, Portland

1, Oregon, (Telephone Capitol 4251); and (2) request the high school from which a student was graduated and any college which he has attended to forward official transcripts of his records to the Registrar, General Extension Division.

Applications and transcripts should be filed several weeks before the applicant intends to enter the Portland State Extension Center.

ADMISSION TO FRESHMAN STANDING. The requirements for admission to first year or freshman standing conform to the following uniform entrance requirements adopted by all the state institutions of higher education in Oregon:

Graduation from a standard high school which in Oregon requires the completion of 16 units, 8 of which are required as follows: 3 units in English; 2 units in social science, comprising the state-adopted courses in United States history-civics and socio-economic problems; 1 unit in health and physical education; 1 unit in mathematics; and 1 unit in the natural sciences. In order to be admitted to any of the four-year curricula in engineering, except industrial arts, a student must present 1 unit in elementary algebra, $\frac{1}{2}$ unit in higher algebra, and 1 unit in plane geometry. A student deficient in mathematics may be admitted but must make up the deficiency before carrying the standard engineering program.

Graduates from standard out-of-state high schools are required to present substantially the same distribution of subject-matter units. Applicants who are not residents of Oregon may be held for additional requirements demonstrating superior ability.

Persons graduating in the lower half of their class and who can demonstrate college ability on the basis of other criteria may be admitted. Students who have attended another college and who have a 2.00 grade average, (C), are eligible for admission. Individuals who cannot meet these standards may petition for admission on a probationary basis in the day program.

CREDIT HOUR LOAD. In the day program a student normally enrolls for no more than 17 term hours. Students whose grade point average is 3.00 or better may petition to take an additional one or two hours. No student will be permitted to take more than 19 term hours of any combination of credit, non-credit, and no-grade courses.

A student must obtain permission in advance to take courses at other educational institutions. If such courses are taken without permission, the Portland State Extension Center reserves the right to withhold credit for courses in which the student is currently enrolled.

REGISTRATION. Day program students register each term in accordance with the schedule designated on the academic calendar.

TWO-YEAR COURSES. Terminal curricula—that is, programs designed to be completed in one or two years—are offered to improve the vocational proficiencies and the general cultural background. Terminal courses include such fields as engineering, secretarial science and business.

FOREIGN LANGUAGE REQUIREMENTS. The foreign language requirement

depends upon whether or not a student intends to be graduated from a four-year institution; and, if so, on the degree and the institution granting that degree. In the Oregon State System of Higher Education a foreign language is required for the Bachelor of Arts degree but not for the Bachelor of Science degree. Many graduate degrees require a reading knowledge of one or more foreign languages. A student should consult an adviser on this subject.

ENTRANCE EXAMINATIONS. If a student is a graduate of a standard high school, no examination is required to determine eligibility for entrance. However, placement and other examinations are given to help the student plan a course of study. The placement examination taken depends upon the course and the student's individual needs.

SELECTION OF MAJOR FIELD. Many students select their major field long before they enter college. Others complete a year or more of varied college work to determine their interests. Even after a choice is made, students may change majors as their college experiences reveal new abilities and interests. Most students unsure of their interests or of their abilities in a specific field enroll as liberal arts majors, because subjects in this field are helpful in general development, and many of the courses are required for entrance into professional schools or for graduation in a specific major.

SCHOLARSHIP REGULATIONS. The faculty committee on Academic Deficiencies has discretionary authority to suspend or place on probation any student not achieving profitable and creditable progress toward graduation (a minimum grade-point average of 2.00 or *C* for both the term and cumulative record). Application of this rule results in the following practices:

Probation. Degree students achieving a grade-point average below 2.00 or *C* either for a term or cumulative may be placed or continued on probation (unless subject to suspension).

Suspension. A student is subject to suspension any time it is apparent that he is not satisfactorily meeting graduation requirements. Most suspensions occur when a student is 12 or more grade points deficient. (Hours taken times 2 subtracted from grade points earned.) If other factors so indicate, a student may be suspended with fewer than 12 points deficiency. Also, a student having 12 or more points deficiency for his fifth or sixth or later terms may be suspended even though he may have a cumulative average above 2.00, if other factors so indicate. (This applies to resident and/or transfer students of sophomore, junior, or senior standing.)

Release from Probation. Any student on probation may achieve good standing by earning both term and cumulative 2.00. This statement applies to resident credit alone and to resident plus transferred credit.

REQUIREMENTS FOR JUNIOR STANDING. Upper-division standing is required in institutions of the Oregon State System of Higher Education in

order to pursue a major curriculum leading to a degree. A student may fulfill the requirements for upper-division standing during two years at Portland State Extension Center. The requirements are:

- (1) Term Hours: Minimum, 93. (96 in some majors).
- (2) Grade-Point Average: Minimum, 2.00.
- (3) English:
 - (a) Freshmen must take and pass a course designated *Wr K* unless excused on the basis of a high rating in the English Placement examination required upon entrance.
 - (b) English Composition: 9 term hours (*Wr 111, 112, 113*) unless excused. A student whose work is of unusually high quality may, with the consent of the Head of the Department of English, be excused at the end of any term from further required written English.
- (4) Physical Education: 5 terms in activity courses, unless excused. (Veterans may be excused.)
- (5) Health Education: HE 250 will satisfy the requirement for men or women. (Veterans may be excused.) Men take HE 150, Health Education, in place of HE 250 to meet the requirement.
- (6) Group Requirements: A prescribed amount of work selected from three "groups" representing comprehensive fields of knowledge. The three groups are: (I) Humanities, (II) Social Science, and (III) Science and Mathematics. Courses that satisfy group requirements are numbered from 100 to 110 and from 200 to 210. The group requirements are:
 - (a) At least 9 approved term hours in each of the three groups and at least 9 additional approved term hours in courses numbered 200-210 in any of the three groups.

Students should study the Bulletin of the institution to which they plan to transfer to be sure that all of its requirements for upper-division standing are met. Particular note should be made that *degree-granting institutions normally require a student to earn a minimum of 45 term hours after the lower-division requirements have been cleared.*

TWO-YEAR CERTIFICATES. A Two-Year Certificate recognizes the successful completion of two years of lower-division work. This certificate is issued upon the request of a student.

Group Courses

Year sequences applicable in meeting group requirements are listed below. These courses may also be taken as electives. Descriptions of the courses are given in this catalog.

Humanities Group***English**

- (U) Eng 101, 102, 103. Survey of English Literature. 3 hours each term.
- (U) Eng 104, 105, 106. Appreciation of Literature. 3 hours each term.
- (C) Eng 107, 108, 109. World Literature. 3 hours each term.
- (U) Eng 201, 202, 203. Shakespeare. 3 hours each term.

Social Science Group**Anthropology**

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

Economics

- (U) Ec 201, 202, 203. Principles of Economics. 3 hours each term.

General Social Science

- (C) SSc 101, 102, 103. Background of Social Science. 3 hours each term.

History

- (U) Hst 101, 102, 103. History of Western Civilization. 3 hours each term.
- (U) Hst 201, 202, 203. History of the United States. 3 hours each term.
- (S) Hst 204. History of the Far East. 3 hours.
- (S) Hst 206. Modern Russia. 3 hours.
- (U) Hst 207, 208, 209. English History. 3 hours each term.
- (S) Hst 209. The World Since 1914. 3 hours.

Geography

- (S) Geog 105, 106, 107. Introductory Geography. 3 hours each term.
- (S) Geog 201, 202, 203. Regional Geography. 3 hours each term.

Philosophy

- (U) Phl 201. Elementary Logic. 3 hours.
- (U) Phl 202. Problems of Philosophy. 3 hours.
- (U) Phl 203. Elementary Ethics. 3 hours.

Political Science

- (U) PS 201, 202, 203. American Government. 3 hours each term.
- PS 204 or PS 205 may be substituted for PS 203.

Psychology

- (U) Psy 201, 202. General Psychology. 3 hours each term.
- (U) Psy 204. Psychology of Adjustment. 3 hours.
- (U) Psy 205. Applied Psychology. 3 hours.

Sociology

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

* The third year of a foreign language may be offered to meet this group requirement. Students should consult their advisers about foreign-language requirements for upper-division and graduate courses and for requirements of other institutions.

Science Group

Botany

(S) Bot 201, 202, 203. General Botany. 3 hours each term.

Chemistry

(S) 104, 105, 106. General Chemistry. 4 hours each term.

(S) Ch 204, 205, 206. General Chemistry and Qualitative Analysis. 5 hours each term.

Geology

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

Mathematics*

(S) Mth 100. Intermediate Algebra. 4 hours.

(S) Mth 101, 102, 103. Elementary Analysis. 4 hours each term.

(S) Mth 104, 105, 106. Mathematics of Business and Industry. 3 hours each term.

(U) Mth 105. College Algebra. 4 hours.

(U) Mth 108. Mathematics of Finance. 4 hours.

(U) Mth 109. Elements of Statistics. 4 hours.

(S) Mth 201, 202, 203. Differential and Integral Calculus. 4 hours each term.

Physics

(S) Ph 101, 102, 103. Engineering Physics. 3 hours each term.

(S) Ph 201, 202, 203. General Physics. 4 hours each term.

Science

(S) GS 101, 102, 103. Biological Science Survey. 4 hours each term.

(S) GS 104, 105, 106. Physical Science Survey. 4 hours each term.

Zoology

(S) Z 201, 202, 203. General Zoology. 3 hours each term.

(U) Z 201, 202, 203. General Zoology. 4 hours each term.

Courses of Study in Terminal Fields

The Day Program offers the following selection of terminal courses which may be completed in the time indicated.

Such programs are designed for students who do not plan to work toward a baccalaureate or professional degree. Certain specified courses may not be acceptable to some institutions for a regular degree program.

Terminal (Leaflets containing complete course descriptions are available.)

<i>Curriculum</i>	<i>Years Required</i>
Medical and Dental Secretaries.....	2
Merchandising	2
Secretarial Science, A	2
Secretarial Science, B	1
(For students with high-school typing and shorthand)	
General Engineering	2
Police Training	2

* Any three of the following meet the science requirement: Mth 100, 101, 102, 103, 105, 108, 109. Students should check with advisers for approved combinations of mathematics courses.

Major Fields Offered (Leaflets containing complete course descriptions are available.)

The following table lists major fields offered to students of the Portland State Extension Center, and the state institutions offering the remaining years leading to a degree:

Field	Number of years work offered at Portland State Extension Center	State System institution offering remaining years leading to a degree
Preagriculture	1	State College
Prearchitecture and Allied Arts	1	University
Biology-Botany	2	State College-University
Business Administration	2	University
Business and Technology	2	State College
Secretarial Science	2	State College
Chemistry	2	State College-University
Elementary Education	3	All Colleges of Education
Secondary Education	3	University-State College
English	2	University
History	2	University
Industrial Arts Education	2	State College
Industrial Arts	2	State College
Chemical Engineering	1	State College
Civil Engineering	2	State College
Electrical Engineering	2	State College
Industrial Engineering	2	State College
Mechanical Engineering	2	State College
Preforestry	1	State College
Prelaw	2	University
Liberal Arts	2	University
Mathematics	2	State College-University
Prejournalism	2	University
Premedical	3	University-State College
Predental	2	University-Dental School
Music	2	University
Prenursing	2*	Medical School
Prepharmacy	2	State College
Psychology	2	University
Prephysical Education (men and women)	2	University-State College
Physics	2	State College-University
Political Science	2	University
Sociology	2	University
Speech	2	University
Zoology	2	State College-University

* Five quarters.

Elementary Education (Cooperative Elementary Teacher-Education Degree Program)

Portland State Extension Center has entered into a cooperative arrangement with the Oregon Colleges of Education to provide preparation for elementary teaching under an emergency plan. Under this plan, students qualifying for a Junior Certificate, or with equivalent preparation, in their first two years, may enroll in the specific junior-year curriculum for elementary teacher education in the Night Program of the Portland State Extension Center. Upon specific recommendation of the Dean of the General Extension Division, this will be followed by a fourth year of concentrated professional preparation at one of the colleges of education. The student may return to Portland for the third term of the senior year doing 10 term hours of student teaching and 6 term hours of course work, directed by the college of education. Upon completion of all requirements, the student will be awarded the degree of Bachelor of Science in Elementary Education by the college of education attended.

This cooperative elementary-education degree program is intended to provide opportunity during the emergency for students already enrolled in the Portland State Extension Center to prepare for elementary teaching. Center students may transfer to any Oregon college of education at the end of their freshman or sophomore year without loss of time or credit. The State Board of Higher Education maintains a full four-year program for professional preparation of elementary teachers in each of the three colleges of education (Monmouth, La Grande, and Ashland), and high school seniors who have decided to prepare for elementary teaching are normally advised to enroll as freshmen at one of these colleges.

Description of Courses

The descriptions which accompany the following courses are designed to show the purpose and scope of the course. Students should note that they cannot register in certain courses until a more basic course has been completed. This more basic course or prerequisite is usually included with the description of the more advanced course.

An explanation of the course numbering system has been given on page 26. The hours indicated following the course title represent the term hours of credit which the course affords.

The courses offered by the Center are approved by the State Board of Higher Education for one or more of the institutions of the state system.

The letter (S) before the course number indicates that it is an Oregon State College course; (U), a University of Oregon course; (C) a college of education course; (E), a General Extension Division course. The statement "Terminal Credit" indicates a course may not carry transfer credit toward a bachelor's degree.

The Portland State Extension Center reserves the right to cancel or discontinue any listed course for lack of sufficient enrollment or for other reasons.

Anthropology

(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.

Art and Architecture

(C) A 211. **Art Structure I.** 3 hours.

The elements of design, color, and representation as they are related to the needs of the student. Creative work is stressed, the student receiving actual experience in different media.

(C) A 212. **Art Structure II.** 2 hours.

Principles of design, structural and decorative; application through various media; foundation material for design in school work. Prerequisite: A 211.

(C) A 217. **Lettering.** 1 hour.

Lettering, including a study of historic styles such as Roman, Gothic, Old English, as well as the modern decorative, manuscript, and poster types.

(C) A 311. **Art Structure III.** 3 hours.

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 relative to individual needs at various age levels from primary through the junior high school. Prerequisite: A 211, 212.

- (S) AA 160, 161. **Color and Composition.** 3 hours each term.

Studio classes in the everyday use of the principles of composing or creating with lines, colors, and textures. The course fulfills the art requirements of the School of Home Economics.

- (U) AA 195. **Basic Design.** 2 hours any term.

No-grade course. Through individual projects in a series of studio assignments, the student achieves an understanding of design in the basic visual arts, and a familiarity with all the professional fields of the school. Correlated with INTRODUCTION TO THE VISUAL ARTS (AA 201, 202, 203).

- (U) AA 201, 202, 203. **Introduction to the Visual Arts.** 3 hours each term.

Designed to develop insight into the actual work of art, and breadth in the understanding of diverse works of art. Introduction to the principal visual arts as related to daily living; sociological and geographical factors in relation to the visual arts. Required for all professional majors; open to nonmajors.

- (U) AA 211, 212, 213. **Graphics.** 3 hours each term.

Fall: Problems in mechanical and freehand perspective, orthographic projection, shades and shadows, as applied to graphic presentation of architectural design. Winter: media of graphic presentation. Spring: methods and techniques of design presentation.

- (S) AA 223. **Elements of Interiors.** 2 hours.

Introduction to scope, aim, and technique of interior design intended to give understanding of professional field. All work done in drafting room. Open to non-major students with consent of instructor.

- (U) AA 290. **Lower-Division Painting.** 3 hours any term.

Instruction in the use of oil color, water color, and other media. Registration permitted any term, but it is desirable that the work be started in the fall. 6 hours required for upper-division standing.

- (U) AA 291. **Lower-Division Drawing.** 3 hours any term.

Training in observation and selection of significant elements. Registration permitted any term, but it is desirable that the work be started in the fall. 6 hours required for upper-division standing.

- (U) AA 293. **Elementary Sculpture.** 2 to 4 hours any term.

Introduction to materials. Elementary considerations of form; technical and compositional exercises in clay and plaster. Sections for pre dental students and other nonmajors.

- (S) AA 295. **Display Design.** 2 or 3 hours each term, two terms.

Practical design experience in commercial art lettering, layouts, packaging, and display advertising. Offered for Pharmacy, Agriculture, and Business and Technology students.

- (U) AA 298. **Sketching.** 1 hour any term.

No-grade course. Sketching from costumed models, to develop ability to observe clearly and record accurately. Offered especially for nonmajor students who have had no previous training in sketching or drawing.

Bacteriology

- (S) Bac 200. **Bacteriology Laboratory.** 2 hours spring.

May be taken only with Bac 230. 2 two-hour laboratory periods.

(S) *Bac 204, 205, 206. **General Bacteriology.** 3 hours each term.

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. Bac 206: Fundamental factors in growth and death of microorganisms; systematic identification of microorganisms and a study of their metabolisms. Prerequisite: one year of chemistry. Two lectures; 2 two-hour laboratory periods.

(S) Bac 230. **Principles of Bacteriology.** 3 hours spring.

Fundamentals of bacteriology with application to agriculture, industry, sanitation, disease. Prerequisite: one year of chemistry.

Biology

(See BOTANY and ZOOLOGY)

Botany(S) Bot 201, 202. **General Botany.** 3 hours each term.

How plants get their food, grow, differentiate, and reproduce. 3 two-hour conference periods.

(S) Bot 203. **Field Botany.** 3 hours spring.

Introductory taxonomy and ecology of native flowering plants. One lecture; 1 recitation; 2 two-hour laboratory periods.

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

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

(S) BA 113. **Survey of Modern Industry.** 3 hours spring.

Representative industries within United States covering development, structure, competitive conditions, basic processes, and technology. Orientation to help the student choose minor in technology.

(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.

(U) BA 221. **Elements of Organization and Production.** 4 hours any term.

Principles of management as applied to commercial and industrial concerns.

(U) BA 222. **Elements of Finance.** 4 hours any term.

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

(U) BA 223. **Elements of Marketing.** 4 hours any term.

Methods, policies, and problems. Private and cooperative channels, auctions, ex-

* Students may receive credit only for Bac 230 with Bac 200; or for Bac 204.

changes, middlemen; demand creation, assembly, standardization, packaging, financing, risk taking, distribution. Required of business administration majors.

Terminal Business

(C) Mer 209. **Merchandise-Apprenticeship.** 3 to 6 hours.

Actual selling experience, under appropriate supervision with directed corollary readings. Conducted through the cooperation of local merchants. Terminal credit.

(C) Mer 238. **Salesmanship.** 3 hours winter.

Salesmanship as a factor in distribution and service; analysis of the customer and his wants; methods of obtaining and holding customers; wholesale and retail sales processes, services, and principles of selling. Terminal credit.

(C) SS 256. **Business Law.** 3 hours spring.

Application of fundamental legal principles to typical business situations illustrated by selected cases; formation, interpretation, discharge of contracts; law of agency, negotiable instruments, consideration, delivery, rights, liabilities of parties, real property mortgages; landlord, tenant, mechanics' lien law; personal property, sales, bailments, chattel mortgages. Terminal credit.

Chemistry

(S) Ch 104, 105, 106. **General Chemistry.** 4 hours each term.

Required for nursing-education and medical-technician students. 1 lecture; 2 recitations; 1 three-hour laboratory period.

(S) Ch 201, 202, 203. **General Chemistry.** 3 hours each term.

Course content particularly adapted for students in engineering. One lecture; 1 recitation; 1 three-hour laboratory period.

(S) Ch 204, 205. **General Chemistry.** 5 hours each term.

The basic principles of general chemistry for students majoring in chemistry, chemical engineering, or premedics, and for others requiring extensive knowledge of the subject. 2 lectures; 1 recitation; 2 three-hour laboratory periods. Students registered for 4 credits take but one laboratory period.

(S) Ch 206. **Qualitative Analysis.** 5 hours spring.

Chemistry of selected metallic elements and semi-micro qualitative analysis. A sequence with Ch 204 and 205, or with Ch 101, 102, 103. 2 lectures; 1 recitation; 2 three-hour laboratory periods.

(S) Ch 226, 227, 228. **Organic Chemistry.** 5 hours each term.

An intensive study of the carbon compounds of the aliphatic and aromatic series. Prerequisite: Ch 206. 2 lectures; 1 recitation; 2 three-hour laboratory periods.

(S) Ch 232, 233. **Quantitative Analysis.** 5 hours fall and winter.

Fundamental principles and laboratory practice. Prerequisite: Ch 206. 2 lectures; 3 three-hour laboratory periods.

(S) Ch 234. **Quantitative Analysis.** 5 hours spring.

Principles of gravimetric analysis, volumetric analysis, and H-ion concentration. Designed for pharmacy and premedical students and medical technicians. Prerequisite: Ch 103. For 5 hours credit: 2 lectures; 3 three-hour laboratory periods.

- (S) Ch 241. **Chemical Theory.** 4 hours spring.

Theory and calculations in inorganic chemistry as a foundation for industrial chemistry. Prerequisite: Ch 206. 3 lectures; 1 two-hour computation period.

Clothing, Textiles, and Related Arts

(See HOME ECONOMICS)

Drama

(See SPEECH)

Economics

- (U) Ec 201, 202, 203. **Principles of Economics.** 3 hours each term.

Principles that underlie production, exchange, and distribution, etc. Prerequisite: sophomore standing.

- (S) Ec 212. **Outlines of Economics.** 3 hours.

A rapid survey of the principles of economics and economic institutions. Restricted to science and upper-division professional-school students.

- (S) Ec 215. **Economic Development of the United States.** 3 hours.

Origin and development of economic institutions including industry, agriculture, commerce, transportation, labor, and finance. Analyzes the economic progress of the United States.

Education

- (S) *Ed 101. **Methods of Study.** 3 hours.

Specific methods of study as applied to various subject-matter fields; the general principles of note-taking; study schedule; fixing study habits; reading technique; evaluation of the various broad fields of human learning. Laboratory work to be arranged.

- (C) Ed 312. **Educational Psychology.** 3 hours.

Latest contributions to educational psychology from experimental education and psychology, with special attention to the psychology of learning. Emphasis is placed on the results of scientific research and experimentation. Directing activities of children or youth. Prerequisite: Psy 201.

- (C) Ed 344, 345, 346. **Physical Education in the Elementary Grades.** 3 hours fall.

Theory and practice in rhythm; singing games, group and folk dancing. Second quarter emphasis is on stunts, games, self-testing activities, tumbling, and materials. Third quarter is devoted to planning and evaluating program with reference to basic principles of physical education and state testing program.

- (C) Ed 351. **Health Education.** 2 hours.

Teaching health education with emphasis on the health knowledge, health attitudes, and health habits of school children, and the development of a health-service

*This is a service course, not a professional course, and will not count toward fulfillment of requirements for certification or for a major in education.

program. Special study of the state health education program. Prerequisite: Sc 101, 102, 103; H 150; or equivalent.

(C) Ed 354. Introduction to Education. 3 hours.

Introduction to the field of education, including an historical survey of the American public-school system; the importance of public education to the life of the republic; the relation of the school to other social agencies; the relationship of education to other professions; the opportunities for service in the principal fields of educational work; current issues in American education; and the desirability of having a working philosophy of education. Observation in schools.

(C) Ed 358. Primary Education. 4 hours.

Principles and procedures of curriculum for primary grades; the young child studied in relation to home, primary school, and other agencies in the community. Designed to acquaint students with the modern teaching procedures and materials, and to provide opportunity for application of sound psychological principles to the guidance of children's learning. Class discussion, observations in the public schools, and organization of teaching materials. Prerequisite: Ed 354, Psy 201.

(C) Ed 359. Intermediate and Upper-Grade Education. 4 hours.

Principles and procedures of curriculum for intermediate and upper grades. Designed to acquaint the student with modern teaching procedures and materials and to provide opportunity for application of sound psychological principles to the guidance of children's learning. Class discussion, observation in the public schools and organization of teaching materials. Prerequisite: Ed 354, Psy 201.

Engineering

(S) GE 101, 102, 103. Engineering Problems. 2 hours each term.

Lectures and elementary problems dealing with the general fields of civil, electrical, industrial, and mechanical engineering to train the student in engineering habits of work. One lecture; 2 two-hour computation periods.

(S) GE 121, 122. Engineering Drawing. 3 hours each term.

Fundamentals of graphic composition with particular emphasis on reading and interpretation of line drawings, charts, and diagrams. Two-term course for students in business and technology. 1 lecture; 3 two-hour periods.

(S) GE 123. Descriptive Geometry. 3 hours.

Theory and problems on the projection of points, lines, surfaces, and solids; applications of graphical solution of engineering problems. Prerequisite: GE 121, 122. 1 lecture; 3 two-hour periods.

Chemical Engineering

(S) ChE 211. Chemical Technology. 2 hours.

Fundamentals of chemical engineering; graphical analysis; instrumentation; control of process variables; applications in the solution of typical problems. Two lectures; one recitation.

(S) ChE 212. Industrial Stoichiometry. 2 hours winter.

Quantitative interpretation and application of physical and chemical data to various industrial chemical processes. Two lectures; one recitation.

(S) ChE 213. **Industrial-Chemical Calculations.** 2 hours spring.

Application of physical and chemical principles to industrial problems; introduction to chemical engineering thermodynamics. Two lectures; 1 recitation period.

Civil Engineering

(S) CE 201, 202, 203. **Introduction to Civil Engineering.** 2 hours each term.

Fundamentals of graphic analysis, descriptive geometry, structural and topographic drafting, including field curves, in relation to the practice of structural, hydraulic, highway, and sanitary engineering. 2 three-hour laboratory periods.

(S) CE 212. **Mechanics (Statics).** 3 hours.

Forces and force systems with reference to rigid bodies; applied mechanics. Prerequisite: differential calculus. One recitation; 2 two-hour computation periods.

(S) CE 213. **Mechanics (Dynamics).** 3 hours.

Continuation of CE 212. Principles and problems in kinetics; force as a factor causing motion. Prerequisite: CE 212. One recitation; 2 two-hour computation periods.

(S) CE 221. **Plane Surveying.** 3 hours.

Theory and use of engineer's transit, tape, and level; evaluation of effect of errors on observation; application of surveying methods to problems in construction and area surveys. Prerequisite: GE 111; Mth 101. 1 recitation; 2 three-hour periods field work.

(S) CE 222. **Plane Surveying.** 3 hours.

Surveying problems relating to construction and land surveying; special computation problems in map projections; control surveys; and earthwork; tests and adjustment of engineer's transit and level. Prerequisite: CE 221. 1 recitation; 2 three-hour field and computation periods.

(S) CE 223. **Plane Surveying.** 3 hours.

Control surveys; computation of state-wide coordinates; topographic mapping; theory and use of stadia and plane table; field astronomy. Prerequisite: CE 222. 1 recitation; 1 six-hour field period.

(S) CE 226. **Plane Surveying.** 3 hours.

Theory and use of engineer's transit, tape, and level; application of surveying methods to problems in construction and area survey. Prerequisite: Mth 101. 1 recitation; 2 three-hour periods field work.

Electrical Engineering

(S) EE 201, 202, 203. **Introduction to Electrical Engineering.** 4 hours each term.

Fundamentals of magnetic and electric fields and associated circuits, and electric circuit theory. Prerequisite: Mth 103, Ph 103, GE 103, or instructor's approval. 2 lectures; 2 two-hour recitations; 1 three-hour laboratory period.

Industrial Engineering

(S) *IE III. **Pattern Making.** 3 hours.

Fundamentals of pattern making; relation of pattern making to drafting, design, foundry and machine-shop operation. 1 lecture; 6 hours of laboratory.

* In addition to the regularly scheduled meetings in this course, the student attends three general lectures to be arranged during the term.

(S) *IE 240. **Foundry Practices.** 2 hours.

Introductory course covering constitution, properties, and design limitations of castings in iron and steel; foundry methods. 1 lecture; 1 four-hour laboratory period.

(S) IE 250. **Forging and Welding.** 2 hours.

Forging, forming, and heat-treating of steel, followed by gas and electric-arc welding; flame-cutting, brazing, and resistance-welding operations. Attention is given throughout the course to practical applications of these processes in engineering construction and industrial fabrication. 1 lecture; 1 four-hour laboratory period.

(S) IE 260, 261. **Machine Tool Practices.** 2 hours each term.

Basic and advanced operations of machine tools on prescribed projects illustrative of industrial operations. Correlation of engineering and manufacturing problems and processes. 1 lecture; 1 four-hour laboratory period.

(S) IE 290. **Introduction of Scientific Management.** 3 hours.

History, development, and scope of scientific management. Laws of scientific management as applied to manufacturing.

Mechanical Engineering

(S) ME 212. **Mechanics (Statics).** 3 hours.

Forces and force systems with reference to the equilibrium of rigid bodies; numerous problems. Prerequisite: differential calculus. 1 recitation; 2 two-hour laboratory periods.

(S) ME 213. **Mechanics (Dynamics).** 3 hours.

Continuation of ME 212. Principles and problems of kinetics; numerous problems. Prerequisite: ME 212. 1 recitation; 2 two-hour laboratory periods.

(S) ME 216. **Materials of Engineering.** 3 hours.

Production, mechanical properties, and their control as applied to materials of machine and building construction. Corrosion resistance and other service requirements. Service course for nonmajors.

(S) ME 217, 218, 219. **Mechanics of Materials.** 3 hours each term.

Forces and force systems with reference to the equilibrium of rigid bodies. Principles of mechanics applied to the elements of engineering structures to determine their strength and fitness. Study of stresses in curved beams, impact stresses, combined stresses, eccentric loading, and theories of failure. Numerous problems. Prerequisite: differential calculus.

(S) ME 241. **Introduction to Aeronautics.** 2 hours.

Brief descriptive survey of principles of flight, engine and propeller operations; navigation and meteorology; governmental aeronautical aids and regulations. Prerequisite: consent of instructor.

Terminal Engineering

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

Basic concepts and principles of physical science; elementary technical problems;

*In addition to the regularly scheduled meetings in this course, the student attends three general lectures to be arranged during the term.

algebraic composition; training in use of the slide rule. 1 lecture; 2 three-hour computation periods. Terminal credit.

(S) GE 201, 202, 203. **General Engineering.** 4 hours each term.

Courses designed for technical terminal students and nonprofessional degree students. Application of the basic principles of science to general problems of engineering. 1 lecture; 1 recitation; 2 three-hour computation periods. Terminal credit.

(S) GE 211. **Structural Drafting.** 3 hours.

Timber, steel, and concrete details; conventions and marking systems; connections and truss details; plotting and earthwork cross sections and profiles. 3 three-hour laboratory periods. Terminal credit.

(S) GE 212. **Elementary Machine Drafting.** 3 hours.

Simple mechanisms and advanced working drawings; shop practices and requirements; reproduction methods. 3 three-hour laboratory periods. Terminal credit.

(C) RE 150. **Radio Code.** 1 hour.

Prepares student to take the government code test for amateur or commercial operator's license. Instruction up to 6 W.P.M.

(C) RE 151. **Radio License.** 1 hour.

Rules, regulations, and radio operations to prepare student to pass Federal Communication Commission test for amateur or commercial operator's license when accompanied by RE 130, 131, 132, RE 140, and RE 230, 231.

English

Literature

(U) *Eng 101, 102, 103. **Survey of English Literature.** 3 hours each term.

From Beowulf to the present. Fall: Beowulf to Milton; winter: Milton to Byron spring: Byron to the present.

(U) *Eng 104, 105, 106. **Appreciation of Literature.** 3 hours each term.

The aim is to stimulate enjoyment and understanding of literature through study of outstanding works in prose and poetry, selected from all periods, including the twentieth century; includes works in English and translations from other literatures.

(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.

(U) Eng 201, 202, 203. **Shakespeare.** 3 hours each term.

Study of the important plays—comedies, histories, and tragedies. Required for majors.

(U) Eng 261, 262, 263. **Survey of American Literature.** 3 hours each term.

American literature from its beginning to the present day. Two consecutive terms required to satisfy the high-school teaching-field requirement in English.

(E) Wr 111a, 112a, 113a. **English Composition.** 3 hours each term.

The fundamentals of English composition; frequent written themes. Special at-

* A student may register for only one of the two sequences: Eng 101, 102, 103 or Eng 104, 105, 106.

tention to correctness in fundamentals and to the organization of papers. This is a special course designed to develop further the writing skills for which the student already has some facility.

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

This course is designed to include not only the regular functions of the freshman composition course, but also some special functions which will help the student who has not mastered all of the basic writing skills. Insofar as possible, emphasis will be placed upon the needs of the individual student. 5 lectures.

(E) Wr 114, 115, 116. **Vocabulary Building.** 2 hours each term.

Designed to expand the student's vocabulary and otherwise improve the use of English. A study of words: new words, the right word; diction; pronunciation; an effective program for acquiring and using the forms of writing. This is a no-grade course. Terminal credit.

(U) Wr 211, 212, 213. **Advanced Writing.** 3 hours each term.

Practice in a variety of literary forms, including fiction. Prerequisite: Wr 111, 112 (with A or B grade), and Wr 113 (with B), or consent of instructor.

(U) Wr 214. **Business English.** 3 hours.

Study of modern practices in business correspondence, primarily for students in the business fields. Analysis and writing of the principal types of correspondence. Prerequisite: Wr 111, 112, 113.

(S) Wr 227. **Technical Report Writing.** 3 hours any term.

Application of principles to specific needs and interests of students having papers in progress. Prerequisite: Wr 113 or equivalent.

(S) Eng 211. **Vocabulary Building.** 3 hours.

Through analysis of words and meanings in context, seeks to increase vocabulary, reading comprehension and effective use of language.

Library

(U) Lib 117. **Use of the Library.** 1 hour.

Training in the use of the card catalog, periodical indices, and reference books; experience in the preparation of bibliographies. As far as possible, problems are coordinated with the individual student's study program.

Foods and Nutrition

(See HOME ECONOMICS)

Foreign Languages

German

(U) GL 1, 2, 3. **First-Year German.** 4 hours each term.

Provides a thorough grammatical foundation and an elementary reading knowledge of German, as well as an understanding of the spoken language.

(U) GL 101, 102, 103. **Second-Year German.** 4 hours each term.

Review of grammar and composition. Reading of modern German authors. Conversation.

Spanish

- (U) RL 11, 12, 13. **First-Year Spanish.** 4 hours each term.

An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition.

Forestry

- (S) F 111. **General Forestry.** 3 hours, fall.

Preliminary survey of the entire field of forestry including the development of forestry in the United States and the origin and distribution of our public domain. May be elected by non-majors.

- (S) FP 210. **Forest Products.** 3 hours, winter.

Adaptation to commercial uses; chief wood-using industries; relative amounts of commercial species used annually; substitutes; by-products.

Geography

- (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. 3 lectures; 1 two-hour laboratory period.

- (S) Geog 105, 106, 107. **Introductory Geography.** 3 hours each term.

World survey of geographic fundamentals emphasizing human adjustments to climatic conditions and physical environment; geographical regions in relation to man's productive occupations; geography of international trade.

- (U) Geog 201, 202, 203. **Regional Economic Geography.** 3 hours each term.

A study of the major types of production and their geographic background.

- (S) Geog 205. **Regional Geography of North America.** 3 hours.

Regional analysis of North America, including Canada and Alaska but not Mexico. Prerequisite: Geog 105 or permission of instructor.

- (S) Geog 211. **Regional Geography of Pacific Northwest.** 3 hours.

Analysis of human and economic geography of Pacific Northwest with special attention to Oregon. Includes field study. Prerequisite: Geog 105 or consent of instructor.

Geology

- (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.

- (S) G 204, 205, 206. **Geology Laboratory.** 1 hour each term.

Laboratory and field work to accompany G 201, 202, 203 for all students desiring a more intimate knowledge of geology. One two-hour laboratory period.

Health Education

(See PHYSICAL EDUCATION)

History

- (U) Hst 101, 102, 103. **History of Western Civilization.** 3 hours each term.
Origins and development of Western civilization from ancient times to the present.
- (U) Hst 201, 202, 203. **History of the United States.** 3 hours each term.
From colonial times to the present day.
- (S) Hst 204. **History of the Far East.** 3 hours.
Aim is to introduce students to the history, civilization, and political, economic, cultural, and social problems of China, Japan, India, and the Pacific Islands. Applies toward group requirement in social science.
- (U) Hst 207, 208, 209. **English History.** 3 hours each term.
A general survey, covering political, economic, social, intellectual, and religious developments.
- (S) Hst 209. **The World Since 1914.** 3 hours.
Origins, backgrounds, and courses of the first and second World Wars; problems of American war mobilization; war aims and postwar planning. With Hst 207, 208 satisfies group requirement in social science. Prerequisite: Hst 101, 102, 103 or special consent of instructor.
- (S) Hst 350. **Modern Russia.** 3 hours.
Aims to enrich student's knowledge of political, diplomatic, economic, and social development of Russia from the revolution of 1905 to the present. Prerequisite: Hst 101, 102, 103 or special consent of instructor.
- (S) Hst 377. **History of Oregon.** 3 hours.
Aims to present a fairly detailed survey of the political, economic, social, and cultural development of Oregon and the Pacific Northwest from the beginning to the present.
- (C) Hst 378, 379. **American 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. Hst 378 covers the period through the Civil War; Hst 379 since the Civil War.

Home Economics

Clothing, Textiles, and Related Arts

- (S) CT 211. **Clothing (Selection).** 3 hours.
Artistic and economic factors in the selection of adult clothing; wardrobe needs of the college girl. Prerequisite: AA 160. 2 lectures; 1 two-hour laboratory period.
- (S) CT 231. **Home Furnishing.** 3 hours.
Elective for students other than home economics majors. Aims to develop appreciation of beauty and suitability in home furnishings; materials and processes involved. 3 two-hour laboratory periods.
- (S) CT 250. **Textiles.** 3 hours.
Properties, uses, selection and care of textile fibers and fabrics. No prerequisite, but chemistry is desirable. 2 lectures; 1 two-hour laboratory period.

Family Life and Home Administration

(S) FL 223. Family Living. 2 hours.

Brief consideration of mate selection; husband-wife, parent-child, child-child relationship. Does not meet requirement for majors in home economics. Open to men and women.

(S) HAd 239. Home Management. 3 hours.

Problems in management of home; management of money, time, and energy in relation to family living. For students not in home-economics degree curricula.

Foods and Nutrition

(S) FN 225. Nutrition. 3 hours any term.

Nutritive value of foods from the standpoint of newer scientific investigations; selection of an optimal diet for health; present-day problems in nutrition; recent trends in American dietary habits.

(U) HEc 225. Principles of Dietetics. 2 hours.

The nutritive value of food; the selection of a proper diet for health, based on dietetic principles. Open to men and women. Required of physical education majors.

Industrial Arts

(See ENGINEERING)

Journalism

(E) J 191. Journalism Practice. 1 hour each term.

6 hours maximum credit. Restricted to students working on school publications.

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

An introduction to the newspaper and other media of mass communication, including news, editorial, pictorial, business, and advertising aspects.

Law Enforcement (Police Training)

(E) *LE 011. Police and Society. 2 hours.

A study of the purpose, function, and brief history of the agencies dealing with the administration of justice. Survey of requirements for entering police service. Origin and evolution of law enforcement agencies. Discussion of crime; the criminal, traffic, and vice as social and police problems; function of the courts; prosecuting and defense attorneys; correctional and penal institutions; probation and parole; American and foreign police systems.

(E) *LE 012. Organization and Administration of Law Enforcement Agencies. 2 hours.

Application of the principles of organization and administration to law enforcement agencies of federal, state, and municipal levels. Continuation of discussion of the principles of organization and administration as pertaining to service.

(E) *LE 013. Elements of Law for Police Officers. 2 hours.

Overview of salient elements of law which have special application to police work,

* Terminal Professional courses which may not be counted toward a college degree or transferred to another institution.

including criminal law, law of arrests, court procedures, automobile law, laws of search, seizure and evidence, and elements of crime.

(E) *LE 021. **Police Techniques I. (Evidence)**, 2 hours.

Study and laboratory work in the collection and preservation of evidence, statements and confessions, observation and description, notes and sketches, surveillance and interrogation.

* Terminal Professional courses which may not be counted toward a college degree or transferred to another institution.

(E) *LE 022. **Police Technique II. (Identification)**, 2 hours.

Identification, including toxicology, photography, handwriting, *moulage*, scientific lie detecting, and ballistics.

(E) *LE 023. **Police Techniques III. (Traffic Control and field work)**, 2 hours.

Problems of traffic control, traffic laws, radio communication, and field work in police training.

Library

(See ENGLISH)

Mathematics

(S) Mth 5. **Elementary Mathematics**. 1 hour.

A short course in numerical calculations, elements of algebra, and trigonometry, designed to aid students in elementary science courses. 3 recitations.

(S) Mth 10. **Elementary Algebra**. 4 hours.

For students entering with less than one year of elementary algebra. Open to others only on recommendation of the department. May not be taken for credit after completion of higher courses in college mathematics.

(S) Mth 20. **Elementary Geometry**. 4 hours.

For students entering with less than one year of high-school geometry.

(S) Mth 100. **Intermediate Algebra**. 4 hours.

Prerequisite: one year of high-school algebra, or Mth 10.

(S) Mth 101, 102, 103. **Elementary Analysis**. 4 hours each term.

Algebra, trigonometry, graphs, elements of calculus, and analytic geometry. Prerequisite: Mth 100 or equivalent, and Mth 20 or equivalent.

(S) Mth 104s, 105s, 106s. **Mathematics of Business and Industry**. 3 hours each term.

Algebra and mathematics of finance. A maximum of 4 term hours credit will be given for Mth 10 and Mth 104, and for Mth 100 and Mth 105.

(U) Mth 105. **College Algebra**. 4 hours.

Prerequisite: one and one-half years of high-school algebra or Mth 100.

(U) Mth 108. **Mathematics of Finance**. 4 hours.

Simple and compound interest and discount, annuities, periodic-payment plans, bonds, depreciation, and other topics related to business. Prerequisite: Mth 101 (S) or Mth 105 (U).

* Terminal Professional courses which may not be counted toward a college degree or transferred to another institution.

(S) Mth 109. Elements of Statistics. 4 hours.

Elementary statistics in the application to problems in psychology, social science, business, and education.

(U) Mth 200. Analytical Trigonometry and Geometry. 4 hours

Intended to bridge the gap between Mth 101, 102, 103 and Mth 201, 202, 203.

Prerequisite: Mth 101, 102, 103 or consent of instructor.

(S) Mth 201, 202, 203. Differential and Integral Calculus. 4 hours each term.

First term: basic differentiation; introductory work in integration with applications to mechanics. Second term: some further applications of differentiation; methods of integration, application. Third term: series, Taylor's theorem; partial differentiation; multiple integrals with applications. Prerequisite: Elementary Analysis or equivalent.

(C) Mth 211. Foundations of Mathematics. 3 hours.

Treatment of historical aspects of mathematics, social uses and relationships, mathematical principles and relationships, grade placement of content materials, appraisal of texts, workbooks and tests, development of problem-solving ability, and proficiency in the fundamental skills of mathematical processes.

(S) Mth 230. Spherical Trigonometry and Rudiments of Navigation. 2 hours.

The solution of the basic spherical triangles with applications to problems in navigation. Prerequisite: Mth 101 or equivalent.

Medical and Dental Assistantship**(C) MD 290. Office Apprenticeship. 3 hours.**

Practical work experience under appropriate supervision, with directed corollary readings. Conducted through cooperation of local physicians and dentists. Terminal credit.

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

Music fundamentals, scales, key relationships, intervals, triads; harmonizations of various triad and seventh chords in all positions; nonchord tones, free harmonization and simple modulation; keyboard work, chord recognition, sight-singing, and analysis correlated with written work. 5 periods.

(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: consent of instructor.

(U) Mus 195. Band. 1 hour each term.

Six hours maximum credit.

(U) Mus 196. Orchestra. 1 hour each term.

Six hours maximum credit.

(U) Mus 197. Choral Union. 1 hour each term.

Six hours maximum credit.

(U) Mus 201, 202, 203. Introduction to Music and its Literature (Appreciation of Music.) 3 hours each term.

A non-technical study of the development of music, stressing the elements of mu-

sical understanding; study of representative compositions, with emphasis on their musical and historical significance.

- (U) Mus 211, 212, 213. **Music Theory II.** 3 hours each term.

For description, see Mus 111, 112, 113. Prerequisite: Mus 111, 112, 113.

- (C) Mus 281. **Music I. Introductory Course in Music.** 3 hours.

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.

- (C) Mus 282. **Music II. Music Reading and Ear Training.** 3 hours.

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.

- (C) Mus 283. **Music III. Music Education.** 3 hours.

The close relationship between music education and other areas in education; planning a musical environment; directing and experiences of children in music; studying principles and procedures in teaching music skills.

- (U) Mus 290. **Applied Music.** 1 hour any term.

Sophomore year. Continuation of Mus 190, which is prerequisite.

Nursing Education

- (U) Nur 230. **Home Nursing.** 2 hours.

Home care of the sick; demonstration of ordinary nursing techniques under home conditions; improvising equipment. Designed primarily for students who are not preparing for professional nursing. An elective for both men and women. 1 lecture; 3 hours laboratory.

Nutrition

(See HOME ECONOMICS)

Philosophy

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

An introduction to the study of argument, reasoning, proof. How to recognize, analyze, criticize, and construct the main types.

- (U) Phl 202. **Problems of Philosophy.** 3 hours.

An introduction to the study of some of the persistent problems of philosophy.

- (U) Phl 203. **Elementary Ethics.** 3 hours.

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

Physical Education

Service Courses

- (U) HE 150. **Health Education (Men).** 1 hour any term.

Study of personal health problems which confront the college student; the basic scientific principles of healthful living. Required of all freshman men. 1 period.

- (U) PE 180. **Physical Education (Women)**. 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required during the freshman and sophomore years for all women. 3 activity hours per week.

- (U) PE 190. **Physical Education (Men)**. 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required of all men during the freshman and sophomore years. 3 activity hours per week.

- (U) HE 250. **Personal Health**. 2 or 3 hours.

Exercise, nutrition, infection and resistance, special senses, mouth hygiene, sex hygiene, rest and sleep, fresh air and sunshine. Satisfies the health-education requirement.

- (U) HE 251. **Community Health**. 3 hours.

Water supply, food and milk sanitation, ventilation, sewage disposal, lighting, housing, health agencies, health laws, insect and rodent control.

- (U) HE 252. **First Aid**. 3 hours.

American Red Cross first aid; lectures, demonstrations, and practice leading to standard and advanced first-aid certificates.

Professional Courses

- (U) PE 121. **Introduction to Physical Education**. 2 hours fall.

Basic mechanics of movement, form, and skills in activities. Basic principles of physiology of exercise.

- (U) PE 124, 125, 126. **Physical-Education Activities (Women)**. 1 or 2 hours each term.

For majors. Instruction and practice. Fall: Fundamentals I, swimming I; Winter: Fundamentals II, tumbling; Spring: tennis, elementary dance.

- (U) PE 127. **Fundamentals of Body Movement and Conditioning (Men)**. 2 hours.

For majors.

- (U) PE 128. **Elementary Tumbling and Apparatus (Men)**. 2 hours.

For majors.

- (U) PE 129. **Track and Field (Men)**. 2 hours.

For majors. Basic principles of conditioning; skills of track and field events.

- (U) PE 224, 225, 226. **Physical-Education Activities (Women)**. 1 or 2 hours each term.

For majors. Instruction and practice. Fall: soccer and speedball, hockey; Winter: folk and square dancing; Spring: swimming II, track and field.

- (U) PE 227. **Elementary Aquatics (Men)**. 2 hours.

For majors. Elementary swimming, diving.

- (U) PE 228. **Folk and Square Dancing (Men)**. 2 hours.

For majors. Rhythmic fundamentals and dances.

- (U) PE 229. **Wrestling (Men)**. 2 hours.

For majors.

Physics

- (S) Ph 101, 102, 103. **Engineering Physics.** 3 hours each term.

Studies in general physics adapted to students in engineering. Prerequisite: mathematics required for engineering majors. 1 lecture; 2 recitations; 1 three-hour laboratory period.

- (S) Ph 201, 202, 203. **General Physics.** 4 hours each term.

Mechanics, sound, heat, light, electricity, and magnetism. Prerequisite: Mth 102 or consent of instructor. 3 lectures; 1 three-hour laboratory period.

- (S) Ph 204, 205, 206. **Astronomy.** 3 hours each term.

Descriptive treatment. Coordinate system; astronomical instruments; the solar system; star types and groupings. 1 recitation; 2 two-hour laboratory periods.

- (S) Ph 211, 212. **Abridged General Physics.** 3 hours, winter and spring.

Mechanics, heat, light, electricity. 1 lecture; 2 recitations; 2 one-hour laboratory periods.

- (S) Ph 311, 312, 313. **Introduction to Modern Physics.** 3 hours each term.

Kinetic theory, the electron, radioactivity; photoelectricity, thermionic emission, X-rays, electronic devices, gaseous conduction, cosmic rays, nuclear physics. Prerequisite: Ph 103 or Ph 203. Two lectures; 1 two-hour laboratory period.

- (S) Ph 334. **Fundamentals of Radio.** 3 hours.

Underlying principles; vacuum tubes; circuits; antennas and wave propagation. Prerequisite: Ph 103 or Ph 203. Two lectures; 1 two-hour laboratory period.

- (S) Ph 361. **Photography.** 3 hours any term.

The hand camera, developing, printing, toning, enlarging. Prerequisite: college chemistry or physics or previous photographic experience, with consent of instructor. 1 lecture; 2 two-hour laboratory periods.

- (S) Ph 362. **Commercial Photography I.** 3 hours any term.

View camera; photographic solutions; copying, photography of small objects, lighting, photo-sketching, lantern slides. Prerequisite: Ph 361. One lecture; 2 two-hour laboratory periods.

- (S) Ph 363. **Commercial Photography II.** 3 hours spring.

Continuation of Ph 362. Composition; exteriors, interiors, flashlights, telephoto lenses, infrared. One lecture; 2 two-hour laboratory periods.

Police Training

(See LAW ENFORCEMENT)

Political Science

- (U) PS 201, 202, 203. **American Governments.** 3 hours each term.

Fall and Winter: national government. Spring: state and local governments.

- (U) PS 204. **European Governments.** 3 hours.

A survey of the constitutions and governmental operations of selected democratic and nondemocratic governments in Europe, including the governments of Britain, France, and the Soviet Union.

(U) PS 205. **International Relations.** 3 hours.

Analysis of the nature of relations among states, with particular reference to contemporary international issues; a study of motivating factors, including nationalism, imperialism, economic rivalries, quest for security, etc.; study of the problem of national sovereignty and its relation to international cooperation.

(S) PS 231, 232, 233. **Current Affairs.** 2 hours each term.

Designed to acquaint student with current political, economic, and sociological problems and developments that arise on both domestic and international levels, and to encourage objective analysis and discussion of these events in order to mold responsible citizens. Open to freshmen and sophomores only.

Psychology

(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.

(U) Psy 204. **Psychology of Adjustment.** 3 hours.

The nature and origins of differences in personality; means of making desired changes. Prerequisite: Psy 201, 202.

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

A survey of the ways in which psychology is applied in advertising, salesmanship, market research, measurement of opinion, occupational placement, development of personal efficiency. Prerequisite: Psy 201, 202.

(U) Psy 208, 209, 210. **General Psychology Laboratory.** 1 hour each term.

Introduction to experimental methods. Laboratory work coordinated with Psy 201, 202, Psy 204, Psy 205. 1 laboratory period each week.

(C) Psy 261. **Child Growth and Development.** 3 hours.

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.

Public Speaking

(See SPEECH)

Religion

(U) R 111, 112, 113. **Introduction to Religious Thought.** 3 hours each term.

Introduction to religious problems and to methods of studying these problems. Religion in different cultures. Consideration of some of the common questions men have asked about God, the soul, immortality, good and evil, the religious fellowship and society, the nature and destiny of man. Criteria for evaluating religion.

Rhetoric

(See ENGLISH)

Science

(See also BOTANY, CHEMISTRY, PHYSICS, ZOOLOGY)

- (S) GS 101, 102, 103. **Biological Science Survey.** 4 hours each term.

The fundamental principles of biology as they apply to both plants and animals. For general students and those majoring in fields other than biology. 3 lectures; 1 two-hour laboratory period.

- (S) GS 104, 105, 106. **Physical Science Survey.** 4 hours each term.

Fundamental principles of physics, chemistry, astronomy, and geology; development and application of the scientific method. For students majoring in fields other than the physical sciences who wish a broad view of the principles of several physical sciences. 3 lectures; 1 two-hour laboratory-recitation period.

Secretarial Science

- (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 shorthand are not permitted to take course SS 111 for credit. 4 recitations.

- (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, manifold, speed practice. Students with at least one year of typing are not permitted to take SS 121 for credit. 5 periods laboratory work.

- (S) SS 131. **Business Forms and Reports.** 2 hours, spring.

Planning and typing business papers, manuscripts, statistical tables, and reports. Speed typing is emphasized.

- (S) SS 211, 212, 213. **Applied Stenography.** 3 hours each term.

Advanced principles and phrases; dictation and transcripts covering vocabularies of representative businesses; legal forms; newspapers and magazine articles. Prerequisite: SS 113, 123 or equivalent. 3 recitations; 3 one-hour laboratory periods.

- (C) SS 241, 242. **Office Practice.** 3 hours, fall and winter.

Actual office experience on the job in dictation, transcription, typing, and filing, making routine and statistical reports, use of office equipment and machines, and practice in meeting the public. Terminal credit.

- (C) SS 243. **Office Practice (Machines).** 3 hours.

Use and operation of various office equipment and machines. Terminal credit.

Social Science

(See also ANTHROPOLOGY, ECONOMICS, EDUCATION, HISTORY, POLITICAL SCIENCE, PSYCHOLOGY, and SOCIOLOGY)

- (C) SSc 101, 102, 103. **Background of Social Science.** 3 hours each term.

A factual and interpretive study of man, his culture, and his institutions. A brief survey of contemporary political, economic, and social situations and problems, with their relationship to historical periods. A year sequence furnishing the back-

ground for all social sciences and laying a basis for understanding contemporary socio-economic problems. Challenges the analytical and critical faculties of students in preparation for more detailed studies, such as courses in economics, political science, and sociology.

(C) SSc 111. **Orientation.** 1 hour.

A course in effective adjustments to college and social needs. Effective means and methods of study; use of the library; time budgeting; importance and spacing of reviews; the amount and type of recreation suitable; social adjustments for happy and effective living; means and methods of modifying personality deficiencies.

Sociology

(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. Prerequisites: sophomore standing or consent of instructor.

(S) Soc 212. **General Sociology.** 3 hours.

An abridgement of Soc 201, 202. Not open to students who have taken Soc 201, 202, 203.

Speech

(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, effective delivery, audience motivation, and language of the speech.

(U) Sp 114. **Voice and Diction.** 3 hours, fall or spring.

Study and practice of the principles of tone production. Phonetic analysis of English sounds as a basis for correct and effortless diction. Intended for students who have slight deviations in voice and diction.

(U) Sp 211. **Interpretation.** 2 hours, winter.

The application of the principles of oral reading to literature.

(U) Sp 221. **Public Discussion.** 2 hours fall or winter.

Preparation of speeches for delivery before public audiences.

(S) Sp 232. **Group Discussion.** 3 hours, spring.

Techniques and practice in preparing, leading, and participating in the many types of discussion used by extension workers, club leaders, teachers, and all business, technical, and professional people, such as conferences, socialized recitations, panels, lecture forums, and symposiums. Prerequisite: Sp 111.

(U) Sp 251. **Elements of Acting.** 2 hours, fall or spring.

Elementary principles of acting technique.

(S) Sp 251. **Workshop Theater.** 1 to 3 hours any term.

For participation in campus plays, credit totaling not more than 6 hours is given on recommendation of the instructor. Prerequisite: consent of the instructor.

(U) Sp 261, 262, 263. **Fundamentals of Stagecraft.** 3 hours each term.

Planning and construction of stage settings and properties; principles of lighting; mechanics of the physical stage. Practical experience in connection with the production of plays.

- (U) Sp 264, 265, 266. **Appreciation of Drama.** 2 hours each term.

Study of design, acting, playwriting, criticism. Appreciation of drama, motion picture, and radio plays as art forms.

Writing

(See ENGLISH)

Zoology

- (S) Z 201, 202, 203. **General Zoology.** 3 hours each term.

For premedical, predental, prenursing, pharmacy, physical education, psychology, fish and game management students, and others. Two lectures; 1 recitation; 1 two-hour laboratory period.

- (S) Z 324, 325. **Comparative Vertebrate Anatomy.** 4 hours each term.

Gross dissection and comparison of organ systems in representative vertebrate forms. Prerequisite: Z 201, 202, 203. 2 lectures; 2 three-hour laboratory periods.

- (S) Z 326. **Comparative Vertebrate Embryology.** 4 hours.

Comparative study of the development of several representative vertebrate forms. Prerequisite: Z 203. 2 lectures; 2 three-hour laboratory periods.

- (S) Z 331, 332. **Physiology.** 3 hours each term.

Especially for students majoring in home economics, pharmacy, and zoology or minoring in physical education. Prerequisite: Z 203, or consent of instructor. 2 lectures; 1 two-hour laboratory period.

- (S) Z 333. **Physiology.** 3 hours.

Continuation of Z 331, 332.

Night Program

See pages 29 to 59 for Day Program

See pages 20 to 27 for General Information

Night Program

(All students are expected to be familiar with the regulations and requirements given in the section of this Bulletin entitled "General Information." They apply to both day program and night program students.)

The night program of the Portland State Extension Center is a well-balanced schedule of related undergraduate and graduate courses in almost all of the major fields of study. Every effort is made to serve the widest general vocational and avocational interests, and the greatest needs of students in meeting lower-division, upper-division, and graduate requirements toward academic degrees.

A survey of the some 250 courses offered during the 1952-53 night program indicates the extent to which these purposes may be fulfilled. Of the more than 625 term hours available in course offerings during the year 30 per cent was in lower-division work, 50 per cent in upper-division work, and 28 per cent in graduate work.

For example, too, the number of term hours available in each of such fields as art, accounting and business administration, engineering, English, geography and geology, history, psychology, the natural sciences, sociology, and education ranged from at least 12 to about 200.

The foregoing figures may become more expressive when related to the fact that a student's major usually requires a concentration of about 36 term hours in the chosen field, whereas the requirement for most degrees totals 186 term hours.

Academic Regulations

ADMISSION REQUIREMENTS. The purpose of the night program of the center is to serve all who wish to take courses and who are able to profit by them. There are no formal requirements for admission except for those working toward degrees. A considerable number of persons register as audit students, taking courses for their cultural and practical value, but not for credit. In any course, however, the instructor may require evidence that prerequisite work has been done.

REGISTRATION. Night program students may register during the day in accordance with the schedule designated on the academic calendar, and until 8:30 at night during the first week of each term.

Attention of students is directed to the fact that late registration fees are assessed after the first week of each term.

Permission of the instructor is required for admission to classes for credit after the first meeting of the class. *Admission for credit is not allowed after the third meeting.*

CREDIT HOUR LOAD. In the night program a student may not normally take more than 6 term hours if employed full-time. High school graduates, veterans, and others who are able to give adequate time to study and who are unable for financial or other reasons to enroll in regular work on one of the campuses, may petition to register for more than 6 term hours. In no case may graduate students who are employed full-time register for more than 6 term hours of graduate credit.

If a student takes two or more courses which duplicate each other, even in part, he will receive credit for only one of them.

CAMPUS RESIDENCE REQUIREMENT. The minimum campus residence requirement for a baccalaureate degree is 12 term hours. In fields and professional schools where course offerings are available, a student may complete all except 12 term hours of the total program through the Portland State Extension Center.

Graduate Degree Program

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

Under favorable circumstances, a graduate student may complete in the night program all work required for the Master of Education degree except twelve hours, which must be completed in residence either at the University of Oregon or at Oregon State College. For the Master of Science in Education from one of the Colleges of Education, all work except twelve term hours may be done through the Portland State Extension Center or other departments of the General Extension Division.

Under favorable circumstances all of the work for the *Master of Arts in General Studies* from Oregon State College may be completed in Portland. This degree is normally suited to those individuals whose interests and broad academic background make them eligible for graduate work spread over several major departments. A thesis is required.

Fifteen term hours of work toward the *Master of Arts* (departmental), Master of Science, or Master of Science in General Studies degree may be completed in Portland with the approval of the candidate's major department.

The *Master of Education* (M.Ed.) is regarded as a professional teaching degree and not necessarily as a research degree. No thesis or field study is required, but a thesis or field study is expected of majors in school administration. A well integrated program is planned for the individual candidate in order to improve his educational service as a teacher, supervisor, or administrator. Each program embraces: (1) a common core of required courses; (2) an area of concentration which provides a complex

of courses organized to meet the special interests and needs of the student. Both the qualifying and final examinations are written. For the *Master of Science in Education* from one of the colleges of education, a core of eighteen professional hours and nine hours of general courses is included in the requirements. The foregoing patterns are based on the assumption that teaching is a developing profession which requires a properly organized series of carefully planned courses, together with some opportunity for elective work.

ADMISSION TO GRADUATE SCHOOLS. A graduate of any accredited college or university is admitted to the Graduate School by the Registrar of the institution from which he wishes to receive a master's degree upon filing an application for admission and submitting an official transcript of his undergraduate credits. Such admission, however, does not entitle a student to become a candidate for a degree.

Candidacy is conditioned by a qualifying examination which each student working toward a master's degree is required to take. Arrangements for the examination should be made through the graduate adviser before completion of one-third of the work for the degree. University of Oregon honor graduates who have taken the bachelor's degree in the field of the graduate major, and Oregon State College graduates who have maintained an undergraduate grade-point average of 3.25, may be exempt from the qualifying examination.

Transferred credit, of which not more than 15 graduate term hours can be transferred from another institution, is provisional until the qualifying examination is taken and the student is admitted to candidacy. Transferred credit does not reduce residence requirements of individual institutions within the State System.

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

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

GRADE REQUIREMENTS. An accumulation of 9 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; a student must present 45 term hours of graduate work with grades of *A* or *B*.

At Oregon State College and at Oregon Colleges of Education a grade-point average of 3.00 (a *B* average) is required of all graduate degrees. Grades below *C* are not accepted for graduate credit at the State College and Oregon Colleges of Education.

FOREIGN LANGUAGE. A reading knowledge of one foreign language, preferably French or German, must be demonstrated by examination or by

the undergraduate record for the Master of Arts (departmental) degree. There is no foreign language requirement for the Master of Science degree, for the Master of Education degrees, or for the Master of Arts in General Studies degree.

THESIS AND FINAL EXAMINATION. Thesis 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 given on the campus of the institution granting the degree.

Graduate students should see an adviser of the Portland State Extension Center before registering for any graduate program.

Teacher Programs

CERTIFICATION PROGRAMS. The Portland State Extension Center is authorized to offer all the work required for both elementary and secondary certificates in Oregon, with the exception of supervised teaching. However, the Portland Summer Session offers supervised teaching at the secondary level and makes some provision to assist experienced elementary teachers in meeting the supervised-teaching requirement. No more than three term hours of credit in supervised teaching is offered in a given summer session.

ELEMENTARY TEACHER EDUCATION DEGREE PROGRAM (See page 37.)

Cooperative Programs

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.

Museum Art School. A number of courses are offered by the Portland State 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 for the fall term opens September 14, 1953, at the Museum Art School, S. W. Park at Madison Street.

In-Service Training. An extensive list of courses is offered as part of the in-service training program of the Portland Public School System. These classes are open to any qualified student. The courses carry college or university credit, and the fees are the same as for the regular night courses.

In-service and other courses scheduled for afternoon outside the Port-

land State Extension Center building are limited to 2 term hours of credit. Those scheduled for evenings may be offered for 3 term hours of credit.

Participation with Industry, Labor, Trades, and Professions. Portland State 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 upon the cost to the General Extension Division.

Description of Courses

Night Program

The descriptions which accompany the following courses are designed to show their purpose and scope. Degree students should note that they cannot register in certain courses until a more basic course 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 has been given on Page 26. The hour indicated following the course title represents the term hours of credit which may be earned in the course.

For the convenience of the students using this bulletin the letters (*U*), (*S*), (*C*), and (*E*) appear in the left margin before course descriptions. The letter (*U*) refers to the University of Oregon, (*S*) to Oregon State College, (*C*) to the Colleges of Education, and (*E*) to the General Extension Division. These indicate that the accompanying course appears in the catalog of the institution designated and is a regular offering of that institution.

CLASS SCHEDULE. Classes meet one evening a week unless otherwise noted in the course descriptions.

Two-hour classes meet from 7:15 to 9:00 p.m.

Three-hour classes meet from 6:45 to 9:25 p.m.

Four-hour classes usually meet two nights a week from 7:15 to 9:00 p.m. Some deviations are necessary and will appear in the course descriptions.

The Portland State 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.

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. Wednesday.

Upper-Division Courses

- (U) Anth 317, 318, 319. **The American Indian.** 3 hours each term.

Indian life in North, Central, and South America before white contact; contemporary Indian life where groups still survive. Prerequisite: upper-division standing. Tuesday.

Art

Associate Professor: Reynolds

Instructors: Givler, Izquierdo, Kennedy, Littman, Lynch, McLarty, Russo, Voorhies, Wiley.

The following classes are given in cooperation with the Museum Art School. The registration fee is \$12.00 per term for each class, plus a special course fee as indicated in some of the courses. (However, in no case will students registering for work in the Museum Art School and the day or night program at Portland State Extension Center building pay more than \$52.00). 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. **Introduction to the Visual Arts.** 1 hour each term.

For beginners and laymen. A survey of many aspects of the arts, with discussion and practice in drawing, composition, painting, and sculpture, for the purpose of increasing the student's powers of observation and expression and leading to a better understanding of the arts. 7:30-9:30. Section I: Tuesday. Section II: Thursday. Course fee, \$4.00 in addition to registration fee. Izquierdo, McLarty.

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

Creative approach to ceramics, including knowledge of various clays, building forms by hand, and experience with glazes. Section I: Tuesday. Section II: Wednesday. Section III: Thursday. Course fee, \$4.00 in addition to registration fee. 7:30-9:30. Kennedy.

- (U) *AA 290. **Lower-Division 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: Voorhies, Tuesday. Section II: Russo, Wednesday. Section III: Wiley, Thursday.

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

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

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

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

* 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.

Upper-Division Courses

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

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

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

A study of design principles and technical methods involved in silk screen. Wednesday, 7:30-9:30. Course fee, \$2.00 in addition to registration fee. Givler.

- A 0313. **Commercial Design.** No credit, any term.

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

Art Education

Assistant Professor: Wasson

Instructors: Foster, Halvorsen, Schukart

Lower-Division Courses

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

Aim is to stimulate appreciation and criticism of domestic architecture. Small-house planning and drawing with particular reference to the needs of individual students. Friday. Wasson.

- (C) A 211. **Art Structure I.** 3 hours fall.

The elements of design, color, and representation as they are related to the needs of the student. Creative work is stressed, the student receiving actual experience in different media. Monday. Schukart.

- (C) A 212. **Art Structure II: Design.** 2 hours winter.

Principles of design, structural and decorative; application through various media; foundation material for design in school work. Prerequisite: A 211. Monday, 6:45-9:25. Schukart.

- (C) A 217. **Lettering.** 1 hour winter.

Lettering, including a study of historic styles such as Roman, Gothic, Old English, as well as the modern decorative, manuscript, and poster types. Wednesday, 7:15-9:00. Foster.

- (C) A 218. **Crafts.** 2 hours winter.

Application of original designs to glass etching, metal etching, foil metal tapping, plaster carving, leather, stencil, plastic, and wood. Thursday, 6:45-9:25. Schukart.

Upper-Division Courses

- (C) A 311. **Art Structure III.** 3 hours spring.

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 relative to individual needs at various age levels from primary through the junior high school. Prerequisite: A 211, 212. Monday. Schukart.

- (U) AA 414p, 415p, 416p. **Art Education in the Senior High School.** (G) 3 hours each term.

Study of contemporary influences in art education; method, subject matter, mate-

rial, etc., in relation to teaching problems, lesson plans, units, and courses of study. Thursday. Halvorsen.

Bacteriology

(See SCIENCE)

Botany

(See SCIENCE)

Business Administration

Professors: Ballaine, Janney, Lomax

Associate Professors: Collier, Ziebarth

Assistant Professors: Deutschmann, Ford, Johnson, Richins, Trueblood

Instructors: Chappel, Conkling, Eklem, Pattullo, Skelton, Stout, Wallsinger, Webster.

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.

Fall: BA 111, Skelton, Monday.
BA 111, Skelton, Tuesday.
BA 113, Parker, Thursday.

Winter: BA 111, Parker, Thursday.
BA 112, Skelton, Monday.
BA 112, Skelton, Tuesday.

Spring: BA 112, Parker, Thursday.
BA 113, Skelton, Monday.
BA 113, Skelton, Tuesday.

Upper-Division Courses

(U) BA 419, 420. **C. P. A. Problems.** 2 hours each term fall and winter.

Intensive study of problems and questions asked by examining boards and in the American Institute of Accountants examinations. Training in correct analysis and correct form and in speed in solving problems. Monday.

(U) BA 479, 480. **Income-Tax Procedure.** 3 hours each term fall and winter.

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

(U) BA 483, 484, 485. **Accounting Theory and Practice.** 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. Monday. Janney.

- (U) BA 489, 490, 491. **Advanced Accounting Theory and Practice.** 3 hours each term.

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

General Business Courses

Lower-Division Courses

- (E) BA 011. **Personal Financial Security.** No credit. Winter term.

Methods of achieving individual financial security through systematic savings and the investment of those savings in a manner tailored to the individual. Discussion of life insurance and home ownership. Wednesday, 7:15-9:00. Webster.

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

Principles of management as applied to commercial and industrial concerns. Friday. Ziebarth.

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

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

- (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. Thursday. Ballaine.

Upper-Division Courses

- (U) BA 312. **Principles of Cost Accounting.** 3 hours winter.

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

- (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. Wednesday.

- (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. Monday. Wallsinger.

- (U) BA 339. **Principles of Advertising.** 3 hours fall.

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

- (U) BA 407, 507. **Seminar in Business Problems: Credit Unions.** (G) 3 hours spring.

An introductory course in credit union management and operation technique. Includes 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. Wednesday. Stout.

- (U) BA 407, 507. **Seminar: Practices and Procedures Before the I.C.C.** 3 hours spring.

Saturday, 9:00-11:40 a.m. Zeibarth.

- (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 nonmajors with consent of the instructor. Tuesday. Chappel.

- (U) BA 412. **Personnel Management.** (G) 3 hours fall.

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

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

Systematic wage and salary program as an essential part of an efficient personnel program. Basic methods for determining individual wage rates and wage structures; job evaluation. Prerequisite: BA 412. Wednesday. Ford.

- (U) BA 414. **Problems in Personnel Management.** (G) 3 hours spring.

Specific personnel problems at various organization levels. Each student proposes solutions, and group solutions are attempted through class discussion, in the light of various viewpoints and sound personnel principles. Prerequisite: BA 411, BA 412, and consent of instructor. Tuesday. Ford.

- (U) BA 416, 417, 418. **Business Law.** 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. Section I: Tuesday. Section II: Wednesday. Collier.

- (U) BA 425. **Real-Estate Fundamentals.** (G) 3 hours winter.

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 nonmajors. Friday. Johnson.

- (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. Friday. Ziebarth.

- (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; section, training, and management of salesmen. Prerequisite: BA 223, or consent of instructor. Friday. 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, turnovers, pricing, expense classification and distribution. Prerequisite: BA 223 or consent of instructor. Friday. Richins.

(U) BA 437. Credits and Collections. (G) 3 hours fall.

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. Thursday. 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. Friday. Richins.

(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 upper-division majors who have had or are taking Business law. Prerequisite: BA 222, 223; Ec 201, 202, 203. Friday. Ziebarth.

(U) BA 456. Property Insurance. 3 hours winter.

Nature of coverage, types of underwriters, types of contracts; analysis of the policy contract, special endorsements and factors determining rates and adjustment of losses. Prerequisite: consent of instructor. Wednesday. Trueblood.

(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. Monday. Eklem.

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

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

(U) BA 475, 476, 477. Foreign-Trade Marketing. (G) 3 hours each term.

Fall: export and import department organization; foreign-trade advertising; communications; channels of distribution. Winter: standard sales-contract terms; foreign credits and collections; arbitration. Spring: special laws of foreign trade; market surveys. Prerequisite: BA 471, 472, 473 or consent of instructor. Wednesday. Lomax.

(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. Tuesday. Ford.

See also:

Ec 201, 202, 203. **Principles of Economics** (under Economics).

Wr 214. **Business English** (under English—Writing).

Sp 225, 226. **Public Speaking for Business and Professional Men and Women** (under Speech).

Secretarial Science

Professor: YERIAN

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 shorthand are not permitted to take course SS 111 for credit. Wednesday.

- (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, manifold, speed practice. Students with at least one year of typing are not permitted to take SS 121 for credit. 6:45-9:25.

Fall: SS 121 Tuesday.

Winter: SS 122 Tuesday.

Spring: SS 123 Tuesday.
SS 121 Thursday.

Upper-Division Course

- (S) SS 421, 422. **Office Organization and Management**. 3 hours fall and winter.

Scientific office management, organization, arrangement, operation, employment and training of office workers, efficiency problems, and business ethics. Prerequisite: SS 313 or consent of instructor. (Especially adapted to certified professional secretaries' requirements.) Thursday. Yerian, Staff.

Chemistry

(See SCIENCE)

Drama

(See SPEECH)

Economics

Assistant Professors: Campbell, Halley, Koplin, Wattles

Instructor: Robbins

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. Wednesday.

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. Wednesday. Halley.

- (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 325. Wednesday. Halley.

- (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 325. Wednesday. Halley.

- (U) Ec 417. **Contemporary Economic Problems.** (g) 3 hours spring.

A study of contemporary economic conditions and problems; analysis of policies and practices affecting such problems. Prerequisite: Ec 201, 202, 203. Thursday. Campbell.

- (U) Ec 434. **Government Control of Private Business.** (g) 3 hours spring.

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. Monday. Koplin.

- (U) Ec 450, 451. **Comparative Economic Systems.** (g) 3 hours fall.

An analytical comparison of capitalism and other economic systems. Prerequisite: Ec 201, 202, 203. Thursday. Robbins.

- (U) Ec 451, 452. **Comparative Economic Systems.** (g) 3 hours winter.

An analytical comparison of capitalism and other economic systems. Prerequisite: Ec 201, 202, 203. Thursday. Wattles.

Education

Professors: Epler, Jacobson, Killgallon, Spalding, Stevens, Zeran

Associate Professors: Bernard, Lillywhite, Morris, Phelps, Sandin

Assistant Professors: Cheney, Ferrier, Hudson, Hummel, Leavitt, Rummel, Tucker, Willard

Instructors: Albertson, LaRiviere, Morrison, Schaper, Schukart

Note: Ed 311, 312, 313, 316 and 415 plus Hst 377 constitute the basic secondary certification courses. Courses indicated by the asterisk will meet specific requirements for *regular* elementary certification.

Upper-Division Courses

- (S) (U) Ed 311. **Secondary Education in American Life.** 3 hours winter.

Development and present status of secondary education as an American institution; social and psychological bases; objectives, functions, programs, curricula, and courses; personnel work and other responsibilities of teachers. Thursday. Stevens.

- (C) (S) (U) Ed 312. **Educational Psychology.** 3 hours fall or spring.

Physical, mental, emotional, and social development as bases for learning; educa-

tionally significant individual and group differences; learning and factors affecting learning. Thursday. Spring. Bernard.

(S) (U) Ed 313. **Principles of Teaching.** 3 hours spring.

Study of the actual classroom teaching process, including classroom organization and management, planning teaching units, evaluating pupil learning, and similar problems. Prerequisite: Ed 312. Thursday. Stevens.

(U) Ed 316. **Oregon School Law and System of Education.** 2 hours any term.

Analysis of the Oregon school system and of the laws on which the system is based. Problems of Oregon schools, plans proposed for their solution, and trends in educational development in the state. Fall: Friday. Winter: Friday. Spring: Wednesday.

* (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; H 150, or consent of instructor. Monday.

(C) Ed 354. **Introduction to Education.** 3 hours winter.

Introduction to the field of education, including a historical survey of the American public-school system; the importance of public education to the life of the republic; the relation of the school to other social agencies; the relationship of education to other professions; the opportunities for service in the principal fields of educational work; current issues in American education; and the desirability of having a working philosophy of education. Thursday. Stevens.

* (C) Ed 358. **Primary Education.** 4 hours fall.

Principles and procedures of curriculum for primary grades; the young child studied in relation to home, primary school, and other agencies in the community. Designed to acquaint students with modern teaching procedures and materials, and to provide opportunity for application of sound psychological principles to guidance of children's learning. Class discussion, observations in the public schools, and organization of teaching materials. Prerequisite: Ed 354, Psy 201, or consent of instructor. Friday. Leavitt. 6:45-9:25. One additional class hour to be arranged.

* (C) Ed 359. **Intermediate and Upper-Grade Education.** 4 hours winter.

Principles and procedures of curriculum for intermediate and upper-grades. Designed to acquaint student with modern teaching procedures and materials and to provide opportunity for application of sound psychological principles to guidance of children's learning. Class discussion, observation in the public schools, and organization of teaching materials. Prerequisite: Ed 354, Psy 201, or consent of instructor. Friday. Leavitt. 6:45-9:25. One additional class hour to be arranged.

* (C) Ed 380. **Elementary-School Library.** 2 hours winter.

Organization, administration, and development of the elementary-school library, including instruction in simple methods of handling essential technical, mechanical, and business processes; the care and repair of books; evaluation of reference materials useful for both teacher and children; stimulation of wider use of books for study and recreation; utilization of the library resources of Oregon, and service of the school library to the community. Thursday. LaRiviere.

(S) (U) Ed 405. **Reading and Conference.** Terms and hours to be arranged.

* These courses will meet specific requirements for regular elementary certification.

- (C) Ed 406. **Problems in Elementary Education (Story Telling).** 2 hours spring.

Materials, techniques, and principles underlying the presentation of poetry and stories for very young children, with actual practice under supervision in their presentation. Thursday. LaRiviere.

- (U) Ed 407. **Education Seminar: Foundations of Education.** 3 hours winter.

A comprehensive survey of some of the major historical, philosophical, psychological, and social factors underlying present-day American education. Problems of educational and personal adjustment in modern society. Wednesday. Stevens and staff.

- (U) Ed 407, 507. **Seminar: Play Therapy.** 3 hours spring.

Reduction of physical and mental tension through play activity.

- (C) Ed 408. **Methods and Research Materials: Art.** (G) 3 hours fall.

Problems and methods in selecting and organizing materials for teaching in art. 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. Friday. Schukart.

- (C) Ed 408. **Methods and Research Materials: Physical and Health Education.** (G) 3 hours spring.

Problems and methods in selecting and organizing materials for teaching in physical and health education. 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. Tuesday. Hudson.

- (C) Ed 408. **Methods and Research Materials: Language Arts.** (G) 3 hours winter.

Problems and methods in selecting and organizing materials for teaching in language arts. 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. Friday. Phelps.

- (C) Ed 408. **Methods and Research Materials: Music.** (G) 3 hours spring.

Problems and methods in selecting and organizing materials for teaching music. 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. Thursday. Albertson.

- (C) Ed 408. **Methods and Research Material: Reading.** (G) 3 hours fall.

Problems and methods in selecting and organizing materials for teaching in reading. 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. Wednesday. Willard.

- (C) Ed 408. **Methods and Research Materials: Social Science.** (G) 3 hours winter.

Problems and methods in selecting and organizing materials for teaching social science. 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. Wednesday. Schaper.

- * (C) Ed 418. **Elementary Tests and Measurements.** (G) 3 hours fall or spring.
Presentation of standardized tests in the various subjects taught in the elementary schools and in group intelligence tests, the uses and limitations of such tests, the general principles of classroom test making, and practice in administering, scoring, and interpreting various tests given in the elementary school. Fall: Tuesday. Spring: Friday. Stevens.
- (S) (U) 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. Tuesday. Stevens.
- * (U) (S) (C) Ed 435. **Audio-Visual Aids.** (G) 3 hours winter.
The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc., are utilized. Sources of materials and equipment; administration of audio-visual program. Friday.
- (S) (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. Monday. Stevens.
- (E) Ed 450. **Radio Education (Television).** (G) 3 hours spring.
A study of the use of radio and television as instruments of education. The course includes discussion, demonstrations, reports, and lectures on radio's and television's place in education; philosophy of radio and television education; planning and supervising the school use of radio and television; organizing the school and community for selection and use of programs; evaluating instruction by radio and television; objectives in developing discrimination; possibilities of future developments. Thursday. Morris and Tucker.
- (S) (U) Ed 460. **Psychology of Infancy and Childhood.** (G) 3 hours fall.
The facts and principles of child behavior and development from conception to adolescence. Prerequisite: general psychology or consent of instructor. Thursday. Bernard.
- (S) (U) Ed 461. **Psychology of Adolescence.** (G) 3 hours winter.
Processes through which the normal human being reaches maturity, acquires effective use of his bodily equipment and learning capacity, and makes satisfactory personal and social adjustments. Monday. Bernard.
- (U) Ed 462. **Psychology of Exceptional Children.** (G) 3 hours spring.
Survey of characteristics and problems of all types of exceptional children, with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Tuesday. Lillywhite.
- (U) Ed 463. **The Maladjusted Child.** (G) 3 hours winter.
The discovery and treatment of the emotionally and socially maladjusted child; the home, school, and community in relation to the child's mental health. Wednesday. Bernard.

* These courses will meet specific requirements for regular elementary certification.

- (U) Ed 464. **The Mentally Handicapped Child.** (G) 3 hours spring.

Identification and guidance of the mentally deficient, the slow learner, and the gifted. Wednesday. Morrison and Staff.

- (U) Ed 465. **Diagnostic and Remedial Techniques.** (G) 3 hours fall.

See Ed 468.

- * (C) Ed 467. **Applied Mental Hygiene.** 3 hours fall or 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. Fall: Monday. Spring: Friday. Bernard.

- (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. Thursday. Phelps.

- (C) Ed 471. **School Finance.** (G) 3 hours fall.

Emphasis on the major problems of financing education, including principles in budget making, problems of school revenues, tax sources, and the unit costs of education. Monday. Hummel.

- (C) Ed 472. **Principles and Practices in Curriculum Construction.** (G) 3 hours spring.

Implications of basic social, philosophical, and psychological factors for curriculum planning and organization at both the elementary and secondary level, including practical emphasis upon specific techniques in curriculum making for the teacher. Thursday. Spalding.

- (C) Ed 473. **Administration of the Elementary School.** (G) 3 hours fall.

Study of the principles and desirable practices in the administration of elementary schools, with special reference to organization for instruction, administering pupil personnel and special services, public relations, school buildings and equipment, guidance, and staff relations. Wednesday. Leavitt.

- (C) Ed 478. **Improvement of Instruction in Reading.** (G) 3 hours fall.

See Ed 537.

- (S) SEd 481. **Alcohol Studies in the School Curriculum.** (G) 3 hours winter.

Incorporation of scientific information about alcohol in school curriculum; physiological, psychological, sociological, and legal aspects of alcoholism. Prerequisite: 24 hours upper-division education. Thursday. Ferrier.

- (S) (C) 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. Tuesday. Zeran.

* These courses will meet specific requirements for regular elementary certification.

- (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. Tuesday. Cheney.
- (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. Tuesday.
- (S) Ed 490. **Educational Sociology.** (G) 3 hours.
Analysis of contributions of sociology to educational problems and practices. Prerequisite: Ed 311, 312, 313 and one year General Sociology. Epler.
- (C) Ed 492. **Recent Trends in Language Arts.** (G) 3 hours winter.
See Ed 536.

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, Stevens; Curriculum, Spalding; Educational Psychology, Bernard; History of Philosophy of Education, Stevens; School Administration, Spalding, Hummel, Phelps; Secondary Education, Spalding, Hummel.
- (U) Ed 501. **Educational Research (Field Study).** Terms and hours to be arranged.
Field study for graduate students who plan to take the Master of Education degree from the University of Oregon. Staff.
- (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.
- (U) Ed 507. **Education Seminar: Foundations of Education.** 3 hours winter.
A comprehensive survey of some of the major historical, philosophical, psychological and social factors underling present-day American education. Problems of educational and personal adjustment in modern society. Wednesday. Stevens and staff.
- (U) Ed 507. **Education Seminar: Special Education.** 3 hours spring.
An intensive study of resources, materials, and methods in special education in the public schools. Lectures, discussion, and special projects. Monday. Killgallon.
- (U) Ed 507. **Education Seminar: Problems of Public School Supervision.** 3 hours fall.
Saturday, 9:00-11:40 a.m. Spalding.
- (U) Ed 507. **Education Seminar: Unit Construction.** 3 hours winter.
Saturday, 9:00-11:40 a.m. Spalding.

- (U) Ed 507. **Education Seminar: Problems of Public School Administration.** 3 hours spring.

Saturday, 9:00-11:40 a.m. Spalding.

- (U) Ed 507. **Education Seminar: Teaching of High-School English.** 3 hours fall.

- (C) Ed 512. **Methods of Research and Writing.** 3 hours fall or spring.

Study and evaluation of the methods, techniques and tools of research. Critical analysis of sample research studies and development of criteria and methods for conducting research. Techniques of reading research and writing reports and articles for professional journals. Fall: Friday. Rummel. Spring: Monday. Bernard.

- (U) (S) Ed 512. **Research Procedures in Education.** 3 hours fall or spring.

Methods, techniques, and tools for doing research work; meaning of scientific method; ways of locating and formulating problems; techniques for solving problems; necessary statistical tools; collections and interpretation of data; preparation of research reports. Fall: Tuesday. Rummel. Spring: Monday. Bernard.

- (U) (S) Ed 522. **Secondary-School Curriculum.** 3 hours winter.

An advanced course for experienced teachers. The school in the community; guidance activities in the school; extraclass activities; the role of the school in contemporary society; the teacher in the local community. Monday. Jacobson.

- (U) Ed 523. **School Activities.** 3 hours spring.

Theories involved in extraclass activities; objectives, organization, and supervision; student participation in social control; major and minor activities; problems of coordination, finance, and teacher personnel. Wednesday.

- (U) Ed 535. **Social Studies in the Elementary School.** 3 hours winter.

Social-Education objectives; children's social problems; unit development; work-study skills; organization of the program, materials; research findings basic to the social education of children. For experienced teachers. Wednesday. Schaper.

- (U) Ed 536. **Language Arts in the Elementary School.** 3 hours winter.

Objectives, developmental needs, and research findings in teaching language arts; planning the elementary-school language-arts program; current issues in the teaching of such skills as spelling, writing, and speaking-listening; newer instructional materials; evaluative criteria and tests for determining development of children in the language arts. This course is essentially the same as Ed 492. Students may register for Ed 492 if they prefer. Friday. Phelps.

- (U) Ed 537. **Reading in the Elementary School.** 3 hours fall.

Nature of the reading process, objectives, organization of a desirable reading program; reading readiness, reading skills; procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. This course is essentially the same as Ed 478. Students may register for Ed 478 if they prefer. Wednesday. Willard.

- (U) (S) Ed 543. **History of American Education.** 3 hours spring.

Intellectual development of America with special reference to education. Prerequisite: graduate standing in education. Monday. Stevens.

- (U) (S) Ed 546. **Philosophy of Education.** 3 hours winter.

Study of the broad fundamental principles and problems of education as evaluated by the various schools of philosophical thought. Monday. Stevens.

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

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

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

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

- (U) Ed 565. **Curriculum Foundations.** 3 hours winter.

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

- (U) Ed 566. **Curriculum Construction.** 3 hours spring.

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

- (U) Ed 567. **Curriculum Materials.** 3 hours fall.

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. Thursday. Spalding.

- (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 nonprofessional problems of school administration. Wednesday. 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. Wednesday. Spalding.

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

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

(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. Monday. Hummel.

(S) (U) Ed 587. Adult Education. 3 hours fall.

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

In-Service Training Courses

Instructors: Bentall, DeBernardis, Dobson, Ernst, Halvorsen, Hamilton, Henriksen, Hicks, Hill, Hoell, Jenne, Langston, Logan, Stotler, Wilson

The following courses, arranged in cooperation with the Portland Public Schools, are given for in-service training of Portland teachers. They are also open to other qualified students. Unless otherwise indicated, all the classes are held Tuesday afternoon, from 4:30 to 6:15.

Lower-Division Courses

(C) A 218. Crafts. 2 hours spring.

Application of original designs to glass etching, metal etching, foil metal tapping, plaster carving, leather, stencil, plastics, and wood. Halvorsen.

(U) PE 283. Rhythms for Children. 2 hours winter or spring.

Programs of dance for kindergarten and primary school children. Locomotor skills, imitative movements, singing games, simple folk dances, dramatizations, and creative dance studies. Hill.

(S) Ph 161. Rudiments of Photography. 2 hours spring.

Planned for beginners in photography. The topics covered include cameras, printing, enlarging, developing, composition, materials, and lighting. Opportunities for field trips and print clinics will be provided. DeBernardis.

Upper-Division Courses

*** (U) Ed 316. Oregon School Law and System of Education. 2 hours winter or spring.**

Analysis of the Oregon School System and of the laws on which the system is based. Problems of Oregon schools, plans proposed for their solution, and trends in educational development in the state. Required for teacher's certificate in Oregon.

(C) Ed 351. Health Education. 2 hours winter.

Teaching of health education with emphasis on the health knowledge, health attitudes, and health habits of school children, and the development of a health service program. Special study of the state health education program. Logan.

(C) Ed 358a, Ed 358b. Primary Education. 2 hours each, fall. (Total of 4 hours required).

Principles and procedures of curriculum for primary grades; the young child studied in relation to home, primary school, and other agencies in the com-

* These courses will meet specific requirements for regular elementary certification.

munity. Designed to acquaint students with modern teaching procedures and materials, and to provide opportunity for application of sound psychological principles to guidance of children's learning. Class discussion, observations in the training schools, and organization of teaching materials. Prerequisite: Ed 354, Psy 201, or consent of instructor. Hamilton and staff.

- (C) Ed 359a, Ed 359b. **Intermediate and Upper-Grade Education.** 2 hours each, fall. (Total of 4 hours required).

Principles and procedures of curriculum for intermediate and upper-grades. Designed to acquaint students with modern teaching procedures and materials and to provide opportunity for application of sound psychological principles to guidance of children's learning. Class discussion, observation in the training schools, and organization of teaching materials. Prerequisite: Ed 354, Psy 201, or consent of instructor. Hamilton and staff.

- (C) Ed 408. **Methods and Research Materials: Arithmetic.** (G) 2 hours winter.

Problems and methods in selecting and organizing materials for teaching elementary school mathematics. 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. Hoel.

- (C) Ed 408. **Methods and Research Materials: Art (Primary Art Education).** (G) 2 hours winter.

Problems and methods in selecting and organizing materials for teaching art. 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. Halvorsen.

- (S) Ed 408. **Methods and Materials (Industrial Arts).** 2 hours winter.

Problems and methods in selecting and organizing materials for instruction; comparison and evaluation of methods, laboratory techniques, supplies, equipment; economy of time and materials. Henriksen.

- (C) Ed 408. **Methods and Research Materials: Music (Intermediate Music).** (G) 2 hours winter.

Problems and methods in selecting and organizing materials for teaching intermediate music. 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. Ernst.

- (C) Ed 408. **Methods and Research Materials: Music (Primary Music).** (G) 2 hours winter.

Problems and methods in selecting and organizing materials for teaching primary music. 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. Wilson.

- (C) Ed 408. **Methods and Research Materials: Physical Education.** (G) 2 hours winter or spring.

Problems and methods in selecting and organizing materials for teaching elementary school physical education. 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. Jenne.

- (U) Ed 424. **Measurement in Education.** (G) 2 hours 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.

(C) (U) Ed 435. **Audio-Visual Aids.** (G) 2 hours winter.

The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc., are utilized. Sources of materials and equipment; administration of audio-visual program. Limited to 20. DeBernardis.

(C) Ed 467. **Applied Mental Hygiene.** 2 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. Langston.

(C) Ed 468. **Diagnostic and Remedial Instruction in Reading.** (G) 2 hours winter.

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

(C) (S) Ed 485. **Principles and Practices of Guidance Services.** (G) 2 hours winter.

Overview of guidance and personal 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. Dobson.

(S) Ed 507. **Seminar: Science.** 2 hours winter and spring.

A problem in science will be selected by the group and the problem-solving approach used. Materials will be available and teachers can work on an aspect of the problem at their level of teaching. Stotler.

(U) (S) Ed 508. **Curriculum Workshop.** 2 hours fall.

This will be a city-wide workshop of elementary and high school teachers. Groups will be organized for each grade level in the elementary school and subject matter area for high school. Consultants will chair the elementary group sessions and supervisors will chair the high school groups. Leadership and consultant service will be provided from the total administrative-supervisory staff of the Portland Public Schools. Special problems will be selected by the groups. Hamilton and staff.

(C) H 358. **First Aid.** 2 hours fall or spring.

First aid for emergency treatment of injuries, with emphasis on the use of knowledge as applied in everyday life and in school situations. Red Cross certificates are given. Hicks.

* (U) Hst 377. **Oregon History.** 2 hours winter or spring.

Brief survey of the building of civilization in the Oregon Country. Required for teacher's certificate in Oregon.

(S) Psy 411. **Mental Hygiene.** (g) 2 hours spring.

Principles and application of mental hygiene to problems of the individual in home and school. Langston.

- (U) Psy 436. **Character and Personality.** (g) 2 hours winter.

Development, functioning, and measurement of personality in normal individuals; emphasis on the mode of operation of the social environment on personality. Langston.

Engineering

Instructor: EGBERT.

Lower-Division Courses

- (E) GE 011. **Graduate Engineers Review.** Non credit. Fall.

Designed to prepare civil, electrical and mechanical engineering graduates for examinations administered by the Board of Engineering Examiners of Oregon. 7:15-9:00.

- (S) GE 101, 102, 103. **Engineering Problems.** 2 hours each term.

Lectures and elementary problems dealing with the general fields of civil, electrical, industrial, and mechanical engineering to train the student in engineering habits of work. One lecture; two 2-hour computation periods. Tuesday and Thursday. 6:45-9:25.

- (S) GE 121, 122. **Engineering Drawing.** 3 hours each term fall and winter.

Fundamentals of graphic composition with particular emphasis on reading and interpretation of line drawings, charts and diagrams. Monday and Wednesday.

- (S) GE 123. **Descriptive Geometry.** 3 hours spring.

Theory and problems on the projection of points, lines, surfaces and solids; applications of graphical solution of engineering problems. Prerequisite: GE 111, 112. Monday.

Upper-Division and Graduate Courses

- (S) AE 465. **Building Cost Estimating.** (g) 3 hours winter.

Complete and approximate estimates, general and detailed consideration in establishing unit prices; quantity surveying; overhead costs and profit estimates; specification interpretations; estimates for separate contracts and sub-contracts. Wednesday. Egbert.

- (S) CE 351, 352. **Strength of Materials.** 3 hours each term fall and winter.

General principles of mechanics applied to the elements of engineering structures to determine their strength and fitness. Prerequisite: CE 212 or ME 212, Mth 203, or consent of instructor. Wednesday.

- (S) CE 405. **Reading and Conference (Steel Design).** 2 hours each term fall and winter. Tuesday.

- (S) EE 405, 505. **Reading and Conference.** Subjects and hours to be announced.

- (S) IE 405, 505. **Reading and Conference.** Subjects and hours to be announced.

- (S) ME 404, 405. **Reading and Conference.** Subjects and hours to be announced.

English

Professor: Powers

Associate Professors: Collier, Franchere, Henkle, Oliver

Assistant Professors: Boggs, Dahlstrom, Litchfield

Instructor: Scharbach

Literature

Lower-Division Courses

- (S) (U) (C) Eng 101, 102, 103. **Survey of English Literature.** 3 hours each term.
From Beowulf to the present. Fall: Beowulf to Milton; Winter: Milton to Byron; Spring: Byron to the present. Thursday. Dahlstrom.
- (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. Saturday, 9:00-11:40 a.m. Litchfield, Oliver.
- (C) Eng 120. **Essentials of Speech I.** 3 hours fall.
Course to give the student opportunity to develop poise and confidence in speech and to organize and present material effectively. Monday.
- (U) Eng 201, 202, 203: **Shakespeare.** 3 hours each term.
Study of the important plays, comedies, histories, and tragedies. Required for majors. Wednesday. Franchere.
- (U) Eng 261, 262, 263. **Survey of American Literature.** 3 hours each term.
American literature from its beginning to the present day. Two consecutive terms required to satisfy the high-school teaching field requirement. Monday. Oliver.

Upper-Division Courses

- (U) Eng 301. **Tragedy.** 3 hours fall.
A study of the nature of tragedy and of its expression in various literary forms. Tuesday. Franchere.
- (U) Eng 304. **Comedy.** 3 hours winter.
The comic view in non-dramatic forms, as well as in the stage tradition. Main emphasis on English masters, but with attention also to classical and continental writers. Principal theories of the comic and of the corresponding literary forms and types. Tuesday. Dahlstrom.
- (U) Eng 305. **Satire.** 3 hours spring.
Satire, or criticism through ridicule, as a major type of literary expression. Examples from various literary forms—dramatic, narrative, and poetic—and from ancient and foreign literatures, as well as English. Special emphasis on contemporary satire. Tuesday. Oliver.
- (C) Eng 388. **Children's Literature.** 3 hours fall.
Acquaintance with, and appreciation of, the great body of literature belonging to the elementary-school program. Investigations in the field of children's interests in reading and in grade placement of types and pieces of literature. Friday. Henkle.
- (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. Thursday. Franchere.
- (U) Eng 414, 415, 416. **History of Literary Criticism.** (G) 3 hours each term.
Studies in the theory and practice of literary criticism from Plato and Aristotle to the present. Monday. Dahlstrom.

- (U) Eng 428. **Chaucer.** (G) 3 hours winter.

As much of Chaucer's work read as time permits. Required for graduate students in English. Tuesday. Franchere.

- (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. Wednesday. Oliver.

Graduate Courses

- (U) Eng 505. **Reading and Conference.** Spring.

Hours to be arranged. Franchere.

- (U) Eng 507. **Seminar: Continental Literature.** 3 hours each term.

Hours to be arranged.

See the following listed under EDUCATION:

- (U) Ed 507. **Education Seminar: The Teaching of High School English.** 3 hours fall.

Writing

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

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

Fall: Wr 111. (Section I) Monday. Collier.

Wr 111. (Section II) Thursday. Oliver.

Wr 111. (Section III) Wednesday. Boggs.

Wr 111. (Section IV) Tuesday. Scharbach.

Winter: Wr 112. (Section I) Monday. Collier.

Wr 112. (Section II) Thursday. Oliver.

Wr 112. (Section III) Wednesday. Boggs.

Wr 111. (Section I) Tuesday. Scharbach.

Spring: Wr 113. (Section I) Monday. Collier.

Wr 113. (Section II) Thursday. Oliver.

Wr 113. (Section III) Wednesday. Boggs.

Wr 112. (Section I) Tuesday. Scharbach.

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

Through analysis of words and meanings in context, seeks to increase vocabulary, reading comprehension, and effective use of language. Thursday. Collier.

- (U) Wr 214. **Business English.** 3 hours winter or spring.

Study of modern practices in business correspondence, primarily for students of business administration. Analysis and writing of the principal types of correspondence. Prerequisite: Wr 111, 112, 113. Thursday. Collier.

Upper-Division Courses

- (U) Wr 324, 325, 326. **Short-Story Writing.** 2 hours each term.

For students interested in creative writing, or in professional writing for magazines. Prerequisite: consent of instructor. Wednesday. Powers.

- (U) Wr 341. **Versification.** 2 hours spring.

Verse writing; study of various verse forms as mediums of expression. Analysis of class work. Prerequisite: consent of instructor. Tuesday. Powers.

- (E) Wr 354, 355. **Advanced Creative Writing.** 2 hours fall and winter.

Writing in the various forms to provide increased ease, certainty, and force in written expression. A continuation, with emphasis on effectiveness and craftsmanship, for those who have taken lower-division courses in rhetoric. Prerequisite: consent of instructor. Tuesday. Powers.

- (U) Wr 411. **English Composition For Teachers.** (g) 3 hours spring.

For students expecting to teach English in high school. Practice in writing and a review of the rules of composition. Required for satisfaction of the high-school teaching-field requirement in English. Prerequisite: Wr 111, 112, 113. Tuesday. Franchere.

Foreign Languages

Instructors: Beattie, Herman, Kraft, Krivoshein.

French

Lower-Division Courses

- (U) RL 1a, 1b, 2a. **First-Year French (First Course).** 2 hours each term.

Provides an introduction to grammar and practice in reading modern prose; considerable practice in pronunciation and opportunity for understanding the spoken language. Monday. Beattie.

- (U) RL 2b, 3a, 3b. **First-Year French (Second Course).** 2 hours each term.

Reviews and extends the knowledge of grammatical principles and the irregular verbs. Exercise in pronunciation and study of idioms used in conversation. Reading of simple texts and sight work to develop in the student ability to read easy French without recourse to English. Wednesday. Beattie.

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. Tuesday.

- (U) GL 2b, 3a, 3b. **First-Year German (Second Course).** 2 hours each term.

This course extends the study of grammar. Translation of prose and poetry; conversation and composition. Wednesday.

Russian

Lower-Division Courses

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

Reading of simple prose with adequate study of grammar for reading comprehension. Wednesday. Krivoshein.

- (U) SL 12b, 13a, 13b. **First-Year Russian. (Second Course).** 2 hours each term.

Rapid review of elementary Russian. Emphasis on simple conversation and easy reading. Conducted as far as possible in Russian. Thursday. Krivoshein.

Spanish

Lower-Division Courses

- (U) RL 11a, 11b, 12a. **First-Year Spanish (First Course).** 2 hours each term.

Provides an introduction to grammar and practice in reading modern prose; considerable practice in pronunciation and opportunity for understanding the spoken language. Monday. Herman.

- (U) RL 12b, 13a, 13b. **First-Year Spanish. (Second Course).** 2 hours each term.

Reviews and extends the knowledge of grammar, composition and conversation. Monday. Kraft.

General Science

(See SCIENCE)

General Social Science

Upper-Division Course

- (C) SSc 411. **Contemporary Problems.** (First term) 3 hours.

A study of modern social, political, and economic problems from the standpoint of sociology, economics, psychology, biology, genetics, and the interference of civilization with the processes of natural selection. Prerequisite: Sc 101, 102, 103; SSc 101, 102, 103; Psy 201, 202, or consent of instructor.

General Studies

Portland State Extension Center Advisers: Dr. James C. Caughlan and Dr. Henry E. Stevens

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.

Geography

Instructors: Dart, 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. Tuesday. Newhouse.

- (U) Geog 219, 220. **Cartography.** 3 hours each term fall and winter.

Study and practice of map making and map projection. Use of aerial photographs. Comparative study of different types used in the United States and in other countries. Thursday. Dart.

Upper-Division Courses

- (U) Geog 323. **Geography of the Pacific Northwest.** (Oregon) 3 hours spring.

A study of the land forms, climates, population, resources, products, and lines of communication of the Pacific Northwest. Thursday. Dart.

- (U) Geog 428. **Geography of the Pacific.** (G) 3 hours winter.

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. Wednesday. Newhouse.

- (U) Geog 429. **Geography of North America.** (g) 3 hours spring.

Regional geography of the continent north of the Rio Grande. Prerequisite: Geog 105, 106, 107 or Geog 201, 202, 203. Monday. Newhouse.

- (U) Geog 430. **Geography of South America.** (G) 3 hours fall.

Physical, economic, and human geography of the continent. Prerequisite: Geog 105, 106, 107 or Geog 201, 202, 203. Monday. Newhouse.

Geology

Associate Professor: Hopson

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. Monday. Mason.

Upper-Division Courses

- (S) G 324, 325. **Engineering Geology.** 3 hours each term winter and spring.

Application and use of geology in engineering and industrial arts. May be taken separately. Prerequisite: upper-division standing. Two lectures and field trips. Tuesday. Mason.

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

This course gives opportunity to become acquainted with rocks and minerals without having to meet the requirements of the more technical courses. Especially useful to students expecting to teach general science. Prerequisite: upper-division standing. Two lectures; one 2-hour laboratory period. Tuesday. Mason.

- (S) G 352. **Geology of Oregon.** 3 hours spring.

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. Wednesday. Hopson.

Health and Physical Education

Professors: Bergstrom, Haar

Assistant Professors: Holland, Hudson

Lower-Division Courses

- (U) HE 252. **First Aid.** 3 hours winter.

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

Upper-Division Courses

- (U) PE 341. **Principles and Practices of Physical Education.** 3 hours spring.
An interpretative study and analysis of the principles and practices of physical education, through their historical development and in their present application and significance. Wednesday. Holland.
- (C) PE 371. **Kinesiology.** 3 hours winter.
Body mechanics, applied to all phases of the physical-education program and athletics. Thursday. Holland.
- (U) PE 406. **Special Problems: Advanced Dance.** (g) 3 hours fall and winter.
For men and women. For advanced students. Analysis of materials in terms of the objectives and standards of the Oregon physical-education program. Special emphasis on teaching procedures directed to the achievement of objectives. Prerequisite: consent of instructor. Tuesday. Hudson.
- (U) PE 411, 412, 413. **Physical-Education Workshop.** (g) 3 hours each term.
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 Education Ed 344, Ed 345, Ed 346.) Content of course is as follows:
PE 411. Rhythmics and folk dancing.
PE 412. Games of low organization.
PE 413. Individual team sports and games.
Monday. Hudson.
- (S) PE 431. **Current Trends and Problems.** (g) 3 hours winter.
Study of present trends in health, physical education and recreation and their underlying forces; recent developments and their implications for administrative responsibility and planning for programs in schools and colleges. Prerequisite: PE 412 or consent of instructor. Thursday. Bergstrom.
- (U) PE 460. **Physical Education in the Elementary School.** (g) 3 hours spring.
An interpretative study and analysis of the functions, purposes, and practices of physical education at the elementary-school level. The program and the significance of its elements. Tuesday.
- (C) PE 470. **Principles of Physical Education.** (G) 3 hours spring.
The scientific basis and background of physical education, its aims, objectives, and standards; the place of physical education in the general education program, the present trend in physical education, and practical problems of the public-school teacher. Wednesday. Holland.
- (U) PE 471. **Human Anatomy.** (g) 3 hours fall.
Gross anatomy; the skeletal and muscular structure, the circulatory, respiratory, digestive, and neural systems, and their functioning in physical activities. Prerequisite: two years of biology, senior standing. Thursday. Holland.
- (U) PE 472. **Kinesiology.** (g) 3 hours winter.
Action of muscles involved in fundamental movements, calisthenics, gymnastics, and athletics. Prerequisite: (U) PE 471. Thursday. Holland.
- (U) PE 473. **Physiology of Exercise.** (g) 3 hours spring.
Physiological effects of muscular exercise, physical conditioning, and training.

Significance of these effects for health and for performance in activity programs.
Prerequisite: PE 472. Thursday. Holland.

Graduate Courses

- (U) PE 506. **Special Problems: Tumbling.** 3 hours winter.
Wednesday. Haar.

History

Associate Professor: Hoffmann
Assistant Professor: Spurlock

Lower-Division Courses

- (C) Hst 101, 102, 103. **History of Western Civilization.** 3 hours each term.
The development of Western civilization from early beginnings to the present time; political, social, and cultural factors; present conditions and problems. The three terms constitute a sequence but may be taken separately. Thursday.
(U) Hst 201, 202, 203. **History of the United States.** 3 hours each term.
Not offered 1953-54.

Upper-Division Courses

- (U) Hst 341, 342, 343. **Europe since 1815.** 3 hours each term.
Political, social, economic, and cultural trends from the fall of Napoleon to the present. Fall: 1815 to 1890; Winter: 1890 to 1929; Spring 1929 to the present. Thursday.
(U) Hst 377. **Oregon History.** 2 hours fall or spring.
Brief survey of the building of civilization in the Oregon Country. Monday. Spurlock.
(C) Hst 378, 379. **American History and Government.** 3 hours each term winter and spring.
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 elements entering into the historical growth of the country, to the form and function of its government, and to the adaptations that have been made to changing social and economic conditions. Hst 378 covers the period through the Civil War; Hst 379 since the Civil War. Tuesday.
(U) Hst 391, 392, 393. **Far East in Modern Times.** 3 hours each term.
Political, economic, and diplomatic history of China, Japan, and Korea, with some attention to Asiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Monday.
(U) Hst 448. **Soviet Union.** (G) 3 hours winter.
The revolution of 1917; Russian domestic and foreign policies from 1917 to the present. Wednesday.
(U) Hst 449. **East-Central Europe since 1900.** (G) 3 hours winter.
The Baltic, Danubian, and Balkan states in recent times; political, social, and economic problems; role of the area in international affairs. Tuesday.
(U) Hst 477. **History of the Pacific Northwest.** (G) 3 hours winter.
Detailed study of the building of civilization in the Pacific Northwest. Not open to students who have had Hst 377. Prerequisite: Hst 201, 202 or consent of

instructor. (Will meet the Oregon teacher certification requirement in Oregon history when taken in an Oregon institution.) Wednesday. Spurlock.

- (U) Hst 480, 481, 482. **The United States in the Twentieth Century.** (G) 3 hours each term.

The progressive era; the impact of the Spanish-American War and the wars of 1914-18 and 1939-45 on the United States; prosperity, depression, and the New Deal. Fall: 1898 to 1914; Winter: 1914-1932; Spring: 1932 to the present. Prerequisite: Hst 201, 202, 203 or consent of instructor. Thursday. Hoffmann.

Home Economics

Professor: Gatton

Assistant Professor: Wasson

Lower-Division Courses

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

Aim is to stimulate appreciation and criticism of domestic architecture. Small-house planning and drawing with particular reference to the needs of individual students. Friday. Wasson.

- (S) CT 250. **Textiles.** 3 hours fall.

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

- (S) HAd 239. **Home Management.** 3 hours winter.

Managing money, time, and energy in relation to goals of family living. For students not in home economics degree curricula. Two recitations; one 2-hour laboratory period. Wednesday. Gatton.

Upper-Division Courses

- (S) CT 331. **Home Furnishing.** 3 hours winter.

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

- (S) CT 431. **Home Furnishing.** (G) 3 hours spring.

Consumer study of home furnishing, fabrics, furniture, rugs, china, silver and ceramics. Particular attention paid to contemporary designers and materials and to prices and manufacturers. Prerequisite: CT 331, or consent of instructor. Friday. Wasson.

Horticulture

Professor: Bouquet

Lower-Division Course

- (S) Hrt 111. **Elements of Horticulture.** 2 hours fall.

Lectures, discussions, and demonstrations dealing with horticultural crops about the home—vegetables, small fruits, tree fruits, and flowers. Emphasis on principles and fundamentals of growth, propagation, soil management, garden planning, soil fertility, pest control, irrigation. Special problems concerned with

important crops. Greenhouse and frame management in gardening. Demonstrations during class meetings. Tuesday.

Journalism

Associate Professor: Price

Assistant Professor: Deutschmann

Instructor: Larson

Lower-Division Courses

- (S) J 111, 112. **Elementary Journalism.** 3 hours each term fall and winter.

Journalistic style of writing; workings of the press, both general and technical. Monday. Larson.

- (U) J 211. **Introduction to Journalism.** 3 hours spring.

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

Upper-Division Courses

- (U) J 339. **Principles of Advertising.** 3 hours fall.

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

- (U) J 428. **History of Journalism.** (G) 3 hours spring.

A study of the changing character of the newspaper, with emphasis on the contributions of outstanding editors, publishers, and inventors. The evolution of freedom of the press, editorial and business standards, mechanics, and advertising practices. Thursday. Price.

Landscape Architecture

Associate Professors: Martel, Solberg

Instructor: Gerke

Lower-Division Course

- (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. Tuesday. Gerke.

Upper-Division Courses

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

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

- (S) LA 359. **Maintenance and Construction.** 3 hours winter.

Maintenance of private and public landscapes; construction of landscape features and structures. Prerequisite: LA 279 or consent of instructor. Tuesday. Solberg.

Mathematics

Associate Professor: Peterson

Lower-Division Courses

- (E) Mth 011. **Mathematics for Office Workers.** *Non-Credit* winter term.

Review of arithmetic fundamentals. Short cuts and practical applications in computing such items as percentages and averages. Tables, graphs, and pictorial presentation of figures. Work to meet individual needs.

- (S) Mth 101, 102, 103. **Elementary Analysis.** 4 hours each term.

Trigonometry, graphs, algebra, elements of calculus, and analytic geometry. Tuesday and Thursday, 7:15 to 9:00.

- (U) Mth 201, 202, 203. **Differential and Integral Calculus.** 4 hours each term.

Standard sequence for students of physical, biological, and social sciences. Prerequisite: Oregon State, Mth 101, 102, 103, or University of Oregon, Mth 200 or Mth 105, 106, 107. Monday and Wednesday, 7:15-9:00.

Upper-Division Courses

- (U) Mth 421, 422, 423. **Introduction to Applied Mathematics.** (g) 3 hours each term.

Fundamental concepts of differential equations, Fourier series, vector analysis, complex variables, probability, and numerical analysis, with applications to the physical sciences. Prerequisite: calculus. Tuesday. Peterson.

- (U) Mth 425. **Elements of Statistical Methods.** (First term) (g) 3 hours fall term.

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. Thursday. Peterson.

Music

Associate Professor: Stehn

Instructor: Albertson

Lower-Division Courses

- (U) Mus 111, 112, 113. **Theory I.** 2 hours each term.

Thorough groundwork in the elements of musical science—melodic, harmonic, and rhythmic. Major and minor chords, keys, scales, intervals, and cadences studied in singing, writing, playing, and dictation. Monday, 6:45-8:30. Stehn.

- (U) Mus 127, 128, 129. **Introduction to Music Literature (Appreciation of Music.)** 2 hours each term.

A nontechnical study of the development of music, stressing the elements of musical understanding; study of representative compositions, with emphasis on their musical and historical significance. Wednesday.

- (U) Mus 196. **Orchestra.** 1 hour any term.

Six hours maximum credit. Tuesday, 7:15-9:00. Stehn.

(C) Mus 281. Music I. Introductory Course in Music. 3 hours fall.

A musical background for the elementary grade teacher; singing varied types of song literature; 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. Thursday. Albertson.

(C) Mus 282. Music II. Music Reading and Ear Training. 3 hours winter.

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. Thursday. Albertson.

(C) Mus 283. Music III. Music Education. 3 hours fall or spring.

Showing the close relationship between music education and other areas in education; planning a musical environment; directing the experiences of children in music; studying principles and procedures in teaching music skills. Friday. Albertson.

See the following listed under EDUCATION

(C) Ed 408. Methods and Research Materials: Music. (G) 3 hours.**Nursing Education**

Associate Professor: Gregerson

*Upper-Division Course***(U) Nur 427. Methods of Clinical Instruction. (G) 3 hours winter.**

Consideration of the steps in planning and developing a program of clinical instruction, and of the methods of evaluating student achievements in clinical nursing practice. Tuesday.

Physical Education

(See HEALTH AND PHYSICAL EDUCATION)

Political Science

Assistant Professors: Kroll, Nagy.

Instructor: Dixon

*Upper-Division Courses***(U) PS 314, 315, 316. Problems of State and Local Government. 3 hours each term.**

A study of the major problems in the organization and function of state, county, city, and other local governments, with special attention to Oregon. Tuesday. Dixon.

(U) PS 322. American Diplomacy. (G) 3 hours fall.

Contemporary foreign relations of the United States; objectives, world and do-

mestic factors affecting American foreign policy, governmental institutions concerned with development and execution of foreign policy, major issues and problems. Thursday. Nagy. (A full year's sequence of Political Science courses will be offered on Thursday evening with Mr. Nagy as instructor. Winter and spring term offerings will be announced later.)

(U) PS 405. **Reading and Conference.** Terms and hours to be arranged.

(U) *PS 407. **Seminar: Public Administration.** 3 hours any term.

(U) †PS 407. **Seminar: Problems of International War and Peace.** 3 hours fall.

An examination of the Great Issues in the world today. The United Nations and other organized efforts for peace to overcome the scizms between the competing ideologies. Wednesday. Nagy.

(Winter term course in this Wednesday night series with Mr. Nagy as instructor will be announced later.)

(U) PS 411, 412. **Introduction to Public Administration.** (G) 3 hours each term fall and winter.

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. Monday. Kroll.

(U) PS 421. **International Law.** (G) 3 hours spring.

Introduction to international public law. Forces influencing its development; the nature and sources of international law; codification; the International Court of Justice. Rules of international law respecting more important subjects. Wednesday. Nagy.

(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. Monday. Kroll.

Graduate Courses

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

(U) PS 507. **Seminar: Problems of International War and Peace.** 3 hours fall.

(U) PS 507. **Seminar: Problems of International War and Peace.** 3 hours fall. Wednesday. Nagy.

Psychology

Associate Professor: Bernard

Assistant Professors: Crooks, Wilcox

Instructor: Boyd

Lower-Division Courses

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

Introductory study of behavior and conscious processes. Survey of experimental

* See PS 507. Seminar: Public Administration.

† See PS 507. Seminar: Problems of International War and Peace.

studies with reference to motivation, learning, thinking, perceiving, and individual differences.

Fall: Psy 201. (Section I). Monday. Wilcox.

Psy 201. (Section II). Wednesday. Wilcox.

Winter: Psy 201. Monday. Wilcox.

Psy 202. Wednesday. Wilcox.

Spring: Psy 201. Monday. Wilcox.

Psy 202. Tuesday. Wilcox.

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

The nature and origins of differences in personality; means of making desired changes. Prerequisite: Psy 201, Psy 202. Wednesday.

(C) Psy 261. Child Growth and Development. 3 hours 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. Wednesday.

Upper-Division Courses

(U) Psy 431, 432. Clinical Methods in Psychology. (G) 2 hours each term 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. Tuesday.

(U) Psy 433, 434. Mental-Testing Laboratory. (G) 2 hours each term 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. Two 2-hour laboratory periods. Prerequisite: Psy 431, 432. Hours to be arranged. Boyd.

(U) Psy 460. Psychology of Infancy and Childhood. (g) 3 hours fall.

Growth of behavior during the prenatal period, infancy, and childhood. Development of muscular activities, perception, emotional adjustment, intelligence, language, and social behavior in childhood. Not open to students who have completed Ed 460. Thursday. Bernard.

(U) Psy 461. Psychology of Adolescence. (g) 3 hours winter.

Study of the behavior changes during pre-adolescence, adolescence, maturity, and old age. Intended to follow Psy 460. Not open to students who have completed Ed 461. Monday. Bernard.

(S) Psy 474, 475, 476. Psychological Tests and Testing. (g) 3 hours each term.

Theory and practice of test administration, scoring, and interpretation; administration, scoring, and interpretation of individual tests in field of mental abilities, special aptitudes, interests, personality, and nonacademic achievement; administration, scoring, and interpretation of group tests in the same areas. Psy 474 must be taken before either Psy 475 or Psy 476. Prerequisite: Psy 202 or Psy 207. Wednesday. Crooks.

Public Speaking

(See SPEECH)

Science

Bacteriology

Upper-Division Course

- (E) Bac 348, 349, 350. **Microbiology and Communicable Diseases.** 2 hours each term.

A study of microorganisms and their relation to human infectious disease. Tuesday.

Botany

Upper-Division Courses

- (U) Bi 332. **Ferns and Mosses.** 4 hours fall.

A detailed study of the life histories of representative ferns, fern allies, liverworts, and mosses. Evolution among pteridophytes. Two lectures; two 3-hour laboratory periods. Prerequisite: general botany. Monday and Wednesday.

- (U) Bi 334. **Systematic Botany (Oregon Flora).** 4 hours winter.

Principles of plant classification; common plant families; collection and identification of Oregon plants. Two lectures; one 3-hour laboratory period. Prerequisite: Bi 204, 205, 206 or equivalent. Monday and Wednesday.

- (S) Bot 341. **Principles of Plant Ecology.** 4 hours spring.

Interrelationships of plant and environment; succession and ecological structure of the plant community; economic ecology. Prerequisite: Bot 201, 202, 203 or equivalent. Two lectures; two 2-hour laboratory periods. Monday and Wednesday.

Chemistry

Lower-Division Courses

- (S) Ch 104, 105, 106. **General Chemistry.** 4 hours each term.

Standard first-year college chemistry. Prerequisite: adequate background in mathematics. Lecture: Wednesday. Laboratory: Thursday.

General Science

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 as sources of food, shelter, clothing, and medicines, and as sources of disease. Two lectures; 1 two-hour laboratory period. Thursday 5:45-9:45.

- (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 position and effects on society. Particular emphasis is placed on the development of scientific attitudes. Two lectures; one 2-hour laboratory period. Thursday.

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. Tuesday.

- (S) GS 411, 412, 413. **History of Science.** (G) 2 hours each term.

The development of science from the beginnings, with emphasis on the scientific method and spirit. Prerequisite: eighteen hours of upper-division science, or equivalent. Monday.

- (S) GS 421, 422, 423. **Classics of Science.** (G) 2 hours each term.

Works notable in the development of science, studied for (1) significance and (2) form; biographies of men of science studied as background. Prerequisite: eighteen hours of upper-division science, or equivalent.

- (S) NR 427, 428, 429. **Natural Resources of United States.** (G) 3 hours each term.

Present utilization and problems, potential development. Fall: Inventory of resources, relationships, study of forest types, water, soils, grasslands, and wildlife in its environment, and minerals. Winter: Management practices of governmental agencies and private industry. Spring: Research in chosen phases of resource problems. Prerequisite: Consent of instructor. Monday.

Physics*Lower-Division Courses*

- (S) Ph 161. **Rudiments of Photography.** 2 hours spring.

Planned for beginners in photography. The topics covered include cameras, printing, enlarging, developing, composition, materials, and lighting. Opportunities for field trips and print clinics will be provided. Tuesday.

- (S) Ph 201, 202, 203. **General Physics.** 4 hours each term.

Standard first-year college physics. Mechanics, sound, heat, light, electricity, and magnetism. Prerequisite: Mth 102, or consent of instructor. Lecture and recitation.

- (S) Ph 204, 205, 206. **Astronomy.** 3 hours each term.

Descriptive treatment. Coordinate system; astronomical instruments; the solar system; star types and groupings. Two lectures; one 2-hour period of observation or laboratory. Tuesday.

Physiology*Upper-Division Courses*

- (E) Phy 411p, 412p, 413p. **Human Physiology.** 2 hours each term.

A study of the function of the various tissues, organs, and systems of the human body. Fall: blood, heart, circulation, and respiration. Winter: digestive system, metabolism, kidney, and endocrine system. Spring: brain and spinal cord, nerve and muscle, and special senses. Prerequisite: high-school chemistry or its equivalent. Tuesday.

Zoology

Lower-Division Courses

- (S) Z 201, 202, 203. **General Zoology.** 3 hours each term.

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

Secretarial Science

(See BUSINESS ADMINISTRATION)

Sociology

Assistant Professor: Drum

Instructor: Good

Lower-Division Course

- (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. Prerequisite: sophomore standing or consent of instructor. Tuesday.

Upper-Division Courses

- (U) Soc 302, 303. **Criminology and Penology.** 3 hours each term fall and winter.

The nature of crime, with reference to causative factors. Theories underlying punishment; the role of the police and the courts; history of punishment and recent penal developments. Prerequisite: Soc 204, Soc 205, or Psy 201, Psy 202, or consent of instructor. Wednesday. Drum.

- (U) Soc 334, 335. **Social Psychology.** 3 hours each term winter and spring.

Analysis of the psychological and sociological processes involved in personality formation and in various forms of group behavior. Particular attention to origin, function, ideologies, membership, and leadership. Prerequisite: Soc 204, Soc 205, or Psy 201, Psy 202. Tuesday, 3:45-6:25.

- (U) Soc 338. **Marriage and the Family.** 3 hours any term.

The role of the family in the development of personality. Mate selection and courtship; marital discord and adjustment. Prerequisite: general sociology or general psychology. Tuesday. 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. University of Oregon Medical School. Monday. Good.

- (U) Soc 407, 507. **Seminar: Social Welfare Resources and Organization.** 3 hours spring.

The various types of social welfare resources which the nurse can use to help patients with social problems; methods of organizing these resources for the meeting of human needs. (Substitute for Soc 347 and Ed 429.) Thursday. Drum.

- (U) Soc 407. **Seminar.** Hours to be arranged.

(U) Soc 417. **Juvenile Delinquency.** (G) 3 hours spring.

Nature and extent of delinquent behavior; contributing factors; current preventive and treatment programs. Prerequisite: general sociology or general psychology. Wednesday. Drum.

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

The development of "race consciousness" and emergent problems of race-culture contacts. Prerequisite: introductory course in sociology, anthropology, or psychology. Tuesday, 3:45-6:25.

Graduate Course

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

Graduate Courses in Social Work

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

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

Generic concepts of case work practices in different agency settings; diagnosis and analysis of cases, treatment problems. Tuesday, 4:00-6:00 and as arranged. 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. Thursday, 6:45-8:30. Drum.

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

Emotional problems commonly met in social agencies; the roles 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. Thursday, 6:45-8:30. Drum.

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

Social factors in common disabling illnesses; the integration of the work of the physician and the caseworker in dealing with health problems; the role of the physician in the treatment of the social and physical problems of the patient. Tuesday, 4:00-6:00. Guest lecturer: Weinzi. 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. Thursday. 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. Monday.

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

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

Speech and Drama

Associate Professors: Collier, Lillywhite

Assistant Professor: Gaupp

Instructors: Blakeley, Wood

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, effective delivery, audience motivation, and language of the speech. Monday.

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

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

- (S) Sp 232. **Group Discussion.** 3 hours spring.

Techniques and practice in preparing, leading, and participating in the many types of discussion used by extension workers, club leaders, teachers, and all business, technical, and professional people, during conferences, socialized recitations, panels, lecture-forums, and symposiums. Prerequisite: Sp 111. Friday. Collier.

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. Friday. 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 directing. Saturday, 9:00-11:40. Gaupp.

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

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

- (U) Sp 482. **Speech Defects and Disorders.** (Second term) (G). 3 hours spring.

Emphasis on cleft-palate and spastic speech, aphasia, stuttering, and neurological speech disorders. Tuesday. 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. Monday.

Zoology

(See SCIENCE)

General Extension Division

Administration

JOHN FRANCIS CRAMER, D.Ed.

Dean, General Extension Division; Director of Summer Sessions; Professor of Education.

VIRON ALONZO MOORE, D.Ed.

Assistant Dean, General Extension Division; Associate Professor of Education.

JAMES CARL CAUGHLAN, Ph.D.

Assistant Dean, General Extension Division; Professor of Education.

JEAN P. BLACK, Ph.D.

Librarian, General Extension Division; Associate Professor of History.

ERRETT E. HUMMEL, D.Ed.

Administrative Assistant to the Dean; Assistant Professor of Education.

HOWARD IMPECOVEN, D.Ed.

Registrar; Assistant Professor of Education.

DONALD R. LARSON, B.A.

Manager of Information Services; Instructor in Journalism.

LESLIE B. NEWHOUSE, M.B.A.

Business Manager; Assistant Professor of Business Administration.

DOROTHY DOERING SMITH, B.A.

Accountant; Instructor in Extension Teaching.

Department of State-Wide Services

VIRON ALONZO MOORE, D.Ed.

Head of State-Wide Services; Associate Professor of Education.

HOWARD JOHN AKERS, D.Ed.

Administrative Assistant, Department of State-Wide Services; Head of Correspondence Study; Assistant Professor of Education.

MARJORIE ALBERTSON, M.M.

Instructor in Music.

HAROLD W. BERNARD, Ph.D.

Associate Professor of Education.

HELEN GASTON BROWN

Instructor in Extension Teaching.

MILDRED ERICSON, B.S.

Instructor in Biological Science.

W. KENNETH FERRIER, M.S.

Assistant Professor of Education.

ROBERT J. GRIDLEY, Ed.M.

Field Representative; Instructor in Education.

RUTH HOPSON, Ph.D.

Associate Professor of General Science.

EVELYN HUDSON, M.S.

Assistant Professor of Physical Education.

JENNELLE MOORHEAD, M.A.

Associate Professor of Health Education.

VICTOR N. PHELPS, Ed.D.

Field Representative; Associate Professor of Education.

JOHN A. SCHULZ, Ed.D.

Field Representative; Associate Professor of Psychology and Education.

JEAN SUTHERLAND, B.A.

Instructor in Art.

HERMAN C. VOELTZ, M.A.

Instructor in History.

Portland State Extension Center**JAMES CARL CAUGHLAN, Ph.D.**

Head, Portland State Extension Center; Professor of Education.

STEPHEN E. EPLER, Ph.D.

Director of Day Program; Professor of Education.

Radio Station KOAC**JAMES M. MORRIS, B.S.**

Program Manager; Associate Professor of Radio Speech.

GLADYS D. CHAMBERS, M.A.

Director of Women's Programs; Instructor in Radio Speech.

ELIZABETH E. DOTSON, B.S.

Director of KOAC School of the Air; Instructor.

ARNOLD EBERT, B.S.

Director of Agricultural Programs; Assistant Professor of Agricultural Extension.

SHELDON GOLDSTEIN, B.A.

Production Director; Instructor.

ROBERT C. HINZ, B.A.

News Editor and Announcer; Instructor in Radio Speech.

PHILIP B. KALAR, B.M.

Music Director and Announcer; Assistant Professor.

JOHN McDONALD, B.S.

Announcer; Instructor in Radio Education.

KATHRYN REESE, B.A.

Program Assistant; Instructor in Radio Education.

D. GLENN STARLIN, Ph.D.

Production Director, University Radio Studios; Assistant Professor of Speech.

DUANE E. TUCKER, M.A.

School Specialist in Radio Education and Announcer; Assistant Professor of Radio Speech.

Visual Instruction**WILLIAM CURTIS REID, Ph.D.**

Head of Department; Professor of Visual Instruction.

Portland Summer Session**JAMES CARL CAUGHLAN, Ph.D.**

Director; Professor of Education.

High School-College Relations**E. DEAN ANDERSON, M.A.**

Executive Secretary; Assistant Professor of Education.

Enrollment Report

Enrollment Report

July 1, 1951—June 30, 1952

General Extension Classes and Correspondence Study

Extension Classes	Graduates			Undergraduates			Auditors			Non-credit			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
PORTLAND CENTER	430	400	830	1,339	1,873	3,212	237	337	574	15	71	86	2,021	2,681	4,702
PORTLAND SUMMER SESSION	296	172	468	371	630	1,001	3	15	18	—	—	—	670	817	1,487
VANPORT EXTENSION CENTER	—	—	—	2,185	625	2,810	—	—	—	—	—	—	2,185	625	2,810
STATE-WIDE CLASSES															
Albany	37	14	51	21	69	90	1	—	1	—	—	—	59	83	142
Arlington	—	—	—	5	10	15	—	—	—	—	—	—	5	10	15
Ashland	29	2	31	—	—	—	—	—	—	—	—	—	29	2	31
Astoria	18	27	45	6	56	62	—	—	—	—	—	—	24	83	107
Baker	16	12	28	—	29	29	—	—	—	—	—	—	16	41	57
Bandon	7	10	17	1	14	15	—	—	—	—	—	—	8	24	32
Beaverton	—	—	—	4	51	55	—	—	—	—	—	—	4	51	55
Bend	4	5	9	—	48	48	—	6	6	—	—	—	4	59	63
Burns	3	3	6	4	20	24	—	—	—	—	—	—	7	23	30
Canby	—	—	—	2	25	27	—	—	—	—	—	—	2	25	27
Cave Junction	2	9	11	—	—	—	2	—	2	—	—	—	4	9	13
Central Oregon C. C.	—	—	—	19	39	58	1	19	20	—	—	—	20	58	78
Condon	—	—	—	4	7	11	—	—	—	—	—	—	4	7	11
Coos Bay	2	3	5	9	66	75	—	—	—	—	—	—	11	69	80
Coquille	3	5	8	1	55	56	—	—	—	—	—	—	4	60	64
Corvallis	22	31	53	21	72	93	6	22	28	—	—	—	49	125	174
Cottage Grove	2	12	14	5	36	41	—	—	—	—	—	—	7	48	55
Drain	—	—	—	2	14	16	—	—	—	—	—	—	2	14	16
Enterprise	—	—	—	10	31	41	—	—	—	—	—	—	10	31	41
Eugene	60	67	127	183	282	465	81	39	120	213	161	374	537	549	1,086
Florence	1	2	3	9	—	9	—	—	—	—	—	—	10	2	12
Forest Grove	6	7	13	3	38	41	—	1	1	—	—	—	9	46	55
Gold Beach	5	4	9	1	6	7	—	—	—	—	—	—	6	10	16
Grants Pass	27	17	44	9	55	64	—	—	—	—	—	—	36	72	108
Harrisburg	—	—	—	3	25	28	—	—	—	—	—	—	3	25	28
Heppner	3	2	5	—	7	7	—	—	—	—	—	—	3	9	12
Hermiston	3	11	14	3	44	47	—	—	—	—	—	—	6	55	61
Hillsboro	2	13	15	5	32	37	—	—	—	—	—	—	7	45	52
Hood River	16	15	31	5	30	35	—	—	—	—	—	—	21	45	66
Klamath Falls	30	21	51	59	162	221	11	19	30	6	1	7	106	203	309
La Grande	34	20	54	—	3	3	—	—	—	—	—	—	34	23	57
Lakeview	—	—	—	2	8	10	—	—	—	—	—	—	2	8	10
Lebanon	9	11	20	17	115	132	—	—	—	—	—	—	26	126	152
McMinnville	27	18	45	—	45	45	—	2	2	—	—	—	27	65	92
Madras	—	—	—	—	15	15	—	1	1	—	—	—	—	16	16
Medford	7	6	13	14	81	95	—	20	20	—	—	—	21	107	128
Milton	6	9	15	3	14	17	—	—	—	—	—	—	9	23	32
Milwaukie	3	6	9	1	16	17	—	—	—	—	—	—	4	22	26

Enrollment in General Extension Division

(Continued)

July 1, 1951—June 30, 1952

	Graduates			Undergraduates			Auditors			Non-credit			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
Molalla	—	—	—	—	5	5	—	8	8	—	—	—	—	13	13
Monmouth	6	3	9	3	2	5	1	3	4	—	—	—	10	8	18
Moro	—	—	—	3	12	15	—	—	—	—	—	—	3	12	15
Myrtle Creek	—	2	2	2	12	14	—	—	—	—	—	—	2	14	16
Myrtle Point	10	3	13	1	21	22	—	—	—	—	—	—	11	24	35
Newberg	—	—	—	4	20	24	—	1	1	—	—	—	4	21	25
Newport	5	11	16	9	63	72	—	—	—	—	—	—	14	74	88
North Bend	6	8	14	2	49	51	—	—	—	—	—	—	8	57	65
Nysa	11	13	24	5	44	49	—	—	—	—	—	—	16	57	73
Oakridge	—	—	—	1	11	12	—	—	—	—	—	—	1	11	12
Ontario	17	6	23	15	27	42	—	—	—	—	—	—	32	33	65
Oretech	11	—	11	24	—	24	—	—	—	—	—	—	35	—	35
Pendleton	20	28	48	14	64	78	—	—	—	—	—	—	34	92	126
Port Orford	6	9	15	2	8	10	—	—	—	—	—	—	8	17	25
Prineville	4	5	9	4	37	41	1	4	5	—	—	—	9	46	55
Rainier	2	1	3	1	24	25	—	—	—	—	—	—	3	25	28
Raleigh Hills	3	6	9	3	15	18	—	—	—	—	—	—	6	21	27
Redmond	4	7	11	8	36	44	—	3	3	—	—	—	12	46	58
Reedsport	—	—	—	—	6	6	1	8	9	—	—	—	1	14	15
Roseburg	53	26	79	18	124	142	—	5	5	—	—	—	71	155	226
Russelville	—	—	—	—	34	34	—	—	—	—	—	—	—	34	34
Salem	27	46	73	60	240	300	—	2	2	—	—	—	87	288	375
Sandy	—	—	—	3	23	26	—	—	—	—	—	—	3	23	26
Seaside	6	6	12	—	21	21	—	—	—	—	—	—	6	27	33
Sisters	—	—	—	—	1	1	—	3	3	—	—	—	—	4	4
Springfield	—	—	—	—	25	25	—	1	1	—	—	—	—	26	26
Stayton	—	—	—	1	11	12	—	—	—	—	—	—	1	11	12
St. Helens	—	—	—	—	20	20	—	—	—	—	—	—	—	20	20
Sweet Home	11	1	12	8	19	27	—	—	—	—	—	—	19	20	39
Taft	—	—	—	—	18	18	—	—	—	—	—	—	—	18	18
The Dalles	2	4	6	1	16	17	—	—	—	—	—	—	3	20	23
Tillamook	14	23	37	13	55	68	—	1	1	—	—	—	27	79	106
Vale	—	—	—	18	38	56	—	—	—	—	—	—	18	38	56
Willamina	—	—	—	—	20	20	—	—	—	—	—	—	—	20	20
Woodburn	8	3	11	1	9	10	—	1	1	—	—	—	9	13	22
State-Wide Totals													1,589	3,654	5,243*
CORRESPONDENCE STUDY															
New Registrations															
Totals	1,336	1,145	2,481	5,837	7,191	13,028	345	521	866	234	223	467	7,752	9,090	16,842

* Figures include 508 people who took classes in more than one center.

† Figures for June, 1952, estimated.

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