



Campus looking south across park

1962

GENERAL
EXTENSION
BULLETIN

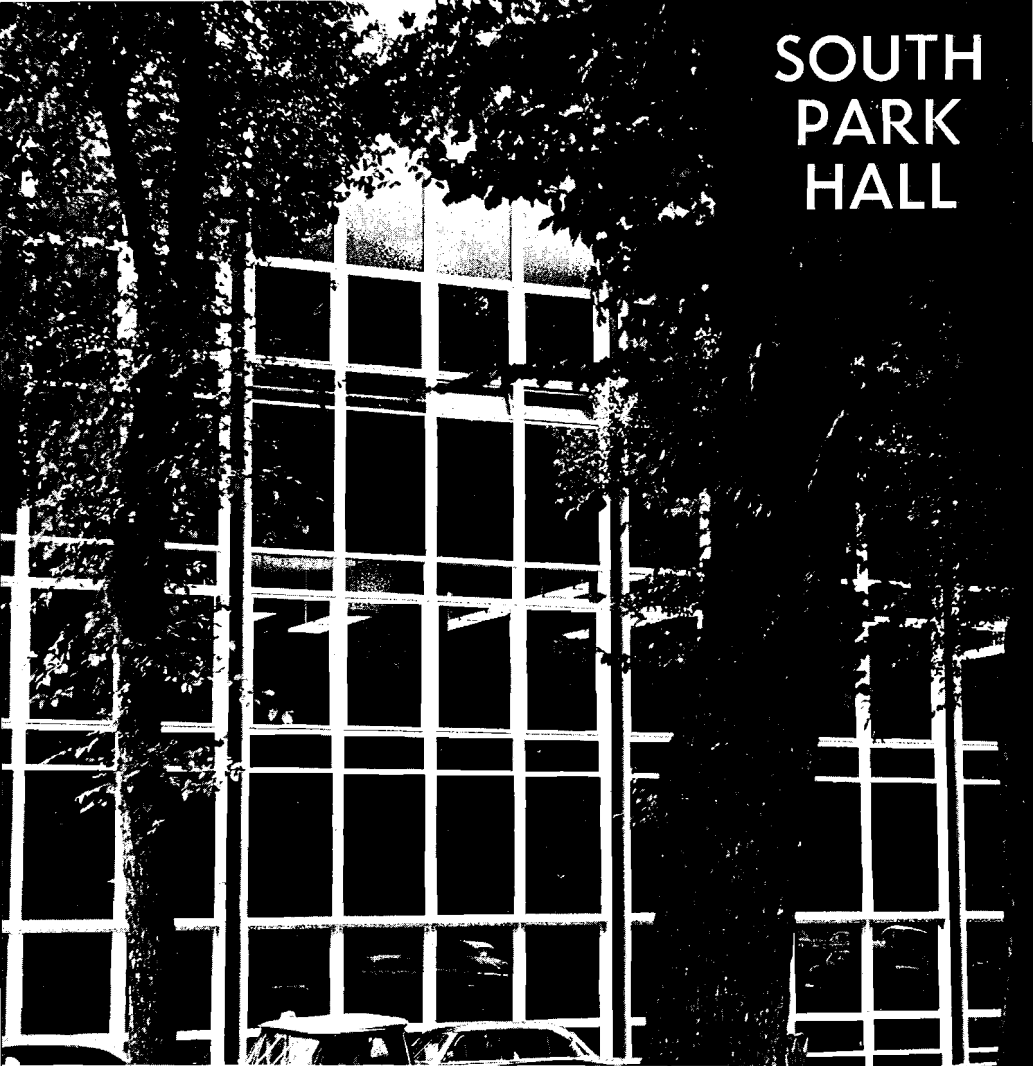
PORTLAND
SUMMER
TERM ———

JUNE ... 18

AUGUST 10

GENERAL
EXTENSION
DIVISION
PORTLAND
CENTER

SOUTH PARK HALL



COVER AND ABOVE:
Campus views, Portland
Center Summer Term



General Extension Division

BULLETIN

Oregon State System of Higher Education

1633 S.W. Park Ave.

Portland 1, Ore.

PORTLAND SERIES NO. 128

April 10, 1962

Entered as second class matter April 15, 1958, at the Post Office at Portland, Oregon, under act of August 24, 1912. Published 30 times a year: January 25; February 25; March 10, 12, 15, 18, 20, 25; April 10, 25; May 20, 25; June 6, 20, 25; July 10, 25; August 25, 28; September 10, 20, 25; October 20, 25; November 25; December 10, 12, 17, 20, 25.

*Back cover color plates courtesy
of Oregon State Highway
Department, Travel Information
Division.*

General Extension Division

BULLETIN

**1962 Portland Center
SUMMER TERM**

Regular Session

June 18-August 10

PRE-REGISTRATION: June 11-16

Post-Session Workshops

August 10-24



**Portland Center, G. E. D.
Oregon State System of Higher
Education**

1633 SW Park Avenue, Portland 1, Oregon

Oregon State System of Higher Education Officers

ROY E. LIEUALLEN, Ed.D., L.H.D., Chancellor

ARTHUR S. FLEMMING, LL.D.
President, University of Oregon

JAMES H. JENSEN, Ph.D.
President, Oregon State University

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

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

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

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

BRANFORD P. MILLAR, Ph.D.
President, Portland State College

ELLIS A. STEBBINS, B.A.
Administrator-in-Charge, Oregon
College of Education

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

WINSTON D. PURVINE, A.B., LL.D.
Director, Oregon Technical Institute

HERBERT A. BORK, M.S., C.P.A.	Comptroller and Bursar
RICHARD L. COLLINS, M.A., C.P.A.	Budget Director
WILLIAM H. CARLSON, M.A.	Director of Libraries
WOLF D. VON OTTERSTEDT, LL.B.	Assistant Attorney General, assigned to Board Office
AUGUST L. STRAND, Ph.D., LL.D.	Director of Institutional Research

EARL M. PALLETT, Ph.D.	Chairman High School-College Relations Committee
FRANCIS B. NICKERSON, D.Ed.	Executive Secretary High School-College Relations Committee

Former Chancellors Oregon State System of Higher Education

WILLIAM J. KERR, D.Sc., LL.D.	1932-1935
FREDERICK M. HUNTER, Ed.D., LL.D.	1935-1946
PAUL C. PACKER, Ph.D., LL.D.	1946-1950
CHARLES D. BYRNE, Ed.D.	1950-1955
JOHN R. RICHARDS, Ph.D.	1955-1961

Table of Contents

This catalog is organized alphabetically by subject category and numerically within each category. In formulating program, student should check related courses. For example, courses in Business Administration may be carried under such headings as Business Administration, Financial and Business Economics, and Management, Production and Marketing, depending upon the official description in the catalog of the college or university at which the course originates. Similarly, English courses are found under both English and Writing. Virtually all subject categories have related courses in other official categories.

GENERAL

Oregon State System Officers, 2
State Board of Higher Education, 4
Summer Term Calendar, 5
Registration Events, 5
Summer Program, 6
Undergraduate Work, 6
Graduate Work, 6-9
Registration Procedure, 10
Summer Term Fees, 10
Library Regulations, 11-12
Fee Refunds, 11
Miscellaneous, 12-13
Description of Courses, 14

COURSES

Anthropology, 14
Arabic, 15
Art Education, 16
Biology, 16-17
Business Administration, 17-18
Chemistry, 19
Economics, 19-20
Education, 20-29
English, 29-30
Family Life and Home Administration, 31
Financial and Business Administration, 31
Food and Nutrition, 31-32
French, 32
General Engineering, 32
General Science, 32-33
Geography, 33-34
Geology, 34
German, 34-35
Health Education, 35
History, 36-38
Home Ec. Ed., 38
Humanities, 38
Italian, 38-39
Library Science, 39
Management, Production and Marketing, 39
Mathematics, 39-41
Microbiology, 41
Music, 41-42
Music Education, 42
Natural Resources, 43
Philosophy, 43
Physical Education, 43-44
Physics, 44
Political Science, 44-45
Psychology, 45-46
Recreation, 47
Religion, 47

Russian, 47
Science Education, 47-48
Secretarial Science, 48
Social Science, 49
Sociology, 49-50
Spanish, 50
Speech, 50
Speech Correction, 51-52
Theater Arts, 52
Writing, 52-53
Zoology, 53

SPECIAL PROGRAMS

Aerospace, 54
Weaving Workshop, 54
Ceramics Workshop, 54
Photo Workshops, 54
The Ballad, 55
Elementary Art Education
Film Colloquy, 55
Theater Arts, 55
Conservation Workshops, 55-56
Adolescent Study, 56
Counselor Training, 56-67
Camping Education, 57
Counseling Minority Youth, 57
Creativity, 57-58
Intergroup Relations, 58
Recreation and Youth Leadership, 58
Driving, 58
Family Financial Security, 58
Radiation and Health, 59
Circulatory Health, 59
Institute for Teachers, 59-60
Deutsche Sommerschule, 60
Mexican Study Program, 60-61
Mathematics Workshops, 61-62
Music Seminar and Clinic, 62-63
School Administration, 63
Geography Workshop, 63
Civil War Tour, 63-64
Special Education, 64-66
Creative Writing, 67
Post Session, 67

STAFF

General Extension Division, 68
Portland Center, 68-69
State-Wide, 70
Educational Media, 70-72
General Services, 72-73
Summer Term Faculty, 73-79
Information Request Form, 80

State Board of Higher Education*

	Term Expires
CHERYL S. MACNAUGHTON, Portland.....	1963
J. W. FORRESTER, JR., Pendleton.....	1963
ALLAN HART, Portland	1964
DOUGLAS MCKEAN, Beaverton.....	1964
WILLIAM E. WALSH, Coos Bay.....	1965
RALPH E. PURVINE, Salem.....	1965
JOHN MERRIFIELD, Portland.....	1966
CHARLES R. HOLLOWAY, JR., Portland.....	1967
ELIZABETH H. JOHNSON, Redmond.....	1968

Officers

WILLIAM E. WALSH.....	President
CHARLES R. HOLLOWAY, JR.	Vice-President
J. W. FORRESTER, JR.	Member, Executive Committee

ROY E. LIEUALLEN, Ed.D., L.H.D., Chancellor

EARL M. PALLETT, Ph.D., Secretary of Board

Office of the State Board of Higher Education

Post Office Box 5175

Eugene, Oregon

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

1962 Portland Center Summer Term Calendar

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

Registration, Other Events

June 11-16, Monday through Friday, 8 a.m.-5 p.m.; **Saturday,** 9-11 a.m.:

Pre-registration for convenience of students who wish to avoid first-week rush; at Registrar's Office, 724 S.W. Harrison (South Park Hall).

June 18, Monday: First day of classes; students are expected to meet classes.

Regular registration period begins, 8 a.m.-5 p.m.; 5:30 p.m.-8:30 p.m., Registrar's office; master's candidates, room 71 SH, 11:00 a.m.

June 19, Tuesday: Regular registration continues, 8 a.m.-5 p.m.; 5:30 p.m.-8:30 p.m.

June 20, Wednesday: Registration continues, 8 a.m.-5:30 p.m.

June 21, Thursday: Registration continues, 8 a.m.-5:30 p.m.; **late fee begins;**

Last day to enroll in a class without instructor's signature; last day to change program without change-of-program fee.

June 22, Friday: Registration continues, 8 a.m.-5:30 p.m.; change-of-program fee begins.

June 23, Saturday: Last day to complete registration or change program; last day to withdraw from a course without responsibility for grades; 9 a.m.-11:30 a.m.

July 4, Wednesday: Legal Holiday.

July 6, Friday: Classes will meet on this Friday to make up for the July 4 holiday.

August 9-10, Thursday and Friday: Final examinations.

August 10, Friday: Portland Center's regular Summer Term ends.

August 11-24: Post Session, special programs varying in length.

The Summer Program

The forty-fifth annual Portland Center Summer Term will provide principally daytime offerings, both graduate and under-graduate, based on the resources and curricula of the colleges and universities in the Oregon State System of Higher Education.

While most regular classes run daily Monday through Thursday, there are notable exceptions. In addition, there are a number of evening offerings scheduled.

While a large number of summer term classes are held on the Portland State College campus, various other locations throughout the city and in some instances away from the city are utilized.

Undergraduate Work

Admission as an Undergraduate: Only requirement for admission to Portland Center's Summer Term is ability to do the work.

Portland Center itself does not confer degrees; therefore, the student wishing credits earned at the Center to apply toward a degree must inform himself of the degree-program requirements of the institution from which he expects to receive his degree.

Information concerning admission, advanced standing, credit transfer, residence, and graduate requirements should be obtained from the Registrar of the degree-granting institution, whether within the Oregon State System of Higher Education or elsewhere.

Maximum Load: Twelve term hours* is the maximum credit which a student may earn in the eight-week summer term, except that undergraduates may enroll for thirteen hours in combinations of four or fewer courses which list a total of not more than thirteen hours of credit. (No exception to the twelve-hour rule is permitted in cases where all courses are taken for graduate credit.) Additional credit may be earned in courses which end prior to opening date of the eight-week term or which begin after the eight-week term has closed.

Graduate Work

Certain master's degrees granted by various institutions within the Oregon State System of Higher Education, as well as work toward these degrees which may be completed at Portland Center, are shown below:

Master of Education. Degree may be taken either at University of Oregon or at Oregon State University.

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

University of Oregon has a 24-hour residence requirement. This requirement may be met by attending two Portland Center Summer terms. Oregon State University has a 12-hour residence requirement. This requirement must be met by attendance on OSU campus proper except in engineering.

At both institutions, the degree is regarded as a professional degree and not necessarily a research degree; however, at the University of Oregon a thesis or field study is required of candidates whose area of specialization is in administration or educational psychology.

At Oregon State University neither a thesis nor a field study is required under Options "C" or "B."

For the degree with either of these Oregon institutions, a well integrated program is planned for each individual candidate designed to improve his educational competence as a teacher, supervisor, educational specialist, or administrator. At the University of Oregon, the following specialized areas have been incorporated into the Division of School Psychological Services: education of exceptional children (mentally retarded, physically handicapped, gifted, emotionally/socially maladjusted, speech handicap); remedial education (reading, spelling, arithmetic, handwriting); educational psychology (school psychology, school psychometry); and counseling psychology (school counseling, rehabilitation counseling, college personnel).

At University of Oregon, both qualifying and final examinations are written. Oregon State University requires written final examinations, but no qualifying examination. Graduate work for a degree of Master of Education may be pursued with specialization in either elementary or secondary fields.

Master of Science in Education (from Oregon College of Education at Monmouth, or from Southern Oregon College at Ashland, or Eastern Oregon College at La Grande):

Oregon College of Education requires 30 hours of credit in residence. This requirement may be met by attending two Portland Center Summer Terms and one Summer session on the Monmouth campus. Only 15 hours may be transferred from the regular evening courses offered at Portland Center during Fall, Winter and Spring quarters.

Eastern Oregon College and Southern Oregon will accept a maximum of 15 hours of course work completed in the Portland Center Summer Term.

Requirements for this degree include a core of 18 hours in professional courses and six hours in general courses. Thesis is optional with each student, but it is recommended for those planning further graduate work. The qualifying examination is written, and the final examination may be both written and oral.

Master of Business Administration: Since the fall term of 1961, programs leading to the Master of Business Administration at University of Oregon

have been offered in Portland. Students working toward this degree may complete up to 36 credit hours in Portland through courses taught by regular University of Oregon School of Business Administration faculty. Students fulfilling residence requirements at Portland Central will be required to write a thesis for the MBA degree.

Master of Science in Health, Physical Education and Recreation: Since fall term, 1961, programs permitting up to 18 credit hours toward the Master of Science in Health, Physical Education and Recreation at University of Oregon have been offered in Portland. However, 12 credit hours of residence at Eugene campus will be required by School of Health, Physical Education and Recreation.

OSU courses in these areas are also available and can be used as majors on the M.Ed. degree.

Master of Education in Library Science: Since the fall term, 1961, sequential programs leading to Master of Education at University of Oregon have been offered in Portland. Heavy specialization in library will be required. Mrs. Ione Pierron, assistant professor of librarianship, School of Education, University of Oregon, will serve as major adviser for those enrolled at Portland Center.

Master of Arts in General Studies: This is a research degree. It is open to individuals whose research interests and broad academic background, usually in three disciplines, make them eligible for graduate work wherein offerings of several major departments are correlated. A thesis is required. Before a candidate's course work can be planned, he must present and justify a thesis topic which involves a research project embracing at least three major departments. An acceptable thesis in General Studies cannot be typical of work normally presented to any single department for a departmental degree.

Under favorable circumstances all work toward this degree from Oregon State University may be completed in Portland, but the University of Oregon requires that the candidates earn at least 33 hours in residence on the Eugene campus.

Master of Arts (Departmental), Master of Science, Master of Science in General Studies: Programs for these degrees must be arranged with the candidate's major department or the degree-granting school selected. On approval by the major department a maximum of 15 hours of graduate work may be completed in Portland.

Professional Degrees in Engineering: The degree of Agricultural Engineer, Chemical Engineer, Civil Engineer, Electrical Engineer, Industrial Engineer, Mechanical Engineer, Metallurgical Engineer, or Mining Engineer, may be earned by a holder of a baccalaureate or master's degree from Oregon State University after having completed at least five years of successful professional practice following graduation, and by completing an acceptable thesis.

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

Qualified candidates for the M.S. degree in electrical, mechanical, civil, or industrial engineering from Oregon State University may complete all graduate course-work at Portland Center.

University work leading to the B.S. degree in applied science from Portland State College may also be completed at Portland Center. This bachelor's degree program is designed to equip the graduate to undertake those Oregon State University advanced engineering programs, discussed in the preceding paragraph, for which the requirements may be fulfilled at Portland Center.

For additional details and application instructions for the degree of engineer, consult the Oregon State University catalog.

Advisers: Authorized advisers for any of the masters' degrees in education and for the Master of Arts in General Studies degree will be available at Portland Center to assist students in planning programs and in establishing candidacy for the degrees. Students should note that random accumulation of graduate credit does not establish qualification for any degree.

Students interested in starting a masters' degree program at Portland Center this summer should meet in room 71, State Hall, at 11:00 a.m. on Monday, June 18. Information will be presented about all of the masters' degrees offered by the various colleges and universities within the Oregon State System of Higher Education.

Admission: Graduate students enrolling at Portland Center Summer Term who wish to apply their Oregon credits toward advanced degrees at one of the institutions within the Oregon State System of Higher Education must make application for admission to the graduate school selected and take the qualifying examination* at the earliest opportunity.

Time Limit: Oregon State System institutions expect that all work for the master's degree, including work for which credit is transferred, thesis, and final examination, will be completed within a period of seven years.

Maximum Load: Twelve term hours of graduate credit is the maximum which a student may earn in the eight-week summer term. Additional credit may be earned only in courses which end prior to the opening date of the eight-week term or which begin after the eight-week term has closed.

* Qualifying examinations will be administered during Summer term at times and places to be announced.

Registration Procedure

Students will register for the summer term Monday, June 18, from 8:00 a.m. - 5:00 p.m., and Monday and Tuesday evenings, June 18 and 19, from 5:30 - 8:30 p.m. at the Registrar's Office, 724 S.W. Harrison Street. Since many classes, and all early-session workshops begin on Monday, June 18, students are expected to register at a time that will not conflict with the first meeting of the class or the workshop.

Students living in Portland or vicinity are urged to register during the pre-registration period, June 11-16. Normally, registration may be completed more easily and quickly during this period.

Students registering on Monday, June 18, will first obtain registration packet and one section card for each course from the Registrar's Office. Fill out the cards and return to the Registrar's Office to have fees assessed. Then take the packet to the Business Office at the same location and pay fees.

Procedure for Graduate Students: Enrollment for graduate credit is in general identical with enrollment for undergraduate credit. However, students electing graduate credit in a 400 (G) or 400 (g) course (see course numbering system on page 15) must so indicate at the time of registration for the course; otherwise graduate credit cannot be granted. Graduate credit is not retroactively granted.

Procedure for Veterans: Students who qualify under veterans' benefits (World War II or Korean) should contact the veteran's adviser in the Registrar's Office.

Summer Term Fees

(Registration Office Hours: 8:00 a.m.-5:00 p.m., Monday through Friday, during entire session

9:00-11:30 a.m. on Saturdays, during June only.

5:30-8:30 p.m. Monday and Tuesday, June 18 and 19, only)

Summer Term Registration Fees Are as Follows:

FULL-TIME STUDENTS AND AUDITORS (8 credit hours or more)

8-week session	\$100.00
11-week or 12-week session	150.00

GRADUATE STUDENTS employed during the Summer Term for at least .15 FTE

services either as graduate assistants, research assistants or fellows	34.00
--	-------

PART-TIME STUDENTS AND AUDITORS

(for 7 credit hours or less)—per credit hour (minimum \$25)	12.50
---	-------

<i>No. of Hours</i>	<i>Total</i>	<i>No. of Hours</i>	<i>Total</i>
1 credit hour	\$25.00	5 credit hours	62.50
2 credit hours	25.00	6 credit hours	75.00
3 credit hours	37.50	7 credit hours	87.50
4 credit hours	50.00		

For non-credit college preparatory courses, charges shall be based upon units of time spent in class each week on a basis equivalent to \$12.50 per credit hour.

SHORT COURSES AND WORKSHOPS—Follow above schedule according to credit hour load.

STAFF FEE—Per credit hour (except staff auditors) 3.00

(Upon approval the staff fee is available to:

- a. All full-time employees, academic and nonacademic, of not only the teaching unit but of any unit of the State System of Higher Education for a limited amount of work for credit, generally for not more than three term hours.
- b. Any academic employee whose appointment is equivalent to half-time service or more (but less than full-time), for a maximum of ten credits per quarter.

Subject to approval, all fees and the maximum credit hour limitations may be waived for retired employees; and for staff members on leave, the maximum credit hour limitation may be waived but the fee is not waived. No fee for staff auditors.

SPECIAL FEES—Late registration full-time students (due after third day of session), per day (not applicable to short courses)\$ 1.00

If institutional charges are met by a check which is returned because of any irregularity for which the student is responsible (NSF, illegible signature, improper bank account number, etc.) a fine of \$1.00 per business day will be charged. (Maximum penalty, \$5.00).

Graduate qualifying examination fee\$1.00-\$15.00

NOTE: \$100 covers all courses of the 8-week summer session, including all short courses begun prior to or within that period and completed by the end of the 8 weeks. For post-session courses which end after regular 8-week session, student will be charged at the rate of the part-time fee, namely \$12.50 per credit hour, provided that the additional charge shall not exceed \$50.00. For full-time students and auditors in an 11-week or 12-week session, the total fee shall be \$150.00.

Fee Refunds

Students whose official withdrawal from summer term has been completed in the Registrar's Office may be entitled to certain refunds of registration fees paid. Refunds in all cases are calculated from June 19 to the date of application for the refund and not from the date the student may have registered or may have ceased attending classes. Claims for refunds must be made in writing.

Library Regulations and Charges

NOTE: The library card is issued upon presentation of the student's tuition receipt. This receipt should therefore be preserved, even when payment of tuition is by check.

A student who has a library card issued during the regular academic year should use this same card during the Summer term. This card will be validated for Summer term use upon presentation of the student's tuition receipt.

The following regulations govern library fines and charges:

1. A fine of 5 cents per day is charged for all overdue books other than reserve books.

2. The following fines are charged for violation of rules governing reserve books and material circulated by special permission: (a) For overdue books, a regular fine of 25 cents for the first hour and 5 cents for each succeeding hour, or fraction thereof, until the book is returned or reported lost. A maximum charge of \$1.00 per hour may be made in cases of flagrant violation of this rule. (b) For failure to return books to proper department desks, a fine of 25 cents is levied.

3. Books needed for use in the library are subject to recall at any time. A maximum fine of \$1.00 a day may be imposed for failure to return promptly.

4. A service charge of 10 cents is added to all fines reported to the business office for collection.

5. Borrowers losing books are charged the replacement cost of the book, plus the amount of fine incurred up to the time the book is reported missing. In addition, a charge of \$1.00 is made to cover the cost of cataloging and processing the replacement copy.

6. When a lost book, for which the borrower has been billed, is returned before a replacement has been ordered, a refund not exceeding the replacement cost plus the \$1.00 cataloging and processing charge may be made at the discretion of the librarian.

7. Borrowers are issued a library card for use in the charge-out machine. The card should be turned in upon withdrawing during the term, or at the end of the term.

Miscellaneous Services

The Portland Center Summer Term **Library**, located on S.W. Broadway at Montgomery street, will be open Monday through Thursday from 7:30 a.m. to 8:00 p.m., and on Friday from 7:30 a.m. to 4:30 p.m.

Entrance to the Library is made from concourse which extends between middle of the block on Broadway on the College Center. The Reserve book collection and small general Reference collection are located on the ground floor. The bulk of the collection is distributed on three upper floors, Education books on first floor, Science and Social Science on second, and Humanities on third.

The **Audio-Visual** department is in the basement and is reached by stairway directly off the concourse.

College Center: The College Center is located on S.W. Park Ave. at Montgomery St. Every regularly-registered student may use the varied facilities offered in College Center and may participate in summer social and activity programs.

Students and faculty may use College Center cafeteria and snack bar, and the dining rooms where group luncheons and dinners are served. There are also meeting rooms and a spacious lounge where art and other special exhibits are displayed.

All College Center facilities are open from 7:30 a.m. - 8:30 p.m. Monday through Thursday and until 4:30 p.m. on Friday. College Center facilities are financed through student fees and are for the use and enjoyment of all summer term as well as regular term students.

The Summer term recreational program, coordinated by College Center staff, will offer summer students information or assistance in taking advantage of the many and varied recreational opportunities to be found in and conveniently near Portland.

Textbooks and Supplies: All required texts and supplies may be purchased from the Cooperative Bookstore located in the College Center building.

Counseling Center for Adults: Professional counseling services are available to all regularly-registered evening and summer students, and to others on referral from cooperating schools and agencies. Information may be obtained at the Center's offices on the second floor of the General Extension Division building, 1633 S.W. Park Ave.

Housing: Portland Center has no housing of its own, but efforts will be made to find accommodations for both faculty and students. Requests should be addressed to John F. Jenkins, 1620 S.W. Park Ave., Portland 1, Oregon.

Recreation: Summer term students may enjoy the varied recreational facilities of the Portland metropolitan area. Conveniently located parks and playgrounds, swimming pools, golf courses and tennis courts, theaters and musical events, Portland Art Museum, and excellent library services are available. A fine new zoo and the Oregon Museum of Science and Industry are additional attractions. In addition, Portland offers easy access to the beautiful beaches of the famed Oregon coast, and to alpine resorts in the surrounding Cascade and Coast mountain ranges. A summer term recreational program, including organized trips and other activities, will be directed by the College Center staff.

Special Events: Lectures, concerts and other special events open to Summer Term students and the public have been scheduled. These events will be described in a separate brochure; further information concerning the special events is available at Portland Center Office of Public Affairs.

Description of Courses

Course Numbering System: Courses in this catalog 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 below 300. Upper-division (junior and senior) courses are numbered from 300 to 499. Graduate courses are numbered 500-599. A large (G) following the title of a 400 course indicates that course may be taken for either major or minor graduate credit. A small (g) following title of a 400 course indicates that course is approved for graduate minor credit only. Numbers less than 50 indicate non-credit courses.

Institutional Source of Courses: For convenience of students utilizing the Portland Center Summer term catalog, the letters OSU, UO, OCE, PSC, and GED appear in parenthesis following the number of credit hours and immediately preceding the course description. These initials indicate that the accompanying course appears in the catalog of the institution designated and is a regular offering of that institution.

Anthropology

Anth 207. Introduction to Cultural Anthropology. (First Term) 3 hours. (PSC)

The meaning of culture; its significance for human beings; its diverse forms and degrees of elaboration among different groups of men; its process of growth and expansion. Frantz. 9:00, Room 154 SH.

Anth 305. Peoples and Cultures of Africa. 3 hours. (PSC)

Hunting, pastoral, and agricultural societies south of the Sahara Desert. Culture history and development; languages and arts; social structure; impact of colonialism, industrialization, missions, and political independence upon indigenous societies and cultures. Frantz. 10:00, Room 149 SH.

Anth 361. Race and Culture. 3 hours. (PSC)

Classification and distribution of human races; cultural factors in racial evolution; influence of mating, marriage, population size, territorial grouping of social attitudes upon race formation and distribution; race and mental endowment; attitudes toward race in human relations; and critique of racist theories. Prerequisites: Upper division standing and 9 hours in Anthropology, Sociology, or Psychology. Frantz. 8:00, Room 154 SH.

Anth 441. Linguistics. (G) (First Term) 3 hours. (UO)

The relation of language to culture; nature and forms of language; influence of linguistic patterns on thought; sounds of language—phonetics and phonemics; linguistic structures; morphophonemics and morphology; semantics; techniques of linguistic recording and analysis; field work. Prerequisites: Senior standing; Anth 207, 208, 209 or two years of a foreign language; consent of instructor. Pierce. TuTh, 6:00-8:00 evening, Room 105 OM.

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Arabic

SmL 50, 51. **First-Year Arabic.** (First and Second Terms) 4 hours each. (PSC)

Elements of the Arabic language, stressing hearing, speaking, reading and writing in that order.

SmL 50. (June 18-July 13) Al-Khaledy. Daily, 1:00-3:00, Room 345 SPH.

SmL 51. (July 16-August 10) Al-Khaledy. Daily, 1:00-3:00, Room 345 SPH.

Art

AA 256. **Weaving.** 2-3 hours. (PSC)

Alber. (See Special Programs.)

AA 257. **Jewelry and Metalsmithing.** 2-3 hours. (PSC)

Introduction to the handworking of nonferrous metals—copper, brass, pewter, silver, gold. Development of design for metal objects. Enameling on metals; centrifuge casting; lapidary work. Morton. 11:00-1:00, Room 292 SPH.

AA 290. **Painting.** 2-3 hours. (PSC)

Instruction in the use of oil color, water color, and other media.

Section I: Hall. Tu Th, 6:00-8:00 evening, Room 243 SPH.

Section II: Hall. 2:00-4:00, Room 243 SPH.

AA 291. **Drawing.** 2-3 hours. (PSC)

Training in observation and selection of significant elements. Hall. 12:00-2:00, Room 243 SPH.

AA 292. **Water Color.** 2-3 hours. (UO)

The technique and use of water color, with special attention to its characteristics as a painting medium. Emphasis on landscape material. May be substituted for third term of AA 291 to meet lower-division major requirement. Open to non-majors with 4 hours of work in AA 291 or with consent of instructor. Prsch. 2:00-4:00, Room 249 SPH.

AA 311, 312, 313. **Creative Arts and Crafts for the Classroom Teacher.** 3 hours each. (PSC)

Art activities for the elementary classroom teacher. Basic tools and materials. Planning the art programs to meet the needs of the child. Art in the school curriculum. Art experiences in relation to child growth and development. Lectures and laboratory work. Prerequisite for AA 313 are AA 311 and AA 312.

AA 311. Section I: Alber. 8:00-10:00, Room 335 SPH.

AA 311. Section II: Pickens. 10:00-12:00, Room 335 SPH.

AA 311. Section III: Staff. 2:00-4:00, Room 235 SPH.

AA 312. Section I: Alber. 10:00-12:00, Room 235 SPH.

AA 312. Section II: Pickens. 8:00-10:00, Room 235 SPH.

AA 312. Section III: Staff. 3:00-5:00, Room 335 SPH.

AA 313. Section I: Burgner. 12:00-2:00, Room 235 SPH.

AA 313. Section II: Pickens. 1:00-3:00, Room 335 SPH.

AA 396. **Advanced Figure Composition and Design.** 3 hours. (PSC)

Advanced problems in design and figure composition. Work from the model is stressed. Various drawing and painting media are used. Prerequisite: 6 term hours in AA 290, 291, or 296. Prsch. 10:00-12:00, Room 249 SPH.

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

- AA 401. **Special Studies.** Hours to be arranged. (PSC)
- AA 401. **Special Studies: Beginning Photography Workshop.** 2 hours. (PSC)
White and staff. (See Special Programs.)
- AA 401. **Special Studies: Ceramics Workshop for Classroom Teachers.** 2 hours. (PSC)
Ball. (See Special Programs.)
- AA 501. **Special Studies: Advanced Photography Workshop.** 4 hours. (UO)
White and staff. (See Special Programs.)

Art Education

- ArE 401. **Special Studies: Design for Elementary Art Education.** 3 hours. (UO)
Burgner. (See Special Programs.)
- ArE 411. **Methods and Research Materials: Art in the Elementary School.** (G) 3 hours. (UO)
Current trends in elementary public school art education. Methods and laboratory practice with children in the effective use of motivation, materials, and ideas in creative activities. Significant research and literature in the field. Prerequisite: ArE 311, 312 or one year of teaching experience. Burgner. 10:00-12:00, Room 341 SPH.
- ArE 414. **Art in the Senior High School.** (G) 3 hours. (UO)
Art in the senior high school examined in terms of program, content materials, etc. Evaluation of current thinking and practice in the field of high-school teaching of art. Required of all majors. Prerequisite: ArE 314, 315 or consent of instructor. Burgner. 8:00-10:00, 341 SPH.
- ArE 501. **Special Studies: Design for Elementary Art Education.** 3 hours. (UO)
Burgner. (See Special Programs.)

Biology

- Bi 201, 202, 203. **General Botany.** 3 hours each. (PSC)
An introduction to the morphology, physiology, and anatomy of flowering plants; brief survey of plant kingdom; introductory taxonomy. Lippert. 8:00-11:00 and 12:00-3:00, Room 314 OM.
- Bi 204, 205, 206. **General Zoology.** 4 hours each. (PSC)
For biology and zoology majors and premedical, pre dental, pre nursing, pre-pharmacy, preveterinarian, physical education, psychology, fish and game management, and fisheries students. Lecture: Aldrich, 8:00-10:00, daily; Laboratory: McKey-Fender, 10:00-2:00 MTWTh; Room 313 OM.
- Bi 231, 232, 233. **Human Anatomy and Physiology.** 3 hours each. (PSC)
An introduction to the study of structure and function of the human body. This course is designed to help the student understand normal structure and functions and give him the knowledge with which he may establish good health practices for himself and also be prepared for giving instruction in biology in the public schools. The subject matter includes the cellular and tissue study of the body

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

systems and their specific functions. Instruction places emphasis on understanding of the body adaptations for reacting and adjusting the whole individual to his environment. This course is not designed for majors in biology. Prerequisite: one year of biological science. Lecture: Crawford. 8:00-10:00, Laboratory: Earnst 10:00-1:00, Room 312 OM.

Bi 301, 302, 303. Field Botany. 3 hours each. (PSC)

Study of the classification and distribution of various plant groups especially designed for secondary teacher preparation, wildlife utilization, economic value, and conservation. Prerequisite: Bi 201, 202, 203. Clarkson. 8:00-11:00 and 12:00-3:00, Room 313 OM.

Business Administration

***BA 111, 112, 113. Constructive Accounting.** 3 hours each. (PSC) (Section I)

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. Hewitt. 8:00-11:00 (8 weeks), Room 103 SH.

****BA 111, 112, 113. Constructive Accounting.** 3 hours each. (PSC) (Section II)

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.

BA 111. Williams. MW, 6:00-8:00 evening, Room 221 SH.

BA 112. Schmelzlee. TuTh, 6:00-8:00 evening, Room 201 SH.

BA 113. Schmelzlee. MW, 8:00-10:00 evening, Room 103 SH.

BA 221. Elements of Production. 3 hours. (PSC)

Principles of management as applied to commercial and industrial concerns. Williams. 9:00, Room 145 SH.

BA 223. Elements of Marketing. 3 hours. (PSC)

Methods, policies, and problems. Private and cooperative channels, auctions, exchanges, middlemen; demand creation, assembly, standardization, packaging, financing, risktaking, distribution. Required of business administration majors. Dodge, R. E. 10:00, Room 183 SH.

BA 329. Production Management. 3 hours. (PSC)

Problems, readings, and discussion of factory organization, production methods, operational controls, utilization of facilities, supervision, and factory management. Prerequisite: BA 221. Hinds. 11:00, Room 147 SH.

BA 359. Finance Management. 3 hours. (PSC)

Problems and case studies in management determinations respecting permanent capital, working capital, retention of earnings, bank loans, commercial credit, and administrative policies. Prerequisite: BA 222. Dehner. 12:00, Room 196 SH.

BA 366. Sales Management. 3 hours. (PSC)

Functions of management in the marketing process; promotion, planning coordi-

* Student must enroll for entire 9 hour sequence, which runs over 8 week period.

** All or any part may be taken for regular summer term.

nation of production and sales; customer relations; selection, training, and supervision of salesmen; administrative policies. Prerequisite: BA 223. Dodge, R. E. TuTh, 8:00-10:00 evening, Room 183 SH.

***BA 383, 384, 385. Accounting Theory.** 3 hours each. (PSC)

Comprehensive study of generally accepted principles of accounting and of conventional procedures for the measurement and presentation of financial data. Problems of theory applicable to income pricing, and to the more difficult but significant business transactions and interorganizational relationships. Prerequisite: BA 113. Matthies. 8:00-11:00 (8 weeks), Room 224 SH.

BA 407. Seminar: Industrial Location. 3 hours. (PSC)

Factors influencing location of industries will be examined in the light of theory and practice with respect to individual industries and area development. Taylor. TuTh, 6:00-8:00 evening, Room 383 SH. (Also see: Economics and Geography.)

BA 411. Business Law. (First Term) 3 hours. (PSC)

Basic rules of law for business conduct. Requirements in formation, performance, and discharge of contracts. Personal property transfers and methods of protecting financial interests involved. Promissory notes and other negotiable papers. Laws related to organization and operation of businesses and business association. A maximum of three hours credit is allowed for BA 256 and BA 411. Dehner. TuTh, 6:00-8:00 evening, Room 145 SH.

BA 414. Real Estate Law. 3 hours. (OSU)

Primary features of legal ownership of land including creation and rights of ownership under various estates, title protection, deeds, wills, and inheritance: property transactions related thereto, including contracts, mortgages, leases, and brokerage. Prerequisite: junior standing. Dehner. TuTh, 8:00-10:00 evening, Room 147 SH.

BA 460. Purchasing. 3 hours. (PSC)

Significant managerial problems raised by purchase and control of materials, supplies, equipment, merchandise, and other procurement items for business or government organizations. Schmelzlee. TuTh, 8:00-10:00 evening, Room 149 SH.

BA 463. Retail Merchandising. 3 hours. (PSC)

Principles of organizing and operating retail institutions; store location, store layout, buying and selling, operating activities, personnel and control. Dodge, R. E. TuTh, 6:00-8:00 evening, Room 183 SH.

BA 497. Human Relations in Business and Industry. (g) 3 hours. (OSU)

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. Allan. 2:00, Room 103 SH.

BA 498. Government Relations in Business and Industry. (g) 3 hours. (OSU)

Statutory, administrative, and common law controls affecting modern business and their influence on budgetary considerations, business structure, and administrative policies; importance of constructive attitude and proper recognition of government aids and services to the business community. Prerequisite: senior standing. Allan. TuTh, 6:00-8:00 evening, Room 147 SH.

* Student must enroll for entire 9 hour sequence over an eight week period.

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Chemistry

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

For students majoring in medical technology, pre dental, nursing and liberal arts. (9 weeks).

Ch 104. (June 18-July 6)

Lectures: Mickelsen. 8:00-9:30 and 1:00-2:30, Room 303 OM

Laboratory A: Boster. 9:30-12:30, Room 304 OM

Laboratory B: Mickelsen. 9:30-12:00, Room 304 OM

Ch 105. (July 9-July 27)

Lectures: Silverman. 8:00-9:30 and 1:00-2:30, Room 303 OM

Laboratory A: Silverman. 9:30-12:00, Room 304 OM

Laboratory B: Mickelsen. 9:30-12:00, Room 304 OM

Ch 106. (July 30-August 17)

Lectures: Silverman. 8:00-9:30 and 1:00-2:30, Room 303 OM

Laboratory A: Boster. 9:30-12:00, Room 304 OM

Laboratory B: Silverman. 9:30-12:00, Room 304 OM

Ch 226, 227. **Elements of Organic Chemistry.** 5 hours each. (PSC)

Chemistry of the carbon compounds; the aliphatics, aromatics, and derivatives. For pre dental, preveterinarian, and medical technology students. Prerequisite: Ch 106 or 206.

Ch 226. Roberti. (June 18-July 13) Lecture: 10:00-12:00; Laboratory: 12:30-4:30, Room 362 OM.

Ch 227. Ferguson. (July 16-August 10) Lecture: 10:00-12:00; Laboratory: 12:30-4:30, Room 362 OM.

Ch 234. **Quantitative Analysis.** 5 hours. (PSC)

Principles of gravimetric analysis and volumetric analysis. Designed for pharmacy, pre dental, pre medical, and medical-technology students. Prerequisite: Ch 106 or 206.

Lecture: Johnson. MWTh, 6:00-7:15 evening, Room 303 OM.

Laboratory: Moore. MWTh, 7:15-10:00 evening, Room 306 OM.

Economics

Ec 201, 202. **Principles of Economics.** (First and Second Terms) 3 hours each. (PSC)

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

Ec 201. Krauthamer. 8:00, Room 105 OM.

Ec 202. Vaqar. 9:00, Room 47 SPH.

Ec 212. **Outlines of Economics.** 3 hours. (OSU)

Rapid survey of the principles of economics and economic institutions. Restricted to science and upper division professional school students. Lovell, H. 10:00, Room 47 SPH.

Ec 326. **Organized Labor.** 3 hours. (PSC)

History of the labor movement, its philosophy and growth. Present structure and position of organized labor. Prerequisite: Ec 201, 202, 203. Lovell, H. 9:00, Room 49 SPH.

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

tional materials. Trends and practices in the teaching of mathematics. Emphasis will be placed upon basic principles, research studies, problem solving, and the utilization of life situations. Prerequisites: Ed 310, Ed 312. An additional hour per week required for laboratory work at class time on Friday or an hour to be arranged by instructor.

Section I: Owen. 10:00, Room 208 OM.

Section II: Owen. 11:00, Room 208 OM.

Ed 389. Reading and Telling Children's Stories. 3 hours. (PSC)

An introduction to the collection of old folk and modern fanciful tales, with laboratory practice in the reading and telling of stories for children through the elementary grades. Prerequisite: Eng 388 or consent of instructor. LaRiviere. MW, 6:00-8:00 evening, Room 224 SH.

Ed 390. Enriching Children's Reading. 3 hours. (PSC)

A study of the enrichment of children's reading through literature. An advanced course designed for parents and teachers of nursery, kindergarten, and elementary school children. Prerequisite: Eng 388 or consent of instructor. Petersen, V. 11:00, Room 214 OM.

Ed 401. Research. Hours to be arranged. (PSC)

Consent of instructor required.

Ed 407. Seminar: Arts and Crafts for the Mentally Retarded. (G) 3 hours. (UO)

Bode. (See Special Programs.)

Ed 407. Seminar: Curriculum for Mentally Retarded. (G) 3 hours. (UO)

Bode. (See Special Programs.)

Ed 408. Special Secondary Methods: Business Education. 3 hours. (PSC)

Problems and methods in selecting and organizing materials for instruction; comparison and evaluation of methods, laboratory techniques, supplies, equipment; economy of time and materials. Prerequisites: Ed 310, 312. Fritch. 1:00-3:00, (June 18-July 13), Room 325 SH.

Ed 408. Special Secondary Methods: German. 1-3 hours. (PSC)

Eaton. (See Special Programs.)

Ed 408. Special Secondary Methods: Science. 3 hours. (PSC)

Problems and methods in selecting and organizing materials for instruction; comparison and evaluation of methods, laboratory techniques, supplies, equipment; economy of time and materials. Prerequisites: Ed 310, 312. Lange. 1:00, Room 105 OM.

Ed 409. Practicum: Remedial Education—Elementary. (G) (UO)

3 or 6 hours. Special permission required. Otto, Clayton and McMenemy. (See Special Programs.)

Ed 409. Practicum: Remedial Education—Secondary. (G) (UO)

3 or 6 hours. Special permission required. Otto, Clayton and McMenemy. (See Special Programs.)

Ed 409. Practicum: Teaching Mentally Retarded. (G) 3 hours. (UO)

Karp and Miller. (See Special Programs.)

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Ed 415. Student Teaching: Elementary. 6 hours maximum. (PSC)

Observation and teaching under the direction of supervising teacher. Students will be provided with opportunities for assuming direct responsibility for learning activities of children, for developing skill in techniques of teaching and schoolroom management, and related professional activities normally assumed by regularly employed teachers. Seminar required. Prerequisites: Psy 311, Ed 310, 312, 9 hours of methods courses including reading, adequate background in subject areas. Limited number who are graduates of standard colleges can be accommodated. Applications must be submitted in advance to Dr. Ray O. Wolf, Portland Center. Daily as arranged, and Thursday, 2:00-4:00 Shattuck School, 1914 S.W. Park Avenue, Portland. Instructor Kvernvik.

Ed 416. Student Teaching: Secondary. 6 hours maximum. (PSC)

Observation and teaching under the direction of a supervising teacher. Students will be provided with opportunities for assuming direct responsibility for the learning activities of children, for developing skill in the techniques of teaching and schoolroom management, and for participating in the life of the school. Prerequisite: Completion of general and professional courses leading to third year standing. Limited number who are graduates of standard colleges can be accommodated. Applications must be submitted in advance to Dr. Ray O. Wolf, Portland Center. Daily as arranged, and Thursday, 2:00-4:00, Shattuck School, 1914 S.W. Park Avenue, Portland.

Ed 424. Measurements in Education. (G) 3 hours. (UO)

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. Section I: Ingebo. 8:00, Room 111 OM.

Ed 424. Measurement in Education. (G) 3 hours. (OSU)

Use of standard tests and scales to measure achievement in school subjects; elements of statistical method. Prerequisite: senior standing. Section II: Ingebo. 9:00, Room 111 OM.

Ed 424. Measurement in Education. (G) 3 hours. (OCE)

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. Section III: Ingebo. 11:00, Room 111 OM.

Ed 428. Psychology of Reading Instruction. (G) 3 hours. (UO)

Nature of the reading process; factors of learning and development related to reading achievement; psychological foundations of methods and materials of reading instruction. Otto. 8:00, Room 213 OM.

Ed 435. Audio-Visual Aids. 3 hours. (PSC)

Development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc., are utilized. Sources of materials and equipment; administration of audio-visual programs. Trenholme. 8:00, Room 208 OM.

Ed 439. The Gifted Child. (G) 3 hours. (UO)

Psychology, education, and guidance of the mentally superior and the extraordinarily gifted child. Wilson. 12:00, Room 283 SH.

Ed 440. History of Education. (G) 3 hours. (OSU)

Growth and development of education; Plato, Aristotle, Renaissance educators. Comenius, Locke, Rousseau, Pestalozzi, Froebel, Herbart, Herbert Spencer, and Dewey. Prerequisite: senior standing. Howie. 8:00, Room 206 OM.

Ed 460. Psychology of Childhood. (G) 3 hours. (OSU)

Growth of behavior during the prenatal period, infancy, and childhood; development of muscular activities, perception, emotional adjustment, intelligence, language, and social behavior in childhood. Prerequisite: senior standing. Section I: Nunokawa. 9:00, Room 113 OM. Section II: Karr. 1:00, Room 103 OM. (Also see Psychology.)

Ed 461. Psychology of Adolescence. (G) 3 hours. (OSU)

Behavior changes during preadolescence and adolescence as related to physiological development and social and cultural factors. Emphasis on personal and social adjustment. Prerequisite: senior standing.

Section I: Karr. 10:00, Room 103 OM.

Section II: Karr. 11:00, Room 103 OM.

(Also see Psychology.)

Ed 462. Psychology of Exceptional Children. (G) 3 hours. (UO)

Characteristics and problems of all types of exceptional children, with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Williams. 9:00, Room 104 OM.

Ed 463. The Maladjusted Child. (G) 3 hours. (UO)

Discovery and treatment of the emotionally and socially maladjusted child; the home, school, and community in relation to the child's mental health. Opportunities for the observation of family counseling techniques. Aikin. 12:00, Room 303 OM.

Ed 464. The Mentally Retarded Child. (G) 3 hours. (UO)

Psychology, education, and guidance of the mentally retarded child.

Section I: Mattson. (See Special Programs.)

Section II: Taylor. 10:00, Room 215 OM.

Ed 465. Diagnostic and Corrective Techniques in the Basic Skills. (G) 3 hours. (UO)

Introduction to extreme learning problems; factors associated with retardation in the basic skills; general principles of diagnosis and correction; survey of diagnostic instruments and corrective materials; specific corrective techniques and programs. Concerned with problems at both the elementary and the secondary level. McMenemy. 11:00, Room 113 OM.

Ed 467. Applied Mental Hygiene. (G) 3 hours. (OCE)

Development of personality, personality conflicts, mechanisms of adjustment, and the basic principles of mental hygiene. Emphasis on application of mental hygiene principles to personality development of teachers and of children. Prerequisite: Psy 201, 202. Pierson. 9:00, Room 206 OM.

Ed 468. Diagnostic and Remedial Techniques in Reading. (G) 3 hours. (UO)

Review of research in reading disability; diagnostic instruments and techniques relating to reading; corrective and remedial reading methods, materials, and programs. Concerned with problems at both the elementary and the secondary level. Prerequisite: Ed 465 or consent of instructor. Clayton. 8:00, Room 113 OM.

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Ed 484. Junior High School. (G) 3 hours. (OCE)

Development of the junior high school, its purposes and objectives. The general organization of the school; courses of study; present practices in leading representative junior high schools, the direction of classroom activities; provision for individual differences; pupil guidance, and socialization. Hummel. 10:00, Room 121 OM.

Ed 485. Principles and Practices of Guidance Services. (G) 3 hours. (OSU)

Beginning course in guidance. Overview of guidance and personnel work; vocational, educational, health, social, personality, recreational, and individual development; participation of teachers, counselors, administrators, parents, and community organizations in guidance program. For teachers and administrators. Prerequisite: senior standing.

Section I: Jackson. 12:00, Room 112 OM.

Section II: Barney. 9:00, Room 112 OM.

Section III: Barney. 8:00, Room 104 OM.

Ed 486. Occupational and Educational Information. (G) 3 hours. (OSU)

Materials available regarding occupations; interpretations of present trends; value and usefulness for high school and college students. Prerequisite: senior standing. Jackson. 11:00, Room 112 OM.

Ed 487. Counseling Techniques. (G) 3 hours. (OSU)

Mental, achievement, trade, and other tests; administration of such tests; classification, methods in educational and vocational counseling. Prerequisite: Ed 485. Jackson. 9:00, Room 121 OM.

Ed 491. Social Education. (G) 3 hours. (UO)

Structure and functioning of society, as a background for the study and evaluation of education in its varied forms; the contribution of sociological principles and findings to the improvement of educational practices. Guy. 1:00, Room 214 OM.

Ed 493. Observation and Evaluation of Teaching. 3 hours. (PSC)

Opportunity for experienced teachers to observe modern trends in schools and other institutions, and to discuss educational theories and practices. A limited number can be assigned to the few places available for this course. Selection will be made from written applications filed in advance with Dr. Ray O. Wolf, Director of Student Teaching. Piacentini. Daily, 1:00, Shattuck School.

Ed 501. Research. Hours to be arranged. (UO) (OSU)**Ed 503. Thesis.** Hours to be arranged. (UO)**Ed 505. Reading and Conference.** Hours to be arranged. (UO) (OSU)**Ed 505. Reading and Conference: Counseling Minority Youth.** 2 hours. (OSU)

Fullmer. (See Special Programs.)

Ed 506. Special Individual Studies. Maximum of 6 hours. (OCE)

Individual surveys, evaluative studies, and special studies in a limited area of interest, under the guidance of a designated staff member. Hours to be arranged.

Ed 507. Seminar: Education and Educational Policy—Russia, Europe, and Australia. 3 hours. (UO)

Widmayer, Howie. 12:00, Room 102 OM.

(Also see PS 507.)

Ed 507. Seminar: Human Resources and the Administrator. 3 hours. (UO)

Concerned with the optimum use of human resources in a school system stressing inter-relationships of the administrator with staff, policy making bodies, citizens and lay groups; concepts of authority and responsibility in differing societies, particularly as they operate in a highly industrialized democratic society. Discussion includes recruiting, selecting, retaining and evaluating teachers and other staff. Driscoll. 8:00, Room 102 OM.

Ed 507. Seminar: Human Values and Social Sciences. 6 hours. (UO)

Panel of instructors and special lecturers will discuss relationships among social sciences, basic human values and contemporary social problems. Films will be used to focus sharply on key issues under scrutiny. Sessions will emphasize general class discussion. Students will be responsible for outside reading and written reports. Howie, Chino, Deinum, Greene. 1:00-3:00, Room 206 OM. (See Political Science and Sociology.)

Ed 507. Seminar: Methods and Materials in Teaching High School Algebra. 2 hours. (OSU)

Rempfer, Krakowski. (See Special Programs.)

Ed 507. Seminar: Reading and Telling Children's Stories. 3 hours. (UO)

Introduction to collection of old folk and modern fanciful tales; with laboratory practice in reading and telling of stories for children through elementary grades. Prerequisite: Eng 388 or consent of instructor. Registration only by signature of instructor. Petersen, V. 9:00, Room 208 OM.

Ed 507. Seminar: Oregon School Law. 3 hours. (UO)

Cramer. 12:00, Room 121 OM.

Ed 507. Seminar: Simulated Experience in School Administration. 6 hours. (UO)

Goldhammer, Azzarelli and staff. (See Special Programs.)

Ed 508. Workshop: Adolescent Problems. 4 hours. (OSU)

Schulz and staff. (See Special Programs.)

Ed 508. Workshop: Aerospace. 6 hours. (OSU)

Haas, Cody and special staff. (See Special Programs.)

Ed 508. Workshop: Children's Literature. 3 hours. (UO)

Study of the enrichment of children's reading through literature. Advanced course designed for parents and teachers of nursery, kindergarten, and elementary school children. Prerequisite: Eng 388 or consent of instructor. Petersen, V. 11:00, Room 214 OM.

Ed 508. Workshop: Creative Writing in the Elementary School. 3 hours. (UO)

Lewis. (See Special Programs.)

Ed 508. Workshop: Creativity. 3 hours. (OSU)

Hitchcock, Drews. (See Special Programs.)

Ed 508. Workshop: Family Financial Security Education. 6 hours. (UO)

Wood, Soha and staff. (See Special Programs.)

Ed 508. Workshop: Intergroup Relations. 2 hours. (UO)

Berremán, Noar, and special staff. (See Special Programs.)

Ed 508. Workshop: Teaching of Geography. 3 hours. (UO)

Newhouse and special staff. (See Special Programs.)

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

- Ed 509. **Practicum: Remedial Education—Elementary.** 3 hours. (UO)
Special permission required. Otto, Clayton and McMenemy. (See Special Programs.)
- Ed 509. **Practicum: Remedial Education—Secondary.** 3 hours. (UO)
Special permission required. Otto, Clayton and McMenemy. (See Special Programs.)
- Ed 512. **Research Procedures in Education.** 3 hours. (OSU)
Methods, techniques, and tools for doing research work; meaning of scientific methods; ways of locating and formulating problems; techniques for solving problems; necessary statistical tools; collection and interpretation of data; preparation of research reports.
Section I: Curtis. 12:00, Room 113 OM.
Section II: Curtis. 1:00, Room 113 OM.
- Ed 512. **Research Procedures in Education.** 3 hours. (UO)
The nature and procedures of research in education; special techniques of thesis, field study, research paper, and dissertation. Open to graduate students majoring in other fields. Does not take the place of individual supervision of the student's thesis. An introductory course in statistics is desirable preparation.
Section I: Curtis. 12:00, Room 113 OM.
Section II: Curtis. 1:00, Room 113 OM.
- Ed 522. **Secondary-School Curriculum.** 3 hours. (UO)
Overview of the secondary-school curriculum, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the course of study; evaluation of the secondary school curriculum. Driscoll. 1:00, Room 112 OM.
- Ed 523. **School Activities.** 3 hours. (UO) (OSU)
Principles and purposes of school activities; pupil participation in school government; assemblies; clubs, social activities; athletics, speech activities, drama, music, publications; evaluation of the school activity program. Hummel. 8:00, Room 103 OM.
- Ed 527. **Secondary-School Administration and Supervision.** 3 hours. (UO)
The secondary-school principalship; principles of administration, staff relationships, public relations, and professional growth; business administration; administration of guidance services, curriculum, and school activities; evaluation of the secondary school. Ditto. 10:00, Room 112 OM.
- Ed 534. **Science in the Elementary School.** 3 hours. (UO)
The place of science in the elementary school, with particular reference to the value of science in the lives of children. Selecting and organizing content; coordinating science with elementary-school activities; methods and materials; rooms and equipment. Stotler. 8:00, Room 183 SH.
- Ed 535. **Social Studies in the Elementary School.** 3 hours. (UO)
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. Mosher. 1:00-3:00, (July 16-August 10), Room 183 SH.
- Ed 536. **Language Arts in the Elementary School.** 3 hours. (UO)
The role of language arts in the elementary-school program; objectives; research findings on language development; the teaching of spelling, writing, and speak-

- ing-listening skills; newer instructional materials, testing and evaluation. Phelps. 11:00, Room 105 OM.
- Ed 537. **Reading in the Elementary School.** 3 hours. (UO)
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. Otto. 9:00, Room 213 OM.
- Ed 538. **Mathematics in the Elementary School.** 3 hours. (UO)
Number abilities needed by children; research findings in mathematics education; designing number experiences; theories of teaching desirable teaching procedures, selection and use of materials. Owen. 1:00, Room 208 OM.
- Ed 546. **Philosophy of Education.** 3 hours. (OSU)
Fundamental problems of education, with some attempt at their solution; meaning of philosophy; philosophy of education; value for teacher and administrator. Prerequisite: graduate standing in education. Guy. 11:00, Room 215 OM.
- Ed 553. **Elementary-School Curriculum.** 3 hours. (UO)
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. Patton. 1:00, Room 111 OM.
- Ed 554. **Elementary-School Supervision and Administration.** 3 hours. (UO)
For mature students of elementary education who are preparing for administrative or supervisory positions. Characteristics of good elementary schools, leadership responsibilities and processes, school organization patterns, pupil personnel policies, school-community relationships. Oliver, W. 11:00-1:00, Room 217 OM, (July 16- August 10.)
- Ed 561. **Advanced Educational Psychology.** 3 hours. (OSU)
Experimental material that seems most useful and relevant to educational psychology. Prerequisite: graduate standing in education. Curtis. 10:00, Room 113 OM.
- Ed 565. **Curriculum Foundations.** 3 hours. (UO)
Implications of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning. Clemmer. 9:00, Room 102 OM.
- Ed 566. **Curriculum Construction.** 3 hours. (UO)
Survey and appraisal of curricular patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning. Hamilton. 1:00, Room 213 OM.
- Ed 572. **Public School Administration.** 3 hours. (UO)
Interpersonal relationships in administration; school-board powers, duties roles, relationships; the superintendency-roles, responsibilities, issues, problems; problems of staff personnel; student personnel problems at the local district level; problems and issues relating to the development of effective school-community relationships. Azzarelli. 8:00-10:00, Room 196 SH, (June 18-July 13).
- Ed 574. **School Supervision.** 3 hours. (UO)
The role of the supervisor in keeping education geared to the changing demands of society; theories of leadership; group processes and individual conference

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

techniques; action research and related approaches to curriculum change; analysis of concrete supervisory problems. Driscoll. 12:00, Room 214 OM.

Ed 575. School Finance. 3 hours. (UO)

The problems of school finance and business management; sources of school income; relationship to the state financial structure; budgeting and accounting. Includes the construction of a school budget. Prerequisite: work in administration and organization; or consent of instructor. Cramer. 10:00, Room 154 SH.

Ed 576. School Buildings. 3 hours. (UO)

Study of the problems involved in planning, financing, and construction of school buildings; care and maintenance of buildings; problems of equipment. Includes analysis of the problems of a specific district. Prerequisite: Work in administration and organization; or consent of instructor. Hummel. 11:00, Room 121 OM.

Ed 593. Methods in Secondary-School Language Arts. 3 hours. (UO)

Review of research in the problems of teaching language arts in the secondary schools; observation and participation in demonstration teaching of literature, grammar, and composition. Designed for administrators and supervisors, as well as classroom teachers. Prerequisite: teaching experience or consent of instructor. Knispel. 11:00-1:00, Room 206 OM. (July 16-August 10)

Ed 596. Methods in Secondary-School Social Studies. 3 hours. (UO)

Trends in the social-studies curriculum; the unit methods of teaching; the core curriculum; social-studies materials and teaching techniques; teaching reflective thinking; teaching current affairs. Students may work on problems of individual interest, and prepare materials for use in junior and senior high-school classes. Prerequisite: teaching experience or consent of instructor. Smith. 8:00, Room 214 OM.

English

Eng 101. Survey of English Literature. (First Term) 3 hours. (PSC)

Beowulf to Milton. Lill. 1:00, Room 338 SPH.

Eng 104, 105. Appreciation of Literature. (First and Second Terms) 3 hours each. (PSC)

The aim is to stimulate the appreciation and criticism of literature through a study of the outstanding works in prose and poetry, selected from all periods including the twentieth century.

Eng 104. Anderson, F. 9:00, Room 214 OM.

Eng 105. Johnson, S. 11:00, Room 224 SH.

Eng 107, 108, 109. World Literature. 3 hours each. (PSC)

A sequence in narrative prose, drama, and poetry. Complete books are included so that the student may be familiar with some of the masterpieces in Western world literature.

Eng 107. Netboy. 9:00, Room 101 SH.

Eng 108. Netboy. TuTh, 6:00-8:00 evening, Room 349 SPH.

Eng 109. Clarke. 8:00, Room 338 SPH.

Eng 202, 203. Shakespeare. (Second and Third Terms) 3 hours each. (PSC)

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

Eng 202. Lill. 11:00, Room 303 OM.

Eng 203. Hart. MW, 6:00-8:00 evening, Room 201 SH.

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

- Eng 253, 254, 255. **Survey of American Literature.** 3 hours each. (PSC)
 American literature from its beginning to the present day. Two consecutive terms will satisfy the high-school teaching requirements in English.
- Eng 253. Hart. 10:00, Room 303 SH.
- Eng 254. Ford. TuTh, 8:00-10:00 evening, Room 338 SPH.
- Eng 255. Ford. 9:00, Room 338 SPH.
- Eng 311. **Tragedy.** (First Term) 3 hours. (PSC)
 A study of the nature of tragedy. Lill. 12:00, Room 345 SPH.
- Eng 373. **The Novel.** (Third Term) 3 hours. (PSC)
 A general study of the novel as a literary type with particular attention given to the continental masters. Yorks. 10:00, Room 338 SPH.
- Eng 385. **Contemporary Literature.** (Second Term) 3 hours. (PSC)
 British and American Literature since 1900. Johnson, S. 10:00, Room 225 SH.
- Eng 388. **Children's Literature and Library.** 3 hours. (PSC)
 An introductory course designed to give acquaintance with some significant books for children, with emphasis on the quality of a book; its format, text, and illustrations. An investigation of school library procedures with suggestions for the presentation of children's literature in the elementary school. Petersen, V. 8:00, Room 215 OM.
- Eng 407. **Seminar in Special Authors: Thoreau and Whitman.** (G) 3 hours. (UO)
 Oliver, E. 9:00, Room 352 SPH.
- Eng 416. **History of Literary Criticism.** (G) (Third Term) 3 hours. (UO)
 Studies in the theory and practice of literary criticism from Plato and Aristotle to the present. Yorks. 11:00, Room 338 SPH.
- Eng 436. **Advanced Shakespeare.** (G) 3 hours. (UO)
 Intensive study of several plays, with primary emphasis on textual problems and sources. Prerequisite: year sequence in Shakespeare. Waller. 1:00, Room 341 SPH.
- Eng 475. **Literary Foundations of American Life.** (G) 3 hours. (UO)
 Study of those authors whose writings have helped to give shape to American thought—from Bradford and the Puritans, through Woolman and Franklin, to Emerson. Oliver, E. 12:00, Room 338 SPH.
- Eng 488. **Literature for Teachers.** (g) 3 hours. (UO)
 For students interested in teaching high-school English. Training in comprehension and analysis of representative literary works. Readings from English and American literature, selected in part from state-adopted high-school texts. Does not apply toward the satisfaction of the minimum requirements for a major in English. Ford. 10:00, Room 349 SPH.
- Eng 491. **Introduction to Modern English.** (g) 3 hours. (UO)
 A general view of modern English vocabulary, grammar, pronunciation, and spelling. Recommended for teachers of English. Anderson, F. 11:00, Room 397 SPH.
- Eng 507. **Seminar: The Ballad.** 3 hours. (UO)
 Toelken. (See Special Programs.)

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
 WEDNESDAYS, AND THURSDAYS

Family Life and Home Administration

FL 225. Child Development. 3 hours. (OSU)

Growth and development of the infant and young child; observations in nursery school. Aikin. MW, 8:00-10:00 evening, Room 245 SH.

FL 407. Seminar: Nursery School Operation and Programming. 3 hours. (OSU)

Aikin. TuTh, 6:00-8:00 evening, Room 245 SH.

FL 507. Seminar: Nursery School Operation and Programming. 3 hours. (OSU)

Aikin. TuTh, 6:00-8:00 evening, Room 245 SH.

Financial and Business Economics

FBE 320. Financial Institutions. 4 hours. (UO)

The functions and economic significance of the major financial institutions in the economy that make the savings of society available to consumers, businesses, and governments, including commercial banks, savings banks, savings and loan associations, credit unions, insurance companies, investment trusts, various governmental lending agencies, and international financial institutions. Analysis of each institution and the part it plays in providing the short, intermediate and long-term credit needs of the users of funds. The commercial banking system in relation to its function of supplying the nation's money supply. The nature and functions of money and credit and the interrelationship of money, credit, and prices as they affect business decisions. Prerequisite: Ec 201, 202, 203. Cotter. Daily, 1:00, Room 196 SH.

FBE 466. Business Fluctuations and Expansion. (G) 5 hours. (UO)

Designed to prepare the student to plan successfully in a dynamic business environment. Analysis of forces that cause pervasive fluctuations in aggregate business activity; the effects of these fluctuations on individual business firms and industries. The relationships among long-run trends and shorter cycles; forecasting techniques and policy measures. The growing impact of government decisions on the profits of a particular business and on price and income levels related to business actions such as inventory and investment policies which affect economic stability. Prerequisite: senior standing. Cotter. MW, 6:00-9:30 evening, Room 147 SH.

FBE 508. Workshop: Family Financial Security Education. 6 hours. (UO)

Wood, Soha and staff. (See Special Programs.)

Food and Nutrition

FN 225. Nutrition. 3 hours. (OSU)

Principles of nutrition from the standpoint of newer scientific investigations; selection of an optimal diet for health; present day problems in nutrition. Lowry. TuTh, 8:00-10:00 evening, Room 245 SH.

French

RL 50, 51. **First-Year French.** (First and Second Terms) 4 hours each. (PSC)

An introduction to French, stressing hearing, speaking, reading and writing in that order. Exercises in elementary composition and grammar.

RL 50. Section I: (June 18-July 13) Healy. Daily, 10:00-12:00, Room 104 OM.
Section II: (June 18-July 13) Beddawi. Daily, 1:00-3:00, Room 343 SPH.

RL 51. Section I: (July 16-August 10) Healy. Daily, 10:00-12:00, Room 104 OM.
Section II: (July 16-August 10) Beddawi. Daily, 1:00-3:00, Room 343 SPH.

RL 101. **Second-Year French.** (First Term) 4 hours. (PSC)

Study of selected texts of representative authors; review of grammar; considerable attention to oral use of the language. Beddawi. Daily, 11:00, Room 358 SPH.

RL 314, 315. **Intermediate French Composition and Conversation.** (First and Second Terms) 2 hours each. (PSC)

Exercises in pronunciation, comprehension, and composition. Ample opportunity for conversation. Prerequisite: 2 years of college French or equivalent.

RL 314. (June 18-July 13) Suvajian. Daily, 8:00, Room 358 SPH.

RL 315. (July 16-August 10) Suvajian. Daily, 8:00, Room 358 SPH.

RL 331. **French Pronunciation and Phonetics.** (First Term) 2 hours. (PSC)

A thorough study of the fundamentals of French pronunciation with personal attention to each student's difficulties. Prerequisite: Two years of college French or equivalent. Healy. MWF, 1:00, Room 352 SPH.

General Engineering

GE 103. **Engineering Concepts.** (Third Term) 3 hours. (PSC)

Lectures and elementary problems dealing with the basic concepts common to all fields of engineering; engineering analysis and methods of work. Prerequisite: Mth 100 or equivalent. Two lectures, two 2-hour computation periods. Greiling. MW, 6:00-9:00 evening, Room 401 SH.

GE 111, 112. **Engineering Graphics.** (First and Second Terms) 2 hours. (PSC)

Fundamental principles and the rules of composition of the graphic language of engineering. Three two and a half hour periods.

GE 111. Greiling. TThF, 6:00-8:30 evening, Room 301 OM.

GE 112. Greiling. TThF, 6:00-8:30 evening, Room 301 OM.

Student may register for one or the other.

General Science

*GS 101, 102, 103. **General Biology.** 3 hours each. (PSC)

The fundamental principles of life as they apply to both plants and animals. For general students and those majoring in fields other than biology. If taken after courses with similar materials have been completed, credit will be restricted. Section I: Winchell.

Laboratory A: 8:00-10:00, Room 310 OM.

* Student must make special arrangements with the instructor to register for less than the entire sequence.

Lecture: 10:00-12:00, Room 101 OM.

Laboratory B: 12:00-2:00, Room 310 OM.

Section II: Palmblad.

Laboratory C: 10:00-12:00, Room 310 OM.

Lecture: 12:00-2:00, Room 101 OM.

Laboratory D: 2:00-4:00, Room 310 OM.

***GS 104, 105, 106. Physical Science.** 3 hours each. (PSC)

Fundamental principles of physics, chemistry, astronomy, and geology; development and application of the scientific methods. For students majoring in fields other than physical sciences who wish a broad view of the principles of several physical sciences. No credit will be allowed in GS 104 after a course in geology has been completed, nor in GS 105 after a course in chemistry, nor in GS 106 after a course in physics.

Lecture: Lange. 10:00-12:00, Room 53 SH.

Laboratory A: Lee. 8:00-10:00, Room 212 OM.

Laboratory B: Lee. 12:30-2:30, Room 212 OM.

***GS 311, 312, 313. Natural History of Oregon.** 3 hours each. (PSC)

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. Wirtz. Lecture: 8:00-10:00; Laboratory: 10:00-1:00, Room 373 OM.

GS 411. History of Science. (g) 3 hours. (OCE)

A brief history of the development of science, its social implications, and the growth of scientific method and philosophy. Prerequisite: upper-division standing in science. Payne. 8:00, Room 110 OM.

Geography

Geog 105, 106, 107. Introductory Geography. 3 hours each. (PSC)

A general introduction to the field of geography, in sequence as follows: Geog 105, physical and cultural elements; Geog 106, regional geography of North America, South America, and Europe; Geog 107, regional geography of the USSR, Africa, and Asia. Geog 105 is prerequisite to Geog 106 and Geog 107.

Geog 105. Section I: Taylor. 10:00, Room 371 SH.

Section II: Stradling. 8:00, Room 371 SH.

Section III: Haratani. MW, 6:00-8:00 evening, Room 371 SH.

Geog 106. Section I: Haratani. 9:00, Room 371 SH.

Section II: Stradling. 11:00, Room 371 SH.

Geog 107. Section I: Taylor. 12:00, Room 371 SH.

Section II: Bushman. MW, 6:00-8:00 evening, Room 383 SH.

Geog 329. Geography of North America. 3 hours. (PSC)

A course providing a basic understanding of economic and social activities in the major human-use regions of the home continent; description, analysis, and interpretation of the present occupancy pattern of the major regions of the United

* Students must make special arrangements with the instructor to register for less than the entire sequence.

States. Prerequisite: Geog 105 or Geog 208, 209, 210. Bushman. 11:00, Room 383 SH.

Geog 414. Geographic Background of American History. 3 hours. (PSC)

The influence of geographic factors on colonization, settlement patterns and westward movement in America. Prerequisite: 9 hours of history or 9 hours of geography. Stradling. 10:00, Room 383 SH.

Geog 425. Geography of Conservation. 3 hours. (PSC)

The geographic distribution of American resources; methods for maintaining the optimum resource use. Prerequisite: Geog 105 or Geog 208, 209, 210. Bushman. 9:00, Room 383 SH. (Also see NR 511.)

Geog 451. Geography of Asia. (G) (First Term) 3 hours. (UO)

Physical and cultural landscapes of Asia and adjacent islands. Geog 451, East Asia. Prerequisite: 6 hours in lower-division geography courses or consent of instructor. Haratani. 8:00, Room 383 SH.

Geog 507. Seminar: Industrial Location. 3 hours. (UO)

Factors influencing location of industries will be examined in the light of theory and practice with respect to individual industries and area development. Taylor. TuTh, 6:00-8:00, evening, Room 383 SH. (Also see Economics and Business Administration.)

Geology

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

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. Clem. 12:00-3:00, Room 171 SH.

German

GL 50, 51, 52. First-Year German. 4 hours each. (PSC)

Provides a thorough grammatical foundation of German, stressing hearing, speaking, reading and writing.

GL 50. Section I: (June 18-July 13) Gebert. Daily, 11:00-1:00, Room 341 SPH.

Section II: (June 18-July 13) Jespersion. Daily, 10:00-12:00, Room 49 SPH.

GL 51. Section I: (July 16-August 10) Gebert. Daily, 11:00-1:00, Room 341 SPH.

Section II: (July 16-August 10) Jespersion. Daily, 10:00-12:00, Room 49 SPH.

GL 52. Nussbaum. Daily, 1:00, Room 349 SPH.

GL 101. Second-Year German. (First Term) 4 hours. (PSC)

Gebert. Daily, 9:00, Room 341 SPH.

GL 334, 335, 336. Intermediate German Conversation and Composition. 2 hours each. (PSC)

Peters and staff. (See Special Programs.)

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

- GL 401. **Special Studies: German Life and Thought.** 2 hours. (PSC)
Peters and staff. (See Special Programs.)
- GL 407. **Seminar: The Novelle.** 4 hours. (PSC)
Langhammer. (See Special Programs.)
- GL 407. **Seminar:**
Section I: The Romantic Tradition (g). 4 hours. (UO) Stammer.
Section II: The Classic Ideal (g). 4 hours. (UO) Peters.
Section III: Twentieth Century Literature. 4 hours. (UO) Eaton.
(See Special Programs.)
- GL 424, 425, 426. **Advanced German Composition and Conversation.** (G) 2 hours each. (UO)
Peters and staff. (See Special Programs.)

Health Education

- HE 252. **First Aid.** 3 hours. (PSC)
Study of first aid and safety procedures—for the individual, schools, athletics and civilian defense; meets certification standards of the American Red Cross. McNally. 9:00, Room 53 SH.
- HE 361. **Community Health Problems.** 3 hours. (PSC)
Basic community health problems important in public school health instruction. Prerequisite: 9 hours of human anatomy and physiology. Koski. 2:00, Room 102 OM. (Also see Mb 425)
- HE 362. **Personal Health Problems.** 3 hours. (PSC)
Hygienic care of the body and other personal health problems, important in health instruction. Prerequisite: 9 hours of human anatomy and physiology. Koski. 11:00, Room 102 OM. (See also: SEd 507. Seminar: Advanced Physiological Hygiene.)
- HE 367. **School Health Services.** 3 hours. (PSC)
Purposes and procedures of health services in the public schools; control of common communicable diseases; technique of pupil health appraisal by the teacher. Prerequisite: 9 hours of biology. Koski. 12:00, Room 103 OM. (Also see: SEd 431. School Health Problems (G).)
- HE 450. **Elementary-School Health Education.** (g) 3 hours. (UO)
The purposes and requirements of the school of health service program, with emphasis on organization and procedures for the school health examination. Organization and presentation of teaching materials based on the health needs of the child, community needs, and school health services. Puckett. 9:00, Room 345 SH.
- HE 508. **Workshop: Secondary School Health Education.** 3 hours. (UO)
Puckett. 10:00, Room 345 SH.

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

History

- Hst 101, 102, 103. **History of Western Civilization.** 3 hours each. (PSC)
Origins and development of Western civilization from ancient times to the present.
Hst. 101. Carbone. 11:00, Room 150 SH.
Hst 102. Thompson. 1:00, Room 150 SH.
Hst 103. Farah. TuTh, 6:00-8:00 evening, Room 150 SH.
- Hst 201, 202, 203. **History of the United States.** 3 hours each. (PSC)
From Colonial times to the present day.
Hst 201. Bates. 11:00, Room 101 SH.
Hst 202. Spurlock. MW, 8:00-10:00 evening, Room 101 SH.
Hst 203. Frazier. 1:00, Room 101 SH.
- Hst 341. **Europe Since 1789.** (First Term) 3 hours. (PSC)
Political, social, economic, and cultural trends from the French Revolution to the present. 1789 to 1890. Farah. 12:00, Room 103 SH.
- Hst 371. **Great Americans in Thought and Action.** (Second Term) 3 hours. (PSC)
Personality and leadership of men and women who have been outstanding in various fields of endeavor, great movements, and critical periods. Prerequisite: Upper division standing or consent of instructor. Gilmore. 11:00, Room 149 SH.
- Hst 393. **The Far East in Modern Times.** (Third Term) 3 hours. (PSC)
Examination of the political, social, and religious institutions of Confucian China. Comparison and contrast of the impact of the West upon China and Japan. Revolution and Communism in China. Role of the United States in Eastern Asia in the nineteenth and twentieth centuries. Prerequisites: Hst 101, 102, 103; Hst 201, 202, 203. Webb. 12:00, Room 149 SH.
- Hst 405. **Reading and Conference.** (PSC)
Hours to be arranged.
- Hst 405. **Reading and Conference: Assigned Subjects in the Area of the Civil War and the American South.** 3 hours. (UO)
(See Special Programs.)
- Hst 418. **Studies in Western Civilization.** (g) (First Term) 3 hours. (UO)
Farah. 10:00, Room 150 SH.
- Hst 424. **Early Modern Europe.** (G) (First Term) 3 hours. (UO)
Political, economic, and cultural history of Europe from the Counter-Reformation to the French Revolution. Europe overseas, the rise of absolutism, the Age of Reason, and enlightened despotism. Thompson. TuTh, 6:00-8:00 evening, Room 203 SH.
- Hst 430. **Renaissance.** (G) (First Term) 3 hours. (UO)
The Renaissance in Italy. LeGuin. 9:00, Room 183 SH.
- Hst 443. **History of France.** (G) (Third Term) 3 hours. (UO)
Modern France since 1940. Thompson. 11:00, Room 103 SH.
- Hst 445. **Europe Since 1939.** (G) 3 hours. (UO)
Background and course of World War II; postwar developments in the European states. LeGuin. MW, 6:00-8:00 evening, Room 103 SH.

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

- Hst 449. **History of Russia.** (G) 3 hours. (Third Term) (UO)
Revolutionary Russia, 1861 to the present. Dmytryshyn. TuTh, 8:00-10:00 evening, Room 145 SH.
- Hst 457. **The Era of American Sectional Conflict.** (G) 3 hours. (UO)
Forces, events, and persons that contributed to unity and particularism in the United States during the first half of the nineteenth century. Silver. 12:00, Room 101 SH.
- Hst 458. **The Era of the Civil War.** (G) 3 hours. (UO)
(See Special Programs.)
- Hst 459. **The Era of Reconstruction.** (G) 3 hours. (UO)
Problems of the tragic era following the Civil War; continuing effects of the end of the nineteenth century. Silver. 9:00, Room 149 SH.
- Hst 462. **History of American Thought and Culture.** (G) (Third Term) 3 hours. (UO)
Main currents of American intellectual and cultural life from colonial times to the present. Prerequisite: Hst 201, 202, 203 or consent of instructor. Frazier. 12:00, Room 147 SH.
- Hst 469. **Twentieth-Century England.** (G) 3 hours. (UO)
Social, political, economic, and intellectual changes in Great Britain in the twentieth century. LeGuin. TuTh, 8:00-10:00 evening, Room 101 SH.
- Hst 475. **American Foreign Relations.** (G) (Third Term) 3 hours. (UO)
The origins, character, and consequences of American foreign policies from the Revolutionary War to the present. Frazier. TuTh, 8:00-10:00 evening, Room 103 SH.
- Hst 476. **History of the West.** (G) (First Term) 3 hours. (OCE)
The early American Frontier. Spurlock. 9:00, Room 147 SH.
- Hst 478. **History of the Pacific Northwest.** (G) 3 hours. (UO)
Detailed study of the building of civilization in the Pacific Northwest. Prerequisite: Hst 201, 202 or consent of instructor. Gilmore. TuTh, 6:00-8:00 evening, Room 101 SH.
- Hst 479. **Forces and Influences in American History.** (G) 3 hours. (UO)
Geographic influences; influence of the frontier; inheritance and tradition; economic forces; nationalism; sectionalism; manifest destiny; democracy. Gilmore. 10:00, Room 101 SH.
- Hst 482. **The United States in the Twentieth Century.** (G) (Third Term) 3 hours. (UO)
Since 1938. Silver. TuTh, 6:00-8:00 evening, Room 345 SH .
- Hst 484. **Early History of the American People.** (G) (First Term) 3 hours. (UO)
From the discovery of America to the administration of George Washington. Bates. 10:00, Room 171 SH.
- Hst 487. **American Economic History.** (G) (First Term) 3 hours. (UO)
The economic development of the United States. Bates. MW, 6:00-8:00 evening, Room 101 SH.
- Hst 490. **Problems of the Pacific.** (g) 3 hours. (UO)
Webb. TuTh, 6:00-8:00 evening, Room 103 SH.

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

Hst 492. World Problems. (g) 3 hours. (OCE)

Consideration given to current and significant political, economic, and social problems of the nations in relation to American culture. Webb. MW, 8:00-10:00 evening, Room 150 SH.

Hst 505. Reading and Conference. (UO)

Hours to be arranged.

Hst 505. Reading and Conference: Assigned Subjects in the Area of the Civil War and the American South. 3 hours. (UO)

(See Special Programs.)

Hst 532. European History: Problems and Interpretations. (Third Term) 3 hours. (UO)

Readings, reports, and group discussions of major trends, problems, and interpretations in modern European history. 1789 to the present. Carbone. MW, 6:00-8:00 evening, Room 145 SH.

Home Economics Education

HEd 507. Seminar: Junior High School Homemaking. 3 hours. (OSU)

Emphasis on curriculum planning and methods for the early adolescents. Kienzle. (June 18-July 13) 12:00-2:00, Room 221 SH.

HEd 511. Current Methods in Teaching Homemaking. 3 hours. (OSU)

Current trends in education applied to homemaking education. Prerequisite: Ed 408d. Warrell. (July 16-August 10) 12:00-2:00, Room 221 SH.

Humanities

Hum 10. Contemporary Ethical Problems: Problems of Peace. (2) (Non-credit) (GED)

Series of lecture-discussions concerned with some of the pressing problems of contemporary life. Factual material will be drawn from several scientific fields, and special attention will be given to ethical dimensions of these problems. Newhall. Tu, 7:30-9:30 evening, Room 345 SPH.

Hum 22. Summer Film Colloquy. (non-credit) (GED)

Deinum. (See Special Programs.)

Italian

RL 70, 71. First-Year Italian. (First and Second Terms) 4 hours. (UO)

Grammar, pronunciation, composition, and translation of modern authors. Ricciardelli. Daily, 11:00-1:00, Room 387 SPH.

RL 70. (June 18-July 13)

RL 71. (July 16-August 10)

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

Library Science

Lib 481. Beginning Bibliography and Reference. (G) 3 hours. (UO)

Study of reference materials and services, and of correct bibliographical form; practical problems in the use of reference books in school libraries. Fletcher. 10:00, Room 401 SH.

Lib 484. School Library Administration. (G) 3 hours. (UO)

Planned for school administrators as well as librarians. Particular emphasis on the place of the library in the instructional program. Problems of support and control; housing and equipment; standards; evaluation; objectives. Fletcher. 1:00, Room 401 SH.

Lib 488. Books and Related Materials for Young People. (G) 3 hours. (UO)

The selection and evaluation of books and other materials for the junior and senior high-school library; a study of adolescent reading interests and the library's role in reading guidance. Fletcher. 11:00, Room 401 SH.

Management, Production and Marketing

MPM 321. Organization and Interpersonal Relations. 3 hours. (UO)

Principles of management applied to commercial and industrial concerns; business planning, policy formulation, establishment of procedures, operations; theory and design of organizational structure; impact of work-flow plans, leadership patterns, and control systems upon human behavior. Ziebarth. 12:00, Room 145 SH.

MPM 412. Personnel Management. (g) 3 hours. (UO)

Personnel management in the modern business organization; personnel policies and practices conducive to good relations with employees; personnel problems of small organizations. Allan. MW, 6:00-8:00 evening, Room 149 SH.

MPM 453. Business Policies. (G) 3 hours. (UO)

The interdependence of the different departments of a business concern. Designed to provide an integrated view of business operations, and to coordinate the more specialized instruction of the school. Prerequisite: senior standing. Ziebarth. TuTh, 6:00-8:00 evening, Room 149 SH.

Mathematics

Mth 10. Elements of Algebra. (Non-credit) (3 hours.) (PSC)

For students with less than one year of algebra. Open to others on recommendation of department.

Section I: Hallstrom. 11:00, Room 47 SPH.

Section II: Lim. TuTh, 6:00-8:00 evening, Room 110 OM.

Mth 22. Computer Programming. (Non-credit) (GED)

Broussard. By consent of instructor. (See Special Programs.)

Mth 32. Summer Conference on Modern Mathematics for College Instructors of Future High School Teachers. (non-credit) (GED).

(See Special Programs.)

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

Prerequisite: one year of high school algebra, or Mth 10. No credit allowed for this course if it is completed after Mth 101 or any other more advanced course in Mth.

Section I: Stanton. Daily, 9:00, Room 105 OM.

Section II: Keeler. Tu Th, 6:00-8:30 evening, Room 104 OM.

Mth 101. College Algebra. 4 hours. (PSC)

Prerequisite: one and one-half years of high-school algebra, or Mth 100. Hallstrom. Daily, 12:00, Room 47 SPH.

Mth 102. Plane Trigonometry. 4 hours. (PSC)

Prerequisite: Mth 101. Tauber. Daily, 12:00, Room 105 OM.

Mth 103. Analytic Geometry. 4 hours. (PSC)

Prerequisite: Mth 102.

Section I: Hallstrom. Daily, 9:00, Room 397 SPH.

Section II: Stanton. MW, 6:00-8:30 evening, Room 104 OM.

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

Simple and compound interest and discount, annuities, periodic-payment plans, bonds, depreciation, and other topics related to business. Prerequisite: Mth 101. Keeler. MW, 6:00-8:30 evening, Room 105 OM.

Mth 111. Mathematics for Elementary Teachers. 3 hours. (PSC)

Treatment of historical aspects of mathematics, social uses and relationships, mathematical principles, development of problem-solving ability and proficiency in the fundamental skills of mathematical processes. Laboratory hours to be arranged.

Section I: Flanagan. 9:00, Room 215 OM.

Section II: Flanagan. MW, 6:00-8:00 evening, Room 112 OM.

Mth 201. Differential and Integral Calculus. (First Term) 4 hours. (PSC)

First term of a standard sequence for students of science and engineering. Prerequisite: Mth 103. Tauber. Daily, 10:00, Room 105 OM.

Mth 311, 312, 313. Advanced Mathematics. 3 hours each. (PSC)

Advanced college algebra, theory of equations, and advanced Euclidean plane geometry. Prerequisite: Mth 103 or equivalent. Stanley. 6:00-9:00 evening, Room 111 OM.

Mth 333. Vector Analysis. 3 hours. (PSC)

Modern vector and matrix methods with applications for students of mathematics, physics, and engineering. Prerequisite: Mth 203. Krakowski. 1:00, Room 104 OM.

Mth 353. Topology. 3 hours. (OSU)

Elements of combinatorial and point set topology. Intuitive discussions of traversing networks and coloring maps are followed by more rigorous general developments. Prerequisite Mth 200. Registration by consent of instructor only. Broussard. (Also see Special Programs.)

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Primary Section 18
 Primary Section 19
 Primary Section 20
 Primary Section 21
 Primary Section 22
 Primary Section 23
 Primary Section 24
 Primary Section 25
 Primary Section 26
 Primary Section 27
 Primary Section 28
 Primary Section 29
 Primary Section 30
 Primary Section 31
 Primary Section 32
 Primary Section 33
 Primary Section 34
 Primary Section 35
 Primary Section 36
 Primary Section 37
 Primary Section 38
 Primary Section 39
 Primary Section 40

Number	Course Title	Credits	Year	
			Day	Time
Sac 51	Collegiate Algebra (3)	3.00	Tuesday	2:05-3:20
Sac 52	Elementary Trigonometry and Solid Geometry	3.00	Tuesday	3:25-5:00
Sac 53	Fundamentals of Speech (Section 1)	3.00	Monday	3:55-5:00
Sac 54	Psychology (1)	3.00	Monday	3:55-5:00
Sac 55	Triangles and Quadrilaterals (Solid Geometry) (2)	3.00	Monday	3:55-5:00
Section 6300 Series				
Sac 66	Elementary Algebra & Mathematics (Section 1)	3.00	Tuesday	3:25
Section 6300 Series				
Sac 69	Geometry (Section 1)	3.00	Monday	2:35-3:50
Sac 70	Math. Topics	3.00	Monday	3:55-5:00
Sac 71	Elementary Algebra for the Classroom Teacher	3.00	Monday	3:55-5:00
Sac 72	Elementary Algebra for Business and Industry (3)	3.00	Monday	3:55-5:00
Sac 73	Mathematics and Methods of Language Arts and Social Studies (Section 1)	3.00	Monday	2:05-3:20
Sac 74	Community Health Problems	3.00	Tuesday	3:00-4:00
Sac 75	Community Health Problems (3)	3.00	Tuesday	3:00-4:00
Sac 76	Reading Course for the Classroom Teacher	3.00	Monday	3:55-5:00
Section 6300 Series				
Sac 80	Elementary Algebra and Trigonometry for the Classroom Teacher	3.00	Tuesday	3:55-5:00
Sac 81	Elementary Geometry (Section 1)	3.00	Tuesday	3:55
Section 6300 Series				
Sac 82	Algebra (3)	3.00	Tuesday	3:05-4:20
Sac 83	Geometry (Section 1)	3.00	Monday	2:35-3:50
Sac 84	Mathematics for Community (Section 1)	3.00	Tuesday	2:05-3:20
Sac 85	Mathematics for Community (Section 2)	3.00	Tuesday	3:25-4:40
Sac 86	Mathematics for Community (Section 3)	3.00	Tuesday	4:45-6:00
Sac 87	Mathematics for Community (Section 4)	3.00	Tuesday	6:05-7:20
Sac 88	Mathematics for Community (Section 5)	3.00	Tuesday	7:25-8:40
Sac 89	Mathematics for Community (Section 6)	3.00	Tuesday	8:45-10:00
Sac 90	Mathematics for Community (Section 7)	3.00	Tuesday	10:05-11:20
Sac 91	Mathematics for Community (Section 8)	3.00	Tuesday	11:25-12:40
Sac 92	Mathematics for Community (Section 9)	3.00	Tuesday	12:45-2:00
Sac 93	Mathematics for Community (Section 10)	3.00	Tuesday	2:05-3:20
Sac 94	Mathematics for Community (Section 11)	3.00	Tuesday	3:25-4:40
Sac 95	Mathematics for Community (Section 12)	3.00	Tuesday	4:45-6:00
Sac 96	Mathematics for Community (Section 13)	3.00	Tuesday	6:05-7:20
Sac 97	Mathematics for Community (Section 14)	3.00	Tuesday	7:25-8:40
Sac 98	Mathematics for Community (Section 15)	3.00	Tuesday	8:45-10:00
Sac 99	Mathematics for Community (Section 16)	3.00	Tuesday	10:05-11:20
Sac 100	Mathematics for Community (Section 17)	3.00	Tuesday	11:25-12:40
Sac 101	Mathematics for Community (Section 18)	3.00	Tuesday	12:45-2:00
Sac 102	Mathematics for Community (Section 19)	3.00	Tuesday	2:05-3:20
Sac 103	Mathematics for Community (Section 20)	3.00	Tuesday	3:25-4:40
Sac 104	Mathematics for Community (Section 21)	3.00	Tuesday	4:45-6:00
Sac 105	Mathematics for Community (Section 22)	3.00	Tuesday	6:05-7:20
Sac 106	Mathematics for Community (Section 23)	3.00	Tuesday	7:25-8:40
Sac 107	Mathematics for Community (Section 24)	3.00	Tuesday	8:45-10:00
Sac 108	Mathematics for Community (Section 25)	3.00	Tuesday	10:05-11:20
Sac 109	Mathematics for Community (Section 26)	3.00	Tuesday	11:25-12:40
Sac 110	Mathematics for Community (Section 27)	3.00	Tuesday	12:45-2:00
Sac 111	Mathematics for Community (Section 28)	3.00	Tuesday	2:05-3:20
Sac 112	Mathematics for Community (Section 29)	3.00	Tuesday	3:25-4:40
Sac 113	Mathematics for Community (Section 30)	3.00	Tuesday	4:45-6:00
Sac 114	Mathematics for Community (Section 31)	3.00	Tuesday	6:05-7:20
Sac 115	Mathematics for Community (Section 32)	3.00	Tuesday	7:25-8:40
Sac 116	Mathematics for Community (Section 33)	3.00	Tuesday	8:45-10:00
Sac 117	Mathematics for Community (Section 34)	3.00	Tuesday	10:05-11:20
Sac 118	Mathematics for Community (Section 35)	3.00	Tuesday	11:25-12:40
Sac 119	Mathematics for Community (Section 36)	3.00	Tuesday	12:45-2:00
Sac 120	Mathematics for Community (Section 37)	3.00	Tuesday	2:05-3:20
Sac 121	Mathematics for Community (Section 38)	3.00	Tuesday	3:25-4:40
Sac 122	Mathematics for Community (Section 39)	3.00	Tuesday	4:45-6:00
Sac 123	Mathematics for Community (Section 40)	3.00	Tuesday	6:05-7:20
Sac 124	Mathematics for Community (Section 41)	3.00	Tuesday	7:25-8:40
Sac 125	Mathematics for Community (Section 42)	3.00	Tuesday	8:45-10:00
Sac 126	Mathematics for Community (Section 43)	3.00	Tuesday	10:05-11:20
Sac 127	Mathematics for Community (Section 44)	3.00	Tuesday	11:25-12:40
Sac 128	Mathematics for Community (Section 45)	3.00	Tuesday	12:45-2:00
Sac 129	Mathematics for Community (Section 46)	3.00	Tuesday	2:05-3:20
Sac 130	Mathematics for Community (Section 47)	3.00	Tuesday	3:25-4:40
Sac 131	Mathematics for Community (Section 48)	3.00	Tuesday	4:45-6:00
Sac 132	Mathematics for Community (Section 49)	3.00	Tuesday	6:05-7:20
Sac 133	Mathematics for Community (Section 50)	3.00	Tuesday	7:25-8:40
Sac 134	Mathematics for Community (Section 51)	3.00	Tuesday	8:45-10:00
Sac 135	Mathematics for Community (Section 52)	3.00	Tuesday	10:05-11:20
Sac 136	Mathematics for Community (Section 53)	3.00	Tuesday	11:25-12:40
Sac 137	Mathematics for Community (Section 54)	3.00	Tuesday	12:45-2:00
Sac 138	Mathematics for Community (Section 55)	3.00	Tuesday	2:05-3:20
Sac 139	Mathematics for Community (Section 56)	3.00	Tuesday	3:25-4:40
Sac 140	Mathematics for Community (Section 57)	3.00	Tuesday	4:45-6:00
Sac 141	Mathematics for Community (Section 58)	3.00	Tuesday	6:05-7:20
Sac 142	Mathematics for Community (Section 59)	3.00	Tuesday	7:25-8:40
Sac 143	Mathematics for Community (Section 60)	3.00	Tuesday	8:45-10:00
Sac 144	Mathematics for Community (Section 61)	3.00	Tuesday	10:05-11:20
Sac 145	Mathematics for Community (Section 62)	3.00	Tuesday	11:25-12:40
Sac 146	Mathematics for Community (Section 63)	3.00	Tuesday	12:45-2:00
Sac 147	Mathematics for Community (Section 64)	3.00	Tuesday	2:05-3:20
Sac 148	Mathematics for Community (Section 65)	3.00	Tuesday	3:25-4:40
Sac 149	Mathematics for Community (Section 66)	3.00	Tuesday	4:45-6:00
Sac 150	Mathematics for Community (Section 67)	3.00	Tuesday	6:05-7:20
Sac 151	Mathematics for Community (Section 68)	3.00	Tuesday	7:25-8:40
Sac 152	Mathematics for Community (Section 69)	3.00	Tuesday	8:45-10:00
Sac 153	Mathematics for Community (Section 70)	3.00	Tuesday	10:05-11:20
Sac 154	Mathematics for Community (Section 71)	3.00	Tuesday	11:25-12:40
Sac 155	Mathematics for Community (Section 72)	3.00	Tuesday	12:45-2:00
Sac 156	Mathematics for Community (Section 73)	3.00	Tuesday	2:05-3:20
Sac 157	Mathematics for Community (Section 74)	3.00	Tuesday	3:25-4:40
Sac 158	Mathematics for Community (Section 75)	3.00	Tuesday	4:45-6:00
Sac 159	Mathematics for Community (Section 76)	3.00	Tuesday	6:05-7:20
Sac 160	Mathematics for Community (Section 77)	3.00	Tuesday	7:25-8:40
Sac 161	Mathematics for Community (Section 78)	3.00	Tuesday	8:45-10:00
Sac 162	Mathematics for Community (Section 79)	3.00	Tuesday	10:05-11:20
Sac 163	Mathematics for Community (Section 80)	3.00	Tuesday	11:25-12:40
Sac 164	Mathematics for Community (Section 81)	3.00	Tuesday	12:45-2:00
Sac 165	Mathematics for Community (Section 82)	3.00	Tuesday	2:05-3:20
Sac 166	Mathematics for Community (Section 83)	3.00	Tuesday	3:25-4:40
Sac 167	Mathematics for Community (Section 84)	3.00	Tuesday	4:45-6:00
Sac 168	Mathematics for Community (Section 85)	3.00	Tuesday	6:05-7:20
Sac 169	Mathematics for Community (Section 86)	3.00	Tuesday	7:25-8:40
Sac 170	Mathematics for Community (Section 87)	3.00	Tuesday	8:45-10:00
Sac 171	Mathematics for Community (Section 88)	3.00	Tuesday	10:05-11:20
Sac 172	Mathematics for Community (Section 89)	3.00	Tuesday	11:25-12:40
Sac 173	Mathematics for Community (Section 90)	3.00	Tuesday	12:45-2:00
Sac 174	Mathematics for Community (Section 91)	3.00	Tuesday	2:05-3:20
Sac 175	Mathematics for Community (Section 92)	3.00	Tuesday	3:25-4:40
Sac 176	Mathematics for Community (Section 93)	3.00	Tuesday	4:45-6:00
Sac 177	Mathematics for Community (Section 94)	3.00	Tuesday	6:05-7:20
Sac 178	Mathematics for Community (Section 95)	3.00	Tuesday	7:25-8:40
Sac 179	Mathematics for Community (Section 96)	3.00	Tuesday	8:45-10:00
Sac 180	Mathematics for Community (Section 97)	3.00	Tuesday	10:05-11:20
Sac 181	Mathematics for Community (Section 98)	3.00	Tuesday	11:25-12:40
Sac 182	Mathematics for Community (Section 99)	3.00	Tuesday	12:45-2:00
Sac 183	Mathematics for Community (Section 100)	3.00	Tuesday	2:05-3:20

Number	Course Title	Class			
		Day	Time	Location	Room
EN 246	Continuity, Vienna	Th	9:00	Shaker	107 01A
Sp 351	Techniques of Solving Problems	Th	9:00	Wilson	109 01C
Sp 352	Problem Solving	Th	9:00	Shaker	107 01A
Sp 494	Canada, Science and Technology: the Grand Coalition (3)	W	7:30		
				Montgomery	137 3101
PA 305	Principles of Education II (Victory)	Th	9:30	Shaker	107 01A
PA 361	Education	Th	9:30	Wilson	109 01C
PA 401	Special Studies: Advanced Pedagogy	W	7:30	Wilson	109 01C
We 402	English Composition (Victory II)	W	7:30	Wilson	109 01C
We 411	English Composition (Victory II)	W	7:30	Shaker	207 311

Section 300 Plan

Ph 101	Nonconcurrent (University of Illinois) (Victory of Physics)	Th	9:30	Wilson	109 01C
Ph 102	Nonconcurrent (University of Illinois)	W	9:30	Wilson	109 01C

Section 300 Plan

PA 311	Education: Association (Victory II)	W	9:30	Wilson	109 01C
PA 361	Child Management	Th	9:30	Wilson	109 01C
PA 401	Special Studies	Th	9:30	Wilson	109 01C
PA 402	Special Studies	Th	9:30	Wilson	109 01C
PA 403	Special Studies	Th	9:30	Wilson	109 01C
PA 404	Special Studies	Th	9:30	Wilson	109 01C
PA 405	Special Studies	Th	9:30	Wilson	109 01C
PA 406	Special Studies	Th	9:30	Wilson	109 01C
PA 407	Special Studies	Th	9:30	Wilson	109 01C
PA 408	Special Studies	Th	9:30	Wilson	109 01C
PA 409	Special Studies	Th	9:30	Wilson	109 01C
PA 410	Special Studies	Th	9:30	Wilson	109 01C
PA 411	Special Studies	Th	9:30	Wilson	109 01C
PA 412	Special Studies	Th	9:30	Wilson	109 01C
PA 413	Special Studies	Th	9:30	Wilson	109 01C
PA 414	Special Studies	Th	9:30	Wilson	109 01C
PA 415	Special Studies	Th	9:30	Wilson	109 01C
PA 416	Special Studies	Th	9:30	Wilson	109 01C
PA 417	Special Studies	Th	9:30	Wilson	109 01C
PA 418	Special Studies	Th	9:30	Wilson	109 01C
PA 419	Special Studies	Th	9:30	Wilson	109 01C
PA 420	Special Studies	Th	9:30	Wilson	109 01C

Section 300s Arranged

Ph 101	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 102	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 103	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 104	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 105	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 106	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 107	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 108	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 109	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 110	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 111	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 112	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 113	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 114	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 115	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 116	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 117	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 118	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 119	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 120	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 121	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 122	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 123	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 124	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 125	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 126	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 127	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 128	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 129	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 130	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 131	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 132	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 133	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 134	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 135	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 136	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 137	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 138	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 139	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 140	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 141	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 142	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 143	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 144	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 145	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 146	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 147	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 148	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 149	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 150	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 151	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 152	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 153	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 154	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 155	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 156	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 157	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 158	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 159	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 160	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 161	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 162	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 163	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 164	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 165	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 166	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 167	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 168	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 169	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 170	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 171	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 172	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 173	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 174	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 175	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 176	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 177	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 178	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 179	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 180	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 181	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 182	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 183	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 184	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 185	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 186	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 187	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 188	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 189	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 190	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 191	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 192	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 193	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 194	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 195	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 196	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 197	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 198	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 199	Nonconcurrent	Th	9:30	Wilson	109 01C
Ph 200	Nonconcurrent	Th	9:30	Wilson	109 01C

COURSE CATALOGUE
 UNIVERSITY OF MICHIGAN
 ANN ARBOR, MICHIGAN
 1968-1969

Mth 407. Seminar: Elementary Decision Theory. 4 hours. (PSC)

The elements of statistics studied from the standpoint of "decision making under uncertainty" rather than as simply the processing of data, though this is included in the seminar. Prerequisite: college algebra and permission of the instructor. Krakowski, F. TuTh, 6:00-8:30 evening, Room 49 SPH.

Mth 414. Foundations of Elementary Mathematics. (g) 3 hours. (OSU)

Fundamental concepts and logical structure of arithmetic, algebra and geometry. Prerequisite: 3 hours of upper division mathematics. Flanagan. 10:00, 111 OM.

Mth 507. Seminar: Introduction to Abstract Algebra. 4 hours. (OSU)

Byrne. (See Special Programs.)

Mth 507. Seminar: Geometry. 4 hours. (OSU)

Rempfer, Krakowski. (See Special Programs.)

Microbiology

Mb 425. Community Health Problems. (g) (First Term) 3 hours. (OSU)

Application of principles of hygiene to sanitary, statistical, governmental, epidemiological, and sociological problems. Prerequisite: Junior or Senior standing, one year of upper division biological science. Koski. 2:00, Room 102 OM.
(Also see: HE 361.)

Music

Mus 22. Clarinet Clinic. (Non-credit) (GED)

Waln. (See Special Programs.)

Mus 190. Applied Music. 1-2 hours. (PSC)

Freshman year. Individual instruction in organ, piano, violin, cello, harp, voice, orchestral and band instruments. Attendance at class sessions and recitals required. Prerequisite: Qualifying examination. By arrangement. Stehn.

Mus 195. Band. 1 hour. (PSC)

Six hours maximum credit. Solie. 1:00, Room 453 SH.

Mus 197. Chorus. 1 hour. (PSC)

Six hours maximum credit. Foster. 12:00, Room 453 SH.

Mus 290. Applied Music. 1-2 hours. (PSC)

Sophomore year. Continuation of Mus 190, which is prerequisite. By arrangement. Stehn.

Mus 301. Survey of Music and Music Literature. (First Term) 3 hours. (PSC)

A survey of music literature presented chronologically with special emphasis on the relationship, in each significant period, between music and the other arts. Turrell. 1:00, Room 449 SH.

Mus 323. Choral Conducting. 2 hours. (PSC)

The principles of conducting and training choral organizations. Practical experience in conducting campus organizations. Foster. 12:00, Room 453 SH.

Mus 381, 382. Music Fundamentals. 3 hours. (PSC)

Basic musicianship for the elementary teacher, developed through experience

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

- relevant to the classroom. Required of majors in elementary education. Prerequisite to Mus 382: Mus 381 or consent of instructor.
Mus 381. Albertson. 11:00, Room 449 SH.
Mus 382. Albertson. 9:00, Room 449 SH.
- Mus 383. Music Fundamentals (Teacher Education).** 3 hours.
Experience in teaching the various music activities found in the elementary classroom. Required of majors in elementary education. Prerequisite: Mus 381 or 382 or consent of instructor. Foster. 10:00, Room 449 SH.
- Mus 390. Applied Music.** 1-2 hours. (PSC)
Junior year. Individual instruction in organ, piano, violin, cello, harp, voice, orchestral and band instruments. One or two lessons a week. Attendance at class sessions and recitals required. Prerequisite: Mus 290 or equivalent and qualifying examination for upper-division standing. By arrangement. Stehn.
- Mus 395. Band.** 1 hour. (PSC)
Six hours maximum credit. Solie. 1:00, Room 453 SH.
- Mus 397. Chorus.** 1 hour. (PSC)
Six hours maximum credit. Foster. 12:00, Room 453 SH.
- Mus 407. Seminar: Music and Civilization.** (G) 3 hours. (UO)
A study of the role of music in human society. Turrell. 12:00, Room 449 SH.
- Mus 407. Seminar: Woodwind Techniques and Literature.** 3 hours. (PSC)
Waln. (See Special Programs.)
- Mus 436. Applied Theory.** (G) (Third Term) 3 hours. (UO)
Trudeau. 10:00, Room 349 SH.
- Mus 441. Advanced Conducting.** (G) 2 or 3 hours. (First Term) (UO)
The routine and technique of conducting. Problems of the symphony orchestra and choral groups. Score reading. Actual practice in conducting. Prerequisite: Mus 211, 212, 213 or equivalent; consent of instructor. Stehn. 11:00, Room 453 SH.
- Mus 490. Applied Music.** 1-2 hours. (PSC)
Senior year. Continuation of Mus 390, which is prerequisite. By arrangement. Stehn.
- Mus 507. Seminar: Woodwind Techniques and Literature.** 3 hours. (UO)
Waln. (See Special Programs.)
- Mus 590. Applied Music.** 1-3 hours. (UO)
Individual instruction in organ, piano, violin, voice, orchestral and band instruments at the graduate level. By arrangement. Stehn.

Music Education

- MuE 405. Reading and Conference.** Hours to be arranged. (UO)
Staff. By arrangement.
- MuE 505. Reading and Conference.** Hours to be arranged. (UO)
- MuE 533. Music in the Elementary School.** 3 hours. (UO)
Theory, supervision, curriculum, materials, and procedures of vocal music teaching in the elementary school. Research in problems involving music and related areas of instruction. Albertson. 8:00, Room 449 SH.

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

Natural Resources

NR 511. Conservation in the United States. 3 hours. (OSU)

Principles and needs of conservation. Prerequisite: graduate standing. Bushman. 9:00, Room 383 SH. (Also see Geog 425.)

Philosophy

Phl 201. Problems of Philosophy. 3 hours. (PSC)

An introduction to some of the persistent problems and great systems of philosophy through reading and discussion of selected source materials. Polonoff. 9:00, Room 343 SPH.

Phl 202. Elementary Ethics. 3 hours. (PSC)

The course develops the idea of man as a moral agent and considers critically various interpretations of the ideals and standards of moral conduct. Newhall. 9:00, Room 345 SPH.

Phl 203. Elementary Logic. 3 hours. (PSC)

An introductory study of the standard forms of reasoning. Exercise in recognizing, analyzing, criticizing, and constructing the main types of argument and proof. Polonoff. 11:00, Room 343 SPH.

Phl 301. History of Philosophy. (First Term) 3 hours. (PSC)

A study of Western philosophy from the pre-Socratic Greek philosophers to Hegel. Newhall. 11:00, Room 345 SPH.

Phl 450. Philosophical Classics. (First Term) 3 hours. (PSC)

Kant, Hegel and Marx. Polonoff. 12:00, Room 343 SPH.

Physical Education

PE 180. Physical Education (Women). 1 hour. (PSC)

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms in different activities required. Tichy. 11:00, Gym. OM.

PE 190. Physical Education (Men). 1 hour. (PSC)

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms in different activities required. Tichy. 11:00, Gym. OM.

PE 342. Class Techniques in Physical Education. 3 hours. (PSC)

A study of techniques, methodology, and materials for organizing, conducting, and evaluating programs of physical education at secondary school level. Emphasis placed upon guiding principles for selection and application of method. Prerequisite: Ed 312, 310, Psy 311. Tichy. 8:00, Room 112 OM.

PE 407. Seminar: Lead-Up Activities and Minor Sports. 3 hours. (OSU)

Analysis of problems in teaching minor sports and lead-up activities, including safety techniques and game forms, with special reference to their use in planning teaching units and lesson plans in light of the objectives and standards required

in Oregon physical-education programs. Advanced practice is provided in certain activities, with emphasis on the interpretation of rules and techniques of officiating. Tichy. 1:00, Gym. OM.

- PE 446. Tests and Measurements in Physical Education.** (G) 3 hours. (UO)
Use of tests and measurements in physical education; evaluation of objectives, programs, and student achievement through measurement techniques. Prerequisite: Upper division standing in secondary education. Reuter. 10:00, Gym. OM.
- PE 480. Driver Education and Training.** (G) 3 hours. (OSU)
Urlaub. (See Special Programs.)
- PE 508. Workshop: Secondary School Physical Education.** 3 hours. (UO)
Puckett. 12:00, Gym. OM.
- PE 556. Administration of Buildings and Facilities.** 3 hours. (UO)
Building layout and equipment; the relationship of the various functional units—equipment service, dressing facilities, activity spaces, administrative units, permanent and dismantlable equipment. Reuter. 9:00, Room 45 SH.
- PE 557. Supervision of Physical Education for City Supervisors.** 3 hours. (UO)
The purpose of supervision; supervision of staff, facilities, and areas; departmental organization, regulations, and policies. Reuter. 12:00, Room 45 SH.

Physics

- Ph 201, 202, 203. General Physics.** 4 hours each. (PSC)
Standard college physics. Prerequisite: Mth 102, or consent of instructor.
Lecture: Sanford. MTuThF. 8:00-11:00, Room 3 OM.
Laboratory A: Johnson. MTuThF. 11:00-2:00, Room 3 OM.
Laboratory B: Johnson. MTuThF. 2:00-5:00, Room 3 OM.
- Ph 411, 412, 413. Modern Physics.** (G) 3 hours each. (UO)
Introduction to the fundamental concepts of atomic, nuclear, and solid-state physics, in terms of experimental developments during the last fifty years. Kinetic theory, Bohr atom, atomic and molecular spectra, nuclear structure, radioactivity. Prerequisite: Ph 201, 202, 203; must be preceded by or accompanied by calculus. Gurevitch. 9:00-12:00, Room 110 OM.

Political Science

- PS 201, 203. American Governments.** (First and Third Terms) 3 hours each. (PSC)
First Term: National government. Third Term: state and local governments.
PS 201. Haggard. 8:00, Room 349 SPH.
PS 203. Dean. 9:00, Room 103 OM.
- PS 407. Seminar: Contemporary Political Movements in the United States.** 3 hours. (UO)
An analysis of the causes and effects of contemporary protest movements in the United States. Haggard. MW, 6:00-8:00 evening, Room 183 SH.

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

PS 455. Area Tensions in the World Today. (G) 3 hours. (UO)

Africa below the Sahara.
Widmayer. 10:00, Room 356 SPH.

PS 507. Seminar: Education and Educational Policy—Russia, Europe and Australia. 3 hours. (UO)

Widmayer and Howie. 12:00, Room 102 OM. (Also see Education.)

PS 507. Seminar: Human Values and Social Sciences. 6 hours. (UO)

Panel of instructors and special lecturers will discuss relationships among social sciences, basic human values and contemporary social problems. Films will be used to focus sharply on key issues under scrutiny. Sessions will emphasize general class discussion. Students will be responsible for outside reading and written reports. Green, Howie, Chino, Deinum. 1:00-3:00, Room 206 OM.
(Also see Education and Sociology.)

Psychology

Psy 201, 202, 203. General Psychology. 3 hours each. (PSC)

Basic principles and theories of behavior. Discussion of individual differences, intelligence, aptitude, methods of psychological measurement and testing, drives and motives, emotions and reactions to stress, perception, learning, thinking, reasoning, personality; the response mechanism, communication processes, attitudes and social processes, frontiers of psychology. Prerequisite: sophomore standing.

Psy 201. Powloski. 8:00, Room 101 OM.

Psy 202. Powloski. 9:00, Room 228 SH.

Psy 203. Section I: Nunokawa. 1:00, Room 228 SH.

Section II: Reed. TuTh, 3:00-5:00, Room 53 SH. (This section for nurses only.)

Psy 204. Psychology of Adjustment. 3 hours. (UO)

The nature and origins of differences in personality; means of making desired changes. Wilcox. 9:00, Room 221 SH.

Psy 311. Human Development. 3 hours. (PSC)

Development of the child as an individual and as a member of social groups. Included is a comparative study of different home and school environments as they influence the psychological growth of the child. Field projects supplement the class work. Primarily for majors in education. Prerequisite: Psy 201, 202.

Section I: Wilson. 9:00, Room 283 SH.

Section II: Wilson. 10:00, Room 283 SH.

Section III: Boyd, R. 11:00, Room 283 SH.

Psy 345. The Psychology of Motivation. 3 hours. (PSC)

Conditions, principles, and theories of human motivation. Critical examinations of the use of motivational theory in the social sciences and related fields. Prerequisite: Psy 201, 202, 203. Wilcox. 8:00, Room 221 SH.

Psy 346. Psychology of Learning. 3 hours. (PSC)

Conditions, principles, and theories of learning. Assessment of experimental methods and results in relation to current theory. Prerequisite: Psy 201, 202, 203. Powloski. 11:00, Room 345 SH.

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

Psy 411. Mental Hygiene. (g) 3 hours. (OSU)

Principles and application of mental hygiene to problems of individuals in home, school, and occupational situations. Prerequisite: Psy 314 or equivalent. Pierson. 9:00, Room 206 OM.

Psy 421. Principles and Methods of Psychological Assessment. (First Term) 3 hours. (UO)

Application of psychological methods to the study of the individual; theoretical and statistical rationale of test construction and interpretation; problems involved in the prediction of human behavior; survey of psychological assessment techniques. Prerequisite: Mth 425 or equivalent. Boyd, R.D. 8:00, Room 283 SH.

Psy 434. Personality. (Third Term) 3 hours. (PSC)

Disorders of personality, mental health. Prerequisite: Psy 201, 202, 203; Mth 425, 426 or equivalent. Nunokawa. 11:00, Room 221 SH.

Psy 450. Abnormal Psychology. (g) 3 hours. (UO)

Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena and psychoses. Normal motives and adjustment mechanisms considered in their exaggerations in the so-called neurotic person. Nunokawa. 11:00, Room 221 SH.

Psy 460. Developmental Psychology I: Infancy and Childhood. (g) 3 hours. (UO)

Development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence, maturity, and old age. Changes of intelligence, motor capacity, emotional response, language, and social behavior. Emphasis on social influences on development.

Section I: Nunokawa. 9:00, Room 113 OM.

Section II: Karr. 1:00, Room 103 OM.

(Also See Ed 460.)

Psy 461. Developmental Psychology II: Adolescence and Maturity. (g) 3 hours. (UO)

Development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence, maturity, and old age. Changes of intelligence, motor capacity, emotional response, language, and social behavior. Emphasis on social influences on development.

Section I: Karr. 10:00, Room 103 OM.

Section II: Karr. 11:00, Room 103 OM.

Psy 465. Motivation. (G) 2 hours. (UO)

Review of changing conceptions of motivation, particularly as a result of clinical studies, experimental work on animal behavior, and the contributions of topological psychology. Wilcox. 8:00, Room 221 SH.

Psy 472. Individual Differences. (g) (First Term) 3 hours. (OSU)

Theories of personality; experimental evidence on individual differences; evaluation of differences; guiding and directing normal development. Prerequisite: Psy 371 or equivalent. Psy 472 is prerequisite for Psy 473, 474. Wilcox. 11:00, Room 225 SH.

Psy 524, 525. Individual Intelligence Testing. 3 hours each. (UO)

Supervised practice in the administration, scoring, and interpretation of intelligence tests, chiefly the Stanford-Binet; the Wechsler intelligence scale for children, the Wechsler adult intelligence scale. Students register for one number only. Prerequisite: Psy 421. Boyd, R.D. 9:00, Room 225 SH.

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Recreation

- Rec 407. **Seminar: Camping Education and Counseling.** 3 hours. (UO)
Rodney. (See Special Programs.)
- Rec 408. **Workshop: Recreation and Youth Leadership.** 9 hours. (UO)
Rodney. (See Special Programs.)
- Rec 507. **Seminar: Camping Education and Counseling.** 3 hours. (UO)
Rodney. (See Special Programs.)
- Rec 508. **Workshop: Recreation and Youth Leadership.** 9 hours. (UO)
Rodney. (See Special Programs.)

Religion

- R 212. **The Old Testament and Its Historical Background.** 3 hours. (OSU)
Old Testament in light of times and conditions which produced it: religion of Israel as it emerges out of critical survey of sources. Zeigler. 11:00, Room 356 SPH.
- R 421. **Religion and Society.** (g) 3 hours. (UO)
The idea of ethical duty in a religious perspective; the New Testament and ethical problems, the ethics of the family, of race, of the political and economic orders; the concepts of history and human destiny in Judeo-Christian thought. Ziegler. 8:00, Room 356 SPH.
- R 462. **History of Great Religions.** 3 hours. (OSU)
Comparative study of religions that command a large following today, such as Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam. Zeigler. 9:00, Room 356 SPH.

Russian

- SL 50, 51. **First-Year Russian.** (First and Second Terms) 4 hours each. (PSC)
Elements of the Russian language, stressing hearing, speaking, reading, and writing.
- SL 50. (June 18-July 13) Juodeika, G. Daily, 11:00-1:00, Room 385 SPH.
- SL 51. (July 16-August 10) Juodeika, G. Daily, 11:00-1:00, Room 385 SPH.

Science Education

- SEd 407. **Seminar: Radiation and Health.** 3 hours. (OSU)
Colasuonno and Special staff. (See Special Programs.)
- SEd 407. **Seminar: Workshop in Advanced Conservation Education.** 3 hours. (OSU)
Ashbaugh, Rockie and Special staff. (See Special Programs.)
- SEd 407. **Seminar: Workshop in Conservation Education.** 3 hours. (OSU)
Hopson, Dart and Special staff. (See Special Programs.)

ALL CLASSES WILL HAVE CONTROLLED ENROLLMENT

- SEd 431. School Health Problems.** (G) (First Term) 3 hours. (OSU)
Maintenance of health of school children; communicable diseases, school sanitation; planning of school buildings; health of school child; hygiene instruction. Prerequisites: Ed 310, 312, and one year of upper division biology. Koski. 12:00, Room 103 OM.
- SEd 507. Seminar: Advanced Physiological Hygiene.** 3 hours. (OSU)
Analysis, interpretation and application of recent discoveries and developments in the health and parahealth fields. Emphasis upon the why and how of health phenomena and practices. Koski. 11:00, Room 102 OM.
- SEd 507. Seminar: Circulatory Health Instruction Resources.** 3 hours. (OSU)
Anderson. (See Special Programs.)
- SEd 507. Seminar: Radiation and Health.** 3 hours. (OSU)
Colasuonno and Special staff. (See Special Programs.)
- SEd 508. Workshop: Advanced Conservation Education.** 3 hours. (OSU)
Ashbaugh, Rockie and Special staff. (See Special Programs.)
- SEd 508. Workshop: Conservation Education.** 3 hours. (OSU)
Hopson, Dart and Special staff. (See Special Programs.)

Secretarial Science

- SS 111, 112. Stenography.** (First and Second Terms) 3 hours each. (PSC)
Theory of shorthand; practical applications in sentence dictation. SS 121, 122 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.
- SS 111. Fritch. (June 18-July 13) 9:00-10:00 and 12:00-1:00, Room 328 SH.
- SS 112. Backlund. (July 16-August 10) 9:00-10:00 and 12:00-1:00, Room 328 SH.
- SS 121, 122. Typing.** (First and Second Terms) 2 hours each. (PSC)
Theory and practice of touch typing; rhythmical drills, dictation exercises; writing paragraphs; punctuation and mechanical arrangements of business correspondence, legal forms, tabulating, manifolding, speed practice. Students with one year or more of typing are not permitted to take SS 121 for credit.
- SS 121. Section I: Carpenter. (June 18-July 13) 10:00-11:00 and 1:00-2:00, Room 328 SH.
- Section II: Carpenter. (June 18-July 13) TuTh, 6:00-8:00 evening, Room 328 SH.
- SS 122. Backlund. (July 16-August 10) 10:00-11:00 and 1:00-2:00, Room 328 SH.
- SS 211. Applied Stenography.** (First Term) 3 hours. (PSC)
Advanced principles and phrases; dictation and transcripts covering vocabularies of representative businesses; legal form; newspaper and magazine articles. Prerequisite: SS 113, 123 or equivalent. Backlund. MW, 6:00-8:00, evening, Room 328 SH.
- SS 215. Business Machines.** 3 hours. (PSC)
Use and operation of various office equipment and machines. Oliver, P. 8:00-10:00, Room 324 SH. (June 18-July 13).
- SS 241, 242. Office Practice.** 3 hours each. (PSC)
General survey course of all office problems and procedures, including typing, filing, statistical work and personnel. No shorthand required. Students register for one number only. Oliver, P. 10:00-12:00, Room 324 SH. (June 18-July 13.)

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

Social Science

SSc 492. Ideologies of the Twentieth Century. (g) 3 hours. (OCE)

Capitalism, Communism, Socialism, and Fascism considered as politico-economic systems. Totalitarian methods contrasted with democratic methods. Carbone. 12:00, Room 150 SH.

SSc 514. Economic Problems in American Democracy. 3 hours. (OCE)

Selected economic problems of both a general and specific nature. The aim is to give prospective secondary teachers a firm foundation of both theoretical and applied materials in various phases of United States economic-industrial situations and problems. Krauthamer. 10:00, Room 347 SPH.

SSc 515. Political Problems in American Democracy. 3 hours. (OCE)

A study of current domestic political problems. Dean, H. 11:00, Room 347 SPH.

Sociology

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

The basic findings of sociology concerning the individual, culture, group life, social institutions, and factors of social change. Soc 204 and 205 are prerequisites to Soc 206. Open to freshmen.

Soc 204. James. 9:00, Room 101 OM.

Soc 205. Chino. 11:00, Room 183 SH.

Soc 206. Voss. 12:00, Room 183 SH.

Soc 334. Social Psychology. (First Term) 3 hours. (PSC)

Analysis of psychological and sociological processes in personality formation and in various forms of group behavior. Particular attention to origin, function, ideologies, membership, and leadership. Prerequisite: Soc 204, 205 or Psy 201, 202. James. 10:00, Room 221 SH.

Soc 338. Marriage and the Family. 3 hours. (PSC)

Growth and development of family throughout its life cycle. Family and personality development, dating, courtship, mate selection, engagement, marital and family adjustment, family crises. Prerequisite: junior standing or consent of instructor. Drum. 9:00, Room 171 SH.

Soc 407. Seminar: Social Welfare Resources and Organization. (Use of Social Agencies by Teachers, Nurses, and other Professionals.) (G) 3 hours. (UO)

The various types of social welfare resources which teachers, nurses, and other professionals can use to help people with social and emotional problems, methods of organizing these resources for the meeting of human needs. Drum. TuTh, 6:00-8:00 evenings, Room 271 SH.

Soc 417. Criminology and Delinquency (Delinquency). (G) (Second Term) 3 hours. (UO)

The nature and extent of delinquency and crime as forms of deviant social behavior; contributing factors; current prevention and treatment programs. Prerequisite: Soc 204, 205; or Psy 201, 202; or Soc 307. Drum. 8:00, Room 225 SH.

Soc 418. Community Organization. (First Term) 3 hours. (PSC)

Analysis of rural and urban community structure; spatial and temporal arrange-

ments of peoples and institutions; and, the development of community and social area topologies as analytical tools for the investigation of communities as complex social systems. The urban personality and patterns of social interaction and participation are related to problems of developing effective social organization and control, and for effecting change under urban conditions. Prerequisite: Soc 204, 205 and 381, or consent of instructor. Voss. 11:00, Room 303 SH.

Soc 456. Industrial Sociology. 3 hours. (PSC)

Analysis of worker-management relations in American Society. The nature of industrial management and the bases of management's labor decisions; the origins, nature, and functions of labor unions; industrial relations; the consequences of worker-management relations for social welfare. Prerequisites: Soc 204, 205. Voss. 9:00, Room 150 SH.

Soc 507. Seminar: Human Values and Social Sciences. 6 hours. (UO)

Panel of instructors and special lecturers will discuss relationships among social sciences, basic human values and contemporary social problems. Films will be used to focus sharply on key issues under scrutiny. Sessions will emphasize general class discussion. Students will be responsible for outside reading and written reports. Chino, Greene, Howie, Deinum. 1:00-3:00, Room 206 OM.
(See also Political Science and Education.)

Soc 507. Seminar: Rehabilitation of the Mentally Ill. 3 hours. (UO)

James. MW, 6:00-8:00 evening, Room 154 SH.

Soc 508. Workshop: Intergroup Relations. 2 hours. (UO)

Berremán, Noar, and special staff. (See Special Programs.)

Spanish

RL 60, 61. First-Year Spanish. (First and Second Terms) 4 hours each. (PSC)

An introduction to Spanish, stressing hearing, speaking, reading and writing.

RL 60. (June 18-July 13) Estrugo. Daily, 8:00-10:00, Room 387 SPH.

RL 61. (July 16-August 10) Estrugo. Daily, 8:00-10:00, Room 387 SPH.

RL 347. Intermediate Spanish Composition and Conversation. (First Term) 2 hours. (PSC)

Fundamentals of pronunciation. Extensive oral and written practice. Conducted in Spanish. Prerequisite: Two years of college Spanish or equivalent. Ricciardelli. MWTh, 9:00, Room 358 SPH.

RL 401. Special Studies: Mexican Study Program. 3 hours. (PSC)

Vecchio. (See Special Programs.)

Speech

Sp 111. Fundamentals of Speech. (First Term) 3 hours. (PSC)

Projects in extempore speaking. Emphasis on content and organization of speech, but attention also to poise, effective delivery, and command of the language.

Section I: Padrow. 1:00, Room 37 SPH.

Section II: Gibson. 9:00, Room 39 SPH.

Section III: Padrow. 10:00, Room 37 SPH.

Section IV: Padrow. 11:00, Room 37 SPH.

Section V: Montgomery. TuTh, 6:00-8:00 evening, Room 37 SPH.

**UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS**

Sp 211. Interpretation. 2 hours. (PSC)

The oral interpretation of literature including prose and poetry. Aimed at a study of the meaning in selected pieces of literature as well as at an effective communication of meaning to others. Gibson. 8:00, Room 39 SPH.

Sp 248. Community Drama (Second Term). 3 hours. (OSU)

Participation and leadership in community dramatics; community-drama idea; play selection; stage technique and acting; costume and makeup; short cuts in craftsmanship; directing and play production. Shafer. TTh, 6:00-8:00 evening, Room 107 OM. (See Special Programs.)

Sp 351. Technique of Acting: Voice. 3 hours. (UO)

Problems in the use of voice in dramatic roles. Wilson. TTh, 6:00-8:00 evening, Room 109 OM. (See Special Programs.)

Sp 355. Workshop Theater. 1-3 hours. (OSU)

Advanced work in acting and dramatic production. Prerequisite: 3 term hours of Sp 253. Shafer. MW, 6:00-8:00 evening, Room 107 OM. (See Special Programs.)

Sp 370. Phonetics. 3 hours. (PSC)

A study of sounds used in speech; determination of sounds; their symbolic nature; their production; physical and psychological problems involved in their perception. No prerequisite. Montgomery. 9:00, Room 37 SPH.

Sp 371. Speech Science. 3 hours. (UO)

A study of the anatomy, psychology, and physics of speech. Casteel and English. 11:00, Room 41 SPH.

Sp 413. Teaching Speech in the Elementary School. 3 hours. (PSC)

Methods and Materials. Instruction in speech practices and projects suitable for the elementary classroom. Attention to the needs of children with both normal and defective speech. Recommended for all prospective elementary teachers. English. 2:00, 41 SPH.

Sp 414. Teaching Speech in the Secondary School. 3 hours. (PSC)

Methods and Materials. Instruction in speech practices and projects for the high school classroom and extra-curricular program. Especially recommended for all teachers of language arts on the secondary level. Gibson. 11:00, Room 39 SPH.

Sp 424. Speech Forms and Techniques in Group Control. (g) 3 hours. (UO)

Forms and techniques of public speaking as they relate to leadership in special situations: forums; symposiums; panels; parliamentary procedures; speeches to convince; inspire; actuate. Special attention to the needs of administrative personnel. Class will be conducted on the workshop basis. Montgomery. MW, 6:00-8:00 evening, Room 37 SPH.

Sp 481, 483. Speech Pathology. (G) 3 hours each. (First and Third Terms) (UO)

Symptoms, causes, and treatment of speech abnormalities. Functional articulatory defects, delayed speech, emotional speech disorders. Public school speech correction, specific techniques in the diagnosis and treatment of major speech problems. Prerequisite: Sp 370, 371 or consent of instructor.

Sp 481: Young. 8:00, Room 37 SPH.

Sp 483: English and Casteel. To be arranged.

Sp 484, 485, 486. Clinical Speech Therapy. (G) 2 hours each. (UO)

Supervised clinical work with speech defective children and adults enrolled for counseling, testing, and treatment in the Speech and Hearing Clinic; group dis-

cussion of case histories and techniques. Prerequisite: Sp 481, 482 or consent of instructor. Casteel and English. Daily, to be arranged, Room 90 SPH.

Sp 487. Audiology. (G) (First Term) 3 hours. (UO)

The auditory function, hearing impairment, and the education or re-education of persons with hearing loss. Anatomy of the ear, psychophysics of hearing, physical attributes of speech sounds, types and causes of hearing loss, speech involvements of deafness. Blakeley. 1:00-3:00, CCD.

Sp 495. Principles and Techniques of Speech Improvement. (g) 3 hours. (OCE)

Survey of the field of speech defects for classroom teachers. Typical speech defects among children and the basic techniques for their prevention and correction. Emphasis on speech problems which classroom teachers may be called upon to manage. Analysis of speech mechanics, recognition of defects, formation of sounds, testing devices, and techniques for remediation and prevention. DuPuis. 1:00, Room 41 SPH.

Sp 507. Seminar: Examination and Treatment of Voice Disorders. 6 hours. (UO)

Freeman. (See Special Programs.)

Sp 507. Seminar: Advanced Practicum in Clinical Procedures in Speech. 12 hours. (UO)

Lillywhite. (June 18-August 10) Daily, all day, Crippled Children's Division.

Sp 507. Seminar: Advanced Practicum in Speech. 9 hours. (UO)

Lillywhite. Daily, to be arranged, Crippled Children's Division.

Theater Arts

TA 308. Principles of Educational Theater. 3 hours. (PSC)

Secondary school drama. Methods and materials for developing the theater program within the curriculum and as an extra-curricular activity. Shafer. TTh, 8:00-10:00 evening, Room 107 OM. (See Special Programs.)

TA 364. Directing. 3 hours. (PSC)

Training in the general interpretation of plays and the conduct of their rehearsal to the end of public performance. Wilson. MW, 8:00-10:00 evening, Room 109 OM. (See Special Programs.)

TA 401. Special Studies: Musical Theater. 1-3 hours. (PSC)

Wilson. MW, 6:00-8:00 evening, Room 109 OM. (See Special Programs.)

Writing

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

The principles and forms of composition, including the library research paper; effective expression of the student's ideas through impromptu and prepared essays on topics of some significance, with special attention to organization. Mastery of the basic mechanics of English expression is presupposed; students who have deficiencies in fundamental language skills or insufficient preparation for college-level work in written English may be required to register for 1 hour of Writing

UNLESS OTHERWISE SPECIFIED, CLASSES MEET MONDAYS, TUESDAYS,
WEDNESDAYS, AND THURSDAYS

laboratory in addition to Wr 111. Wr 111 is a prerequisite for Wr 112, and Wr 112 is a prerequisite for Wr 113.

Wr 111. Section I: Oliver, E. 11:00, Room 349 SPH.

Section II: Yorks. MW, 8:00-10:00 evening, Room 358 SPH.

Section III: Hart. 9:00, Room 303 SH.

Section IV: Staff. 10:00, Room 358 SPH.

Wr 112. Section I: Johnson, S. MW, 6:00-8:00 evening, Room 225 SH.

Section II: Staff. 8:00, Room 345 SPH.

Wr 113. Section I: Clarke. 10:00, Room 345 SPH.

Section II: Staff. MW, 6:00-8:00 evening, Room 203 SH.

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

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. Netboy. 11:00, 352 SPH.

Wr 411. **English Composition for Teachers.** (g) 3 hours. (UO)

For students expecting to teach English in high school. Practice in writing and a review of the rules of composition. Recommended for satisfaction of the high-school teaching requirement in English. Prerequisite: Wr 111, 112, 113. Anderson, F. 12:00, Room 215 OM.

Zoology

Z 541. **Heredity.** 3 hours. (OSU)

Clarkson. 11:00, Room 213 OM.

Special Summer Programs

Aerospace

Ed 508. **Workshop: Aerospace.** 6 hours. (July 9-August 4) (OSU)

Especially planned for elementary and secondary teachers and administrators to consider economic, social, geographical, military, and technical aspects of the aerospace age. First three weeks at Portland Air Base. Fourth week divided between U. S. Naval Ordnance Test Station, China Lake, Cal., and Edwards Air Force Base. Air transportation to China Lake, Cal., and return to Portland will be furnished by Armed Forces. Open only to persons who have never enrolled in Aviation Education Workshop. Limited number of persons will be permitted to live at Portland Air Base. Course materials will approximate \$6.00. All costs, except for tuition which is payable at registration, are paid at time service is rendered. Air transportation and base accommodations limit enrollment. A few scholarships are available. Admission by prior application should be addressed to Robert J. Gridley, Assistant Director, 1633 S.W. Park Ave., Portland. Haas, Cody and special staff. Daily, 9:00 to 12:00 and 1:00 to 4:00. Portland Air Base.

Arts, Literature and Humanities

AA 256. **Weaving.** 2 hours. (Fridays: June 22, 29, July 6, 13, 20, 27, and August 3) (PSC)

Introduction to basic weaving techniques. The dressing, care, and manipulation of several types of looms. Experimentation with a wide variety of fibers. Production of textiles or original design on 4- and 12-harness looms. Alber. Seven consecutive Fridays, 9:00 to 12:00 and 1:00 to 4:00, Room 334 SPH.

AA 401. **Special Studies: Beginning Photography Workshop.** 2 hours. (August 1-7) (PSC)

Designed to enlarge individual's perception through camera work. Considerations will include awareness of the visual world, integration of exposure, film processing and printing, and handling cameras. Concentration is an essential feature and quality. An additional course fee of \$10.00 is required for this program. For further information contact the Museum Art School, S.W. Park Ave., at Madison St., Portland. White and staff. WThFMT, 7:00 a.m. to 10:00 p.m., and Sat., Sun., 8:00 to 5:00 p.m., Museum Art School.

AA 401. **Special Studies: Ceramics Workshop for Classroom Teachers.** 2 hours. (August 13-24) (PSC)

Designed especially for classroom teachers who have had at least 6 hours of basic art education. An enrichment course, rather than a basic art education course, emphasizing hand building, pottery, stacking, firing, and glazes. Enrollment limited. Ball. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 298 SPH.

AA 501. **Special Studies: Advanced Photography Workshop.** 4 hours. (August 11-19) (UO)

This program proposes welding of the camera and light-sensitive materials to the expressive-creative purposes of student. This purpose is approached through zone system of previsualization, exposure, and printing; photographing in such a way that pictures are a projection of personality of individual; photography

of "found object" as done with documentary photography and in photography practiced as a medium of expression-creation. Method: Photographing morning, processing afternoons, for evening critiques. An additional course fee of \$15.00 is required for this program. For further information contact the Museum Art School, S.W. Park Ave., at Madison St., Portland. White and staff. Daily, including Saturdays and Sundays, 9:00 to 12:00, 1:00 to 4:00, and 7:00 to 9:00, Museum Art School.

ArE 401, 501. **Special Studies: Design for Elementary Art Education.** 3 hours. (August 13-24) (UO)

Instruction in design and an examination of design in the elementary school curriculum. Enrollment limited. Burgner. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 235 SPH.

Eng 507. **Seminar: The Ballad.** 3 hours. (Fridays: June 22, 29, July 6, 13, 20, 27, and August 3, 10.) (UO)

An extensive study of the Ballad from English-Scottish ballads through American ballads and folksongs. Methods and problems of collecting ballads. Toelken. Eight consecutive Fridays, 9:00 to 12:00 and 1:00 to 4:00, Room 435 SH.

Hum 22. **Summer Film Colloquy.** (Non-credit) (GED)

Andries Deinun presents a summer film colloquy of foreign feature films under the title "On Being Oneself: Rare Films about Awareness." Wednesday evenings, June 20, 27, July 11, 18, 25, August 1 and 8, 7:30-9:30, Room 71 SH. Season tickets, \$7.00; faculty season ticket, \$3.50.

Theater Arts

Because of the growing success of musical comedy in high schools, there is a need for persons trained in musical theater production. The summer curriculum in theater arts offers such training. The courses culminate in production of two musical comedies in the sixth and seventh weeks. The musicals, among them Jay Lerner and Frederick Lowe's *Paint Your Wagon*, will be chosen with an eye to successful high school production. High school juniors and seniors may apply for enrollment in the Theater Workshop (Sp 355). A limited number of student assistantships for both college and high school students are available. Those interested should apply to Mr. Asher Wilson, Theater Arts Dept., Portland State College.

Sp 248. **Community Drama.** (Second term). 3 hours. (OSU)

Sp 351. **Technique of Acting: Voice.** 3 hours. (UO)

Sp 355. **Workshop Theater.** 1-3 hours. (OSU)

TA 308. **Principles of Educational Theater.** 3 hours. (PSC)

TA 364. **Directing.** 3 hours. (PSC)

TA 401. **Special Studies.** 1-3 hours. (PSC)

Conservation

SEd 407. **Seminar: Workshop in Advanced Conservation Education.** 3 hours. (August 5-11) (OSU)

SEd 508. **Workshop: Advanced Conservation Education.** 3 hours. (August 5-11) (OSU)

Resource management, stressing interrelationships of resources and basis of con-

flict and harmony in resource use in the Pacific Northwest. Water resources will be highlighted, and recreation, forest, wildlife, and soil resources will be studied in association with water. This workshop will be held at facilities of the Portland General Electric Company at Timothy Lake, in the Mt. Hood National Forest. Because of (a) the distances involved for the numerous field trips and (b) the dusty mountain roads to be traveled, commercial bus transportation, rather than private student cars, will be utilized. Prerequisite: Basic Conservation Workshop, or college course in Conservation, or permission of instructor. *Good physical condition is imperative.* Tuition, \$37.50, food and lodging for seven days, \$32.50, bus transportation, \$10.00; total of \$80.00 payable at time of registration. Registration must be completed on or before July 30. Ashbaugh, Rockie and special staff. Daily, Timothy Lake.

SED 407. **Seminar: Workshop in Conservation Education.** 3 hours. (OSU)

SED 508. **Workshop: Conservation Education.** 3 hours. (Section I: July 15-21; Section II: July 22-28; Section III: July 29- August 4) (OSU)

Study of forestry, lumber, fish and wildlife, soils, crops, irrigation, water and power potentials and outdoor living for elementary and secondary teachers and administrators. This workshop, offered in three identical sections, will be held at Hoodoo Ski Bowl near the summit of Oregon's Santiam Pass, just off Highway 20. Students may enroll for one section only. Not open to students who participated in any previous Conservation workshop offered in the Portland Summer Term. Good physical condition is imperative. Tuition, \$37.50; food and lodging for seven days, \$40.00; both sums are payable at the time of registration. Registration must be completed on or before July 9. Scholarships are available for qualified students. Applications should be addressed to Robert J. Gridley, Assistant Director, 1633 S.W. Park Ave., Portland. Hopson, Dart and special staff. Daily, Hoodoo Ski Bowl.

Counseling and Guidance

Adolescent Study

Ed 508. **Workshop: Adolescent Problems.** 4 hours. (August 13-24) (OSU)

The identification and evaluation of adolescent problems: a study of the adolescent in his social environment. The origin of behavior, both normal and deviate. Study of adolescent delinquency, its causes, analysis of suggested solutions. Schulz and staff. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 201 SH.

Counselor Training Program

Portland Center will offer an Advanced Summer Term Counseling and Guidance Training Institute under the National Defense Education Act. The Counseling and Guidance Training Institute carries graduate credit only, and admission involves special procedures. Enrollees in this Institute, and a year-long Institute to be held through 1962-63, have been selected. Information of future Institutes may be obtained from Dr. Harold W. Bernard, Director, Counseling and Guidance Institute, 1633 S.W. Park Avenue, Portland 1, Oregon, or call CApitol 6-6601, Extension 430.

Ed 507. Seminar: Self-Evaluative Analysis. 3 hours. (UO-OSU)

This seminar is designed specifically for counselor-trainees to assist in the delineation of an accurate self-concept and development of a more adequate person in the counseling role. This will be developed on an individual and group basis. Andrews, Fullmer, Schulz and Smith.

Ed 507. Seminar: Counseling and Guidance Problems. 3 hours. (UO-OSU)

This course is planned to meet the requirements of an advanced counselor training program. Counselor-trainees will work with Group Counseling, Family Consultation and Able Underachievers. Andrews and Fullmer.

Psy 507. Seminar: Interpreting Individual Test Scores. 3 hours. (UO)

The purpose of this course is to develop additional competence in the administration, scoring, and interpretation of individual intelligence tests. The emphasis will be on the Wechsler Scales for Adults and Children. Smith.

Ed 577. Counselor Training: Group Procedures. 3 hours. (OSU)

Principles underlying behavior and methods for modifying individual's attitudes and actions by group procedures; survey of group dynamics; evaluation of leader's role in group; process of attitudinal change and its results; approaches to group and play therapy; relation between individual and group counseling methods. Prerequisite: Ed 485, 487. Bernard.

The above courses constitute the core offering for the Institute. Additional courses which will be available for individual-program planning are:

Ed 491. Social Education. (G) 3 hours. (OSU-UO)**Ed 505. Reading and Conference.** (OSU-UO)**Ed 509. Practicum: Secondary School Counseling.** Hours to be arranged. (UO)**Psy 525. Individual Intelligence Testing.** 3 hours. (UO)**Ed 588. Supervised Counseling Techniques.** 3 hours. (OSU)**Ed 589. Organization and Administration of Guidance Services.** 3 hours. (OSU)

Other Counseling Programs

Rec 407, 507. Seminar: Camping Education and Counseling. 3 hours. (July 5-8 and July 14-21) (UO)

A program of camping education and counseling training. Students will live and work in an organized camp for one week. Emphasis will be given to camp leadership techniques, principles and problems of group leadership and group behavior as related to camping education. Pre-camp training period July 5, 12:00 noon through July 8. Camp training dates are July 14-21 both periods at Camp Silver Creek, located in the Silver Creek Falls State Park near Salem, Oregon. Board and room will be nominal and may be paid at the time service is rendered. Limited enrollment. Admission by prior application to Robert J. Gridley, 1633 S.W. Park Ave., Portland 1, Oregon. Rodney.

Ed 505. Reading and Conference: Counseling Minority Youth. 2 hours. (August 13-17) (OSU)

Designed to examine the relationship between counseling theory and practices as related to minority groups. Delta Sigma Theta, national women's public service sorority for minority groups, is sponsoring this work in cooperation with Portland Center. Fullmer. Daily, 9:00 to 12:00 and 1:00 to 4:00. Room 250 SH.

Ed 508. Workshop: Creativity. 3 hours. (June 18-29) (OSU)

Designed especially for counselors by Dr. Arthur A. Hitchcock, Executive Di-

rector of the American Personnel and Guidance Association and Dr. Elizabeth Drews, Michigan State University. The workshop will center in creativity as a human quality and upon the identification and development of creativity among children and adolescents. Hitchcock and Drews. Daily, 9:00 to 12:00 and 1:00 to 4:00. Room 203 SH.

Ed 508. Workshop: Intergroup Relations. 2 hours. (August 20-24) (UO)

Soc 508. Workshop: Intergroup Relations. 2 hours. (August 20-24) (UO)

A program to aid school personnel, community workers, and other interested persons to understand the nature of our intergroup society, the racial, religious and ethnic groups that compose it, and intergroup conflict arising from prejudice and discrimination.

The current situation and programs for amelioration will be considered in the light of American values and of social science knowledge. Methods and materials will be discussed for education and intergroup relations and for dealing with intergroup problems in the school and community. Berreman, Noar, and special staff. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 250 SH.

Rec 407. Seminar: Recreation and Youth Leadership. 9 hours. (June 18-August 10) (UO)

Rec 508. Workshop: Recreation and Youth Leadership. 9 hours. (June 18-August 10) (UO)

Designed for students, teachers, recreation, park, and youth leaders or others interested in problems of recreation, the workshop is planned to give students both classwork and field experience in an established recreation or youth-serving agency. Each student will be scheduled for field experience to best meet his needs. Rodney. 8:00 to 10:00 a.m., Room 401 SH.

Driving

PE 480. Driver Education and Training. (G) 3 hours. (August 13-24) (OSU)

A basic course for preparation of teachers to conduct driver-training courses in high schools. Actual behind-the-wheel instruction in dual-control car supplied under sponsorship of the American Automobile Association and the State Department of Education. Prerequisite: senior or graduate standing and teaching experience. Urlaub. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 101 SH.

Economics

Ed 508. Workshop: Family Financial Security Education. 6 hours. (June 18-July 13) (UO)

FBE 508. Workshop: Family Financial Security Education. 6 hours. (June 18-July 13) (UO)

Aspects of money and banking, insurance, real estate, investments, estates, and family financing related to family financial security. Designed for elementary and secondary teachers, principals, superintendents, curriculum directors, guidance counselors, teacher-training instructors, and other administrators in the greater Portland area. Admission by advance application. Wood, Soha and staff. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 433 SPH.

Health

SEd 407, 507. **Seminar: Radiation and Health.** 3 hours. (July 23-August 3) (OSU)

A study of radiation and its effects on people. A survey course designed for public awareness of special interest to nurses, teachers, firemen, policemen, utility workers, housewives, and civil defense workers. A basic understanding of biology or physical science is the only requirement. The course will interpret and discuss the latest development in radiation research and will utilize community resources through lectures, films, and field trips. Workshop director will be Dr. Thomas Colasuonno, who is director of public health of the Indiana University Medical Center. Colasuonno and special staff. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 271 SH.

SEd 507. **Seminar: Circulatory Health Instruction Resources.** 3 hours. (June 18-29) (OSU)

Directed toward bringing together the numerous recent scientific and technical knowledge relating to the normal heart, its health and cardio-vascular disorders. Project will be development of a teaching curriculum guide for junior and senior high school level. Scholarships of \$60 offered by the Oregon Heart Association. Limited enrollment. C. L. Anderson. Request application forms from Robert J. Gridley, 1633 S.W. Park Ave., Portland, Oregon. June 18-22, 9:00 to 12:00 and 1:00 to 4:00; June 25-29, 2:00 to 5:30 and 7:00 to 9:00, Room 247 SH.

Institute for Teachers

As an implementation of the Portland High School Curriculum Study, Portland Center, in cooperation with the Portland Public Schools, will again offer an Institute for Teachers in 1962.

The Institute is planned for selected teachers of the Portland Public Schools, and will be held in Madison High School facilities, 2735 N.E. 82nd Avenue, Portland 20.

Ed 508. **Workshop: The Slow Learner.** 4 hours. (June 18-July 13) (UO)

Emphasis in this workshop will be on assistance to slow learners in high school classes. Attention will be focused on English and Social Studies in all grades and on Home Economics and Industrial Arts. Morning sessions will be devoted to presentations and discussions of learning process and to reading difficulties and other blocks to satisfactory progress. In the afternoons each teacher will follow a program of self-improvement, working toward familiarizing himself with available materials and preparing projects and plans to meet the needs of students in his classes. Higginson

Sc-Mth 507. **Seminar: Science.** 4 hours. (June 18-July 13) (OCE)

This institute will be divided into three sections:

1. General Science. A re-examination of aims and a study of new methods and materials for attaining those aims.
2. Applied Science. A seminar of experience in providing a curriculum and physical environment suitable for pupils who are not able to achieve in other high school science courses.
3. Physical Science. A structured sequence of experience in physical science to acquaint teachers with a revised philosophy, content, organization and materials for this course. Van Atta

SSc 507. Seminar: Social Science. 6 hours. (June 18-July 27) (OCE)

This seminar in Social Science will emphasize the preparation of teachers to participate in the Portland Pilot Program in social studies and will deal with the content, skills, and materials recommended for that program. The group will be divided into three sections on the basis of the pilot program which they plan to teach, and each will emphasize one course with additional background material for the teacher. Lectures, discussion groups, and guided reading experiences are planned. Kenyon.

Language

Deutsche Sommerschule am Pazifik

A program of intensive instruction in the German language and literature for advanced students to be housed at Reed College from June 15 to August 4. For further information, write to Dr. H. F. Peters, Portland Center, 1633 S.W. Park Ave., Portland. After consultation with Dr. Peters, students will register for a combination of courses selected from the listing below and totaling 9 to 12 hours credit. An additional course fee of \$60 is required for this program.

GL 334, 335, 336. **Intermediate German Conversation and Composition.** 2 hours. Peters and staff. (PSC)

GL 401. **Special Studies: German Life and Thought.** 2 hours. Peters and staff. (PSC)

GL 407. **Seminar: The Novelle.** 4 hours. Langhammer. (PSC)

GL 407. **Seminar: Sec. 1. The Romantic Tradition.** (g) 4 hours. Stammler.

Sec. 2. **The Classic Ideal.** (g) 4 hours. Peters.

Sec. 3. **Twentieth Century Literature.** 4 hours. Eaton. (UO)

Ed 408. **Special Secondary Methods: German.** 1-3 hours. Eaton. (PSC)

GL 424, 425, 426. **Advanced German Composition and Conversation.** (G) 2 hours. Peters and staff. (UO)

Mexican Study Program

This program, in cooperation with the American Heritage Association and Oregon State Department of Education, is designed for secondary and elementary teachers who would like to improve their fluency in the Spanish language. The program will be held in Mexico in order to give the participants maximum contact with both the language and the culture of our nearest Spanish-speaking neighbor. Although the focal point of the program will be in Mexico City, by arrangement with Mexico City College, intensive instruction in Spanish will be given throughout the entire 29 days of the program, from departure on June 16 until the return to Portland on July 14. Cultural horizons will be broadened by visits to such historic cities as Guadalajara, Morelia, Mazatlan, Taxco, and Veracruz. The Indian heritage will be studied at the pyramids of San Juan Teotihuacan and at the Tarascan village on Janitzio Island on beautiful Lake Patzcuaro. Participants will visit Mexican schools and discuss common problems with Mexican educators. Of special value will be the op-

portunity to collect useful teaching materials to make Spanish classes more meaningful for Oregon students. Teaching techniques and audio-lingual philosophy will be explored in the group seminars. Program director is Mr. Berton M. Bailey, Modern Foreign Language Consultant, Oregon State Department of Education. The academic portion of the program will be supervised by Dr. Frank Vecchio.

Registration will be made by special arrangement through Dr. Vecchio, Room 456 South Park Hall, Portland State College. The registration fee will be \$37.50 for 3 credit hours of language. For information on travel expense, food, lodging, and other expenses, interested persons may contact the AHA, 1225 S.W. Oak, Lake Oswego, Oregon, NE 6-6959.

RL 401. Special Studies: Mexican Study Program. 3 hours. (PSC)

Mathematics

(Special Programs in Mathematics Supported by the
National Science Foundation)

Mathematics for High School Teachers of Mathematics

This Institute, directed by Dr. J. Richard Byrne, associate professor of mathematics, Portland State College, is especially designed for high school teachers of mathematics. It will provide them with a better understanding of the algebra and geometry they teach; an acquaintance with and competence in SMSG materials; and a broad mathematical base for their teaching, specifically by studying introductory abstract algebra. The Institute will be held five days a week during the period June 18 to August 10. Participants will receive a stipend and allowance for dependents and travel. Enrollment limited to the thirty junior and senior high school teachers awarded stipends for the Institute. Request for application forms should be directed to Dr. J. Richard Byrne, Director, Room 120, Old Main, 1620 S.W. Park Avenue, Portland 1, Oregon. Byrne, Rempfer and Krakowski.

Mth 507. Seminar: Geometry. 4 hours. Rempfer and Krakowski. 249 SH. (OSU)

Mth 507. Seminar: Introduction to Abstract Algebra. 4 hours. Byrne. 250 SH. (OSU)

Ed 507. Seminar: Methods and Materials in Teaching High School Algebra. 2 hours. Rempfer and Krakowski. 201 SH. (OSU)

Modern Mathematics for College Instructors of Future High School Teachers

This Conference, directed by Dr. Robert W. Rempfer, professor of mathematics, Portland State College, is designed for college teachers of

future high school teachers of mathematics. Objective is to elaborate a theme that ramifies into a supporting base for much of the newer high school material with which college instructors of mathematics must deal in connection with teacher training. Conference will deal with selections from algebra. Conference will proceed largely on small group basis with a six-day week. Stipends and travel allowance are available to those conferees accepted. Attendance at Conference will be limited to 20 participants selected on the basis of letter application to Dr. Rempfer, Director, Room 114, Old Main, 1620 S.W. Park Avenue, Portland 1, Oregon. Conference will run from 8:00 until 4:00 daily, July 20 to August 11, 1962. Rempfer, Niven, Butler and Stanley.

Mathematics for Gifted High School Students

This Institute, directed by Dr. Robert L. Broussard, associate professor of mathematics, Portland State College, is designed for gifted high school students of mathematics in the junior and senior years. Objectives are to help identify students who have excellent potential for becoming scientists; to help accelerate their scholarly development by providing instruction in scientific content and methods by scientists of recognized stature; and to help develop cooperation between colleges and high schools in increasing the quality of education in the sciences. Initial selection will be on recommendation by the high schools. Applications should be directed to Dr. Robert L. Broussard, Director, Room 120 Old Main, 1620 S.W. Park Avenue, Portland 1, Oregon. The Institute will be held mornings, five days a week during the period from June 18 to August 10. High school students will receive a travel allowance. With the exception of Topology and Computer Programming, the enrollment is limited to 25 high school students and a few selected high school teachers of mathematics. Teachers accepted in the Institute will receive stipends and college credit in mathematics. Broussard, Byrne.

- Mth 22. **Computer Programming.** Non-credit. Fridays. Broussard. Field trips. (GED)
- Mth 353. **Topology.** 3 hours. Monday through Thursday. Broussard. 250 SH. (OSU)
- Mth 507. **Seminar: Introduction to Abstract Algebra.** 4 hours. Monday through Friday. Byrne. 250 SH. (OSU)

Music

- Mus 22. **Clarinet Clinic.** Non-credit. (August 17-18) (GED)

Primarily for senior high school and college students and teachers. Tone production, embouchure, techniques of the clarinet and a discussion of clarinet literature. Directed by Professor George E. Waln from The Conservatory of Music, Oberlin College. Fee \$10.00. Friday and Saturday, 9:00 to 12:00 and 1:00 to 4:00, Room 453 SH.

Mus 407. Seminar: Woodwind Techniques and Literature. 3 hours. (August 13-24) (PSC)

Mus 507. Seminar: Woodwind Techniques and Literature. 3 hours. (August 13-24) (UO)

A seminar dealing with all of the problems involved in the playing and teaching of woodwind instruments. Discussions of appropriate literature at all levels for these instruments. Restricted to band and orchestra performers and teachers. Students should have available for their own use as many of the woodwind instruments as possible. Students enrolled in this seminar may participate in the Clarinet Clinic on August 17-18 without charge. Seminar and Clinic to be directed by Professor George E. Wain from The Conservatory of Music, Oberlin College. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 453 SH.

School Administration

Ed 22. Simulated Experience in School Administration. Non-credit. (July 2-13) (GED)

Simulated materials depicting actual administrative problems and situations with which school supervisors, principals, and superintendents are involved. This is an in-service course restricted to administrators in Vancouver Public Schools. Azzarelli and staff. Daily, 1:00 to 5:00, 607 North Devine Road, Vancouver, Washington.

Ed 507. Seminar: Simulated Experience in School Administration. 6 hours. (June 11-29) (UO)

Simulated materials depicting actual administrative problems and situations with which school supervisors, principals, and superintendents are involved. Open to experienced supervisors and administrators and individuals who have had classroom teaching experience and who contemplate entering supervisory or administrative positions within the near future. A \$5.00 materials charge should be paid at time of registration along with tuition fee. Advance registration is recommended as enrollment is limited. Goldhammer, Azzarelli and staff. Daily, 1:00 to 5:00, Room 301 SH.

Social Studies

Geography

Ed 508. Workshop: Teaching of Geography. 3 hours. (Fridays: June 22, 29, July 6, 13, 20, and 27) (UO)

A study of principles and methods used in presentation of basic materials of geography on elementary and secondary levels. Maps, globes, charts, slides, filmstrips. Three weekend field trips. Newhouse and special staff. Six consecutive Fridays, 9:00 to 12:00 and 1:00 to 4:00, Room 383 SH.

Travel and Lecture Program to the Civil War Battlegrounds

This program, in cooperation with the American Heritage Association, will deal with the critical decade before the Civil War and of the course

of that conflict. Enrollees must be registered *before April 9* in order to attend several sessions which will be held at Portland Center during Spring Term. Students will also have lectures and presentations at various universities in the South and near specific points of interest while traveling. On June 19 enrollees will depart by bus from Portland and travel to the geographic area of the Civil War battles. The group will visit Little Rock, Vicksburg, Atlanta, Petersburg, Charlottesville, Antietam, Gettysburg, Washington, D.C., Springfield and other places that have especial significance for the study of the South and the Civil War. Students will return to Portland on July 30.

Registration will be made by special arrangement through Dr. George Hoffmann, Room 424 State Hall, Portland State College. The registration fee will be \$75 for 6 credit hours of History 458 (G) and History 405-505, which will be taught together in connection with the program. For information on travel, food, lodging, and other expenses, interested persons may contact Dr. Hoffmann.

Hst 405, 505. **Reading and Conference: Assigned Subjects in the Area of the Civil War and the American South.** 3 hours. (UO)

Hst 458. **The Era of the Civil War.** (G) 3 hours. (UO)

Special Education

Certificate Program for Teachers of the Mentally Retarded

Teachers who have the necessary qualifications may complete the Certificate Program for teachers of the mentally retarded in the eight-week session of either the University of Oregon or the Portland Center. A twelve-hour program in this specialty is scheduled. Teachers enrolling in this program will not have time available for courses in other fields. The Portland Center program, consisting of the following courses, will be held at the Eliot School, 2231 N. Flint, Portland 17. For application for admission form write to Robert J. Gridley, Assistant Director, 1633 S.W. Park Avenue, Portland 1, Oregon.

Ed 407. **Seminar: Curriculum for Mentally Retarded.** (G) 3 hours. Bode. (UO)

Ed 407. **Seminar: Arts and Crafts for Mentally Retarded.** (G) 3 hours. Bode. (UO)

Ed 409. **Practicum: Teaching Mentally Retarded.** (G) 3 hours. Karp and Miller. (UO)

Ed 464. **The Mentally Retarded Child.** (G) 3 hours. Mattson. (UO)

Speech Correction Programs

STUDENT PROGRAM

Two types of programming in speech correction are offered through

the Portland Center. (1) Programs leading to certification with the State of Oregon and the American Speech and Hearing Association; and (2) programs leading to the Master of Education degree at the University of Oregon. Both programs represent an extension of the University of Oregon's speech correction program, and are offered at the Portland Center in cooperation with the Crippled Children's Division, University of Oregon Medical School. Students interested in either of these programs are encouraged to contact Dr. Robert H. English, Portland Center, for information and guidance.

Courses required for speech correction programs and offered during the summer term are:

- Sp 370. **Phonetics.** 3 hours. (PSC)
- Sp 371. **Speech Science.** 3 hours. (UO)
- Sp 481. **Speech Pathology.** (G) (First Term) 3 hours. (UO)
- Sp 483. **Speech Pathology.** (G) (Third Term) 3 hours. (UO)
- Sp 484, 485, 486. **Clinical Speech Therapy.** (G) 3 hours. (UO)
- Sp 487. **Audiology.** (G) (First Term) 3 hours. (UO)
- Sp 507. **Seminar: Advanced Practicum in Clinical Procedures in Speech.** 12 hours. (UO)

Students enrolled in clinical activities, the Advanced Practicum and the Voice Disorders Seminar, will have the opportunity to observe and participate in the various clinics at the Medical School.

SPECIAL FOUR-WEEK SEMINAR IN SPEECH CORRECTION

Each summer Portland Center provides a special four-week seminar for advanced clinicians under the direction of an outstanding visiting instructor. This summer, Dr. Gerald Freeman, Consultant in Speech Pathology and Director of the Speech Clinic, Oakland County Board of Education, Pontiac, Michigan, will conduct a seminar in Voice Disorders assisted by Mrs. Ruth M. DuPuis, Senior Speech Consultant for the Portland Public Schools.

- Sp 507. **Seminar: Examination and Treatment of Voice Disorders.** 6 hours. (June 18-July 13). (UO)

Primary consideration will be given to deviation of voice found in school age children at all levels. Attention will be given to detection, referral and differential diagnosis of voice problems. Seminar will include demonstrations of typical voice problems; opportunity for practice in examination procedures; and review of recent literature and research. Credit earned in this Seminar will apply toward requirements for the Oregon Speech Correction Certificate and credit toward Basic and Advanced Certification in the American Speech and Hearing Association. For permission to enroll contact Dr. Robert H. English, Portland Center, 1633 S.W. Park Avenue, Portland 1, Oregon. Freeman, DuPuis. Daily, 8:00 to 12:00 (this constitutes a full-time load). 43 SPH.

SPEECH CORRECTIVE SERVICES FOR CHILDREN

Clinical speech correction services are provided children between the ages of 4 and 21. The selection of children for admission to the clinic is

on the basis of examination and interview. A parent must accompany the child to the examination, and should be available for conference with clinicians at least one day per week throughout the six-week summer term for the children. Referrals may come from any source. Children in speech correction are scheduled for one and two hour periods, four mornings per week, for six weeks at the Speech Clinic in the basement of South Park Hall, Portland State College. Applications for the clinic should be directed to Mr. Robert Casteel, Clinic Supervisor, Portland Center, 1633 S.W. Park Avenue, Portland 1, Oregon.

Remedial Reading Clinic for Classroom and Special Education Teachers

Ed 409 (G) -509. Practicum is offered in conjunction with the Reading Clinic which is operated at Shattuck Elementary School. Teachers who are preparing to meet state certification requirements in remedial education and classroom teachers interested in diagnostic and remedial techniques will find the practicum experience to be of value. Practicum may be taken for either 3 or 6 hours of credit during summer term. Special permission to enroll in the Practicum must be obtained from Dr. Wayne Otto.

Applicants for enrollment in the Reading Clinic may be referred by parents or teachers. To be eligible, children should be in grades four (or repeating grade three) through eleven. Children who are accepted for enrollment in the Reading Clinic will be scheduled between 9:00 and 11:00 on Monday through Thursday from June 25 through August 3. The Reading Clinic is located, during the summer term in Shattuck Elementary School, 1914 S.W. Park Avenue, Portland.

Direct inquiries about practicum, remedial education programs, and enrollment in the Reading Clinic to Dr. Wayne Otto, Portland Center, 1633 S.W. Park Avenue, Portland 1, Oregon. (CApitol 6-6601, extension 425).

Courses *required* for the state remedial education certificate offered in the summer term are:

Ed 409. (G) -509. **Practicum.** 3 or 6 hours. (UO)

Remedial Education-Elementary
Remedial Education-Secondary

Ed 428. **Psychology of Reading Instruction.** (G) 3 hours. (UO)

Ed 460. **Psychology of Childhood.** (G) 3 hours. (OSU)

Ed 462. **Psychology of Exceptional Children.** (G) 3 hours. (UO)

Ed 468. **Diagnostic and Remedial Techniques in Reading.** (G) 3 hours. (UO)

Psy 421. **Principles and Methods of Psychological Assessment.** (g) 3 hours. (UO)

Psy 524. **Individual Intelligence Testing.** 4 hours. (UO)

Sp 481. **Speech Pathology.** (G) 3 hours. (UO)

Recommended courses:

- Ed 463. **The Maladjusted Child.** (G) 3 hours. (UO)
Ed 464. **The Mentally Retarded Child.** (G) 3 hours. (UO)
Ed 465. **Diagnostic and Corrective Techniques in the Basic Skills.** (G) 3 hours. (UO)
Ed 537. **Reading in the Elementary School.** 3 hours. (UO)

Writing

- Ed 508. **Workshop: Creative Writing in the Elementary School.** 3 hours. (August 13-24) (UO)

Designed especially for elementary teachers to assist them in helping children write creatively. Lectures and critique of writings by Dr. Claudia Lewis of the Bank Street College of Education in New York. Dr. Lewis has written books and verse for children and articles for the Saturday Review. Enrollment limited. Lewis. Daily, 9:00 to 12:00 and 1:00 to 4:00, Room 103 SH.

Post Session

- AA 401. **Special Studies: Ceramics Workshop for Classroom Teachers.** 2 hours. (August 13-24) (PSC)
AA 501. **Special Studies: Advanced Photography Workshop.** 4 hours. (August 11-19) (UO)
ArE 401, 501. **Special Studies: Design for Elementary Art Education.** 3 hours. (August 13-24) (UO)
Ed 505. **Reading and Conference: Counseling Minority Youth.** 2 hours. (August 13-17) (OSU)
Ed 508. **Workshop: Adolescent Problems.** 4 hours. (August 13-24) (OSU)
Ed 508. **Workshop: Creative Writing in the Elementary School.** 3 hours. (August 13-24) (UO)
Ed 508. **Workshop: Intergroup Relations.** 2 hours. (August 20-24) (UO)
Soc 508. **Workshop: Intergroup Relations.** 2 hours. (August 20-24) (UO)
Mus 22. **Clarinet Clinic.** Non-credit. (August 17-18) (GED)
Mus 407. **Seminar: Woodwind Techniques and Literature.** 3 hours. (August 13-24) (PSC)
Mus 507. **Seminar: Woodwind Techniques and Literature.** 3 hours. (August 13-24) (UO)
PE 480. **Driver Education and Training.** (G) 3 hours. (August 13-24) (OSU)

General Extension Division

Through its extension program of the educational resources of its seven campus institutions, the Oregon State System of Higher Education has the responsibility of serving the higher education needs of the people of Oregon not regularly enrolled in a college or university.

The General Extension Division serves as the administrative agency of the State System of Higher Education—initiating, coordinating and guiding extension programs: 1. Offerings for credit, such as regular courses, correspondence study, workshops, institutes and telecourses. 2. Services of a noncredit nature, such as audio-visual activities and facilities, cultural activities, and other educational service projects. 3. Continuing-education opportunities for adults through noncredit courses, institute-conference programs, radio, television films and other media of communication of information.

The General Extension Division is responsible for establishing staffing and maintaining departments for education services, regional offices to represent all departments of the division, audio-visual, radio and television facilities to provide higher education for adults based on the unified program of the Oregon State System of Higher Education.

Administration and Staff

ROY E. LIEUALLEN, Chancellor, Oregon State System of Higher Education

JAMES W. SHERBURNE, Dean, General Extension Division

RALPH W. STEETLE, Associate Dean; Director, Department of Educational Media

VIRON A. MOORE, Assistant Dean; Director, Department of Instruction, State-Wide

DANIEL W. FULLMER, Assistant Dean; Director, Department of Instruction, Portland Center

DONALD R. LARSON, Assistant Dean; Director, Office of General Services

Department of Instruction, Portland Center

Working in liaison with other departments of the General Extension Division, Portland Center develops and offers evening and summer term programs for students in the Portland metropolitan area and for others who wish to avail themselves of specific programs. A wide range of both credit and noncredit offerings is available through Portland Center.

The summer term program is designed to serve full-time and part-time students in all areas of credit—lower division, upper division and graduate. In addition, noncredit short courses, conferences, workshops and other special programs are provided, many of these in cooperation with the business, industrial and economic community.

The policy of the Department of Portland Center is to serve the needs of the greater Portland metropolitan area with whatever resources are available from catalogs of member institutions of the State System of Higher Education with safeguards to assure fulfillment of the responsibility regarding institutional standards for staff, library, and physical facility.

Special institutes and training programs developed through marshaling of multiple resources and talent, are featured in Portland Center's summer term, as well as during the other quarters.

Administration and Staff

DANIEL W. FULLMER, Assistant Dean; Director
PAUL E. WATSON, Associate Director-Instruction
ROBERT J. GRIDLEY, Assistant Director-Special Programs
GEORGE DEL, Head, Office of Public Affairs
LEROY R. PIERSON, Head, Office of Student Personnel Services
HAROLD W. BERNARD, Coordinator, Counseling and Guidance
DONAL W. MCINTOSH, Coordinator Business and Public Administration
AILEEN G. MCNETT, Coordinator, Office of Student Personnel
ROBERT SMITH, Coordinator, Oregon Technical Institute (On leave)
CHARLES F. ZIEBARTH (UO), Coordinator, Business Administration
JOSEPH J. AZZARELLI (UO), Consultant, School Administration
ANDRIES DEINUM, Consultant, the Humanities
R. DUANE ANDREWS, Counseling and Guidance
ROBERT CARLSON, Information Representative
ROBERT L. CASTEEL, Speech Clinician
WILL DRUM, (UO) Sociology and Social Work
ROBERT H. ENGLISH, (UO), Specialist, Speech and Hearing
ROBERT C. FREDRICKS, Counseling and Guidance
NINA SUE GORDON, Counselor, Counseling Center for Adults
JOHN E. GRENFELL, Counselor, Counseling Center for Adults
RUTH E. HOPSON, General Science
GRACE IRISH, Counseling and Guidance
WILLIAM E. KLINE, Counseling and Guidance
HUGH G. LOVELL, Economics
JOAN MERRITT, Administrative Assistant
WAYNE OTTO (UO), Specialist, Reading
JOHN A. SCHULZ, Counseling and Guidance
RONALD E. SMITH, Counseling and Guidance
CLARK SPURLOCK, History
ROBERT W. WILKINSON, JR., Administrative Assistant
RUTH WINCHELL, General Science

Department of Instruction, State-Wide Services

Helping implement the objectives of the General Extension Division, the Department of State-Wide Services serves the state's citizens with college-level evening classes, correspondence study courses, conferences, workshops, telecourses, and consultant services to business, industry, education and other activities. Any community in Oregon may become a meeting place for state-wide evening classes if satisfactory facilities are provided and sufficient enrollment is guaranteed to cover actual operating costs. Present state-wide offices are maintained on campus in Eugene, Corvallis, Ashland, La Grande and Monmouth, as well as in Salem.

Administration and Staff

VIRON A. MOORE, Assistant Dean; Director
 HOWARD J. AKERS, Assistant Director; Head, Salem Center and North Central Regional Office
 FLOYD B. ALBIN, Campus Representative, Branch Office, Oregon College of Education
 CHARLES D. DEAN, Head, Office of Correspondence Instruction; Consultant, Educational and Professional Groups
 HAROLD P. HOYT, Head, Corvallis Center and Northwest Regional Office
 CHARLES A. IVIE, Head, Southern Regional Office
 DONALD E. LOW, Head, Office of Business and Public Administration
 DORA E. PRENTISS, Head, Office of Televised Instruction
 ROY L. SKEEN, (EOC) Head, Eastern Regional Office
 DOROTHY D. SMITH, Head, Eugene Center and Central Regional Office
 JENNELLE MOORHEAD, Health and Human Welfare
 HERMAN C. FORSLUND, Pharmacy
 E. MILTON GRASSELL, Visual Instruction
 JEAN L. SUTHERLAND, Art
 OSCAR C. CHRISTENSEN, JR., Education (On leave)
 DONALD COOPER, Coordinator, Industrial Programs
 HERMAN C. VOELTZ, History
 CHARLES F. RUFF, English
 KEITH GOLDHAMMER, Education
 W. KENNETH FERRIER, Alcohol Studies Education
 EDWARD J. CAMERON, Informational Representative

Department of Educational Media

The Department of Educational Media, established and embodied in the General Extension Division in 1960, utilizes radio, television and other audio-visual instruments in the service of the people of the state. Radio station KOAC is received through western and central Oregon.

Two non-commercial educational television stations, KOAC-TV and KOAP-TV, serve more than 70 per cent of the state's population. KOAP-FM recently was donated to the Oregon System of Higher Education by Westinghouse, Inc. and is now a part of the educational media complex. Oregon Educational Television Network draws program resources from studios in Portland, Corvallis, Eugene, Monmouth and Salem. Inter-institutional course work is augmented by a variety of telecourses for the off-campus viewer. The network is affiliated with the Educational Television and Radio Center, providing access to the best in ETV programming in the nation.

The Office of Audio-Visual Instruction makes 16 mm motion picture films and slides available to schools, community groups and other educational organizations. A film library and such services as planning and production of films, demonstrations, workshops and consultation on audio-visual methods and materials are the further responsibility of the office of Audio-Visual Instruction is maintained jointly by General Extension Division and the Federal Cooperative Extension Service.

Administration and Staff

RALPH W. STEETLE, Associate Dean; Director

W. CURTIS REID, Head, Office of Audio-Visual Services

JAMES M. MORRIS, Head, Office of KOAC-AM-TV; Station Manager

GRANT S. FEIKERT, Director of Engineering

WILLIAM F. McGRATH, (OSU) Program Director, Oregon Educational Television Network

JACK N. GOODMAN, Budget Director; Film Library Manager, Office of Audio-Visual Services

LAURENCE E. BUTLER, (SOC) Southern Regional Director, Office of Audio-Visual Services

WILLIAM P. WELLS, (EOC) Eastern Regional Director, Office of Audio-Visual Services

FRANK G. NELSON, (EOC) Eastern Region, Office of Audio-Visual Services

E. MILTON GRASSELL, School Specialist, Office of Audio-Visual Services

WILLIAM C. RUSH, Photographer, Office of Audio-Visual Services

HELEN DAETZ, Information Specialist

HELEN FAICK, Artist Service

DAVID H. LEONARD, Program Manager, KOAP-TV

PAUL LARIVIERE, Program Manager, KOAP-FM

BROOKS LEFFLER, Production Manager, KOAP-TV

ROBERT RICHTER, Program Development, KOAP-TV

WILLIAM BYRD, Producer-Director, KOAP-TV

LARRY J. WHITE, Producer-Director, KOAP-TV

ANTON H. SCHMIDT, Chief Engineer, KOAP-TV

ROBERT L. TINKLE, Radio-TV Technician, KOAP-TV

ALLEN N. DAVIS, Radio-TV Technician, KOAP-TV

H. LEROY FAHNER, Radio-TV Technician, KOAP-TV

STEPHEN FEIKERT, Radio-TV Technician, KOAP-TV

MELVIN R. KARSTEN, Radio-TV Technician, KOAP-TV
 WARREN R. HEWITT, Announcer, KOAC-AM-TV
 BEN J. BALLARD, Chief Engineer, KOAC-AM-TV
 ROBERT W. COOK, Studio Crew Chief, KOAC-AM-TV
 ROBERT C. HINZ, Production Services Manager, News Editor, KOAC-AM-TV
 SHIRLEY J. HOWARD, Women's Programs, KOAC-AM-TV
 MARIAN C. JOHNSON, Office Manager, KOAC-AM-TV
 PHILLIP B. KALAR, Radio Program Director, KOAC-AM-TV
 ALFRED R. KELMAN, Research Director, KOAC-AM-TV
 JOHN MACDONALD, Producer-Announcer, KOAC-AM-TV
 ELLIS E. MANNING, Radio-TV Technician, KOAC-AM-TV
 LESTER G. MOCK, Television Program Director, KOAC-AM-TV
 HOWARD R. PAINE, Radio-TV Technician, KOAC-AM-TV
 ELIZABETH D. PATAPOFF, Elementary School Programs, KOAC-AM-TV
 RICHARD W. POTTER, Producer-Director, KOAC-AM-TV
 ROGER REYNOLDS, Producer-Announcer, KOAC-AM-TV
 ROBERT M. ROBERTS, Producer-Announcer, KOAC-AM-TV
 MACK W. SCHWAB, Producer-Director, KOAC-AM-TV
 RALSTON E. SMITH, Information Specialist, KOAC-AM-TV
 WILLIAM C. SMITH, (OSU) Farm Programs, KOAC-AM-TV
 HOWARD E. SPIDLE, Radio-TV Technician, KOAC-AM-TV
 JACK R. TAYLOR, Radio-TV Technician, KOAC-AM-TV
 KENNETH L. WARREN, Producer-Director, KOAC-AM-TV
 BERNARD J. WOHLWEND, Radio-TV Technician, KOAC-AM-TV
 JOHN R. SHEPHERD, (UO) Coordinator of Radio and ETV Programs, Eugene Area
 DONALD F. DILL, Coordinator of Radio and ETV Programs, Salem Area

Office of General Services

The Office of General Services functions as a management structure for the various service activities of the General Extension Division—including the Business Office, Registrar's Office, Library, Information Services, Duplicating and Mailing Services.

In addition, it assists in the encouragement of special community programs and assists the departments in their projects in the area of community relations.

Administration and Staff

DONALD R. LARSON, Assistant Dean; Director
 CHARLES R. WENSTROM, Coordinator, Information Services
 W. T. LEMMAN, Business Manager
 BERNARD C. BAUMGARTNER, Registrar
 JEAN BLACK, Librarian
 EDWARD J. CAMERON, Informational Representative (State-Wide)
 MARY ELLA CARSON, Informational Representative (General Services)

GEORGE DIEL, Head, Office of Public Affairs (Portland Center)
ROBERT CARLSON, Informational Representative (Portland Center, General Services)
HELEN DAETZ, Informational Representative (Educational Media)
RALSTON SMITH, Informational Representative (Educational Media)
MARGARET SUTHERLAND, Supervisor Duplicating Services Personnel
LORETTA HUBBELL, Production Supervisor Duplicating Services
HELEN FAICK, Artist Service (Educational Media)
DAVID K. JOHNSON, Artist Service (Educational Media, General Services)

Summer Term Faculty

MARIAN C. ATKIN, M.Sc., Assistant Professor of Family Life, Oregon State University.
TWILA M. ALBER, Instructor in Arts & Crafts, Arts & Crafts Recreation Center, Columbus, Ohio.
MARJORIE ALBERTSON, M.M., Assistant Professor of Music, Portland State College.
LEWIS E. ALDRICH, Ph.D., Instructor in Biology, Portland State College.
NOURY S. AL-KHALEDY, M.A., Assistant Professor of Semitic Languages, Portland State College.
HARRY THAIN ALLAN, J.D., Assistant Professor of Business Administration, Oregon State University.
ETHEL J. ALPENFELS, Ph.D., Professor of Anthropology, New York University.
CARL L. ANDERSON, Dr.P.H., Chairman, Department of Hygiene & Environmental Sanitation, Oregon State University.
FREEMAN B. ANDERSON, Ph.D., Assistant Professor of English, Portland State College.
R. DUANE ANDREWS, Ph.D., Associate Professor of Education, General Extension Division.
JAMES G. ASHBAUGH, M.A., Assistant Professor of Geography, Portland State College.
JOSEPH J. AZZARELLI, Ed.D., Assistant Professor of Education, General Extension Division and University of Oregon.
DARIEN HOWARD BACKLUND, M.Ed., Assistant Professor of Secretarial Science, Portland State College.
CARLTON BALL, A.M., Professor of Fine Arts, University of Southern California.
ORVIN PAT BARNEY, M.Ed., Instructor, Portland Public Schools.
WHITNEY BATES, Ph.D., Assistant Professor of History, Portland State College.
ABDALLAH J. BEDDAWI, M.A., Assistant Professor of Foreign Languages, Portland State College.
HAROLD W. BERNARD, Ph.D., Professor of Education, General Extension Division.
JOEL V. BERREMAN, Ph.D., Professor of Sociology, University of Oregon.
ROBERT W. BLAKELEY, Ph.D., Instructor in Speech Pathology & Hearing, University of Oregon Medical School.
FRED R. BODE, M.A., Coordinator of Speech Training Classes, Department of Education, San Diego County.
ROBERT L. BOSTER, B.S., Instructor in Chemistry, Portland State College.
ROBERT D. BOYD, Ph.D., Clinical Psychologist, Child Guidance Clinic, Portland.
ROBERT L. BROUSSARD, Ph.D., Associate Professor of Mathematics, Portland State College.
JACK W. BURCNER, M.A., Associate Professor of Art, University of Oregon.
DONALD O. BUSHMAN, Ph.D., Associate Professor of Geography, University of South Carolina.

- JOHN B. BUTLER, JR., Ph.D., Associate Professor of Mathematics, Portland State College.
- J. RICHARD BYRNE, Ph.D., Associate Professor of Mathematics, Portland State College.
- GEORGE A. CARBONE, Ph.D., Professor of History, Portland State College.
- LEONARD LEROY CARPENTER, M.S., Supervisor of Business Education, Portland Public Schools.
- ROBERT L. CASTEEL, B.A., Instructor, Speech Clinician, General Extension Division.
- FREDERIC H. CHINO, M.A., Assistant Professor of Sociology, Portland State College.
- MARGARET CLARKE, M.A., Assistant Professor of English, Portland State College.
- QUENTIN D. CLARKSON, Ph.D., Associate Professor of Biology, Portland State College.
- DONALD BRUCE CLAYTON, M.A., Director of Special Education, Multnomah County Schools.
- RICHARD CLEM, A.M., Associate Professor of Geology, Whitman College.
- ROBERT B. CLEMMER, M.A., Principal Abernathy School.
- LESTER DAVID CODY, M.E.A., Curriculum Consultant.
- THOMAS M. COLASUONNO, M.P.H., Ed. D., Director, Public Health Administration, Indianapolis.
- RICHARD VERN COTTER, B.S., Graduate Assistant, School of Business, University of Oregon.
- JOHN F. CRAMER, D.Ed., Professor of Education, Portland State College.
- CLIFFORD S. CRAWFORD, Ph.D., Instructor in Biology, Portland State College.
- WILLIAM D. CURTIS, Ph.D., Assistant Professor of Psychology, California State Polytechnic College.
- CHARLES DAIGH, B.S., Graduate Assistant, University of Illinois.
- JOHN O. DART, Ph.D., Professor of Geography, Portland State College.
- HOWARD DEAN, Ph.D., Professor of Political Science, Portland State College.
- ALBERT H. DEHNER, Ph.D., Professor of Business Administration, Portland State College.
- ANDRIES DEINUM, M.A., Assistant Professor of English, General Extension Division.
- GEORGE DIEL, M.A., Assistant Professor of Journalism; Head, Office of Public Affairs, General Extension Division.
- EDWIN C. DITTO, D.Ed., Superintendent of Schools, Oregon City.
- BASIL DMYTRYSHYN, Ph.D., Associate Professor of History, Portland State College.
- FRED LEO DOBLER, M.Ed., Assistant Professor of Education, Portland State College.
- ROBERT E. DODGE, Ph.D., Associate Professor of Business Administration, Portland State College.
- ELIZABETH DREWS, Ph.D., Associate Professor of Education, Michigan State University.
- JOSEPH L. DRISCOLL, Ph.D., Director, Student Teaching and Educational Field Work, Boston College.
- WILL DRUM, M.A., J.D., Associate Professor of Sociology and Social Work, General Extension Division.
- RUTH MARIELLEN DUPUIS, M.Ed., Consultant, Speech and Hearing Program, Portland Public Schools.
- JOHN EARNST, B.S., Instructor, Science, General Extension Division.
- FRANK F. EATON, J.U.D., Professor of German, Portland State College.
- ROBERT H. ENGLISH, D.Ed., Assistant Professor of Speech, General Extension Division.
- ROLANDO J. ESTRUGO, L.L.D., Instructor of Foreign Languages, General Extension Division.

- CAESAR E. FARAH, Ph.D., Assistant Professor of History, Portland State College.
- DANIEL D. FEDER, Ph.D., Professor of Psychology; Chairman, Department of Psychology, San Francisco State College.
- JAMES W. FERGUSSON, Ph.D., Professor of Chemistry, Portland State College.
- W. KENNETH FERRIER, Ed.D., Professor of Education, General Extension Division.
- MILDRED FLANAGAN, M.A., Assistant Professor of Mathematics, Portland State College.
- KATHLEEN GRAHAM FLETCHER, M.S., Assistant Professor, Department of Instructional Materials, Southern Illinois University.
- PHILIP H. FORD, Ph.D., Associate Professor of English, Portland State College.
- JESSE SCOTT FOSTER, M.S., Assistant Supervisor of Music, Portland Public Schools.
- CHARLES FRANTZ, Ph.D., Associate Professor of Anthropology, Portland State College.
- JOSEPH K. FRAZIER, B.A., Instructor in History, Portland State College.
- GERALD FREEMAN, Ph.D., Consultant in Speech Pathology; Director, Speech Clinic, Oakland County (Michigan) Board of Education.
- ROBERT C. FREDRICKS, M.A., Instructor in Education; Administrative Assistant, Portland Center, General Extension Division.
- DEE FRITCH, M.S., Commercial Teacher, DeMotte (Indiana) Public Schools.
- DANIEL W. FULLMER, Ph.D., Professor of Psychology; Assistant Dean, Director, Portland Center, General Extension Division.
- FRANZ J. GEBERT, M.A., Assistant Professor of German, University of Portland.
- FRANCIS P. GIBSON, Ph.D., Associate Professor of Speech, Portland State College.
- JESSE L. GILMORE, Ph.D., Associate Professor of History, Portland State College.
- KEITH GOLDHAMMER, Ph.D., Associate Professor of Education, University of Oregon.
- NORMAN N. GREENE, Ph.D., Associate Professor of Political Science, Portland State College.
- RALPH GREILING, Ed.M., Associate Professor of Engineering, Portland State College.
- JOHN E. GRENFELL, M.Ed., Instructor in Psychology, General Extension Division.
- ROBERT J. GRIDLEY, Ed.M., Associate Professor of Education; Assistant Director, Portland Center, General Extension Division.
- MARK GUREVITCH, Ph.D., Professor of Physics, Portland State College.
- GEORGE V. GUY, Ph.D., Associate Professor of Education, Portland State College.
- RAY HAAS, M.A., Director, Adult and Vocational Education, Forest Grove Union High School.
- MARKO L. HAGGARD, M.A., Assistant Professor of Political Science, Portland State College.
- HOWARD ADGATE HALL, M.F.A., Head, Art Department, Klamath Union High School.
- ALFRED P. HALLSTROM, M.Sc., Instructor of Mathematics, Oregon College of Education.
- NORMAN K. HAMILTON, Ed.D., Assistant Superintendent, Portland Public Schools.
- JAMES HARATANI, M.A., Assistant Professor of Geography, Portland State College.
- JAMES S. HART, Ph.D., Associate Professor of English, Portland State College.
- LILA M. HATTON, Instructor, Mt. Tabor School, Portland Public Schools.
- RUTH CAROL HEALY, M.Ed., Assistant Professor of French, Portland State College.
- LEROY HEWITT, M.A., C.P.A., Assistant Professor of Business Administration, Portland State College.
- GORDON K. HIGGINSON, Ph.D., Professor of Psychology, University of Portland.
- E. HUGH HINDS, M.A., Associate Professor of Business Administration, Portland State College.
- DOROTHY P. HINSHAW, B.S., Instructor, Boise School, Portland Public Schools.
- ARTHUR A. HITCHCOCK, Ph.D., Executive Director, American Personnel and Guidance Association.

- GEORGE C. HOFFMANN, Ph.D., Professor of History, Portland State College.
- RUTH E. HOPSON, Ph.D., Associate Professor of General Science, General Extension Division.
- GEORGE HOWIE, M.A., Ed.B., Senior Lecturer in Education, University of Sydney, Sydney, New South Wales, Australia.
- ERRETT E. HUMMEL, D.Ed., Professor of Education, Portland State College.
- GEORGE S. INCEBO, Ph.D., Supervisor of Testing, Portland Public Schools.
- GRACE IRISH, M.S.Ed., Instructor in Education, Assistant to Director of Counseling and Guidance Training Institute, General Extension Division.
- KARA V. JACKSON, Ed.D., Professor of Education, Grambling College (Louisiana).
- JOHN JAMES, Ph.D., Professor of Sociology, Portland State College.
- JOHN F. JENKINS, M.Ed., Associate Professor of Education, Portland State College.
- ROBERT C. JESPERSON, M.A., Instructor of Foreign Languages, Portland State College.
- CLYDE R. JOHNSON, Ph.D., Professor of Chemistry, Portland State College.
- ROBERT L. JOHNSON, B.S., Instructor in Engineering and Physics, Portland State College.
- STANLEY L. JOHNSON, Ph.D., Assistant Professor of English, Portland State College.
- MARGARET C. JONES, B.S., Instructor, Astor School, Portland Public Schools.
- SALLY ANN JONES, M.Ed., Instructor of Art and Homemaking, Milwaukie Junior High School.
- GRACE JUODEIKA, M.A., Instructor of Foreign Languages, Portland State College.
- MARGUERITE KARP, B.S., Special Achievement Class Teacher, Hillsboro.
- CHADWICK KARR, Ph.D., Assistant Professor of Psychology, Portland State College.
- CARL A. KEELER, M.A., Assistant Professor of Mathematics, Portland State College.
- JOHN G. KENYON, M.A., Assistant Professor of Sociology, Lewis and Clark College.
- MARIAN RUTH KIENZLE, M.S., Curriculum Consultant, State Department of Education.
- WILLIAM E. KLINE, M.Ed., Assistant Professor of Education, Assistant to Director of Counseling and Guidance Training Institute, General Extension Division.
- MARGARET KNISPEL, M.Ed., Chairman, English Department, Beaverton High School.
- WILLIAM A. KOSKI, Ed.D., Associate Professor of Physical Education, Oregon State University.
- FRED KRAKOWSKI, D.Sc., Department of Mathematics, University of California.
- VICTOR M. KRAKOWSKI, Ph.D., Visiting Professor of Mathematics, Portland State College.
- SIGMUND KRAUTHAMER, Assistant Professor of Economics, University of Utah.
- DONALD KVERNVIK, M.S., Markham School, Portland Public Schools.
- ERWIN F. LANCE, D.Ed., Professor of General Science, Portland State College.
- FRAZ LANGHAMMER, Ph.D., Assistant Professor of Romance Languages, Portland State College.
- LEORA F. LARIVIERE, B.L.S., Circulation Librarian, Portland State College.
- WILLIAM T. LARUE, M.A., Instructor, Oakland (California) Schools.
- FLORENCE W. LEE, B.S., Instructor, Physical Science, General Extension Division.
- CHARLES A. LEQUIN, Ph.D., Assistant Professor of History, Portland State College.
- CLAUDIA LEWIS, Ph.D., Specialist in Children's Literature, Bank Street College of Education (New York).
- JAMES VERNON LILL, Ph.D., Associate Professor of English, Portland State College.
- HEROLD LILLYWHITE, Ph.D., Associate Professor of Speech Pathology, University of Oregon Medical School.
- YEAM SENG LIM, M.S., Instructor in Mathematics, General Extension Division.

- BYRON E. LIPPERT, M.S., Instructor in Biology, Portland State College.
- HUGH G. LOVELL, Ph.D., Associate Professor of Economics, General Extension Division.
- JOANNE LOWRY, M.S., Instructor in Home Economics, Portland State College.
- JEAN MACDOUGALL, B.A., Instructor, Lewis School, Portland Public Schools.
- WILLIAM R. MATTHIES, M.S., C.P.A., Associate Professor of Business Administration, Portland State College.
- ROBERT H. MATTSON, D.Ed., Assistant Professor of Education, University of Oregon.
- DONAL W. MCINTOSH, B.S., Assistant Professor, Business Administration, General Extension Division.
- DOROTHY F. MCKEY-FENDER, B.A., Instructor. Science, Portland State College.
- EUGENE W. McNALLY, Ph.D., Assistant Professor of Physical Education, Portland State College.
- RICHARD ALEXANDER McMENEMY, M.A., Consultant for Remedial Reading, Portland Public Schools.
- AILEEN McNETT, M.A., Instructor in Psychology; Coordinator, Office of Student Personnel, Portland Center, General Extension Division.
- JOHN R. MICKELSEN, Ph.D., Associate Professor of Chemistry, Portland State College.
- VERNA MILLER, M.A., Instructor, Jefferson High School, Portland.
- KIRT E. MONTGOMERY, Ph.D., Associate Professor of Speech, University of Oregon.
- MARY MOORE, M.S., Instructor in Chemistry, Portland State College.
- ROBERT S. MORTON, M.F.A., Instructor in Industrial Arts, Cleveland High School, Portland.
- LILLIAN I. MOSHER, M.Ed., Assistant Supervisor of Elementary Education, Portland Public Schools.
- ANTHONY NETBOY, M.A., Assistant Professor of English, Portland State College.
- DAVID H. NEWHALL, Ph.D., Professor of Philosophy, Portland State College.
- HAZEL R. NEWHOUSE, M.A., Instructor, Gresham High School.
- GERTRUDE NOAR, M.A., National Director of Education, Anti-Defamation League.
- WALTER NUNOKAWA, Ph.D., Assistant Professor of Psychology, Portland State College.
- LAUREN NUSSBAUM, Instructor in Foreign Languages, General Extension Division.
- EGBERT S. OLIVER, Ph.D., Professor of English, Portland State College.
- PAULINE J. OLIVER, M.S., Assistant Professor of Secretarial Science, Portland State College.
- WILLIAM A. OLIVER, D.Ed., Assistant Superintendent, Portland Public Schools.
- PATRICIA OSBORN, B.S., Instructor, Astor School, Portland Public Schools.
- WAYNE OTTO, Ph.D., Assistant Professor of Education, General Extension Division and University of Oregon.
- E. BENNETT OWEN, M.A., Instructor in Education, Dayton (Ohio) Public Schools.
- BEN PADROW, M.S., Assistant Professor of Speech, Portland State College.
- IVAN G. PALMBLAD, B.S., Instructor in General Science, Portland State College.
- MINER T. PATTON, D.Ed., Principal Whitman School, Portland Public Schools.
- K. ELLSWORTH PAYNE, M.Ed., Assistant Professor of General Science, Portland State College.
- H. FREDERICK PETERS, Ph.D., Professor of German and Comparative Literature, Portland State College.
- VERA PETERSEN, Ed.D., Associate Professor of Education, Portland State College.
- VICTOR N. PHELPS, D.Ed., Professor of Education, Portland State College.
- CARL JOHN PIACENTINI, M.Ed., Principal, Astor School, Portland.
- ALEX LEGRAND PICKENS, Ed.D., Associate Professor of Art, University of Georgia.

- JOE E. PIERCE, Ph.D., Associate Professor of Anthropology, Portland State College.
- LEROY R. PIERSON, Ed.D., Associate Professor of Education, General Extension Division, and Oregon College of Education.
- IRVING I. POLONOFF, Ph.D., Associate Professor of Philosophy, Portland State College.
- ROBERT F. POWLOSKI, Ph.D., Associate Professor of Psychology, Portland State College.
- RICHARD J. PRASCH, M.F.A., Associate Professor of Art, Portland State College.
- JESSIE L. PUCKETT, M.S., Associate Professor of Physical Education, University of Oregon.
- MAX RODNEY REED, Ph.D., Associate Professor of Psychology, University of Portland.
- ROBERT W. REMPFER, Ph.D., Professor of Mathematics, Portland State College.
- EDWARD R. REUTER, Ph.D., Assistant Professor of Physical Education, University of Oregon.
- MICHELE RICCIARDELLI, Ph.D., Instructor in Foreign Languages, Portland State College.
- PHILIP C. ROBERTI, Ph.D., Associate Professor of Chemistry, Portland State College.
- WILLIAM A. ROCKIE, Former Chief of Project Plans, U.S. Soil Conservation Service.
- LYNN S. RODNEY, Ph.D., Professor of Physical Education, University of Oregon.
- GEORGE RUSSELL, M.A., M.Ed., Principal, Sunset High School, Beaverton.
- CECIL E. SANFORD, M.S., Assistant Professor of Physics, Portland State College.
- ROBERT P. SCHMELZLEE, M.Ed., Assistant Professor of Business Administration, Portland State College.
- JOHN A. SCHULZ, Ed.D., Associate Professor of Psychology, General Extension Division.
- KERMIT M. SHAFER, M.A., Assistant Professor of Theater Arts, Portland State College.
- FRANCES SIGBORN, M.Ed., Assistant Professor of Education, Portland State College.
- JAMES W. SILVER, Ph.D., Professor of History, University of Mississippi.
- MORRIS B. SILVERMAN, Ph.D., Assistant Professor of Chemistry, Portland State College.
- RONALD E. SMITH, Ph.D., Associate Professor of Psychology, General Extension Division.
- RONALD O. SMITH, M.A., Supervisor, Social Studies, Portland Public Schools.
- GORDON A. SOLIE, B.S., Instructor of Music, Portland State College.
- JOHN W. SOHA, M.B.A., C.P.A., Associate Professor of Accounting, University of Oregon.
- CLARK SPURLOCK, D.Ed., Professor of History, General Extension Division.
- HEINRICH STAMMLER, Ph.D., Associate Professor of Foreign Languages, University of Kansas.
- ROBERT LAUREN STANLEY, Ph.D., Associate Professor of Mathematics, Portland State College.
- EMMA G. STANTON, M.S., Senior Instructor of Mathematics, Portland State College.
- JOHN STEHN, M.S., Professor of Music, Portland State College.
- DONALD W. STOTLER, Ed.D., Supervisor, Science, Portland Public Schools.
- DALE STRADLING, M.Ed., Instructor of Geography, Portland State College.
- GARABED N. SUVAJIAN, M.A., Instructor of Foreign Languages, Portland State College.
- SELMO TAUBER, Ph.D., Associate Professor of Mathematics, Portland State College.
- EDGAR A. TAYLOR, JR., M.A., Director of Special Education, Portland Public Schools.

- ROBERT M. TAYLOR, Ph.D., Associate Professor of Geography, Department of Foreign Trade, University of Texas.
- BROOKS THOMPSON, Ph.D., Professor of History, Troy State College (Alabama).
- MICHAEL W. TICHY, Ed.D., Associate Professor of Physical Education, Portland State College.
- JOHN B. TOELKEN, M.A., Instructor in English, University of Oregon.
- ARTHUR K. TRENHOLME, M.A., Director of Instructional Materials, Portland Public Schools.
- S. JOHN TRUDEAU, B.M., Assistant Professor of Music, Portland State College.
- FRANCES B. TURRELL, Ph.D., Associate Professor of Music, Portland State College.
- JOHN S. URLAUB, Ed.D., Director of Driver Education, Berkeley High School, Berkeley (California).
- ROBERT OTIS VAN ATTA, M.A., Assistant Professor of Geology, Portland State College.
- NASROLLAH VAQAR, Ph.D., Assistant Professor of Economics, Portland State College.
- FRANK VECCHIO, Ph.D., Instructor of Romance Languages, Portland State College.
- EVELYN E. VICTORS, M.S., Assistant Professor of Physical Education, Portland State College.
- HARWIN L. VOSS, M.S., Assistant Professor of Sociology, Portland State College.
- FREDERICK O. WALLER, Ph.D., Associate Professor of English, Portland State College.
- GEORGE E. WALN, Professor of Woodwinds and Music Education, Oberlin College (Ohio).
- COMMERY WARRELL, M.S., Coordinator, Adult Family Life, Portland Community College.
- PAUL E. WATSON, Ed.D., Professor of Education; Associate Director, Portland Center, General Extension Division.
- MORRIS K. WEBB, Ph.D., Associate Professor of History, Portland State College.
- RICHARD H. WHEATLEY, M.Ed., Instructor, Astor School, Portland Public Schools.
- MINOR WHITE, B.S., Lecturer in Photography, Rochester Institute of Technology (New York).
- RUTH WIDMAYER, Ph.D., Associate Professor of Political Science, Portland State College.
- WARREN W. WILCOX, Ph.D., Professor of Psychology, Portland State College.
- ROBERT W. WILKINSON, JR., B.A., Instructor in Political Science, Administrative Assistant to Office of Director, General Extension Division.
- CLIFFORD W. WILLIAMS, M.A., Director, Special Curriculum Projects, Portland Public Schools.
- J. RICHARD WILLIAMS, M.S., Instructor in Business Administration, Portland State
- ASHER B. WILSON, JR., M.A., Associate Professor of Theater Arts, Portland State
- ROBERT C. WILSON, Ph.D., Professor of Psychology and Statistics, Portland State
- RUTH WINCHELL, M.A., Assistant Professor of Biology, General Extension Division.
- JOHN H. WIRTZ, Ph.D., Assistant Professor of General Science, Portland State
- RAY O. WOLF, D.Ed., Professor of Education, Portland State College.
- HUGH B. WOOD, Ed.D., Professor of Education, University of Oregon.
- SAMUEL A. YORKS, Ph.D., Associate Professor of English, Portland State College.
- NORTON B. YOUNG, Ph.D., Instructor in Audiology, University of Oregon Medical School.
- LESLIE ZEIGLER, Th.D., Instructor in Philosophy and Religion, Oregon State University.
- CHARLES F. ZIEBARTH, Ph.D., Associate Professor of Transportation, General Extension Division.

HANDY INFORMATION-REQUEST FORM FOR PORTLAND, OTHER LISTINGS

**Office of Public Affairs
Portland Center, General Extension Division
1633 SW Park, Portland 1, Oregon**

Please mail a copy of publications checked below:

- 1962-63 Academic Year Catalog, Portland Center.
- Portland Center Fall Term Schedule.
- Night-Owl and Summer Signal giving information about Summer and Fall Term Courses.
- Statewide Evening Class Bulletin at Canby, Beaverton, Gladstone, Gresham, Hillsboro, Forest Grove, McMinnville, Oregon City, Oswego and Sandy.
- College of the Air Telecourse Schedule.
- Educational Media Bulletin (Radio, TV-Film Services)
- Correspondence Courses.

Name.....

Address.....

City..... Zone..... State.....

