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UNIVERSITY OF OREGON

SUMMER SESSION

June 17 to August 9

1957

Eugene, Oregon

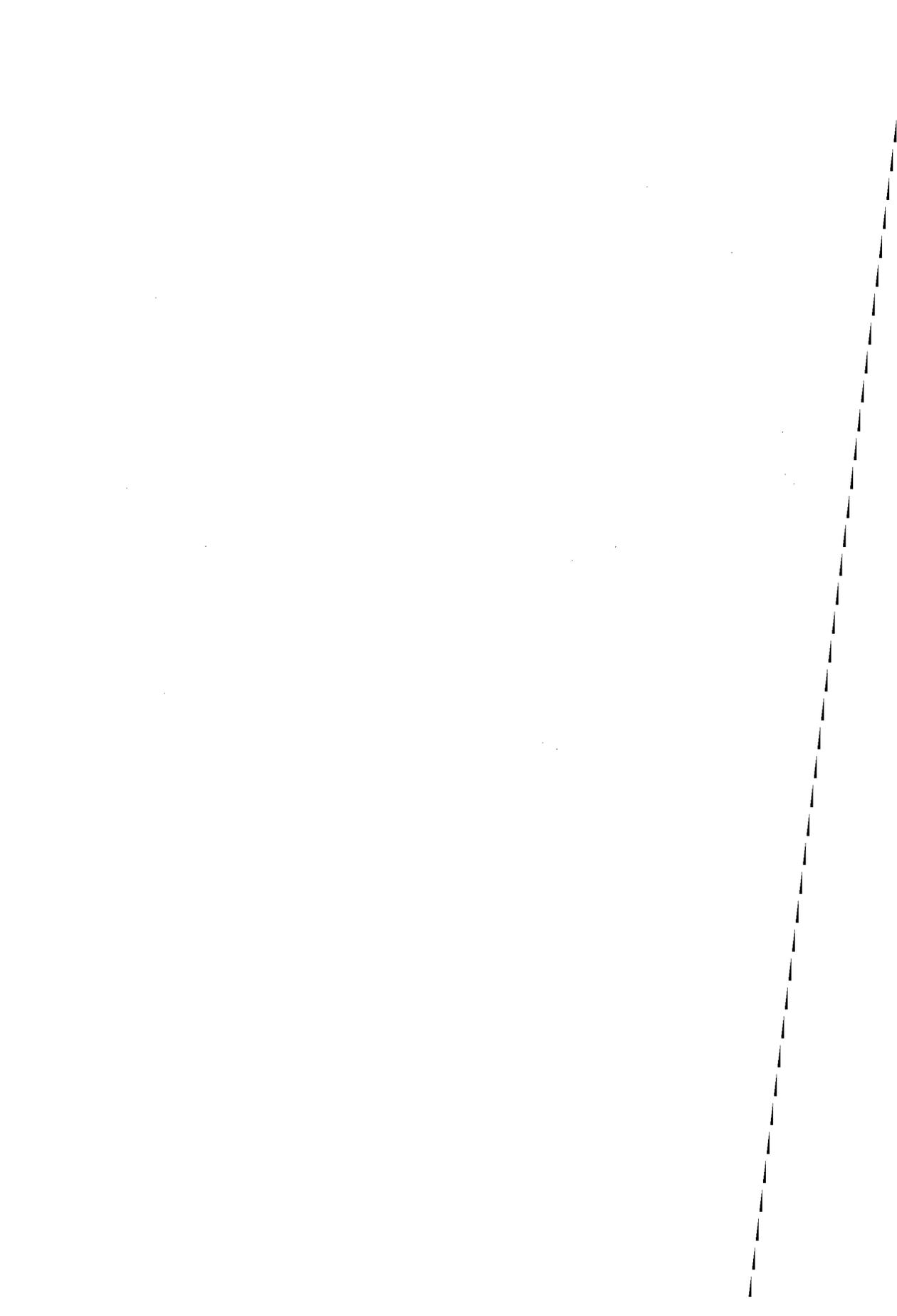


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Oregon State System of Higher Education

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

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

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

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

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

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Summer Session 1957

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- BERTRAM YOOD, Ph.D., Associate Professor of Mathematics.

Summer Session Calendar

June 17—August 9, 1957

June 17.....	Registration
June 18.....	Classes Begin
June 19.....	Last day for payment of registration fee without penalty
June 26.....	Last day for adding a course
July 4.....	Independence Day, holiday
July 12.....	Last day for withdrawal from a course
July 15.....	Last day for filing doctor's theses
July 26.....	Last day for filing master's theses
August 7.....	Last day for master's and doctor's oral examinations
August 8-9.....	Final examinations

The Summer Program

The fifty-third annual summer session of the University of Oregon will be organized as a single session of approximately eight weeks between June 17 and August 9, 1957.

Undergraduate Work

A large selection of lower-division courses will be offered in the 1957 summer session; these courses will be closely integrated with course sequences offered during the regular academic year, so that students may make steady progress toward the completion of lower-division requirements. Certain courses are planned especially for students intending to enter medical or dental schools or schools of nursing.

Students who are nearing graduation will find in the summer session an excellent opportunity to complete upper-division requirements for a degree.

Admission as an Undergraduate. The only requirement for admission to the summer session is ability to do the work. However, students who wish to become candidates for a degree from the University must satisfy the regular University admission requirements. As early as possible before the opening of the summer session, such students should file with the University Director of Admissions complete official transcripts covering all school work taken above the eighth grade. Specific requirements are listed in the general University Catalog.

Graduate Work

Many summer courses are especially planned for graduate students; all of the work for the master's degree may be completed in summer sessions.

Admission. A bachelor's degree from an accredited institution is prerequisite to registration as a graduate students. To earn credit toward an advanced degree at the University of Oregon, the student must clear his admission with the Director of Admissions before registering, preferably before coming to the campus.

Preparation. For a graduate major, preparation at the undergraduate level in the same field is required.

Credit Requirements. For the departmental master's degree the University requires a program of study of not less than 45 term hours, with a minimum of 30 term hours in the major subject. No major is required for the degrees of M.A. in General Studies and M.S. in General Studies.

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

Residence Requirement. Three terms of residence are required for the master's degree. A maximum of 15 term hours (one term) earned in other divisions of the Oregon State System of Higher Education is accepted toward the satisfaction of this requirement for the M.A. or M.S. degree. For the M.A. in General Studies and the M.Ed., a maximum of 33 term hours of work may be completed in the extension centers of the State System.

Transferred Credit. Not more than 15 term hours of credit may be transferred from another institution toward the master's degree. Transferred credit is provisional until the qualifying examination is taken, and does not shorten the residence requirement, except as noted above.

Time Limit. It is expected 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.

Qualifying Examination and Program. During the first term of work toward the master's degree, the student should file a tentative program, planned in conference with his major adviser. It is expected that the qualifying examination will be taken during the first term of residence, or before 15 term hours have been earned.

Admission to Candidacy. A graduate student is admitted to candidacy for an advanced degree only after he has passed his qualifying examinations. At least 12 term hours of graduate work must be completed after admission to candidacy.

Maximum Course Load. The maximum summer course load for a graduate student is 13 term hours; 12 term hours is considered a normal load.

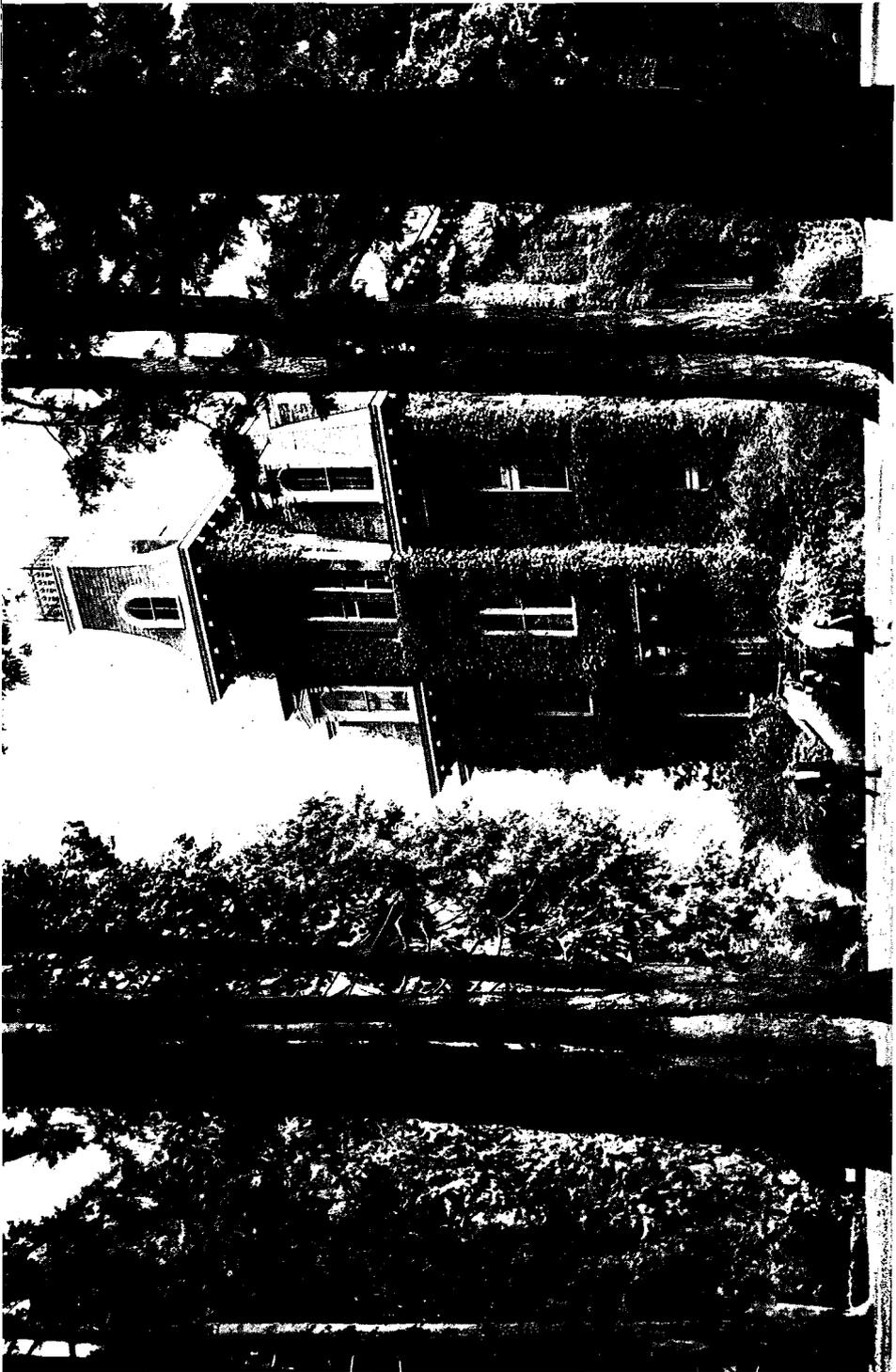
Thesis Registration. All graduate students working for an advanced degree for which a thesis is required must register for Thesis (503). The candidate for the M.A. or M.S. degree with thesis earns 9 term hours of credit for this work; a first draft of the thesis must be accepted by the adviser before the student can register for the final 3 hours.

Further information will be furnished at the office of the Graduate School, Johnson Hall.

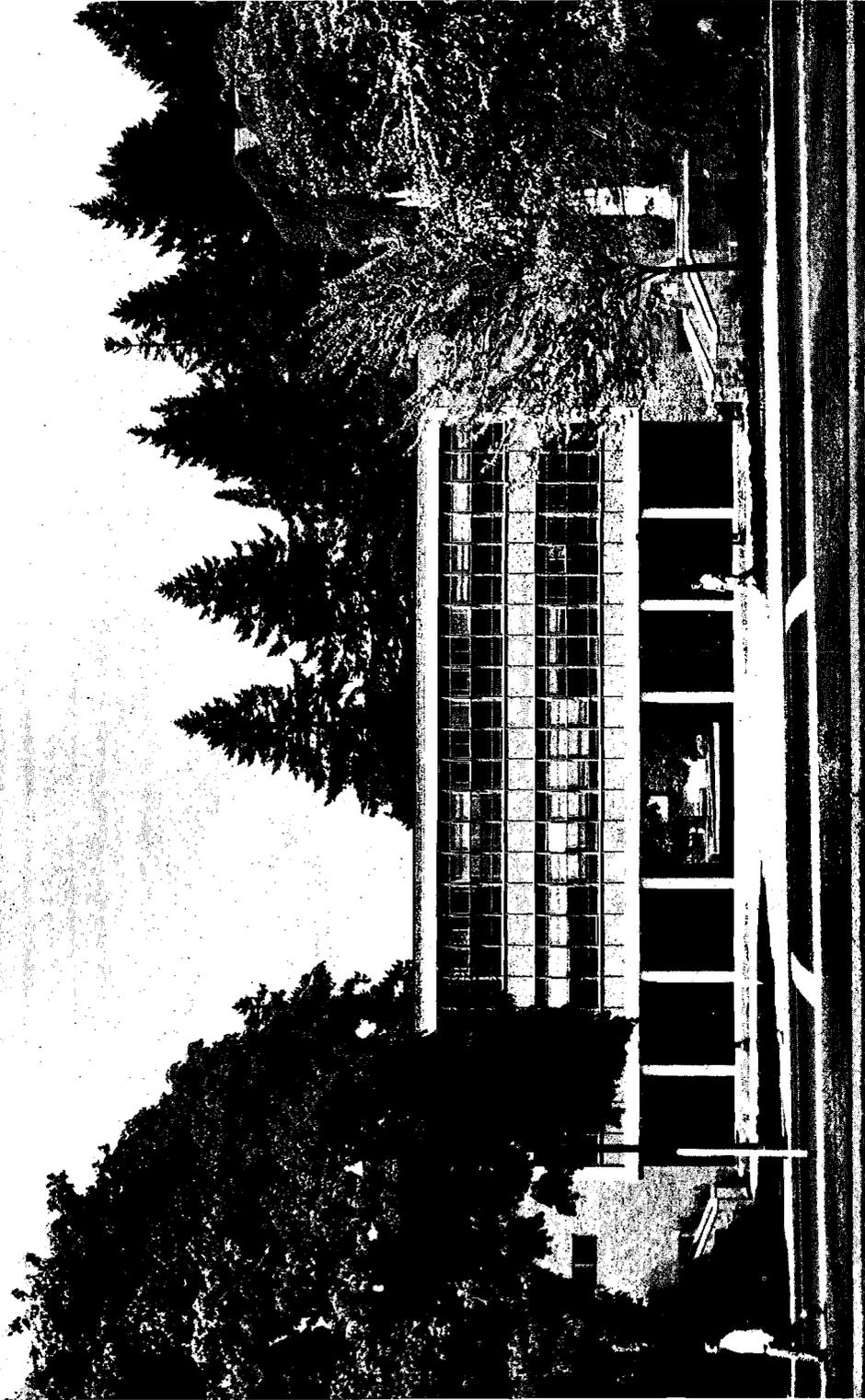
Opportunities for Teachers

Because many teachers wish to take summer work to improve their professional training, an extensive program has been planned especially to meet their needs.

Secondary-School Teaching. The state of Oregon will grant a one-year provisional certificate for secondary-school teaching to a person who holds a bachelor's degree and who has completed a minimum of 21 term hours of work of education and a course in Oregon history. Provisional certification may be continued for a maximum period of five years if, during each of these five years, the teacher earns not less than 9 term hours in properly selected college courses at the upper-division or graduate level. On the completion of 45 term hours of selected work



DEADY HALL, THROUGH THE TALL FIRS ON THE OLD CAMPUS



COMMUNWELTH HALL HOUSING SOCIAL SCIENCES AND BUSINESS ADMINISTRATION

as a graduate student, the teacher is eligible for regular certification. A total of 36 term hours of work in education, including undergraduate and graduate courses, is required for the regular certificate.

Master of Science in General Studies. The University offers a program of graduate study planned especially for students working toward the satisfaction of the requirements for regular high-school teacher certification. The program leads to the degree of Master of Science in General Studies. The program is administered by the dean of the Graduate School and supervised by the Committee on General Studies.

Enrollment is open to any person who is eligible for admission to the Graduate School; the student must, however, have a reasonable background of undergraduate study in the fields or departments in which he proposes to work, and must complete prerequisites for specific courses. The requirements for the degree of Master of Science in General Studies are:

(1) A total of between 45 and 51 term hours in graduate courses, distributed in accordance with (a) and (b), below:

(a) A total of 36 term hours in graduate courses in fields of study other than education, including normally not more than 21 term hours in one field. At least 6 term hours must be in 500 courses in one department or school; the student's program must be planned to provide well-rounded knowledge and must not be made up of scattered, unrelated courses.

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

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

The program is supervised by the Committee on General Studies, of which Dr. L. R. Sorenson, associate professor of history, is chairman.

Other Graduate Programs. In addition, the University offers departmental master's degrees in journalism, English, history, social science, foreign languages, mathematics, biological science, physical science, geography and geology, speech, health and physical education, music, art, and business. Work toward these degrees is admirably fitted to the need of persons who wish to limit preparation to one field. At the option of the department, a thesis may or may not be required. Many departments offer programs for the master's degree both with thesis and without thesis.

A third type of master degree is the Master of Education, which fits the needs of the superintendents, deans, principals, and elementary teachers. For a few high-school teachers who have very few education credits and who must concentrate in this field, the program leading to this degree may be the most satisfactory.

Elementary Education. An undergraduate program in elementary education will be offered in the 1957 summer session. Persons who have emergency elementary certificates and wish to secure regular certificates and a bachelor's degree may satisfy requirements through summer study. Persons with emergency certificates and a bachelor's degree are eligible for work toward a master's degree. Practice teaching in the elementary schools will not be offered in the summer of 1957.

Graduate Work in Elementary Education. Graduate work in elementary education will be offered in the summer session. The summer faculty will include

visiting instructors with special competence in the field. Work will be offered both for classroom teachers and for supervisors and principals.

Administrative Credentials. Every person holding an administrative position in the Oregon public schools must have an appropriate administrative certificate. The administrative certificates are: (1) superintendent's certificate, (2) administrative principal's certificate, (3) secondary principal's certificate, (4) elementary principal's certificate, and (5) supervisor's certificate. Work in school administration, planned specifically to meet the requirements for each of these certificates, is offered in the University summer sessions.

Post Session

There will be a two-week post session for graduate students in education from August 12 to 23. Three term hours of credit may be earned in Reading and Conference (Ed 505). The fee for this session is \$8.00 per term hour. Instruction will be offered by Professor Hearn and others.

Student Council Workshop. The third annual Student Council Workshop, sponsored jointly by the Oregon Association of Secondary School Principals, the Oregon State Department of Education, and the University, will be held August 12-23 (see page 31 for description). State and national leaders in student council work will be on the campus from August 12 to 16, during which time student leaders representing most of the secondary schools of Oregon will be in attendance. Two sections, elementary and advanced, will be organized for student council advisers and others interested in problems of student participation in school government.

Registration Procedure

Students will register for the summer session on Monday, June 17; classes will begin Tuesday morning, June 18. Registration will begin at 8 o'clock in the morning and continue until 4 o'clock in the afternoon. Students will receive registration material and further instructions at the Registrar's Office. (Education majors may obtain registration material either at the School of Education or at the Registrar's Office.)

Graduate students in education who reside in Eugene or vicinity are urged to obtain their registration materials at the School of Education on Friday, June 14, or on Saturday morning, June 15. They will thus be able to confer with their advisers and fill out class cards in advance of the regular registration day. Fees will, however, not be assessed or paid until Monday, June 17.

Summer Session Fees

Students attending summer session classes for credit or as auditors pay the same fees. Registration and other summer session fees are listed below. The Business Office is open for payment of fees from 8:00 a.m. to 12:00 noon and from 1:00 to 5:00 p.m., Monday through Friday.

Registration fee.....	\$65.00
Students registering for 7 or more term hours of work (for credit or as auditors) pay this fee. There is no additional out-of-state fee for the summer session. Graduate students employed as teaching or research assistants during the summer session pay a fee of \$25.00.	
Part-time fee.....	\$16.00 to \$48.00
1 or 2 term hours, \$16.00; 3 term hours, \$24.00; 4 term hours, \$32.00; 5 term hours, \$40.00; 6 term hours, \$48.00. Paid also by auditors attending classes carrying a total credit of 6 term hours or less.	
Late-registration fee, per day.....	\$1.00
Full-time undergraduate and graduate students pay the late-registration fee if they register after June 19.	
Graduate qualifying examination fee.....	\$1.00 to \$15.00

Staff fee, per term hour..... \$3.00

On approval by the President's Office, full-time staff members may register for a maximum of 5 term hours in summer courses for this special fee; academic staff members employed half time or more, but less than full time, may register for a maximum of 10 term hours under the staff fee.

Fees for children receiving instruction in Clinical School..... \$20.00

Music fees.....see page 46

Fee Refunds. Students who withdraw from the summer session and who have complied with the regulations governing withdrawal are entitled to certain refunds of fees paid, depending on the time of withdrawal. The refund schedule is as follows:

Withdrawal first three days after beginning of classes..... Refund of all fees over \$6.50
 Withdrawing within first two weeks..... Refund of all fees over \$16.25
 Withdrawing after two weeks and before
 beginning of fifth week..... Refund of all fees over \$32.50
 Withdrawing after beginning of fifth week..... No refund

Refunds in all cases are calculated from the date of application for the refund, and not from the date the student ceased attending classes.

Board and Room

Board and room for both men and women will be available in University halls of residence.

Blankets and bed linen, and the laundry of these items, are furnished by the halls; students furnish their own towels. Applications for reservations of dormitory rooms must be sent to the Director of Housing, Business Office, University of Oregon, Eugene, before the opening of the summer session.

During the summer session, students rooming in the dormitories may board elsewhere, if they wish; and students living outside the dormitories may have their meals in the dormitory dining rooms, either regularly at the session rate or occasionally at per-meal rates.

Most of the dormitory rooms available are for multiple occupancy; the few single rooms will be reserved for those who first make requests for single-room accommodations.

Graduate women students and mature women teachers will not be subject to the strict supervision provided for undergraduate women students.

Facilities will be available for married couples on the same basis as for other dormitory residents but reservations must be made in advance.

Dormitory Rates. The rates for room and board in the University dormitories for men and women during the summer session are as follows:

	<i>Multiple Occupancy</i>	<i>Single Occupancy</i>	<i>Board*</i>	<i>Total, Board & Room</i>	
				<i>Multiple</i>	<i>Single</i>
Eight-week session	\$57.00	\$72.00	\$97.00	\$154.00	\$169.00
Four-week session	28.50	36.00	48.50	77.00	84.50
Three-week course.....	21.25	27.00	36.50	57.75	63.50
Two-week course	14.25	18.00	24.25	38.50	42.25
One-week course	9.00	12.00	13.25	22.25	25.25
Per day	2.00	2.50	2.50†	4.50	5.00

Room and board charges for the eight-week session are payable in advance at the opening of the session, or in installments as follows:

	<i>Multiple</i>	<i>Single</i>
At the opening of session.....	\$ 77.00	\$ 84.50
Prior to July 13.....	77.00	84.50
	<hr/>	<hr/>
	\$154.00	\$169.00

* Three meals per day, 6 days per week; Sundays and holidays, breakfast and dinner.
 † Rates per meal: breakfast, 50 cents; lunch, 80 cents; dinner, \$1.20.

A penalty charge of \$1.00 per day, up to a maximum of \$5.00, is made if the first installment is not paid by June 26 or if the second installment is not paid by July 13.

Refunds of board or room charges will not be made unless the student withdraws from school.

Board and room charges are paid at the University Cashier's Office, Emerald Hall. This office is open Monday through Friday, from 8:00 a.m. to 12:00 noon and from 1:00 to 5:00 p.m.

The dormitories will be open for the summer session at 1:00 p.m. on Sunday, June 16. The first meal served will be breakfast on Monday, June 17. The dormitories will close Saturday noon, August 10. The last meal served will be the evening meal on Friday, August 9.

Room and Board in Private Houses. A number of private boarding and rooming houses will be open during the summer. Rooms, flats, and furnished cottages suitable for light housekeeping may also be available. A list of such accommodations will be obtainable from the Housing Secretary after June 1.

Housing for Married Students. The University operates a considerable number of housing units for married students, some of which will be available for the summer session. Married students interested in these quarters should write to the Director of Housing, Business Office. Married students seeking off-campus living quarters in Eugene for the summer session should consult the Housing Secretary at the time of registration or shortly before, and then make their own individual arrangements with householders or managers of apartments.

Undergraduate Housing Rules. The rules regarding housing which prevail during the regular academic year are applicable to undergraduate students during the summer session. Mature undergraduate teachers are excepted from these rules.

(1) Freshman students are required to live in the University dormitories; undergraduate women are required to live either in the dormitories or in houses maintained by organized University living groups, (sororities, cooperatives). Married students and students living with relatives in Eugene are excepted from this rule. Other exceptions are rare, and are made only for students working for room and board, or for whom rooms are not available in campus quarters.

(2) Unmarried undergraduate students are not allowed to live in motor courts, hotels, or separate houses.

General Information

Forums and Lectures. Evening forums and lectures by visiting lecturers and prominent members of the University faculty will be scheduled each week during the summer session.

Recreation. Everyone who enjoys the outdoors should come prepared to take part in the recreational program sponsored by the University. There will be hikes and picnics, golf, tennis, pingpong, outdoor volleyball, playground baseball, indoor evening games, swimming, and social dancing. It is suggested that students bring tennis rackets and golf clubs. There are excellent opportunities for these sports on the University campus and nearby courses.

Summer students have the privilege of the use of the gymnasium, swimming pools, and tennis courts; they will be furnished with swimming suits, lockers, towels and soap.

Murray Warner Collection of Oriental Art. The Museum of Art, housing the Murray Warner Collection of Oriental Art, will be open to students during part of the summer.

Two special conducted tours of the Murray Warner Collection will be arranged during the session; one tour will give attention to Japanese materials, the other to Chinese materials. Advance registration for the tours is required. Special tours may also be arranged through the Museum of Art office. Special exhibits are planned for the summer.

Chorus, Orchestra, and Band. A summer chorus, orchestra, and band will be organized. Membership in these organizations will be open to all summer students, whether or not they are enrolled in music courses. Students who play orchestral or band instruments are urged to bring their instruments and take part. Concerts will be given by these groups during the final week of the session. The purpose of these organizations is recreation and enjoyment as well as professional and cultural training.

The Summer Sun, a four-page weekly newspaper devoted to summer session news, is published by the journalism classes and is distributed free to the faculty and students.

Health Service. Payment of summer session fees entitles students to general medical attention and advice at the University Student Health Service. Health Service hours are 8:30 a.m. to 12:30 p.m., Monday through Friday.

Employment Service. The University maintains an employment service for students desiring part-time work while in attendance at the University. This service is available to summer students. Those interested in learning of opportunities for part-time work should write to Employment Secretary, University of Oregon.

Teacher Placement. The School of Education maintains a Placement Service primarily to help graduates of the University obtain suitable teaching positions. This service is extended also to older teachers who have been connected with the University, including students in the summer session. To be eligible for this service, the student must have completed 8 term hours of work in the University.

Correspondence Study. Students may frequently find a schedule of correspondence courses through which to continue their program of study after the close of the summer session. A correspondence catalog may be obtained from the General Extension Division office on the University campus.

Extension Classes. The General Extension Division welcomes inquiries in regard to extension courses offered in Portland and in other Oregon cities.

High-School Music Summer Session. A three-week summer session for high-school students in band and orchestra will be held on the campus from June 23 to July 12. Observation of the rehearsals of the high-school groups will be interesting and valuable to high-school music teachers.

High-School Publications Short Course. A one-week summer training session for high-school newspaper and yearbook editors and business managers and for their advisers will be held from August 12 to 16. The course is sponsored by the School of Journalism and the Oregon Scholastic Press. Students will be housed in dormitories. This will be the first program of its kind in Oregon. For further information, write: Dean, School of Journalism, University of Oregon.

Course-Numbering System. The 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 name of a 400 course indicates that the course may be taken for either major or minor graduate credit. A small (g) following the name of a 400 course indicates that the course is approved for graduate minor credit only.

Workshops and Conferences

- Ed 508. **Workshop: Curriculum Project.** 4 hours. June 17-July 12.
- Ed 508. **Workshop: Family Financial Security Education.** 6 hours. June 17-July 12.
- Ed 508. **Workshop: International Education.** 6 hours. June 22-July 26.
- Ed 508. **Workshop: Teaching Methods in Geography.** 3 hours June 18-29.
- Ed 508. **Workshop: Teaching Methods in Geography.** 3 hours June 18-29.
- Eng 507. **Seminar: Workshop in Composition—Grammar and Linguistics.** 3 hours. June 17-28.
- PE 406. **Special Problems: Coaching Workshop.** 2 hours. June 10-15.
- PE 406. **Workshop: Contemporary Dance, Team Sports, Individual Sports, American Folk and Ballroom Dance.** 2-6 hours. June 17-July 5.
- PE 508. **Workshop: Rehabilitation Institute.** 2 hours. July 14-20.
- Soc 508. **Workshop: Intergroup Relations.** 3 hours. July 8-19.
- HE 408. **Workshop: Driver Education and Training.** 2 hours. June 10-14.
- PE 406. **Special Problems: Workshop in Tumbling and Apparatus.** 2 hours.
- HE 506. **Special Problems: Driver Education.** 3 hours.
- High-School Music Summer Session.** June 23-July 13.
- High-School Publications Short Course.** August 12-16.

Anthropology

Visiting Professor: KENNETH G. ORR

- Anth 414. **Race and Culture.** (G) 3 hours.
Racial classifications and comparisons; the biological base of culture; attitudes toward race in human relations. Prerequisite: 9 hours in anthropology or consent of instructor. MTuWTh, 11:00. 117 Anthropology. Orr.
- Anth 501. **Research.** Hours to be arranged.
- Anth 503. **Thesis.** Hours to be arranged.
- Anth 505. **Reading and Conference.** Hours to be arranged.
- Anth 507. **Seminar: Scope and Methods of the Social Sciences.** 3-6 hours.
The background and perspectives of each of the social-science disciplines—anthropology, economics, political science, psychology, and sociology. Selected aspects of social organization and process considered in detail. Daily, 8:00-10:00. 104 Education. Orr, Tope, staff.

Art

Professor: BALDINGER. Assistant Professors: BURGNER, WHITE. Instructors: FOSTER, JAMES, NIXON.

Applied Design

- AA 255. **Ceramics.** 1-3 hours.
Introduction to ceramic techniques and materials. Throwing, molding, and hand building. Surface decoration of two- and three-dimensional surfaces. Students participate in stacking, firing, and drawing the kilns. Open to non-

majors. Section A, MTuWTh, 9:00-12:00. Section B, MTuWTh, 1:00-4:00. The student may enroll for either a four- or an eight-week period.

AA 257. Metalwork and Jewelry. 2 hours.

The handworking of nonferrous metals—copper, brass, pewter, silver, gold. Development of design for metal objects. Enameling on metal; centrifuge casting; lapidary work. Section A, MTuWTh, 9:00-12:00. Section B, MTuWTh, 1:00-4:00. The student may enroll for either a four- or eight-week period.

AA 455. Advanced Ceramics. (g) 2-4 hours.

Advanced studio work in ceramics; individual projects. Emphasis on creative form. Study of material, texture, and functional relationships. Body and glaze making; earthenware, stoneware, and porcelain. Kiln atmospheres and effects on body and glaze. Students assume responsibility for firing their own work. 30 term hours required for major. Prerequisite: 6 term hours in AA 255. MTuWTh, 9:00-12:00 or 1:00-4:00. The student may enroll for either a four- or an eight-week period.

AA 457. Advanced Metalwork and Jewelry. (G) 2-3 hours.

Emphasis on creative work. Advanced problems in forging, sand and centrifuge casting, enameling, etching, lapidary work, brazing, welding, repousse, and tool making. Section A, MTuWTh, 9:00-12:00. Section B, MTuWTh, 1:00-4:00. The student may enroll for either a four- or an eight-week period.

AA 458. Textile Printing (Silk Screen). (G) 2-4 hours.

Advanced problems in design and color, applied to standard textiles. Technique in pattern design and yardage printing. Hours to be arranged.

Painting and Drawing

AA 290. Painting. 2-3 hours.

Instruction in the use of oil color, water color, and other media. 12 term hours required for upper-division standing. MTuWTh, 9:00-12:00 or 1:00-4:00. The student may enroll for either a four- or an eight-week period.

AA 481. Advanced Water Color. (G) 2-4 hours.

Advanced work in water color, with particular attention to landscape material. MTuWTh, 9:00-11:00 or 1:00-3:00. The student may enroll for either a four- or an eight-week period.

AA 490. Advanced Painting. (G) 2-4 hours.

Advanced problems in portrait, figure, landscape, and still life, in all media. Prerequisite: 12 term hours in AA 290. MTuWTh, 9:00-12:00 or 1:00-4:00. The student may enroll for either a four- or an eight-week period.

AA 491. Advanced Drawing. (g) 2-4 hours.

Advanced work in drawing. Study of form from the figure. Prerequisite: 6 hours in AA 291 or AA 391. MTuWTh, 9:00-12:00 or 1:00-4:00. The student may enroll for either a four- or an eight-week period.

AA 590. Graduate Studies in Painting. Hours to be arranged.

Work at an advanced level with problems of color and form, techniques, processes, and visual theories.

Art History

AA 363. Introduction to the History of Art. 3 hours.

An historical survey of the visual arts from prehistoric to modern times. Selected works of painting, sculpture, architecture, and other arts are studied in relation to the cultures producing them. Designed for nonmajor students, as well as for majors in art history. MTuWTh, 11:00.

Art Education

ArE 311. Creative Arts and Crafts for Elementary Teachers. 2-4 hours.

Art activities for the classroom teacher. Use of basic tools and materials. Planning the art program to meet the needs of the child. Art in the school curriculum. Material and supply resources. Art experiences in relation to child growth and development. Laboratory work, with lecture sessions. Two sessions of four weeks each; 2 hours of credit for each session. MTuWTh, 8:00-10:00. Students may also enroll for the eight-week session for 4 hours of credit.

ArE 314. Art Education in the Junior High School. 3 hours.

Art activities in the junior high school; the needs and abilities of the pre-adolescent child relative to self-expression; critical evaluation of art materials in terms of student experience; laboratory work with basic problems in the junior-high-school art program. Field work with children. MTuWTh, 8:00-10:00.

ArE 401. Special Studies: Kindergarten. 2-4 hours.

First four weeks, June 17-July 12. A creative approach to the art experiences of the preschool child. Workshop activities with simple tools and materials, with specific emphasis on the physical, mental, and emotional growth of the child. MTuWTh, 10:00-12:00.

ArE 401. Special Studies: Children's Art Laboratory. 2-4 hours.

Second four weeks, July 15-August 9. A children's art laboratory will be offered for the beginning student who is interested in investigating children's creative art experiences in laboratory situations with 7- to 10-year-old children. Students and children will work with simple materials in parallel art activities. MTuWTh, 10:00-12:00.

ArE 405. Reading and Conference. Hours to be arranged.

ArE 411. Methods and Research Materials in Elementary School Art. (G) 2 hours.

June 17-July 12. An investigation of current trends and directives in elementary public school art education. Methods and laboratory practices in the effective use of materials and ideas in creative activities. Study of significant research and literature in the field. Prerequisite: ArE 311, 312 or one year of teaching experience. MTuWTh, 10:00-12:00.

ArE 414. Art Education in the High School. (G) 2-4 hours.

Study of art education in the secondary school, through laboratory work and individual research. Practice-teaching problems examined and studied as a group experience. Evaluation of current thinking in the field; application to the classroom situation. Two four-week sessions; 2 term hours credit for each session. MTuWTh, 8:00-10:00. Students may also enroll for the eight-week session for 4 hours of credit.

ArE 501. Special Studies: Arts and Crafts in Special Education. 3 hours.

First four weeks, June 17-July 12. Use of simple materials and ideas as they pertain to the needs of the deviant child. Major consideration to the instructional program for the mentally handicapped. MTuWTh, 8:00-10:00.

ArE 505. Reading and Conference. Hours to be arranged.

ArE 507. Seminar: Art Education. 2 hours.

Second four-week session. MTuWTh, 11:00.

ArE 533. Art in the Elementary School. 2 hours.

Designed to enable elementary art teachers and administrators to gain a better understanding of the significance of creative art activity. Lectures are closely integrated with laboratory work. Levels of creative development in children; direction and supervision of this development; building of a basic curriculum. Second four-week session. MTuWTh, 10:00-12:00.

Biology

Professor: HUESTIS. Associate Professors: CLANCY, BACON. Assistant Professors: TEPFER, McCONNAUGHEY. Instructor: MORRIS. Visiting Faculty: BARNES, MCNAB, PHINNEY.

During the 1957 Summer Session the Department of Biology will continue a long-range summer program that was inaugurated last year. On a rotational plan, over a period of several summers, courses are offered that are particularly directed toward meeting the needs of biology teachers. This long-range program assures the summer session student an opportunity to gain a substantial background in biology by attendance at several sessions. The following courses will be presented in this rotational plan: (1) General Biology, (2) Field and Laboratory Methods in Biology, (3) Introduction to Genetics, (4) Mammalian Physiology, (5) Microbiology, (6) History of Biology, (7) Field Botany, and (8) Field Ornithology. This list of courses will be expanded as the demand and need arise. Each summer one term of General Biology and one or more courses in field biology will be offered, along with one or more of the other courses in the above list. In addition to the biology offerings at Eugene, courses emphasizing marine biology and invertebrate zoology are offered at the Marine Biological Laboratory, located near Coos Bay.

Bi 102. General Biology. 4 hours.

Structure and functions of seed-plant organs; survey of the plant kingdom. This is the second term of the three-term sequence offered during the regular session. Students may start with Bi 102 without difficulty. Lectures, MWF, 1:00-3:14 Science. Laboratory, MW, 2:00-5:00. 217 Science. Tepfer.

Bi 401, 501. Research. Hours to be arranged.

Bi 403, 503. Thesis. Hours to be arranged.

Bi 405, 505. Reading and Conference. Hours to be arranged.

Bi 442. Introduction to Genetics. (g) 4 hours.

An introduction to fundamental concepts of genetics by means of lectures, demonstrations, and laboratory exercises, the latter involving breeding experiments with the fruit fly, *Drosophila*. Particular attention given to needs of biology teachers in secondary schools with reference to utilization of genetic materials in their classes. Prerequisite: basic course in biological science. Lecture, MWF, 1:00; laboratory, MWF, 2:00-5:00. 305 Science. Clancy.

Bi 470. Field Botany. (G) 3 hours.

Field study and identification of the flora of Northwest Oregon. Vascular plants will be emphasized, but algae, fungi and mosses will be considered as they are met in the field. Recognition of diverse plant communities; collection, identification, and preparation of specimens; utilization of materials for laboratory teaching. All-day field trip to the Cascades and week-end trip to the Institute of Marine Biology will be arranged, in addition to local trips. Prerequisite: one year of biology or permission of instructor. Lectures, laboratory, and field work, TuTh, 1:00-5:00. 315 Science. Tepfer.

Bi 486. Field Ornithology. (G) 3 hours.

Designed to give practice in the identification of Oregon birds by their field marks, songs, call notes, and behavior, and to call attention to the habitats in which different species may be found. Local bird walks will be supplemented by longer trips to special environments. The use of birds as material for biology teaching will be stressed. Field work, lectures, and discussion, TuTh, 6:00-8:00; and Saturday, 6:00-10:00. 220 Science. Huestis.

The following courses will be offered at the Oregon Institute of Marine Biology, Charleston, Oregon. Detailed description of these courses is contained in a special announcement, available upon request to Dr. B. H. McConnaughey, Director, Institute of Marine Biology, University of Oregon, Eugene.

The course in Natural History of Marine Organisms (Bi 465) is presented under the sponsorship of the National Science Foundation. Enrollment will be restricted. It is designed specifically for university and college teachers to whom a first-hand experience in marine biology would be of value and would lead to more effective and inspirational teaching. Stipends and some expense allowances will be available to 20 participants. For additional information and application blanks write: Robert W. Morris, Director, NSF Institute in Marine Biology, University of Oregon, Eugene, Oregon.

Bi 401, 501. **Research.** Hours to be arranged.

Bi 403, 503. **Thesis.** Hours to be arranged.

Bi 405, 505. **Reading and Conference.** Hours to be arranged.

Bi 407, 507. **Seminar.** 1 hour (regular and post session).

Bi 450. **Marine Invertebrate Types.** (g) 3 hours (post session).

Bi 454. **Algology.** (G) 8 hours (regular session).

Bi 456. **Natural History of Marine Organisms.** (G) 9 hours (eight weeks).

Bi 459. **Marine Ecology.** (G) 6 hours (regular session).

Bi 462. **Invertebrate Zoology.** (G) 8 hours (regular session).

Bi 482. **Invertebrate Embryology.** (G) 3 hours (post session).

Business Administration

Professor: MORRIS. Associate Professors: AKERS, RICHINS, SMITH.
Assistant Professors: DODGE, JONES, KOVARSKY, WATSON.

BA 111. **Constructive Accounting.** 4 hours.

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. Daily, 11:00. 266 Commonwealth. Smith.

SS 121. **Typing.** 2 hours.

Introduction to touch typewriting, with emphasis on speed and accuracy development; application of skill to simple business exercises. Students with one year of high-school typing may not take SS 121 for credit. Daily, 9:00. 270 Commonwealth. Jones.

SS 122. **Typing.** 2 hours.

Application of typing skill to business letters and forms; development of speed and accuracy. Daily, 9:00. 270 Commonwealth. Jones.

SS 324. **Office Practice Techniques.** 2 hours.

First four weeks, June 17-July 12. Includes study of various duplicating machines, the electric typewriter, the handling of a variety of office tasks, and applications to practical office situations. Daily, 10:00-12:00. 269 Commonwealth. Jones.

SS 325. **Office Practice Techniques.** 2 hours.

Second four weeks, July 15-August 9. Includes study of voice-writing machines, filing, and performance of actual office tasks. Daily, 10:00-12:00. 269 Commonwealth. Jones.

BA 332. **Business Statistics.** 4 hours.

Emphasis on appreciation and understanding of statistical methods. Charts and tables; sampling; averages, time-series analysis; index numbers; a brief introduction to the concept of linear correlations. Required of majors. Daily, 8:00. 370 Commonwealth. Watson.

- BA 401. **Research.** Hours to be arranged.
Supervised individual work in some field of special interest. Subjects chosen must be approved by the major professor. Prerequisite: senior standing. Morris, staff.
- BA 411. **Business Public Relations.** 4 hours.
Public relations of business firms; tools and techniques for determining public reactions; methods of securing good public relations. Open to nonmajors with consent of instructor. Daily, 11:00. 167 Commonwealth. Kovarsky.
- BA 412. **Personnel Management.** (G) 4 hours.
Place and significance of personnel management in modern business organization; personnel policies and practices conducive to good relations with business employees. Personnel problems of small organizations. Daily, 10:00. 167 Commonwealth. Kovarsky.
- BA 416. **Business Law.** (G) 4 hours.
Introduction to legal principles as applied to typical business situations. Contracts; agency law. Daily, 1:00. 237 Commonwealth. Richins.
- BA 421. **Principles of Business Education.** (G) 4 hours.
First four weeks, June 17-July 12. Aims and objectives of business education; history, trends, issues, curriculum construction at high-school and junior-college levels; instructional problems; research in business education. Prerequisite: consent of instructor. Daily, 8:00-10:00. 266 Commonwealth. Smith.
- BA 422. **Problems in Business Education.** (G) 4 hours.
Second four weeks, July 15-August 9. Examination of current literature and text materials. Work-experience programs; standards of achievement; guidance programs; placement and follow-up; in-service training for teachers; business entrance tests; evaluation of current methods; auditory and visual aids. Prerequisite: consent of instructor. Daily, 8:00-10:00. 266 Commonwealth. Smith.
- BA 429. **Production Management.** (G) 4 hours.
Nature and scope of production processes; economic, technological, regional factors; managerial organization of production; plant location; design and layout; planning of plant investment; working-capital investment and labor costs; planning production operations. Daily 2:00. 167 Commonwealth. Kovarsky.
- BA 436. **Retail-Store Management.** (G) 4 hours.
Retail policies and problems. Stock-control systems, buying methods of sales promotion, plant operation, personnel, credit, turnover, pricing, expense classification and distribution. Daily, 8:00. 366 Commonwealth. Dodge.
- BA 442. **Principles of Salesmanship.** (G) 4 hours.
Principles and techniques of personal salesmanship; selling reactions. From the standpoint of seller and buyer. Daily, 10:00. 366 Commonwealth. Dodge.
- BA 454. **Fundamentals of Risk and Insurance.** (G) 4 hours.
Basic principles of insurance and risk bearing; major areas of private insurance—property, casualty, life, marine; emphasis on elements common to all fields. Insurance in the economy, various ways of handling risk, types of insurance carriers, reinsurance, major contract provisions, insurance regulations. Daily, 2:00. 237 Commonwealth. Richins.
- BA 459. **Finance Management.** (G) 4 hours.
Promotional problems involved in promotion, organization, obtaining permanent and working capital, bank loans, commercial-paper borrowing, management of earnings, administration policies. Daily, 10:00. 370 Commonwealth. Watson.
- BA 460. **Financial Institutions.** (G) 4 hours.
Services, operations, and economic effects of financial institutions and government lending agencies with which businessmen come in contact. Emphasis on commercial banks. Daily, 1:00. 370 Commonwealth. Watson.

- BA 501. **Advanced Business Research.** Hours to be arranged.
Examination and criticism of typical studies in business research. Methods of procedure adapted to various types of business problems. Hours to be arranged. Morris, staff.
- BA 503. **Graduate Thesis.** Hours to be arranged.
- BA 505. **Reading and Conference.** Hours to be arranged.
- BA 507. **Graduate Seminar.** Hours to be arranged.
Richins.
- BA 507. **Seminar: Family Financial Security Education.** 6 hours.
First four weeks, June 17-July 12. Aspects of money and banking, insurance, real estate, investments, estates, and family financing related to family financial security. Designed for classroom teachers. Admission by prior application. Daily, 8:30-4:00. 341 Commonwealth. Akers, staff.

Chemistry

Instructor: VAN GULICK.

- Ch 439. **Survey of Organic Chemistry.** (g) 5 hours.
Intended specifically for teachers of science in secondary schools. Some of the fundamental aspects of organic chemistry are covered. Attention given to topics likely to arise in classroom discussion such as the nature of plastics, the chemical constitution of synthetic fibers, and various natural products. Lectures, M T u W Th, 8:00; laboratory, F, 8:00-10:00. 104 Science. van Gulick.

Economics

Professors: KLEINSORGE, MACY. Associate Professor: SORENSON.
Assistant Professor: KOPLIN.

- Ec 201. **Principles of Economics.** 4 hours.
Principles that underlie production and exchange. Attention to sources and distribution of national income, the banking system, and government finance. Daily, 11:00. 137 Commonwealth. Koplin.
- Ec 407. **Seminar: Principles and Problems of Government Finance.** (g) 4 hours.
A study of basic issues involved in financing government. Theory and its application to contemporary problems of Federal, state, and local units. Daily, 11:00. 134 Commonwealth. Macy.
- Ec 407. **Seminar: The American Labor Movement.** (g) 4 hours.
Development of the American labor movement. The organization and administration of labor unions; their objectives and activities. The extent of government controls. Daily, 8:00. 134 Commonwealth. Kleinsorge.
- Ec 450, 451. **Comparative Economic Systems.** (g) 4 hours.
An analytical comparison of capitalism, socialism, communism, and other economic systems. Daily, 9:00. 366 Commonwealth. Koplin.
- Ec 488. **American Economic History.** (G) 4 hours.
The economic development of the United States, 1850 to 1900. Second term of a year sequence. Daily, 10:00. 232 Commonwealth. Sorenson.
- Ec 501. **Research.** Hours to be arranged.
- Ec 503. **Thesis.** Hours to be arranged.
- Ec 505. **Reading and Conference.** Hours to be arranged.

Education

Professors: BERREMAN, CASTELL, CLARKE, FOSKETT, JACOBSON, KAMBLY, KILLGALLON, MACY, MOURSUND, NYE, ROMNEY, TOPE. Associate Professors: AKERS, DAHLBERG, DEAN, GHENT, GOLDHAMMER, HEARN, LITTMAN, LOWE, OLSON, SANDIN, VAGNER, WILLARD. Assistant Professors: BAILEY, BAKER, BURGNER, CAMPBELL, CULBERTSON, DIEBEL, FULLMER, GRAHAM, HACKETT, HUNTER, KERSH, LEE, MILLHOLLEN, NYE, PIPER, RISINGER, STOVALL, SUNDBERG, TAYLOR. Instructors: BROWN, DICKMAN, KRAUS, MADSEN, MARQUIS, SCHAAP, SEALOFF, WILLIAMS. Visiting Faculty: AULD, BEAR, BURTON, EAST, GUNN, HINES, HOGG, LOGSDON, ORR, TUCKER, WILSON, WOOD. Teaching Fellow: BORSTING.
Lecturer: OLSEN.

Post Session. There will be a two-week post session for graduate students in education from August 12 to 23. Three term hours of credit may be earned in Reading and Conference (Ed 505). The fee for this session is \$8.00 per term hour. Instruction will be offered by Professor Hearn and others.

General Education

PS 201. **American Government.** 3 hours.

Provisions and principles of the United States Constitution; how they were formulated and how they have developed in American government and politics. MTuWTh, 9:00. 233 Commonwealth. Brown.

Ed 310. **The School in American Life.** 3 hours.

Education as a career; function of education in a democracy; curriculum and organization of schools; current educational trends and contemporary problems; financing public education; the characteristics, needs, and interests of pupils by age groupings; general principles of growth and learning, and relation to current practices. MTuWTh, 9:00. 130 Education. Wilson.

Ed 311. **Human Development.** 4 hours.

Designed to provide psychological knowledge especially relevant to the professional activities of teachers in the elementary and secondary schools. Various aspects of the development and adjustment of the school child, with attention to the role of the teacher and the school program in the development of the pupil. Laboratory training in observation of the school child and in the interpretation of growth, health, psychological-test, and other data commonly available to the teacher. Prerequisite: Psy 201 or Psy 204. Daily, 2:00. 104 Education. Taylor.

Ed 312. **Educational Psychology: Learning.** 4 hours.

Theoretical and practical study of learning and of factors affecting learning by children and youth in school. Theories of learning, motivation, guidance; learning activity, transfer, evaluation of achievement; principles of learning; applicable to learners of varying levels of maturity. Laboratory training in observation and analysis of the teacher-learning situation from a psychological viewpoint. Prerequisite: Psy 201 or Psy 204. Daily, 8:00. 126 Education. Culbertson.

Ed 317. **Social Foundations of Teaching.** 3 hours.

The nature and influence of such social determinants of child behavior as family, class structure, peer groups, mass media of communication, etc. MTuWTh, 10:00. 126 Education. Graham.

MuE 351. **Voice Class.** 2 hours.

Study of voice problems in the public schools. MWF, 2:00. 202 Music. Bailey.

MuE 407. **Seminar: Interpretation of Band Literature.** (G) 3 hours.

Problems of conducting and interpretation. MTuThF, 10:00. 203 Music. Vagner.

MuE 407. Seminar: Brass Instruments. (G) 2 hours.

Second four weeks. Demonstration and discussion of the playing of brass instruments and their literature. Daily. 11:00. 215 Music. Lee.

MuE 408. Special Teaching Methods. 2-3 hours.

Parallels practice teaching in elementary and secondary schools. Observations, reports, and conferences on materials and procedures used in music instruction. Prerequisite: consent of instructor. Instrumental: Vagner. Vocal: Nye.

Sp 411. Speech for the Classroom Teacher. 3 hours.

Instruction in speech and speech forms designed for classroom use. Required for English majors who intend to teach, but open to all prospective teachers. MTuWTh, 9:00. 201 Villard. Dahlberg.

Ed 424. Measurement in Education. (G) 4 hours.

Use and interpretation of informal and standardized tests as supervisory and guidance instruments for the diagnosis, analysis, and 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. Daily, 1:00. 136 Education. Kersh.

Ed 435. Audio-Visual Aids. (G) 3-4 hours.

The development and use of audio-visual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc. are utilized. Sources of materials and equipment; administration of audio-visual programs. Daily, 3:00. 127 Education. Hunter.

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

Study of the growth and development of cognition, motivation, interests, learning, and skills in infancy and childhood, integrated with the study of the growth of social behavior and the acquisition of social and individual controls over behavior. Influence of parental patterns and environmental conditions on later personality development. MWThF, 11:00. 370 Commonwealth. Dickman.

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

Behavior changes during pre-adolescence and adolescence as related to physiological development and social and cultural factors. Emphasis on personal and social adjustment. Intended to follow Psy 460. Not open to students who have completed Ed 461. MWThF, 2:00. 370 Commonwealth. Dickman.

Ed 476. School Law and Organization. 2 hours.

Oregon laws applying to schools and teachers; teacher personnel policies and practices; professional organization; means for continued professional growth. MTuW, 3:00. 128 Education. Goldhammer.

Ed 501. Research. 1-3 hours.**Ed 501. Research: Field Study.** 3 hours.**Ed 503. Thesis.** Hours to be arranged.**Ed 505. Reading and Conference.** 1-4 hours.

Instruction may be arranged for the eight-week session, for the first four weeks, or for the second four weeks.

Ed 507. Seminar: Social Foundations of Education. 2-3 hours.

Implications to education of social influences—the family, peer groups, social class, the local community, and minority group status—upon child development. Not open to students who have taken Ed 317. MWF, 11:00. 126 Education. Graham.

Ed 507. Seminar: Advanced Educational Psychology. 4 hours.

Review of some modern viewpoints in educational psychology. The learning process; character development of the individual in relation to the socialization process; diagnosis and school treatment of pupils' conduct and behavior;

the psychological principles of leadership and morale, as related to classroom teaching and school administration. Prerequisite: graduate standing in education, introductory course in educational psychology, and consent of instructor. Daily, 11:00. 125 Education. Kersh.

Ed 507. Seminar: The Public and the Press. 4 hours.

First four weeks, June 17-July 12. Analysis of the role of newspapers, magazines, motion pictures, radio, and television in a democratic society; the problems of improving the relationship between the public and the press in the mass-communication process. Not open to journalism majors. Daily, 9:00 and 10:00. 306 Allen. Brown.

Ed 507. Seminar: Supervision of School Publications. 4 hours.

Second four weeks, July 15-August 9. The teacher's role in guiding student publications in secondary schools and junior colleges. Not open to journalism majors. Daily, 9:00 and 10:00. 306 Allen. Brown.

Ed 508. Workshop: Curriculum Project. 4 hours.

June 17-July 12. Sponsored by local school systems, the Oregon State Department of Education, and the University of Oregon. Membership limited, by invitation, to persons who are working on the state-wide curriculum study. Tuition paid by the Board of Education. Four-week courses before the opening of the workshop are available. Student Union. Burton, staff.

Ed 508. Workshop: International Education. 6 hours.

June 22-July 26. The major objective of this workshop is to aid teachers to acquire those attributes of world-mindedness and other competencies essential for making effective contributions in their classrooms toward education for international understanding. The workshop will be conducted in Lima, Peru and will enable participants to receive first-hand acquaintance with another culture, with the work of international agencies, such as the United Nations and UNESCO, with the activities of the United States government abroad, with European-type schools, and the Peruvian national system of education. Emphasis will be placed on developing a diary of ideas and information and other resources of value for instruction. Address inquiries to Mrs. Bernice Tucker, Multnomah County Schools, 12240 N. E. Glisan, Portland, Oregon. Sandin, Tucker.

Ed 508. Workshop: Family Financial Security Education. 6 hours.

First four weeks, June 17-July 12. Aspects of money and banking, insurance, real estate, investments, estates, and family financing, related to family financial security. Designed for classroom teachers. Admission by prior application. Daily, 8:30-4:00. 341 Commonwealth. Akers, staff.

Soc 508. Workshop: Intergroup Relations. 3 hours.

July 8-19. Sponsored by the University of Oregon and the National Council of Christians and Jews. Designed for teachers and community leaders whose activities involve intergroup relations, either through classroom instruction or in informal community programs. Racial, religious, national, and other groups will be considered. The facts concerning the nature and significance of ethnic and cultural differences, the multigroup nature of American society, the nature and significance of prejudice and differential treatment based on ethnic and cultural differences. Daily, 9:00-11:00, 2:00-4:00. 134 Commonwealth. Berreman, Olsen.

Ed 512. Research Procedures in Education. 4 hours.

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. Daily, 7:00. 128 Education. Fullmer.

Ed 515. Educational Statistics. 3 hours.

An introductory course in statistics. Computing machines are available for student use. Prerequisite: Consent of instructor. MTuWTh, 10:00. 11 Deady. Borsting, Moursund.

Ed 516. Educational Statistics. 3 hours.

Advanced statistics applied to research in physical education; partial and multiple correlation, regression, analysis of variance, chi-square, and special correlation methods. Prerequisite: Ed 515. Daily, 2:00. 114 Physical Education. Clarke.

Ed 523. School Activities. 4 hours.

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. Daily, 8:00. 127 Education. Logsdon.

Ed 525. Pupil Personnel Programs. 4 hours.

July 15-August 9. The need for guidance and counseling; organization and administration of guidance services; tests, inventories, questionnaires, records; guidance in the curriculum; counseling the individual; the role of the home and the community in guidance; evaluation of guidance services. Daily, 10:00-12:00. 130 Education. Hearn.

Ed 526. Counseling Procedures. 3 hours.

Counseling problems of various types; methods of interviewing for different purposes; sources of vocational information; diagnosis of individual cases; evaluation of counseling programs. Prerequisite: clinical methods. MTuWTh, 8:00. 201 Condon. Sundberg.

Ed 543. History of American Education. 4 hours.

The intellectual development of the United States, with special reference to education. Prerequisite: knowledge of American history. Daily, 2:00. 202 Chapman. Castell.

Ed 546. Philosophy of Education. 4 hours.

Study of broad fundamental principles and problems of education as evaluated by the various schools of philosophical thought. Daily, 3:00. 202 Chapman. Castell.

Ed 565. Curriculum Foundations. 3 hours.

Implications of the basic social, philosophical, and psychological factors in curriculum planning and organization; historical background. MTuWTh, 3:00. 130 Education. Graham.

Ed 566. Curriculum Construction. 3-4 hours.

Survey and appraisal of curricular patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning. Daily, 1:00. 128 Education. Goldhammer.

Ed 574. School Supervision. 3-4 hours.

Second four weeks, July 15-August 9. Purpose and plans for supervision; use of tests, diagnosis of pupil difficulty, etc., as applied to both elementary and secondary schools. Prerequisites: Ed 311, Ed 312, or teaching experience. Daily, 8:00-10:00. 234 Commonwealth. Burton.

Elementary Education

Mth 7. Mathematics for Elementary Teachers. 3 hours.

Elements of arithmetic, algebra, and geometry. A required course in the elementary teacher training program. Daily, 9:00. 102 Deady. Ghent.

PE 221. Games for the Elementary School. 2 hours.

Games of low organization for children from grades 1 through 6. Specific emphasis on teaching methods. MTuWTh, 3:00. East Court. Hackett.

Ed 358. The Child and his Curriculum: Language Arts. 5 hours.

Language development from kindergarten through the elementary school. Emphasis on language as a means of communication and as a tool for thinking. Reading readiness, the psychology of the reading process, reading skills

in relation to other parts of the curriculum, diagnostic and remedial measures. Materials and teaching procedures in oral and written communication, spelling, and handwriting. Prerequisite: Ed 311, Ed 312. Daily, 8:00; M, 1:00-3:00. 137 Commonwealth. Gunn.

- MuE 371. Music for Elementary Teachers.** 3 hours.
Continuation of MuE 370. MTuThF, 2:00. 203 Music. Madsen.
- MuE 372. Music Methods for Elementary Teachers.** 3 hours.
Experiences in teaching the various music activities in the elementary schools. Required of majors in elementary education. Prerequisite: MuE 370, 371, or consent of instructor. MTuThF, 8:00. 203 Music. Madsen.
- Ed 407. Seminar: Methods in Science in the Elementary School.** 3 hours.
Designed to provide an understanding of the meaning of elementary science, an interpretation of the objectives of science education, the place of the teacher and the child, audio-visual aids, techniques of instruction, the selection of textbooks, evaluation and trends in the elementary science program. MTuWTh, 10:00. 137 Commonwealth. Olson.
- Ed 407. Seminar: Methods in Mathematics in the Elementary School.** 3 hours.
Principles and methods of instruction of elementary-school arithmetic; consideration of current issues; meaningful experiences and effective learning related to the number skills needed by children; ways to analyze difficulties and to evaluate progress. MTuWTh, 11:00. 237 Commonwealth. Nye.
- Ed 407. Seminar: Methods in Social Studies in the Elementary School.** 3 hours.
Study of the objectives, problems, materials, instructional techniques, and evaluational aspects of guiding the learning of children in the social studies. MTuWTh, 9:00. 237 Commonwealth. Nye.
- HE 450. Elementary-School Health Education.** (g) 3 hours.
The purposes and requirements of the elementary-school health service program, with emphasis upon 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. MTuWTh, 11:00. 101 Physical Education. Hackett.
- Ed 451. Preprimary Education.** (G) 4 hours.
Review of the development of children, age 5 through 8. Program planning; group behavior; the place of the teacher; equipment, activities, books, and music for these age levels. Daily, 1:00. 126 Education. Taylor.
- PE 460. Physical Education in the Elementary School.** (g) 3 hours.
An analysis and interpretive study of the objectives, standards, and activities of the elementary-school physical-education program. TuWThF, 10:00. 122 Physical Education. Hackett.
- Ed 507. Seminar: Children's Literature.** 3 hours.
First four weeks, June 17-July 12. Recent findings in children's literature. A large collection of children's books will be available for examination. Study of materials suitable for various grade levels. Opportunity to study and discuss materials suitable for language arts, literature, social studies, science, and other areas at the elementary level. MTuWTh, 8:00-10:00. 130 Education. Piper.
- Ed 508. Workshop: Teaching Methods in Geography.** 3 hours.
Two weeks, June 18-29. A study of principles and methods used in the presentation of the basic materials of geography. Maps, globes, charts, slides, film strips. MTuWTh, 10:00-12:00, 2:00-4:00. 101 Condon. Stovall.
- MuE 533. Music in the Elementary School.** 3 hours.
Theory, supervision, curriculum, materials, and procedures of music teaching in the elementary school. Research in problems involving music and related areas of instruction. MTuThF, 9:00. 203 Music. Nye.

Ed 534. Science in the Elementary School. 4 hours.

The place of science in the elementary school, with particular reference to the value of science in the lives of children. Selecting and organizing content, coordinating science with elementary-school activities; methods and materials; rooms and equipment. Daily, 10:00. 125 Education. Kambly.

Ed 535. Social Studies in the Elementary School. 4 hours.

Social-education objectives; children's social problems; unit development; work-study skills; organization of the program, materials; research findings basic to the social education of children. Daily, 9:00. 136 Education. Willard.

Ed 536. Language Arts in the Elementary School. 4 hours.

The role of language arts in the elementary-school program; research findings on language development; the teaching of spelling, writing, and speaking-listening skills; newer instructional materials; testing and evaluation. Daily, 10:00. 128 Education. Gunn.

Ed 537. Reading in the Elementary School. 4 hours.

Nature of the reading process, objectives, organization of a desirable reading program; reading readiness, reading skills, procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. Daily, 11:00. 127 Education. Willard.

Ed 538. Mathematics in the Elementary School. 4 hours.

Number abilities needed by children; research findings on mathematics education; designed number experiences; theories of teaching; desirable teaching procedures; selection and use of materials. Daily, 1:00. 130 Education. Olson.

Ed 553. Elementary-School Curriculum. 4 hours.

A systematic study of the elementary-school curriculum, including pupil needs in everyday life situations, objectives, essentials of a good program; varying curriculum designs, organization of learning experiences, evaluation of learning and appraisal of newer curriculum practices. Daily, 9:00. 126 Education. Sandin.

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

The role, duties, needs, and problems of modern supervision, including evaluation and improvement of the teaching-learning situation. Daily, 11:00. 128 Education. Sandin.

Secondary Education

Ed 314. Principles of Teaching. 3 hours.

Study of the actual classroom teaching process, including classroom organization and management, planning teaching units, evaluating pupil learning, and similar problems. Prerequisite: Ed 310, Ed 312. MTuWTh, 7:00. 126 Education. Kambly.

MuE 407. Seminar: Choral Music in the Upper Grades and Junior High School. (G) 3 hours.

Survey of appropriate material for chorus and special performing groups. Problems of organization and rehearsal techniques. MTuThF, 8:00. 104 Music. Risinger.

HE 464. Health Instruction. (G) 3 hours.

Methods and materials in health instruction for junior and senior high schools; emphasis on the preparation and construction of health teaching units. Prerequisite: HE 361, 362, 363 or consent of instructor. MTuWTh, 1:00. 101 Physical Education. Hackett.

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

Origin and functions of the junior high school; characteristics and needs of the early adolescent; administration of the junior high school; curriculum and

instruction; guidance; school activities; evaluation of the junior high school. MTuWTh, 10:00. 136 Education. Wilson.

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

The place of school records, test results, interest, aptitudes, abilities, and personal characteristics in the appraisal of educational and vocational potentialities; sources of current materials relating to educational opportunities and occupational trends. MTuWTh, 1:00. 125 Education. Wilson.

Ed 507. Seminar: Methods in Social Studies in the Junior and Senior High School. 3-4 hours.

Second four weeks, July 15-August 9. Designed for experienced classroom teachers. Attention will be given to the social-studies curriculum, citizenship education, the teaching of current affairs, handling of controversial issues, use of audio-visual aids, evaluation techniques, classroom techniques, and materials. Opportunity for students to prepare materials for use in their classes. Daily, 1:00-3:00. 366 Commonwealth. Williams.

Ed 507 Seminar: Methods in Science in the Junior and Senior High School. 3 hours.

Objectives of science; selection of subject matter; construction of science units; teaching techniques; materials and facilities for science teaching. Open to all persons interested in the teaching or supervision of junior or senior high-school science. MTuWTh, 9:00. 16 Science. Diebel.

Ed 507. Seminar: Methods in Language Arts in the Junior and Senior High School. 3-4 hours.

Second four weeks, July 15-August 9. Selection of areas of instruction in language arts; units, techniques of instruction, materials for language-arts teaching. Open to all students interested in the teaching or supervision of language arts in junior or senior high schools. Daily 8:00-10:00. 125 Education. Kraus.

Ed 507. Seminar: Methods in Mathematics in the Junior and Senior High School. 3-4 hours.

For experienced teachers; techniques of instruction in general mathematics, algebra, geometry, and advanced courses. Daily, 8:00. 333 Commonwealth. Schaaf.

Ed 508. Workshop: The Student Council. 3 hours.

August 12-23. Aims and objectives of the student council; organization, group processes, council problems and projects; evaluation of the council's program. Designed especially for student council advisers, open to others on consent of instructors. Daily, 9:00-12:00, 1:30-4:00. Student Union. Hearn, Bear, Wood, Auld.

Ed 522. Secondary-School Curriculum. 4 hours.

First four weeks, June 17-July 12. A survey of the secondary-school curriculum; trends and outstanding practices in organization, content, methodology, materials, and evaluation. Problem approach to specific subject areas. Daily, 10:00-12:00. 234 Commonwealth. Millhollen.

Ed 527. Secondary-School Administration and Supervision. 4 hours.

The secondary-school principalship; principles of administration, staff relationship, public relations, and professional growth; business administration, administration of guidance services, curriculum and school activities; evaluation of the secondary school. Daily, 11:00. 136 Education. Logsdon.

MuE 535. Music in the Senior High School. 3 hours.

Curricula, organization, methods, and materials in all aspects of senior high-school music. MTuThF, 10:00. 202 Music. Resinger.

Special Education

- Ed 409. Psycho-Education Clinic.** (G) 2 or 4 hours.
Supervised clinical practice in diagnosis and remediation of exceptional children. Prerequisite: Ed 465. Daily, 10:00-11:00; 11:00-12:00. Killgallon.
- Ed 462. Psychology of Exceptional Children.** (G) 4 hours.
Survey of characteristics and problems of all types of exceptional children, with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Daily, 1:00. 107 Commonwealth. East.
- Ed 463. The Maladjusted Child.** (G) 4 hours.
The discovery and treatment of the emotionally and socially maladjusted child; the home, school, and community in relation to the child's mental health. Daily, 3:00. 125 Education. Lowe.
- Ed 464. The Mentally Deviate Child.** (G) 4 hours.
Identification and guidance of the mental deficient, the slow learner, and the gifted. Daily, 2:00. 107 Commonwealth. East.
- Ed 465. Diagnostic and Remedial Techniques.** (G) 4 hours.
Diagnostic, remedial, and corrective techniques in basic school subjects; application of techniques to actual cases. Daily, 1:00. 234 Commonwealth. Hogg, Killgallon.
- ArE 501. Special Studies: Arts and Crafts in Special Education.** 3 hours.
First four weeks, June 17-July 12. Use of simple materials and ideas as they pertain to the needs of the deviant child. Major consideration to the instruction program for the mentally handicapped. MTuWTh, 8:00-10:00.
- Ed 507. Seminar: Supervision of Remedial Instruction.** 2-4 hours.
Study of and laboratory practice with supervisory problems of the reading clinic. Prerequisite: 6 hours in Ed 409 and consent of instructor. Daily, 10:00-11:00; 11:00-12:00. Killgallon, Hogg.

Educational Administration

- Ec 407. Seminar: Principles and Problems of Government Finance.** (g) 4 hours.
A study of basic issues involved in financing government. Theory and its application to contemporary problems of Federal, state, and local units. Daily, 11:00. 134 Commonwealth. Macy.
- Sp 424. Speech Forms and Techniques in Group Control.** (G) 3 hours.
Forms and methods in public speech as they relate to audience psychology and special situations. Study of forum, panel, committee, lecture, and parliamentary principles in terms of factors of attention, information, and persuasion. Special consideration of the needs of school administrators in public relations. MTuWTh, 11:00. 205 Villard. Dahlberg.
- Ed 507. Seminar: Nature and Problems of Administrative Behavior.** 3-6 hours.
For advanced graduate students who are at or past the master's level. Draws from the literature in the related fields of business administration, economics, social psychology, sociology, and political science. Particular emphasis on the fundamental research underlying human behavior as a basis for the theory and practice of administrative behavior. MTuWTh, 10:00-12:00. 104 Education. Jacobson, Culbertson, Colvard, Marquis, Sundberg.
- Ed 507. Seminar: Scope and Methods of the Social Sciences.** 3-6 hours.
The background and perspectives of each of the social-science disciplines—anthropology, economics, political science, psychology, and sociology. Selected aspects of social organization and process considered in detail. Daily, 8:00-10:00. 104 Education. Tope, Orr, Campbell, Dean, Littmann, Foskett.

Ed 572. Public School Administration. 3-4 hours.

Relations of the principal to the school board, school finance, school records and accounts, school building programs, pupil accounting, the teaching staff. Prerequisite: teaching experience or consent of instructor. Daily, 2:00. 126 Education. Romney.

Ed 573. Public School Organization. 3 hours.

Ed 572, 573, 574 required for majors in school administration. Ed 573 deals with organization in both grade and high school; emphasis on the small system. Prerequisite: teaching experience or consent of instructor. MTuWTh, 10:00. 127 Education. Goldhammer.

Ed 575. School Finance. 3-4 hours.

The problems of school finance and business management; sources of school income; relationship to the state financial structure; budgeting and accounting. Construction of a school budget. Daily, 1:00. 127 Education. Romney.

Ed 576. School Buildings. 3-4 hours.

First four weeks, June 17-July 12. Study of problems in planning, construction, maintaining, and operating school buildings. The basic course in school buildings, intended for persons who have not had much experience in building problems. Daily, 8:00-10:00. 128 Education. Hines.

Other Courses for Teachers

The summer courses listed below have been planned to meet the needs of classroom teachers. For descriptions, see the several departmental sections in this catalog.

Anthropology

Anth 414. **Race and Culture.** (G) 3 hours.

Art

AA 255. **Ceramics.** 1-3 hours.

AA 257. **Metalwork and Jewelry.** 2 hours.

AA 290. **Painting.** 2-3 hours.

AA 363. **Introduction to the History of Art.** 3 hours.

AA 455. **Advanced Ceramics.** (g) 2-4 hours.

AA 457. **Advanced Metalwork and Jewelry.** (G) 2-3 hours.

AA 458. **Textile Printing (Silk Screen).** (G) 2-4 hours.

AA 481. **Advanced Water Color.** (g) 2-4 hours.

AA 490. **Advanced Painting.** (G) 2-4 hours.

AA 491. **Advanced Drawing.** (g) 2-4 hours.

AA 590. **Graduate Studies in Painting.** Hours to be arranged.

ArE 311. **Creative Arts and Crafts for Elementary Teachers.** 2-4 hours.

ArE 314. **Art Education in the Junior High School.** 3 hours.

ArE 401. **Special Studies: Kindergarten.** 2-4 hours.

ArE 401. **Special Studies: Children's Art Laboratory.** 2-4 hours.

ArE 405. **Reading and Conference.** Hours to be arranged.

ArE 411. **Methods and Research Materials in Elementary School Art.** (G) 2 hours.

ArE 414. **Art Education in the High School.** (G) 2-4 hours.

- ArE 505. **Reading and Conference.** Hours to be arranged.
 ArE 507. **Seminar: Art Education.** 2 hours.
 ArE 533. **Art in the Elementary School.** 2 hours.

Biology

- Bi 470. **Field Botany.** (G) 3 hours.
 Bi 486. **Field Ornithology.** (G) 3 hours.

Chemistry

- Ch 439. **Survey of Organic Chemistry.** 5 hours.

Economics

- Ec 201. **Principles of Economics.** 4 hours.
 Ec 407. **Seminar in the American Labor Movement.** (g) 4 hours.
 Ec 450-451. **Comparative Economic Systems.** (g) 4 hours.

English

- Wr 111. **English Composition (First Term).** 3 hours.
 Wr 211. **Advanced Writing.** 3 hours.
 Wr 411. **English Composition for Teachers.** (g) 3 or 4 hours.
 Eng 101. **Survey of English Literature (First Term).** 3 hours.
 Eng 102. **Survey of English Literature (Second Term).** 3 hours.
 Eng 201. **Shakespeare (First Term).** 3 hours.
 Eng 407. **Seminar: Shakespeare.** (G) 3 hours.
 Eng 428. **Chaucer.** (G) 3 hours.
 Eng 430. **Literature of the Renaissance (First Term).** (g) 3 hours.
 Eng 480. **The Modern Spirit in American Literature (Third Term).** (g) 3 hours.
 Eng 507. **Seminar: Mediaeval Literature and the Romantic Revival.** 3-4 hours.
 Eng 507. **Seminar: Nature and the Poet.** 3-4 hours.
 Eng 507. **Seminar: American Literature.** 3-4 hours.
 Eng 507. **Seminar: Workshop in Composition—Grammar and Linguistics.** 3 hours.

Foreign Languages

- RL 505. **Reading and Conference (French).** 3 hours.
 GL 320. **Scientific German.** 3 hours.
 CL 407. **Seminar: Latin Composition.** (g) 3 hours.
 CL 505. **Reading and Conference: Ovid.** 3 hours.

History

- Hst 418. **Studies in Western Civilization.** (g) 4 hours.
 Hst 419. **Studies in Western Civilization.** (g) 4 hours.
 Hst 478. **History of the Pacific Northwest.** (G) 4 hours.

Mathematics

- Mth 479. **Algebra.** (g) 3 hours.
 Mth 499. **Foundations of Mathematics.** (g) 3 hours.
 Mth 578. **Geometry.** 3 hours.

Journalism

- J 488. **The Public and the Press.** (g) 4 hours.

Sociology

- Soc 307. **Principles of Sociology.** 4 hours.
 Soc 308. **World Population and Social Structure.** 4 hours.
 Soc 507. **Seminar: Family Life Education.** 4 hours.
 Soc 507. **Seminar: Propaganda and Social Control.** 4 hours.
 Soc 507. **Seminar: Sociology of Religion.** 4 hours.
 Soc 508. **Workshop: Intergroup Relations.** 3 hours.

Speech

- Sp 424. **Speech Forms and Techniques in Group Control.** (G) 3 hours.
 Sp 448. **Radio-Television and the Public.** (G) 3 hours.
 Sp 481. **Speech Defects and Disorders.** (G) 3 hours.
 Sp 507. **Seminar: Dramatic Production and Play Direction.** 3 hours.
 Sp 507. **Seminar: Discussion, Debate, Persuasion.** 3 hours.
 Sp 507. **Seminar: Problems of Education by Television.** 3 hours.
 Sp 507. **Seminar: Technical Problems of the Theater.** 2-4 hours.

Music

- Mus 407. **Seminar: Analysis of Music Structure.** (G) 2 hours.
 Mus 407. **Seminar: Understanding Music.** 3 hours.
 MuE 351. **Voice Class.** 2 hours.
 MuE 370. **Music for Elementary Teachers.** 3 hours.
 MuE 407. **Seminar: Composition Workshop.** (G) 2 hours.
 MuE 407. **Seminar: Advanced Conducting.** (G) 3 hours.
 MuE 407. **Seminar: Brass Instruments.** (G) 2 hours.
 MuE 501. **Research.** Hours to be arranged.
 MuE 503. **Thesis.** Hours to be arranged.
 MuE 505. **Reading and Conference.** Hours to be arranged.
 MuE 507. **Seminar.** Hours to be arranged.
 MuE 532. **Research in Music Education.** 3 hours.
 MuE 535. **Music in the Senior High School.** 4 hours.

Physics

- GS 104. **Physical Science Survey.** 4 hours.
 Ph 411. **Modern Physics.** (G) 3 hours.
 Ph 507. **Seminar: Foundations of Physics.** 4 hours.

Political Science

- PS 205. **International Relations.** 3 hours.
 PS 411. **Introduction to Public Administration.** (G) 4 hours.
 PS 417. **Government and Politics of South and Southeast Asia.** (G) 4 hours.
 PS 494. **Problems of American Democracy.** (G) 4 hours.
 PS 505. **Reading and Conference: International Relations.** Hours to be arranged.
 PS 507. **Seminar: Contemporary Problems of American Foreign Relations.** 3-4 hours.

Psychology

- Psy 421. **Principles and Methods of Psychological Assessment.** (G) 3 hours.
 Psy 424. **Individual Intelligence-Testing Laboratory.** (G) 3 hours.
 Psy 425. **Individual Intelligence-Testing Laboratory.** (G) 3 hours.
 Psy 435. **Counseling Procedures.** (G) 3 hours.
 Psy 450. **Abnormal Psychology.** (G) 3 hours.
 Psy 467. **Learning.** (G) 3 hours.
 Psy 507. **Behavior Problems in Children.** 3 hours.
 Psy 507. **Group Dynamics.** 3 or 4 hours.

English

Professors: HOELTJE, LESCH, SOUERS. Associate Professor: SHERWOOD. Assistant Professors: OSWALD, MUNDLE, WEGELIN, DICKEY. Visiting Professors: CRAIG, LAIRD.
 Instructors: KRAUS, VAN VORIS.

- Wr 111. **English Composition (First Term).** 3 hours.
 Fundamentals of English Composition. TuWThF, 8:00. 117 Friendly. Van Voris.
 Wr 112, 113. **English Composition.** 3 hours each term.
 Not offered in the 1957 summer session. Summer students may take Wr 211 in place of either Wr 112 or Wr 113 to satisfy the composition requirement.
 Wr 211. **Advanced Writing.** 3 hours.
 Expository writing. Summer students may take Wr 211 in place of either Wr 112 or Wr 113 to satisfy the composition requirement. TuWThF, 8:00. 118 Friendly. Dickey.
 Wr 411. **English Composition for Teachers.** (g) 3 or 4 hours.
 For students expecting to teach English in high school. Practice in writing and a review of the rules of composition. Required for the satisfaction of the high-school teaching-field requirement in English. Prerequisites: Wr 111, 112, 113. TuWThF, 9:00. 118 Friendly. Oswald.
 Eng 101. **Survey of English Literature (First Term).** 3 hours.
 Anglo-Saxon beginnings to the Renaissance. MTuWTh, 10:00. 117 Friendly. Mundle.
 Eng 102. **Survey of English Literature (Second Term).** 3 hours.
 Milton to Wordsworth. MTuWTh, 11:00. 117 Friendly. Mundle.
 Eng 201. **Shakespeare (First Term).** 3 hours.
 TuWThF, 9:00. 117 Friendly. Dickey.
 Eng 403. **Thesis for Honors Candidates.** Hours to be arranged.

- Eng 405. **Reading and Conference.** Hours to be arranged.
- Eng 407. **Seminar: Shakespeare.** (G) 3 hours.
MTuWTh, 11:00. 115 Friendly. Craig.
- Eng 428. **Chaucer.** (G) 3 hours.
As much of Chaucer's work read as time permits. Required for graduate students in English. MTuWTh, 2:00. 106 Friendly. Souers.
- Eng 430. **Literature of the Renaissance (First Term).** (g) 3 hours.
MTuWTh, 10:00. 115 Friendly. Lesch.
- Eng 480. **The Modern Spirit in American Literature (Third Term).** (g) 3 hours.
TuWThF, 1:00. 115 Friendly. Wegelin.
- Eng 501. **Research.** Hours to be arranged.
- Eng 503. **Thesis.** Hours to be arranged.
- Eng 505. **Reading and Conference.** Hours to be arranged.
- Eng 507. **Seminar: Mediaeval Literature and the Romantic Revival.** 3-4 hours.
Time to be arranged; first meeting, Tuesday, June 18, 3:00. 112 Friendly. Souers.
- Eng 507. **Seminar: Nature and the Poet.** 3-4 hours.
Time to be arranged; first meeting, Tuesday, June 18, 9:00. 112 Friendly. Lesch.
- Eng 507. **Seminar: American Literature.** 3-4 hours.
Time to be arranged; first meeting, Tuesday, June 18, 11:00. 112 Friendly. Hoeltje.
- Eng 507. **Seminar: Workshop in Composition—Grammar and Linguistics.** 3 hours.
June 17-28. An organization meeting will be held on Monday, June 17, at 2:00. 105 Friendly. Kraus, Laird, Oswald, Sherwood.

Foreign Languages

Associate Professor: JOHNSON. Assistant Professors:
LEPPMANN, O'NEIL, POWERS.

French

- *RL 1, 2. **First-Year French.** 8 hours.
An introduction to the language, stressing reading, comprehension of the spoken tongue, and the basic principles of French grammar. Equivalent of the first two terms of First-Year French given during the regular academic year. Daily, 8:00, 11:00. 225 Friendly. Johnson.
- RL 405. **Reading and Conference.** 3 hours.
Intended for students interested in French art and music as related to literature. With consent of the instructor, a limited number of students may pursue a supervised reading program in French literature. MTuWF, 10:00. 225 Friendly. Johnson.
- RL 503. **Thesis.** Hours to be arranged.
Johnson.
- RL 505. **Reading and Conference.** 3 hours.
Intended for students interested in French art and music as related to literature. With consent of the instructor, a limited number of students may pursue a supervised reading program in French literature. MTuWF, 10:00. 225 Friendly. Johnson.

* See note (*), page 38.

German

***GL 1, 2. First-Year German.** 8 hours.

The fundamentals of grammar, oral drill, translation of prose selections. Equivalent of the first two terms of First-Year German given during the regular academic year. Recommended for students who wish to acquire a reading knowledge. Daily, 8:00-10:00. 215 Friendly. Leppmann.

GL 320 Scientific German. 3 hours.

Intensive practice in the reading of scientific texts of increasing difficulty. Prerequisite: consent of instructor. Leppmann.

Latin

CL 407. Seminar: Latin Composition. (g) 3 hours.

Survey of classical Latin syntax; extensive practice in prose composition; close study of poetic techniques; practice in verse composition. Designed for teachers and Latin majors. Prerequisite: two years of college Latin or equivalent. MTuWF, 11:00. 305 Friendly. O'Neil.

CL 505. Reading and Conference: Ovid. 3 hours.

Extensive reading in the fifteen books of the *Metamorphoses*, with emphasis on the major myths. Study of Ovid's prosody and poetic techniques. Discussion of his role in the Augustan literature. MTuWF, 10:00. 305 Friendly. O'Neil.

Spanish

***RL 11, 12. First-Year Spanish.** 8 hours.

An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. Equivalent of the first two terms of First-Year Spanish given during the regular academic year. Daily, 8:00-9:00. 312 Friendly. Powers.

RL 503. Thesis. Hours to be arranged.

Powers.

Geography

Assistant Professors: PITTS, STOVALL.

Geog 105. Introductory Geography. 3 hours.

A general introduction to the field of geography. MTuWTh, 9:00. 105 Condon. Stovall.

Geog 201. Regional Economic Geography. 3 hours.

A study of the major types of production and their geographic background. TuWThF, 1:00. 105 Condon. Pitts.

Geog 427. Geography of the Soviet Union. (G) 3 hours.

Its resources, peoples, and world position of the Soviet Union. TuWThF, 9:00. 106 Condon. Pitts.

Geog 429. Geography of North America. (g) 3 hours.

Geography of the continent north of the Rio Grande. TuWThF, 8:00. 106 Condon. Pitts.

Geog 503. Thesis. Hours to be arranged.

Geog 505. Reading and Conference. Hours to be arranged.

* Students who complete RL 1, 2, RL 11, 12, or GL 1, 2 with a grade of A or B may enter Second-Year French, German, or Spanish in the fall term.

Ed 508. Workshop: Teaching Methods in Geography. 3 hours.

Two weeks, June 18-June 29. A study of principles and methods used in the presentation of the basic materials of geography. Maps, globes, charts, slides, film strips. MTuWTh, 10:00-12:00, 2:00-4:00. 101 Condon. Stovall.

Geology

Professor: STAPLES. Assistant Professor: STOVALL.

Geol 291. Rocks and Minerals. 3 hours.

A study of the common minerals and rocks; origin, lore, and properties of precious, semiprecious, and ornamental stones; economically important rocks and minerals. MTuWTh, 8:00. 105 Condon. Stovall.

Geol 406. Advanced Field Geology. 9 hours.

Geological field work in selected parts of Oregon. Prerequisites: Geol 314, Geol 383, and consent of instructor. Staples.

Geol 501. Research. Hours to be arranged.**Geol 503. Thesis.** Hours to be arranged.**Geol 505. Reading and Conference.** Hours to be arranged.**Geol 506. Advanced Field Geology.** 9 hours.

Geologic field work in selected parts of Oregon. Emphasis on individual problems. Prerequisite: graduate standing and consent of the instructor. Staples.

Health and Physical Education

Professors: CLARKE, ESSLINGER, POLEY, SIGERSETH, WOODRUFF. Associate Professors:
RHODA, SPRAGUE. Assistant Professors: HACKETT, PUCKETT. Instructors: CONNER,
COOK. Assistant: CLARKE. Visiting Faculty: ATKINSON, FLETCHER,
GIRARD, McCLOY.

Workshops

PE 408. Workshop: Dance, Team, and Individual Sports. 2-6 hours.

June 17-July 5. Designed for junior and senior high-school teachers and college instructors. Emphasis upon participation, improvement of skill, and proficiency and concentrated work in methods of teaching and development of teaching materials. Areas for participation and study:

Body Mechanics and Posture, Apparatus and Tumbling. Teaching materials, analysis, methods of instruction. 2 hours. Daily, 8:00-10:00. Woodruff, Puckett.

Contemporary Dance. Basic movement leading to dance composition, musical interpretation leading to percussion, dance drama. 2 hours. Daily, 8:00-10:00. Cook.

**Team Sports (Soccer, Speedaway, Basketball).* Teaching materials, techniques of team play, organization patterns. 2 hours. Daily, 10:00-12:00. Woodruff.

**Individual and Dual Sports (Bowling, Tennis, Golf).* Skill improvement, instruction materials, methods of teaching. 2 hours. Daily, 1:00-3:00. Bellissimo, Puckett, Brumbach.

American Folk Dance, Ballroom Dance. Analysis and methods of teaching dance materials. 2 hours. Daily, 3:00-5:00. Atkinson.

* Activities in team and individual sports areas will be determined by student preference.

HE 408. Workshop: Driver Education and Training. 2 hours.

June 10-14. Designed to prepare teachers to conduct driver-education courses at the secondary-school level. The course includes instruction in the use of testing devices, development of instructional units, behind-the-wheel instruction, and methods and materials for conducting a driver-education course in the secondary schools. MTuWThF, 8:00-12:00, 1:00-5:00. 127 Education. Fletcher.

PE 508. Workshop: Rehabilitation Institute. 2 hours.

July 14-20. An institute designed for workers engaged in rendering direct service to the handicapped or in organizing the community to recognize and assume its responsibility for the handicapped. Special emphasis will be placed on the coordinated team approach in the rehabilitation process. Given in cooperation with the U.S. Office of Vocation Rehabilitation, Department of Health Education and Welfare. MTuWThF, 8:30-12:00, 1:30-4:30; S, 8:30-12:00; two or three evening sessions. Student Union. Poley.

Coaching Clinic

PE 406. Special Problems: Coaching Clinic. 2 hours.

June 10-15. Special problems of coaching football, basketball, baseball, track and field, and wrestling. Designed especially to meet the needs of high-school coaches. Several of the members of the teaching staff have been selected for their successful teaching experience at the high-school level.

Football Coaching.....	8:30-11:45	MTuWTh		
	1:00-3:00	MTuW	}	Jones
	7:00-9:00	p.m., M		
Basketball Coaching.....	8:30-11:45	FS	}	To be selected
	1:00-3:30	ThF		
	7:00-9:30	p.m., Th		
Track Coaching.....	4:00-5:30	MTuW	}	Bowerman
	7:00-9:00	p.m., Tu		
Baseball Coaching.....	4:00-5:30	MTuW	}	Kirsch
	7:00-9:00	p.m., W		
Athletic Training.....	3:00-4:00	MTuW		To be selected
Wrestling Coaching.....	3:45-5:30	ThF		Hammer

Physical Education (Professional Courses)

PE 221. Games for the Elementary School. 2 hours.

Games of low organization for children from grades 1 through 6. Specific emphasis on teaching methods. MTuWTh, 3:00. East Court. Conner.

PE 406. Special Problems. Hours to be arranged.

Individual study of special problems assigned by the adviser and approved by the dean of the school.

PE 406. Special Problems: Tumbling and Apparatus. 2 hours.

For both men and women. Instruction in apparatus and tumbling skills, with emphasis on the methods, materials, nomenclature, and criteria for selection of skills in these activities to fit the various grade levels of instruction. MTuWTh, 4:00-5:30. Men's Gym.

PE 444. Tests and Measurements in Physical Education. (G) 3 hours.

Use of tests and measurements in physical education; evaluation of objectives, programs, and student achievement through measurement techniques. TuWThF, 10:00. 114 Physical Education. Rhoda.

PE 460. Physical Education in the Elementary School. (g) 3 hours.

An analysis and interpretive study of the objectives, standards, and activities of the elementary-school physical-education program. TuWThF, 10:00. 122 Physical Education. Hackett.

- PE 501. **Research in Physical Education.** Hours to be arranged.
- PE 503. **Thesis.** Hours to be arranged.
- PE 505. **Reading and Conference.** Hours to be arranged.
- PE 506. **Special Problems.** Hours to be arranged.
Individual study of selected problems in the field of physical education assigned by the adviser and approved by the dean of the school.
- PE 507. **Seminar: Scientific Bases for Physical Education.** 3 hours.
Problems related to physical education, such as the evaluation of man relative to corrective and adaptive physical education, known factors of physical education, physical education for carry-over purpose, physiology of exercise and program planning, physical education for the very young child, physical education for the aging person, reconditioning. TuWThF, 9:00. 114 Physical Education. McCloy.
- PE 507. **Seminar: Psychology of Physical Education.** 3 hours.
Application of the laws and principles of educational psychology to the teaching of physical-education activities; psychology of personal adjustment and guidance. TuWThF, 11:00. 114 Physical Education. McCloy.
- PE 507. **Seminar: Major Issues in Physical Education.** 3 hours.
Consideration will be given to the major issues in physical education in the United States. MTuWTh, 1:00. 143 Physical Education. Esslinger.
- PE 517. **Methods of Research.** 3 hours.
Methods and techniques of research in health, physical education, and recreation; practice in application to problems of current interest. MTuWTh, 3:00. 122 Physical Education. Clarke.
- PE 521. **Corrective Physical-Education Studies.** 3 hours.
Study of the common deviations of posture and feet; causes, methods of referral when advisable, and basic principles underlying the prescriptions of exercises for those conditions which may be handled safely by the physical-education teacher. TuWThF, 9:00. 121 Gerlinger. Poley.
- PE 533. **Techniques of Relaxation.** 3 hours.
The common causes of fatigue and neuromuscular hypertension; methods of combatting them. Theories underlying techniques of relaxation; application of those techniques in daily living. TuWThF, 10:00. Gerlinger. Poley.
- PE 540. **Statistical Methods in Physical Education.** 3 hours.
The use of norms, comparable scores, rating scales, and multiple regression as tools of research and interpretation of physical-growth, physical-status, and physical-performance data. Prerequisite: elementary statistics. MTuWTh, 2:00. 122 Physical Education. Rhoda.
- PE 541. **Statistical Methods in Physical Education.** 3 hours.
Advanced statistics applied to research in physical education, including partial and multiple correlation, regression, analysis of variance, chi-square, and special correlation methods. Prerequisite: PE 540. Daily, 2:00. 114 Physical Education. Clarke.
- PE 556. **Administration of Buildings and Facilities.** 3 hours.
Building layout and equipment; relationship of the various functional units; equipment, service, dressing facilities, activity spaces, administrative units, permanent and dismantlable equipment. TuWThF, 8:00. 122 Physical Education. Rhoda.
- PE 557. **Supervision of Physical Education for City Supervisors.** 3 hours.
The purpose of supervision; supervision of staff, facilities, and areas; departmental organization, regulations, and policies. MTuWTh, 2:00. 143 Physical Education. Sprague.

PE 559. Professional Preparation in Physical Education. 3 hours.

Historical development of professional preparation in physical education; curriculum, administrative factors, evaluation, and recruitment essential to the development and conduct of teacher-education programs in physical education. TuWThF, 8:00. 114 Physical Education. Sprague.

PE 572. Gross Anatomy Basic to Physical Performance. 3 hours.

Principles and facts in the fields of myology, osteology, arthrology, neurology, and angiology of importance to college teachers of physical education who give instruction in anatomy, kinesiology, and physiology of exercise. Application to body movement and performance. Prerequisite: PE 471, PE 472, PE 473, or equivalent. TuTh, 7:00-9:00 P.M. 114 Physical Education. Sigerseth.

PE 574. Physiological Principles of Advanced Conditioning. 3 hours.

Principles of diet, fatigue, circulatory and respiratory endurance, and muscular endurance which bear directly on physical performance in athletics. Important conditioning practices and environmental and geographical factors which determine performance ability. Course planned to cover practical problems and practices of conditioning and physical fitness. MTuWTh, 1:00. 122 Physical Education. Sigerseth.

Physical Education (Service Courses)**PE 180, 190, or 380, 390. Tennis.** 1 hour.

For men and women. MTuWTh, 3:00 or 4:00. Tennis Courts.

PE 180, 190, or 380, 390. Golf. 1 hour.

For men and women. MW, 4:00-6:00; or TuTh, 4:00-6:00.

PE 190, or 390. Swimming. 1 hour.

For men. MTuWTh, 11:00. Men's Pool.

PE 180, 190, or 380, 390. Ballroom Dancing. 1 hour.

For men and women. MTuWTh, 1:00. Gerlinger. Conner.

Health Education (Professional Courses)**HE 406. Special Problems.** Hours to be arranged.

Individual study of special problems, assigned by the adviser and approved by the dean of the school.

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

The purposes and requirements of the elementary-school health service program, with emphasis on organization and procedures for the school health examination, organization and presentation of teaching materials based on the health needs of the child, community needs, and school health services. MTuWTh, 11:00. 101 Physical Education. Hackett.

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

Social-hygiene content, methods, and materials appropriate for junior and senior high schools, with special application to social hygiene, mental health, and family-life education units in the state course of study. Prerequisite: senior standing in health education or biology; graduate standing in education or physical education. MTuWTh, 3:00. 114 Physical Education. Girard.

HE 464. Health Instruction. (G) 3 hours.

Methods and materials in health instruction for junior and senior high schools; emphasis on the preparation and construction of health teaching units. Prerequisite: HE 361, 362, 363 or consent of instructor. MTuWTh, 1:00. 101 Physical Education. Hackett.

HE 506. Special Problems: Driver Education. 3 hours.

An advanced driver-education course designed to prepare teachers to conduct

driver-education courses in secondary schools. A detailed study of the research data in the field. The details of the organization and administration of driver education, personal psychological problems of driving, traffic enforcement, and safety-teaching materials and methods of instruction in driver education. Prerequisite: secondary-school teaching credential and basic driver-education courses. MTuWTh, 1:00. 114 Physical Education. Girard.

HE 552. Administration of School Health Education. 3 hours.

Organization and administration of the school health program. MTuWTh, 11:00. 122 Physical Education. Girard.

History

Professor: WRIGHT. Associate Professor: SORENSON. Assistant Professors: BINGHAM, WILLIAMS, SMITH, SNOW. Visiting Professor: GOLDMAN.

Hst 102. History of Western Civilization. 4 hours.

Development of Western civilization: the early modern period. Second term of a three-term sequence. Daily, 8:00. 232 Commonwealth. Snow.

Hst 201. History of the United States. 4 hours.

The thirteen colonies and the United States to about 1840. First term of a three-term sequence. Daily, 9:00. 107 Commonwealth. Williams.

Hst 202. History of the United States. 4 hours.

The United States, 1840-1896. Second term of a three-term sequence. Daily, 10:00. 332 Commonwealth. Bingham.

Hst 405. Reading and Conference. 1 to 3 hours.

Directed readings in a special field, with a written report or examination. Open only to students eligible for honors (cumulative GPA of 2.75).

Hst 418. Studies in Western Civilization. (g) 4 hours.

Political, economic, and intellectual problems in the history of Western civilization from the Middle Ages to 1815. Intended primarily for teachers; attention to aspects that are particularly applicable to teaching assignments. Daily, 9:00. 333 Commonwealth. Smith.

Hst 419. Studies in Western Civilization. (g) 4 hours.

Political, economic, and intellectual problems in the history of Western civilization, from 1815 to the present. Intended primarily for teachers; attention to aspects that are particularly applicable to teaching assignments. Daily, 11:00. 333 Commonwealth. Smith.

Hst 433. Europe 1600-1789. (G) 4 hours.

Political, economic, social, and cultural development of the European states from the close of the Reformation to the French Revolution. Daily, 10:00. 107 Commonwealth. Snow.

Hst 445. Europe since 1939. (g) 4 hours.

Origins and course of World War II; postwar developments in Europe, domestic and international. Daily, 10:00. 237 Commonwealth. Wright.

Hst 446. Modern Germany. (g) 4 hours.

Germany since Bismarck's time, with emphasis on developments since 1918. Daily, 8:00. 237 Commonwealth. Wright.

Hst 475. American Foreign Relations. (g) 4 hours.

American foreign policy in the twentieth century. Third term of a year sequence. Daily, 11:00. 107 Commonwealth. Williams.

Hst 478. History of the Pacific Northwest. (G) 4 hours.

Detailed study of the building of civilization in the Pacific Northwest. Not open to students who have taken Hst 377. Meets state requirements for teacher certification. Daily, 8:00. 242 Commonwealth. Bingham.

- Hst 479. **Forces and Influences in American History.** (G) 4 hours.
Social forces in American history since the Civil War, with emphasis on reform movements. Daily, 11:00. 242 Commonwealth. Goldman.
- Hst 481. **The United States in the Twentieth Century.** (G) 4 hours.
The United States between the two world wars. Second term of a year sequence. Daily, 9:00. 242 Commonwealth. Goldman.
- Hst 488. **American Economic History.** (G) 4 hours.
The economic development of the United States, 1850 to 1900. Second term of a year sequence. Daily, 10:00. 232 Commonwealth. Sorenson.
- Hst 501. **Research.** Hours to be arranged.
- Hst 503. **Thesis.** Hours to be arranged.
- Hst 505. **Reading and Conference: Europe in the Era of the Reformation.** 3 hours.
Snow.
- Hst 507. **Seminar: Pacific Northwest.** 3 hours.
Bingham.
- Hst 507. **Seminar: American Foreign Relations.** 3 hours.
Williams.
- Hst 532. **European History: Problems and Interpretations.** 3 hours.
Readings, reports, and group discussions of major trends, problems, and interpretations in modern European history. Emphasis on standard works and on controversial viewpoints. Third term of a year sequence: from the French Revolution to the present. Smith.

Journalism

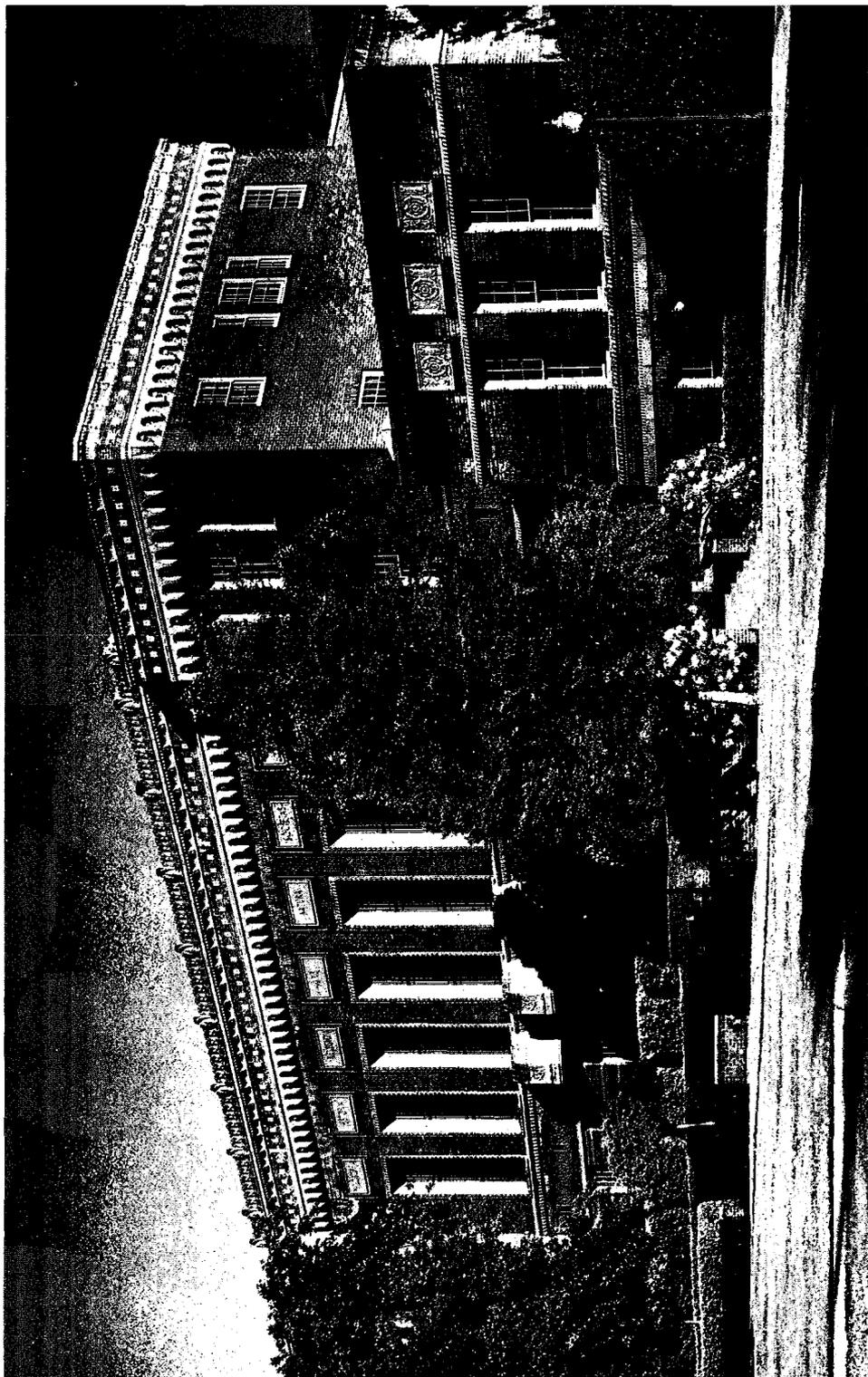
Professor: DUNCAN. Visiting Faculty: BROWN.

- J 488. **The Public and the Press.** (g) 4 hours.
First four weeks. Analysis of the role of newspapers, magazines, motion pictures, radio, and television in a democratic society; the problem of improving the relationship between the public and the press in the mass communication process. Not open to journalism majors. Daily, 9:00-10:00. 306 Allen. Brown.
- J 489. **Supervision of School Publications.** (g) 4 hours.
Last four weeks. The teacher's role in guiding student publications in secondary schools and junior colleges. Not open to journalism majors. Daily, 9:00-10:00. 306 Allen. Brown.
- J 501. **Research.** Hours to be arranged.
- J 503. **Thesis.** Hours to be arranged.
- J 505. **Reading and Conference.** Hours to be arranged.

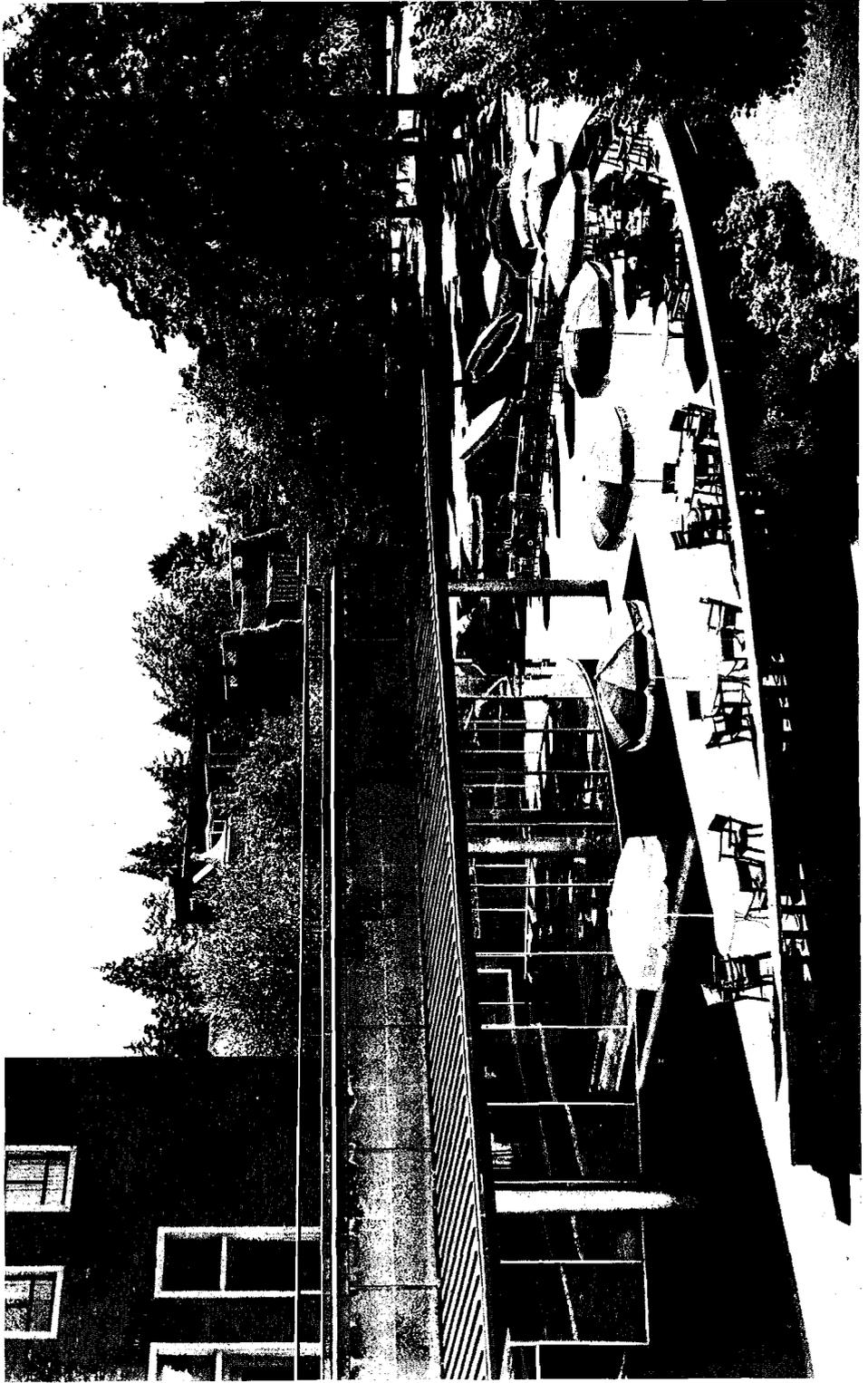
Library Education

Assistant Professor: BAKER. Visiting Faculty: SEALOFF.

- Lib 381. **Elementary Bibliography and Reference Materials.** 4 hours.
Study of important reference books, indexes, and bibliographies. Practical problems in the use of reference tools, with emphasis on reference work in the school library. Daily, 9:00. 223 Library. Sealoff.



THE UNIVERSITY OF OREGON LIBRARY



THE ERB MEMORIAL UNION—"FISHBOWL" AND TERRACE

- Lib 386. **Organization of Library Materials.** 4 hours.
 Instruction and practice in simplified procedures for the acquisition, preparation, cataloging, and classification of books and related library materials. MW, 1:00-2:00; TuTh, 1:00-3:00. 223 Library. Baker.
- Lib 484. **School Library Administration.** (g) 4 hours.
 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, services, objectives. Daily, 11:00. 223 Library. Sealoff.
- Lib 488. **Books and Related Materials for Young People.** (g) 4 hours.
 Primarily a reading course based on materials suitable for the junior and senior high school. Study of reading interests and curricular needs; criteria for evaluating materials; selection aids; evaluation of books and other materials. Daily, 10:00. 223 Library. Sealoff.
- Lib 505. **Reading and Conference.** 1-3 hours.
 Sealoff.

Mathematics

Professor: MOURSUND. Associate Professors: CIVIN, RUBIN, YOOD. Instructors: ANDERSON, BHARUCHA-REID. Teaching Fellow: BORSTING.

Upper-division and graduate courses offered by the Department of Mathematics during the summer session differ from those offered during the regular session. Usually, however, the needs of students can be met. Regular-session students should consult the head of the department before planning their programs.

Candidates for the Master of Arts, Master of Science, and Doctor of Philosophy degrees may obtain detailed information on requirements for those degrees at the Mathematics Office.

The following sequences are designed primarily for teachers working toward the degree of Master of Science in General Studies:

Mth 479 (g), Mth 579. Algebra. 6 hours.

Mth 489 (g), Mth 589. Geometry. 6 hours.

Mth 499 (g), Mth 599. Foundations of Mathematics. 6 hours.

It is the intention of the department to offer at least three of the total six terms of work in these courses each summer; the courses will be scheduled in such a manner that a student may complete two sequences in at most three summers and three sequences in at most four summers. Mth 479, Mth 499 and Mth 589 are being offered this summer. Mth 489, Mth 579, and Mth 599 are scheduled for 1958; and Mth 479 and several other courses for 1959.

A special course, Mth 7, suitable for elementary-school and junior high-school teachers, is offered every summer.

Mth 7 Mathematics for Elementary Teachers. 3 hours.

Elements of arithmetic, algebra, and geometry. A required course in the elementary teacher training program. Daily, 9:00. 102 Deady. Ghent.

Mth 10. Elements of Algebra. 3 hours.

Intended for students who have had less than one year of high-school algebra. May be integrated with Mth 7 if there is not sufficient enrollment to justify a separate section. Daily, 9:00. 106 Deady.

Mth 101. Essentials of Mathematics. 4 hours.

Intermediate algebra with applications. Intended for students who have had only one year of high-school algebra or who have not had algebra for some time. Daily, 9:00. 104 Deady.

Mth 105. College Algebra. 4 hours.

Intended for students who have a working knowledge of intermediate algebra or who have had at least one and one-half years of high-school algebra. Daily, 10:00. 102 Deady. Anderson.

Mth 107. Analytic Geometry. 4 hours.

Plane analytic geometry and an introduction to solid analytic geometry. Prerequisite for calculus. Daily, 10:00. 106 Deady.

Mth 201, 202, 203. Calculus. 4-12 hours.

To be offered by reading and conference. Enrollment restricted to students whom the department feels need the course and are sufficiently well prepared to take it with little class instruction. Moursund, Borsting.

Mth 405. Reading and Conference. Hours to be arranged.**Mth 425. Elements of Statistical Methods.** (g) 3 hours.

An introductory course in statistics. Integrated with Educational Statistics (Ed 515). Computing machines are available for student use. Prerequisite: consent of department. MTuWTh, 10:00. 11 Deady. Borsting, Moursund.

Mth 479. Algebra. (g) 3 hours.

Intended primarily for high-school mathematics teachers. Number systems, theory of algebraic operations, selected topics. Prerequisite: analytic geometry or consent of instructor. MTuWTh, 1:00. 102 Deady. Anderson.

Mth 499. Foundations of Mathematics. (g) 3 hours.

Fundamental concepts leading to a better understanding of the nature of mathematics. Prerequisite: consent of instructor. MTuWTh, 9:00. 104 Deady. Moursund.

Mth 501. Research. Hours to be arranged.**Mth 503. Thesis.** Hours to be arranged.**Mth 505. Reading and Conference.** Hours to be arranged.**Mth 507. Seminar.** 1 to 4 hours.

For graduate mathematics majors. Anderson.

Mth 589. Geometry. 3 hours.

Intended primarily for high-school teachers. Fundamental geometric concepts, selected problems from Euclidean geometry, and introduction to non-Euclidean geometries. Prerequisite: analytic geometry. MTuWTh, 10:00. 104 Deady. Ghent.

Music

Professors: KRATT, CYKLER, NYE. Associate Professors: BOUGHTON, GREEN, VAGNER.
Assistant Professors: BAILEY, LEE, RISINGER. Instructor: MADSEN.
Visiting Faculty: MCKAY.

Fees. The following special fees are charged for private lessons in applied music (Mus 190, Mus 290, Mus 390, Mus 490, Mus 590): Piano, violin, viola, cello, and voice, one lesson a week for eight weeks, \$20.00; two lessons a week, \$33.00. Wind instruments, one lesson a week for eight weeks, \$14.00; two lessons a week, \$28.00. Practice-room fee; one hour daily for eight weeks, \$2.75.

Mus 111. Music Theory I. 4 hours.

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

Mus 190. Applied Music. 1 to 2 hours.

Freshman year. Individual instruction in piano, voice, stringed instruments, orchestral and band instruments. Prerequisite: qualifying examination.

Piano—Green.

Stringed Instruments—Boughton.

Voice—Bailey.

Brass Instruments—Lee.

Woodwind Instruments—Vagner.

Mus 290. Applied Music. 1 to 2 hours.

Sophomore year. Continuation of Music 190.

MuE 351. Voice Class. 2 hours.

Study of voice problems in the public schools. MWF, 2:00. 202 Music. Bailey.

MuE 370. Music for Elementary Teachers. 3 hours.

Music activities for the elementary teacher. An introductory sequence designed to build basic musicianship through experiences related to the teaching of music in the elementary-school classroom. MuE 370 and MuE 371 must be taken in sequence. Required of majors in elementary education. MTuThF, 1:00. 203 Music. Madsen.

MuE 371. Music for Elementary Teachers. 3 hours.

Continuation of MuE 370. MTuThF, 2:00. 203 Music. Madsen.

MuE 372. Music Methods for Elementary Teachers. 3 hours.

Experiences in teaching the various music activities in the elementary schools. Required of majors in elementary education. Prerequisite: MuE 370, 371 or consent of instructor. MTuThF, 8:00. 203 Music. Madsen.

Mus 390. Applied Music. 1 to 2 hours.

Junior year. Prerequisite: Mus 290 or equivalent and qualifying examination for upper-division standing.

Mus 395. Band. 1 hour.

Interpretation and performance of band literature, including the reading of selected music for high-school band. Open to all students. MTuWTh, 3:00. Music Auditorium. Vagner.

Mus 396. Orchestra. 1 hour.

Study and performance of orchestra literature. TuTh, 2:00; W, 7:00-9:00 p.m. Music Auditorium. Boughton.

Mus 397. Choral Union. 1 hour.

The preparation of a significant choral work in the larger form for public performance at the close of the summer session. Open to all students. MTuWTh, 1:00. 202 Music. Risinger.

Mus 405. Reading and Conference. Hours to be arranged.**MuE 407. Seminar: Interpretation of Band Literature.** (G) 3 hours.

Problems of conducting and interpretation. MTuThF, 10:00. 203 Music. Vagner.

MuE 407. Seminar: Choral Music in the Upper Grades and Junior High School. (G) 3 hours.

Survey of appropriate material for chorus and special performing groups. Problems of organization and rehearsal techniques. MTuThF, 8:00. 104 Music. Risinger.

MuE 407. Seminar: Composition. (G) 2 hours.

Designed especially for teachers to stimulate interest in composition and in the arranging of choral and instrumental ensembles in the public school. W, 8:00-10:00. 202 Music. McKay.

MuE 407. Seminar: Advanced Conducting. (G) 3 hours.

The routine and technique of conducting. Problems of public-school instru-

- mental organizations. Laboratory experience will be provided by students in High School Music Summer Session. MTuThF, 1:00. 104 Music. Boughton.
- MuE 407. Seminar: Brass Instruments.** (G) 2 hours.
Second four weeks. Demonstration and discussion of the playing of brass instruments and their literature. Daily, 11:00. 215 Music. Lee.
- Mus 407. Seminar: Analysis of Music Structure.** (G) 2 hours.
For advanced students in music education. MWF, 2:00. 104 Music. McKay.
- Mus 407. Seminar: Theory.** No credit.
Offers students an opportunity to remove deficiencies in theory, and to acquire the requisite facility in theory for upper-division and graduate study. MTuThF, 11:00. 104 Music. Green.
- Mus 407. Seminar: Understanding Music.** 3 hours.
A course designed to familiarize the nonmusic major with the materials of musical expression and their organization through the study of the literature of music. Not open to music majors. MTuThF, 11:00. 202 Music. Cykler.
- Mus 408. Seminar in Music History.** (G) 3 hours.
Music in the Romantic period. MTuThF, 8:00. 202 Music. Cykler.
- MuE 408. Special Teaching Methods.** 2-3 hours.
Parallels practice teaching in elementary and secondary schools. Observations, reports and conferences on materials and procedures used in music instruction. Prerequisite: consent of instructor. Instrumental, Wagner. Vocal: Nye.
- Mus 428. Introduction to Musicology.** (G) 3 hours.
Study of the methods of research in music, and application of research techniques to particular musical problems. Prerequisite: Mus 360, 361, 362 or consent of instructor. MTuThF, 9:00. 202 Music. Cykler.
- Mus 490. Applied Music.** 1 to 2 hours.
Senior year. Continuation of Mus 390, which is prerequisite. For instructors, see Mus 190.
- Mus 501. Research.** Hours to be arranged.
- MuE 501. Research.** Hours to be arranged.
- Mus 503. Thesis.** Hours to be arranged.
- MuE 503. Thesis.** Hours to be arranged.
- Mus 505. Reading and Conference.** Hours to be arranged.
- MuE 505. Reading and Conference.** Hours to be arranged.
- Mus 507. Seminar.** Hours to be arranged.
- MuE 507. Seminar.** Hours to be arranged.
- MuE 533. Music in the Elementary School.** 3 hours.
Theory, supervision, curriculum, materials, and procedures of music teaching in the elementary school. Research in problems involving music and related areas of instruction. MTuThF, 9:00. 203 Music. Nye.
- MuE 532. Research in Music Education.** 3 hours.
Discussion of problems and issues in music education at all levels. Organization of field studies, research papers, and theses. Prerequisite: consent of instructor. MTuWTh, 11:00. 203 Music. Nye.
- MuE 535. Music in the Senior High School.** 3 hours.
Curricula, organization, methods, and materials in all aspects of senior high-school music. MTuThF, 10:00. 202 Music. Risinger.
- Mus 590. Applied Music.** 1 to 4 hours.
Individual instruction in piano, voice, stringed instruments, orchestral and band instruments, at the graduate level.

High-School Music Summer Session

A three-week summer session for high-school students in band and orchestra will be held on the campus from June 23 to July 12. Observation of the rehearsals of the high-school groups will be interesting and valuable to high-school music teachers.

Physics

Professors: ELLICKSON, CH'EN. Associate Professors: DART, EBBIGHAUSEN.
Assistant Professors: CRASEMANN, EASTERDAY.

Beginning with the 1957 summer session, the Department of Physics will offer a two-year summer session program particularly for teachers of high-school physics and general science and elementary-school science teachers. A seminar in Foundations of Physics will be offered each summer. Modern Physics will be offered as a two-term sequence, Atomic Physics (Ph 411) and Nuclear Physics (Ph 412), to be taught in alternate summers. Two terms of Physical-Science Survey will also be offered in a two-summer sequence—GS 104 devoted to astronomy and meteorology, GS 105 to atomic physics and geology.

GS 104. **Physical-Science Survey.** 4 hours.

About half of the lectures will be devoted to a survey of the astronomy of the solar and stellar systems. The remainder will be concerned with meteorology, and will include a discussion of the nature and origin of clouds, precipitation, storms, and a general discussion of weather. This course is designed particularly for the elementary-school teacher. MTuWThF, 11:00. 16 Science. Ebbighausen.

Ph 411. **Modern Physics: Atomic Physics.** (G) 3 hours.

Atomic structure, the wave and quantum nature of light, the origin of optical spectra and X-rays, and modern developments in these fields. Special attention will be paid to the manner of presentation of these topics to high-school students. MTuWTh, 8:00. 16 Science. Ebbighausen.

Ph 501. **Research.** Hours to be arranged.

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

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

Ph 507. **Seminar: Foundations of Physics.** 4 hours.

The basic principles of the physical sciences discussed with special attention given to those commonly considered in high-school physics courses. Methods of presentation of this material in high-school classes. The use, care, and construction of laboratory and demonstration equipment. MTuWThF, 10:00. 16 Science. Ebbighausen.

Political Science

Professor: SCHLEICHER. Associate Professor: DEAN. Instructors: BROWN, MARQUIS

PS 201. **American Government.** 3 hours.

Provisions and principles of the United States Constitution; how they were formulated and how they have developed in American government and politics. MTuWTh, 9:00. 233 Commonwealth. Brown.

PS 205. **International Relations.** 3 hours.

Analysis of the nature of relations among states, with particular reference to contemporary international issues; a study of motivating factors, including

nationalism, imperialism, economic rivalries, quest for security, etc.; study of the problem of national sovereignty and its relation to international cooperation. MTuWTh, 11:00. 233 Commonwealth. Brown.

***PS 411. Introduction to Public Administration.** (G) 4 hours.

Study of the organization and activities of government in carrying out public policy. Daily, 8:00. 332 Commonwealth. Marquis.

PS 417. Government and Politics of South and Southeast Asia. (G) 4 hours.

The political forces and institutions, and international relations, of the independent countries and colonial areas extending from Pakistan to the Philippines. The emphasis is on common problems and trends, and on areas such as India, Thailand, Indo-China, Malaya, Indonesia, and the Philippines. Daily, 9:00. 332 Commonwealth. Schleicher.

PS 494. Problems of American Democracy. (G) 4 hours.

Analysis of significant problems of the American political system: national power and state's rights; the growth of presidential power; the quest for Congressional leadership; the rise of the welfare state; the demand for responsible parties; the Bill of Rights and the cold war; social change and the Constitution. Daily, 11:00. 332 Commonwealth. Dean.

PS 501. Research. Hours to be arranged.

PS 503. Thesis. Hours to be arranged.

PS 505. Reading and Conference: International Relations. Hours to be arranged.
Schleicher.

PS 507. Seminar: Contemporary Problems of American Foreign Relations.
3-4 hours.

Readings, reports, and discussion on the postwar foreign policies of the United States; objectives, policy formulation, influencing factors, and policies. Schleicher.

Psychology

Professor: LEEPER. Associate Professors: LITTMAN, LUCHINS. Assistant Professors; SUNDBERG, VON HOLT. Instructor: DICKMAN.

Psy 202. General Psychology. 3 hours.

Second term of introductory psychology. Study of sensory and perceptual processes, learning, and thinking. MWThF, 8:00. 301 Condon. Dickman.

Psy 421. Principles and Methods of Psychological Assessment. (G) 3 hours.

Consideration of problems in assessing personality. Comparison of interview method with psychological testing. Theoretical and statistical background for interpretation of test scores. Prerequisite: course in statistics of mental measurement. MTuThF, 1:00. 201 Condon. von Holt.

Psy 424. Individual Intelligence-Testing Laboratory. (G) 3 hours.

Supervised practice in administration, scoring, and interpretation of the Stanford-Binet tests. Psy 421 must be taken concurrently if it has not been taken previously. Prerequisite: consent of instructor. MTuThF, 9:00. 201 Condon. von Holt.

Psy 425. Individual Intelligence-Testing Laboratory. (G) 3 hours.

Supervised practice in administration, scoring, and interpretation of the Wechsler tests. Psy 421 must be taken concurrently if it has not been taken previously. Prerequisite: consent of instructor. MTuThF, 10:00. 201 Condon. von Holt.

Psy 435. **Counseling Procedures.** (G) 3 hours.

Counseling problems of various types; methods of interviewing for different purposes; sources of vocational information; diagnosis of individual cases; evaluation of counseling programs. Prerequisite: Psy 421, 422 or equivalent. MTuWTh, 8:00. 201 Condon. Sundberg.

Psy 450. **Abnormal Psychology.** (G) 3 hours.

Study of anxiety and its relation to normal and abnormal behavior; survey of various types of neurosis, psychosis, and characterological disorders in terms of changes in perception, thinking and behavior. Evaluation of some prevalent theories of psychopathology. Influence of social-cultural factors in the development of abnormal behavior; a brief consideration of treatment methods. MWThF, 9:00. 301 Condon. Dickman.

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

Study of the growth and development of cognition, motivation, interests, learning, and skills in infancy and childhood, integrated with the study of the growth of social behavior and the acquisition of social and individual controls over behavior. Influence of parental patterns and environmental conditions on later personality development. MWThF, 11:00. 370 Commonwealth. Dickman.

Psy 461. **Developmental Psychology II: Adolescence.** (g) 3 hours.

Behavior changes during pre-adolescence and adolescence as related to physiological development and social and cultural factors. Emphasis on personal and social adjustment. Intended to follow Psy 460. Not open to students who have completed Ed 461. MWThF, 2:00. 370 Commonwealth. Dickman.

Psy 467. **Learning.** (G) 3 hours.

A critical study of the psychology of learning; experimental work and related theoretical formulations on trial-and-error learning, conditioning, problem-solving, skills, and thinking. MTuWTh, 11:00. 201 Condon. Littman.

Psy 501. **Research.** Hours to be arranged.

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

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

Psy 507. **Seminar: Behavior Problems in Children.** 3 hours.

Everyday problems of the everyday child. General principles of treatment, with special reference to the school situation. MTuWF, 8:00. Luchins.

Psy 507. **Seminar: Group Dynamics.** 3-4 hours.

The theory of social processes and structure of small groups as they operate in an institutional context, particularly in schools and hospitals. General principles of group behavior, and methods of studying group structure and process. MTuWF, 10:00. 301 Condon. Luchins.

Psy 507. **Seminar: Group Therapy.** 3-4 hours.

Discussion of some present-day approaches in group therapy, both with reference to treatment of social groups as such and with reference to use of the group as a means of therapeutic change of particular individuals within the group. Prerequisite: Group Dynamics or equivalent course previously or concurrently. MTuWF, 11:00. 301 Condon. Luchins.

Psy 507. **Seminar: Current Personality Theory.** 3 hours.

Recent trends and developments in the basic theoretical understanding of personality. TuWThF, 2:00. 201 Condon. Leeper.

Sociology

Professors: FOSKETT, BERREMAN. Associate Professor: MARTIN. Assistant Professors:
JOHANNIS, COLVARD, JOHNSON. Lecturer: OLSEN.

- Soc 307. **Principles of Sociology.** 4 hours.
Fundamental concepts and empirical findings in the field of sociology. Not open to students who have completed Soc 204, 205. Daily, 8:00. 107 Commonwealth. Berreman.
- Soc 308. **World Population and Social Structure.** 4 hours.
Introduction to the general field of population studies, providing within a sociological framework an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. Required of all majors. Prerequisite: Soc 204, 205, 206 or Soc 307. Daily, 9:00. 232 Commonwealth. Martin.
- Soc 407. **Seminar: Social Relations and Social Structure.** (G) 4 hours.
Emphasis will be placed on the development of theoretical framework for the analysis of the elements, forms, content, and organization of patterned human behavior. Daily, 8:00. 233 Commonwealth. Johnson.
- Soc 407. **Seminar: Family Life Education.** 4 hours.
The development of family life education programs, including underlying theory, trends, methods, and materials. TuTh, 2:00-4:30. 234 Commonwealth. Johannis.
- Soc 407. **Seminar: Sociology of Religion.** 4 hours.
Religion as a social system of the overall society; the patterning of religious behavior; the relation between religion and other social institutions; the religious systems of the world. MW, 2:00-4:30. 233 Commonwealth. Johnson.
- Soc 501. **Research.** Hours to be arranged.
- Soc 503. **Thesis.** Hours to be arranged.
- Soc 505. **Reading and Conference.** Hours to be arranged.
- Soc 507. **Seminar: Propaganda and Social Control.** 4 hours.
A social-psychological study of propaganda as a means for the control of public opinion and action. Some application will be made to such fields as commercial, political, and war propaganda, but the emphasis is on the understanding of social and psychological processes rather than on the content of propaganda or the media by which it is communicated. TuTh, 2:00-4:30. 233 Commonwealth. Berreman.
- Ed 507. **Seminar: Nature and Problems of Administrative Behavior.** 3-6 hours.
For advanced graduate students who are at or past the master's level. Draws from the literature in the related fields of business administration, economics, social psychology, sociology, and political science. Particular emphasis on the fundamental research underlying human behavior as a basis for the theory and practice of administrative behavior. MTuWTh, 10:00-12:00. Colvard, staff.
- Ed 507. **Seminar: Scope and Method of the Social Sciences.** 3-6 hours.
The background and perspectives of each of the social science disciplines—anthropology, economics, political science, psychology, and sociology. Selected aspects of social organization and process considered in detail. Daily, 8:00-10:00. 104 Education. Foskett, Tope, Orr, Dean, Littman.
- Soc 508. **Workshop: Intergroup Relations.** 3 hours.
July 8-19. Designed for teachers and community leaders whose activities involve intergroup relations, either through classroom instruction or in informal community programs. Racial, religious, national, and other groups will be considered. The facts concerning the nature and significance of ethnic and

cultural differences, the multigroup nature of American society, the nature and significance of prejudice and differential treatment based on ethnic and cultural differences. Daily, 9:00-11:00, 2:00-4:00. 341 Commonwealth. Berreman, Olsen.

Speech

Professor: WOOD. Associate Professors: DAHLBERG, STARLIN. Assistant Professors: COHEN, HUNTER, RAMEY. Instructor: KREMPPEL.

- Sp 111. **Fundamentals of Speech.** 3 hours.
Projects in extempore speaking. Primary emphasis on content, organization, and adjustment to the speaking situation. MTuWTh, 8:00. 205 Villard. Dahlberg.
- Sp 261, 262, 263. **Theater Principles.** 3 hours.
Development of the physical theater and the mechanics of its stage and shops; planning and construction of stage settings and properties; basic principles of stage lighting. MTuWTh, 2:00. 103 Villard. Ramey.
- Sp 352. **Technique of Acting.** 3 hours.
Principles of acting technique; problems in analysis and presentation of character. MTuWTh, 11:00. 102 Villard. Hunter.
- Sp 411. **Speech for the Classroom Teacher.** 3 hours.
Instruction in speech and speech forms designed for classroom use. Required for English majors who intend to teach, but open to all prospective teachers. MTuWTh, 9:00. 201 Villard. Dahlberg.
- Sp 424. **Speech Forms and Techniques in Group Control.** (G) 3 hours.
Forms and methods in public speech as they relate to audience psychology and special situations. Study of forum, panel, committee, lecture, and parliamentary principles in terms of factors of attention, information, and persuasion. Special consideration of the needs of school administrators in public relations. MTuWTh, 11:00. 205 Villard. Dahlberg.
- Sp 448. **Radio-Television and the Public.** (G) 3 hours.
The influence and importance of broadcasting as a social, political, and cultural force; the development of broadcasting; commercial versus public-service broadcasting; the rights and duties of listeners; public opinion and propaganda influence. MTuWTh, 11:00. 217 Villard. Cohen.
- Sp 461. **Scene Design.** (G) 3 hours.
Elements of theatrical design in the educational theater. MTuWTh, 1:00. 206 Villard. Krempel.
- Sp 464. **History of the Theater.** (G) 3 hours.
An historical study of the theater from ancient to modern times. MTuWTh, 10:00. 206 Villard. Hunter.
- Sp 481. **Speech Defects and Disorders.** (G) 3 hours.
Symptoms and causes of speech abnormalities; emphasis on diagnosis and basic pathology of articulatory defects and delayed speech, with discussion of methods of treatment limited to general principles. MTuWTh, 9:00. 101 Villard. Wood.
- Sp 483. **Clinical Methods in Speech Correction.** (G) 3 hours.
Study of specific approaches and techniques in the treatment of the major speech defects, including functional articulatory difficulties, cleft-palate speech, stuttering, and neurological speech disorders. MTuWTh, 1:00. 101 Villard. Wood.

- Sp 484, 485, 486. **Clinical Practice in Speech Correction.** (G) 1-4 hours.
Actual case experience for student clinicians in the diagnosis and treatment of speech-defective children and adults, under supervision. Speech Clinic, Villard. Wood.
- Sp 501. **Research.** Hours to be arranged.
- Sp 503. **Thesis.** Hours to be arranged.
- Sp 505. **Reading and Conference.** Hours to be arranged.
- Sp 507. **Seminar: Introduction to Graduate Study.** 3 hours.
217 Villard. Cohen.
- Sp 507. **Seminar: Dramatic Production and Play Direction.** 3 hours.
MTuWTh, 10:00. 102 Villard. Krempel.
- Sp 507. **Seminar: Technical Problems of the Theater.** 2-4 hours.
Ramey.
- Sp 507. **Seminar: Discussion, Debate, Persuasion.** 3 hours.
206 Villard. Cohen.
- Sp 507. **Seminar: Problems of Education by Television.** 3 hours.
MTuWTh, 8:00. 217 Villard. Starlin.