



S U M M E R S E S S I O N

PORTLAND . JUNE 20-AUGUST 12

OREGON STATE SYSTEM

B U L L E T I N

OF HIGHER EDUCATION



Vanport Extension Center

Representing the

UNIVERSITY OF OREGON
OREGON STATE COLLEGE
OREGON COLLEGE OF EDUCATION
SOUTHERN OREGON COLLEGE OF EDUCATION
EASTERN OREGON COLLEGE OF EDUCATION

Eight-Week Summer Session

June 20—August 12 1949

OREGON STATE SYSTEM OF HIGHER EDUCATION

Telephone: UNiversity 1605

Table of Contents

ORECON STATE SYSTEM OF HIGHER EDUCATION	9
STATE BOARD OF HIGHER EDUCATION	11
Administrative Officers, State System	12
FACULTY	13
CALENDAR	
Fees and Refunds	
General Information	18
Description of Courses	19
Business Administration	20
Chemistry	
Economics	20
Engineering	20
Civil Engineering	21
English	21
Literature	21
Rhetoric	21
Health and Physical Education	
History	22
Mathematics	22
Music	22
Physical Education (See Health and Physical Education)	
Physics	22
Political Science	23
Psychology	23
Rhetoric (See English)	
Science	23
Secretarial Science	23
Sociology	24
Speech	24
Zoology	24

[2]

Student Council

Vanport is student-run. "We school ourselves in self-discipline as well as credits," one young woman council member said.



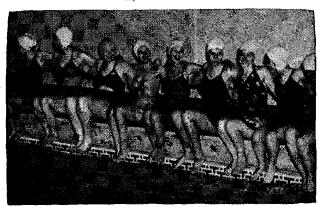


Athletic lay a Major Part at Vanport



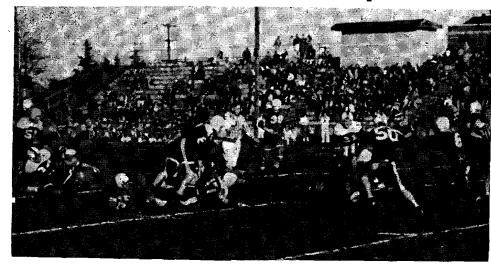


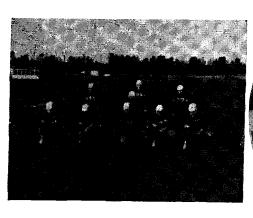






Varsity sports with first-class equipment, a fine coaching staff, and intramural competition as well, for both men and women. Vanport teams rate well in the collegiate leagues—successful in competition, healthy in activity.











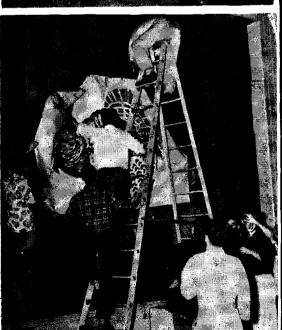






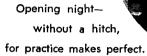
Social Activities

A regular schedule of parties, informal as well as formal, adds enjoyment to life at Vanport Extension Center.





Drama and Music











Professional training for those who wish it, poise and enjoyment for all—in the drama and music departments of Vanport.

Rehearsals for the mixed chorus result in performances of uniformly high quality.







Vanport cafeteria meals at cost—at convenient hours.

Housing for Married or Single Students

Within a short distance from the campus, housing may be available for married or single students. Rates are reasonable, whether you prefer furnished or unfurnished accommodations.

Oregon State System of Higher Education

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

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

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

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

State Board of Higher Education

•			
	Term		
	Expires		
R. E. KLEINSORGE, Silverton	1950		
George F. Chambers, Salem	1951		
Leif S. Finseth, Dallas	1952		
Рип, Metschan, Portland	1953		
HENRY F. CABILL, Portland	1954		
EDGAR W. SMITH, Portland	1955		
A. S. Grant, Baker	1956		
CHERYL S. MACNAUGHTON, Portland	1957		
HERMAN OLIVER, John Day	1958		
OFFICERS			
EDGAR W. SMITH	President		
R. E. KleinsorgeVice-I	President		

EXECUTIVE COMMITTEE

EDGAR W. SMITH

LEIF S. FINSETH

R. E. KLEINSORGE

PAUL C. PACKER, Chancellor CHARLES D. BYRNE, Secretary

Office of the State Board of Higher Education
Eugene, Oregon

Oregon State System of Higher Education

PAUL C. PACKER, Ph.D., LL.D., Chancellor Frederick Maurice Hunter, Ed.D., LL.D., Honorary Chancellor

HARRY K. NEWBURN, Ph.D. AUGUST LEROY STRAND, Ph.D. President, University of Oregon President, Oregon State College HENRY M. GUNN, Ed.D. DAVID W. E. BAIRD, M.D., LL.D. Dean, University of Oregon Medical President, Oregon College of Educa-School ELMO NALL STEVENSON, Ed.D. ROBEN JOHN MAASKE, Ph.D. President, Eastern Oregon College of President, Southern Oregon College of Education Education OFFICE OF THE CHANCELLOR RICHARD LYLE COLLINS, M.A., C.P.A....Budget Director L. MELVIN LESTER, B.A.....Editorial Assistant, Division of Information BUSINESS OFFICE JOHN L. WATSON, B.B.A., C.P.A. Assistant Comptroller HAROLD ROWLEY, B.S. Chief Accountant WILLIAM RALPH STOVALLAssistant Accountant and Property Custodian TEACHER EDUCATION PAUL B. JACOBSON, Ph.D......Director of High-School Teacher Education HENRY M. GUNN, Ed.D. Director of Elementary Teacher Education GENERAL EXTENSION DIVISION JOHN FRANCIS CRAMER, D.Ed.....Dean and Director of General Extension HENRY EUGENE STEVENS, D.Ed......Assistant Director of General Extension LIBRARIES ELZIE VANCE HERBERT. Head of Orders Department MARIE HULL JACKSON, B.A., B.S. in L.S.....Cataloger for Union Catalog

Vanport Extension Center

Oregon State System of Higher Education

Faculty*

- PAUL C. PACKER, Ph.D., Chancellor, Oregon State System of Higher Education.

 B.A. (1918), Iowa; M.A. (1921), Michigan; Ph.D. (1923), Columbia; LL.D. (1938), Cornell.
- JOHN FRANCIS CRAMER, D.Ed., Dean and Director, General Extension; Director of Summer Sessions, Oregon State System of Higher Education.
 A.B. (1920), M.A. (1921), Willamette; M.Ed. (1932), D.Ed. (1937), Oregon.
- HENRY EUGENE STEVENS, D.Ed., Assistant Director, General Extension; Graduate Adviser, Portland Extension Center.

 B.S. (1936), D.Ed. (1940), Oregon.
- STEPHEN E. EPLER, Ph.D., Director, Vanport Extension Center. B.A. (1932), Cotner College; M.A. (1933), Nebraska; Ph.D. (1943), Columbia.
- PHIL H. PUTNAM, D.Ed., Assistant Director, Vanport Extension Center. B.S. (1931), Black Hills Teachers; M.S. (1937), Oregon; D.Ed. (1948), Stanford.
- CLIFFORD L. CONSTANCE, M.A., Registrar, University of Oregon and Vanport Extension Center.

B.A. (1925), M.A. (1929), Oregon. At Oregon since 1931.

- JEAN P. BLACK, Ph.D., Librarian; Assistant Professor.
 B.A. (1924), Mount Holyoke; M.A. (1925), Ph.D. (1928), Michigan; B.S. in L.S. (1932), Washington.
- JOSEPH V. HOLLAND, M.Ed., Athletic Director; Assistant Professor. B.A. (1941), M.Ed. (1946), Willamette.
- RICHARD B. HALLEY, M.S., Men's Adviser; Assistant Professor of Economics. B.S. (1938), M.S. (1940), Oregon.
- LESLIE B. NEWHOUSE, M.B.A., Business Manager; Instructor in Business Administration.

B.A. (1930), M.B.A. (1932), Oregon.

LESTER EGLESTON, Superintendent of Buildings and Maintenance.

MARGUERITE C. ADAMS, R.N., Student Health Nurse.

VAUGHAN ALBERTSON, M.A., Assistant Professor of English. B.A. (1928), Rice Institute; M.A. (1930), Columbia.

MARION ARNETT, B.A., Instructor in Spanish.

B.A. (1929), Oregon.

Arba L. Ager, M.Ed., Instructor in Physical Education and Education. B.S. (1941), M.Ed. (1948), Oregon.

HIGH-SCHOOL RELATIONS

E. Dean Anderson, M.A. Executive Secretary

^{*} Includes 1948-49 faculty.

HOWARD BACKLUND, B.A., Instructor in Secretarial Science and Music. B.A. (1937), Oregon.

ROGER BAILEY, Instructor in Journalism.

NATHAN BERKHAM, M.A., Instructor in Economics.

B.A. (1932), Reed; M.A. (1937), Oregon.

EDWIN C. BERRY, B.A., Instructor in Sociology.

B.A. (1938), Duquesne.

H. O. N. Bull, M.A., Visiting Assistant Professor of Geography.

B.A. (1925), M.A. (1947), Cambridge.

WILLIAM O. BUSCHMAN, M.Ed., Instructor in Mathematics.

B.A. (1941), Reed; M.Ed. (1947), Oregon.

GREER CASPER, Instructor in Machine Shop.

DOROTHY CLIFFORD, M.A., Assistant Professor of English, Drama, and Speech.

B.A. (1933), Oregon; M.A. (1942), Washington.

JAMES W. COOMBS, B.S., Assistant Professor of Engineering.

B.S. (1929), Oregon.

ARTHUR L. CROOKHAM, M.A., Instructor in Journalism.

B.A. (1912), Southwestern College; M.A. (1913), Kansas.

HOLLIS M. DOLE, M.S., Instructor in Geology.

B.S. (1940), M.S. (1942), Oregon State.

PAUL M. DUNN, M.S.F., Professor of Foresty; Dean, School of Forestry, Oregon

State College.

B.S. (1923), M.S. (1933), Iowa State.

SOTERA T. DE LA VEGA, B.S., Instructor in Physical Education.

B.S. (1945), Illinois.

FRANK F. EATON, J.U.D., Instructor in German.

J.U.D. (1924), Hamburg University.

HAROLD ELKINTON, M.B.A., Visiting Professor of Business Administration.

B.A. (1925), Whitman; M.B.A. (1927), Oregon.

CARLETON G. FANGER, M.S., Instructor in Engineering.

B.S. (1947), M.S. (1948), Oregon State.

MILDRED FLANAGAN, M.A., Assistant Professor of Mathematics.

B.A. (1933), Henderson State Teachers (Arkansas); M.A. (1935), Arkansas.

RUTH FRANCHERE, B.A., Instructor in English.

B.A. (1930), Iowa

ALLAN A. GIBB, M.A., Assistant Professor of Mathematics; Head of Department.

B.S. (1938), B.Ed. (1941), Alberta; M.A. (1943), Toronto.

ALBERT GIBSON, B.S., Instructor in Engineering.

B.S. (1911), Oregon State.

ALVA W. GRAHAM, D.Ed., Instructor in Psychology.

B.S. (1927), M.A. (1934), Northwestern; D.Ed. (1946), Oregon.

RALPH GREILING, B.S., Instructor in Engineering.

B.S. (1942), Oregon State.

MICHAEL R. HANGER, M.S., Instructor in Economics.

B.Sc. (1924), Oregon State; M.S. (1937), Oregon.

WILLIAM D. HASKELL, B.S., Instructor in Foundry Practices.

B.S. (1929), Oregon State.

GEORGE C. HOFFMANN, M.A., Assistant Professor of Political Science; Head of Social Science Department.

A.A. (1938), Los Angeles City College; B.A. (1939), M.A. (1940), Southern California.

MARGARET C. HOLLAND, B.A., Instructor in English.

B.A. (1936), Oregon.

EMERSON E. HOOGSTRAAT, B.S., Instructor in Economics.

B.S. (1946), Oregon.

C. A. Hubbard, D.Sc., Assistant Professor of Zoology.

B.Ed. (1921), M.Ed. (1930), M.S. (1931), Washington; D.Sc. (1932), Pacific.

MORRIS S. ISSEKS, M.A., Instructor in Political Science.

B.A. (1934), Arkansas; M.A. (1936), Minnesota.

CLYDE R. JOHNSON, Ph.D., Instructor in Chemistry.

B.A. (1925), Reed College; M.A. (1929), Ph.D. (1930), Rice Institute.

RAYMOND D. JONES, Instructor in Forging and Welding.

MARVIN E. KNUDSON, M.A., Instructor in Journalism.

B.A. (1927), B.S.E. (1928), North Dakota; M.A. (1937), Minnesota.

ERWIN F. LANGE, M.S., Assistant Professor of Chemistry.

B.A. (1933), Willamette: M.S. (1936), Oregon.

*RAY L. LAPHAM, M.A., Assistant Professor of English.

B.A. (1919), Reed; M.A. (1925), Oregon.

GENE E. LEO. B.B.A., C.P.A., Instructor in Business Administration.

B.B.A. (1945), Oregon.

ELLA G. LITCHFIELD, M.A., Assistant Professor of English.

B.Ed. (1932). Mankato State Teachers: M.A. (1934). Minnesota.

CLIFFORD E. MASER, Ph.D., Dean, School of Business and Technology; Professor of Business Administration, Oregon State College.

A.B. (1934), Swarthmore; D.K. (1935), Ph.D. (1936), Cologne.

ROBERT N. MERZ, M.A., Assistant Professor of Sociology.

B.A. (1936), Detroit Institute of Technology; A.M. (1937), Wayne; A.M. (1941), Chicago.

MICHAEL NIELSEN, Instructor in Forging and Welding.

HAROLD OAKES, Instructor in Machine Shop.

PHILIP H. OVERMEYER, Ph.D., Visiting Professor of Economics.

B.S. (1931), M.S. (1936), Oregon; Ph.D. (1939), Minnesota.

DONALD D. PARKER, M.B.A., Assistant Professor of Business Administration.

B.A. (1941), Linfield; M.B.A. (1942), Northwestern.

K. Ellsworth Payne, B.A., Instructor in Chemistry.

B.A. (1947), Brigham Young.

CORINNE POUTEAU. Bachelière-ès-Lettres. Instructor in French.

Bachelière-ès-Lettres (1914), Alençon.

FRANK L. ROBERTS, Ph.M., Assistant Professor of English and Speech; Head of Department.

B.A. (1938), Pacific; Ph.M. (1943), Wisconsin.

^{*} Deceased, December 30, 1948.

THOMAS A. SHOTWELL, M.S., Instructor in Physics.

B.Sc. (1917), Linfield; M.S. (1931), Oregon.

RICHARD E. SMITH, B.S., Assistant Professor of Engineering; Head of Department.

B.S. (1941), Oregon State.

RICHARD B. WALTON, B.A., Assistant Professor of Physics.

B.A. (1943), Oregon State.

CATHERINE M. WEAVER, M.A., Assistant Professor of English.

A.B. (1918), Michigan; M.A. (1929), Texas Christian.

DONALD V. WEAVER, A.B., Instructor in Mathematics.

A.B. (1925), Harvard.

HILDEGARD WEISS, M.A., Assistant Professor of English.

B.A. (1940), La Verne; M.A. (1946), California.

WARREN W. WILCOX, Ph.D., Assistant Professor of Psychology.

A.B. (1924), Dakota Wesleyan; A.M. (1929), Ph.D. (1932), Kansas.

Assistants

WILLARD BEAMER, Visual Education.

ROBERT BENSON, Library.

THOMAS BOOTHBY, Botany and Zoology.

WILLIAM J. COLEMAN, Chemistry.

WILLIAM H. COOK, JR., Visual Education.

JOHN M. COOKSEY, Chemistry.

FRANK DOTSON, Visual Education.

RALPH J. Dyson, Physical Education.

ALVIN H. FOLEEN, Physics.

DALE D. HOSKINS, Chemistry.

JOHN D. KOONTZ, Chemistry.

WALTER LARSEN, Botany and Zoology.

ROBERT E. MURRAY, Physics.

CLARA Ross, Library.

DONALD SCHUBERG, Physical Education.

ANDREW C. SMITH, JR., Physics.

RAY SOMMERFELDT, Physics.

ANDREW W. STEVENSON, Botany and Zoology.

HARRY J. THOMAS, JR., Botany and Zoology.

JAMES H. TREZONA, Botany and Zoology.

LAWRENCE R. WATSON, Psychology.

ANDREW D. WHEELER, Physical Education.

Roy P. Wright, Visual Education.

Vanport Summer Session Calendar 1949

June 17, Friday (9:00 a.m. to 4:00 p.m.)	Placement examinations for new students.
June 20, Monday (9:00 a.m. to 4:00 p.m.)	Registration in Columbia Hall. Late registration fee effective June 21.
June 21, Tuesday	Classes begin.
	lay for new registration, change of courses, es, or dropping a course without grade of F.
July 4, Monday	Holiday.
July 8, Friday	Beginning of second term (winter) work in year-sequence courses.
July 15, Friday	Last day for withdrawal from school without being held for grade of F.
July 27, Wednesday	Beginning of third term (spring) work in year-sequence courses.
August 12, Friday	End of session.

Fees and Refunds

REGISTRATION FEES

Regular students, regular fees (tuition not included)\$	50.00
Part-time students and auditors, registering for not more than 4 hours	25.00
Registration in absentia, per term hour	4.00
Late-registration fee (due after third day of session)1.00 to	3.00
(\$1.00 for each day after 3 p.m., June 22, to a maximum of \$3.00)	

FEE REFUNDS

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

^{. (1)} Any claim for refund must be made in writing before the close of the term in which the claim originated.

⁽²⁾ Refunds in all cases are calculated from the date of application for refund and not from the date when the student ceased attending classes, except in unusual cases when formal withdrawal has been delayed through causes largely beyond the control of the student.

General Information

Summer Session Program, 1949. The Vanport summer session offers freshman and sophomore work in a wide variety of fields. Students without any previous college work may begin their college program. Courses are offered which enable these students to make up deficiencies in mathematics and English so that they can carry a full credit program in the fall. There are also courses which enable those who have had college work to complete sequences and make up deficiencies in required fields in order that they may take sophomore work in the fall. Courses which cover a full year's credit are open to new and old students, enabling them to complete one required sequence or to be ready for sophomore or junior work in that subject. Students may carry a full or a partial load, the maximum load being 12 credit hours for the eight-week session.

Who May Enroll. The summer session is open to all who think they could profit from the work. High-school graduates and nongraduates are admitted to the summer term.

Physical Plant. The administration building of the Oregon Shipbuilding Corporation has been remodeled and equipped for college classes. Excellent laboratories and classrooms have been provided. The building is easily accessible from all parts of Portland and the surrounding area.

History. The Vanport Extension Center derives its name from its original location in Vanport City, a Federal housing project immediately north of the Portland city limits. This project, including the college buildings, was destroyed by flood on May 30, 1948. The U. S. Grant High School was used for the 1948 Summer Session. Classes were first held in the present Columbia Hall at Oregon Shipyard in September 1948.

Student Services. Guidance—The men's adviser and the women's adviser consult with students on both educational and personal matters. Extracurricular Activities—Picnics, parties, and excursions for all students are sponsored during the summer. Opportunities for participating in dramatics, music, and other activities will be made available.

Housing. No dormitories or housing projects are operated by the Center, but a housing bureau is maintained to assist students in finding accommodations. A number of students live in a trailer project one-half mile from the center, which is operated by the Portland Housing Authority.

Student Co-operative Store. This store provides textbooks, school supplies, and other articles needed by the students. It is run on a nonprofit basis. Most of the employees are students working on a part-time basis. This store is an example of the initiative of Vanport students. It was started in the fall of 1946 as a food-buying club. The store lost its stock in the flood but has paid all of its creditors.

Cafeteria. A cafeteria is operated for the convenience of the students. Hot lunches, short orders, and soda fountain products are available.

Library. The library occupies the second floor, center wing, of Columbia Hall. It provides a well-lighted reading room, seating two hundred. The periodical subscription list contains nearly 150 titles. An excellent selection of current books is available. The student body is entitled to the use of the public library facilities of Multnomah County and also has access to special collections such as the Oregon

Historical Society library. The library is under the direction of a professional librarian and is open daily when classes are in session.

Assemblies. Every Tuesday from 10:15 to 11:00 there will be an assembly in the auditorium of Columbia Hall. The Tuesday morning schedule of class periods will be adjusted as follows to allow for assembly hour:

8 o'clock classes	8:00 to	8:40
9 o'clock classes	8:45 to	9:25
10 o'clock classes	9:30 to	10:10
11 o'clock classes	11:15 to	11:55

Other class hours will remain the same.

Veterans' Information. All veterans who are planning to attend the Vanport Extension Center are urged to make prompt application to the Portland Veterans Administration office for a Certificate of Elicibility and Entitlement. This certificate is essential for receiving any of the government education benefits. Students who present their certificates will be able to register and to receive books and supplies at government expense under the G. I. Bill of Rights. Those who do not present certificates must pay all their expenses. However, they may arrange for reimbursement later when they secure their certificates. A considerable amount of time elapses between application for a certificate and its issuance, so that prospective students should apply well in advance of the opening of the term they wish to attend.

Any veteran who has used a Certificate of Eligibility at another institution should request from the Veterans Administration a supplemental certificate for use at Vanport.

The address of the Portland office of the Veterans Administration is 208 S. W. Fifth Avenue (telephone, ATwater 9131). Application for a certificate may be made in person or by mail. The Veterans Administration has a training officer at the Vanport Extension Center at scheduled hours to advise veterans and assist them with their problems.

Portland Extension Center. The Portland Extension Center of the State System of Higher Education offers many undergraduate courses, some of which are open to lower-division students. It is possible for a student to take courses simultaneously at the Portland and Vanport Extension Centers. The Portland Center also gives graduate courses which are open to qualified students. Copies of the catalog may be obtained from Portland Extension Center, 220 S. W. Alder Street, Portland 4, Oregon (telephone, ATwater 2165).

NONVETERANS ARE ADMITTED

The Vanport Extension Center is not exclusively for veterans. The percentage of nonveterans has increased tenfold since the opening of the Center. Over one thousand nonveterans have registered as students during the past three academic years.

Description of Courses

The hours indicated following the course title represent the term hours of credit which may be earned. The designation (U) following the description of a course indicates that it is a University of Oregon course. The designation (S) following the description of a course indicates that it is an Oregon State College course. The designation (E) following the description of a course indicates

that it is a General Extension course. The Vanport Extension Center reserves the right to discontinue any announced course because of insufficient enrollment or for other reasons. All courses and year sequences are of eight weeks' duration. Students who wish only part of a year sequence offering should see CALENDAR for starting dates.

Eight-Week Session

BUSINESS ADMINISTRATION

BA 111, 112, 113. Constructive Accounting. 9 hours.

Technique of account construction; preparation of financial statements. Application of accounting principles to practical business problems. Required of all majors; prerequisite to advanced work in business. (U)

BA 222. Elements of Finance. 4 hours.

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

CHEMISTRY

Ch 104, 105, 106. General Chemistry. 12 hours.

Required for nursing-education and medical-technician students. (S)

Ch 206. General Chemistry. 5 hours.

Prerequisite: Ch 205. (S)

Ch 226, 227. Organic Chemistry. 10 hours. (Ch 227, last four weeks—5 hours.)

Carbon compounds of the aliphatic series. An intensive study of the chemistry of the aromatic series. Prerequisite: Ch 206. (S)

Ch 234. Quantitative Analysis. 5 or 6 hours.

Principles of gravimetric analysis, volumetric analysis, and H-ion concentration. Designed for pharmacy and premedical students and medical technicians. Prerequisite: Ch 103. (S)

ECONOMICS

Ec 201. Principles of Economics. 3 hours.

Principles that underlie production, exchange, distribution, etc. Prerequisite: sophomore standing. (U)

ENGINEERING

GE 101, 102, 103. Engineering Problems. 2 hours each course.

Lectures and elementary problems dealing with the general fields of civil, electrical, industrial, and mechanical engineering; to train the students in engineering habits of work.

GE 121, 122. Engineering Drawing. 3 hours each course.

Training in the use of drafting tools. Applications include geometrical constructions; lettering; orthographic projections; auxiliary planes of projection; sections and conventional violations; fasteners; intersections and developments; charts and diagrams; mechanical perspective, and freehand technical and pictorial drawing.

GE 123. Descriptive Geometry. 3 hours.

Theory and problems on the projection of points, lines, surfaces, and solids; applications of graphical solution of engineering problems. Prerequisite: GE 121, 122.

CIVIL ENGINEERING

CE 226. Plane Surveying. 3 hours.

Theory and use of engineer's transit, tape, and level; application of surveying methods to problems in construction and area survey. Prerequisite: Mth 101.

ENGLISH

Literature

Eng 101. Survey of English Literature. 3 hours.

From Beowulf to Milton. (U)

Eng 102. Survey of English Literature. 3 hours.

From Milton to Byron. (U)

Eng 271. Contemporary Literature. 3 hours.

The contemporary American novel; modern drama; American poetry. (U)

Rhetoric

Rht K. Corrective English. 1 hour.

One-term course in the mechanics of English, required of freshmen who receive low ratings in the entrance placement examination. For such students Rht K is a prerequisite for any other work in written English. (U)

Rht 111. English Composition. 3 hours.

The fundamentals of English composition and rhetoric; frequent written themes in the various forms of discourse. Special attention to correctness in fundamentals and to the organization of papers. (U)

Rht 112. English Composition. 3 hours.

Prerequisite: Rht 111. (U)

Rht 113. English Composition, 3 hours.

Prerequisite: Rht 112. (U)

Rht 114. Vocabulary Building. 2 hours.

Designed to expand the student's vocabulary and otherwise to improve the use of English. A study of words: new words, the right word; diction; pronunciation; an effective program for acquiring and using the forms and mechanics of writing. (E)

Rht 217. Business English. 3 hours.

Study of modern practices in business correspondence, primarily for students of business administration. Analysis and writing of the principal types of correspondence. Prerequisite: Rht 113. (U)

HEALTH AND PHYSICAL EDUCATION

PE 180. Elementary and Advanced Physical Education. 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required of all women during the freshman and sophomore years. (U)

PE 190. Elementary and Advanced Physical Education. 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required of all men during the freshman and sophomore years. (U)

HE 250. Personal Health. 3 hours.

Exercise, nutrition, infection and resistance, special senses, mouth hygiene, sex hygiene, rest and sleep, fresh air and sunshine. Satisfies the health-education requirement. May not be taken by women who have had PE 114, 115, 116; men who have had PE 150 may take HE 250 for 2 hours credit only. (U)

HISTORY

Hst 101. History of Western Civilization. 3 hours.

Origins and development of Western civilization beginning with ancient times. (U)

Hst 201. History of the United States. 3 hours.

This course begins with the colonial period. (U)

MATHEMATICS

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

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

Mth 101. Elementary Analysis, 4 hours.

Trigonometry and graphs. (S)

Mth 102. Elementary Analysis, 4 hours.

Algebra and elements of calculus. Prerequisite: Mth 101. (S)

Mth 103. Elementary Analysis. 4 hours.

Analytic geometry, Prerequisite: Mth 102, (S)

Mth 105. College Algebra. 4 hours.

Prerequisite: 1½ years of high-school algebra or Mth 100. (S)

Mth 201. Differential and Integral Calculus, 4 hours.

Prerequisite: Elementary Analysis or equivalent. (S)

Mth 203. Differential and Integral Calculus. 4 hours.

Prerequisite: Mth 202. (S)

MUSIC

Mus 128. Introduction to Music Literature, 2 hours.

A nontechnical study of the development of music, stressing the elements of musical understanding; study of representative compositions, with emphasis on their musical and historical significance. No prerequisite. (U)

PHYSICAL EDUCATION

(See HEALTH AND PHYSICAL EDUCATION)

PHYSICS

Ph 201, 202, 203. General Physics. 12 hours.

Mechanics, sound, heat, light, electricity, and magnetism. (S)

Ph 361. Photography, 3 hours.

The hand camera, developing, printing, toning, enlarging, slides. Prerequisite: college chemistry or physics or previous photographic experience, and consent of instructor. (S)

POLITICAL SCIENCE

PS 201. American Governments. 3 hours.

National government. (U)

PS 202. American Governments. 3 hours.

State and local governments. (U)

PSYCHOLOGY

Psy 201, 202. General Psychology. 6 hours.

Introductory study of behavior and conscious processes. Survey of experimental studies with reference to motivation, learning, thinking, perceiving, and individual differences, (U)

Psy 205. Applied Psychology. 3 hours.

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

Psy 208, 209, 210. General Psychology Laboratory. 3 hours.

Introduction to experimental methods. Laboratory work coordinated with Psy 201, 202, 205. (U)

RHETORIC

(See English)

SCIENCE

(See also CHEMISTRY, PHYSICS, ZOOLOGY)

GS 101. Biological-Science Survey, 4 hours.

The fundamental principles of biology as they apply to both plants and animals. For general students and those majoring in fields other than biology. (S)

GS 104. Physical-Science Survey. 4 hours.

Fundamental principles of physics, chemistry, astronomy, and geology; development and application of the scientific method. For students majoring in fields other than the physical sciences who wish a broad view of the principles of several physical sciences. (S)

SECRETARIAL SCIENCE

SS 121. Typing. 2 hours.

Theory and practice of touch typing; rhythmical drills, dictation exercises; writing paragraphs; punctuation and mechanical arrangement of business correspondence; legal forms, tabulating, manifolding, speed practice. Students with one year of typing are not permitted to take SS 121 for credit. (S)

SS 122. Typing, 2 hours.

Prerequisite: SS 121. (S)

SS 123. Typing. 2 hours.

Prerequisite: SS 122. (S)

SOCIOLOGY

Soc 204. General Sociology. 3 hours.

The basic findings of sociology concerning the individual, culture, group life, social institutions, and factors of social change. Prerequisite: sophomore standing or consent of instructor. (U)

SPEECH

Sp 111. Extempore Speaking. 3 hours.

Development and presentation of original speeches; vocabulary building; pronunciation; voice, gesture, bearing; organization; delivery. (S)

Sp 114. Voice and Diction. 3 hours.

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

Sp 247. Community Drama. 3 hours.

Training for participation and leadership in community dramatics; play selection; stage technique and acting; costume and make-up; directing and play production. Production of children's plays will be emphasized.

Sp 251. Workshop Theater. 1 to 3 hours.

For participation in campus plays, credit totaling not more than 6 hours is given on recommendation of the instructor. (S)

ZOOLOGY

Bi 201, 202, 203. General Zoology. 12 hours.

Study of the fundamental principles of animal biology. (U)

Z 324, 325. Comparative Vertebrate Anatomy. 8 hours.

Gross dissection and comparison of organ systems in representative vertebrates. Prerequisite: Z 203. (S)



Student Co-operative Stores

School supplies are available through the Co-op. Membership is strictly limited to students and staff of the Vanport Extension Center.





Classes

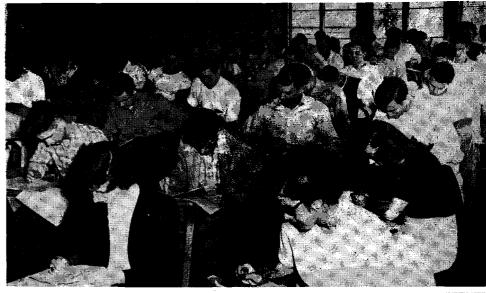
Equipment meets high standards of modern education.















Instruction

is comparable to that offered on the same level in other institutions.





Campus Activities at Vanport



From "campus queen" contests and rallies to fund drives and philanthropic appeals—the student body is active.





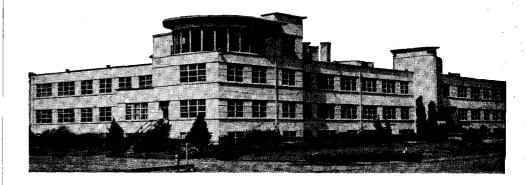




On the serious side, special meetings and field trips receive the wholehearted co-operation of Vanport students.









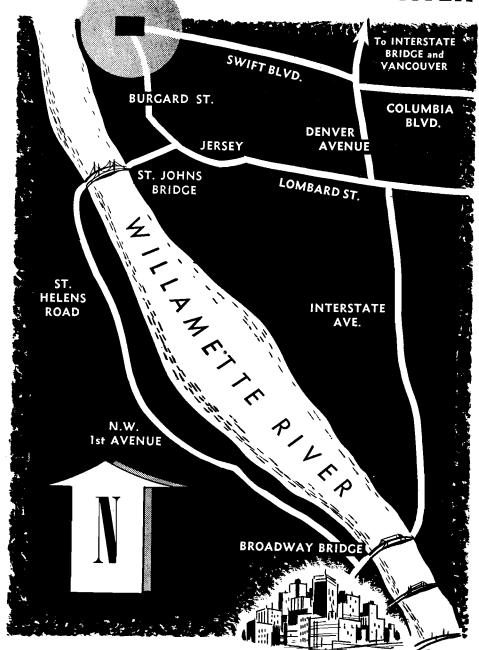




Student Publication

Proud, indeed, are those on the **Van**guard staff, where practice training under expert guidance and actual working conditions prepares for editorial and advertising futures.

VANPORT EXTENSION CENTER



Only 25 Minutes from Downtown Portland



On the serious side, special meetings and field trips receive the wholehearted co-operation of Vanport students.





