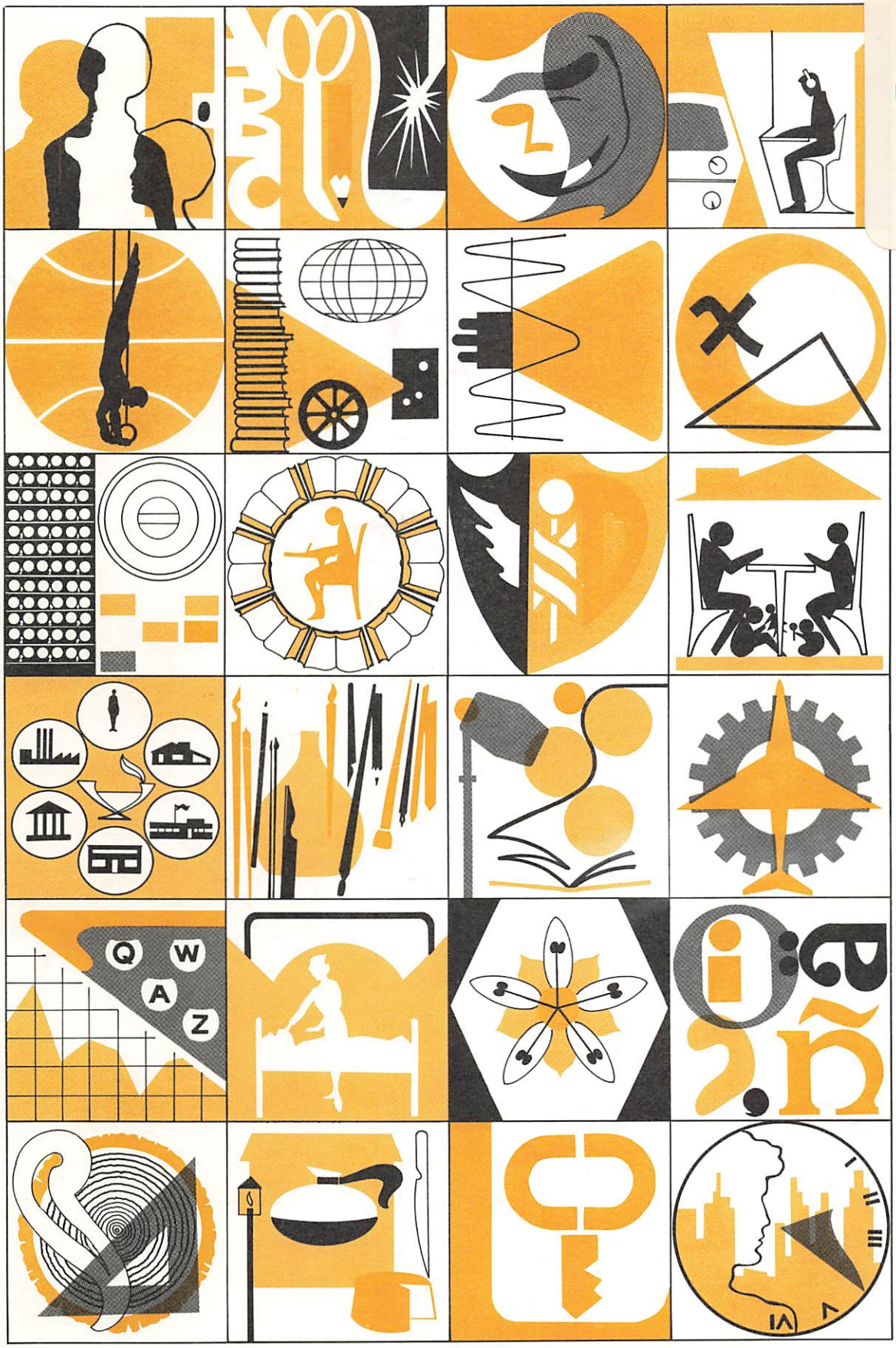

LANE COMMUNITY COLLEGE
CATALOG 1969-70

LANE COMMUNITY COLLEGE

4000 East 30th Avenue
Eugene, Oregon 97405

Catalog
No. 5
June 1969

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ACADEMIC CALENDAR
1969-70

Summer Term 1969

June 9, Monday—
June 20, Friday ..... Summer Term registration
June 23, Monday..... Classes begin
Juy 4, Friday..... Independence Day holiday
July 18, Friday..... Four-week session ends
August 15, Friday..... Eight-week session ends
September 8, Monday..... Labor Day holiday
September 12, Friday..... Twelve-week session ends

Fall Term 1969-70

July 14, Monday—
September 26, Friday..... Fall Term registration
September 29, Monday..... Classes begin
November 11, Tuesday..... Veterans Day holiday
November 27, Thursday—
November 30, Sunday..... Thanksgiving holiday
December 19, Friday..... Fall Term ends

Winter Term 1969-70

December 15, Monday—
January 2, Friday..... Winter Term registration
January 5, Monday..... Classes begin
March 20, Friday..... Winter Term ends

Spring Term 1970

March 16, Monday—
March 27, Friday..... Spring Term registration
March 30, Monday..... Classes begin
May 30, Saturday..... Memorial Day holiday
June 12, Friday..... Spring Term ends

Summer Term 1970

June 8, Monday—
June 19, Friday..... Summer Term registration
June 22, Monday..... Classes begin
July 4, Saturday..... Independence Day holiday
July 17, Friday..... Four-week session ends
August 14, Friday..... Eight-week session ends
September 7, Monday..... Labor Day holiday
September 11, Friday..... Twelve-week session ends

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LANE COMMUNITY COLLEGE

The Open Door

Lane Community College is an open door institution which strives to offer some kind of post high school educational opportunity for all who apply. Programs vary from single courses to two-year sequences of courses leading to Associate of Arts and Associate of Science degrees.

Residents of Lane County, the Harrisburg Union High School District, and the Monroe Elementary School District voted the College into existence October 19, 1964. It began operating as a legally constituted tax-supported institution on July 1, 1965.

Purposes

LCC has been developed primarily to serve those for whom no other post-high school educational opportunities are readily available, either geographically, financially, vocationally or academically. It is committed to a comprehensive program providing:

1. Occupational education programs with prestige and status equal to that of other disciplines.

2. General liberal arts education for: (a) those with undefined goals, in order to allow them to explore alternatives in a physical and cultural atmosphere designed particularly for the undecided, and (b) those who aspire to transfer to colleges and universities.

3. Credit and non-credit opportunities in general and remedial education for citizens, young and old, who have special interests and needs.

4. Counseling and guidance in vocational and educational planning.

5. Adult continuing education opportunities based on requests of patrons. Special emphasis is placed on developing adult programs to meet the needs of occupations which require less than a bachelor's degree.

6. A center to meet the cultural desires of District patrons.

Financial Support

During 1968-69 the College's $3.5 million operating budget was underwritten in the main (four-fifths of it) by tuition, state and federal funds. The other one-fifth was raised through property taxes in the College District.

Instruction costs required the bulk of operating expenditures (about three-fourths), with smaller amounts expended for maintenance of plant, utilities, business and administration.

Board of Education

Supervising the College at the policy-making level is a seven-member elected Board of Education. Its members are:

Albert Brauer, chairman. He represents Zone 1, which includes the Florence, Mapleton, Blachly, Fern Ridge and Crow-Applegate School Districts. A Florence physician, his term expires in 1972.

Clifford Matson, vice chairman. He represents Zone 2, which includes the Junction City, Bethel, Harrisburg, Harris, Wyatt and Monroe Elementary School Districts. A Junction City dentist, his term expires in 1971.

Robert Ackerman, who represents Zone 3, which includes the Marcola, Springfield and McKenzie School Districts. A Springfield attorney, his term expires in 1969.

William Bristow, Jr., who represents Zone 5, the Eugene School District. A Eugene jeweler, his term expires in 1970.

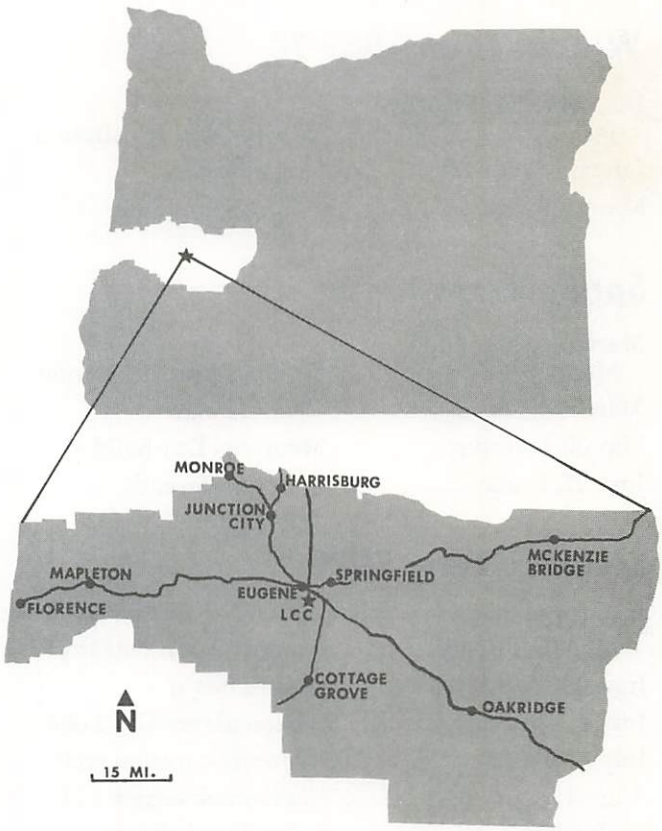
Lyle Swetland, who represents the District at-large. A Eugene printer, his term expires in 1970.

Dean Webb, who represents Zone 4, which includes the Creswell, Pleasant Hill, South Lane, Lowell, Westfir and Oakridge School Districts. A Cottage Grove dentist, his term expires in 1972.

Richard Williams, who represents the District at-large. A Eugene hospital administrator, his term expires in 1971.

College District

More than 200,000 residents are served in an area which includes Lane County and small portions of Linn, Benton, and Douglas Counties. The District encompasses 5,000 square miles.



LANE COUNTY AREA EDUCATION DISTRICT

Board Members


Albert Brauer


Clifford Matson


Robert Ackerman


William Bristow, Jr.


Lyle Swetland


Dean Webb


Richard Williams

Budget Committee

Assisting the Board of Education in developing the College budget this year were these freeholders: John Brewer of Swisshome, Roger Detering of Harrisburg, Mary Krenk of Eugene,

Robert Mention of Eugene, Gary Reed of Springfield, and Carlton Woodard of Cottage Grove.

Advisory Committees

Nearly 250 citizens from throughout the College District serve as volunteer members of 22 advisory committees appointed by the Board of Education. The committee members evaluate proposed instructional programs and keep the College informed of community needs and suggestions for courses and programs.

The committees include:
Data Processing, College-Community Relations, Para-Dental, Nursing, Health and PE, Electronics, Radio and TV, Labor-Industry-Business-Education, Fire Prevention Technology, Food Services, Library-Learning Resource Center, Mechanics, Industrial Technology, Funding, Family Life, Student Personnel Services, Home Economics, Forestry, Law Enforcement, Business, Inventors Council, Commercial Art.

Administration

The Board of Education delegates to the President the responsibility of implementing its policies.

President

Pickering, Robert, President as of July 1, 1969—B.S., Ed.M., University of Minnesota; Ed.D., Columbia University.

Hamill, Robert, Acting President 1968-69—B.A., Speech, University of Redlands, Redlands, California; M.S., General Studies, D.Ed., Administration, University of Oregon.

Instruction

Case, Lewis E., Dean of Instruction—B.S., Public Address, Syracuse University; M.A., Rhetoric, University of Pittsburgh; Honorary Doctor of Laws, Harding College, Searcy, Arkansas.

La Grandeur, Ramon F., Associate Dean of Instruction—B.S., Zoology, University of Washington; M.Ed., Administration, D.Ed., Educational Administration, University of Oregon.

Rasmussen, Gerald, Associate Dean of Instruction—B.S., M.A., History, University of Oregon.

Student Services

Hakanson, I. S., Dean of Students—B.A., Physical Education, Linfield College, McMinnville, Oregon; M.Ed., Guidance, Oregon State University.

Fiscal Affairs

Mansell, William, Controller – B.S., Business Administration, University of Oregon.

Douda, Henry, Federal Funding Accountant—B.S., Business Administration, University of Oregon.
Jones, Wanda, Office Manager.

Plant Operations

Cox, William W., Dean of College Services—A.B., M.A., Colorado State College of Education; Oregon Vocational Certificate.

Ames, Merlin S., Director of Food Services—Oregon Vocational Certificate.

Grant, Patrick, Purchasing Agent—Oregon Vocational Certificate.

Van Orden, Walter, Supervisor of Plant.

Wilkes, Floyd A., Director of Data Processing—B.S., Accounting, Brigham Young University; Oregon Vocational Approval.

Zinser, Ada, Bookstore Manager—Certificate, Oregon College of Education.

College-Community Relations and Development

Dotson, Bert J., Community Services, Assistant to the President—B.S., Education, M.Ed., University of Oregon.

Eymann, Richard, Assistant to the President for Funding and Development—A.B., M.C.S., Business Administration, Dartmouth College.

Romine, Larry, Director of Information and Publications—B.A., Sociology, Midland College; M.S., Journalism, University of Oregon.

Snow, James W., Acting Director of Institutional Research—B.A., Mathematics and Chemistry, M.A., Mathematics, Colorado State University.


Robert Pickering


Robert Hamill


Lewis Case


I. S. Hakanson


William Cox


William Mansell

Staff

More than 600 full-time and part-time staff members serve students in credit and non-credit programs.

Instructors make up two-thirds of the total, with two dozen administrators, a dozen counselors, and about 150 secretaries, clerks and custodians filling out the team.

Students

Annual enrollment totals about 5,000 in credit programs and about 7,000 in non-credit programs. Part-timers predominate. They equal the equivalency of about 4,000 full-time students.

More than three-fourths of the students reside in Eugene-Springfield. Half are between 20 and 25; half combine employment and college; half reside within five miles of the campus. About three-fourths of the credit program students are male.

Academic Program

Each year more than 3,000 classes are conducted in day and night credit and non-credit programs. Course listings include 250 which are offered for credit toward Associate of Arts and Associate of Science degrees. An additional 180 non-credit, non-graded courses are available, primarily, in the evening. Students may enroll in 46 one and two-year occupational programs or in the first one or two years of college transfer courses for most professions.

Accreditation

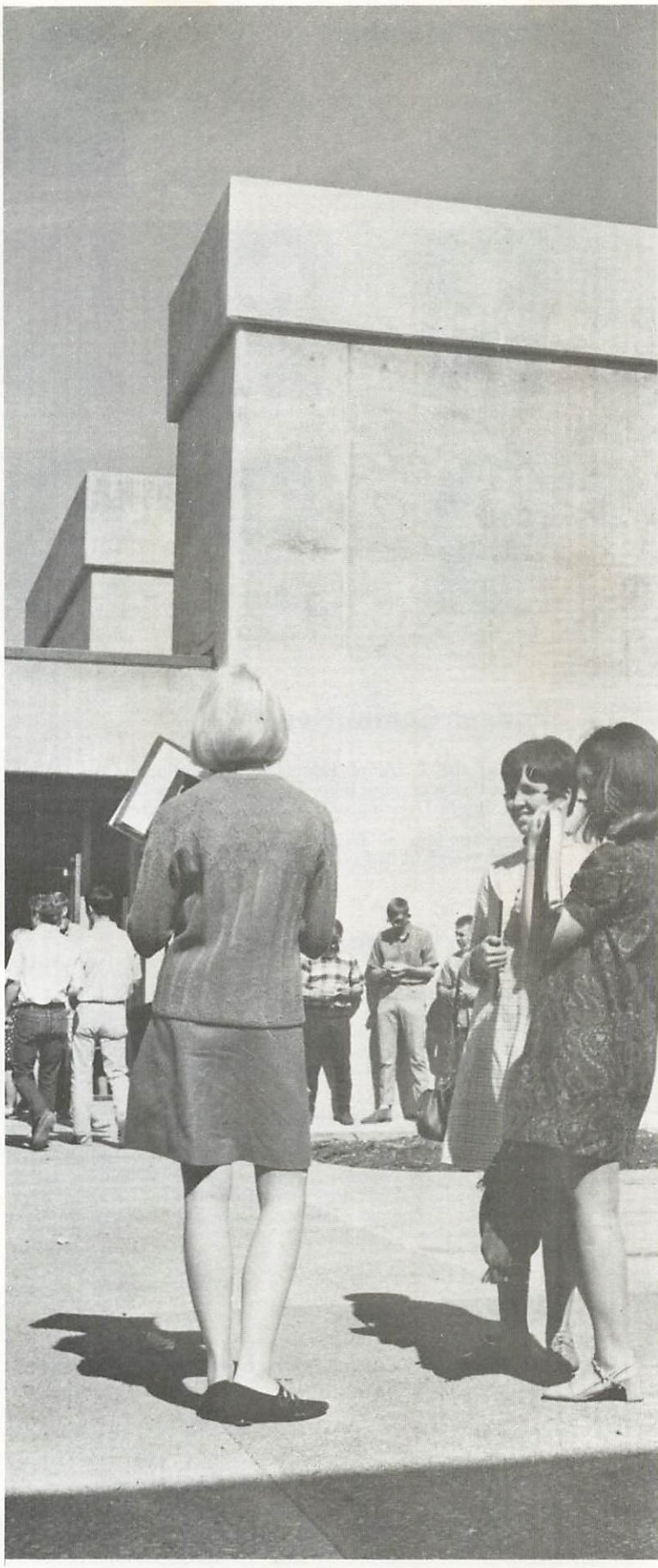
LCC is accredited by the Northwest Association of Secondary and Higher Schools. It is a member of the American Association of Junior Colleges, the Northwest Association of Junior Colleges, and the Oregon Community College Association.

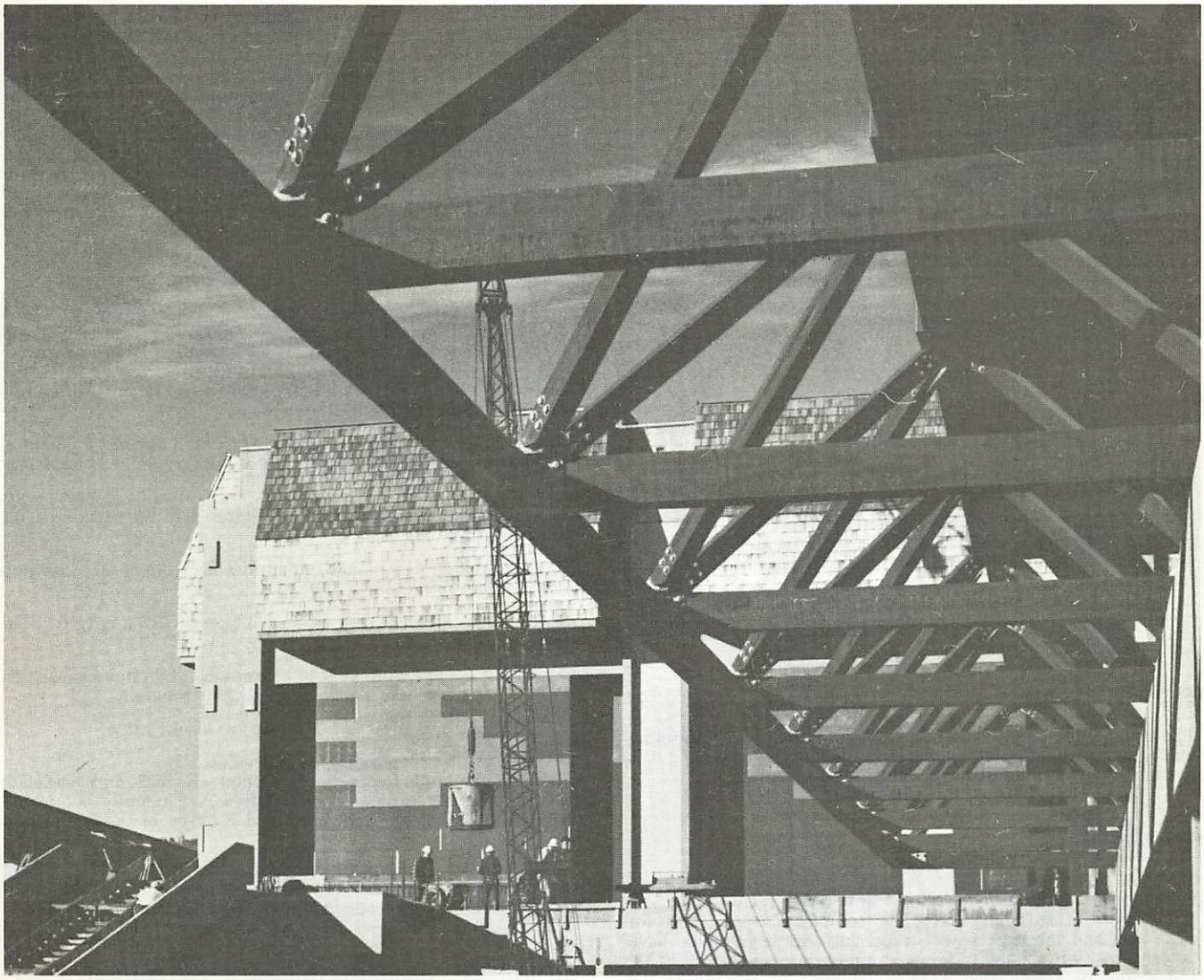
Terms

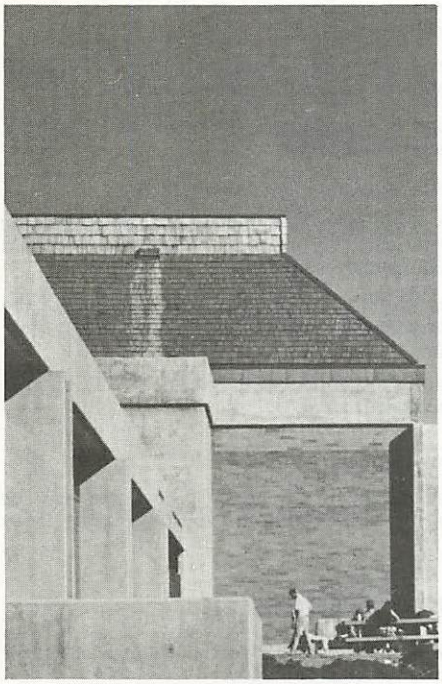
A year around study program is maintained. Fall, Winter and Spring Terms are approximately 11 weeks long. Summer Term includes four, eight and 12-week sessions.

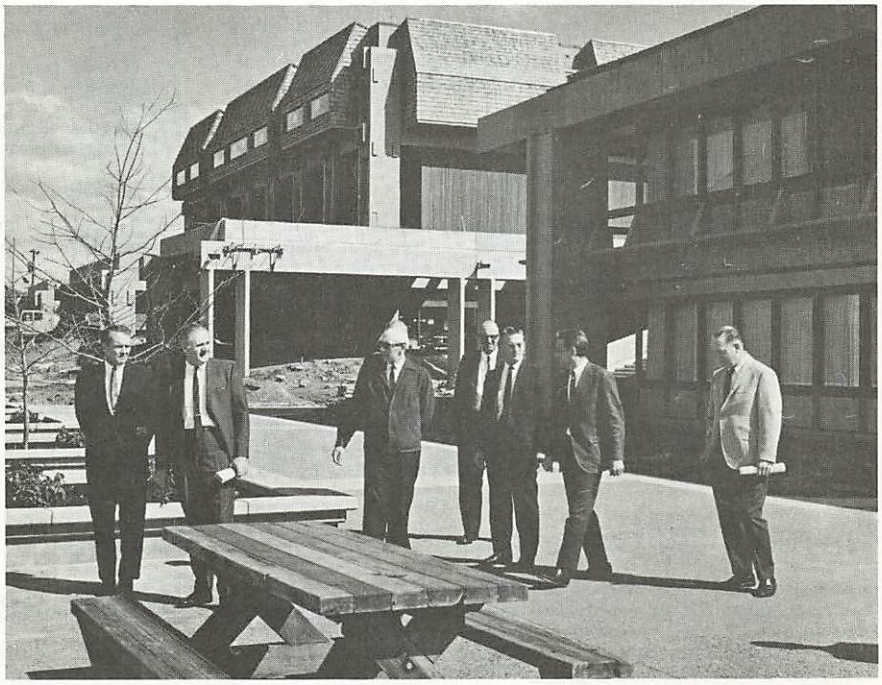
The Campus

Construction noise is routine background sound on LCC's 158-acre campus at 4000 E. 30th Avenue, Eugene. Since occupying the campus in September, 1968, students have watched $16.6 million worth of buildings go up around them. The first 14 buildings enclose more than half a million square feet, two-thirds of it allocated to occupational instruction. There is paved parking for 2,500 vehicles. About eight more buildings are expected to be added in the next several years.









ADMISSIONS PROCEDURES

When to Apply

Unless seeking entry to programs such as nursing or dental, prospective students need not apply for admission to the College until after high school graduation. Admission and registration for Fall Term can be accomplished as late as several days after classes begin, but those who desire convenient course and time schedules find it wise to seek admission and to register during July or August.

Application

The application form is available each Spring at counseling offices in each of the high schools in the College District. It is available year around at the LCC Admissions Office.

Credentials

Students must be high school graduates, hold equivalency certificates or be admitted by petition. In order to review qualifications, the College must have the completed application for admission and the high school transcript. Applicants who have taken post-high school training at other institutions must file transcripts regarding that work. Evidence of receipt of the equivalency certificate must be submitted, where appropriate.
Applicants who have taken tests such as the College Entrance Examination Board Test or the American Testing Examination must file test results with the Admissions office. LCC does not require testing at entrance, except for admission into programs such as nursing, dental or electronics.

Physical Examination

A complete physical examination is required of all students enrolled for 10 or more credit hours or any physical education class. Forms for this exam are available at the Admissions Office; they must be signed by a physician and returned to the Admissions Office.

Advance Fee

At the time of admission to the College, the student is required to make a non-refundable $10 tuition deposit. This fee is credited toward tuition if the student enrolls at LCC the following term.

Special Requirements

Some programs have special admission requirements. Those entering *college transfer programs* must be high school graduates or have a high school equivalency certificate. The latter may be earned by receiving a qualifying score on the General Educational Development Test, which may be taken at the Counseling Center. Several programs in electronics and *engineering* require a significant background in mathematics. Those enrolling must be high school graduates and earn satisfactory scores on qualifying examinations. Those entering *occupational programs* must be 18 years of age or older and must, in the judgment of the Administration, be able to profit from instruction. Since enrollment in occupational programs is limited by the facilities available, in-District students are admitted on a first-come, first-serve basis. Admission to vocational programs is limited to students living in the College attendance area until June 1, after which time admission of all applicants is considered in order of date of application.

Special Admission Procedures for Selected Programs

The Dental Hygiene, Dental Assistant, Associate Degree Nursing, Practical Nursing, Electronic Engineering Technician, and Civil and Structural Engineering Technician programs have special procedures for admission. As in all programs at LCC, the candidate must first meet the minimum requirements for admission as a regular student. (See above.)

In the *Associate Degree Nursing, Licensed Practical Nursing, Dental Hygiene,* and *Dental Assistant* programs, it is necessary to:

1. Make application on or before March 1 to be considered for the following year's class.

2. Submit high school and, if applicable, college or post-high school transcripts.

3. Submit three letters of reference (Lane Community College forms must be used).

4. Submit a brief statement of experience and education which may be of particular significance for this program.

5. Successfully complete the screening examination.

6. Be available for a personal interview.
In addition, applicants for the Dental Hygiene and Associate Degree Nursing programs should have successfully completed high school Chemistry, Algebra, and Biology, or the equivalent.

In *Electronics Technology* and *Civil and Structural Engineering Technology,* it is necessary to successfuly complete the Engineering Physical Science Aptitude Test (EPSAT). Preparation in high school Math and Physics is recommended.

In the *Radio Broadcasting* program, it is necessary to:

1. Have an interview and reading audition with the department chairman or a counselor.

2. Have a background in Speech, Drama, Music and Typing if planning to enter radio programming and production.

3. Have a background in Math, Physical Science and Typing if planning to enter radio engineering.

In the *Apprenticeship* programs, it is necessary to:

1. Furnish evidence of completion of high school by presenting a transcript or the equivalent. The student should have earned at least a "C" average in high school.

2. Arrange an interview with Mr. Douglas or Mr. Schultz of the State Bureau of Apprenticeship and Training, Third Floor, State Office Building, Eugene.

3. Complete the General Aptitude Test Battery (GATB) at the State Employment Office, Eugene.

Special Student Status

In special cases, exceptions to the above procedures may be granted. Requests are to be submitted in writing to the Dean of Students.

Notification of Admission

When all requirements for admission to the College are satisfied, the student is notified of acceptance.

COSTS

Tuition

Tuition and special fees must be paid in full at the time of registration, unless special arrangements have been made. Payment is made at the Business Office in the Administration Building.

Resident Tuition

Full-time student (10 credit hours or more).....$55 per term
If more than 50 miles from College.....$25 per term
40 to 50 miles from College.....$30 per term
30 to 39 miles from College.....$40 per term
Part-time student—
$6 per credit hour per term, through 9 credit hours

Out-of-District but in-state tuition

Full-time student .....$110 per term
Part-time student .....$12 per credit hour

Out-of-state tuition

Full-time student .....$200 per term

Special fees

Welding .....$10 per term
Physical Education fee.....$3 per term

Typical student yearly expense excluding board, room, and transportation

Tuition	$165
Books	60
Fees and miscellaneous	25
	$250

Determination of Residence

In-District

An in-District student is one who meets at least one of the following conditions:

1. Married and a resident of the College District at least six months prior to first registration. (Time spent as a full-time student in a collegiate institution does not count towards meeting the six-month residence requirement.)

2. Over age 21 and a resident of the College District at least six months prior to first registration. (Time spent as a full-time student in a collegiate institution does not count towards meeting the six-month residence requirements.)

3. A minor whose parents or legal guardians are bonafide residents of the College District.

4. A minor whose domicile is independent of his legal guardian. Such a person qualifies for the in-District enrollment fee on presentation of an affadavit stating that he established his domicile in the College District six months prior to his first registration and that he was not a full-time student at a collegiate institution during that period.

Out-of-District

Those whose homes or permanent addresses are outside of the Lane Area Education District, regardless of temporary residences being established in the District, are classed as out-of-District students.

Out-of-state

Any student whose permanent address is outside Oregon is classed as an out-of-state student.

Books, Supplies and Tool Kits

An average of $5 to $10 for books for each course should be budgeted. In addition, many vocational programs require $50 to $150 tool kits. Information regarding cost is available in the Counseling Center.

Insurance

Group insurance is available through the College at registration time. Information may be obtained at the Business Office.

Late Registration

Students are assessed a late fee of $1 a day for each class day after classes begin. In no case is a student admitted to a class more than seven calendar days after the first session.

Physical Education Fees

A charge of $3 per term is assessed all students registered for physical education classes.

Refunds

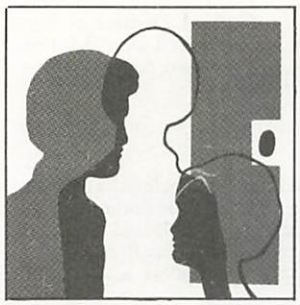
Those withdrawing from College prior to the end of the fifth week receive a full refund of tuition, less the $10 registration fee. Those who withdraw after that date receive no refund.

Special Fees

Some courses, such as welding and science labs, require the use of special materials and/or fragile equipment. Instead of asking students to buy them piece by piece, the materials are purchased by the departments and made available at a flat rate of $5 to $10 per term, payable in advance. In some instances, refunds are made for unused or undamaged materials and equipment.

Transcript Charge

Reasonable requests for student transcripts are honored without charge. Order in person at, or by written request to, the Registrar's Office.



STUDENT ACTIVITIES, SERVICES & REGULATIONS

Athletics, Intercollegiate

LCC is a member of the Oregon Community College Athletic Association. Men's intercollegiate activities are conducted in cross-country, soccer, basketball, gymnastics, wrestling, track and tennis. Basketball competition for women is provided on an extramural basis.

Athletics, Intermural

The broad aim of the intramural program is to provide an opportunity for every student to participate in some type of sports activity as frequently as his or her interests, ability and time will permit. The intramural program provides a full schedule of individual and team sports leading to intracollege championships.

Bookstore

The College ordinarily does not furnish textbooks and/or manuals required in courses. Texts for all classes, paperback books and a variety of school supplies and some notions are available at the Bookstore. Profits from the Bookstore are used to underwrite student activities, therefore eliminating the necessity of a student activity fee.

Contests for Students

Many non-LCC organizations sponsor contests which are intended to promote a particular value or belief. Such contests may or may not have educational value commensurate with the time required for representative participation. The Administration evaluates each contest or request and determines if it is to be approved. Two criteria are used as guides in such determination:

1. Is the contest one which has high and worthy objectives?
2. Would the sanctioning of participation by students assure educational value commensurate with the effort to be expended by the students and by the College?

Counseling

One of the advantages offered by LCC is counselors available to help students in planning toward maximum self-development. Counselors are continuously and conveniently available to all who are seeking educational and vocational guidance.

Counselors will help students plan programs, register for or withdraw from classes, and locate housing. They will aid in finding employment or obtaining financial assistance or arranging activities. They are always ready to assist with answers to any of the major and minor questions arising in the daily pursuit of education. Students may seek these services as the needs arise.

Counselors

Hakanson, I. S., Dean of Students—B.A., Physical Education, Linfield College; M.Ed., Guidance, Oregon State University.

Bailey, Wilbert G., Director of Placement—B.A., Vocational Agriculture; M.Ed., Counseling, Pennsylvania State University.

Bernham, John A., Coordinator of Testing—B.A., English, Cascade College; M.Ed., Counseling, University of Oregon.

Burns, Ralph E.—B.S., Industrial Education; B.S., Agricultural Education; M.S., Agriculture, Oregon State University.

Carter, John E., Director of Student Activities—B.S., Education, Southern Oregon College; M.Ed., University of Oregon.

Cook, Robert E.—B.S., Physical Education; M.Ed., University of Oregon.

Dixon, Pauline—B.A., Journalism; M.Ed., Counseling, University of Oregon.

Ekstrom, Betty Coe—B.A., Journalism, University of Oregon.

Goldsmith, Ellene M., Coordinator of Student Health Services—B.S., Nursing Education, University of Minnesota; R.N., L.P.N., M.S., Health Education, University of Oregon; Oregon Vocational Certificate.

Haverland, Dallas K.—B.S., Special Education, M.Ed., Secondary Education, University of Oregon; M.S., Guidance and Counseling, Purdue University.

Hills, Kenneth, D., Director of Counseling—A.B., History, Northwest Nazarene College; M.A., Ph.D., Guidance, University of Wyoming.

Howard, Frances, Director of Financial Aids—B.S., Business, M.Ed., Guidance, University of Oregon.

Marshall, Robert B., Director of Admissions—Registrar—B.S., M.A., Industrial Vocational Education, Pennsylvania State University; Oregon Vocational Certificate.

Parent, Irene, Coordinator of Foreign Students—B.S., Physical Education, Pacific University; M.Ed., Oregon State University.

Roof, David – B.A., Geology, Hanover College; M.A. Ed., Science, Western Kentucky University.

Schaefer, Arthur C.—Certificate in Finance and Banking, University of Washington; Oregon Vocational Approval.

Stadler, Helene—B.A., Sociology and Psychology, M.S.W., Social Work, University of Minnesota.

Wright, William A.—B.A., Science Education, M. Guidance and Counseling, Oregon State University.

Wilbert Bailey

John Bernham

Ralph Burns

John Carter

Robert Cook

Pauline Dixon

Betty Ekstrom

Ellene Goldsmith

Dallas Haverland

Kenneth Hills

Frances Howard

Robert Marshall

Irene Parent

David Roof

Arthur Schaefer

Helene Stadler

William Wright

Financial Assistance

Ordinarily, some kind of help can be found for students needing financial assistance. Scholarships are awarded by the Board of Education, private individuals and service clubs. Work-study jobs on the campus pay $1.40 an hour and up and help is available in finding part-time jobs in the community. The Federal government makes both loans and grants available. Students needing help should contact the Financial Aids Counselor.

Food Services

A cafeteria in The Center offers an extensive menu of well-prepared, nourishing foods. Coin-operated food dispensers are available in lounges around the campus.

Foreign Students

Non-citizens should contact the Foreign Students Counselor, who is available to assist in solving scheduling and other problems.

Grievance Procedure

That students might express their feelings, rectify unsatisfactory situations, or air grievances about attendance policies, grading practices or matters of similar nature, the following procedure has been established. This procedure should be followed, step by step, so that all parties to the problem are completely informed and are given an opportunity to rectify the situation.

Step 1: If possible, the student makes direct personal contact with the other party.

Step 2: The student consults with the Dean of Students or his representative.

Step 3: The student writes out the specific problem, stating names, dates, etc., as clearly as possible.

Step 4: The Dean of Students presents the student's written statement to the Academic Council for its consideration. (The Academic Council consists of representatives of students and staff. It acts in an advisory capacity to the President, Dean of Instruction, Business Manager, and Dean of Students.)

Step 5: If the question is still unresolved, the student may appeal to the President or, through his office, to the Board of Education.

Health

A registered nurse is available to provide emergency first aid and health counseling. Her office is located on the second floor of the Health Building and is open from 8 a.m. to 5 p.m. Students needing medical treatment other than first aid should contact their own physicians.

Housing

An approved list of student housing is on file in the Admissions Office. The College assumes no responsibility in negotiating housing agreements; these arrangements are the responsibility of the student and his parents.

Instructor Office Hours

Each instructor holds regularly scheduled office hours for conferences with students. The schedule of office hours is announced to students, posted on the door to the instructor's office, or on his desk, and reported to the Dean of Instruction and to the College switchboard operator.

Intoxicants

No instructor or student may bring onto the campus any intoxicant or appear on campus under the influence of an intoxicant. A violation of this rule is grounds for dismissal or disqualification.

Military Information

Students seeking military information should contact the Veterans Counselor, who works closely with Selective Service and the Veterans Administration. Students are assisted in preparing forms and planning programs which satisfy the standards of those organizations.

Motor Vehicles Regulations

Authority to establish regulations covering the use of motor vehicles on the LCC campus comes from the Board of Education.

Strict enforcement of regulations is necessary to minimize confusion, maximize safety, and utilize existing facilities to their maximum.

It is the responsibility of each individual to know the regulations.

Registration of Motor Vehicles

All staff and students, full and part-time, who have vehicles in their possession or control for use within the campus boundaries at any time must be issued and display a registration sticker or parking permit on their vehicles. Those who fail to register or to display properly a parking permit or registration sticker on the left rear bumper will be subject to a fine, assessed by LCC.

1. Vehicles should be registered at the time of registration for classes.

2. At any other time, registration stickers must be applied for at the Office of College Services.

3. All staff must register their vehicles at the Office of College Services.

4. No charge will be assessed for registration stickers. No additional charge will be made for changes of vehicle.

5. Bumper stickers will be issued by number at the time of registration.

6. Stickers are not transferable between vehicles or between individuals.

7. Any staff members or students of LCC owning or having possession of motor vehicles will be held responsible for reading and knowing these regulations, for all College regulations, and for all parking violations involving such vehicles, regardless of who is operating them. These regulations should be made known to any other person who may operate the vehicles.

8. Decals may not be affixed by any temporary method.

9. A person eligible to obtain a parking permit may not attach such permit to any vehicle owned by a person not eligible for a permit as provided by these regulations.

10. If the registrant releases ownership or control it becomes his responsibility to remove the sticker.

11. Temporary permits may be issued by the Office of College Services for visitors and emergency parking.

Replacement of Parking Permits and Registration Stickers

If at any time the decal is defaced or removed it becomes the responsibility of the registrant to replace it immediately. A registrant making a request for a parking permit for a new vehicle or to replace a damaged sticker must remove and present remains of all parking stickers to the Office of College Services.

Parking Restrictions

Responsibility for locating a legal parking space rests with the operator of the motor vehicle. Lack of space will not be considered a legal excuse for violating any LCC parking regulations.

1. For the purpose of these regulations the word "parked" means any vehicle which is stopped within the campus boundaries, regardless of whether with or without driver in attendance and irrespective of the period of time such vehicle shall be stopped.

2. No vehicle shall be parked on the campus except in those areas set aside and designated as parking. A parking area for staff shall be designated by the College, separate from student parking.

3. No parking is allowed at any time in yellow zones, driveways, service vehicle space, fire lanes or in landscaped areas.

4. All persons will observe posted speed limits and posted and restricted areas and spaces. The operation of a motor vehicle on LCC property in excess of 20 miles per hour, under any driving conditions, will be considered evidence of irresponsible and careless driving.

5. Head-in parking is required.

6. Persons having motor vehicles broken down on or about the campus must notify the Office of College Services. Making major mechanical repairs to motor vehicles on LCC property is prohibited. Abandoned or junked vehicles will be removed at the owner's expense after a 72 hour period.

7. Motor vehicles will be operated in compliance with the Oregon Motor Vehicle Code.

8. LCC cannot assume responsibility for any motor vehicle or its contents parked on College property or environs. The College assumes no risk for accidents and permitees expressly agree that LCC shall not be liable under any circumstances for injury to persons or for loss of or damage to property.

Scooters, Motorcycles, Motor Bicycles

1. Motor cycles, motor bicycles and scooters are, by state law, motor vehicles and are subject to all traffic rules and regulations controlling motor vehicles. Operation on paths, playfields, planted areas, sidewalks, or in pedestrian areas, is not permitted. Said motorized units are subject to registration and must have parking permits if using College spaces or parking stalls.

2. The approximate location for displaying a parking permit or parking sticker will be any area on the left side of motorcycles, motor scooters and bicycles.

3. Special areas will be designated exclusively for motorcycles, motor scooters, and bicycles only. Such vehicles may not park in any other parking spaces.

4. Motorcycles, motor scooters and motor bicycles may not use racks intended for bicycles.

Disabled Persons

1. Physically handicapped persons may apply for special parking space at the Registrar's Office. Medical verification of this disability may be required, as will information regarding length of time special parking will be needed.

2. Disabled persons spaces are reserved by appropriate signs and no other persons may park in this reserved space. Vehicles in violation will be towed at the expense of the operator.

Visitors

1. Spaces especially reserved for visitors are so designated. (10 West parking, 5 East, 5 South). Other categories of parkers may not use these spaces. Any person required to register vehicles or who is eligible for a parking permit will not be considered a visitor.

Enforcement

1. Campus parking regulations are enforced by LCC campus police. Lots are subject to regulations 24 hours a day, 7 days a week. Tickets issued for offenses are payable at the College Business Office within 5 days of the date of ticket issuance.

2. Failure to post the required bail on a fine within 5 days of the date of ticket issue will result in a summons to appear before the Dean of College Services.

3. Students will be cited and appropriate action taken for any of the following reasons:

   a. When a student receives 3 parking citations on campus during any term.

   b. When the permit is used on an unregistered vehicle or by an unauthorized individual.

   c. When there is falsification on a vehicle registration application.

   d. When there is counterfeiting, altering, defacing, or transferring of a registration sticker or parking permit to another motor vehicle for which a sticker or permit was not issued; or when there is false information given in a hearing, or when any permit is misused.

4. A permit may be revoked when the registrant fails to notify the College Services Office within 5 days that the purpose for which the permit was issued has changed and no longer exists.

Loading Zones

Persons having heavy or bulky packages or material to load or unload may use loading zones. Twenty minutes will be allowed in these zones.

Penalties for Offenses

Violators of any of the rules and regulations herein promulgated by LCC shall be subjected to a fine as indicated on the schedule. Traffic citations may either be presented to the registrant, placed on the registrant's vehicle window or mailed to the registrant.

Damage to College property will be assessed in addition to fines.

1. Failure to display registration sticker or parking permit or to register vehicle.....$5.00

2. Speeding or improper driving on College property.....$5.00

3. Parking in violation of posted space.....$3.00

4. Blocking fire hydrant or posted fire lane, driveway, entrances, or alleys.....$5.00

5. Parking on landscaped areas or lawns.....$5.00

6. Improper parking (includes parking in a manner so as to take the space of 2 autos, overtime in a limited loading zone, service drives or entrances, failure to park head-in, or failure to place the sticker in accordance with regulations) $5.00

7. Counterfeiting, altering, defacing or transferring a registration sticker or parking permit to another motor vehicle for which a registration sticker or parking permit was not issued, or giving false information in an application or hearing, or misuse of any permit.....$5.00

Vehicles may be towed and impounded by a towing company authorized by the Dean of College Services. The operator will then be liable for towing and storage fees in addition to fines.

Appeal Procedure

Any citation under these regulations may be appealed by following the method outlined in the Grievance Procedure listed above.

Placement

A counselor is available to assist students in finding full or part-time employment. Registration in person at the Placement Office is required.

Publications

The Torch newspaper, published 27 times each College year, is devoted to articles about the College, students and campus events. Distributed free, it is a major link between student government and the student body. The Titan yearbook is published each spring and sold to students.

Public Events

Six all-College convocations are scheduled each year by the student-staff committee on Convocations and Public Events. Attendance is voluntary. Speakers and entertainers of general interest appear without cost to the students.

Public Performances by Students

Public performances by sanctioned student groups is encouraged. But participation before community groups, with the attendant preparation and travel, is not permitted to violate the academic and other regulations of the College.

Radio

The College operates two stations: KLCC-FM (90.3 mc), and closed circuit KMPS (700 kc). Each provides students with information and notices pertinent to College life and activities.

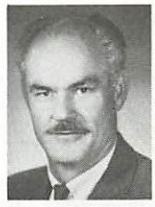
Smoking

Smoking is permitted on the campus, except in the classrooms, shops, and posted areas.

Student Government

A Student Senate of elected Associated Student Body officers and Departmental Representatives meets regularly to plan LCC student activities and to coordinate student programs with other Oregon community colleges. Student leaders have as great a degree of authority and responsibility in the operation of student affairs as is consistent with state laws and responsible operation of the College.

David Spriggs
President



Jack Wisenhunt
1st Vice President

Carroll Noel
2nd Vice President

Cheryl Holmes
Corresponding Secretary

Joanne Denniston
Treasurer

A. Constitution

PREAMBLE

We, the students of Lane Community College, in order to promote the greatest welfare for the greatest number of students, to guarantee equality of opportunity, to offer an experience in the practice of American democratic government, to encourage student participation, to supervise the planning and direction of student activities as an active partner with the Administration, do ordain and establish this Constitution of the Lane Community College Associated Student Body.

ARTICLE I—NAME

The name of this organization shall be the Associated Students of Lane Community College.

ARTICLE II—PURPOSE

The purpose of this organization shall be to carry on student activities consistent with the standards of the institution, in cooperation with the Administrative Council, and to insure that the Student Body is officially represented in dealing with outside organizations. The purpose shall be to promote activities that provide students an opportunity to experience leadership in ways not usually found in the classroom. Also to promote an enlightened atmosphere of open discussion where members can establish a mature attitude with respect to inter-personal communications.

ARTICLE III—COLORS AND TEAM NAME

The official colors shall be blue and white. The team name shall be the Titans.

ARTICLE IV—MEMBERSHIP

Section I

Membership in this organization shall be open to all full or part-time students enrolled in a credit course in any of the college departments.

Section II
A full-time student is one paying full tuition.

Section III
Membership from Adult Education shall be limited to two Senators. These two Senators must be enrolled in at least one Adult Education class.

Section IV
Each member shall have one vote at each election held in conformance with this Constitution.

ARTICLE V—OFFICERS

Section I
The officers of the organization shall consist of President, First Vice President, Second Vice President, Recording Secretary, Corresponding Secretary, Publicity Director, and Treasurer.

Section II
The tenure of office of the Associated Student Body Officers shall begin the last three meetings of the Student Senate in the Spring Term and continue through the last meeting of the following Spring Term. Newly elected officers will conduct the last three meetings, with all officers (old and new) voting.

Section III
A candidate for an officer's position must be a full-time student and have an accumulated minimum grade point average of not less than 1.5 on all college work.

Section IV
A candidate shall have completed two academic terms prior to his term in office and shall have been in attendance not less than one academic term prior to his nomination.

ARTICLE VI—STUDENT SENATE

Section I
The governing body of the Associated Students of Lane Community College shall be known as the Student Senate.

Section II
The Senate shall be composed of the elected officers of the Associated Student Body, one elected freshman and sophomore representative from each curricular department, one appointed representative from each chartered club, five (5) senators at large, and OCCSA officers who attend Lane Community College. Each Senator shall have one vote.

Section III
Editors of all student publications shall be selected by the Media Board.

Section IV
A parliamentarian may be appointed by the President, but shall have no vote.

Section V
A Senator must be a full-time or part-time student.

Section VI
A Senator must be enrolled, during his tenure in office, in at least one class from the department he wishes to represent.

Section VII
In the event that any member misses three meetings during any one term, he will be replaced unless he can show just cause to the Senate.

Section VIII
A faculty advisor shall be chosen by the President of the College and another member of the faculty will be chosen by the Senate. Said member shall be selected by the third week of the Fall Term. Advisors shall have no vote.

ARTICLE VII—MEETINGS

Section I
There shall be at least two regular meetings of the Senate each month, on such dates and at such times and places as the members may designate. Meetings require a quorum attendance of at least 51 percent of the members.

Section II
Special meetings may be called at a time and place deemed necessary by the President. Notification by written announcement will be given to each Senator 24 hours prior to the event.

Section III
A Student Body meeting may be called by:

a. A petition presented to the Senate stating the reason for said meeting and signed by 3 percent of the Student Body.

b. A resolution passed by the Senate.

ARTICLE VIII—OTHER ORGANIZATIONS

Section I
Each organization must seek to function, at least in part, as a service club, contributing some positive and worthwhile service to the College and to the community.

Section II
Any student group or club desiring to organize shall submit a request for recognition to the Senate for consideration and approval. The application shall include the following information:

a. Statement of goals and functions;

b. Proposed constitution and by-laws, if existing;

c. List of interested students;

d. Name of full-time faculty advisor who will be present at all quorum meetings. (This requirement can be waived or altered by the College President's Cabinet if efforts to secure an advisor have been unsuccessful.)

e. That the organization's functions, goals, and constitution are not in conflict with the ASB Constitution or with College policy.

Section III
The ASB President and Coordinator of Student Activities may, by joint agreement, grant recognition to any student group that is formed for the specific purpose of supporting (or opposing) any candidate or candidates, or any ballot measure appearing on the ballot of any special, primary or any general election; however, such organizations will not be eligible for charters.

Section IV
All organizations recognized by the Senate will be issued charters signed by the College President, the Associated Student Body President, and the advisor to the Student Senate. Copies of said charters shall be filed with the ASB Recording Secretary.

ARTICLE IX—PUBLICATIONS

Section I
The Titan shall be the name of the annual publication of the Associated Student Body.

Section II
The Torch shall be the name of the College newspaper.

Section III
The Titan Code shall be the name of the student handbook.

ARTICLE X—FINANCE

Section I
The Treasurer shall prepare with the Finance Committee a budget for the ensuing year and present it to the Senate for approval at its second meeting.

Section II
The Treasurer shall call for budget requests from clubs and organizations 21 days prior to budget deadline. Budget deadline shall be 14 days prior to submission to Senate.

Section III
Students funds shall be an account of the College. Said funds shall be administered by the student body designees, and said funds shall be domiciled in the Business Office.

Section IV
Requests for funds shall be turned in to the ASB Treasurer. Requisitions shall be signed by said Treasurer or Second Vice President, Director of Student Activities, and designated administrators.

Section V
For each Senate meeting, the Treasurer shall prepare and present a budget report.

Section VI
A monthly itemized budget report shall be made to the Student Body.

Section VII
The auditing of student body books will be done by the College auditor in the same manner the College records are audited.

ARTICLE XI–RATIFICATION

Section I
The constitution shall take effect when it has passed the Student Senate and has been ratified by two-thirds majority of the votes cast by the Associated Students.

ARTICLE XII–AMENDMENTS

Section I
Amendments may originate in Senate, where two-thirds of its members must be in favor of the proposed amendments, or they may originate by the petition of 100 members of the Associated Student Body.

Section II
If the proposed measure receives the approval of the College President, it shall be approved for further posting.

Section III
The proposed amendment shall, after having been posted for two weeks, be presented by ballot to the student body.

Section IV
It must receive a two-thirds majority of the votes cast by the Student Body to become an amendment to this Constitution.

ARTICLE XIII–PARLIAMENTARY AUTHORITY

Section I
The rules contained in Roberts Rules of Order (revised) shall govern this organization in all cases to which they are applicable, and in which they are not inconsistent with the Constitution and by-laws of this organization.

ARTICLE XIV–BY-LAWS

Section I
By-laws are passed in any Senate meeting by two-thirds majority of the membership.

Section II
Proposed by-laws shall be presented to the Senate two weeks prior to voting on said by-laws.

Section III
By-laws may originate in Senate, or they may originate by the petition of 100 members of the Associated Student Body.

ARTICLE XV–INITIATIVE AND REFERENDUM

Section I
If a Student Body member disagrees with any decision or policy made by the Senate or any member of the Senate, such decision or policy can be altered by two-thirds majority of votes cast by at least 51 percent of the Student Body. At least 10 percent of the Student Body must sign a petition for such an election. Said election shall be held within three weeks following the date said petition was presented to the Senate.

B. Membership

Student body membership is extended automatically to all students. The student body card, which is issued free at registration, provides admission to the library and student body activities. If lost, a replacement may be obtained at the Admissions Office for $2.

C. Activities Calendar

Student activities are scheduled through the Coordinator of Student Activities, who publishes a weekly calendar of events for distribution to students and staff. Several days advance notice is required if an event is to be published on the calendar.

D. Activities Procedure

To assure that the activity program meets the needs and interests of students, the following procedure has been established to enable students to make requests regarding activities such as dances, establishment of clubs, athletics, picnics, and outside speakers.

Step 1: Student obtains a petition form from the Student Senate Office or the Student Activities Office.

Step 2: Student writes a description of the activity on the petition form.

Step 3: Student presents completed petition form, with appropriate signatures, to the Student Senate at its next regularly scheduled meeting.

Step 4: If Senate action is not satisfactory, the student follows the Grievance Procedure as outlined above.

E. Clubs and Organizations

Present clubs and organizations include the Fellowship of Christian University Students (FOCUS), Associated Student Community Unified Services (ASCUS), Flying Titans, Campus Crusade for Christ, and Phi Theta Kappa. Affiliation with these groups broadens horizons for students and affords an opportunity for college life to be something more than classroom work.

Students may organize new clubs or special interest groups at any time, provided that the goals of the group are compatible with the aims of the College. Such clubs and organizations must be established and governed by provisions of the constitution of the student government.

F. Social Events

Each term a major activity, to which all students are invited, is planned and sponsored by the Student Senate.

G. Speakers

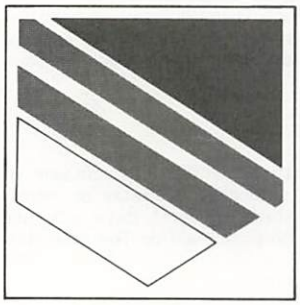
Clubs and organizations may invite speakers from off campus to address their groups or the campus as a whole. Speakers must adhere to reasonable standards of decency and morals and avoid advocation of illegal or unlawful activities.

H. Use of Buildings

Use of rooms and other College facilities for other than regularly scheduled classes is arranged ahead of time through the Dean of College Services. All special events are cleared on the master calendar of student activities maintained by the Coordinator of Student Activities. A room may be scheduled for a specific hour for the entire school year for meetings of a club or committee.

Testing

General entrance testing is not required; however, many types of tests are available upon request. The General Aptitude Test Battery assists in the selection of occupational objectives. The Engineering, Physical Science Aptitude Test is used in screening for engineering technician programs. Individual tests of intelligence, interest, and aptitude are available.



ACADEMIC REGULATIONS

Glossary of Terms

Familiarity with these few basic terms can enhance your understanding of the academic procedures described in the material to follow.

Credits are granted in recognition of work successfully completed in specific courses. For lecture courses, one hour credit is granted for one hour attendance in class per week. Laboratory and activity credits are generally granted at the rate of one credit for two hours attendance. Ninety-three credits are required for an associate degree. Normally no more than 93 credit hours may be transferred to a four-year college.

A *course* is any class or subject (e.g. English Composition, Biology, Drafting) for which a student may register for a term's Course numbering follows a particular pattern which distinguishes vocational credits from college transfer credits. All courses which grant credit toward a vocational degree have four numbers with a decimal point. Those which are transferrable to four-year colleges are identified with letters and three digits. They follow closely those used by other degree-granting schools in Oregon.

A *full-time student* is defined by the Associated Student Body Constitution as anyone who is carrying nine or more credit hours of work. This status entitles one to privileges such as voting, holding office, and admittance to College functions. It is important to know that the definition of a full-time student varies with agencies. For example, the Selective Service Board and the Social Security Administration define a full-time student as one carrying 12 credit hours of work.

Laboratories are work or activity classes in which most of the work is done during the class session. As a result, a student usually spends two or three hours time in a laboratory class for one unit credit.

A *program* is a group of courses arranged to provide vocational or professional training leading toward a certificate of completion or an associate degree.

A *sequence* is a series of courses which are closely related to one another. They are usually numbered consecutively.

A *term* is an approximately eleven-week period of study. There are four terms in the College year. Fall Term begins at the end of September and lasts until Christmas vacation. Winter Term begins at the first of the year and lasts until March 15 or 20, and Spring Term begins at the end of March and lasts until about the middle of June. Summer Term begins the middle of June and lasts until about September 1. Terms are sometimes referred to as quarters.

Academic Council

The Academic Council is a committee of staff and students appointed by the President. It has the responsibility of interpreting or waiving academic regulations and of considering appeals by students.

The Council handles such matters as permission to take early examinations, change recorded grades or carry excess units. Petitions for such privileges are submitted through a counselor or the Dean of Students.

Adding a Course

Students may enroll for a course as late as seven calendar days after a term begins. Those joining a class late should realize, however, that they will be at a disadvantage since no special consideration is given late entrants. Late enrollment or adding of a class is arranged through a counselor.

Advanced Placement

Some students complete college-level work in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board. Those who receive satisfactory grades in examinations administered by the Board may, on admission to LCC, be granted credit in comparable courses toward an Associate of Arts Degree. Amount of credit is determined by the academic department concerned. Grades are recorded as "pass."

Attendance

Faculty members usually announce an attendance policy for each class, and it is the student's responsibility to know and comply with that policy. A student may be dropped from class when the number of absences exceeds the number of times the class meets in a two-week period. Those enrolling late should make a point to obtain attendance rules from each instructor to avoid misunderstandings and unnecessary petitions to the Academic Council. For state reimbursement purposes, attendance must be recorded for each class session.

Auditing Classes

Students may request enrollment in classes as auditors, if space is available. Charge for auditing (non-credit, non-graded participation in a class) is $4 per credit hour.

Credit by Examination

Students who believe themselves masters of material to be covered in a given course, by virtue of previous training or work experience, may apply for credit for the course through this procedure:

1. Contact a counselor.

2. Document either (a) successful completion of the course at some post high school education institution or (b) appropriate job experience.

3. Fill out a Credit by Examination form. Indicate on the form whether the test is being taken for a letter grade or on a pass-fail basis.

4. Secure approval of application from appropriate department chairman.

5. Take signed form to the Business Office and pay $3 per credit hour.

6. Take examination over course material from department chairman or instructor.

7. Contact department chairman or instructor to find test result. Deliver completed form to the Registrar's Office.

Dead Week

The five days prior to final exam week are reserved for study. Most student activities cease.

Degrees, Certificates and Diplomas

Associate of Arts Degree

The A.A. Degree is awarded to students who satisfy the following requirements:

1. Complete a minimum of 93 term hours of college transfer courses with a cumulative grade point average of not less than 2.00.

2. Include in the program the following: English Composition, 9 hours; Physical Education (unless excused by the Academic Council), 5 hours; Health, 2 hours; and a year sequence in Science and/or Math, Social Science and Language or Literature.

3. Establish a major by taking a second-year sequence in either the Liberal Arts or in a Science.

4. Attend at least two terms, including the last term, and earn at least 24 credit hours at LCC.

5. Meet any special departmental requirements.

Associate of Science Degree

The A.S. Degree is awarded to students who satisfy the following requirements:

1. Complete the required courses and credit hours prescribed for any structured occupational program of at least 93 term hours.

2. Attend at least two terms, including the last term, and earn at least 24 credit hours at LCC.

3. Earn a cumulative grade point average of not less than 2.00.

4. Receive approval of the Academic Council for minor deviations from specific course requirements.

Certificates and Diplomas

A diploma is awarded to the student who does not meet the requirements for the A.A. or A.S. Degree but who has completed any 93 hours of credit courses with a cumulative GPA of not less than 2.00 and who has attended at least two terms, including the last term, and who has earned at least 24 credit hours at LCC.

The satisfactory completion of a course, courses, or prescribed program is recognized by the Administration through the awarding of a transcript, letter of referral, competency certificate, completion or other evidence. Specific awards are dependent upon the nature of the programs and the decision of the Administration and faculty.

Examinations

Students are responsible for taking final examinations as they are listed in the final examination schedule. Examinations ordinarily are not given in advance of the scheduled time, except that students under extraordinary circumstances may petition the Academic Council in writing for special consideration.

Special final examinations ordinarily are given under two conditions only: Before the scheduled time by permission of the Academic Council, or after the scheduled time to make up a grade of "I" (incomplete).

Midterm examinations are given at the discretion of instructors.

Grading

Grades are earned in credit courses and are recorded in each student's permanent record. Grade definitions:

A—Indicates superior work, initiative, and originality.
B—Indicates performance of assigned work in highly satisfactory manner.

C—Indicates adequate or average performance of assigned work.

D—Indicates barely passing work and that little or no initiative has been displayed.

F—Indicates course failure, or failure to take a final exam.

I—Indicates "incomplete." This is given when, for a justifiable, approved reason (serious illness, or an agreement between the student and faculty member), a student does not complete all requirements of a course within a term. The student is obligated to complete the requirements within the following year if he wishes to receive credit for the course.

W—Indicates approved withdrawal from a course. A "W" indicates the student withdrew from a course before final week.

GPA

The grade point average (GPA) is based on the assignment of points to course grades. An A earns four points, B three points, C two points, D one point, F and I no points. The points allowed for the grade are multiplied by the number of credit hours earned in the course. The points earned for all courses are added and then divided by the number of credit hours to get the GPA. A student receiving all A's would have a 4.00 GPA.

Pass—No Pass

In courses designated as unrelated to the major field, a student may elect to enroll as a candidate for "pass" or "no pass" rather than a letter grade. If he chooses the pass—no pass option, he must notify the instructor not later than 13 calendar days after the first day of the term.

When they deem it appropriate, instructors may assign "pass—no pass" students the letter grade of "A," but no grade lower.
No more than 16 credit hours of "pass" grades may be applied toward LCC degree requirements.
Students who accumulate fewer than 45 credit hours over four terms may not enroll for more than 12 hours of "pass" grades.

College transfer courses listed as electives for majors in lower division curriculums outlined by the State System of Higher Education may be taken on a "pass—no pass" basis within the limits of this policy.

"Pass—no pass" courses to be applied toward occupational programs are designated by departments concerned.

High School Students

Working in cooperation with local school districts, LCC enrolls selected high school students on a part-time basis in many programs. Application should be made through the local high school counselor.

Honors List

Each term honors lists are published. Full-time students receiving grade point averages of 3.50 and above are named to the President's List. Those earning 3.00 to 3.49 are named to the Dean's List.

No-Grade Courses

About 200 non-credit courses are offered to help students prepare for college work or simply to enrich their backgrounds. These are offered through the Study Skills Center and Adult Education Department. See course lists under descriptions of those departments.

Probation

A student receiving less than a 2.00 GPA any term is placed on probation. If a student receives less than a 2.00 for two consecutive terms, he is asked to work with a counselor to develop a program in which he will be more apt to succeed. Probation is lifted when one's grades for the past term and the cumulative GPA are 2.00 or above.

Schedule of Classes

A Schedule of Classes is distributed prior to the beginning of each term. It contains the calendar for the term, information on registration and testing, a list of classes offered, and the times and places where the classes will be held.

Suspension

The College Administration has authority to suspend students. After disqualification from attendance, students are considered for re-enrollment only after submitting requests for reinstatement to the Academic Council.

Transfer Credits

Work satisfactorily completed at other Oregon public colleges is normally accepted for credit toward LCC degrees. Likewise, credit earned at LCC is transferable to other state colleges or universities. After a student has completed 93 term hours of lower division (freshman-sophomore) work toward the baccalaureate degree in any combination of institutions, the remaining hour requirements must be completed at a four-year institution. Community college students are responsible for determining the requirements of the institution and program to which they plan to transfer. In some professional fields, transfer must be made at the end of the freshman year. Recommended lower division programs for transfer students appear in department descriptions.

Unsatisfactory Work

Instructors have the right to drop students from classes if, within the first seven weeks of a term, they demonstrate insufficient preparation for the subject content of the course. A "W" grade is assigned.

If a student persistently neglects class assignments or is habitually absent, the instructor may request a counselor to withdraw the student from the class and record a "W" grade on the permanent record.

Withdrawal From a Class

A student may withdraw from a class without an adverse grade any time through the seventh week of a term. After that date, he may withdraw without penalty only if he has a grade of "C" or better, if he has the approval of the instructor.

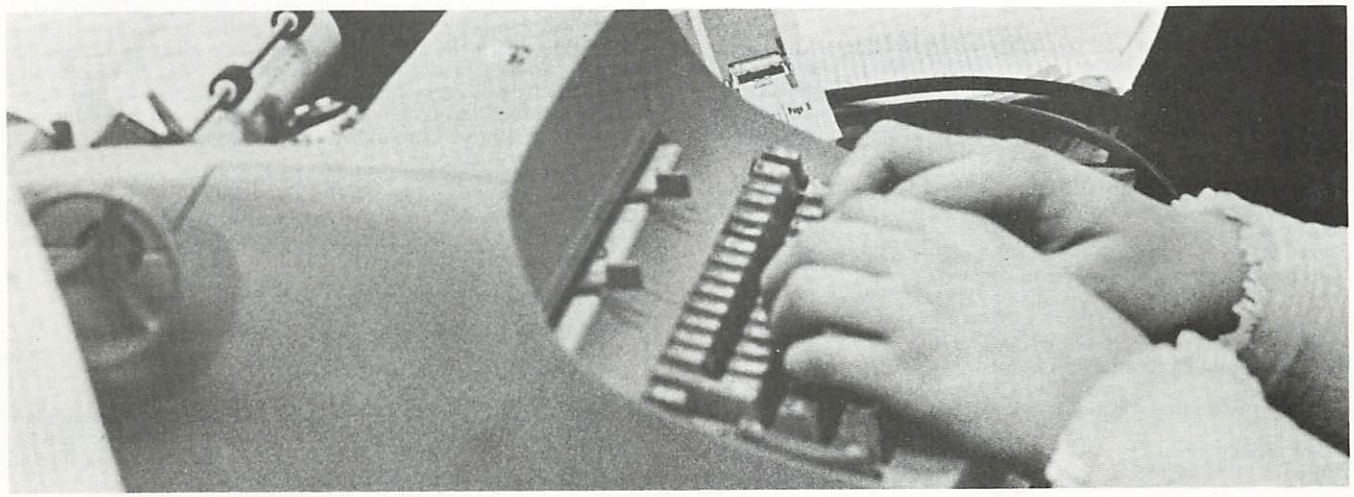
OREGON COMMUNITY COLLEGE OCCUPATIONAL PROGRAMS

This State Department of Education listing reflects as accurately as possible the **current** occupational programs. However, almost all programs can be varied in length, as well as emphasis, to suit specific student and employment needs. **Check college catalogs for possible variations within programs or additions or deletions to this listing.**

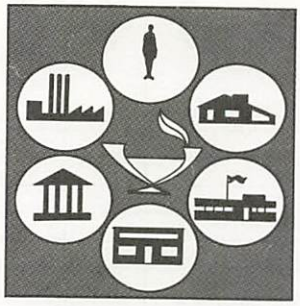
Cluster	Blue Mountain	Central Oregon	Clackamas	Clatsop	Lane	Linn-Benton	Mt. Hood	Portland	Salem	Southwestern	Treasure Valley	Umpqua
Mechanical												
Agricultural Mechanics					x						x	
Aero Airframe Mech.					x			x				
Aero Power Plant Mech.					x							
Automotive Mechanics	x	x	x	x	x	x	x	x		x	x	x
Auto. Parts Sales											x	
Auto. Body & Fend. Rpr.	x	x	x		x	x						
Aviation Mechanics							x					
Diesel Mechanics	x				x							
Electronic Mech.			x				x					
Industrial Mech.		x			x				x	x		
Mechanics											x	
Mech. Draft. Tech.			x						x		x	
Mech. Engr. Tech.									x			
Office Machines Rpr.		x										
Supervisory Training						x			x	x		
Welding			x	x								
General Clerical												
Cashiering-Checking								x	x			
Clerk-Typist					x		x			x		
Clerk-Steno					x				x	x		
Clerk-Bookkeeping			x		x	x			x			x
Clerical (Multi-train.)								x		x		
Gen. Bus. Office Clerical	x	x		x				x	x	x	x	
Data Processing				x		x				x		
Key Punch Operator					x					x		x
Machine Operator					x				x	x		
Computer Programing			x		x				x	x		
Library Assistant											x	
Secretarial												
Secretarial	x	x	x	x	x	x	x	x	x	x		
Exec. Secretary			x							x	x	
Legal Secretary			x					x				
Medical Secretary			x				x	x				
Office Management						x					x	
Stenography									x	x	x	x
Basic Marketing												
Business Management							x	x		x		
Computer Operation		x			x			x	x	x		
Sales		x								x		
Transportation								x				
Forestry			x									
Mass Communications							x					
Mid-Management					x	x	x				x	
Merchandising			x	x				x				
Radio Broadcasting	x				x							
T. V. Broadcasting					x							
Radio T. V. Broadcast.							x					
Real Estate	x						x	x	x		x	x

Cluster	Blue Mountain	Central Oregon	Clackamas	Clatsop	Lane	Linn-Benton	Mt. Hood	Portland	Salem	Southwestern	Treasure Valley	Umpqua
Bookkeeping-Accounting												
Accounting Tech.	x			x			x	x				x
Bookkeeping-Clerical			x		x	x			x	x		
Bookkeeping-Accounting		x			x			x	x			
Elec. Acc. Machine Tech.									x			
Elec. Data Process. Tech.	x					x		x	x			
Business Data Process.			x									
Agriculture												
Agr. & Ind. Equip. Tech.					x							
Agriculture Equipment Repair											x	
Food Processing Technology							x					
Forestry Aide		x							x			
Forestry Technology		x		x	x		x		x	x		x
Grain-Feed-Seed Farm Supply Tech.						x						
Horticulture: Landscape Business							x					
Ornamental			x									
Landscape Public Grounds Manage.											x	
Outdoor Recreation-Conservation Tech.											x	
Livestock Technology				x								
Range & Ranch Management											x	
Technical Agriculture	x										x	
Food Service												
Food Process Technology							x					
Fry Cook					x							
Quantity Food Prep.								x				
Building Construction												
Building Construction											x	
Building Materials Management					x							
Construction Technology					x							
Millwork & Cabinet Making					x							
Civil Eng. Tech. (Structural)	x				x		x	x	x	x		
Highway Eng.								x	x			
Surveyor Tech.									x			
Drafting Technology			x		x				x		x	x
Architect. Tech.								x	x			
Civil & Struct. Draft. Technology									x	x		
Marine Technology								x	x			
Technical Illustration Technology								x	x			
General Drafting	x						x		x	x	x	
Wood Products												
Forest Products Technology									x	x		
Wood Paper & Building Material Tech.									x			
Metal Working												
Machinist				x				x				
Machine Shop Tech.-1			x		x				x	x		
Supervisory Training						x				x		
Welding		x	x	x	x	x	x	x	x			
Welding Technology					x						x	
Weld. & Fab. Tech.			x						x			
Industrial Electronics											x	

Cluster	Blue Mountain	Central Oregon	Clackamas	Clatsop	Lane	Linn-Benton	Mt. Hood	Portland	Salem	Southwestern	Treasure Valley	Umpqua
Health Occupations												
Dental Assistant	x				x			x	x			
Dental Tech.								x				
Dental Hygienist					x							
Health Occup. Tr. Program											x	
Home Health Aide					x							
Medical Assistant			x						x			
Nursing Assist., Orderlies, Aides					x	x						
Occupational Ther. Asst.							x					
Physical Therapy Asst.							x					
Practical Nursing	x	x	x		x		x	x	x	x	x	x
Recreation Assistant							x					
Technical Nursing (ADN)					x			x	x			
Electrical												
Aviation Electronics							x					
Communications Tech.			x									
Electro-Electric Drafting Tech.			x	x					x			
Electronic-Engr. Tech.	x	x		x	x			x	x	x		
Electronic-Mech. Tech.			x							x		
Industrial Electro/ Communications Tech.									x			
Industrial Electronics Program										x	x	
Instrumentation and Control Tech.								x				
TV-Radio Service					x			x	x			
Home Appliance Service					x							
Domestic Refrigeration Service					x							
Other												
Chemical Technician Quality Control							x	x				
Commercial Flight Training	x		x		x		x				x	
Heavy Equip. Operator (+Diesel)												x
Graphic Art								x				
Home Economics (Art Business Mgmt).						x		x				
Instructional Materials Aides									x			
Fire Protection Tech.			x		x	x		x	x			x
Law Enforcement-Police Science	x		x	x	x			x		x	x	x
Marine Technology				x								
Well Drilling Tech.									x			
Teacher's Aide			x									



STUDY PROGRAMS AND SERVICES



Adult Education

Director

Williams, Nile—B.A., Social Science, College of Idaho; M.Ed., University of Oregon.

Coordinator

Johnson, Joris O.—Oregon Vocational Certificate.

General Information

About 180 non-credit, non-graded courses are offered each year. These range from vocational-technical to office skills, home arts, language arts, mathematics and avocational courses.

Besides this core, the College is willing and usually able to establish on request other courses in must demand areas. Establishment of courses hinges on location of an instructor and registration of at least 12 students.

All courses offered are held in geographical locations closest to the majority of enrollees. Likewise, they are taught at a time, day or evening, most convenient to the majority of students. Counseling and guidance are available both days and evenings on the main campus.

Enrollment in most courses is open to anyone interested, though a few have prerequisites. A list of class offerings is issued quarterly. Students simply attend the first meeting of the class, where enrollment is effected.

Classes usually meet for 30 hours of instruction at a tuition charge of $12. The cost may vary up or down in line with the number of instruction hours and type of course. There may be an extra charge if a cooperating agency charges a rental for facilities. No refunds are made after the second meeting of a class.

An exception to the usual tuition rate is made in the case of senior citizens. A person 65 or older may enroll in as many classes as he wishes at a tuition rate of only $6 per term.
Books for classes may be purchased at the College Bookstore. Material fees may be assessed in some classes.

Tuition Schedule

State Approved Occupational Courses	30 clock hours—$12 per course
Self Improvement, Avocational Courses	30 clock hours—$20 per course
Driver Education	15 clock hours—$47 per course
High School Completion	36 clock hours—$12 per course

Typical courses offered:

Vocational-Technical

Drafting, Drafting and Blueprint Reading for Plumbers and Pipefitters, Introduction to Water Works Field, Waitress Training, Retail Selling Fundamentals, Advanced Retailing, Commercial Art, Property Appraisal, Medical Terminology for Licensed Practical Nurses, Medications for Practical Nurses, Radio Theory II, Elements of Supervision, Basic Psychology for Supervisors, Human Relations, Labor-Management Relations, Industrial Economics, Methods of Improvement for Supervisors, Cost Control for Supervisors, Oral Communication for Supervisors, Written Communications for Supervisors, Developing the Employees Through Training, Refrigeration I, Automotive Electrical Tune-up, Front End Alignment, Basic Oil Burner Service, General Welding, Machine Shop I, Radio Operator's License, Radio Theory I, Agriculture, Fireman Training, Custodial Training.

Office Skills

Accounting, Bookkeeping, Preparation of Income Tax for Professionals, Briefhand, Business Law, Business Machines, Combination Business, Credit Union Accounting, Secretarial—Educational, Secretarial—Lumber, Secretarial—Basic Medical, Secretarial—Medical, Shorthand—Beginning, Shorthand—Advanced, Typing—Beginning, Typing—Advanced, Written Communications.

Home Arts

Bishop Sewing—Beginning and Advanced, Bishop Tailoring—Beginning and Advanced, Couture, Home Sewing, Home Tailoring, Sewing Children's Clothing, Interior Design I & II, Agriculture and Home Economics, Household Furnishings, Knit and Fashion Fabrics, Food Preparation for Special Occasions, Flower Arranging and Home Decorating, Accessories for the Home, The Family in the Money World.

Language Arts

Reading Improvement, English Essentials, Spanish, German, French, Russian, Arabic.

Mathematics

Refresher Mathematics, Beginning and Elementary Algebra, Geometry, Business Mathematics.

Avocational

Citizenship, Driver Education, Ornithology, Parliamentary Rules.

Apprentice Training

An organized system is maintained for providing young people with manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations. Since apprentices learn the skills of the craftsmen through on-the-job work experiences and related information in the classroom, the program involves cooperation among schools, labor, and management. Minimum terms and conditions of apprenticeship are regulated by state and local statutes or agreements.

Apprenticeship programs include these trades:
Carpentry, Floor Covering, Industrial Maintenance Electrician, Inside Wireman, Maintenance Electrician, Meterman, Painters, Plasterer, Plumber, Power Lineman, Roofer, Sheet Metal, Station Wireman, Steamfitter.

Basic qualifications for admittance to apprenticeship are:

1. Generally, 16 years as a minimum age requirement.

2. Good health and physical fitness.

3. High school graduation, preferably. (Many trades place high value on mathematics, mechanical drawing, and the sciences, and all expect the ability to read, spell, write and speak intelligently. High school transcripts must be submitted.)

4. Completion of aptitude tests.

5. Acceptance, after interview, by a joint apprenticeship committee. (This is generally composed of four employees and four journeymen who administer the local apprenticeship system.)

6. Willingness to work, study, and attend classes.

7. Willingness to maintain proper conduct in school and on the job.

8. Successful completion of a probationary period.

Advantages of apprenticeship are:

1. Employment.

2. Pay while learning.

3. Self-reliance at a comparatively young age.

4. Learning to produce with modern tools and machines.

5. Experience in the latest methods.

6. Knowledge of current industrial materials.

7. Opportunity to use properly or install thousands of dollars worth of materials during training.

8. working under direction of a competent journeyman with close personal attention and supervision.

9. Attending classes for six hours each week to learn those things which cannot be taught economically in the shop or at the job site.

10. Instructors who are capable, practical men selected from the industry by the joint apprenticeship committee.

11. Work reports, class grades, and attendance reviewed by the joint apprenticeship committee before each wage increase.

In conducting classes, the Adult Education Department cooperates with the State Division of Vocational Education and the State and Federal Bureaus of Labor, through the State Apprenticeship and Training Council. Classes are established upon request of the local trade committee when a sufficient number of indentured apprentices are available.

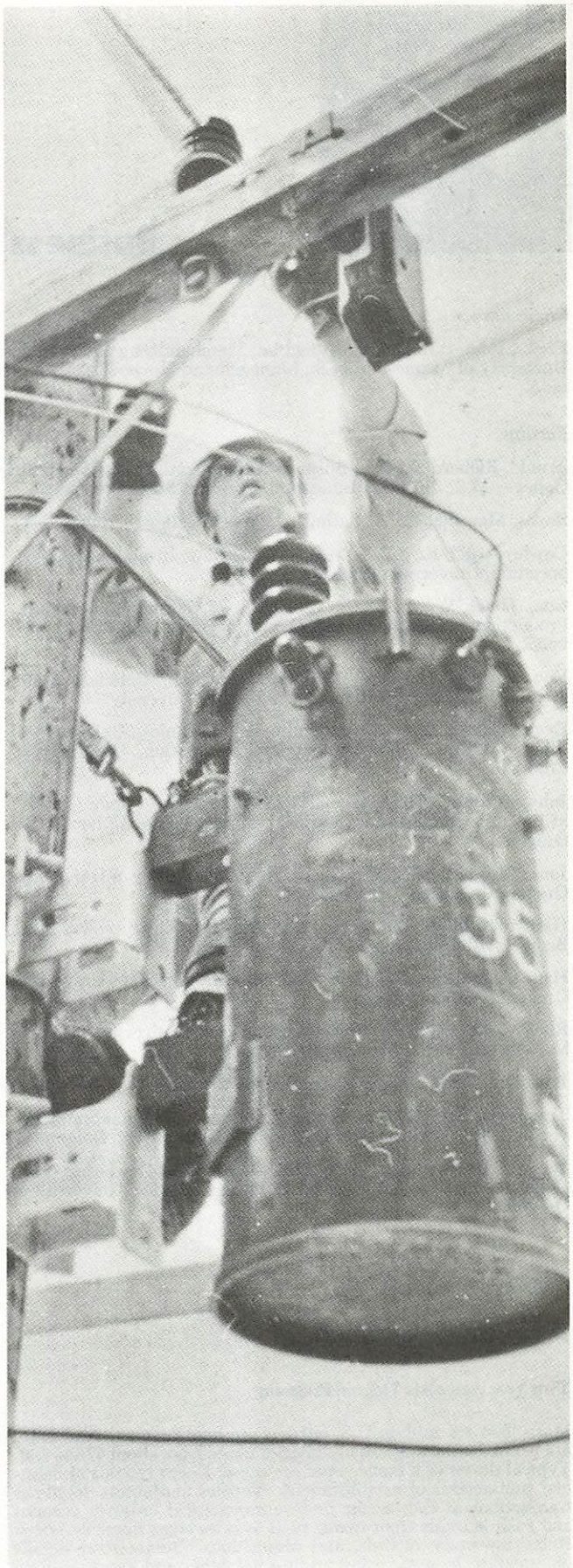
Persons interested in apprenticeship training should first contact either the state apprenticeship representative, Mr. R. Wayne Douglass, State Office Building, Room 1, Seventh and Pearl Streets, Eugene (telephone 342-1361, ext. 207) or the federal apprenticeship representative, Mr. Fred Koehler, 835 Park East, Wylie Professional Building, Eugene (telephone 342-5141, ext. 316 and 317).

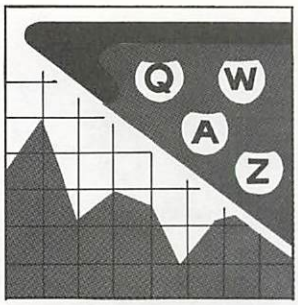
High School Completion

The program offers an opportunity for those who have not completed high school to earn a diploma. Primarily, entrance is limited to persons 19 years of age or older. On request of a school district or a court, where circumstances warrant, the College will cooperate to advance the education of students under 19.

Normally, the program consists of six basic courses: English Grammar, American Literature, U. S. History, Modern Problems, and fundamental science and mathematics courses. One course is offered at a time, ordinarily on Monday and Thursday evenings from 7-10 p.m. for a six-week period. A person may enter at the beginning of any of the classes. Proven proficiency in these six fields will merit an Adult Education diploma awarded through a participating school district.

Classes are offered in all school districts in the College District where interest is sufficient. Counseling and guidance services are available at the Eugene campus for persons interested in the program.





Business

Chairman

Kreitz, John, B.B.A. with distinction, Merchandising and Selling, University of Minnesota; M.S., Management, University of Colorado.

Faculty

Arnold, Richard D., B.S., Business Administration, Portland State College; M.S., Business Education, Portland State College.

Bayes, Maurine, C.P.S. Rating; Oregon Vocational Approval.

Cowley, Hugh F., B.B.A., M.B.A., Marketing, Insurance & Transportation, University of Oregon.

Cox, James W., B.S.E.E., University of Washington; M.B.A., Production Management and Data Processing, Utah State University.

Eno, Richard H., B.A., Business Education, Colorado State; M.Ed., Business Education, Oregon State University.

Evans, James D., B.S., Agricultural Economics, University of Idaho; M.S.B.A., Management and Accounting, University of Colorado.

Johnson, Robert, B. A., Social Science, Moorhead State College; M.B.A., Personnel and Industrial Management, University of Oregon.

Jones, Edith A., B.S., Education, Nebraska Wesleyan University; Oregon Vocational Certificate.

Hartstrom, Millie, B.S., Finance and Business Environment; M.S., Business Administration, University of Oregon.

Haugan, Marilyn, B.S., M.S., Business, Oregon State University; Oregon Vocational Approval.

Rholl, Gary O., B.A., Business Education, University of Iowa; M.B.A., Finance, University of Oregon.

Thygesen, Ruth, Oregon Vocational Certificate.

Trautwein, Sue W., B.S., Business Education, Oregon State University; M.S. Business Administration, University of Oregon.

Wehner, Gordon, B.A., Accounting, Economics, Lewis and Clark College; M.A., Accounting and Business Statistics, University of Oregon.

Programs

Accounting/Clerical

Two Year Associate Degree Program

More than 1.1 million U.S. citizens are bookkeepers. And more are needed. Starting weekly salaries range from about $75 to $90. Typical duties of a bookkeeper are these: Keeps records of financial transactions of establishment: Verifies and enters details of transactions as they occur or in chronological order in account and cash journals from items, such as sales slips, invoices, check stubs, inventory records, and requisitions. Summarizes details on separate ledgers, using adding machine, and transfers data to general ledger. Balances books and compiles reports to show statistics, such as cash receipts and expenditures, accounts payable and receivable, profit and loss ,and other items pertinent to operation of business. Calculates employee wages from plant records or timecards and makes up checks or withdraws cash from bank for payment of wages. May prepare withholding, Social Security, and other tax reports. May compute, type, and mail monthly statements to customers. May complete books to or through trial balance. May operate calculating and bookkeeping machines.

First Year

	F H-C°	W H-C	S H-C
Typing I, II, II	5-3	5-3	5-3
Business English I, II, III	3-3	3-3	3-3
Accounting I, II, III	4-3	4-3	4-3
Business Math	3-3		
Sociology 204, 205	3-3	3-3	
Business Machines I, II		3-3	3-3
Physical Education		3-1	3-1
Personal Development			3-3
	18-15	21-16	21-16

°H—hours, C—credits

Second Year

	F H-C	W H-C	S H-C
Principles of Accounting	3-3	3-3	3-3
Office Procedures I, II, III	4-3	4-3	4-3
Principles of Economics	3-3	3-3	3-3
Business Environment	3-3		
Business Law		3-3	
Health			3-3
Human Relations II	3-3		
Elective (Business)		3-3	3-3
Physical Education			3-1
	16-15	16-15	19-16

Accounting/Clerical

One Year Program

See Description Above.

	F H-C°	W H-C	S H-C
Typing I, II, III	5-3	5-3	5-3
Accounting I, II, III	4-3	4-3	4-3
Business English I, II, III	3-3	3-3	3-3
Business Math	3-3		
Business Machines I, II		3-3	3-3
Office Procedures I, II, III	4-3	4-3	4-3
	19-15	19-15	19-15

°H—hours, C—credits

Business Administration and General Studies—Business

College Transfer

This program, if successfully completed, will permit a student to transfer into any of the major programs in business administration offered by institutions of the Oregon State System of Higher Education, or the general studies program in business at EOC, at the junior level. Students may complete requirements for the baccalaureate degree with two additional years of work at the four-year institutions.

Freshman Year

	F	W	S
BA 101 Introduction to Business	4		
Sp 111 Fundamentals of Speech		3	
Mathematics[1]	4	4	4
Wr 111, 112, 113 English Composition[2]	3	3	3
Social Science Sequence[3]	3	3	3
Physical Education	1		1
Personal Health		2	
Electives			3-4
	15	15	14-15

Sophomore Year

	F	W	S
Ec 201, 202, 203 Principles of Economics	3	3	3
BA 211, 212, 213 Principles of Accounting[4]	3	3	3
BA 226 Business Law (UO, OSU, EOC)	3		
BA 232 Introduction to Business Statistics (UO, PSU, EOC, SOC)		3	
Literature or science sequence[5]	3-4	3-4	3-4
Electives to bring total hours to 93[6]	2-6	2-6	5-6
Physical Education	1	1	1
	16	16	16

Total: 93 hours

This program is limited to 93 credit hours because four-year institutions, as a usual practice, require that any credit earned after the completion of 93 hours of acceptable college work be earned at a four-year institution.

[1]Students should enroll in mathematics according to placement test scores. Students planning to transfer to UO or OSU should complete mathematics through Mth 200. Eight hours of mathematics is adequate for students transferring to SOC.

[2]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of elective. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113.

[3]Students planning to transfer to OSU should complete Hst 101, 102, 103 History of Western Civilization; students planning to transfer to SOC, PS 201, 202, 203 American Governments or Hst 201, 202, 203 History of the United States. PSU recommends Phl 201 Problems of Philosophy, 202 Elementary Ethics, and 203 Elementary Logic. Students planning to attend EOC should take Hst 101, 102, 103 History of Western Civilization.

[4]All students, including those planning to transfer to UO, should complete entire accounting sequence. Because of variations among institutions in order and timing of material covered, students should not attempt to transfer mid-way through the sequence.

[5]Students planning to transfer to OSU should select a science or mathematics sequence appropriate to their minor. Recommended are Ch 201, 202, 203 General Chemistry, which is required in many minors, and Mth 200, 201, 202, 203 Calculus with Analytical Geometry which meets the requirements in the applied mathematics minor. (see OSU catalog) Students planning to transfer to SOC should complete World Literature or Introduction to Literature. Students transferring to UO should complete a literature sequence meeting UO group requirements. PSU students should complete literature, foreign language, or other arts and letters sequence.

[6]Students planning to transfer to PSU should take BA 214 Business Communications and, if available, BA 221, 222, 223 Production, Finance, Marketing; those planning to transfer to SOC, BA 214 and Mus 201 Introduction to Music and Its Literature; those planning to transfer to EOC, BA 214, Mus 201, and AA 201 Survey of Visual Arts.

Business Education

University of Oregon

Students should complete programs outlined above for business administration, substituting a literature sequence meeting UO group requirements for the social science sequence in the freshman year and completing Psy 201, 202 instead of the literature sequence indicated in the sophomore year. Students should enroll in skill courses in typing and shorthand according to placement, completing work through SS 223 Applied Stenography. (No credit is given for beginning typewriting.)

Oregon State University

Students should complete the transfer program outlined for secretarial science, being sure to include Psy 201, 202 General Psychology and Sp 111 Fundamentals of Speech.

Portland State University

Students should complete the following program:

Freshman Year

	F	W	S
Wr 111, 112 English Composition	3	3	
Sp 111 Fundamentals of Speech			3
BA 211, 212, 213 Principles of Accounting	3	3	3
Mathematics according to placement	4	4	4
Phl 201 Problems of Philosophy	3		
Phl 202 Elementary Ethics		3	
Typing according to placement and/or electives	2	2	2
Physical Education	1	1	
Personal Health			2
	16	16	14

Sophomore Year

Ec 201, 202, 203 Principles of Economics	3	3	3
Psy 201, 202 General Psychology	3	3	
Arts and letters sequence (literature, foreign language, music, art)	3	3	3
BA 214 Business Communications			3
Stenography according to placement	3	3	3
Physical Education	1	1	1
Electives (BA 221, 222, 223 Production, Finance, Marketing, if available)	3	3	3
	16	16	16

Southern Oregon College

Eastern Oregon College

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
GS 101, 102, 103 General Biology (SOC, EOC) or GS 104, 105, 106 Physical Science (SOC, EOC) or Mathematics, 12 hours (EOC)	4	4	4
Literature sequence	3	3	3
Sp 111 Fundamentals of Speech		3	
Mus 201 Introduction to Music and Its Literature or AA 201 Survey of Visual Arts	3		
Typing according to placement and/or electives	2	2	2
Physical Education	1	1	1
Personal Health			2
	16	16	14

Sophomore Year

Hst 201, 202, 203 History of the United States or PS 201, 202, 203 American Governments	3	3	3
Ec 201, 202, 203 Principles of Economics	3	3	3
Psy 201, 202 General Psychology	3	3	
Stenography according to placement	3	3	3
Physical Education	1	1	1
Mus 201 or AA 201	3		
Electives to bring total to 93 hours		2-3	5-6
	16	15-16	15-16

Key Punch

First Term

English I
Bookkeeping I
Business Machines I
Typing I
Key Punch I

Second Term

English II
Bookkeeping II
Office Procedures I
Survey in Data Processing
Key Punch II

Middle Management

Two Year Associate Degree Program

The middle management program is a two-year training program culminating with the Associate of Science degree. The student takes a series of core courses, then earns the balance of his credit by choosing among a variety of available electives, to earn a total of 93 credit hours.

The First Year

During the first year, students concentrate on the core program, which provides a concrete foundation of general business and economic concepts. This background gives the student the necessary understanding of the overall business environment. It qualifies him to select the functional area in which he wishes to concentrate during his second year. He also takes courses in communications and the humanities to improve his competence in interpersonal relationships, a definite asset in any business occupation.

First Year

	F H-C°	W H-C	S H-C
English Composition	3-3		
Fundamentals of Speech		3-3	
Communication Skills III		3-3	
Principles of Accounting	3-3	3-3	3-3
Business Environment	3-3		
Business Law		3-3	
Marketing			3-3
Business Math	3-3		
Business Math/Statistics		3-3	
Techniques of Business Decisions			3-3
Sociology 204, 205	3-3	3-3	
Social Psychology			3-3
Physical Education	3-1	3-1	3-1
	18-16	18-16	18-16

°H—hours, C—credits

Second Year

Principles of Economics	3-3	3-3	3-3
Management Data Processing	3-3		
Financial Management		3-3	
Seminar Occupational Dev.			3-3
Human Relations II	3-3		
Elective		3-3	3-3
Health	3-3		
Elective°		3-3	3-3
Elective°	3-3	3-3	3-3
	15-15	15-15	15-15

°12 credits of electives must be in Business and 6 may be in the Liberal Arts. Upon approval of his programs advisor, the student may substitute selected vocational courses for those specified as college transfer. The program is designed to accommodate major programs in the primary industrial groups or functional areas of specialization.

Suggested electives:

2.550, Supervisory Management, BA 218, 2.114 Personal Finance, 2.560 Small Business Management, 2.410 Risk and Insurance, 2.412 Investments, 2.402 Financial Institutions, 2.319 Market Analysis and Segmentation, 2.314 Advertising, 2.224 Manpower Management, 2.518 Office Management, 2.320 Real Estate, 2.508 Filing and Records Management, 2.316 Salesmanship, 2.500 Business Records and Reports, 2.104 Personal Typing, 2.607 Key Punch Operation, 2.510 Letter and Report Writing.

Secretarial, Professional

Two Year Associate Degree Program

Opportunities abound in the clerical field, which employs 11 million Americans. Seventy per cent of them are women. The U. S. Department of Labor estimates that 300,000 new jobs open each year. Here in Lane County about 600 jobs are available annually.

Nearly 20 per cent of available clerical jobs are for stenographers and secretaries. Stenos earn a starting wage of $75 to $90 a week. Secretaries earn about $60 to $90 to start.

The following are descriptions of typical stenography and secretarial jobs as reported in the Department of Labor's *Dictionary of Occupational Titles.*

Stenographer. Takes dictation in shorthand of correspondence, reports, and other matter, and transcribes dictated material, using typewriter. Performs variety of clerical duties except when working in stenographic pool. May transcribe material from sound recordings.

Secretary girl friday; secretarial stenographer. Schedules appointments, gives information to callers, takes dictation, and otherwise relieves officials of clerical work and minor administrative and business detail: Reads and routes incoming mail. Locates and attaches appropriate file to correspondence to be answered by employer. Takes dictation in shorthand or on Stenotype machine and transcribes notes on typewriter, or transcribes from voice recordings. Composes and types routine correspondence. Files correspondence and other records. Answers telephone and gives information to callers or routes call to appropriate official and places outgoing calls. Schedules appointments for employer. Greets visitors, ascertains nature of business, and conducts visitors to employer or appropriate person. May or may not take dictation. May arrange travel schedule and reservations. May compile and type statistical reports. May supervise clerical workers. May keep personnel records. May record minutes of staff meetings.

Applicants should have had courses in typing and other secretarial and business subjects in high school, along with English.

First Year

	F H-C°	W H-C	S H-C
Typing I, II, III	5-3	5-3	5-3
Shorthand I, II, III	4-3	4-3	4-3
Business English I, II, III	3-3	3-3	3-3
Business Math	3-3		
Business Machines I, II		3-3	3-3
General Sociology	3-3	3-3	
Personal Development			3-3
P.E.		3-1	3-1
	18-15	21-16	21-16

°H—hours, C-credits

Second Year

Advanced Transcription I, II, III	4-3	4-3	4-3
Office Procedures I, II, III	4-3	4-3	4-3
Principles of Economics	3-3		
Business Environment	3-3		
Human Relations II	3-3		
Filing and Record Management		3-3	
Business Law		3-3	
Health			3-3
Communications Skills III			3-3
Elective (Business)		3-3	3-3
P.E.			3-1
	17-15	17-15	20-16

Secretarial

One Year Program

See description above.

	F H-C	W H-C	S H-C
Typing I, II, III	5-3	5-3	5-3
Shorthand I, II, III	4-3	4-3	4-3
Business English I, II, III	3-3	3-3	3-3
Business Mathematics	3-3		
Business Machines I, II		3-3	3-3
Office Procedures I, II, III	4-3	4-3	4-3
	19-15	19-15	19-15

Secretarial Science

College Transfer

This program is recommended for students who plan to transfer to the major program in secretarial science or business education at Oregon State University.

Freshman Year

	F	W	S
Wr 111, 112 English Composition	3	3	
SS 111, 112, 113 Stenography[1]	3	3	3
SS 121, 122, 123 Typing[1]	2	2	2
BA 101 Introduction to Business	4		
Literature or science sequence	3-4	3-4	3-4
Physical Education	1		1
Personal Health	2		
Electives		2-3	5-6
	16-17	15-16	15

Sophomore Year

EC 201, 202, 203 Principles of Economics	3	3	3
BA 211, 212, 213 Principles of Accounting	3	3	3
SS 211, 212, 213 Applied Stenography	3	3	3
PS 201 American Governments (secretarial science majors)	3		
Hst 203 History of the United States (secretarial science majors)			3
Psy 201, 202 General Psychology and Sp 111 Fundamentals of Speech (business education majors)	3	3	3
BA 224 Business Communications	3		
Physical Education	1	1	1
Electives to bring total to 93 hours		2-5	2
	17	15	15

Total: 93 hours

[1]Students who have had previous training in stenography and typing should enroll in classes commensurate with their abilities.

Courses

2.502 Advanced Transcription I (4 class hrs/wk) 3 credits
Stenographic work on a production basis with emphasis on comprehensive reading of notes in thought sequence and sustained transcription practice. Aims at coordinating skills and speed of typing, shorthand, and English essentials.

2.504 Advanced Transcription II (4 class hrs/wk) 3 credits
Dictation of unfamiliar material at levels accepted by business. Study of terminology in special areas such as legal, medical, and other specified areas.
Prerequisite: Advanced Transcription I, 2.502.

2.506 Advanced Transcription III (4 class hrs/wk) 3 credits
Designed to train students for production work while allowing specialization in professional and industrial fields such as legal, engineering, medical, etc. Transcription of material dictated from these special areas.
Prerequisite: Advanced Transcription II, 2.504.

2.314 Advertising (3 class hrs/wk) 3 credits
Detailed examination of the purposes, preparation, placement and analysis of the various types of advertisements within each of the media such as television, radio and the newspaper. The relative merits of several media are then explored. The course involves practice in the planning and analysis of complete advertising campaigns and their coordination with other marketing strategies.
Prerequisite: Marketing BA 223, 2.223.

1.506 Applied Economics (3 class hrs/wk) 3 credits
Principles involved in the operation of the American economic system. Role of business and industry in the total economy. Basic economic principles are applied to the relationship of employer and employees. Topics considered include historic trends, business organization, price and competition, imperfect competition, and monopoly, price levels, business cycles, taxation, labor unions, management association, labor-management relations, labor legislation, and social and private security.

SS 211, 212, 213 Applied Stenography 3 credits
Advanced principles and phrases; dictation and transcripts covering vocabularies of representative business; legal forms, newspaper and magazine articles.
Prerequisite: SS 113, 123 or equivalent.

2.110 Accounting I (3 class, 1 lab hrs/wk) 3 credits
Introduction to basic principles of bookkeeping and accounting; the bookkeeping cycle; journals and ledgers, special journals and subsidiary ledger and financial statements.

2.111 Accounting II (3 class, 1 lab hrs/wk) 3 credits
The bookkeeping and accounting cycle as it applies to the combination journal; payroll accounting, payroll taxes applying to the employer, depreciation and disposal of fixed assets, and principles for the recording of bad debts.
Prerequisite: Bookkeeping and Accounting I.

2.112 Accounting III (3 class, 1 lab hrs/wk) 3 credits
Introduction to accounting principles as applied to departmental and partnership accounting; controls and records, corporation accounting, and manufacturing accounting.
Prerequisite: Bookkeeping and Accounting II.

5.439 Accounting for Dental Assistants
(2 class, 3 lab hrs/wk) 3 credits
The basic principles of bookkeeping and accounting applied to the dental field, including the bookkeeping cycle, journals, and ledgers, special journals and subsidiary ledgers, and financial statements.

BA 214 Business Communications
Extensive practice in writing effective letters and reports. A study of mechanics, principles, tone, and effectiveness will enable him to achieve desired results. The planning, organizing and writing of reports presented so that the student may advance progressively from simple problems to the more complex reports required in the business world.

1.120 Business English I (3 class hrs/wk) 3 credits
A practical approach to effective expression in business and industry, which provides training in the four areas of communication: Vocabulary expansion, spelling improvement, development of desirable attitudes and techniques. A complete streamlined course in the grammar of business communication, oral and written, is begun in this unit.

1.122 Business English II (3 class hrs/wk) 3 credits
Continues with training in the grammar of business communications, vocabulary development, and spelling improvement. Correct usage of punctuation, capitalization, abbreviations, and figures is included in this unit, as well as an introduction to writing craftsmanship and skill.

1.124 Business English III (3 class hrs/wk) 3 credits
Continues the study of writing craftsmanship and skill, with emphasis on the writing of effective business letters, memorandums, reports, and other written communications. Speech and informal personal communications are also studied.

BA 125, 2.125 Business Environment
(3 class hrs/wk) 3 credits
The business organization's role and responsibility in society. The interrelationships of major functional areas of business. The study of the systems approach to management process with the intention of orienting the student in the field of business and to help him determine his field of major concentration. (No credit if credit is received for Introduction to Business, BA 101)

BA 226 Business Law (3 class hrs/wk) 3 credits
The framework of the law as it affects the businessman; how the law operates and is enforced in business. Course would be valuable to both the business and non-business student because of its emphasis on practical aspects of the framework of the law and its relation to society and business.

2.519 Business Machines I (2 class, 1 lab hrs/wk) 3 credits
Combines basic mathematics with instruction in the applications of business machines to bookkeeping and other office problems. A review of mathematics with particular emphasis on shortcuts and basic functions in the use of decimals, fractions, percentages, and interest is covered in the early part of the term. The general functions of business machines and understanding of their application in business and the acquiring of reasonable skills in their use is a major goal.
Prerequisite: Business Math, 2.206.

2.521 Business Machines II (2 class, 1 lab hrs/wk) 3 credits
Particular attention is given to stenographic dictating and transcribing machines. Practice in planning layouts, cutting stencils and masters for use in duplicating copy and the use of photographic and electronic reproductive devices is covered. Students study the use of letter guides, screening plates, and correction and patching devices.
Prerequisite: Business Math, 2.206; Typing I, 2.101.

2.206 Business Mathematics (3 class hrs/wk) 3 credits
Fundamental mathematics as they apply to the business organization. Special attention is given to fractions, decimal equivalents, percentages, estimating and checking answers. Business measurements covered in this term include ledger accounting, bank statement reconciliations, invoicing and discounting, inventory valuation techniques, and profit margin analysis.

2.210 Business Mathematics/Statistics
(3 class hrs/wk) 3 credits
Complex mathematical calculations applicable to the firm. The material covered in this course includes the mathematics of payroll, depreciation, insurance, taxes, stocks and bonds, borrowing and lending funds, and sinking funds and annuities. A special section in the latter part of the course includes the elements of statistical analysis, including the measures of central tendency, samplings, ratios, and measurements of variation. The final unit in the course involves the students in an analysis of comparative business statistics by using charting and graphing techniques.
Prerequisite: Business Mathematics 2.206.

2.500 Business Records and Reports
(3 class hrs/wk) 3 credits
Business reports needed for pricing, accounting records, profit and loss statements, reports for local, state, and federal governments in such matters as Social Security, withholding taxes, industrial accident, and licensing requirements. Information is also included on salary records, employee records, procedures for making out orders, charges, billings, inventory control, and other administrative details.
Prerequisite: Second-year standing.

2.114 BA 218 Consumer Finance (3 class hrs/wk) 3 credits
Savings and investment opportunities available to the American consumer. Emphasis on personal budgets, real estate ownership, wise use of consumer credit, credit institutions, social security, stock market, mutual funds, and individual tax and estate planning. The course designed for non-business, vocational, and college transfer students and for business students wishing an additional course beyond beginning finance.

2.508 Filing and Records Management
(3 class hrs/wk) 3 credits
Rules and principles of indexing, filing, establishing and maintaining a filing system, and training in the various methods of filing such as alphabetical, numerical, subject, geographic, Variadex, Soundex, and Kardex.

2.402 Financial Institutions (3 class hrs/wk) 3 credits
Financial institutions operating in the American economy. History and analysis of the economic significance of the major financial institutions that serve the consumer, the government, and the business community.
Prerequisite: Financial Management, BA 222, 2.222.

BA 222, 2.222 Financial Management
(3 class hrs/wk) 3 credits
Problems encountered in the financial management of the business organization. The emphasis is on the decision making area of managerial finance. The student is initially exposed to the finance function and elements of financial analysis and control. Planning and forecasting of future needs and directions are stressed. Units on budgeting; short-, intermediate-, and long-term financing; debt vs. equity financing for optimal capital structure; sources, uses, and the flow of funds.
Prerequisite: Accounting BA 212.

2.412 Investments 3 credits
Investment alternatives available to the private investor. Units covered include the determination of investment objectives and the establishment of a sound individual program and portfolio, the selection and analysis of corporate securities, the securities markets and their operation.

BA 101 Introduction to Business 4 credits
Business organization, operation and management intended to orient the student in the field of business and to help him determine his field of major concentration. (No credit if BA 125 has been completed.)

BA 232 Introduction to Business Statistics 3 credits
Elementary statistics techniques to aid decision making in the business environment. Emphasis is on statistical description, probability, sampling, estimation, and hypothesis testing. Problem solution by electronic digital computer is featured. Other topics such as operations research may be introduced.
Prerequisite: Math 106 (Elementary Calculus) or equivalent.

BA 111 Introduction to Management of Information Systems
Contemporary and projected future business information processing systems. Overview of the hardware; i.e., unit records and digital computer equipment. The artificial languages used in solving problems in business data processing systems. Emphasis on the involvement in management decision making in a job definition, equipment solution, and systems design.

2.607 Keypunch Operation I 3 credits
Familiarization with the IBM card, interpretation of punched holes in card. Introduction of the 026 and 029 card punch. Operational functions and keyboard of both numeric and alphabetic. The purpose and use of functional keys. Methods of duplication and error correction of the card punch. Use and development of program drum card.

2.510 Letter Writing and Reports 3 credits
Extensive practice in writing effective letters and reports. A study of mechanics, principles, tone, and effectiveness will enable him to achieve desired results. The planning, organizing, and writing of reports will be presented so that the student may advance progressively from simple problems to the more complex reports required in the business world.

2.606 Management Data Processing 3 credits
Overview of the equipment used in punched card (unit record) and computer data processing. Major areas of data processing that involve management decision making: Job definition—the determination of whether or not an organization would benefit by a data evaluation of available systems with respect to present and future organizational requirements; and systems design—the development and evaluation of master plans for the implementation of equipment.

2.224 Manpower Management (non-business)
(3 class hrs/wk) 3 credits
Personnel management and manpower management. Considerable work in manpower management improvement and analysis.

2.318 Market Analysis and Segmentation 3 credits
Examination of the different types of markets that exist in our economy, how these markets may be identified, the analysis and preparation of products for presentation, and the analysis of projected and perceived product and brand images.
Prerequisite: Marketing, BA 223, 2.223.

BA 223, 2.223 Marketing (3 class hrs/wk) 3 credits
Role of Marketing in our socio-economic system. Emphasis upon market problem solving and decision making required by Management. Sales promotion critically analyzed and promotional methods evaluated. The course is designed as a background course for those students specializing in marketing and for those students in business and other divisions that will be taking only one course in the field. Both groups are provided with comprehensive treatment of Marketing as it operates in American industry today.

2.518 Office Management 3 credits
Principles and successful practices used in getting office work accomplished. The effective solution of office management using both quantitative and non-quantitative analysis.

2.512 Office Procedures I (3 class hrs/wk) 3 credits
Introduction to the secretarial profession, secretarial typewriting and duplicating, secretarial communications responsibilities, and use of transmittal services.
Prerequisite: Typing I.

2.514 Office Procedures II (class hrs/wk) 3 credits
This course is a continuation of Office Procedures I. It covers secretarial management of records; handling travel and meeting arrangements; collecting, processing, and presenting business data; financial and legal aspects of secretarial work; and preparing for a professional future.
Prerequisite: Office Procedures I.

2.516 Office Procedures III (3 class hrs/wk) 3 credits
Specialization in office procedures related to such areas as medicine, law, science, and executive professions. Preparation of forms and reports related to these areas and building of specialized vocabularies.
Prerequisite: Office Procedures II.

2.116 Personal Development 3 credits
Importance of social and business behavior taught through the presentation of text and workbook material and the visitations of guest speakers. Individual work in such areas as weight control, hair and complexion care, voice and personality problems. Etiquette will deal with such social graces as dining out, table manners, travel information, tipping, making of reservations. Money management, homelife, problems of city living, job applications and interviews.

BA 211, 212, 213 Principles of Accounting
3 credits each term
Introduction to field of accounting; technique of account construction; preparation of financial statements; application of accounting principles to practical business problems; proprietorship studies from standpoint of single owner, partnership, and corporation.

EC 201, 202, 203 Principles of Economics 3 credits each
Principles and policies and their relation to specific goals and policies of our national economy.
Prerequisite: Sophomore standing, 201 prerequisite for 202.

BA 221, 2.221 Production Management
(3 class hrs/wk) 3 credits
An introductory analysis as to allocation of productive resources, i.e., capacity, control, authority and productivity. A survey of the development of modern industry and scientific management, and introduction to the operating principles of production.
Prerequisite: BA 213 and BA 232.

2.320 Real Estate 3 credits
Introduction to real estate. Includes the economic, social and legal basis of real estate transactions, factors of property rights, taxation, real estate instruments, finance and property ownership.

2.410 Risk and Insurance 3 credits
Concepts of risk, probability, and insurance; role of insurance in the management of risk. An examination of the underlying legal principles and common elements of most insurance contracts. Special emphasis on the role of insurance from the viewpoint of the consumer; business and personal applications of the major types of property and liability insurance, and life and health insurance with emphasis on the underlying economic need each is designed to meet.

BA 238, 2.238 Salesmanship
Role of sales as an integral part of the total marketing function. The application of selling to the behavioral science is included with special emphasis on sales psychology, sales techniques and the fundamental principles of sales communications.

2.316 Salesmanship (3 class hrs/wk) 3 credits
Human relations, characteristics of the customer, buying motives, approach, presentation, demonstration, overcoming objections and excuses, closing the sale, and objective selling. Each student is given the opportunity to develop a sales approach for presentation and analysis in class.

2.509 Seminar in Occupational Development 3 credits
Operations of local business firms, the occupations therein, practical experience in working with management. It is each student's responsibility to meet independently with the management of a specific organization, prepare a detailed report and personally conduct his class on a tour through the vital parts of the organization.
Prerequisite: Sixth-quarter standing.

2.105 Shorthand and Transcription
(3 class, 2 lab hrs/wk) 3 credits
Introduction to theory of Gregg Shorthand, Simplified, including the alphabet, brief forms, phrasing and abbreviating principles.

2.106 Shorthand and Transcription II
(2 class, 2 lab hrs/wk) 3 credits
Completion of shorthand theory and review of all principles. Development of ability to construct new outlines rapidly from dictation and to lay solid foundations for further development of dictation and transcription skill. Ability to produce mailable letters is developed.
Prerequisite: Shorthand and Transcription I, 2.105.

2.107 Shorthand and Transcription III
(2 class, 2 lab hrs/wk) 3 credits
Further development of speed and accuracy in dictation and transcription. Intensive practice in refining shorthand skills and in producing mailable letters. Personal qualifications covered.
Prerequisite: Shorthand and Transcription II, 2.106.

2.580 Small Business Management (3 class hrs/wk) 3 credits
Role, organization and operation of small business in the American Society. Emphasis upon the spirit of free enterprise and problems of the small merchant in meeting competition.

SS 111, 112, 113 Stenography (5 class hrs/wk) 3 credits each
Theory of shorthand; practical application in sentence and paragraph dictation. SS 121, 122, 123 must be taken concurrently unless the student has had the equivalent. Students with one year of high school shorthand may receive credit for SS 111 only upon recommendation of the instructor.

2.550 Supervisory Management (3 class hrs/wk) 3 credits
Organizational objectives and supervisory functions and practices of the first-line administrative personnel. Emphasis on situational thinking by use of care or incident study of problems affecting foremen and administrative personnel. A review of basic concepts of influence, attitude, morale, and motivation, with emphasis on the role of the first-line supervisor in problems of communication, control, inter-group conflict, disciplinary action, reorganization and union-management dispute. A course for non-business majors.

2.232 Techniques of Business Decisions 3 credits
Concepts of probability expected value, and utility theory; basic sampling techniques, random variables, and probability distributions; basic concepts of opportunity loss and costs of uncertainty determined by incremental analysis and subjective probability; basic concepts of binomial sampling, conditional, joint, and marginal probability, statistical decision rules and their error characteristics. Methods of evaluating decisions in terms of expected loss and remission of probabilities in light of new information.
Prerequisite: Math 2.210 or Math 106.

2.101 Typing I (2 class, 3 lab hrs/wk) 3 credits
Introduction to typewriter and operation; mastery of keyboard through alphabet typing exercises and the development of the touch system.

2.102 Typing II (1 class, 4 lab hrs/wk) 3 credits
Development of speed and accuracy; introduction to various styles of business letter, and the typing of envelopes and tabulated material. Miscellaneous office procedures.
Prerequisite: Typing I (2.101)

2.103 Typing III (1 class, 4 lab hrs/wk) 3 credits
Preparation of business reports, legal forms and duplicating materials. Intensive speed and review drills to increase speed and accuracy to employment level.
Prerequisite: Typing II (2.102).

2.104 Typing, Personal (2 class, 3 lab hrs/wk) 3 credits
For students desiring to extend their present typing abilities for personal or occupational needs, and for those desiring to remedy typing deficiencies, with an end result of improvement in degree of typing skills according to individual interest. The course includes projects in correspondence, themes, outlines, tabulations, reports, and speed and accuracy development.

SS 121, 122, 123 Typing 2 credits
Theory and practice; drills of all kinds; punctuation and mechanical arrangements of business correspondence, legal forms; tabulating, manuscripts, modern business forms; straight copy timings; training and electrical typewriters. Students who have had one year of typing may receive credit for SS 121.

Developmental Education

Director

Bird, Howard F.—B.S., Elementary Education, Brigham Young University; M.Ed., Special Education, Wayne State University; Ph.D., Education Psychology, University of Minnesota.

Faculty

Berg, Jerry—M.Ed., University of Oregon.

Bonner, Jacqueline—B.S., General Science, Oregon State University; B.S., Education, Eastern Oregon College; M.S., Journalism, University of Oregon; M.S., Interdisciplinary Studies, University of Oregon. Part-time.

Ellison, James—B.S., Biology, Oregon State University; M.S., Biological Science, Oregon State University.

Halberg, Leland R.—B.S., Education, Wisconsin State College; M.S., Physics, University of Oregon; Oregon Vocational Approval.

Hayward, Billie—B.S., Education, Arkansas State College; M.A., Education, University of Wyoming. Part-time.

Marks, Rosa—M.A., University of Oregon, Education and Learning Difficulties.

The Program

The Developmental Education Department serves students through operation of the Study Skills Center, which is located on the fourth floor of The Center. The SSC is a laboratory facility which provides students with specialized equipment, materials, tools, and trained personnel for improving their proficiency in learning techniques and basic skills.

Learning assistance is offered in accelerated reading, developmental reading, spelling, effective study skills, English grammar and composition, vocabulary development, music appreciation, electronics, physiology, chemistry, shorthand, typing, 10-key calculating, nursing, psychology, air technology, mathematics and foreign languages.

The primary method of helping is individually programmed instruction combined with tutorial guidance. Some group work is offered, however, in such areas as accelerated reading and effective study skills.

Attendance at the SSC is voluntary and no credit or grade is given. No tuition is charged LCC students; however, non-LCC enrollees are charged $15 per term. The facilities are available to all persons in the College District, but priority is given LCC students.

The SSC can be helpful in many ways. For the student whose education has been interrupted and is now returning to college, the Center allows him to get "back into the swing of things" before entering regular classes; for the adult who has never been to college, it affords an opportunity to experience the learning process without classroom pressures or demands; for the non-reading adult it is an opportunity to correct a handicap without exposing himself to embarrassment; and for the student with a specific learning problem, it is an avenue of personal and immediate attention.

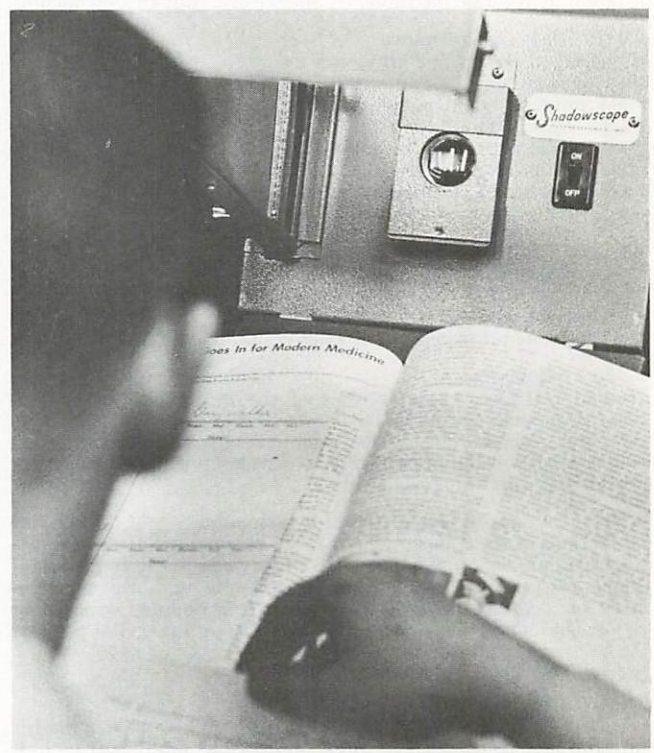
The Center has a wide variety of teaching machines, film strips, tapes, typewriters, record players, tape recorders, programmed textbooks, and other printed materials. A large portion of these materials can be checked out for overnight extended use. Thus the student can broaden his education background through independent study, and he can remedy deficiences without being confined to a classroom.

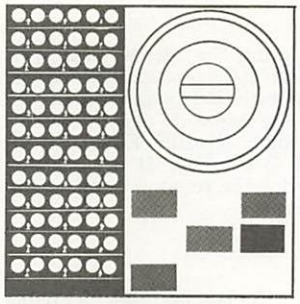
During the student's initial visit to the Center, background data is collected, a record folder is established and an instructor determines skills levels through formal and informal testing devices. Diagnostic testing may be done in mathematics, English, reading, spelling, and study skills areas. Before the student's next appointment, the background information and diagnostic evidence is studied and a skills program constructed.

During the second appointment, the diagnostic evidence and the recommended skills program are fully explained. Thereafter, the student's performance is evaluated at the end of each lesson. His progress and performance determine specific materials and techniques to be employed on subsequent visits. The student's weekly lesson, diagnostic information, answer sheets, and anecdotal comments are kept in his record folder. The student is responsible for maintaining most of his records and recording the amount of time he spends working in each skill area.

In constructing a lesson, teachers employ multi-level materials and several different modes of learning media. This approach allows the student to attack his skill deficiency at the proper level and to utilize a number of learning avenues. This technique also allows the instructor a measure of flexibility in placement, in that he is able to move a student from one level of difficulty to another without impediment.

The student normally works on several skills and utilizes three or four different kinds of materials and media during a lesson. This gives him a variety of tasks to accomplish and helps make the lesson more interesting. The lessons generally last about one hour. During three-quarters of the time, the student is working independently after consulting with his instructor.





Data Processing

Director

Wilkes, Floyd A.—B.S., Accounting, Brigham Young University. Oregon Vocational Approval.

Faculty

Cox, James W.—B.S.E.E., University of Washington; M.B.A., Production Management and Data Processing, Utah State University. Oregon Vocational Approval.

Lamb, Charles—Oregon Vocational Approval.

Nehring, Jerry—Oregon Vocational Approval.

Data Processing

Two Year Associate Degree Program

The data processing program is structured to provide training for persons planning to work as data processing machine operators and computer programmers. Course offerings are subject to the availability of equipment.

Demand for trained personnel in this field is growing beyond the availability of trained personnel, and with the increasing complexity of business it is anticipated that this condition will continue. Applicants planning to enter this program should have had some background in high school business courses or practical experience in business, and an interest in working with records, developing systems of processing and planning for business records and reports.

First Year

	F		W		S	
	H	C*	H	C	H	C
Survey of Data Processing	3	3				
Bookkeeping & Accounting I, II, III**	4	3	4	3	4	3
Mathematics II, III	3	3	3	3		
Communications Skills I, II**	3	3	3	3		
Elective	3	3				
Unit Record Equipment I, II			5	4	8	4
Personal Health			3	3		
Mathematics for Data Processing					5	5
Applied Economics**					3	3
	16	15	18	16	20	15

*H=hours, C=credits

**College transfer students substitute the following:
BA 211, 212, 213 Accounting for Bookkeeping & Accounting I, II, III.
Wr 111 English Composition for Communications Skills I.
Sp 111 Fundamentals of Speech for Communications Skills II.
Ec 201, 202, 203 for Applied Economics.

Data processing field projects in the summer between the first and second year require 30 hours for 10 credits.

Second Year

	F		W		S	
	H	C	H	C	H	C
Computer Programming I, II, III	9	5	9	5	9	5
Psychology or Psychology 201	3	3				
Introduction to Business Statistics	3	3				
Elective	3	3	6	6		
Automated Systems & Procedures			3	3		
Human Relations I or Psychology 202			3	3		
Recent Developments in Data Processing					5	4
Business Law					3	3
	18	14	21	17	17	12

Courses

2.623 Automated Systems & Procedures
(3 class hrs/wk) 3 credits
Fundamentals of automated data systems and procedures. Techniques and principles of systems analysis, forms design and control, systems economics.
Prerequisite: Second-year standing in Data Processing Curriculum.

2.611 Computer Programming I
(3 class-6 lab hrs/wk) 5 credits
Functions and capacities of computers; block diagramming and problem definition, introduction to the IBM 360 computer.
Prerequisite: Unit Record Equipment II, or consent of instructor.

2.613 Computer Programming II
(3 class-6 lab hrs/wk) 5 credits
Continued use of computers; instruction in tab and/or disk and magnetic storage media. Further applications of data processing language to various machines.
Prerequisite: Computer Programming I, 2.611.

2.605 Computer Programming III
(3 class-6 lab hrs/wk) 5 credits
Survey of general languages used in data processing and their applications. Provides specific problems oriented to language use.
Prerequisite: Computer Programming II, 2.613.

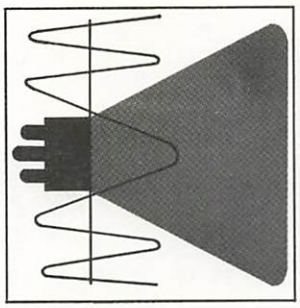
2.610 Data Processing Field Projects
(30 hrs field work/wk) 10 credits
Practical work experience in business data processing. Production work in machine processes and basic functions of data processing. Supervision and conference sessions.
Prerequisite: Three terms Business Data Processing curriculum completed.

2.625 Recent Developments in Data Processing
(3 class-2 lab hrs/wk) 4 credits
Information on latest developments in data processing. Guest lecturers from leading manufacturers invited to present current and proposed changes in data processing. Visitations to businesses.
Prerequisite: Sixth-term standing in Data Processing curriculum.

2.601 Survey of Data Processing
(3 class hrs/wk) 3 credits
Introduction to history, development and basic methods, techniques, and systems of manual, mechanical, and electronic data processing.

2.602 Unit Record Equipment I
(3 class-2 lab hrs/wk) 4 credits
Basic machines used in data processing; use of the key punch, interpreter, sorter, collator, and reproducing punch.
Prerequisite: Survey of Data Processing, 2.601.

2.604 Unit Record Equipment II
(2 class-6 lab hrs/wk) 4 credits
Advanced instruction and practice on data processing machines; tabulating machine with and/or without the calculator. Projects using the various functions of data processing.
Prerequisite: Unit Record Equipment I, 2.602.



Electronics

Chairman

Houglum, Roger J., B.S., M.Ed., University of Oregon; FCC Radiotelephone First Class License; Oregon Vocational Certificate.

Faculty

Huntington, James R., Radio Announcer and Engineering Vocational Certificate; Oregon Vocational Certificate.

Lichty, Thomas W., FCC Radiotelephone License; Oregon Vocational Approval.

McCarroll, Darwin, FCC Radiotelephone First Class License; Oregon Vocational Certificate.

Nott, Ray, Oregon Vocational Approval.

Domestic Refrigeration Service

One Year Program

Education and training are provided to develop the skills, basic knowledge, proper attitudes, and appreciation for successful entrance and advancement in the field of domestic refrigeration.

The opportunity for employment in the appliance field upon completion of the complete two-year appliance service program is available in appliance servicing, appliance retail or distributor service (factory service) departments, general service repair shops, or in specialized service shops.

Successful completion of school courses and work experience can lead to positions such as service manager, ownership, and/or management of an appliance repair business.

The Associate of Science Degree is awarded after completion of both the Home Appliance Service and Domestic Refrigeration Service programs. The curriculums may be taken in any order, but the preferred sequence is Home Appliance Service the first year and Domestic Refrigeration the second.

Curriculum

	F H-C*	W H-C	S H-C
Domestic Refrigeration Services I, II, III	5-5	3-3	3-3
Domestic Refrigeration Service I, II, III Lab	15-5	17-6	17-6
Machine Shop Orientation**	5-3		
Welding IA**	5-2		
Machine Shop Operation**		5-3	
Practical Physics I (Heat, Sound, Light)		5-4	
Human Relations I**			3-3
Salesmanship			3-3
	30-15	30-16	26-15

*H—hours, C—credits

**These courses must be taken during the second year with Home Appliance Service, if Domestic Refrigeration Service has been taken the first year. The Domestic Refrigeration must be taken to meet the requirement for the Associate of Science Degree: Applied Economics (3 Credits), Health Education (2 Credits), Communications Skills II (3 Credits). It is suggested that these courses be scheduled during the summer between the Appliance and Refrigeration sequences.

Courses

3.606 Domestic Refrigeration I (5 class hrs/wk) 5 credits

3.607 Domestic Refrigeration I Lab (15 lab hrs/wk) 5 credits
Principles of Refrigeration. Use of hand tools and their care, bending and flaring of copper tubing, silver soldering, theory of compressors, use of gauges and manifold assemblies.

3.608 Domestic Refrigeration II (3 class hrs/wk) 3 credits

3.609 Domestic Refrigeration II Lab (17 lab hrs/wk) 6 credits
Effect of temperature and pressure on gases and liquids; theoretical operation of expansion valves; floats and receivers, and condensers; purging systems of air and moisture; charging refrigeration systems; lubrication problems; testing the refrigeration system after repairs have been made.
Prerequisite: Domestic Refrigeration I.

3.610 Domestic Refrigeration III (3 class hrs/wk) 3 credits

3.611 Domestic Refrigeration III Lab (17 lab hrs/wk) 6 credits
Types of compressors used in mechanical refrigeration systems, non-mechanical refrigeration systems, metering devices, supplementary system controls, electrical circuits in typical modern refrigeration units. Shop experience in repairing and servicing modern domestic refrigeration units.
Prerequisite: Domestic Refrigeration II.

1.608 Human Relations I (3 class hrs/wk) 3 credits
Principles of psychology that will be of assistance in the understanding of personal relationships on the job. Motivations, feelings, emotions, and principles of learning are considered with particular reference to "on-the-job" problems.

2.316 Salesmanship (3 class hrs/wk) 3 credits
Human relations, characteristics of the customer, buying motives, approach, presentation, demonstration, overcoming objections and excuses, closing the sale, and objective selling.

3.392 Marine Shop Orientation (2 class, 3 lab hrs/wk) 3 credits
Various machine shop tools and their use, setup and operation of machine shop.

4.150 Welding IA (1 class, 4 lab hrs/wk) 2 credits
Set up and operation of oxyacetylene welding equipment. Practice in welding, brazing, and soldering ferrous and non-ferrous metals and their alloys.

4.300 Practical Physics I (Heat, Sound, Light) (3 class, 2 lab hrs/wk) 4 credits
Introductory practical physics covering heat, light, sound.

Home Appliance Service

One Year Program

What was once a trade largely concerned with locating and replacing worn or broken parts has, in the space of just a few years, become one in which the serviceman must have a thorough mastery of electricity, basic electronics, and physical science.

Training for employment in the home appliance field is a combination of classroom study of theoretical principles and daily shop experience working with such domestic appliances as automatic washers, dishwashers, dryers, hot water heaters, water pumps, and electric stoves.

The Associate of Science Degree is awarded after completion of the sequence in domestic refrigeration service. The curriculums may be taken in either sequence, but the preferred sequence is home appliance service the first year and domestic refrigeration the second.

Curriculum

	F H-C°	W H-C	S H-C
Home Appliance Service I, II, III	5-5	3-3	3-3
Home Appliance Service I, II, III Lab	15-5	17-6	17-6
Electronics I, II°	5-4	5-4	
Electrical Drafting°°			4-2
Mathematics II°° (Algebra)	3-3		
Practical Physics II (Mechanics)		5-4	
Communications Skills I			3-3
	28-17	30-17	27-14

°H—hours, C—credits

°°If a student elects to take Domestic Refrigeration Service sequence in his first year, these courses must be taken the first year. The Home Appliance Service courses must be taken to meet the requirement for the Associate of Science Degree: Applied Economics (3 Credits), Health Education (2 Credits), Communications Skills II (3 Credits). It is suggested that these courses be scheduled during the summer, between the Appliance and Refrigeration sequences.

Courses

3.600 Home Appliance Service I (5 class hrs/wk) 5 credits

3.601 Home Appliance Service I Lab
(15 lab hrs/wk) 5 credits
Use of hand and machine tools and their maintenance, electrical meters and mechanical test equipment. Operation of basic electrical components used in modern appliances. Shop safety.

3.602 Home Appliance Service II (3 class hrs/wk) 3 credits

3.603 Home Appliance Service II Lab
(17 lab hrs/wk) 6 credits
Work with mock-ups of appliance components to gain familiarity with their characteristics and operation. Trouble-shooting, repairing components. Introduction to modern home appliances.
Prerequisite: Home Appliance Service I.

3.604 Home Appliance Service III (3 class hrs/wk) 3 credits

3.605 Home Appliance Service III Lab
(17 lab hrs/wk) 6 credits
Diagnosis of both mechanical and electrical faults in such modern domestic appliances as washers, dryers, ranges, dishwashers, and waste disposals. Development of ability to locate cause of equipment malfunction by deduction and reasoning ability. Performing service operations on modern home appliances.
Prerequisite: Home Appliance Service II.

4.302 Practical Physics II (Mechanics)
(3 class, 2 lab hrs/wk) 4 credits
Introductory practical physics covering matter, measurements, mechanics, and machines.
Prerequisite: Mathematics I 4.200 or equivalent.

4.920 Electronics I (3 class, 2 lab hrs/wk) 4 credits
Electron theory of matter, electron movement, voltage and current relationships. Analysis of series, parallel, and series parallel circuits.
Prerequisite: High school algebra or Mathematics II 4.202.

4.922 Electronics II (3 class, 2 lab hrs/wk) 4 credits
Use of meters for measurement of voltage, current, power and resistance; alternating current. Relationship of AC to radio and audio frequency voltages and currents.
Prerequisite: Electronics I.

Electronic Engineering Technician

Two Year Associate Degree Program

This program provides the basic principles, theory, and lab work in the practical phases of electronics. This training is such as to prepare the beginning technician for understanding and knowledge of a highly skilled aspect of electronics, so that he can work under the supervision of an engineer or the engineering departments where technical competence is needed.

Satisfactory completion of the two-year program qualifies the person for employment as an electronic engineering technician, electronic instrument technician, electronic lab technician, guided missile technician, industrial electronic technician, microwave radio technician, and radio technician. The rapid expansion of the electronic industry in this "space age" has created a great demand for engineering technicians in electronics. Opportunities and demand for employment in this field are greater than the supply of trained personnel and will continue at this rate because of the unusual expansion of the electronics industry. Job opportunities are available in government agencies involved in missile programs and space exploration. Automation developments in business and industry offer opportunities for trained technicians.

Applicants must have completed high school or the equivalent and should have successfully completed a course in Algebra. An entrance test must be passed.

Curriculum

First Year

	F H-C°	W H-C	S H-C
Electrical Theory (DC) I	5-4		
Electrical Theory (AC) II		5-4	
Engineering Problems I, II	2-2	2-2	
Technical Math I, II, III	4-4	4-4	4-4
Applied Physics I, II	5-4	5-4	
Communications Skills I, II	3-3	3-3	
Drafting I	4-2		
Electrical Drafting		4-2	
Practical Descriptive Geometry			4-2
Electrical Circuits			3-3
Electrical Circuits Lab			6-2
Vacuum Tube and Transistor Analysis			3-3
Vacuum Tube and Transistor Analysis Lab			3-1
	23-19	23-19	23-15

°H—hours, C—credits

Second Year

	F H-C	W H-C	S H-C
Oscillator Circuits and Design		2-2	
Oscillator Circuits and Design Lab		6-2	
Servo Systems	4-2		
Wave Generation and Shaping	5-3		
Electrical Math	4-4		
Applied Economics	3-3		
Industrial Electronics I, II		5-3	6-4
Industrial Television I, II		5-3	3-1
Amplifier Circuits and Design	3-3		
Amplifier Circuits and Design Lab	6-2		
Electronic Data Processing		3-3	
Health Education		2-2	
Advanced Electronic Circuits			5-3
Automation Systems			3-3
Microwaves			5-3
	25-17	23-15	22-14

°H—hours, C—credits

Courses

6.115 Electrical Mathematics (4 class hrs/wk) 4 credits
Applied mathematics for electronic engineering technicians. Introduction to calculus, covering graphical methods, differentiations and integration.
Prerequisite: Technical Mathematics III, 6.266, or equivalent.

6.127 Practical Descriptive Geometry (4 lab hrs/wk) 2 credits
Review of advanced drafting problems, descriptive geometric principles.
Prerequisite: Third-term standing or approval of department head.

6.135 Engineering Problems I (2 class hrs/wk) 2 credits
Meets calculating needs of the technician in electronics, civil and structural engineering and technical drafting. Engineering methods and related problem solving considered; emphasis on slide rule computation.
Prerequisite: One year of high school algebra or equivalent.

6.135 Engineering Problems II (2 class hrs/wk) 2 credits
Continuation of the slide rule and related problem solution. Other means of calculation related to problem solution in various fields. Problem solution structured in terms of analysis, formulation, calculation, and clear presentation.
Prerequisite: Engineering Problems I, 6.135.

6.200 Electrical Theory (DC) I
(3 class, 2 lab hrs/wk) 4 credits
Electronics on the basis of direct currents with an emphasis on contemporary techniques as a supplement to basic concepts. Principles of electron physics, currents, and factors affecting its magnitude, circuit analysis, phenomena of magnetism and electromagnetism, inductance, capacitance, and electrical measurement instruments.
Prerequisite: High school algebra or equivalent.

6.202 Electrical Theory (AC) II
(3 class, 2 lab hrs/wk) 4 credits
A continuation of electrical theory on the basis of alternating currents with an emphasis on contemporary techniques as a supplement to basic concepts. Analysis of the sine wave, circuits with a sine wave input, and resonance.
Prerequisite: Second-term standing or approval of department head.

6.204 Electrical Circuits (3 class hrs/wk) 3 credits

6.205 Electrical Circuits Lab (6 lab hrs/wk) 2 credits
Electrical theory with an emphasis on the analysis of the characteristics of complex waveform circuits.
Prerequisite: Third-term standing or approval of department head.

6.210 Vacuum Tube and Transistor Analysis
(3 class hrs/wk) 3 credits

6.211 Vacuum Tube and Transistor Analysis Lab
(3 lab hrs/wk) 1 credit
Electrical characteristics of vacuum tubes and transistors; electron physics with emphasis on electron emission and fundamental transistor theory.
Prerequisite: Third-term standing or approval of department head.

6.212 Oscillator Circuits and Design
(2 class hrs/wk) 2 credits

6.213 Oscillator Circuits and Design Lab
(6 lab hrs/wk) 2 credits
Single-phase rectifier circuits and filters with calculation of the ripple-factor. Introduces the fundamental feedback equation and covers positive and negative feedback.

6.214 Amplifier Circuits and Design
(3 class hrs/wk) 3 credits

6.215 Amplifier Circuits and Design Lab
(6 lab hrs/wk) 2 credits
Application of vacuum tubes and transistors in amplifier circuits. Analyzes the vacuum-tube amplifier into its basic and equivalent circuit, loadlines, distortion, and pentode and beam-power tube considerations. Analyzes transistor amplifiers in various circuit configurations and covers biasing methods. Transformer analysis, transformer-coupled amplifiers and R-C coupled amplifiers.
Prerequisite: Fourth-term standing or approval of department head.

6.216 Advanced Electronic Circuits
(2 class, 3 lab hrs/wk) 3 credits
Current problems and opportunities with computers, communications, industrial controls, electronics, microwaves, and radar. Simulated problems of industry.
Prerequisite: Sixth-term standing or approval of department head.

6.218 Industrial Electronics I (2 class, 3 lab hrs/wk) 3 credits
Principles and applications of motors in industry; review of the principles of D-C motors and generators. A-C motors and generators, synchronous motors, 3 phase systems, circuit protective and switching equipment.
Prerequisite: Fifth-term standing or approval of department head.

6.220 Industrial Electronics II
(3 class, 3 lab hrs/wk) 4 credits
Continuation of Industrial Electronics I with emphasis on the control of motors and power with electronic circuits and devices.
Prerequisite: Sixth-term standing or approval of department head.

6.228 Industrial Television I (2 class, 3 lab hrs/wk) 3 credits
Television systems, scanning and synchronization, composite video signal, frequency-modulation, television receivers and monitors, picture tubes, power supplies, video amplification, and deflection oscillator and amplifier circuits.
Prerequisite: Fifth-term standing or approval of department head.

6.234 Wave Generation and Shaping
(2 class, 3 lab hrs/wk) 3 credits
Introduction to pulse techniques: historical development, typical applications, nomenclature, importance of pulse shapes, and responses of frequency-selective circuits to pulses.
Prerequisite: Fourth-term standing or approval of department head.

6.235 Industrial Television II (1 class, 2 lab hrs/wk) 1 credit
Closed circuit television systems, picture transmission, scanning process and the composite signal, camera tubes and circuits, camera video amplifier systems, camera sync and deflection generators.
Prerequisite: Sixth-term standing or approval of department head.

6.236 Servo Systems (1 class, 3 lab hrs/wk) 2 credits
Principles of servo and data transmission systems with emphasis on fundamentals. Elementary forms of control systems.
Prerequisite: Fourth-term standing or approval of department head.

6.240 Electronic Data Processing (3 class hrs/wk) 3 credits
Principles of electronic digital computers, application and programming of computers in business, industrial, and scientific organizations.
Prerequisite: Fifth-term standing or approval of department head.

6.242 Microwaves (2 class, 3 lab hrs/wk) 3 credits
Ultra-high frequencies to develop a good foundation for the development of waveguides and microwave circuitry.
Prerequisite: Sixth-term standing or approval of department head.

6.244 Automation Systems (3 class hrs/wk) 3 credits
Techniques of automation. Basic concepts of automation and covers automatic controls, pneumatic control devices, hydraulic control devices, and electronic and electric control devices.

6.261 Technical Mathematics I (4 class hrs/wk) 4 credits
Review of basic algebra, advanced work with functions, variation, systems of linear equations, exponents and radicals, and quadratic equations in one unknown.
Prerequisite: High school algebra or equivalent.

6.262 Technical Mathematics II (4 class hrs/wk) 4 credits
Review of plane geometry, its applications and analytical trigonometry on the technician level. Emphasis on problem solving.
Prerequisite: Technical Mathematics I, 6.261, or equivalent.

6.266 Technical Mathematics III (4 class hrs/wk) 4 credits
Mathematics on the technician level covering simultaneous quadratic equations, binomial theorem, arithmetic and geometric progressions, logarithms, exponential functions, complex numbers, and vector algebra.
Prerequisite: Technical Mathematics II, 6.262, or equivalent.

6.370 Applied Physics I (3 class, 2 lab hrs/wk) 4 credits
Mechanics of measurement, vectors, kinematics, work power-energy, machines and rotational motion.
Prerequisite: Technical Math I concurrently or approval of department head.

6.371 Applied Physics II (3 class, 2 lab hrs/wk) 4 credits
Structure of matter, heat, sound, and light.
Prerequisite: Technical Math II or approval of department head.

4.101 Drafting I (4 lab hrs/wk) 2 credits
Basics of drawing techniques. Emphasis on application of drafting instruments, standard orthographic projection, layout procedures, and ASA approved lettering techniques.
Prerequisite: High school algebra or approval of department head. Mathematics II, 4.202, may be taken concurrently.

4.103 Electrical Drafting (4 lab hrs/wk) 2 credits
Techniques required for the electrical and electronic fields. Charts, graphs, chassis layout; schematic, wiring, and routing diagrams; and location drawings. Standard schematics such as motor starters, annunciators, AM and EEIA approved symbols.
Prerequisite: Drafting I, 4.101, or equivalent.

Radio and Television Service

Two Year Program

Fundamentals of troubleshooting, repair, alignment, adjustment of radio and TV receivers and citizens band transceivers are taught. Training is aimed at preparing a person for entry jobs in radio and television repair.

Opportunities for employment in this field are offered in specialty radio and television repair shops, sales and service companies, commercial communications installation and service, wired music and installation service, television cable service, electronic equipment installers, radio and television wholesale and service, and factory service.

Curriculum

First Year

	F H-C°	W H-C	S H-C
Fundamentals of Radio Service I	3-3		
Fundamentals of Radio Service I Lab	12-4		
Electrical Theory (DC) I, (AC) II	5-4	5-4	
Electrical Drafting	4-2		
Math II, III	3-3	3-3	
Radio Service II, III		3-3	3-3
Radio Service II, III Lab		12-4	12-4
Communications Skills I, II		3-3	3-3
Electronics III			5-4
Applied Economics			3-3
	27-16	26-17	26-17

°H—hours, C—credits

Second Year

	F H-C	W H-C	S H-C
Television Service I, II	3-3	3-3	
Television Service I, II Lab	12-4	12-4	
Slide Rule	2-1		
Practical Physics I, II	5-4	5-4	
Audio Systems		5-3	
Salesmanship		3-3	
Health Education			2-2
Television Service III			5-5
Television Service III Lab			10-3
Employer-Employee Relations	2-2		
Human Relations I			3-3
Business Records and Reports			3-3
	24-14	28-17	23-16

3.378 Fundamentals of Radio Service I (3 class hrs/wk) 3 credits

3.379 Fundamentals of Radio Service I Lab (12 lab hrs/wk) 4 credits
Various types of chassis and component parts; use of service manuals; supply sources. Instruction in use of vacuum tube voltmeters and tubecheckers. Basic hand tools and uses. Soldering, brazing and chassis sheet metal work.
Prerequisite: Mathematics II, Electrical Theory I, and Electrical Drafting to be taken concurrently.

3.490 Radio Service II (3 class hrs/wk) 3 credits

3.491 Radio Service Lab II (12 lab hrs/wk) 4 credits
Tube types and construction, AC/DC power supplies, loudspeakers, audio output and amplifier stages, I-F and R-F amplifier, automatic volume controls, converters, mixers and oscillator stages, and radio antennas.
Prerequisite: Fundamentals of Radio Service I, Electrical Theory II, and Mathematics III to be taken concurrently.

3.492 Radio Service III (3 class hrs/wk) 3 credits

3.493 Radio Service Lab III (12 lab hrs/wk) 4 credits
Various types of receivers, service procedures and problems. Transistors and other semiconductor devices. Fundamentals of electronic musical instrument servicing.
Prerequisite: Radio Service II, Electronic Circuits taken concurrently.

3.494 Television Service I (3 class hrs/wk) 3 credits

3.495 Television Service I Lab (12 lab hrs/wk) 4 credits
Emphasis on actual servicing of television receivers. Substitution of parts; field servicing; voltage and power supplies; circuits.
Prerequisite: Fourth-term standing or equivalent.

3.496 Television Service II (3 class hrs/wk) 3 credits

3.497 Television Service II Lab (12 lab hrs/wk) 4 credits
Continuation of Television Service covering: Video-amplifiers, picture tube circuits, construction and replacement; tuners, sound section and antenna types, installation and service notes.
Prerequisite: Television Service I.

6.914 Television Service III (5 class hrs/wk) 5 credits

6.915 Television Service III Lab (10 lab hrs/wk) 3 credits
Modern television systems with emphasis on color fundamentals, the color picture tube, the deflection and convergence circuits. Receiver analyzed for troubles, alignment, and servicing. Use of color test equipment, and the setup and convergence of the set.
Prerequisite: Television Service II.

4.208 Slide Rule (2 lab hrs/wk) 1 credit
Theory, operation, and applications of the slide rule: multiplication, division, powers and roots, trigonometric functions, and logarithms.
Prerequisite: Mathematics II, 4.202, or equivalent.

4.924 Electronics III (3 class, 2 lab hrs/wk) 4 credits
Introduction to vacuum tubes. Diodes, triodes, tetrodes, pentodes, and multi-element types; solid state devices; typical power circuits. Block diagrams of specialized applications including electronic organs, tape recorders, and stereo amplifiers.
Prerequisite: Electronics II.

4.912 Audio Systems (2 class, 3 lab hrs/wk) 3 credits
High fidelity systems, components, amplifiers, pickups and loudspeakers, AM and FM tuners, record players, tape recorders, inter-communication systems. Servicing audio systems.
Prerequisite: Electronics III.

1.506 Applied Economics (3 class hrs/wk) 3 credits
Role of business and industry in the total economy; basic economic principles applied to the relationship of employer and employee.

2.500 Business Records and Reports (3 class hrs/wk) 3 credits
Reports needed for pricing, accounting records, profit and loss statements; for local, state, and federal governments in such matter as Social Security, withholding taxes, industrial accident, and licensing requirements.
Prerequisite: Second-year standing.

Fine and Applied Arts

Chairman

Wright, Rosco—B.S., Education, M. S., General Studies (Art), University of Oregon.

Faculty

Blodgett, Thomas—B.S., Art, Lewis and Clark College; M.F.A., Fine and Applied Arts, University of Oregon. Part-time.

Dean, Bruce—B.F.A., Drawing, Painting & Illustration, Art Institute of Chicago; M.F.A., Painting & Print Making, University of Illinois.

Haugse, John—B.F.A., Painting and Drawing, San Francisco Art Institute; M.F.A., Painting, University of Oregon. Part-time.

Janson, Ron Tore—B.A., M.F.A., Painting, University of Oregon. Part-time.

Koch, Edwin R.—B.S., Architecture and Allied Arts; M.F.A., Painting, University of Oregon. Part-time.

Morgan, Marston—B.A., Architecture; M.A., Art History, University of Oregon.

Wild, Bruce—B.A., Central Washington College; M.F.A., Ceramics, University of Oregon.

Courses

AA 195, 196, 197 Basic Design (6 class hrs/wk) 2 credits each
Studio exercises in basic principles of design.

Art 255 Ceramics (6 class hrs/wk) 2-4 credits (6 hrs max.)
Ceramics techniques and materials: throwing, molding, hand building; stacking, firing, and drawing kilns.

AA 291 Drawing (6 class hrs/wk) 2 credits each term (6 hrs. maximum)
Observation and selection of significant elements.

AA 290 Painting (6 class hrs/wk) 2 credits each term (6 hrs. maximum)
Use of oil color and other media.

AA 201, 202, 203 Survey of Visual Arts (3 class hrs/wk) 3 credits each
Understanding and intelligent enjoyment of visual arts through study of historical and contemporary works, motives, media, forms.

Suggested Curriculums

Architecture, Interior Architecture, and Landscape Architecture

This program is recommended for those who plan to transfer in architecture, interior architecture, and landscape architecture to the University of Oregon. Students seeking admission to these professional programs must have grade-point averages of not less than 2.50. Those successfully completing the program, with the required GPA, will be prepared to enter programs in interior and landscape architecture at the sophomore level. Students transferring into the professional program in architecture will need to complete certain professional work (usually accomplished during the freshman year) after transfer, which may extend the time required to complete the professional program beyond the normal five-year period.

Freshman Year

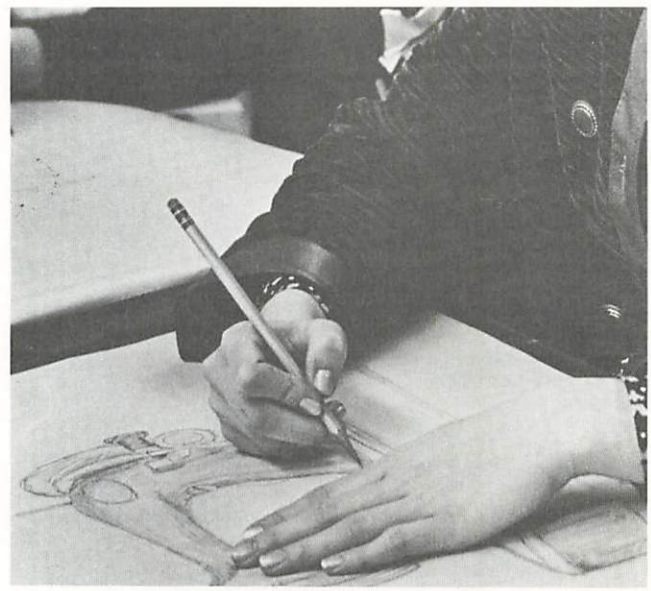
	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
Hst 101, 102, 103 History of Western Civilization	3	3	3
Mathematics[1] (all architecture students and landscape students who have not completed mathematics through Trigonometry in high school) or in high school) or Science sequence (students not required to take mathematics)	4	4	4
AA 290 Painting or AA 291 Drawing	2-3	2-3	2-3
AA 201, 202, 203 Survey of the Visual Arts	3	3	3
Physical Education	1		1
Personal Health		2	
	16-17	16-17	16-17

Total: 49-52 hours

[1]Students should enroll in mathematics at the level indicated by entrance examination scores. This requirement is met with 12 hours of mathematics numbered 101 and above.

Art and Applied Design

Recommended for students who plan to transfer in art to the University of Oregon, Oregon State University, Portland State University, or to a program in applied design at Southern Oregon College. Those who satisfactorily complete the program should complete requirements for a baccalaureate degree with two additional years of work. (Students transferring to the University of Oregon must have a 2.50 grade-point average for acceptance into the major program in fine and applied arts.)



Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Art courses:			
AA 195, 196, 197 Basic Design (All students)	2	2	2
AA 201, 202, 203 Survey of Visual Arts (9 hours, PSU; AA201, 202, 6 hours, OSU)	2-7	2-7	2-7
AA 291 Drawing (6 hours, PSU, SOC)			
AA 290 Painting, AA 255 Ceramics, or AA 293 Sculpture (6 hours, UO)			
Science sequence or 12 hours of mathematics[2]	3-4	3-4	3-4
First year language (OSU)	4	4	4
Sp 111 Fundamentals of Speech, Mus 201 Introduction to Music and Its Literature, and elective (SOC)	3	3	3
Literature sequence (UO—courses numbered 100-110 or 200-210)	3	3	3
Physical Education	1		1
Personal Health		2	
	15-16	15-17	15-16

Sophomore Year

	F	W	S
Literature sequence (PSU, SOC)[3]	3	3	3
Second year foreign language (OSU)	4	4	4
Social science sequence[4]	3	3	3
Second science or social science sequence	3-4	3-4	3-4
Art courses:			
AA 201, 202, 203 Survey of Visual Arts (9 hours, UO) AA 291 Drawing (6 hours, UO) AA 290 Painting, AA 255 Ceramics, AA 293 Elementary Sculpture OSU; 6 hours of painting, ceramics or sculpture; PSU: 9 hours of painting or 6 hours of ceramics or sculpture; UO: 3 additional hours of course begun in freshman year; SOC: 3 hours each, painting, sculpture, ceramics	9-15	9-15	9-15
Physical Education	1	1	1
Electives as necessary to bring total hours to 93			
	15-16	15-16	15-16

[1]UO and SOC: Wr 111, 112, 113, OSU and PSU: Wr 111, 112 and elective.

[2]SOC: GS 101, 102, 103 or GS 201, 202, 203.

[3]SOC students should complete Introduction to Literature or World Literature.

[4]SOC: History of the United States or American Governments. OSU: history or philosophy sequence.

Art Education

Students planning to complete their baccalaureate degree programs at Portland State University or Oregon State University should complete the transfer program in art (see above), completing Psy 201, 202 General Psychology and Sp 111 Fundamentals of Speech, instead of the second science or social science sequence during the sophomore year. Students planning to transfer to the University of Oregon, Southern Oregon College, Oregon College of Education, or Eastern Oregon College should follow the program outlined below. Successful completion of the appropriate program will permit students to complete requirements for the baccalaureate degree in two additional years.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
Literature sequence	3	3	3
AA 195, 196, 197 Basic design	2	2	2
AA 201, 202, 203 Survey of Visual Arts (UO, OCE, EOC)	3	3	3
GS 104, 105, 106 Physical Science (SOC)	4	4	4
Studio art electives (drawing, painting, sculpture, or ceramics—no more than 6 hours of each to be completed by the end of the sophomore year)[1]	3-4	3-4	3-4
Physical Education	1	1	1
	15-16	15-16	15-16

Sophomore Year

	F	W	S
Psy 201, 202 General Psychology	3	3	
Sp 111 Fundamentals of Speech (SOC, EOC, OCE)[2]			3
Social science sequence (Hst 201, 202, 203 History of the United States recommended)[3]	3	3	3
Science sequence[4]	4	4	4
Studio art electives to bring total hours to 93	4-5	3-4	4-8
Physical Education	1		1
Personal Health		2	
	15-16	15-16	15-16

Total: 93 hours

[1]Approved transfer courses in water color, printmaking, or lettering may be substituted for painting, sculpture, or ceramics, if available.

[2]UO students should take 3 hours of studio art.

[3]UO recommends Anth 207, 208, 209 Introduction to Cultural Anthropology.

[4]GS 101, 102, 103 General Biology, GS 104, 105, 106 Physical Science, mathematics according to recommended placement. OCE students should complete 12 hours of mathematics. SOC students should complete GS 101, 102, 103 General Biology or second science sequence.

Art History

Recommended for students who plan to transfer in art history to the University of Oregon. A grade-point average of not less than 2.50 is required.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
First-year language (French or German)[1]	4	4	4
Hst 101, 102, 103 History of Western Civilization	3	3	3
Studio arts (drawing, painting, sculpture or ceramics)	3-4	3-4	3-4
Physical Education	1		1
Personal Health		2	
	14-15	15-16	14-15

Sophomore Year

	F	W	S
Second-year language	4	4	4
Literature sequence	3	3	3
Science sequence or 12 hours of math	3-4	3-4	3-4
AA 201, 202, 203 Survey of the Visual Arts	3	3	3
Studio arts (drawing, painting, sculpture or ceramics)	2	2	2
Physical Education	1	1	1
	16-17	16-17	16-17

[1]Students must complete language requirement in French or German. No other language is acceptable.

Food Technology

A program in Food Preparation is planned for 1970-71. Present courses in this field are offered through the Adult Education, Home Economics and Special Training Programs Departments. Those departments may be contacted for further information.

Suggested Curriculum

Agriculture

Suggested by the School of Agriculture of Oregon State University. The program, if successfully completed, will permit transfer into most of the major curricula offered by the School of Agriculture at the junior level, and completion of baccalaureate degree programs with an additional two years of study. Students who wish to pursue major work in fisheries, food science, and wildlife management should transfer at the end of the freshman year program.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
Ch 201, 202, 203 General Chemistry[1]	4	4	4
Mth 101 College Algebra[2]		4	
Mth 102 Trigonometry			4
Bot 201, 202 General Botany or Bi 101, 102, 103 General Biology[3]	4	4	0-4
Physical Education	1	1	
Personal Health			2
Electives[4]	3-4		0-3
	15-16	16	16-17

Sophomore Year

	F	W	S
Z 201, 202, 203 General Zoology[3] or electives [4]	3	3	3
Ph 201, (202) General Physics[2]	4	(4)	
Sp 111 Fundamentals of Speech			3
Physical Education	1	1	1
Mth 200 Calculus with Analytic Geometry[2]	4		
Electives[4]		4-8	5
	15	15	15

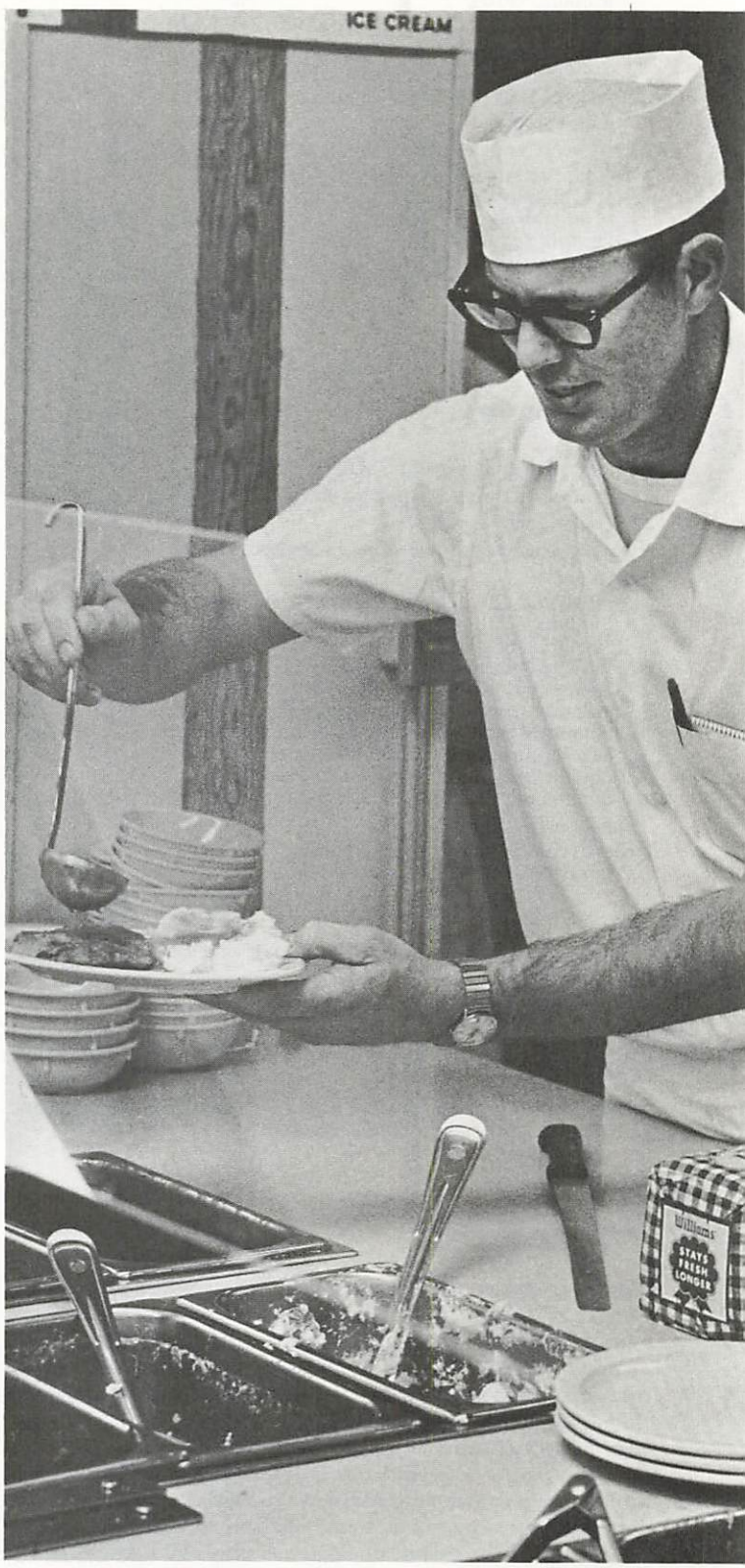
Total: 93 hours

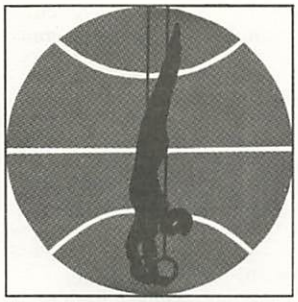
[1]Students not qualified to enroll in Ch 201, 202, 203 will complete Ch 101, 102, 103 and 241 before going on to Organic Chemistry.

[2]Students should register in mathematics at level indicated by placement test scores. Students planning to complete a curriculum option in agricultural science must complete mathematics through Mth 200 and two terms of physics.

[3]Students who elect to do their major work at OSU in agricultural economics, agricultural education, or food science and technology may take the General Biology sequence in lieu of Botany 201, 202 General Botany, Z 201, 202, 203 General Zoology, and Z 341 Genetics (Z 341 completed after transfer).

[4]Electives should be selected from the following areas: communications, humanities and social sciences, chemistry, mathematics, physics, and business.





Health and Physical Education

Chairman

Hodges, M. Cecil—B.Ed., M.S., Health and Physical Education, University of Oregon.

Faculty

Bascom, John—B.S., M.S. with Honors, Zoology, Kansas State University; M.D., Northwestern University Medical School; Ph.D., Surgery, University of Minnesota. Part-time.

Berwick, Arthur E.—B.S., Oregon State University, Food Technology; M.S., University of Oregon, Health Education. Part-time.

Brubaker, Carole—B.S., Physical Education, Ball State University; M.S., Physical Education, University of Oregon.

Chase, Gary—B.S., Pre-Medical; M.S., Physical Education, Washington State University. Part-time.

Daggett, Delpha—B.S., Physical Education, Oregon State University; M.A., Physical Education, University of Oregon.

Gyorgyfalvy, George—B.S., Physical Education, The Hungarian College of Physical Education, Budapest; M.S., Physical Education, University of Colorado.

Goulding, Florence W.—B.S., Physical Education, University of Utah; M.S., UCLA; Ph.D., Physical Education, University of Oregon.

Hannaford, Irene E.—B.A., Education, Central Washington State College; M.Ed., Central Washington State College. Part-time.

Krause, Melvin A.—B.S., M.S., Health and Physical Education, University of Oregon.

Newell, Richard—B.S., Physical Education, University of Illinois; M.S., Health, University of Oregon.

Sackett, Fred—B.S., Physical Education, Washington State University; Registered Physical Therapist, Mayo Clinic, Rochester, Minnesota.

Roth, Irvin J.—B.A., Physical Education, Willamette University; M.Ed., University of Oregon.

Tarpenning, Allen—B.S., Physical Education, Linfield College; M.Ed., Pacific University, Forest Grove, Oregon.

Young, Thomas A.—B.S., Physical Education; M.Ed., Springfield College, Springfield, Massachusetts.

The Program

Health and Physical Education offers programs and courses in health education, physical education, recreational activities, intramural sports and intercollegiate athletics.

The health education program attempts to influence student attitudes and behavior relating to individual and community health. Instructors seek out meaningful parts of medicine, psychology, physiology, sociology, economics and philosophy and integrate this knowledge to stimulate practical behavioral patterns designed to effect optimum efficiency and well-being.

In the physical education programs a variety of activities are taught for physiological and recreational values. Courses include individual, dual and team sports and other activities designed to improve fitness, movement, and creative expression. Activities are scheduled for the skilled, unskilled and handicapped. To meet College requirements for an associate degree, five terms of physical education are required.

Majors in health, physical education and recreation must begin course work in professional activities during the freshman year if they are to complete a baccalaureate program in four years. Lower division professional courses are recommended for all students planning to transfer to teacher preparation programs offered by state system institutions.

Intramural and intercollegiate athletics are an integral part of the physical education program. Both men and women students of all levels of ability are urged to participate.

The broad aim of the intramural program is to provide an opportunity for every student to participate in some type of competitive sports activity as frequently as his interests, ability and time will permit. The intramural program provides a full schedule of individual and team sports leading to school championships.

Intercollegiate athletics provide competitive opportunities for highly skilled students in selected sports with teams from other colleges. LCC is a member of the Oregon Community College Athletic Conference and the National Junior College Athletic Association. Teams compete in cross country, track, basketball, gymnastics, wrestling, soccer, golf, swimming, tennis and baseball.

Health Education Courses

1.605 Health Education (2 hrs/wk) 2 credits
Desirable mental and physical health practices as they relate to the individual and the community.

HE 250 Personal Health (3 hrs/wk) 3 credits
Personal health problems of men and women with emphasis on implications of family life. Mental health, communicable diseases, degenerative diseases, nutrition.

HE 251 Community Health (3 hrs/wk) 3 credits
Methods of handling health and sanitation problems in the community with special reference to water supply, food and milk sanitation, sewage disposal, insect and rodent control, air pollution, hospitals, nursing homes, and state and local official and voluntary health agencies.

HE 252 First Aid (3 hrs/wk) 3 credits
First aid and safety procedures—for individuals, schools, athletics, and civilian defense; meets certification standards of the American Red Cross for the standard and advanced First Aid card.

5.212 First Aid (2 hrs/wk) 1 credit
Standard first aid procedures and techniques; designed to meet graduation requirements. Upon successful completion of the course, a standard First Aid card may be secured.

5.213 First Aid (2 hrs/wk) 1 Credit
Advanced first aid procedures and techniques; meets needs of special interest groups which have opportunity to give first aid care frequently in the course of daily routines. Upon successful completion of the course an American Red Cross Advanced First Aid card may be secured.
Prerequisite: First Aid 5.212 or current Standard First Aid card.

5.214 First Aid (Emergency Care & Rescue)
(2 hrs/wk) 1 Credit
Medical self help training to help prepare for survival in time of disaster when the services of a physician or other allied health personnel are not available. Includes methods of first aid instruction and meets the certification standards of the American Red Cross for Instructors. Prerequisite: First Aid 5.213 or current Advanced First Aid card.

Physical Education Activities

PE 180 Physical Education (3 class hrs/wk) 3 Credits
(women) A variety of activities taught for physiological and rec-
or reational values, designed to improve fitness, move-

PE 190 ment and creative expression. Activities are scheduled
(men) for the skilled, unskilled handicapped.

Adaptive Activity (Men and Women)
Students with physical limitations or deviations are assigned to programs of adapted physical activity by a physician or departmental staff. Special sections for restricted and corrective work.

Archery (Men and Women)
Fundamental skills and techniques of target shooting, rules, care and selection of equipment.

Baseball (Men Only)
Fundamentals, techniques of offensive and defensive play, rules, team play, and competition.

Badminton (Men and Women)
Fundamental skills of serving, strategy, play, rules and tournament play.

Basic Movement (Women Only)
Analysis and development of physical potential. Designed to maintain figure, form fitness, and to increase knowledge and performance of basic sports skills.

Basketball (Men and Women)
Fundamentals, techniques of offensive and defensive play, rules, team play, and competition.

Body Building (Men Only)
Use of weights and weight lifting equipment. A chart of progress and development is kept by each individual. Also, other conditioning methods are introduced.

Bowling—Beginning (Men and Women) (°additional fee)
Fundamentals, techniques, rules and social etiquette of bowling.

Bowling—Intermediate (Men and Women) (additional fee)
Perfection of straight ball deliveery, introduction of hook and curve ball delivery, and tournament play.

Conditioning (Men and Women)
Primarily concerned with cardio-vascular development, variations in running, jogging, interval work, and wind sprints. Special programs of exercise and activities for men and women over 30 years of age.

Contemporary Dance (Men and women)
Fundamentals of dance movement (principles and practices of body movement and response to music); conditioning techniques; experience in elementary dance composition.

Cross Country (Men and Women)
A study and practice of the techniques of running. Individual and group competition.

Fencing (Men and Women)
Initial positions, techniques, attacking movements, and defensive movements; competition.

Field Hockey (Women Only)
Fundamental skills and techniques, as well as rules and team play.

Flag Football (Men Only)
Fundamental skills, development of team play and competition.

Folk Dance (Men and Women)
Fundamentals and patterns of folk and square dancing.

Golf (Men and Women) (°additional fee)
Fundamentals, techniques, rules, social etiquette.

Gymnastics (Men and Women)
The techniques involved in controlled muscular movement, using various types of gymnastic apparatus.

Handball (Men Only)
Fundamental techniques and rules; singles and doubles competition.

Personal Defense (Men and Women)
Techniques and fundamentals.

Skiing—beginning (Men and Women) (additional fee)
Selection and use of equipment, flat turning, walking, climbing, straight running position, open and closed skiing, traverse position, turning and side slipping.

Skiing—intermediate (Men and Women) (additional fee)
Continuation of the sequence for beginning skiing. Student is guided to parallel skiing as rapidly as time permits.

Soccer (Men Only)
Fundamentals, techniques of offensive and defensive play, strategy, rules, team play.

Softball (Men and Women)
Fundamentals, rules, and team play.

Swimming—beginning (Men and Women)
Orientation to water, introduction to prone and supine float, front crawl, back crawl, breast stroke, side stroke, and elementary diving.

Swimming—intermediate (Men and Women)
Development of the front crawl, breast stroke, back stroke, survival swimming, turns, and endurance.

Swimming—advanced (Men and Women)
Perfection of all strokes, water games, diving, and life-saving techniques.

Swimming—lifesaving (Men and Women)
Basic skills of life saving; leads to American Red Cross certification in Senior Lifesaving.

Tennis (Men and Women)
Theory and practice in tennis skills, strategy, and application of rules.

Track (Men and Women)
Fundamentals, rules, theories, and training in track and field events.

Volleyball (Men and Women)
Individual and team play, rules, and strategy.

Wrestling (Men Only)
Fundamentals, techniques, rules and competition.

Preprofessional Courses

PE 131 Introduction to Health, Physical Education and Recreation (3 class hrs/wk) 3 credits
Professional orientation; basic philosophy and objectives; professional opportunities and qualifications in each of the areas and sub-areas.

PE 194 Professional Activities (6 class hrs/wk) 2 credits
(women) Instruction and practice in specific teaching techniques and basic skills. One activity per term. Fall: Field sports. Winter: Basketball, tumbling, basic movement. Spring: Track, field.

PE 294 Professional Activities (6 class hrs/wk) 2 credits
(women) Instruction and practice in specific teaching techniques and basic skills. One activity per term. Fall: Gymnastics. Winter: Contemporary dance, volleyball. Spring: Folk, square, social dance.

PE 195 Professional Activities (6 class hrs/wk) 2 credits
(men) Instruction and practice in specific teaching techniques and basic skills. One activity per term. Fall: Fundamentals of movement, games. Winter: Gymnastics. Spring: Track, field.

PE 295 Professional Activities (6 class hrs/wk) 2 credits
(men) Instruction and practice in specific teaching techniques and basic skills. One activity per term. Fall: Field sports. Winter: Aquatics. Spring: Folk, square, social dance.

Suggested Curriculum

Physical Education — Health and Physical Education

Students who wish to become physical education or health and physical education instructors must begin course work in professional activities (PE 194 and 195 Professional Activities) during the freshman year if they are to complete a baccalaureate program in four years. Service course work in physical education (PE 180 and 190 Physical Education) cannot be substituted for the professional activity courses. This program will permit transfer into teacher preparation programs offered by state system institutions.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Z 201, 202, 203 General Zoology (or GS 101, 102, 103 General Biology)[2]	3-4	3-4	3-4
PE 194/195 Professional Activities	2	2	2
PE 131 Introduction to Health, Physical Education, and Recreation	3		
Sp 111 Introduction to Speech		3	
HE 252 First Aid			3
Literature sequence (O, OSU, OCE, SOC, EOC)	3	3	3
Phl 201, 202, 203 Problems of Philosophy	3	3	3
Elementary Ethics, Elementary Aesthetics (PSU)			
	14-15	14-15	14-15

Sophomore Year

	F	W	S
Ch 101, 102, 103 or 201, 202, 203 General Chemistry	3-4	3-4	3-4
PE 294/295 Professional Activities	2	2	2
Psy 201, 202, 203 General Psychology	3	3	3
Social science sequence[4]	3	3	3
HE 250 Personal Health	2		
FN 225 Nutrition		3	
Electives to bring total hours to 93[3]	3-4	3-4	3-4
	16-17	16-17	16-17

Total: 93 hours

One-Year Preprofessional Program

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Z 201, 202, 203 General Zoology (or GS 101, 102, 103 General Biology)[2]	3-4	3-4	3-4
Literature sequence (UO, OSU, OCE, SOC, EOC)	3	3	3
Phl 201, 202, 203 Problems of Philosophy	3	3	3
Elementary Ethics, Elementary Aesthetics (PSU)			
Physical Education	1	1	1
	16-17	16-17	16-17

Total: 48-51 hours

[1]Students planning to transfer to OSU, PSU or OCE should complete Wr 111, 112 and 3 hours of electives. (If student plans to transfer to PSU at the end of the freshman year of the two-year program, he should complete Wr 111, GS 105 Physical Science (chemistry), and 3 hours of electives.) Students transferring to UO, EOC, or SOC should complete Wr 111,112, 113.

[2]PSU students should take GS 101, 102, 103 General Biology.

[3]UO and PSU students who doe not have satisfactory placement scores should complete Mth 10 Elementary Algebra (noncredit course) prior to transfer; SOC students should complete AA 201 Survey of Visual Arts and Mus 201 Introduction to Music and Its Literature.

[4]SOC students should complete either Hst 201, 202, 203 or PS 201, 202, 203.

Home Economics and Textiles

Home economics is the field of knowledge and service primarily concerned with strengthening family life through:

- °educating the individual for family living.
- °improving the services and goods used by families
- °furthering community, national, and world conditions favorable to family living.

Chairman

Belden, Gladys—B.S., Home Economics, Oklahoma State University; M.S., Home Economics, Oregon State University.

Faculty

Armstrong, Jeanne—B.S., Home Economics, Oregon State University. Part-time.

Honey, Kathryn—B.A., Home Economics, Oregon State University; MHEc., Clothing Construction, Oregon State University. Part-time.

King, Marcia—B.S., Foods and Nutrition, Walla Walla College, 1958; M.S., Nutrition and Dietetics, Loma Linda University, 1962. Part-time.

The Home Economics Department offers programs and classes in three categories:

College Transfer

Classes required of students planning to major in home economics in a four-year institution may be taken also by terminal students. All classes are functional and planned to meet everyday needs.

Occupational

Programs and classes in this category are designed to be of particular value to those planning to enter employment in a home-related occupation.

General Education

These non-credit classes are planned to improve the personal and/or family life of any student, regardless of his occupational goals. Some are offered through the Adult Education Department.

Associate of Arts in Home Economics

Those who complete this program graduate with an A.A. Degree. The total program may be transferred to Oregon State University as the first two years of a home economics major.

First Year

	F	W	S
*Math 95	4		
Home Ec 101 Introduction to Home Economics	1		
Wr 111, 112 English Composition		3	3
Art 195, 196, 197 Basic Design	2	2	2
FL 222 Marriage Preparation	2		
FL 223 Family Living		2	
CT 211 Clothing Selection			3
Literature sequence	3	3	3
Science (Chemistry or Biology)	4	4	4
Physical Education			2
	17	15	17

*Unless exempt by Achievemeent Test (Level I Math) Score.

Second Year

	F	W	S
Psy 201, 202, 203 General Psychology	3	3	3
Hst 101, 102, 103 History of Western Civilization	3	3	3
*Soc 204, 205, 206 General Sociology	3	3	3
Physical Education	1	1	1
CT 210 Clothing Construction	3		
FL 225 Child Development		3	
CT 250 Textiles			3
FN 225 Nutrition	3		
Wr 113 English Composition		3	
	16	16	13

*Or combination of Sociology and Economics

Transfer Courses

FL 225 Child Development (3 class hrs/wk) 3 credits
Physical, intellectual, and social-emotional development of the child, age birth through six, with some emphasis on prenatal influences. Observations in the preschool.

CT 210 Clothing Construction (6 class hrs/wk) 3 credits
Beginning course in college sequence. Includes principles of selection, construction and fitting, management problems in use of time and equipment.

CT 211 Clothing Selection (3 class hrs/wk) 3 credits
Artistic, economic and psychological factors affecting selection of clothing for adults. Practical course for majors and nonmajors.

FL 223 Family Living (2 class hrs/wk) 2 credits
Reading and discussion on selected topics concerning marriage and relationships in the beginning family.

FN 218 Food Preparation (1 class-2 lab hrs/wk) 3 credits
For students **not** majoring in home ecenomics. Basic principles of food preparation, meal planning, and table service are discussed and practiced in the laboratory.

HEc 101 Introduction to Home Economics
(1 class hr/wk) 1 credit
Orientation course for majors in home economics. Open to any interested person. Home economics as a field of study, including history, philosophy and job and career opportunities.

FL 222 Marriage Preparation (2 class hrs/wk) 2 credits
Reading and discussion organized around topics of personal concern selected by the students, including interpersonal relationships, changing sexual standards; love vs. infatuation, engagement and marriage.

FN 225 Nutrition (3 class hrs/wk) 3 credits
The science of nutrition applied to daily life. Newer scientific investigations; optimal diet for health; present day problems.

CT 250 Textiles (3 class hrs/wk) 3 credits
Properties, identification, selection, use and care of textile fibers and fabrics for clothing and home furnishings.

Associate of Science in Child Care Services

This program prepares students for such occupations as day care aide, kindergarten or primary teachers' aide, nursery school assistant, foster parent or family day care mother. It is valuable for parents, volunteers, and others interested in young children. Individual courses may be elected by students in other programs. By choosing the college transfer alternatives, a student may prepare for continued professional preparation in early childhood education.

Occupational Courses

7.102 Child Care and Guidance
(1 class-3 lab hrs/wk) 2 credits
For parents of pre-school children, who participate in cooperative group care projects. Includes a two hour orientation session before participation begins, followed by a three hour practicum and one hour lecture discusssion each week. Lecture periods based on recognizing needs of children; guiding children's activities; understanding behavior and setting limits.

0.502 Fashion Fundamentals (3 class hrs/wk) 3 credits
Making the most of personal appearance through study and experimentation with color, design, accessories, and cosmetics. Psycho-social aspects of clothing; and fashion as an occupational field.

0.503 Food for Weight Control
(1 class-2 lab hrs/wk) 2 credits
Those with overweight problems learn to adjust calorie intake to meet energy needs within the normal diet. Laboratory provides for testing recipes, food combinations, and means of making special diets attractive.

7.100 Introduction to Food Service Work
(2 class hrs/wk) 2 credits
The many facets of food service work; principles governing proper food handling. Basic material is presented to enhance the student's present value as a lower-echelon food service worker or to qualiy him or easy placement in subordinate positions in the food service industry.

Suggested Curriculum

Home Economics

Recommended for students who plan to transfer in home economics to Oregon State University. Requirements for the baccalaureate degree may be completed with three additional years of work.

Freshman Year

	F	W	S
HEc 101 Introduction to Home Economics	1		
Wr 111 English Composition	3		
Mth 95 Intermediate Algebra[1]		4	
AA 195, 196 Basic Design	2	2	
Art or Music			2
Hst 101, 102, 103 History of Western Civilization	3	3	3
Literature sequence[2]	3	3	3
Science sequence with laboratory (chemistry or biology)[3]	3-4	3-4	3-4
Physical Education	1	1	
Personal Health			2
Electives			2-3
	16-17	16-17	16-17

Total: 48-51 hours

This program may be completed by students attending community colleges offering professional course work in home economics for transfer credit. If two full years of **appropriate professional-level work** is available at the community college, students may complete requirements for the baccalaureate degree with two additional years of work at Oregon State University.

Freshman Year

	F	W	S
HEc Introduction to Home Economics	1		
Wr 111, 112 English Composition	3	3	
Elective			2
AA 195, 196 Basic Design	2	3	
Art or Music			2
Home economics transfer courses or electives[4]	2-3	2-3	2-3
Literature sequence[2]	3	3	3
Science sequence with laboratory (chemistry or biology)[3]	3-4	3-4	3-4
Physical Education	1	1	
Personal Health			2
	15-17	15-16	15-16

Sophomore Year

	F	W	S
Psy 201, 202, 203 General Psychology	3	3	3
Hst 101, 102, 103 History of Western Civilization	3	3	3
Home economics transfer courses or electives[5]	2-3	2-3	2-3
Mth 95 Intermediate Algebra[6]		4	
Soc 204, 205, 206 General Sociology; PS 201, 202, 203 American Governments; or Ec 201, 202, 203 Principles of Economics[7]	3	3	3
Physical Education	1	1	1
Electives to bring total hours to 93[8]	2-4	2-4	
	15-16	15-16	15-16

Total: 93 hours

[1]Unless exempt by Achievement Test (Level I Mathematics) score.

[2]Or 6 hours of literature and Sp 111 Fundamentals of Speech.

[3]Chemistry recommended for all students. Ch 101, 102, 103 General Chemistry and Ch 201, 202, 203 General Chemistry or Ch 101, 102, 103 General Chemistry and Ch 241 Chemical Theory, required for students whose main interest is foods, nutrition, dietetics, or textiles.

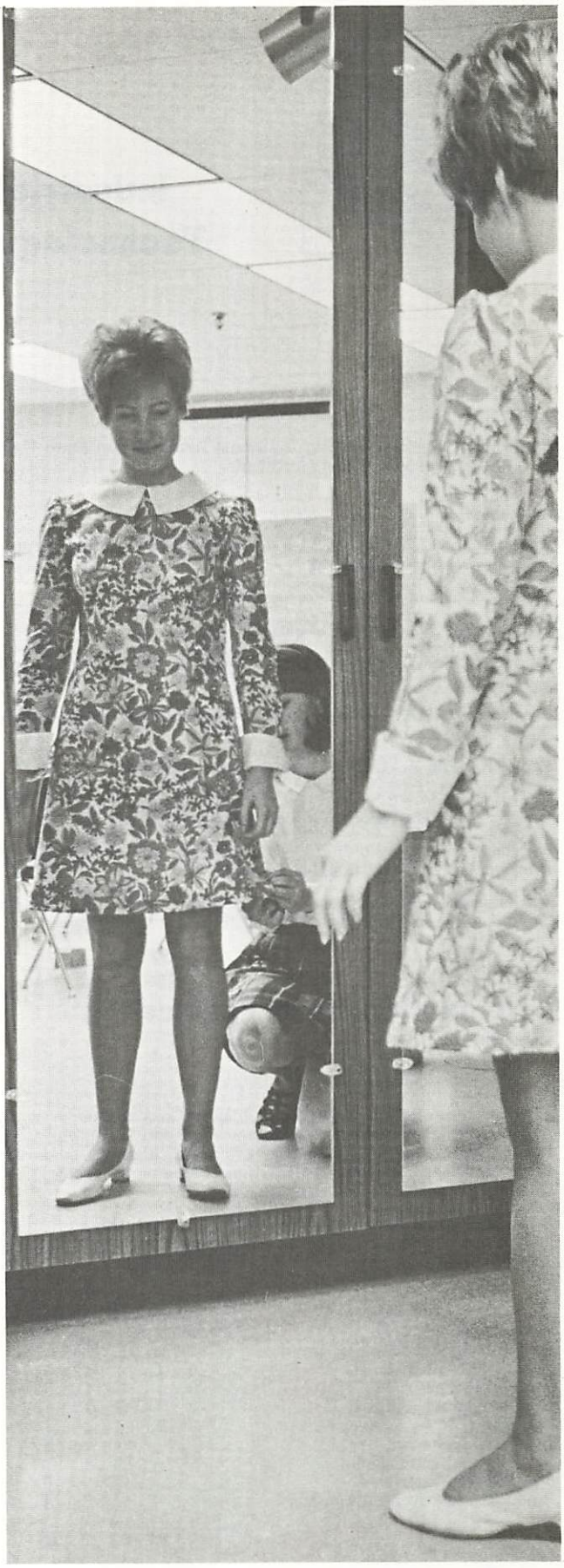
[4]Home economics courses to be selected from the following: CT 210 Clothing Construction, CT 211 Clothing Selection, CT 250 Textiles, FL 222 Marriage Preparation, FL 225 Child Delevopment, FN 225 Nutrition, HM 240 Management in Family Living.

[5]See 4 above.

[6]See 1 above.

[7]Students interested in family life or home management areas should select sociology or economics.

[8]If Ch 101, 102, 103 is taken during freshman year, adjust program so Ch 241 Chemical Theory will be completed during sophomore year.



Industrial Technology

Chairman

Blood, Carl A.—B.S., M.Ed., Industrial Arts, Oregon State University; Oregon Vocational Certificate.

Faculty

Allen, Robert T.—B.S., Civil Engineering, Iowa State University; Oregon Vocational Approval.

Aubrey, Chester—Oregon Vocational Approval.

Gault, Robert L.—Oregon Vocational Approval.

Merrill, O. Jed—B.S., University of Oregon; Oregon Vocational Certificate.

Meier, Gerald A. — B.S.F., Forest Management, Pennsylvania State University.

Parro, Eugene Z.—Oregon Vocational Certificate.

Philips, John M.—B.S., Forestry, University of California; M.Ed., Oregon State University; Oregon Vocational Certificate.

Shuster, John W.—Welding Certification Federal Department of Interior; Oregon Vocational Approval.

Vaaler, Adrian W.—B.S., Civil Engineering, University of North Dakota; Oregon Vocational Certificate.

Programs

Civil and Structural Engineering Technician

Two Year Associate Degree

The program offers broad technical theory and laboratory work to provide the fundamental background needed for employment in jobs such as civil engineering technician, highway engineering technician, surveyor, construction estimator, inspector, contractor assistant, and cost estimator.

Applicants must have completed high school or the equivalent and passed a course in algebra. An entrance test is required.

First Year

	F		W		S	
	H	C*	H	C	H	C
Plane Surveying I, II	5	3			5	3
Engineering Problems I, II	2	2	2	2		
Technical Math I, II, III	4	4	4	4	4	4
Applied Physics I, II	5	4	5	4		
Communication Skills I, II	3	3	3	3		
Drafting I, II	4	2	4	2		
Applied Mechanics I					5	3
Surveying Computations			5	3		
Strength of Materials I					5	3
Practical Descriptive Geometry					4	2
	23	18	23	18	23	15

*H=hours, C=credits

Second Year

	F		W		S	
	H	C	H	C	H	C
Mapping and Computing I, II	4	2	6	3		
Strength of Materials II	5	3				
Structural Analysis and Design	4	2				
Materials of Construction	2	2				
Applied Mechanics II	5	3				
Applied Economics	3	3				
Hydraulics I, II			3	3	3	3
Soil Mechanics I			5	3		
Timber and Steel Construction			6	4		
Construction Codes			2	2		
Health Education			2	2		
Concrete Construction and Design					7	3
Foundations of Structures					3	3
Structural Drafting					5	2
Contracts and Specifications					3	3
Construction Estimating					2	2
	23	15	24	17	23	16

Courses

6.109 Applied Mechanics I (2 class—3 lab hrs/wk) 3 credits
Mechanics of solids, with emphasis on statistics.

6.111 Applied Mechanics II (2 class—3 lab hrs/wk) 3 credits
Motion of rigid bodies and the forces that produce or change their motion.
Prerequisites: Fourth-term standing or approval of department head.

6.123 Concrete Construction and Design
(2 class—5 lab hrs/wk) 3 credits
Concrete materials, shear and bending calculation, shear and bending stresses, and design calculations. Design of concrete mixes to specified compressive strengths; problem solving.
Prerequisite: Sixth-term standing or approval of department head.

6.122 Construction Codes (2 class hrs/wk) 2 credits
Various codes specifying the standards of construction and the installation of electrical and plumbing fixtures. Building codes and the function of government units (state and local) charged with the administration and inspection of building construction.
Prerequisite: Second-year standing or approval of department head.

6.110 Construction Estimating (2 class hrs/wk) 2 credits
Development of skills in estimating the amount and cost of materials required and labor cost involved in various types of construction.
Prerequisite: Fifth-term standing or approval of department head.

6.118 Contracts and Specifications (3 class hrs/wk) 3 credits
Common usage and practice in the preparation of contracts and attendant specifications. Examination of existing contracts covering current jobs will be used whenever possible.
Prerequisite: Second-year standing or approval of department head.

4.101 Drafting I (4 lab hrs/wk) 2 credits
Basic drawing techniques with emphasis on the application of drafting instruments, standard orthographic projection, layout procedures, and ASA approved lettering techniques.
Prerequisite: High school algebra or approval of department head. Mathematics II, 4.202, may be taken concurrently.

4.105 Drafting II (4 lab hrs/wk) 2 credits
Intermediate preparation for mechanical, structural, civil, and architectural drafting. Projection and perspective drawings. Concept technique of inking, and the development of working drawings as used in industry.
Prerequisite: Drafting I, 4.101, or equivalent.

6.120 Foundations of Structures (3 class hrs/wk) 3 credits
Various materials, devices, and designs used in structural foundations such as footing, cofferdams, caissons, abutments, piers, and underpinnings.

6.112 Hydraulics I (3 class hrs/wk) 3 credits
Fundamental properties of fluids, principles of hydrostatic pressure including Pascal's Law, the hydrostatic paradox, Archimedes's Principle, measurement by manometer, the measure-

ment of fluid properties. The relationship of hydrostatic pressure and center of gravity and the effect of hydrostatic pressure exerted against plane surfaces.
Prerequisite: Fifth-term standing or approval of department head.

6.114 Hydraulics II (3 class hrs/wk) 3 credits
Fundamentals of fluid flow, Bernoulli's Theorum, flow profiles, stream restrictions, distribution of energy in the stream flow through pipe, Reynold's Law, Newton's Law of Hydrodynamics, vector representation, hydraulic similitude, and dimensional analysis.
Prerequisite: Hydraulics I, 6.112, or equivalent.

6.131 Mapping and Computing I (4 lab hrs/wk) 2 credits
Advance map plotting, earthwork computation, field surveying from maps, legal description, subdivision planning and simulated problems of construction.
Prerequisite: Fourth-term standing or approval of department head.

6.133 Mapping and Computing II (6 lab hrs/wk) 3 credits
A study of surveying laws, public land survey procedures, professional surveyor practices, earth work computations, and map projections.
Prerequisite: Mapping and Computing I or equivalent.

6.108 Materials of Construction (2 class hrs/wk) 2 credits
Comparisons of various materials, their source, method of manufacture, physical and chemical properties; grading under a variety of conditions; soil and terrain as encountered in construction work.
Prerequisite: Approval of department head.

6.101 Plane Surveying I (1 class-4 lab hrs/wk) 3 credits
Fundamentals of chaining and leveling, care and adjustment of surveying instruments, and office procedures; with appropriate field work.
Prerequisite: Approval of department head.

6.103 Plane Surveying II (1 class—4 lab hrs/wk) 3 credits
Continuation of Plane Surveying I designed to familiarize the student completely with the engineer's transit.
Prerequisite: Second-term standing or approval of department head.

6.124 Soil Mechanics I (2 class—3 lab hrs/wk) 3 credits
A study of index of properties of soil, hydraulic and mechanical properties, soil drainages and plastic equilibrium.
Prerequisite: Second-year standing or approval of department head.

6.107 Strength of Materials I (2 class—3 lab hrs/wk) 3 credits
Stresses and strains that occur in bodies when subjected to tensile, compressive and shearing forces, including the common theory of beams.
Prerequisite: Applied Mechanics I and Technical Mathematics I or equivalent.

6.128 Strength of Materials II
(2 class—3 lab hrs/wk) 3 credits
Design and deflection of beams, and the combination of forces and their effect upon various structural members.
Prerequisite: Strength of Materials I or equivalent.

6.130 Structural Analysis & Design
(1 class—3 lab hrs/wk) 2 credits
Determination of stresses induced by loads on structures: selections of appropriate structural members and suitable connections; practical design procedures relating to various structural members.
Prerequisite: Applied Mechanics I; Strength of Materials I.

4.111 Structural Drafting (5 lab hrs/wk) 2 credits
Civil and structural drafting procedures. Function and design of plans, diagrams and drawings; structural shapes such as bridges, dams and earthwork constructions.
Prerequisite: Sixth-term standing or approval of department head.

6.500 Surveying Computations
(1 class—4 lab hrs/wk) 3 credits
Trigonometric and geometric formulas, logarithms, mechanical computers and integrating instruments, area computation, traverse calculations, leveling, plotting surveys.
Prerequisite: Third-term standing or approval of department head.

6.125 Timber and Steel Construction
(3 class—3 lab hrs/wk) 4 credits
Steel and wood fasteners and connections, timber beams and columns. Structural members analyzed for design features.
Prerequisite: Structural Analysis and Design, 6.130, or equivalent.

Construction Technology

Two Year Program

This program prepares the student to enter one of the many fields in the construction industries. Typical positions are construction materials and equipment salesmen, inspectors, estimators, quality control technicians and manufacturing processing technicians. Persons entering employment in these areas have the background necessary for ultimate promotion into supervisory positions. The curriculum consists of a year of common study and laboratory experience, and a second year of specialized options.

Study and laboratory experiences aim to establish a balance between fundamental theory and its practical application. To achieve balance, the student studies mathematics, physics, communication skills, psychology, and business and supplements it by second year on-the-job experiences. These experiences correlate theory to practical work application.

Second Year Options

Second year specialization is offered in the areas of welding, architectural millwork, and building materials management. See descriptions of these programs to follow. Development of additional programs is anticipated in production, prefabrication, quality control, managerial training and concrete.

Architectural Millwork

One or Two Year Program

Study and lab experience are geared to the needs of the millwork and cabinetmaking industries. Special emphasis is placed on standards of excellence in economy, custom and premium millwork, as outlined by the Architectural Woodwork Institute. Standards and manuals developed by the Woodwork Institutes of Oregon, California and Arizona are used.

Students study exterior finish and frames, interior finish and frames, stairwork, casework, laminated plastics, doors, glue lams, sash and frames, and finishing and maintenance of equipment.

First Year

Candidates for the two year Associate Degree take both years. Only the first year is required if one wishes only to earn a certificate.

	F		W		S	
	H	C°	H	C	H	C
Machine and Tool Maintenance	5	3				
Construction Practices I, II			10	5	10	5
Communication Skills I or Writing 111	3	3				
Communication Skills II or Speech 111			3	3		
Communication Skills III					3	3
Math II, III and Electives (Gen. Ed.)	3	3	3	3	3	3
or Technical Math I, II, III	4	4	4	4	4	4
Practical Physics	5	4				
Introduction to Fabrication Practices II			5	3		
Drafting Fundamentals	5	2				
Architectural Drafting			5	2		
Blueprint Reading for Construction I					5	3
Employer-Employee Relations					2	2
	24	18	26	16	23	16

°H=hours, C=credits

Second Year

	F		W		S	
	H	C	H	C	H	C
Production Millwork I, II, III	8	5	8	5	8	5
Human Relations I					3	3
Machine Woodwork (Millwork)					6	3
Millwork and Cabinet Design	6	3				
Wood and Metal Finishing			6	3		
Welding IA, IB	5	2	5	2		
Electives (General Ed.)	2	2			3	3
Electives (Technical)	2	2	4	4	3	3
Health Education			2	2		
Woodworking Technology	6	3				
	29	17	25	16	23	17

Courses

4.051 Construction Practices I
(3 class—7 lab hrs/wk) 5 credits
Materials and methods common to structural form in the construction industries: aggregate, stone, steel, glass, plastic, gypsum, and wood.

4.052 Construction Practices II
(3 class—7 lab hrs/wk) 5 credits
Use and methods of supplementary material common to construction practices; insulative, acoustical, finish, protective, decorative and hardware.

4.050 Machine and Tool Maintenance
(2 class—3 lab hrs/wk) 3 credits
Background information and experience using machine tools common to construction practices. Relationship of use and maintenance of hand tools, portable power tools, and production machines to occupational practices in construction and fabrication industries.

3.195 Machine Woodwork (Millwork)
(2 class—4 lab hrs/wk) 3 credits
Design and construction of jigs and fixtures used on common woodworking machines for mass production of millwork products. Organization of the laboratory and personnel for production and different methods for facility control of items in limited production.

3.196 Millwork and Cabinet Design
(2 class—4 lab hrs/wk) 3 credits
Material used in designing and planning for the construction of millwork products. Single item design, grouping.

3.192, 3.193, 3.194 Production Millwork I, II, III
(2 class—6 lab hrs/wk) 5 credits
Production methods, special machines, and standards of practices in cabinet, furniture, and mill work. Laboratory work in the design and construction of quantity and quality control devices.

3.197 Wood and Metal Finishing
(2 class—4 lab hrs/wk) 3 credits
Preparation of new and used wood and metal surfaces for various types of finish materials; finishes and their application by brush and spray methods.

3.198 Woodworking Technology
(2 class—4 lab hrs/wk) 3 credits
Wood as a material, its structure and utilization in construction and fabrication, and wood identification.

Building Materials Management

Two Year Associate Degree Program

This program prepares students for careers which utilize a knowledge of building construction techniques and materials, and blueprint reading. A typical job is selling building and construction equipment and supplies. Pay is about $325 monthly.

First Year

	F		W		S	
	H	C°	H	C	H	C
Machine and Tool Maintenance	5	3				
Construction Practices I, II			10	5	10	5
Communications Skills I or Writing 111	3	3				
Communications Skills II or Speech 111			3	3		
Communications Skills III					3	3
Mathematics I, II, III	3	3	3	3	3	3
General Ed. Electives or Technical Math	4	4	4	4	4	4
Practical Physics II	5	4				
Introduction to Fabrication Practices II			5	3		
Drafting Fundamentals	5	2				
Architectural Drafting			5	2		
Blueprint Reading for Construction I					5	3
Employer-Employee Relations					2	2
	25	19	30	20	27	20

°H=hours, C=credits

Second Year

	F		W		S	
	H	C	H	C	H	C
Construction Material Sales I, II, III	15	5	15	5	15	5
Business Math	3	3				
Construction Codes			2	2		
Construction Estimating					2	2
Marketing	3	3				
Advertising			3	3		
Salesmanship					3	3
Business Records and Reports	3	3				
Business Machines I	3	3				
General Education Electives			4	4	3	3
Technology Electives°			2	2	3	3
	27	17	26	16	26	16

°Enough of the electives must be from general education to qualify the student for the Associate of Science Degree.

Courses

4.058 Construction Materials Sales I
(15 class hrs/wk) 5 credits
Supervised on-the-job experience in the area of marketing, business records and reports and in the operation of business machines.

4.060 Construction Materials Sales II
(15 class hrs/wk) 5 credits
Supervised work experience in the area of advertising and display.
Prerequisite: Construction Materials Sales I.

4.062 Construction Materials Sales III
(15 class hrs/wk) 5 credits
Supervised work experiences in the area of salesmanship.
Prerequisite: Construction Materials Sales II.

Welding Technology

Two Year Program

The student prepares for employment as a welder or in a supervisory capacity. Course material covers techniques needed for entry positions in the welding industry, along with background information helpful for those who seek advancement into management, sales and service, ownership, and technician positions in production industries.

First Year

	F		W		S	
	H	C°	H	C	H	C
Welding Processes IA, IB, II	5	2	5	2	5	2
Communications Skills I, II or Wr 111 and Sp 111	3	3	3	3		
Communications Skills III					3	3
Mathematics II, III			3	3	3	3
or						
Technical Math I, II			4	4	4	4
Practical Physics II	5	4				
Introduction to Fabrication Practices I, IA	5	3	5	3		
Metals Application Treatment & Testing					5	3

	F		W		S	
Machine Tool Operation			5	3		
Drafting Fundamentals	5	2				
Mechanical Drafting			5	2		
Blueprint Reading for Construction I					5	3
Health Education					2	2
	27	18	30	20	27	20

*H=hours, C=credits

Second Year

	F		W		S	
	H	C	H	C	H	C
Welding I, II, III	15	9	15	9	15	9
Employee-Employer Relations					2	2
Human Relations I			3	3		
Blueprint Reading for Construction II	5	3				
Welding, Senior Projects I, II			8	4	8	4
Electives*	4	4			1	1
	24	16	26	16	26	16

*Enough of the electives must be from general education to qualify the student for the Associate of Science Degree.

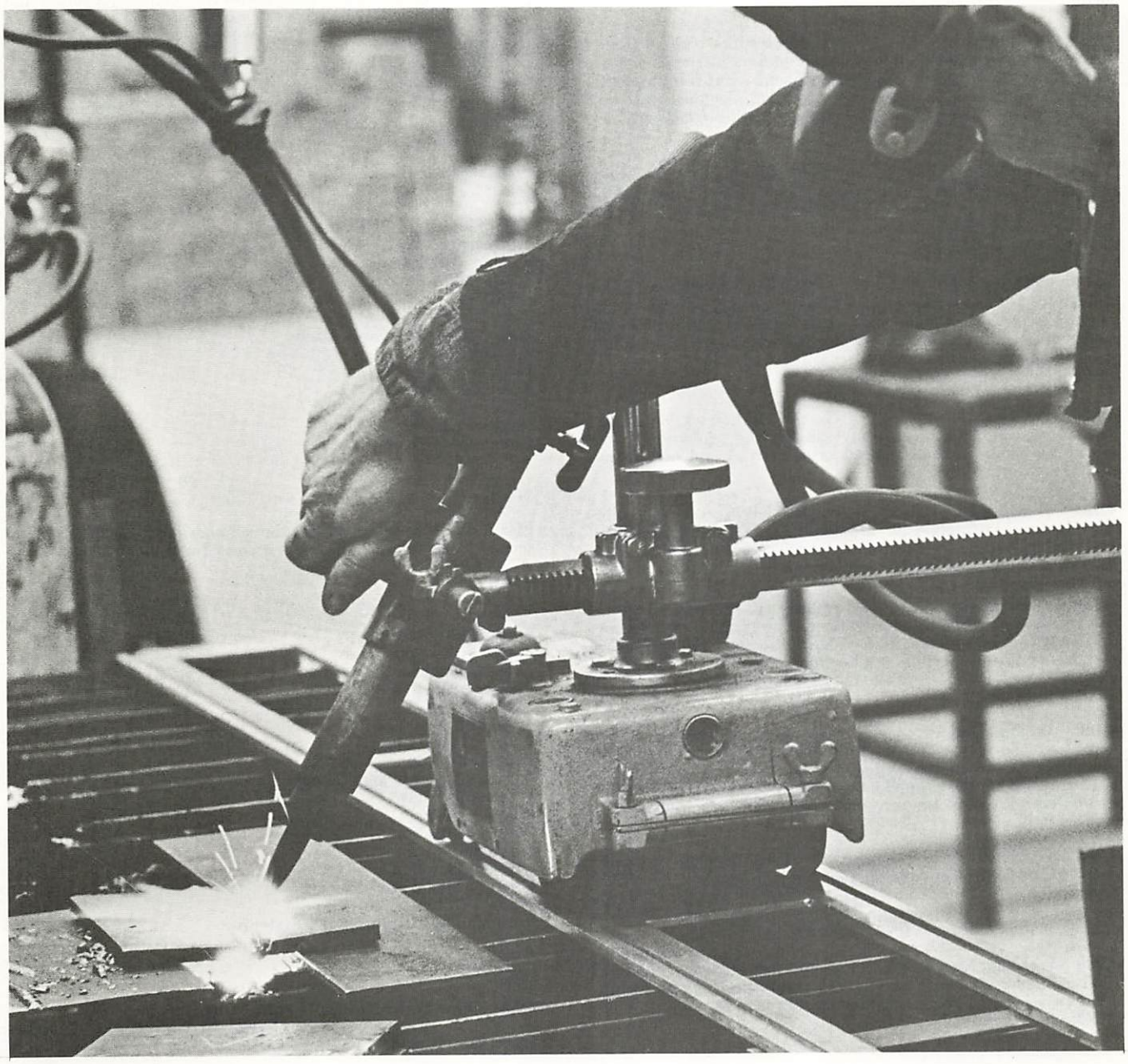
Courses

3.910 Blueprint Reading for Construction I
(5 class hrs/wk) 3 credits

Relationship of the various drawings in a set of plans to basic drawing principles; recognition of detail in job prints related to the construction industries; prints of construction jobs; free hand, large scale detailing of portions of construction; material take off.

3.911 Blueprint Reading for Construction II
(5 class hrs/wk) 3 credits

Advanced study related to the needs of the individual in the interpretation of shop prints for special features of design, fabrication, construction, and assembly. Residences, commercial buildings, and bridge or dam construction prints typify the type of plans used for study.
Prerequisite: Blueprint Reading for Construction I.



4.128A Introduction to Fabrication Practices IA
(1 class—4 lab hrs/wk) 3 credits
Study and application of fabricated, metal technology. Recognition of pattern and jig material. Positioning of fabricated sections for rapid completion. Areas where automated equipment can be utilized. Elimination of distortion problems.
Prerequisite: Introduction to Fabrication Practices I.

4.109 Mechanical Drafting (5 lab hrs/wk) 2 credits
An advanced course emphasizing mechanical design. Includes sketching, cam and gear layout, isometric drawings, welding drawings, tolerances and allowances, tool jib drawings. Simplified drawing techniques will be placed on the industrial requirements of drawing.
Prerequisite: Third-term standing or approval of department head.

4.106 Metals Application Treatment and Testing
(2 class—3 lab hrs/wk) 3 credits
Survey in metallurgy covering the common materials of fabrication, metals coding systems, characteristics, methods of refining and alloying and methods of treating. Various types of and the working of metals used by industry.
Prerequisite: Second-year standing or approval by department head.

3.905 Welding I (15 class hrs/wk) 9 credits
Use of inert gas welding of ferrous and non-ferrous metals. T.I.G. and M.I.G. process, and use of semi- and full automatic welding equipment. All position welding, layout, and joint preparation of materials toward State Welding Certification is included.

3.906 Welding II (15 class hrs/wk) 9 credits
Simulation, diagrams, and symbols of tests for graduation and State Certification. Advanced welding procedures with emphasis on welds of low hydrogen quality.
Prerequisite: Welding I.

3.907 Welding III (15 class hrs/wk) 9 credits
Industrial level experiences in material scheduling and listing, reading of blueprints, engineering specification, data review, and supervisory training. Preparation for test specimens to be sent to the testing lab, certification papers will be required.
Prerequisite: Welding II.

4.150 Welding IA (1 class—4 lab hrs/wk) 2 credits
Set up and operation of oxyacetylene welding equipment. Practice in welding, brazing, and soldering ferrous and non-ferrous metals and their alloys.

4.151 Welding IB (1 class—4 lab hrs/wk) 2 credits
Introductory instruction in arc welding. Demonstration and practice in welding by electric arc. Application to industrial use in construction, maintenance, and repair.

4.156 Welding IIA (1 class—4 lab hrs/wk) 2 credits
Advanced application of oxyacetylene. Information and instruction on the manufacture of metals, advanced heat treating of metals, advanced cutting applications, technical information. Shop practice with reference to various trades and industrial applications.

4.152 Welding IIB (1 class—4 lab hrs/wk) 2 credits
Advanced instruction and practice in electric arc welding. Information and instruction in manufacturing of metals, advanced heat treating, cutting applications, and technical information correlated with shop practice and application to various trades and industry.

3.908 Welding, Senior Projects I (8 lab hrs/wk) 4 credits
A lab course in project development. Layout, cutting, and metal preparation from shop drawings, welding in journeyman-type procedures of industry; transfer of plans on paper to "all-dimensional" metal parts for fabrication and welding.

3.909 Welding, Senior Projects II (8 lab hrs/wk) 4 credits
A lab course in continued, advanced, layout procedures, prefabrication, assembly processes, correct uses and routing of manpower and equipment.
Prerequisite: Senior Projects I.

Forest Technician

Two Year Associate Degree Program

This curriculum provides education and training to qualify a person as a forest technician. A forest technician is competent to handle intermediate responsibilities between those appropriate to the skilled worker and those of the professional forester. He directs the former under the supervision of the latter; in other words, he sees that plans prepared by professional foresters are efficiently executed. Students completing the program with 100 credits or more are placed as Forest Technicians with the state and federal agencies, and private forest product and logging operations.

There are several electives included in this program and the student may take special work in his particular field of interest. Wildlife, recreation, log scaling, timber cruising, surveying, timber sale administration, reforestation, etc., are some examples of possible options in which the student may specialize by counseling with his major instructor.

A high school graduate who completes this curriculum would be qualified to work for the U. S. Forest Service as a forestry aide, usually at the GS4 level. The salaries for other employers would be comparable. Previous forestry experience and completion of the two year technician program would qualify the graduate for a higher rating. Technician level work starts with the GS-S rating. Applicants must have completed high school or the equivalent, and should have successfully completed courses in algebra and trigonometry. The applicant should have demonstrated an interest in outdoor camping or woods experience, and be capable of hard, vigorous, physical and mental activity.

First Year

	F		W		S	
	H	C*	H	C	H	C
Communications Skills I, II, III	3	3	3	3	3	3
Mathematics I, II	3	3	3	3		
Human Relations	3	3				
General Forestry	3	3				
Drafting I	4	2				
Fire Control	4	3				
Power Equipment and Safety			6	3		
Silvicultural Practices			6	3		
Plane Surveying I, II			6	3		
Tree Identification					6	3
Forest Recreation					6	3
General Elective					3	3
Engineering Problems					2	2
	20	17	24	15	26	17

*H=hours, C=credits

Forest job experience during the summer between the first and second years requires 30 hours a week for five credits.

Second Year

	F		W		S	
	H	C	H	C	H	C
Forest Mensuration I	6	3				
Forest Protection	3	3				
Forest Products	4	2				
Forestry Elective	3	3				
Elective—General	3	3				
Applied Economics	3	3				
Forest Mensuration II			6	3		
Supervisory Management			3	3		
Forestry Records and Reports			3	3		
Forest Contracts			6	3		
Elective—General			3	3		
Health Education			2	2		
Forest Surveying					6	3
Logging Planning					6	3
Forestry Specialized Studies					10	5
Senior Project					3	3
Introduction to Information Systems					3	2
	23	16	23	17	28	16

Courses

6.640 Fire Protection and Control
(2 class—2 lab hrs/wk) 3 credits
Forest fire behavior, ignition; spread of forest fires and factors

by which they are influenced; methods of fire prevention and suppression; forest fire control organizations and equipment, transportation, communications, and the operation of forest fire equipment.
Prerequisite: General Forestry taken concurrently.

6.635 Forest Contracts (2 class—4 lab hrs/wk) 3 credits
Basic principles of a forest contract, field trips to show the contracts are enforced through regular in-the-forest inspection. Seller's and purchasers' problems; basic forest operating laws.
Prerequisite: Second-year standing; Forestry Records and Reports taken concurrently.

6.660 Forest Job Experience
(Minimum of 30 hrs/wk) 5 credits
On-the-job training and experience under supervision of the College and employer.
Prerequisite: Consent of instructor.

6.637 Forestry Elective (3 lecture hrs/wk) 3 credits
Directed study and individual conference. Student follows a specific outline of reading and interviews as assigned by his instructor. The subject matter of this course is unlimited as long as the subject lies in the field of forestry or natural resources and will help the student toward his chosen field of forestry employment.

6.625, 6.626 Forest Mensuration I, II
(2 class—4 lab hrs/wk) 3 credits
A general course in forest measurements starting with log scaling, log grading and cruising methods. Necessary theory and practical work in each field.
Prerequisite: Mathematics II, III, and second year standing.

6.636 Forestry Practice (2 class—8 lab hrs/wk) 5 credits
On-the-job training in whatever specialty the student is interested. It may be any subject in forestry, and the student will spend two hours a week with the instructor and one full eight-hour day in field work. This may be on a project in company with other students on the same specialty; or, where possible, it will be working for the Forest Service or others in the specialty field, one day a week.
Prerequisite: To be arranged with Forestry instructor.

6.605 Forest Products (1 class—3 lab hrs/wk) 2 credits
Forest products and how they are produced. Visits made to major wood-using industries, their materials and methods studied in class.

6.641 Forest Protection (3 class hrs/wk) 3 credits
Elementary forest diseases, natural weather damage, and animal damage. Systems discussed for identification purposes; prevention or cures that are known.
Prerequisite: Second-year standing.

6.633 Forestry Records and Reports (3 class hrs/wk) 3 credits
Reports for appraisal, accounting records, profit and loss statements; for local, state, and federal governments in such matters as Social Security, withholding taxes, industrial accident licensing requirements; billings, inventory control, and other administrative details.
Prerequisite: Second-year standing; Forest Contracts to be taken concurrently.

6.656 Forest Recreation (2 class—4 lab hrs/wk) 3 credits
All phases of recreational forest usage from the aesthetic needs of man for wilderness to the business management needed in areas of high density usage such as a marina. The sociology of forest users and the methods used for planning and maintenance of recreational facilities.

6.628 Forest Surveying (2 class—4 lab hrs/wk) 3 credits
Forest surveying, with emphasis on serial photos and topographic surveying; and covering the public land surveys.
Prerequisite: Surveying I and II, second-year standing.

6.601 General Forestry (3 class hrs/wk) 3 credits
Total field of Forestry—a survey of the jobs and resources involved.

6.632 Introduction to Information Systems
(1 class—2 lab hrs/wk) 2 credits
Use of computers in the business world. Preparing raw data, methods of reporting computed data, and general use of machine records with application to forestry records.
Prerequisite: Second-year standing. Forest surveying and logging planning to be taken concurrently.

6.631 Logging Planning (2 class—4 lab hrs/wk) 3 credits
Field procedures necessary in logging planning. An undeveloped tract of land will be studied from acquisition to prepared road system and logging plan with road engineering practices.
Prerequisite: Forest Surveying and Introduction to Information Systems to be taken concurrently.

6.621 Power Equipment and Safety
(2 class—4 lab hrs/wk) 3 credits
Basic first aid course, and industrial safety as it applies to logging and forest products. Basic operation and maintenance of transportation, and small engine driven equipment. Coordinated with silvicultural practices, which must be taken concurrently.
Prerequisite: General forestry and fire control.

6.650 Senior Project (3 hrs/wk) 3 credits
Special study or activity in field of Forest Technology or related subjects.

6.615 Silvicultural Practices (2 class—4 lab hrs/wk) 3 credits
Basic theory of Silviculture, a general understanding of the growth principles and cutting methods for commercial forest species. Laboratory work in determining of sample area, selection, marking, and thinning operation. Coordinated with Power Equipment, which must be taken concurrently.
Prerequisite: General Forestry and Fire Control.

6.645 Tree Identification (2 class—4 lab hrs/wk) 3 credits
Ecology and identification of trees and shrubs, including Western commercial timber species and many of the native non-commercial types.

Technical Drafting

Two Year Associate Degree Program

Basic instruction and training in drafting techniques is offered, with additional specialized instruction on advanced techniques in such areas as machine drafting, electrical drafting, technical illustration, architectural drafting, and structural drafting. Related technical courses that give better understanding of planning and production methods are included.

The program provides training for those planning to enter employment with industrial or business firms that need skilled technicians who can interpret engineering data and directions, and develop sketches, plans, working drawings and details for production work.

Opportunities for employment in this field are available in construction, industrial manufacturing plants, engineering firms, and city, county, state and federal agencies involved in planning construction projects.

First Year

	F		W		S	
	H	C*	H	C	H	C
Drafting I, II	4	2	4	2		
Mathematics II, III	3	3	3	3		
Practical Physics I, II, III	5	4	5	4	5	4
Introduction Fabrication Practices, I, II, III	5	3	5	3	5	3
Communications Skills, I, II, III	3	3	3	3	3	3
Applied Economics	3	3				
Project Drafting					10	4
Employer-Employee Relations			2	2		
Advanced Drafting Problems					5	3
	23	18	22	17	28	17

*H=hours, C=credits

Second Year

	F		W		S	
	H	C°	H	C	H	C
Advanced Machine Drafting I, II, III	5	2	5	2	5	2
Technical Math I, II, III	4	4	4	4	4	4
Applied Physics I, II, III	5	4	5	4	5	4
Engineering Problems I, II	2	2	2	2		
Electrical Drafting	4	2				
Introduction to Specifications	3	3				
Industrial Safety	3	3				
Production Planning & Practices			5	4		
Metals Application Treatment Testing					5	3
Technical Illustration					4	2
Architectural Drafting			5	2		
Structural Drafting					5	2
Health Education			2	2		
	26	20	28	20	28	17

4.115 Advanced Drafting Problems (2 class—3 lab hrs/wk) 3 credits
Application of principles to problems commonly encountered by draftsmen.
Prerequisite: Drafting II, and Mathematics 4.204, or approval of instructor.

4.117 Advanced Machine Drafting I (5 lab hrs/wk) 2 credits
Technical sketching and shape description, multi-view projections, sectional views, and revolutions.
Prerequisite: Second-year standing or approval of instructor.

4.123 Advanced Machine Drafting II (5 lab hrs/wk) 2 credits
Advanced studies in the major areas of machine drafting. The area covered will include threads and fasteners, assembly drawings, pictorial drawings, and engineering graphics.
Prerequisite: Advanced Machine Drafting I.

4.125 Advanced Machine Drafting III (5 lab hrs/wk) 2 credits
Practical drafting problems requiring the application of previously learned principles of machine drafting. Advanced work on cams, gears, and the relationships of drafting to shop processes.
Prerequisite: Advanced Machine Drafting II.

4.107 Architectural Drafting (5 lab hrs/wk) 2 credits
Architectural drawing techniques, methods and procedures; lettering, layout and design of the standard drawings (construction and display, and rendering the display drawing. Design principles, carpentry, masonry principles, construction drawing.
Prerequisite: Second-year standing or approval of department head.

4.103 Electrical Drafting (4 lab hrs/wk) 2 credits
Techniques required for the electrical and electronic fields. Charts, graphs; schematic, wiring and routing diagrams; location drawings. Standard schematics such as motor starters, annunciators, AM and EEIA approved symbols will be used.
Prerequisite: Drafting I or equivalent.

4.108 Industrial Safety (3 class hrs/wk) 3 credits
Principles of safety in industry, including safety codes, personnel considerations and safety practices relating to design work, materials handling, and equipment.
Prerequisite: Second-year standing or approval of department head.

4.128 Introduction to Fabrication Practices I (2 class—3 lab hrs/wk) 3 credits
Practices in the fabrication of metals and metal cutting, finishing, change of shape, change of physical characteristics, and joining of metals.

4.129 Introduction to Fabrication Practices II (2 class—3 lab hrs/wk) 3 credits
Practices in the fabrication of woods implemented by visits to various manufacturing companies and construction jobs using common practices. Woodcutting, finishing, shaping, joining and fastening. A study of building codes will be included.
Prerequisite: Fabrication Practices I or consent of department head.

4.130 Introduction to Fabrication Practices III (2 class—3 lab hrs/wk) 3 credits
Fabrication practices in the general area of construction and related areas: Concrete structure, highway construction, bridge construction, electrical and electronic applications, and plastics.
Prerequisite: Fabrication Practices I and II.

4.102 Introduction to Specifications (3 class hrs/wk) 3 credits
Common usage and practice in the preparation and interpretation of specifications. Examination of existing specifications covering current subjects with practical problems.
Prerequisite: Seond-Year standing or approval of department head.

4.119 Project Drafting (1 class—9 lab hrs/wk) 4 credits
Working conditions similar to industrial drafting room. Project drawings requiring skills previously acquired. Methods for detail layout, reading specifications, common material of fabrication, checking and back-checking drawings, and material take-offs.
Prerequisite: Drafting II which may be taken concurrently.

4.104 Production Planning and Practices (3 class—2 lab hrs/wk) 4 credits
Elements of production control and planning such as: Machine routing, steps of fabrication, efficient shop layout, materials handling, storage problems, and production records.
Prerequisite: Second-year standing or approval of department head.

4.127 Technical Illustration (4 lab hrs/wk) 2 credits
Techniques required for modern technical illustrations and drawings in catalogs, published presentation, or exploded drawings: freehand drawing and template implements, pencils, brush and technique of light and shadow.
Prerequisite: Second-year standing or approval of department head.

College Transfer Courses

GE 101, 102, 103 Engineering Orientation 2 credits each
Problem solving and math indoctrination; the overall viewpoint regarding problems of development in civilization, the objective questioning and critical approach to technological problems. Contemporary approach to solutions is made by the use of Fortran programming using the IBM 360 for solutions.

Preferably, these courses should be consecutive, beginning with GE 101. The first term familiarizes the student with engineering terminology and mastery of the use of the slide rule. The emphasis shifts toward computer training in Fortran and the use of a data control computer and the OS3 console.
Prerequisites: Math 101, 102.

GE 115—Graphics 3 credits
Fundamental principles of the language. Three two-hour laboratory periods.

Suggested Transfer Curriculums

Engineering

Four and Five Years

Students whose high school records and entrance examination scores show high ability in science and mathematics and readiness to begin calculus may complete the following first-year program in engineering at the community college and transfer to the School of Engineering at Oregon State University ready to begin the second year of professional engineering studies.

Freshman Year—First-year Engineering

	F	W	S
GE 101, 102, 103 Engineering Orientation	2	2	2
Mth 200, 201, 202 Calculus with Analytic Geometry	4	4	4
Ph 207, 208, 209 Introductory Classical Physics	4	4	4
Ch 201, 202, 203 General Chemistry (chemical or electrical engineering majors) or social science or humanities sequence (agricultural, civil, general, mechanical engineering and engineering physics major)	3-4	3-4	3-4
Wr 111 English Composition	3		
Elective			2-3
Physical Education	1		1
Personal Health		2	
	17-18	15-16	16-18

Total: 48-52 hours

Students who are not ready to begin the program outlined above will need to begin their college studies with a year of pre-engineering. This year, and the first year of engineering, may be completed at the community college. Three years of engineering studies at Oregon State University will be required to complete a baccalaureate program in engineering, for a total of five years (one year pre-engineering, four years engineering).

Freshman Year—Pre-Engineering

	F	W	S
Mth 95 Intermediate Algebra[1]	4		
Mth 101 College Algebra		4	
Mth 102 Trigonometry			4
Ch 201, 202, 203 General Chemistry (chemical and electrical engineering majors) or social science or humanities sequence (agricultural, civil, general, and mechanical engineering and engineering physics majors)[2]	3-4	3-4	3-4
Wr 111, 112 English Composition	3	3	
Electives	3-4	3-4	5-6
Physical Education	1	1	
Personal Health			2
	15-16	15-16	15-16

Sophomore Year—First-Year Engineering

GE 101, 102, 103 Engineering Orientation	2	2	2
Mth 200, 201, 202 Calculus with Analytic Geometry	4	4	4
Ph 207, 208, 209 Introductory Classical Physics	4	4	4
Social science or humanities sequence	3	3	3
Physical Education	1	1	1
Electives	0-3	0-3	0-3
	14-17	14-17	14-17

Total: 87-93 hours

[1]Students should begin work in mathematics at the level indicated in placement tests. If possible, the entire sequence Mth 200, 201, 202, 203 should be completed before the end of the sophomore year.

[2]Or Ch 101, 102, 103 and 241.

Forestry

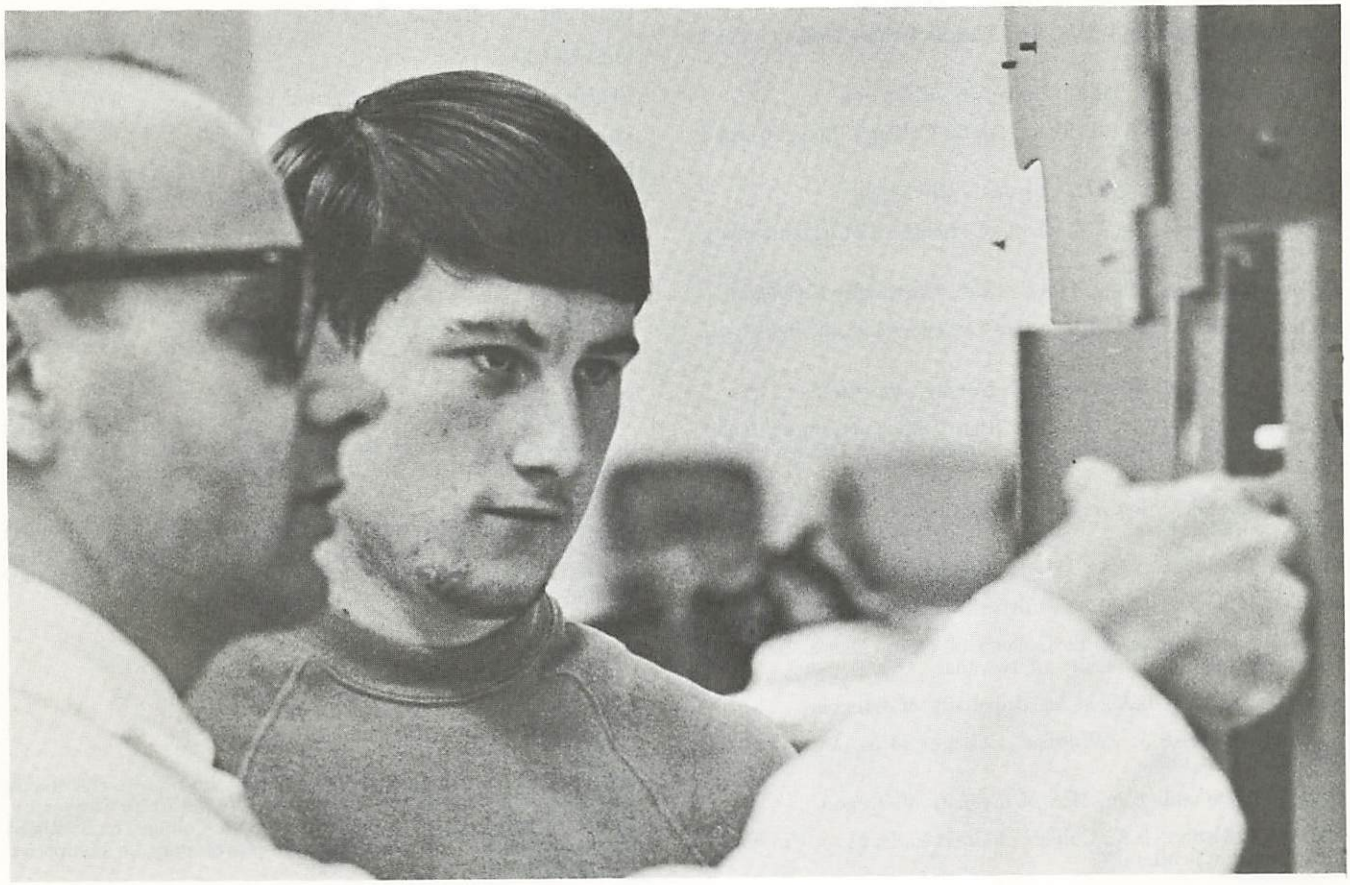
The one-year preforestry program outlined below, if successfully completed, will prepare students to enter professional curricula in forestry offered by the School of Forestry at Oregon State University at the sophomore level. Students planning to enter a professional program of forestry at Oregon State University, or some other institution, would transfer immediately following completion of the one-year forestry program. Forestry is a complex and demanding profession. Students will find that the one-year preforestry program must be followed by at least three years at a professional school of forestry to complete baccalaureate degree requirements.

Freshman Year—Preforestry

	F	W	S
Bot 201, 202 General Botany	4	4	
Ch 201, 202, 203 General Chemistry	4	4	4
Mth 101 College Algebra[1]	4		
Mth 102 Trigonometry		4	
Mth 200 Calculus with Analytic Geometry			4
Wr 111, 112, 113 English Composition	3	3	3
Ge 115 Graphics			3
Physical Education	1		1
Personal Health		2	
Sp 111 Fundamentals of Speech			3
	16	17	18

Total: 51 hours

[1]Students should enroll in mathematics at level indicated by placement test scores. However, the usual pattern calls for completion of Mth 200 by the end of the freshman year.



Language Arts

Chairman

Howard, John E.—B.S., M.A., University of North Dakota.

Faculty

Alford, Evan—B.S., University of Oregon; O.D., Northern Illinois College.

Anderson, Catherine—B.S., University of Illinois; M.A., University of Oregon. Part-time.

Armstrong, Paul—B.A., Chico State College; M.A., University of Oregon.

Blackwell, Samuel E.—B.S., Abilene Christian College; M.S., Syracuse University.

Combs, Maxine—B.A., Mills College; M.A., Wayne State University; Ph.D., University of Oregon. Part-time.

Couchman, Betty Ann—B.A., San Francisco State College. Part-time.

Dixon, Pauline—B.A., M.E., University of Oregon.

Hodges, Marcia—B.A., William Smith College; M.A., Cornell University. Part-time.

Juba, Sheila B.—B.A., M.A., University of Oregon.

Kepner, Thomas—B.A., University of Michigan; M.A., University of Oregon. Part-time.

Lansdowne, Karen—B.A., M.A., M.Ed., University of Oregon.

Miller, Frank—B.S., Portland State College; M.A., University of Washington. Part-time.

Orcutt, Ada—B.A., Willamette University. Part-time.

Packard, Eulalia—B.A., Colorado State University; M.A., Colorado State University; M.A.L.S., University of Denver. Part-time.

Piper, Mark—B.A., University of Puget Sound; M.A., University of Oregon. Part-time.

Powell, Jack—B.A., M.A., University of Portland.

Reschke, Claus—B.A., M.A., University of Oregon. Part-time.

Robinson, Antoinette—B.A., College of Notre Dame, Belmont, California; M.A., University of Nevada.

Sanderson, Delta—B.A., M.A., University of Oregon.

Sommers, Jane—B.A., Whitman College; M.A., University of Montana. Part-time.

Smith, W. Donald—B.A., M.A., University of Oregon.

Stevens, Christian—B.A., College of Great Falls; M.A., University of Edinburgh, Scotland.

Taylor, Cherry—B.S., University of Oregon; M.S., University of Southern California.

Tegger, Arthur—B.A., Westmont College, Santa Barbara, California, M.A., Pacific University.

Vonderheit, Ruby—B.A., M.A., University of Oregon. Part-time.

Woods, Arden—B.A., M.A., University of Oregon. Part-time.

Courses

1.100 Communications Skills I (3 class hrs/wk) 3 credits
Speaking, listening, spelling and vocabulary.
Prerequisite: High school English or equivalent.

1.102 Communications Skills II (3 class hrs/wk) 3 credits
Reading, writing, practical usage in mechanics and grammar, note-taking, outlining, summarizing and report making.
Prerequisite: Communications Skills I or equivalent.

6.126 Communications Skills III (3 class hrs/wk) 3 credits
Report and letter writing basic to occupational and business education.
Prerequisite: Communications Skills I & II or equivalent.

Wr 10 Corrective English (3 class hrs/wk) non-credit
Review of fundamentals of English Composition.

Wr 111, 112, 113 English Composition (3 class hrs/wk) 3 credits each
Fundamentals of composition; frequent written themes. Must be taken in sequence.

Wr 226 Expository Writing (3 class hrs/wk) 3 credits
Practice in various forms of expository writing.
Prerequisite: Wr 111, 112, 113

RL 50, 51, 52 French, First Year (4 class hrs/wk 4 credits each
Must be taken in sequence.

RL 101, 102, 103 French, Second Year (4 class hrs/wk) 4 credits each
Must be taken in sequence.

GL 50, 51, 52 German, First Year (5 class hrs/wk) 4 credits each
Must be taken in sequence.

GL 101, 102, 103 German, Second Year (5 class hrs/wk) 4 credits each
Must be taken in sequence.

Eng. 201, 202, 203 Shakespeare (3 class hrs/wk) 3 credits
Important plays: Comedies, histories, and tragedies.

RL 60, 61, 62 Spanish, First Year (4 class hrs/wk) 4 credits each
Must be taken in sequence.

RL 107, 108, 109 Spanish, Second Year (4 class hrs/wk) 4 credits each
Must be taken in sequence.

Eng. 101, 102, 103 Survey of English Literature (3 class hrs/wk) 3 credits each
Readings selected to represent great writers, literary forms, and significant currents of thought. Should be taken in squence.

Eng. 107, 108, 109 Survey of World Literature (3 class hrs/wk) 3 credits each
Outstanding works of ancient, medieval, and modern writers that have had a wide appeal outside the countries in which they originated. Should be taken in sequence.

Suggested Curriculums

English

This program is recommended for those who plan to transfer in English to the University of Oregon, Oregon State University, Portland State University, Eastern Oregon College, or Southern Oregon College. The baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence numbered at 100 level[2]	3	3	3
Science sequence (with laboratory or 12 hours of mathematics numbered 101 or above)	4	4	4
Foreign language[3]	4	4	4
Physical Education	1	1	1
	15	15	15

Sophomore Year

	F	W	S
Eng 201, 202, 203 Shakespeare[4]	3	3	3
Hst 101, 102, 103 History of Western Civilization	3	3	3
Second social science sequence[5]	3	3	3
Foreign language[3]	4	4	4
Physical Education	1		1
Personal Health		2	
Electives[6]	3		2
	17	15	16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of elective. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113. (SOC students may substitute a writing elective for Wr 113.)

[2]OSU: Eng 101, 102, 103 or Eng 107, 108, 109. SOC: Eng 104, 105, 106 or Eng 107, 108, 109.

[3]The language requirement for the B.A. degree may be met in any one of the following ways: (1) two years (normally 24 term hours) of college work in a foreign (2) one year of college work at the second-year or higher level; or (3) examination showing language competence equivalent to that attained at the end of two years of college study. SOC also offers a B.S. program in English which does not require a foreign language. Students selecting this option should complete Sp 111 and two of following: AA 201, Mus 201, Phl 201.

[4]PSU students may substitute Eng 253, 254, 255 Survey of American Literature. EOC students may complete Eng 201, 202, and Wr 226 Expository Writing.

[5]Students planning to teach should complete Psy 201, 202 Introduction to Psychology, and Sp 111 Introduction to Speech.

[6]OSU students should begin a second sequence in science or complete courses in mathematics to meet OSU distribution requirements.

Foreign Languages

This program is recommended for those who plan to transfer in foreign languages to the University of Oregon, Portland State University, or Oregon State University (French and German). Requirements for the baccalaureate degree may be completed with two additional years of work.

Foreign language students may begin their study of language in college. However, it is more common and desirable for prospective language majors to begin their studies with two to four years of work in high school. Students ready to begin second-year course work in language their freshman year will need to transfer to a four-year institution for advanced course work during the sophomore year.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Science sequence (with laboratory, or 12 hours of mathematics numbered 101 and above)	3-4	3-4	3-4
Foreign language	4	4	4
Physical Education	1		1
Personal Health		2	
	14-15	15-16	14-15

Sophomore Year

	F	W	S
Foreign language	4	4	4
Second science sequence[2]	3-4	3-4	3-4
Social science sequence (Hst 101, 102, 103 History of Western Civilization recommended)	3	3	3
Second social science or humanities sequence[3]	3	3	3
Physical Education	1	1	1
Electives to bring total to 93 hours	2	2-3	
	15-16	15-17	14-15

Total: 93 hours

[1]Students transferring to UO should complete Wr 111, 112, 113. Students transferring to PSU or OSU should complete Wr 111, 112 and 3 hours of electives.

[2]Students transferring to UO may complete Psy 201, 202, 203 General Psychology. If this is done, laboratory course work will need to be completed after transfer.

[3]Students transferring to PSU or OSU who plan to be teachers should complete Psy 201, 202 and Sp 111 Introduction to Speech. AA 201, 202, 203 Survey of Visual Arts is recommended for students transferring to PSU who do not plan to teach.

General Arts and Letters, General Studies in Arts and Letters, General Studies in Humanities

This program is recommended for students who plan to transfer in general arts and letters at the University of Oregon, in general studies in arts and letters at Portland State University, or in general studies in humanities at Eastern Oregon College, Oregon College of Education, Oregon State University, or Southern Oregon College. Requirements for the baccalaureate degree may be completed with two additional years of work. Students planning to teach in the secondary schools, who will complete their preparation at Portland State University, should complete the transfer program recommended for the subject they plan to teach.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence[2]	3	3	3
First year foreign language[3] or social science sequence	3-4	3-4	3-4
Science sequence (with laboratory or 12 hours of mathematics numbered 101 or above)[4]	4	4	4
Physical Education	1		1
Personal Health		2	
	14-15	15-16	14-15

Sophomore Year

	F	W	S
Psy 201, 202, 203 General Psychology[5] or social science	3	3	3
Hst 101, 102, 103 History of Western Civilization (UO, OSU, EOC, SOC see[6])	3	3	3
Social science or science sequence (PSU)	3-4	3-4	3-4
Two terms of Eng 253, 254, 255 American Literature and one term of Eng 201, 202, 203 Shakespeare (OCE)	3	3	3
Second year foreign language or science sequence	3-4	3-4	3-4
Select one:[7] Eng 201, 202, 203 Shakespeare AA 201, 202, 203 Survey of the Visual Arts Mus 201, 202, 203 Introduction to Music and Its Literature	3	3	3
Physical Education	1	1	1
Electives[8]	2	2	2
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU, PSU, or OCE should complete Wr 111, 112 and 3 hours of elective. Students transferring to UO or EOC should complete Wr 111, 112, 113. SOC students complete Wr 111, 112, and 113 or writing elective.

[2]UO: course numbered at 100 level. SOC: Eng 104, 105, 106 or 107, 108, 109. OCE: Eng 101, 102, 103 or Eng 107, 108, 109. PSU: any arts and letters courses acceptable.

[3]The language requirement for the B.A. degree may be met in one of the following ways: (1) two years (normally 24 term hours) of college work in a foreign language; (2) one year of college work at the second-year level; or (3) examination showing competence equivalent to that attained at the end of two years of college work. OSU, PSU, EOC, OCE, and SOC offer Bachelor of Science degree, which does not require completion of the foreign language requirement.

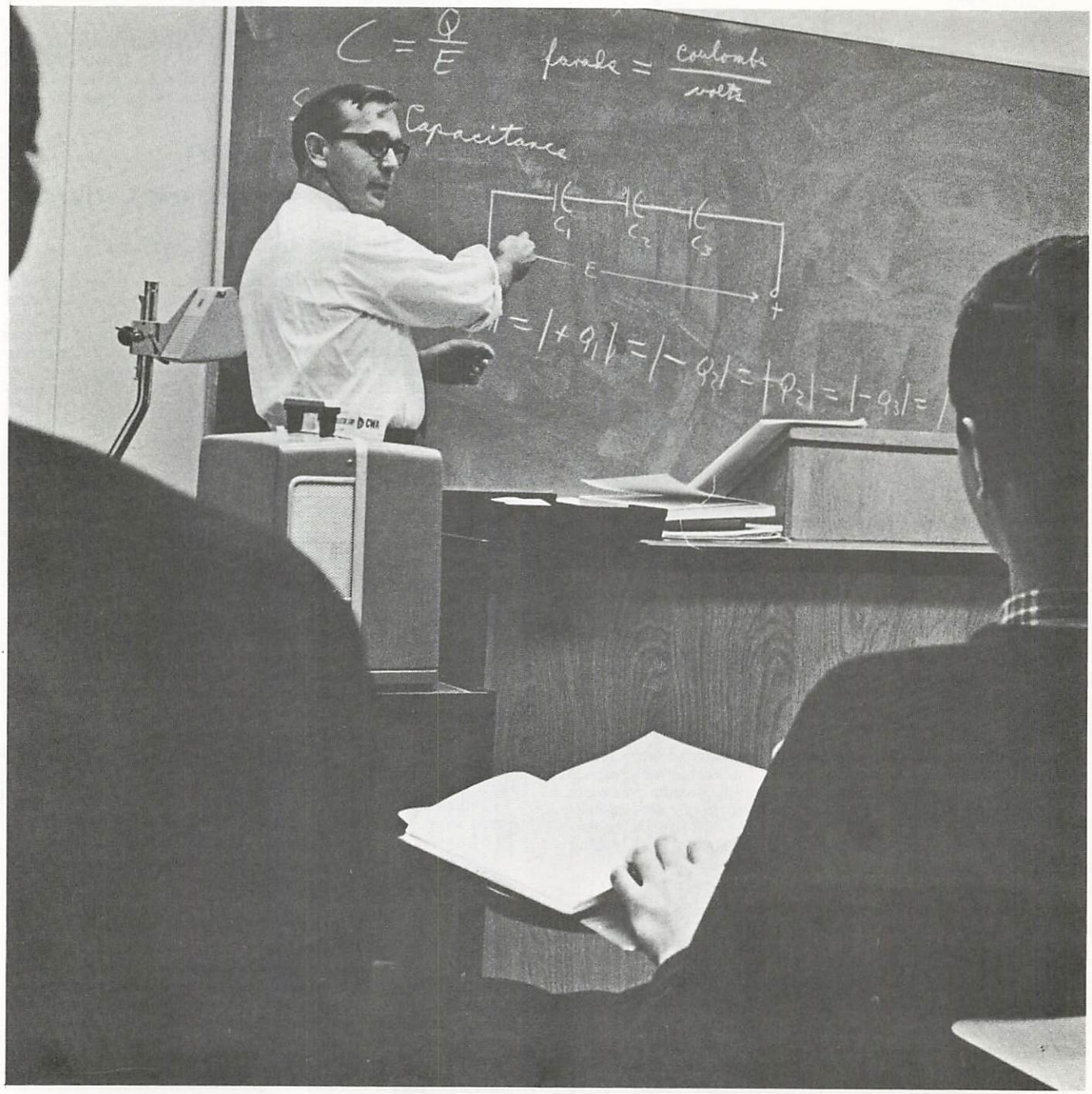
[4]SOC requires two science sequences, one a biological science and one physical science or mathematics. Non-laboratory science and Mth 95 are acceptable at PSU.

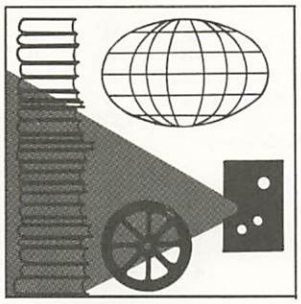
[5]Students transferring to EOC, OCE, OSU and SOC who plan to become teachers must complete Psy 201, 202, and Sp 111. Others may substitute a social science sequence. UO students should complete the program outlined.

[6]SOC students should take either Hst 201, 202, 203 History of the United States or Ps 201, 202, 203 American Governments.

[7]OSU students should take AA 201, 202, 203 or Mus 201, 202, 203. OCE students may complete Eng 101, 102, 103 or Eng 107, 108, 109, if not taken during Freshman year, or any combination of Eng 201, 202, 203, AA 201, 202, 203, and Mus 201, 202, 203 (not necessarily a sequence), PSU also recommends Eng 253, 254, 255.

[8]OSU students should select courses in philosophy or social science. OCE students planning to teach should complete Phl 201, 202, or 203.





Library-Learning Resource Center

The continued expansion and development of library and learning resource materials as an integral part of the instructional program of the College is assured through close cooperation between students, instructors, and library personnel. Library-Learning Resource Center facilities are explained to students in orientation in such classes as communications, social sciences, science and mathematics. Students in beginning English classes receive information on the use of the card catalog, reference books, and periodical indexes. In other classes they are given assistance in locating specific types of information. The reader and reference services in the library are designed to provide students with opportunities to explore in depth. The LRC staff is designing independent study programmed instructional materials so that students may be informed of the various tools of the library without having to go through formal classroom instruction. An example of this is an 8mm concept film on the use of the card catalog; other areas to be covered are writing of a term paper, the use of various indexes and guides, and the use of the microfilm reader-printers.

Other library facilities are available in the area, such as the University of Oregon Library, the Springfield Public Library and the Eugene Public Library. These services are subject to regulations of the individual libraries.

Director

Harker, Keith H., B.S., Library Science, University of Utah; M.S., Librarianship, University of Oregon.

Staff

Lindstrom, Howard, Audio Visual Coordinator, B.S. in Elementary Ed., Southern Oregon College; M.A. in Curriculum Materials and Inst. Tech.; San Jose State College.

Matheson, Del, Catalog and Reference Librarian; A.A., B.S., English, Mankato State College; M.S., Library Science, University of Oregon.

Ownbey, Donald, Acquisitions Librarian, B.A., History, M.Ed., Linfield College; M.L.S., Library Science, University of Oregon.

The Program

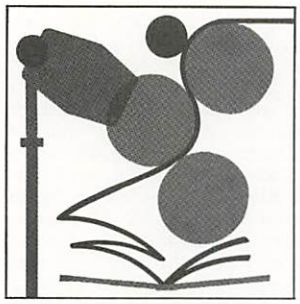
The Library-Learning Resource Center serves the educational needs of students and faculty by providing them with a comprehensive quality collection of instructional materials, equipment, and publications. Its primary purpose and objective is, therefore, identical to the educational task and philosophy of the College itself.

The Center contains, in addition to the traditional library resources, record and tape listening areas, facilities for previewing films and the dial access information retrieval system.

As a center for many types of instructional materials, the L-LRC facilitates the use of effective aids to learning through its central grouping of such resources as the printed materials in books, magazines, newspapers, and pamphlets; aural materials as found in motion pictures, phonograph records, and tapes; and pictorial materials in filmstrips, illustrations, maps, charts, prints, and models.

The Center offers an inviting, convenient, quiet place for reading and study and provides books and other instructional services for students and staff in both day and adult courses. Opportunities are afforded students to develop skills in the use of important reference books and time-saving indexes. Assistance and encouragement are given to students and faculty in the investigation of problems and ideas.

Assistance is given to students in reaching their educational requirements and goals and in investigating vocational opportunities. Current files of vocational guidance materials are available to help in selecting vocational objectives. A collection of catalogs from colleges and universities throughout the nation is provided for those who plan to transfer to other institutions of higher learning.



Mass Communications

Chairman

De Chaine, Virginia—B.S., M.S., Speech and Theatre, University of Oregon.

Faculty

Blackwell, Sam E.—B.S., Business Administration, Abilene Christian College; M.A., Public Relations and Advertising, Syracuse University.

Brock, James—B.S., Sociology, University of Oregon; FCC Radio Telephone First Class License; Oregon Vocational Approval.

Carmichael, Carl—B.A., English-Speech, Westminster College; M.A., Rhetoric, Louisiana State University; Ph.D., Communication Research, University of Iowa. Part-time.

Delue, Norman—B.A., Speech and Theater, Western Michigan University; M.A., Theater, St. Louis University. Part-time.

Gibson, Pat—B.A., English, University of Oklahoma. Part-time.

Hartman, Barrie—B.A., Journalism, Washington State University; M.S., Journalism, University of Oregon. Part-time.

Houglum, Roger J.—B.S., M.Ed., University of Oregon; FCC Radio Telephone First Class License; Oregon Vocational Certificate.

Romine, Larry—B.A., Sociology, Midland College; M.S., Journalism, University of Oregon.

Taylor, Carol—B.A., English and Speech, Stetson University; M.A., Speech, University of Georgia. Part-time.

Speech

Students who plan to transfer to the major programs in speech at the University of Oregon, Oregon State University or Portland State University should take the courses listed below. Requirements for the baccalaureate degree may be completed with two additional years of work at the University of Oregon, three years at Portland State University.

Two-Year Program (UO, OSU)
Freshman Year

	F	W	S
Wr 111, 112, 112 English Composition[1]	3	3	3
Literature sequence	3	3	3
First year foreign language[2] or)			
Science sequence[3] (with laboratory or)	3-4	3-4	3-4
12 hours of mathematics 101 or above))			
Sp 111, 112, 113 Fundamentals of Speech	3	3	3
Physical Education	1		1
Personal Health		2	
Electives	2		2
	15-16	14-15	15-16

Sophomore Year

	F	W	S
Social Science sequence[4]	3	3	3
Sp 229 Interpretation	2		
Second year foreign language (B.A. degree)	4	4	4
Science sequence (B.A. degree)[3]	3-4	3-4	3-4
Second humanitarian sequence (B.S. degree)[5]			
Second social science sequence (B.S. degree)[6]	3	3	3
Physical Education	1	1	1
Electives[7]	0-4	3-6	3-6
	14-16	15-16	15-16

Total: 93 hours

One-Year Program (PSU)

	F	W	S
Wr 111 English Composition	3		
Social science sequence	3	3	3
Science sequence[8]	3-4	3-4	3-4
Sp 111, 112, 113 Fundamentals of Speech	3	3	3
Physical Education	1	1	
Personal Health			2
Electives[7]	2-3	2-3	0-2
	16	16	15-16

Total: 47-48 hours

[1]Students planning to transfer to OSU should complete Wr 111, 112, and 3 hours of elective. Students transferring to UO should complete Wr 111, 112, 113.

[2]The B.A. degree program is recommended particularly for students interested in theater or contemplating graduate study. The language requirement for the B.A. degree may be met in any one of the following ways: (1) two years (normally 24 term hours) of college work in a foreign language; (2) one year of college work at the second-year level; or (3) examination showing competence equivalent to that attained at the end of two years of college work.

[3]Students interested in speech therapy should take GS 101, 102, 103 General Biology. Students transferring to UO may take Psy 201, 202, 203 to meet science requirements if laboratory work is completed at UO after transfer.

[4]History of Western Civilization recommended. Students planning to teach should complete Psy 201, 202 during sophomore year.

[5]Recommended: Mus 201, 202, 203 Introduction to Music and Its Literature; AA 201, 202, 203 Survey of the Visual Arts; or Eng 201, 202, 203 Shakespeare.

[6]Recommended: Soc 204, 205, 206 General Sociology or Hst 201, 202, 203 History of the United States.

[7]Students may complete 1-6 credits in Sp 250 Speech and Theater Workshop, if offered.

[8]Students interested in speech science and correction should take GS 101, 102, 103 General Biology or GS 104, 105, 106 Physical Science.

Speech Courses

Sp 101, 102, 103 Introduction to Mass Communications 3 credits each
Nature, functions, impact, and problems of mass communications; its developmental, psychological, sociological, aesthetic, and physical bases; introduction to general speech, journalism, photography, radio and television.

Sp 111, 112, 113 Fundamentals of Speech 3 credits each
Projects in extempore speaking. Primary emphasis on content and organization, with attention to the student's adjustment to the speaking situation, effective delivery, audience motivation, and language of speech.

Sp 212 Voice and Articulation 3 credits
Principles of voice production and articulation of speech sounds, with attention to elementary speech physiology and phonetics. Intended for those who desire to develop more effective speech and for meeting the special needs of teachers, radio and television speakers, public speakers, foreign born, and other who require special competence in speaking.

Sp 241 Fundamentals of Broadcasting 3 credits
General survey of broadcasting, including history, growth, social aspects, laws and policies, station and network organization, programming, the advertiser, the listener, public interest, standards of criticism, comparison of broadcast systems, international broadcasting and propaganda.

Radio Broadcasting

One Year Program

The radio communications training program in broadcasting gives the student the basic instruction and training required for employment in a commercial radio broadcast station.

Instruction covers the fundamentals of radio station operation, program planning and production, studio and control room operation, announcing techniques and radio advertising. On-the-air experience is provided at the College's FCC-licensed FM broadcast station, KLCC, which operates with 450 watts of power on 90.3 mc.

Instruction and training in this program are aimed at preparing a person for employment as a combination man, announcer-technician, or announcer. Usual first employment is at radio stations in smaller communities, with promotion to larger stations and more specialized jobs possible after a year or two of experience. Beginning pay is about $400 a month.

Radio Broadcasting may be combined with a year of Telecasting for those who wish to earn an Associate Degree in Telecommunications.

	F		W		S	
	H	C°	H	C	H	C
Radio Broadcasting I	3	3				
Radio Broadcasting Lab I	12	4				
Electronics I, II	5	4	5	4		
Math II, III	3	3	-3	3		
Electrical Drafting	4	2				
Radio Broadcasting II			3	3		
Radio Broadcasting Lab II			12	4		
Communications Skills I, II			3	3	3	3
Radio Broadcasting III					3	3
Radio Broadcasting Lab III					12	4
Electronics III					5	4
Radio Operator Preparation I, II			5	4	5	4
	27	16	31	21	28	18

°H=hours, C=credits

Radio Courses

3.400 Radio Broadcasting I (3 class hrs/wk) 3 credits

3.401 Radio Broadcasting Lab I (12 lab hrs/wk) 4 credits
History and technical development of broadcasting; Federal Communications Commission rules and regulations; station organization, operation, and job responsibilities; radio programming and formats.

3.402 Radio Broadcasting II (3 class hrs/wk) 3 credits

3.403 Radio Broadcasting Lab II (12 lab hrs/wk) 4 credits
Microphone types and their response patterns. Developments of speed and accuracy in reading, and warmth and friendliness in communication; announcing techniques; radio advertising.
Prerequisite: Fundamentals of Radio Broadcasting I or consent of instructor.

3.404 Radio Broadcasting III (3 class hrs/wk) 3 credits

3.405 Radio Broadcasting Lab III (12 lab hrs/wk) 4 credits
Technical equipment of the radio station in the control room, studio, and transmission, its maintenance; procedures in case of failure; public relations; public service responsibility of a licensee as viewed by the FCC; problems of station management; personnel; development of a "station image."
Prerequisite: Fundamentals of Radio Broadcasting II or consent of instructor. (A seminar in advanced radio station operation is available on sufficient demand.)

3.370 Radio Broadcasting IV (3 class hrs/wk) 3 credits

3.371 Radio Broadcasting Lab IV (12 lab hrs/wk) 4 credits
Historical development network and independent station programming; FCC criteria for acceptable programming; radio continuities.
Prerequisite: Radio Broadcasting III or consent of instructor.

3.372 Radio Broadcasting V (3 class hrs/wk) 3 credits

3.373 Radio Broadcasting Lab V (12 lab hrs/wk) 4 credits
Historical development; advertising: local and national, copy and spot sales.
Prerequisite: Radio Broadcasting IV.

3.374 Radio Broadcasting VI (3 class hrs/wk) 3 credits

3.375 Radio Broadcasting Lab VI (12 lab hrs/wk) 4 credits
Information required to pass FCC operator's license exam; testing and trouble-shooting malfunctioning transmitter equipment; problems of station operation; public relations and public service responsibility of radio station; planning full-day programs; staff responsibilities.
Prerequisite: To be taken in the sixth term.

Telecasting

One Year Program

Those who have previous background in communications receive basic instruction and job experience for employment in the broadcasting field.

Instruction covers the fundamentals of television control room and studio techniques. LCC's new closed-circuit TV installation is used as a training laboratory. Students may specialize in camera work, switching, set construction and lighting, or announcing.

A usual prerequisite is the completion of Radio Broadcasting I, II, III or previous radio or station experience.
Telecasting may be combined with a year of Radio Broadcasting for those who wish to earn an Associate Degree in Telecommunications.

	F		W		S	
	H	C*	H	C	H	C
Telecasting I	3	3				
Telecasting Lab I	12	4				
Practical Physics I, II	5	4	5	4		
Applied Economics	3	3				
Telecasting II			3	3		
Telecasting Lab II			12	4		
Salesmanship			3	3		
Audio Systems			5	4		
Telecasting III					3	3
Telecasting Lab III					12	4
Human Relations I					3	3
Employer-Employee Relations	2	2				
Business Records and Reports					3	3
Health Education					2	2
	25	16	28	18	23	15

*H=hours, C=credits

Telecasting Courses

3.410 Telecasting I (3 class hrs/wk) 3 credits

3.411 Telecasting Lab I (12 lab hrs/wk) 4 credits
Station organization; technical and production facilities of stations; methods, and system fundamentals; studio and control room procedure.

3.412 Telecasting II (3 class hrs/wk) 3 credits

3.413 Telecaseting Lab II (12 lab hrs/wk) 4 credits
Cameras and their operation; camera lenses, floor management, lighting, video switching of production, audio in production.

3.414 Telecasting III (3 class hrs/wk) 3 credits

3.415 Telecasting Lab III (12 lab hrs/wk) 4 credits
Preparation for programs; sets, colors for suitable interest and contrast values, lighting; typical control equipment.

Journalism

Those who plan to transfer to the major program in journalism at the University of Oregon are advised to follow the program below. Requirements for the baccalaureate degree may be completed with two additional years of work. Lower-division course work in journalism, up to 13 hours, is accepted as elective credit at UO. It does not apply toward the upper-division major.

Freshman Year

	F	W	S
Wr 111, 112, 113, English Composition	3	3	3
Eng 101, 102, 103 Survey of English)			
Literature, or Eng 104, 105, 106)			
Introduction to Literature)	3	3	3
Science sequence (with laboratory or 12 hours Mth 101 and above)	4	4	4
Foreign language or electives[1]	4	4	4
Physical Education	1		1
Personal Health		2	
	15	16	15

Sophomore Year

	F	W	S
Hist 101, 102, 103 History of Western Civilization or Hst 201, 202, 203 History of the United States	3	3	3
Eng 253, 254, 255 Survey of American Literature or Eng 201, 202, 203 Shakespeare	3	3	3
Ec 201, 202, 203 Principles of Economics or PS 201, 202, 203 American Governments	3	3	3
Foreign language or second social science sequence	3-4	3-4	3-4
Electives[2]	2-3	2-3	2-3
Physical Education	1	1	1
	16	16	15

Total: 93 hours

[1]Students are encouraged to study one foreign language through the second-year college level. Introduction to Mass Communications is a satisfactory elective.

[2]J215 Newswriting Lab, J216, J217 Newswriting I and II, J218 News Editing, are satisfactory electives.

Journalism Courses

J 215 Newswriting Lab (1 lab hr/wk) 1 credit
Gathering, writing, editing news for the College newspaper.
Prerequisite: Concurrent enrollment in either J216, 217, or 218.

J 216 Newswriting I (2 class hrs/wk) 2 credits
What news it, how its simpler forms are written.
Prerequisite: Concurrent enrollment in J 215.

J 217 Newswriting II (2 class hrs/wk) 2 credits
Writing news which lends itself to "feature" treatment.
Prerequisite: J 216, concurrent enrollment in J 215.

J 218 News Editing (2 class hrs/wk) 2 credits
Basics of copy reading, headline writing, makeup.
Prerequisite: J 216.

Photography

Fundamentals of visual communications, using photography, are stressed. Emphasis is on camera, optics, lighting, composition, exposure, and darkroom developing and printing.

Photography Courses

2.207 Photography I 3 credits
Introduction, history, purposes, uses, fundamentals of camera and darkroom procedures.

2.208 Photography II 3 credits
Camera techniques, composition, lighting, optics, mechanics of the finished photograph.
Prerequisite: Photography I or consent of instructor.

2.209 Photography III 3 credits
Advanced camera techniques and darkroom procedures for film and print.
Prerequisite: Photography II or consent of instructor.

Mathematics

Chairman

Zink, Howard E.—B.A. Northwest Nazarene College, Nampa, Idaho; M. S., Mathematics, University of Colorado.

Faculty

Coalwell, Richard—B.S., General Science, University of Oregon; M.A., Mathematics, Boston College.

Edelman, Ron—B.S., Mathematics South Dakota School of Mines & Technology; M.S., Interdisciplinary Studies, University of Oregon.

Fast, Casey—B.S., Education, Portland State University; M.A., Mathematics, University of Oregon.

Gore, Patrick—B.S., Geology, Oklahoma University; M.A., Education, Memphis State University; M.S., Mathematics, Tulsa University.

Halberg, Leland—B.S., Education, Wisconsin State College; M.S., Interdisciplinary, Mathematics and Physics, University of Oregon; Oregon Vocational Approval.

Jay, Roger—B.A., M.A., Mathematics, Texas Technological College, Lubbock, Texas.

Loughlin, John—B.A., Mathematics Montclair State College, New Jersey; M.A., Mathematics, Villanova University, Pennsylvania.

Reimer, Thomas—B.S., Mathematics, Seattle Pacific College; M.S., Mathematics, Oregon State University.

Schwin, Vernon D.—B.A., Mathematics, Olivet Nazarene College, Kankakee, Illinois; M.S., Interdisciplinary Studies, University of Oregon.

Seabloom, Edward—B.S., General Science, Oregon State University; M.S., Interdisciplinary Studies, University of Oregon.

Smith, Hazel—B.A., Education, University of Alberta; M.S., Mathematics, Michigan State University.

Snow, James W.—B.A., Mathematics & Chemistry; M.A., Mathematics, Colorado State University.

Swanson, James—B.S., Mathematics, University of Oregon; M.S., Interdisciplinary Studies, Mathematics, Psychology, and Education, University of Oregon.

Occupational Courses

4.200 Mathematics I (3 class hrs/wk) 3 credits
Practical mathematics that includes problems composed of whole numbers, fractions, measurements, formulas, graphs, and roots. Review of general mathematics.
Prerequisite: Ability to profit from instruction.

4.202 Mathematics II (3 class hrs/wk) 3 credits
Essentials of elementary algebra, trigonometry of the right triangle, with applications related to the occupational fields.
Prerequisite: Successful completion of high school level general mathematics; no algebra or geometry is presumed.

4.204 Mathematics III (3 class hrs/wk) 3 credits
A continuation of algebra studied in Mathematics II with emphasis upon practical application.
Prerequisite: Mathematics II, or the equivalent.

4.208 Slide Rule (2 lab hrs/wk) 1 credit
Basic course in the theory, operation, and applications of the slide rule, including multiplication, division, power and roots, trigonometric functions, and logarithms.
Prerequisite: Mathematics III (4.204 or equivalent)

1.281 Mathematics for Data Processing (5 class hrs/wk) 5 credits
Basic logic, numeral systems, algebra with emphasis on problem solving, numbers in bases other than ten, and Boolean Algebra.
Prerequisite: Mathematics III (4.204 or equivalent)

6.135 Engineering Problems I (2 class hrs/wk 2 credits
Designed to meet the calculating needs of the technician in electronics, civil and structural engineering and technical drafting. Engineering methods and related problems solving will be considered. Prime emphasis on slide rule computation.
Prerequisite: One year of high school algebra or equivalent.

6.136 Engineering Problems II (2 class hrs/wk) 2 credits
Continuation of the slide rule and related problems solution. Other means of calculation will be related to problems solution in the technician's various fields. Problem solution will be structured in terms of analysis, formulation, calculation, and clear presentation.
Prerequisite: Engineering problems I (6.135)

6.261 Technical Mathematics I (4 class hrs/wk) 4 credits
Review of basic algebra and advanced work with functions, variation, systems of linear equations, exponents and radicals, and quadratic equations in one unknown. Emphasis on problem solving.
Prerequisite: High school algebra or equivalent.

6.262 Technical Mathematics II (4 class hrs/wk) 4 credits
Review of plane geometry, its applications an analytical trigonometry on technician level. Emphasis on problem solving.
Prerequisite: Technical Mathematics I (6.261 or equivalent).

6.266 Technical Mathematics III (4 class hrs/wk) 4 credits
Mathematics on the technician level covering simultaneous quadratic equations, binomial theorem, arithmetic and geometric progressions, logarithms, exponential functions, complex numbers, and vector algebra.
Prerequisite: Technical Mathematics II (6.262 or equivalent).

6.115 Electrical Mathematics (4 class hrs/wk) 4 credits
Introductory calculus for electronics engineering tehnicians. Differential and integration of rational, trigonometric, and exponential functions.
Prerequisite: Technical Mathematics III (6.266 or equivalent).

College Transfer Courses

Mth 10 Elementary Algebra Non-Credit
Fundamental concepts of algebra including signed numbers, monomials, polynomials, linear equations and stated problems. Designed to qualify the student with little or no background in algebra for Mth 95. Placement may result from the cooperative tests given in Mth 95.

Mth 95 Intermediate Algebra 4 credits
Basic algebraic concepts related to linear and quadratic equations, complex numbers, radicals, exponents and logarithms. No credit if taken after Mth 101 or any more advanced mathematics course. Not acceptable toward meeting science group requirements at the University of Oregon. Placement may result from cooperative tests given in Mth 101.
Prerequisite: Mth 10, Mth III, or one year of high school algebra, preferable within the past 5 years.

Mth 101 College Algebra 4 credits
Fundamental concepts of number systems, functions, linear equations, systems of linear equations, matrices, determinants, mathematical induction and logarithms.
Prerequisite: Mth 95 or one and one-half years of high school algebra.

Mth 102 Trigonometry 4 credits
Study and analysis of trigonometric functions and complex numbers, with topics in probability and theory of equations.
Prerequisite: Mth 101

Mth 106 Elementary Calculus 4 credits
A one term course in the elements of differential and integral calculus approached largely from an intuitive viewpoint. Electronic calculators and computers will be utilized to facilitate computions.
Prerequisite: Mth 102.

Mth 191, 192, 193 Mathematics for Elementary Teachers 3 credits each
Sequence of study in the basic concepts of mathematics for elementary teachers, or for anyone wishing a course in contemporary elementary mathematics.

Mth 191
Concepts of sets, functions, cardinal number system, factors and powers, division and systems of numeration.

Mth 102
Prime numbers, fundamental theorem of arithmetic, greatest common factor, least common multiple, rational and real number system.
Prerequisite: Mth 192

Mth 200, 201, 202, 203 Calculus with Analytic Geometry 4 credits each
Standard sequence for students in mathematics, science and engineering.

Math 200
A careful development of the concepts of plane analytic geometry, limits and derivative. Theorems on differentiation and their applications.
Prerequisite: Mth 102.

Mth 201
Development and analysis of definitions and theorems related to the definite integral with applications. Trigonometric review of lines, conics, and trigonometric and exponential functions.
Prerequisite: Mth 200.

Mth 202
Parametric equations, polar coordinates, vectors, and methods of integration with applications.
Prerequisite: Mth 201.

Mth 203
Solid analytic geometry, vector in three dimensions, infinite series, partial differentiation, multiple integration and linear algebra.
Prerequisite: Mth 202.

Mth 233 Introduction to Numerical Computation 4 credits
Computer use with emphasis on problem definition and problem analysis; use of flow charting techniques and the Fortran programming language.
Prerequisite: Mth 101 or equivalent.

Suggested Curriculum

Mathematics

This program has been approved by the University of Oregon, Oregon State University, Portland State University, and Southern Oregon College for students who plan to transfer in mathematics. Those who complete Mth 203 by the end of the sophomore year may complete requirements for the baccalaureate degree with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Foreign language (French, German, or Russian) (UO, OSU)	4	4	4
Mathematics[2]	4	4	4
Physical Education	1		1
Personal Health		2	
	15	16	15

Sophomore Year

	F	W	S
Mathematics[2]	4	4	4
Second year foreign language (UO, OSU)	4	4	4
Non-math science sequence (PSU)	3-4	3-4	3-4
Social science sequence[3]	3	3	3
Physical Education	1	1	1
Electives to bring total hours to 93[4]	3-4	3-4	3-4
	15-16	15-16	15-16

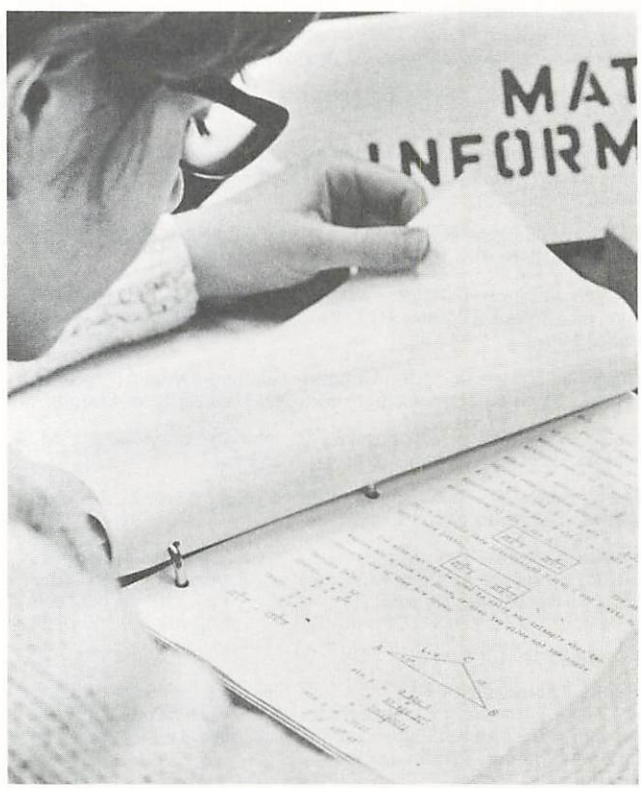
Total: 93 hours

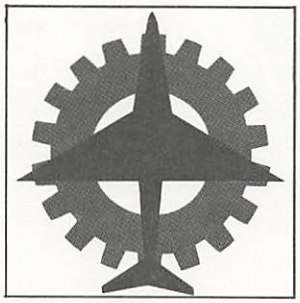
[1]Students planning to transfer to OSU should complete Wr 111, 112, and 3 hours of elective. Students transferring to UO, EOC or SOC should complete Wr 111, 112, 113. Students transferring to PSU should complete Wr 111 and 6 hours of humanities or social science.

[2]Students should enroll in mathematics at the level indicated in placement examinations. Students ready to begin calculus fall term of the freshman year should transfer to a major institution for their sophomore year of work. Since OSU courses equivalent to Mth 95 Intermediate Algebra, Mth 101 College Algebra, and Mth 102 Trigonometry offer only 2 hours credit for each course will be applied toward meeting departmental requirements in mathematics.

[3]Students transferring to SOC should take Hst 201, 202, 203 History of the United States or Ps 201, 202, 203 American Governments.

[4]Students preparing to become secondary teachers should complete Psy 201, 202 General Psychology. Those transferring to SOC should fill out the year with Sp 111 Fundamentals of Speech.





Mechanics

Chairman

Gaskill, Melvin C., Curtiss Wright Technological Institute of Aeronautics; FAA ground school certificate; FAA A.P. Mechanics Certificate; FAA Parachute Technician Certificate; Oregon Vocational Certificate.

Faculty

Davis, Lawrence L., A.P. Certificate; I.A. Rating; Oregon Vocational Approval.

Dickinson, Donald, A.P. Certificate, Oregon Vocational Approval.

Ellsworth, German C. M., B.S., Aeronautics, Utah State University; FAA Certified A.P. Certificate; Oregon Vocational Approval.

Greenlund, Don, Oregon Vocational approval.

Haurigan, John, Air Cadet Training; University of North Dakota.

Hovland, Marvin J., FAA Gold Seal Certificate; S.M.E.L. Rating; Instrument Instructors Certificate; Advanced Ground Certificate; Oregon Vocational Approval.

Jossart, Daryl A., Oregon Vocational Approval.

Kapsa, Douglas, Certificate in Flight and Ground.

Kellogg, Merrill, Machinist Apprentice, Western Machine Corp.

Lemke, Carl, FAA Certified A.P. Mechanic; FAA Mechanic Examiner and Ground School Instructor; Oregon Vocational Certificate.

Luck, George, Oregon Vocational Certificate.

Mast, George L., Oregon Vocational Certificate.

Maxwell, Robert D., Oregon Vocational Approval.

Meyer, Roland, Certified Vocational Instructor.

Naessens, Henry, Diploma in Aeronautics, Cass Tech High; Diploma in Aero Mech., Aeronautical University of Chicago.

Agricultural and Industrial Equipment Technology

Two Year Associate Degree

Students are trained to repair agricultural and light industrial equipment. Since equipment is increasing in size, cost and complexity, few are skilled in this specialty and jobs are abundant. Wages begin at about $2.50 per hour; journeyman get $3.50 to $4.

The program has 20 vacancies yearly. An agricultural background and interest in mechanics are helpful. Special costs include: Books $25, tools $100, welding fee $10.

Curriculum

First Year

	F H-C°	W H-C	S H-C
Farm Implement I, II, III	5-5	5-5	2-2
Farm Implement I, II, III Lab	10-3	10-3	6-2
Mathematics II	3-3		
Machine Shop Orientation	5-3		
Welding IA	5-2		
Practical Physics II, III		5-4	5-4
Machine Tool Operation		5-3	
Internal Combustion Engines I		2-2	
Internal Combustion Engines I Lab		3-1	
Applied Fluid Mechanics			2-2
Power Trains			2-2
Power Trains Lab			6-2
Fuel Systems, Farm Equipment			6-4
	28-16	30-18	29-18

°H—hours, C—credits

Agriculture and industrial equipment technology work experience fills the summer between the first and second years. It carries 30 class/lab hours and 10 credits. Regular tuition must be paid if credits are to be earned.

Second Year

	F H-C	W H-C	S H-C
Farm Equipment Electrical System	6-4		
Farm Equipment Engines	5-5		
Farm Equipment Engines Lab	10-3		
Communications Skills I, II	3-3	3-3	
Hydraulics, Heavy Equipment	5-3		
Farm Equipment Hydraulics I, II		5-3	5-3
Farm Equipment Power Trains		5-3	
Crawler Tractors		5-5	
Crawler Tractors Lab		10-3	
Farm Equipment Service Management			3-3
Farm Equipment Painting			5-2
Tractor, Major Overhaul			15-7
Elective (General Ed.)			3-3
	29-18	28-17	31-18

Courses

8.101 Farm Implement (5 class hrs/wk) 5 credits
The farm equipment industry; history, development of the industry, and job requirements; Tillage equipment: plows, harrows, cultivators, rollers, and carriers.

8.102 Farm Implement I Lab (10 lab hrs/wk) 3 credits
Development of skill in adjusting, maintaining, repairing, and in-the-field operation of tillage equipment.

8.103 Farm Implement II (5 class hrs/wk) 5 credits
Instruction in the use of Operator's Manual when assembling, adjusting, maintaining, repairing of seeding, fertilizing, and spraying equipment.
Prerequisite: Farm Implement I, 8.101.

8.104 Farm Implement II Lab (10 lab hrs/wk) 3 credits
Practice in assembling, adjusting, lubricating, and repairing of seeding, fertilizing, and spray equipment. To be taken concurrently with Farm Implement II.

8.105 Farm Implement III (2 class hrs/wk) 2 credits
Use of the Operator's Manual when adjusting, maintaining, assembling, and repairing harvest equipment.
Prerequisite: Farm Implement II, 8.103.

8.106 Farm Implement III Lab (6 lab hrs/wk) 2 credits
Practice in adjusting, maintaining, assembling, and repairing harvesting equipment. To be taken concurrently with Farm Implement III, 8.105.

8.107 Fuel Systems, Farm Equipment
(3 class, 3 lab hrs/wk) 4 credits
Kinds, repairing, assembling of fuel systems in agricultural machinery.
Prerequisite: Internal Combustion Engines I, 3.304.

8.109 Farm Equipment Electrical Systems
(3 class, 3 lab hrs/wk) 4 credits
Principles of the tractor electrical system, locating and correcting troubles in the electrical system.
Prerequisite: Practical Physics III, 4.304.

8.111 Farm Equipment Engines (5 class hrs/wk) 5 credits
Farm motors other than tractors.
Prerequisite: Internal Combustion Engines I, 3.304.

8.112 Farm Equipment Engines Lab
(10 lab hrs/wk) 3 credits
Adjustment, maintenance, and repair of small engines. To be taken concurrently with Farm Equipment Engines, 8.111.

8.113 Farm Equipment Hydraulics I
(2 class, 3 lab hrs/wk) 3 credits
Basic hydraulics and its application to agricultural machinery.
Prerequisite: Hydraulic Heavy Equipment, 3.353.

8.115 Farm Equipment Hydraulics II
(2 class, 3 lab hrs/wk) 3 credits
Assembling, servicing, and repairing hydraulic units.
Prerequisite: Farm Equipment Hydraulics I, 8.113.

8.117 Farm Equipment Power Trains
(2 class, 3 lab hrs/wk) 3 credits
Instruction in assembling, disassembling, and repairing of different types of power trains in tractors.

8.121 Crawler Tractors (5 class hrs/wk) 5 credits
Understanding and use of the Operator's Manual for Crawler Tractors; various kinds and types of Crawler tractors.
Prerequisite: Completion, first year of Farm Equipment Service Curriculum.

8.122 Crawler Tractors Lab (10 lab hrs/wk) 3 credits
Instruction in assembling, adjusting, and repairing tracks and steering clutches of the Crawler tractor. To be taken concurrently with Crawler Tractors, 8.121.

8.123 Tractor, Major Overhaul
(3 class hrs, 12 lab hrs/wk) 7 credits
Procedures in overhauling a tractor and the ability to disassemble, repair, reassemble, and tune the tractor for field conditions.
Prerequisite: Final term standing in Farm Equipment Service Curriculum.

8.131 Farm Equipment Painting
(1 class, 4 lab hrs/wk) 2 credits
Equipment cleaning and painting.

8.143 Farm Equipment Service Management
(3 class hrs/wk) 3 credits
Operating procedures of an agricultural machinery service department; function of a service employee.
Prerequisite: Final term standing in Farm Equipment Service Curriculum.

Farm Equipment Service Work Experience
(30 class/lab hrs) 30 credits
Students are placed at Farm Implement dealers for one summer to work as regular employees.

1. Student keeps records of jobs performed and experiences received.

2. Employer evaluates progress of student.

3. Instructor visits and evaluates student progress at regular intervals during the summer.

Airframe and Powerplant Mechanics

Two Year Associate Degree Program

This program prepares one for employment as a line or service mechanic. Opportunities for employment are expanding for those who can qualify for the Federal Aviation Agency certificate. Airline mechanics get $3.72 an hour with increases to more than $4 in two years. Fixed base operators get $2 to $2.50, with top pay after six years about $4.

The exacting nature of the courses is such that only applicants who have mechanical aptitude and who have completed high school or the equivalent are admitted. Special costs include: Books $75, tools $110, welding fee $10. Class size is limited to 100 students.

Airframe Mechanics

The F.A.A. approved Airframe curriculum provides the practical training, theory, and technical information required to take the F.A.A. examination for Airframe Mechanic.

	F H-C*	W H-C	S H-C
Airframe I, II, III	5-5	5-5	5-5
Airframe Lab I, II, III	20-5	19-6	15-3
Mathematics II, III	3-3	3-3	
Drafting I or II	4-2		
Communications Skills I or II		3-3	
Welding IA (Airframe)			5-2
Electrical Drafting			4-2
Practical Physics III			5-4
	32-15	30-17	34-16

*H—hours, C—credits

Powerplant Mechanics

The F.A.A. approved Powerplant curriculum provides the practical training, theory and technical information required to take the F.A.A. examination for Powerplant Mechanic.

	F H-C	W H-C	S H-C
Aircraft Powerplant I, II, III	10-10	5-5	5-5
Aircraft Powerplant I, II, III Lab	15-3	20-7	15-6 or 19-6
Practical Physics II	5-4		
Communications Skills I or II			3-3
Drafting I or II		4-2	
Applied Economics	3-3		
Health Education			2-2
	33-20	29-14	29-16 or 25-16

Courses

3.220 Airframe I (5 class hrs/wk) 5 credits

3.221 Airframe I Lab (20 lab hrs/wk) 5 credits

Woodwork
FAA requirements for wood repairs and splices, wood types and properties, glues and gluing, woodworking tools and machines, safety in using tools and machines, repairing certificated aircraft assemblies.

Fabric and Dope
Aircraft fabric grades, types, and specifications, FAA repair procedures and limitations, aircraft dopes, refinishing completed aircraft, airfoil layout.

Hydraulics
Hydraulics tubing and fittings, pumps, brakes, shocks; complete system study.

3.222 Airframe II (5 class hrs/wk) 5 credits

3.223 Airframe II Lab (19 lab hrs/wk) 6 credits

Aircraft Sheet Metal
Hand forming, bending, riveting, repair of stressed skins, soldering stainless steel, sheet metal working tools, heat treating, annealing, properties of metals, FAA approved procedures.

Theory of Flight
History of aviation, nomenclature, fundamentals of aerodynamics, aircraft designs and components.
Prerequisite: Airframe I and Airframe Lab I.

3.224 Airframe III (5 class hrs/wk) 5 credits

3.225 Airframe III Lab (15 lab hrs/wk) 3 credits

Aircraft Electrical
Direct current, circuits; wiring, electrical systems, relays, electrical motors and generators, FAA requirements for aircraft electical systems, aircraft instruments.

Assembly and Rigging
Alignment, rigging monoplane and biplane, aircraft identification, certification requirements categories.

Weight and Balance
Continuation of study started during theory of flight. Advanced weight control problems. Weighing live aircraft for airworthiness certification.
Prerequisite: Airframe II and Airframe Lab II.

3.226 Aircraft Powerplant I (10 class hrs/wk) 10 credits

3.227 Aircraft Powerplant I Lab (15 lab hrs/wk) 3 credits

Powerplant, Electrical
Practical application to electrical theory. Circuits, relays, solenoids, circuit breakers, motors; wiring, electrical instruments. FAA requirements and regulations covering aircraft electrical systems.

Magnetos and Ignition
Disassembly, inspection, re-assembly and installation of different makes and models of magnetos currently in use.

Starters and Generators
Disassembly inspection and installation of aircraft starters.

Machine Operation
Demonstration and application of machine tool operations including thread cutting lathe, milling machine, surface grinder, band saws, shaper, drill presses, hones, making bushings, repair operation.

Lubrication of Powerplant
Theory of lubrication, history of lubricants, requirements, tests, types of engine lubrication systems, pumps, valves, and coolers.

Powerplant, Basic
Elementary shop mathematics, theory of flight, nomenclature of aircraft, its components and appliances, weight and balance including its effects on stability and performance.

3.228 Aircraft Powerplant II (5 class hrs/wk) 5 credits

3.229 Aircraft Powerplant II Lab (20 lab hrs/wk) 7 credits

Propellers
Instruction and practice in disassembly, inspection reassembly and installation of different makes of propellers currently in use.

Carburetion
Laboratory work in disassembly, inspection and assembly of carburetors in use today.

Engine Overhaul I
Engine principles, disassembly of all systems.
Prerequisite: Aircraft Powerplant I and Aircraft Powerplant Lab I.

3.230 Aircraft Powerplant III (5 class hrs/wk) 5 credits

3.231 Aircraft Powerplant III Lab (15 or 19 lab hrs/wk) 6 credits

Engine Overhaul II
Continuation of Engine Overhaul I.

Jet Operation
Principles and practice of jet operation, safety in jet handling, partial engine disassembly and testing.

Fuel Systems
Fuel flow requirements, tank arrangements and tests, fuels, octane ratings, performance numbers.
Prerequisite: Aircraft Powerplant II and Aircraft Powerplant Lab II.

4.150A Welding IA (Aircraft) (1 class, 4 lab hrs/wk) 2 credits
Set up and operation of oxyacetylene welding equipment; practice in welding and fabricating aircraft steel tubing structures. This is an FAA-required course for students in the A & P mechanic curriculum.

Auto Body and Fender

Two Year Associate Degree Program

Training is given in all phases of auto body and fender repair and painting. A broad understanding and background is provided in the various phases of auto body and fender and painting through class instruction and shop practice. Special costs include: Tools $95, welding fee $10.

Entry jobs for employment in this field are available in body-shops, at auto sales and service departments, and specialty auto body and fender repair and paint shops. Increasing numbers of auto makes and models and traffic congestion have caused an ever-increasing demand for qualified auto body and fender repairmen. Beginners earn $1.50 to $2 per hour; journeymen get $8,000 to $9,000 per year.

This two-year program consists of one year of auto body metal work and one year of auto painting. Each course prepares the student for that specialty. To qualify for the associate degree, both one year courses must be completed.

Automotive Body and Fender

	F H-C°	W H-C	S H-C
Automotive Metal Work I, II, III	3-3	3-3	2-2
Automotive Metal Work I, II, III Lab	20-7	20-7	20-7
Welding IA, IIA, IB	5-2	5-2	5-2
Practical Physics II	5-4		
or			
General Physics 202	6-4		
Communications Skills I or II			
or WR 111 or 112		3-3	
Math II			3-3
or Math 95			5-4
Physical Education			3-1
	33-16	31-15	33-15

°H—hours, C—credits

Recommended supporting courses: Collision Estimating, Automotive Materials, Blueprint Reading and Sketching, Applied Economics, Machine Shop Orientation, Health Education, Automotive Service Management, and Welding IIB.

For those intending to take two years to earn an associate degree, Communications Skills I and II or English Composition WR 111 and 112, and Math 11 or Math 95 are required. Second year students should take a recommended supporting course if they have completed the math requirement the first year.

Automotive Painting

	F H-C°	W H-C	S H-C
Automotive Painting I, II, III	3-3	3-3	3-3
Automotive Painting I, II, III Lab	20-7	20-7	20-7
Practical Physics II	5-4		
or			
General Physics 201	6-4		
Mathematics II	3-3		
or			
Mathematics 95	5-4		
Communications Skills I or II			
or WR 111 or 112		3-3	
Employer-Employee Relations			2-2
Health Education		2-2	
Applied Economics			3-3
	31-17	28-15	28-15

°H—hours, C—credits

Recommended Supporting Courses: Automotive Materials, Blueprint Reading and Sketching, Machine Shop Orientation, Automotive Service Management, Welding IA, Welding IB, Welding IIA, and Welding IIB.

Courses

3.238 Automotive Painting I (3 class hrs/wk) 3 credits
Instruction on materials and equipment used in preparation of auto body for refinishing.

3.239 Automotive Painting I Lab (20 lab hrs/wk) 7 credits
Provides shop practice in mixing primers and color; spray gun adjusting and cleaning; preparing metal for painting; painting with lacquer type products; and rubbing and cleaning.
Prerequisite: To be taken concurrently with Automotive Painting I.

3.240 Automotive Painting II (3 class hrs/wk) 3 credits
Matching colors and the use of color charts. Complete refinishing instructions.
Prerequisite: Automotive Painting I.

3.241 Automotive Painting II Lab (20 lab hrs/wk) 7 credits
Shop practice in all phases of lacquer type painting and preparation, and general production work.
Prerequisite: To be taken concurrently with Automotive Painting II.

3.243 Automotive Painting III (3 class hrs/wk) 3 credits
Preparing a car for complete painting; spraying with enamel; special enamel finishes; interior refinishing; auto clean-up after painting; preparing car for delivery to customer.
Prerequisite: Automotive Painting II.

3.244 Automotive Painting III Lab (20 lab hrs/wk) 7 credits
Shop practice in preparing car for painting with enamel; interior painting detailing; and preparing car for delivery to customer.
Prerequisite: To be taken concurrently with Automotive Painting III.

3.397 Automotive Metal Work I (3 class hrs/wk) 3 credits
History and development in auto body and frame construction and types of auto bodies and frames. Fundamentals of metal work. Removal, repair and replacement of hardware, glass and trim; sealing for water and dust leaks.

3.398 Automotive Metal Work I Lab
(20 lab hrs/wk) 7 credits
Shop practice in straightening metal damage; door assembly and alignment; fender, hood, and deck lid replacement; removal and replacement of glass; and seal for dust and water leaks.
Prerequisite: To be taken concurrently with Automotive Metal Work I and Welding IA.

3.321 Automotive Metal Work II (3 class hrs/wk) 3 credits
Body, fender and panel major repair.
Prerequisite: Automotive Metal Work I.

3.328 Automotive Metal Work II Lab
(20 lab hrs/wk) 7 credits
Provides shop practice on major front end repair; major rear end damage, and damages resulting from side swipe.
Prerequisite: To be taken concurrently with Automotive Metal Work II.

3.337 Automotive Metal Work III (2 class hrs/wk) 2 credits
Methods and procedures for repair of extensive damage to cars involving body structural members; frame measuring and alignment; fitting and placing of panels.
Prerequisite: Automotive Metal Work II.

3.315 Automotive Metal Work III Lab
(20 lab hrs/wk) 7 credits
Provides shop practice in repairing extensive damage; frame repair, superstructure alignment, major body replacements, and general production.
Prerequisite: To be taken concurrently with Automotive Metal Work III.

Automotive Mechanics

Two Year Associate Degree Program

Broad basic instruction and shop practice is offered in fundamentals and principles of automotive service and repair. This training can lead to employment in entrance occupations of the automotive service and repair field. Beginners earn $1.50 an hour; journeymen get up to $10,000 annually.

With the ever-expanding number of makes and models of autos, the demand for auto mechanics who have a broad background of course instruction and training is constantly increasing. Class vacancies total 100. Special costs include: Tools $100, coveralls, books, welding fees.

Curriculum

First Year

	F H-C*	W H-C	S H-C
Automotive Chassis I	3-3		
Automotive Chassis Lab I	6-2		
Internal Combustion Engine I, II	2-2	2-2	
Internal Combustion Engine I, II, Lab	3-1	6-2	
Power Trains		2-2	
Power Trains Lab		5-2	
Fuel System & Carburetion I, II		2-2	2-2
Fuel System & Carburetion I, II, Lab		3-1	3-1
Automotive Repair I			9-3
Automotive Electricity I			3-3
Automotive Electricity I, Lab			3-1
Welding IA, IB	5-2	5-2	
Practical Physics I, II, III	5-4	5-4	5-4
Mathematics II	3-3		
Employer-Employee Relations			2-2
Applied Fluid Mechanics			2-2
	27-17	30-17	29-18

*H=hours, C=credits

Second Year

Automotive Repair II, III	9-3	9-3	
Automotive Electricity II	3-3		
Automotive Electricity II, Lab	3-1		
Tune-up and Diagnosis		2-2	
Tune-up and Diagnosis Lab		5-2	
Automotive Overhaul			9-3
Automatic Transmissions	3-3		
Automatic Transmissions Lab	3-1		
Communications Skills I, II		3-3	3-3
Machine Shop Orientation	5-3		
Machine Tool Operation		5-3	
Power Steering		4-2	
Automotive Materials		2-2	
Automotive Fuels and Lubrication			2-2
Automotive Repair Estimating			2-2
Automotive Service Management			2-2
Health Education			2-2
Blueprint Reading and Sketching			3-1
	26-14	30-17	23-15

Courses

3.300 Automotive Chassis I (3 class hrs/wk) 3 credits

3.301 Automotive Chassis Lab I (6 lab hrs/wk) 2 credits
Principles of operation of automotive chassis components. Fundamentals, diagnosis, and overhaul techniques of steering and suspension system. Basic hand tools and shop equipment, brake systems, trouble shooting, and overhaul.
Prerequisite: Practical Physics I should be taken concurrently.

3.304 Internal Combustion Engines I
(2 class hrs/wk) 2 credits

3.305 Internal Combustion Engines Lab I
(3 lab hrs/wk) 1 credit
Principles of operation of various types of internal combustion engines and all components and accessories. Service and overhaul techniques. Engine and accessory component functions.
Prerequisite: Practical Physics I taken concurrently.

3.306 Internal Combustion Engines II
(2 class hrs/wk) 2 credits

3.307 Internal Combustion Engines Lab II
(6 lab hrs/wk) 2 credits
Instruction in overhaul methods, trouble shooting, general engine performance and testing, and service techniques covering valve, cylinder, and bearing systems.
Prerequisite: Internal Combustion Engines I. Practical Physics II concurrently.

3.308 Automotive Electricity I (3 class hrs/wk) 3 credits

3.309 Automotive Electricity Lab I (3 lab hrs/wk) 1 credit
Fundamental principles of electricity as used by the auto mechanic. Construction and function of automotive electrical components.
Prerequisite: Practical Physics III taken concurrently.

3.310 Fuel Systems and Carburetion I
(2 class hrs/wk) 2 credits

3.311 Fuel Systems and Carburetion Lab I
(3 lab hrs/wk) 1 credit
Principles of carburetion, and overview of principles of engine fuel systems. Basic instruction on carburetor circuits.
Prerequisites: Internal Combustion Engines I. Practical Physics. II concurrently.

3.312 Fuel Systems and Carburetion II
(2 class hrs/wk) 2 credits

3.313 Fuel Systems and Carburetion Lab II
(3 lab hrs/wk) 1 credit
An advanced course in techniques and procedures for overhaul and service of carburetion accessories, including all types of single and multiple throat models.
Prerequisite: Fuel Systems and Carburetion I.

3.314 Power Steering (1 class, 3 lab hrs/wk) 2 credits
Practical power steering work covering trouble shooting, dismantling, inspection of parts, reassembly, and adjustment to cover principles of repair procedure on those power steering units common to the automotive trade.
Prerequisite: Second year standing or instructor's approval and Applied Fluid Mechanics.

3.316 Power Trains (2 class hrs/wk) 2 credits

3.317 Power Trains Lab (5 lab hrs/wk) 2 credits
All components of the power train, including clutch, standard and overdrive type transmissions, drive line, and final drive.
Prerequisite: Automotive Chassis I or equivalent.

3.320 Applied Fluid Mechanics (2 class hrs/wk) 2 credits
Practical uses of hydraulic power transmission and application. Fundamental principles are reviewed and the uses of Hydraulic pressure and fluid flow in brakes, pumps, power steering units, fluid couplings, torque converters, and power accessories are covered thoroughly.
Prerequisite: Practical Physics I and II

3.322 Automotive Electricity II (3 class hrs/wk) 3 credits

3.323 Automotive Electricity Lab II (3 lab hrs/wk) 1 credit
Diagnosing minor lighting, charging and indicating system troubles; interpreting and tracing automotive wiring diagrams.
Prerequisite: Automotive Electricity I or equivalent.

3.324 Tune-Up and Diagnosis (2 class hrs/wk) 2 credits

3.325 Tune-Up and Diagnosis Lab (5 lab hrs/wk) 2 credits
Diagnosing malfunctions in the automotive engine and its accessory systems. Advanced testing of electrical and carburetion systems. Developing the ability to analyze the operation of engine accessories directly related to engine performance.
Prerequisite: Second-year standing and Automotive Electricity II or equivalent.

3.326 Automatic Transmissions (3 class hrs/wk) 3 credits

3.327 Automatic Transmissions Lab (3 lab hrs/wk) 1 credit
Instruction in automatic transmission, including principles of operation, trouble shooting and overhaul procedures on hydraulically operated transmissions, torque converters, and fluid couplings used with automatic transmissions common to the automotive field.
Prerequisite: Applied Fluid Mechanics and Power Trains or equivalent.

3.329 Automotive Repair I (9 lab hrs/wk) 3 credits
Development of additional abilities and understanding through diagnosis and repair of automotive equipment.
Prerequisite: Second-year standing or instructor's approval.

3.331 Automotive Repair II (9 lab hrs/wk) 3 credits
Continuation of Automotive Repair I in further developing the student's abilities and knowledge, with emphasis on automotive electricity and automatic transmission units.
Prerequisite: Automotive Repair I or equivalent.

3.333 Automotive Repair III (9 lab hrs/wk) 3 credits
Continuation of Automotive Repair II to develop further the student's abilities in diagnosis and repair of automotive units, with emphasis on power steering and tune-up procedures. Power accessories are serviced.
Prerequisite: Automotive Repair II or equivalent.

3.332 Automotive Service Management
(2 class hrs/wk) 2 credits
Duties and responsibilities of the service manager. Methods of organizing service personnel, shop facilities, and an instruction to shop layout and buildings. Appreciation of good relationship with customers, labor and management groups and individuals.

3.334 Automotive Fuels and Lubricants
(2 class hrs/wk) 2 credits
Nature and origin of petroleum products, their manufacturing processes and use and function.
Prerequisite: Second-year standing or equivalent.

3.336 Automotive Materials (2 class hrs/wk) 2 credits
Use of iron, steel, aluminum and light alloys, copper and its alloys, plastics, fibers, rubber, and synthetics. Various body finishes.

3.335 Automotive Overhaul (9 lab hrs/wk) 3 credits
Complete inspection and analysis to determine repairs needed to recondition an automobile.
Prerequisite: Automotive Repair III.

3.338 Automotive Repair Estimating
(2 class hrs/wk) 2 credits
Diagnosing and estimating of labor and material costs involved in the repair and service of automotive equipment. Emphasis on the use of typical manuals and price lists used in industry.
Prerequisite: Second-year standing or equivalent.

3.246 Collision Estimating (2 class, 3 lab hrs/wk) 3 credits
Estimating over-all cost for parts, labor, fixing shop costs and profit on repair jobs. Preparation of insurance claim estimates and making out insurance claim forms.
Prerequisite: Third-term standing.

4.150 Welding IA (1 class, 4 lab hrs/wk) 2 credits
Set up and operation of oxyacetylene welding equipment. Practice in welding, brazing, and soldering ferrous and non-ferrous metals and their alloys.

4.151 Welding IB (1 class, 4 lab hrs/wk) 2 credits
Introductory instruction in arc welding. Practice in welding by electric arc. Applications to industrial use in construction, maintenance, and repair.

Diesel Mechanics

Two Year Associate Degree Program

Basic instruction is offered in automotive heavy equipment and diesel heavy equipment repair. Students are prepared for employment in entry occupations leading to jobs such as heavy duty mechanic, bus mechanic, truck mechanic, tractor mechanic, fuel injection technician and diesel tune-up technician. Beginning pay is $3 an hour; journeymen get $4.50 an hour.

Possible job opportunities are available with truck fleets, logging operations, heavy construction, factory diesel sales outlets, road construction contractors, parts sales and service outlets, general heavy equipment repair jobs, and automotive diesel service and repair. Special costs include tools and coveralls. Class vacancies total 40.

Curriculum

First Year

	F H-C°	W H-C	S H-C
Automotive Chassis I	3-3		
Automotive Chassis I Lab, Heavy Equipment	6-2		
Internal Combustion Engine I, II	2-2	2-2	
Internal Combustion Engines I, II, Lab	3-1	6-2	
Power Trains		2-2	
Power Trains Lab, Heavy Equipment		5-2	
Fuel Systems & Carburetion, Heavy Equipment		2-2	
Fuel Systems & Carburetion Lab, Heavy Equipment		3-1	
Diesel Engines I			2-2
Diesel Engines I, Lab			6-2
Fuel Injection Systems, I			2-2
Fuel Injection Systems I, Lab			4-1
Automotive Electricity			3-3
Automotive Electricity, Heavy Equipment			3-1
Machine Shop Orientation	5-3		
Machine Tool Operation		5-3	
Employer-Employee Relations			2-2
Practical Physics I, II, III	5-4	5-4	5-4
Mathematics II	3-3		
	27-18	30-18	27-17

°H=hours, C=credits

Second Year

	F H-C°	W H-C	S H-C
Fuel Injection Systems II	2-2		
Fuel Injection Systems II, Lab	6-2		
Diesel Engines II	2-2		
Diesel Engines II, Lab	6-2		
Diesel Tune-Up & Diagnosis		2-2	
Diesel Tune-Up & Diagnosis, Lab		5-2	
Diesel Engine Repair I, II		9-3	9-3
Heavy Equipment Hydraulics			5-3
Auxiliary Systems			2-2
Auxiliary Systems Lab			3-1
Applied Fluid Mechanics	2-2		
Welding IA	5-2		
Welding IB		5-2	
Welding IIB			5-2
Communications Skills I, II	3-3	3-3	
Power Steering		4-2	
Automotive Service Management			2-2
Health Education		2-2	
	26-15	30-16	26-13

°H=hours, C=credits

Courses

3.346 Automotive Chassis Lab I, Heavy Equipment
(6 lab hrs/wk) 2 credits
Laboratory practice to develop the ability to use basic hand tools, measuring tools and shop equipment in the overhauling and adjusting of various types of automotive and truck suspension and steering systems. Brake service, hydraulic overhaul, and air brake servicing.
Prerequisite: Automotive Chassis I should be taken concurrently.

3.348 Internal Combustion Engines II Lab, Heavy Equipment (6 lab hrs/wk) 2 credits
Practical experience in heavy-duty engine reconditioning. Diagnosis of troubles directly related to the engine and its performance is practiced with the use of test instruments. A companion course for Internal Combustion Engines II.
Prerequisite: Practical Physics I, Internal Combustion Engines II, Practical Physics II taken concurrently.

3.349 Fuel Systems and Carburetion, Heavy Equipment (2 class hrs/wk) 2 credits

3.350 Fuel Systems and Carburetion, Heavy Equipment (3 lab hrs/wk) 1 credit
Principles of carburetion and fuel systems. Techniques and procedures for overhaul and service of carburetors and carburetor accessories, with emphasis on heavy duty and special carburetion equipment such as supercharger and automotive fuel injection.
Prerequisite: Internal Combustion Engines I, Practical Physics II taken concurrently.

3.351 Power Trains Lab, Heavy Equipment
(5 lab hrs/wk) 2 credits
Developing skills in servicing, overhauling, and adjusting units in automotive and heavy equipment power trains. Work on laboratory units in conjunction with units in Power Trains.
Prerequisite: To be taken concurrently with Power Trains.

3.352 Automotive Electricity Lab I, Heavy Equipment (3 lab hrs/wk) 1 credit
Practical application of the theory studied in Automotive Electricity I as related to heavy equipment.
Prerequisite: To be taken concurrently with Automotive Electricity.

3.353 Hydraulics, Heavy Equipment (2 class, 3 lab hrs/wk) 3 credits
Principles of hydraulics in power transmission as used on heavy duty equipment. Basic principles of hydraulics and the trouble shooting, servicing, and overhauling of hydraulic system components.
Prerequisite: Sixth-term standing.

4.158 Welding IIB (1 class, 4 lab hrs/wk) 2 credits
Advanced instruction and practice in electric arc welding. Information and instruction in manufacturing of metals, advanced heat treating, cutting applications, and technical information correlated with shop practice and application to various trades and industry.

3.800 Diesel Engines I (2 class hrs/wk) 2 credits

3.801 Diesel Engines I Lab (6 lab hrs/wk) 2 credits
Types and construction of engines with emphasis on the fundamentals, and cooling and lubrication systems.
Prerequisite: Third-term standing in Diesel Mechanics Curriculum.

3.802 Diesel Engines II (2 class hrs/wk) 2 credits

3.803 Diesel Engines II Lab (6 lab hrs/wk) 2 credits
Valve operating mechanism, air intake systems, piston and connecting rod servicing, crankshaft servicing, cylinder and block servicing, engine performance superchargers and blowers, and mechanical and hydraulic governors.
Prerequisite: Diesel Engines I and Lab or equivalent.

3.804 Fuel Injection Systems I (2 class hrs/wk) 2 credits

3.805 Fuel Injection Systems I Lab (4 lab hrs/wk) 1 credit
Diesel fuel systems, fuel-oil transfer pumps, injection systems, fuel injection pumps, and nozzles.
Prerequisite: Second-year standing or Diesel Engines I or Lab I, or equivalent.

3.806 Fuel Injection Systems II (2 class hrs/wk) 2 credits

3.807 Fuel Injection Systems II Lab (6 lab hrs/wk) 2 credits
Service and repair of injection equipment. Safety and proper handling of fuel injection equipment and testing equipment. The principles, specifications, installations, adjustments, and maintenance of various types of nozzles.
Prerequisite: Fuel Injection Systems I.

3.808 Diesel Tune-Up and Diagnosis (2 class hrs/wk) 2 credits

3.809 Diesel Tune-Up and Diagnosis Lab (5 lab hrs/wk) 2 credits
Various troubles encountered in tune-up and diagnosis of diesel engines with emphasis on accurate and systematic procedures.
Prerequisite: Diesel Engines I and II. Fuel Injection Systems I and II or equivalent

3.811 Diesel Engine Repair I (9 lab hrs/wk) 3 credits
Shop and/or laboratory course for development of additional abilities and understandings through the diagnosis and repair of operating diesel equipment and components. Overhaul and maintenance procedures and practices as they relate to the removal, disassembly, repair, reassembly, and testing of typical diesel engines and their components.
Prerequisite: Fifth-term standing.

3.812 Auxiliary Systems (2 class hrs/wk) 2 credits

3.813 Auxiliary Systems Lab (3 lab hrs/wk) 1 credit
Specialized study in the areas of the cooling, fuel supply, lubrication, air intake, exhaust, and starting systems of typical diesel engines in use today. Starting aids, blowers, superchargers, governors and air compressors.
Prerequisite: Diesel Engines I and II or equivalent.

3.816 Diesel Engine Repair II (9 lab hrs/wk) 3 credits
Diagnosis, repair and overhaul procedures on the engines, their removal, disassembly, overhaul, reassembly installation and testing of component parts. Inspection, servicing, and repair of systems.
Prerequisite: Sixth-term standing.

Flight Technology

Two Year Associate Degree

Students prepare for employment as business aircraft pilots, airline pilots, or flight instructors. Combining Flight and business training also opens other avenues of employment. Pay is $750 per month and up.

The exacting nature of the course is such that applicants must comply with all Federal Aviation Agency (F.A.A.) requirements for each rating sought. Applicants must be counseled prior to acceptance and only those who can reasonably be expected to succeed will be accepted. Students must have FAA Class II Medical Certificate. Class vacancies total 50.

Fee costs for this program vary with the rates for different aircraft. Examples of cost are:

Introductory and Basic Flight	range $716 to $725
Flight Intermediate I	range $462 to $469
Flight Intermediate II	range $504 to $517
Flight Intermediate III	range $462 to $469
Flight Intermediate IV	range $580 to $587

The above 200 flight hours total cost will range from $2,751 to $2,767.

Veteran students who wish to pursue the vocational objective of commercial pilot may elect to fly with a V.A. approved commercial operator rather than an LCC instructor. Flight time with an approved operator will be credited by the College for the comparable courses in this curriculum when the student re-enters to continue working for the 94-credit associate degree.

Curriculum

First Year

	F H-C*	W H-C	S H-C
Flight Orientation	3-3		
Introductory & Basic Flight** (25 dual, 25 solo hours)	8-4		
Flight Theory, Private Pilot	3-3		
Aerophysics	5-4		
Mathematics II, III or Math 95, 102	3-3	3-3	
Air Navigation		3-3	
Aviation Meteorology		3-3	
Aerodynamics		3-3	
Flight Intermediate I** (10 dual, 25 solo hrs)		7-3	
Physical Education 180/190		3-1	
Aircraft & Engines Structures Theory			3-3
Flight Intermediate II** (10 dual, 30 solo hrs)			7-3
Radio Aids & Communications			3-3
Health Education			2-2
Communications Skills I or Wr 111			3-3
Aircraft Development			3-3
	22-17	22-16	21-17

*H=hours, C=credits

**Flight Intermediate I or II may be made up during the summer.

Second Year

	F H-C*	W H-C	S H-C
Advanced Commercial Pilot Ground School	3-3		
General Aviation Safety	3-3		
Flight Intermediate III** (10 dual, 25 solo hours)	7-3		
Aircraft Systems	3-3		
Communications Skills II or Wr 112	3-3		
American Institution or American Government	3-3		
Flight Intermediate IV** (10 dual, 30 solo hours)		7-3	
Air Transportation		3-3	
Airline Management		3-3	
Introduction to Business		4-4	
Electives†		3-3	
Flight Advanced I (10 hours flight)			6-3
Survey of Data Processing			3-3
Business Law			3-3
Fundamentals of Speech, SP 111			3-3
Salesmanship			3-3
	22-18	20-16	18-15

*H=hours, C=credits

**These courses contain a total of 382 clock hours in which student must complete 200 flight hours with the remainder being used for ground instruction and pre-flight preparation and post-flight debriefing.

†Recommended electives are Applied Economics, Human Relations I, Introduction to Psychology, Fundamentals of Speech.

Courses

6.401 Flight Orientation (3 class hrs/wk) 3 credits
Introductory aviation technology: Basic applications of aerophysics, theory of flight, aircraft standards and specifications, use of technical manuals, basic airframe construction, hydraulic systems, and weight and balance fundamentals.

6.403 Aircraft Development (3 class hrs/wk) 3 credits
An informative, historical survey of the effect of manned flight. The development of aircraft, milestones in aviation, noted pioneers, and the socio-economic impact of flight upon modern civilization.

6.405 Flight Theory, Private Pilot (3 class hrs/wk) 3 credits
Principles of flight, basics of air traffic control, weather facts, navigational procedures, and airplane operation pertinent for the private pilot. Upon completion of this course the student should have sufficient knowledge to take the FAA Written Examination for the Private Pilot Certificate. This constitutes the final examination.

6.407 Aerophysics (3 class, 2 lab hrs/wk) 5 credits
Introduction to physics, physical terms and the basis for physical laws in practical application to aeronautics. Laws of motion, gas laws, electromagnetism, basic principles of electrical circuits, hydraulics, and pneumatics.

6.409 Air Navigation (3 class hrs/wk) 3 credits
Basic elements of air navigation; fundamentals and practical application of pilotage and dead reckoning; use of plotter, computer, aerial charts, and FAA publications pertinent to flying.
Prerequisite: Flight Theory, Private Pilot.

6.411 Aviation Meteorology (3 class hrs/wk) 3 credits
Meteorological phenomena affecting aircraft flight; basic concepts of aviation meteorology; analysis and use of weather data for flight planning and safe flying; interpretation of U.S. Weather Bureau maps, reports, and forecasts.
Prerequisite: To be concurrent with Air Navigation.

6.413 Aerodynamics (3 class hrs/wk) 3 credits
Analysis of the physics of flight, including the application of basic aerodynamics to the wing and airfoil; and the analysis of light and drag components relative to the wing plan-form and airplane performance. The application of aerodynamic effect of turbo-jet engines involving principles of propulsion.

6.415 Aircraft and Engine Structures (3 class hrs/wk) 3 credits
Fundamental principles of aircraft engines, including engine theory, materials and methods of construction, lubricants systems, induction systems, and superchargers. General engine operating on airframe structures, purpose types and construction of airframe.

6.417 Radio Aids and Communication (3 class hrs/wk) 3 credits
Basic radio fundamentals as used by the pilot. A description and practical use of various radio aids to safe aerial navigation.
Prerequisite: Air Navigation.

6.419 Air Transportation (3 class hrs/wk) 3 credits
Development and present status of air transportation, federal legislation, characteristics, and classification of air carriers; the organization and functions of the FAA and the Civil Aeronautics Board.

6.421 General Aviation Safety (3 class hrs/wk) 3 credits
Fundamentals essential to safe flight; instruments used and the evaluation and interpretation of their indications. Weight and balance problems are given consideration; also the Federal Aviation Regulations pertaining to safe flight.
Prerequisite: Flight Theory, Private Pilot.

6.423 Aircraft Systems (3 class hrs/wk) 3 credits
Theory of the operation of aircraft systems.
Prerequsite: Aircraft and Engine Structures.

6.425 Advanced Commercial Pilot Ground School (3 class hrs/wk) 3 credits
Preparation for the FAA Commercial Pilot examination and Instrument Rating examination by bringing into focus all the previous areas of instruction; emphasizes newest methods and procedures in flight.
Prerequisites: All the Flight theory classes offered in Terms I through III or approval of the Flight Technology Screening Committee.

6.427 Airline Management (3 class hrs/wk) 3 credits
The functions of management in airline operation, air carrier familiarization effects of federal regulation, organization, accounts; industrial, financial, and economic implications relative to decision making.
Prerequisite: Air Transportation.

6.431 Introductory and Basic Flight (3 class, 5 lab hrs/wk) 4 credits
25 Dual—25 Solo hours.
An introduction to flight through actual flying experience in modern, safe, fully-equipped aircraft. 25 hours dual flight instructions and 25 solo flight with 20 hours in oral instruction and de-briefing. This program exceeds the FAA minimum to qualify for Private Pilot rating; required first phase for students in the two-year associate degree program terminating with Commercial Pilot and Instrument Pilot with multiengine or flight instructor.

6.433 Flight Intermediate (2 class, 5 lab hrs/wk) 3 credits
10 Dual—25 Solo hours.
First of four phases of flight training in preparation for the FAA Commercial Pilot Certificate. A total of 70 hours of instruction; 10 hours dual flight, 25 hours solo flight, and 35 hours of oral instruction and de-briefing.
Prerequisite: Introductory and Basic Flight or Private Pilot certificate, and permission of Flight Technology Acceptance Committee.

6.435 Flight Intermediate II (2 class, 5 lab hrs/wk) 3 credits
10 Dual—30 Solo hours.
Second phase of flight training, continuation of Flight Intermediate I. Total of 70 hours of instruction: 10 hours dual flight, 30 hours solo flight, and 30 hours of oral instruction and debriefing. Instrument flight training is emphasized.
Prerequisite: Flight Intermediate I or equivalent flight experience as determined by the Flight Technology Acceptance Committee.

6.439 Flight Intermediate III (2 class, 5 lab hrs/wk) 3 credits
10 Dual—25 Solo hours.
Continuation of training for Commercial Pilot Certificate.
Prerequisite: Flight Intermediate II or equivalent flight experience as determined by the Flight Technology Acceptance Committee.

6.441 Flight Intermediate IV (2 class, 5 lab hrs/wk) 3 credits
10 Dual—30 Solo hours.
Final phase of Flight Training in preparation for Commercial Pilot with Instrument Rating.
Prerequisite: Flight Intermediate III.

6.443 Flight Advanced I (2 class, 4 lab hrs/wk) 3 credits
10 Dual Hours.
Students have the option of selecting Multi-engine, Flight Instructor, or Instrument Flight Instructor training to complete the flight program. Each course provides 60 hours instruction, 10 dual flight hours, and 50 hours of oral preparation and debriefing.
Prerequisite: Valid Commercial Pilot with Instrument Rating Certificate.

Machine Shop

Two Year Program

Basic principles and fundamentals are taught in machine and related metal work. Class instruction in theory is combined with shop practice. Students prepare for entrance occupations in machine shop or related industries. Class vacancies total 30.
Special costs include: Tools, $85; books, $35; welding fee, $40.
Opportunities for employment are found in the machine repair and maintenance shops, metal working plants, repair and maintenance shops for mill and construction contractors, and specialty machine shops. Local beginning pay is $3 an hour; journeymen earn $3.90 an hour.

Curriculum

First Year

	F H-C*	W H-C	S H-C
Machine Shop I, II, III	3-3	3-3	3-3
Machine Shop I, II, III, Lab	12-4	12-4	12-4
Practical Physics I, II, III	5-4	5-4	5-4
Drafting I, II	4-2	4-2	
Mathematics II	3-3		
Welding IA and IB		5-2	5-2
Applied Economics			3-3
	27-16	29-15	28-16

*H=hours, C=credits

Second Year

	F H-C*	W H-C	S H-C
Machine Shop IV, V, VI	3-3	3-3	3-3
Machine Shop IV, V, VI, Lab	12-4	12-4	12-4
Communications Skills, I, II	3-3		3-3
Welding IIA, IIB	5-2		5-2
Introduction to Specifications	3-3		
Mathematics III		3-3	
Project Drafting		10-4	
Health Education			2-2
Employer-Employee Relations			2-2
	26-15	28-14	27-16

*H=hours, C=credits

Courses

3.380 Machine Shop I (3 class hrs/wk) 3 credits

3.381 Machine Shop I Lab (12 lab hrs/wk) 4 credits
Fundamentals and workable knowledge of industrial processes and machines required of the machinist. Basic fundamentals of layout and machining metal by drilling, turning, and boring, milling, grinding, shaping, planing, and slotting. Use and maintenance of machinist hand tools and safety practices.

3.382 Machine Shop II (3 class hrs/wk) 3 credits

3.383 Machine Shop II (12 lab hrs/wk) 4 credits
Use, operation, and maintenance of the machine lathe. Tool grinding, drilling, straight turning, taper turning, boring, internal and external thread cutting, and facing cuts.
Prerequisite: Machine Shop I.

3.384 Machine Shop III (3 class hrs/wk) 3 credits

3.385 Machine Shop III Lab (12 lab hrs/wk) 4 credits
Varied uses of lathe in precision work. Methods and procedures for machining on face plate.
Prerequisite: Machine Shop II.

3.386 Machine Shop IV (3 class hrs/wk) 3 credits

3.387 Machine Shop IV Lab (12 lab hrs/wk) 4 credits
Use and setup of machine shop shapers and planers; calculation of cutting speeds and fee rate for different metals; use of hand devices, fixtures, and vises. Cuts and slotting, joining.
Prerequisite: Machine Shop III.

3.388 Machine Shop V (3 class hrs/wk) 3 credits

3.389 Machine Shop V Lab (12 lab hrs/wk) 4 credits
Different types of milling machines, their uses, maintenance, and proper safety precautions. Cutters and cutter holding devices, and speeds for feeds of cutters.
Prerequisite: Machine Shop IV.

3.390 Machine Shop VI (3 class hrs/wk) 3 credits

3.391 Machine Shop VI Lab (12 lab hrs/wk) 4 credits
Theory of spur gears, chain sprockets and driver, bearings, bronze anti-friction and babbit, hydraulic power transmission, cylinders and control valves. Layout, machining, and assembly of simple machines.
Prerequisite: Machine Shop V.

3.392 Machine Shop Orientation (2 class, 3 lab hrs/wk) 3 credits
Various machine shop tools and their use. Setup and operation of machine shop.

3.393 Machine Tool Operation (2 class, 3 lab hrs/wk) 3 credits
Basic machine shop practice with drill press, lathe, and grinder that a person may need to know to set up and operate in certain fields other than the machinist's trade.

Nursing

Director

Fiorentino, Mary C., B.S., Nursing, Seattle University; M. of Nursing, Medical-Surgical Nursing, University of Washington.

Faculty

Alford, Evelyn, B.S. In Nursing, Wayne State University; M.S. in Health Education, University of Oregon.

Everest, Joan, Diploma in Public Health Nursing, McGill University, Montreal; B.N. in Teaching of Nursing, McGill University.

Fanconi, Carol, B.S. in Nursing, Arizona State University.

McCarthy, Alice J., B.S. in Nursing, Carrol College; M. Nursing, Montana State University.

Milne, Margaret, B.A. in Biology, University of Oregon; M.A. in Biology, University of Oregon; Diploma in Nursing, Royal Infirmary, Edinburgh, England; Diploma in Midwifery, Simpson Memorial Maternity Pavilion, Edinburgh, England.

Underhill, Arlene, R.N., Sacramento City College; B.S., University of Oregon; Oregon Vocational Approval.

Nursing, Associate Degree

Two Year Program

The program prepares beginning practitioners for performing general nursing under qualified supervision. Both general and specialized content in approximately equal amounts is taught throughout the program to assist the student to develop as a person, as a citizen and as a nurse. Graduates earn an Associate Degree in Nursing and are eligible to write the State Board Test Pool Examination for licensure as registered nurses.

The Associate Degree nurse performs under the supervision of a physician and/or qualified superordinant and assists in planning the nursing care of patients, applying appropriate nursing measures, and evaluating the results of the care given. She/he assists others with less preparation to perform the technical aspects of nursing care and functions with a high degree of skill based upon knowledge of principles derived from the life and behavioral sciences.

Admission to Program

Candidate must make application and be accepted as regular College students according to the admission procedures outlined in the Catalog.

The applicant must be a high school graduate or have successfully completed the General Development Test (G.E.D.). Satisfactory completion of a pre-entrance examination (college-level Sequential Test of Educational Progress), a personal interview, and three letters of references are required. A background in high school chemistry and algebra within the past five years is a requirement. If an applicant is accepted with a deficiency in one of these three areas, the deficiency must be made up during the summer preceding her/his entry into the program.

Curriculum

First Year

	F Lec/Cl°	W Lec/Cl	S Lec/Cl
Human Anatomy and Physiology I, II	3-3	3-3	
Practical Physics for Nurses, I and II		3-3	3-3
Nutrition 225	3		
General Psychology 201, 202	3	3	
Human Development and Individual Differences			3
Microbiology			3-3
Nursing Fundamentals I, II	3-3	4-9	
Maternal and Child Health Nursing			5-12
	13-9	13-15	14-15
Second Year			
Physical and Mental Illness I, II, III	5-15	4-12	4-12
Survey of Nursing I	1		
Survey of Nursing II			2
Community Health 251		3	
English Literature 101 or World Literature	3		
Writing 111		3	
Speech 111			3
Electives°°		3	3
	8-15	13-12	12-12

°Lec=Number of Hours lecture per week. Cl=Number of Hours in clinical facilities per week.

°°One elective is to be selected from the area of American Government or Institutions. The remaining two electives may be selected from the student's areas of interest.

Courses

5.607 Nursing Fundamentals I (3 class hrs/wk) 3 credits

5.607 Nursing Fundamentals I Lab (3 lab hrs/wk) 1 credit
Utilizes principles derived from the physical and social sciences as a basis for presenting foundations for nursing intervention. The major concepts of nutrition, asepsis, pharmacology, safety, communication, and maintaining the individuality of man serve as connecting threads upon which to build more complex knowledge. Mental health concepts are stressed and integrated throughout.

5.610 Nursing Fundamentals II (4 class hrs/wk) 4 credits

5.611 Nursing Fundamentals II Lab (9 class hrs/wk) 3 credits
A continuation of Nursing Fundamentals I, building the basic foundation for nursing practice.

5.612 Maternal and Child Health Nursing
(5 class hrs/wk) 5 credits

5.613 Maternal and Child Health Nursing Lab
(12 class hrs/wk) 4 credits
Builds upon concepts of normal behavior and personality development to form the basis for a study of the family unit during the pregnancy cycle and the development of the fetus from conception through adolescence. Emphasis is placed on child, family and nurse relationships as they influence the hospitalized child. Maternal complications and common disorders of the various age groups of children are considered in relation to their implications for nursing.

5.616 Physical and Mental Illness II (4 class hrs/wk) 4 credits

5.617 Physical and Mental Illness Lab
(12 class hrs/wk) 4 credits
Presents major medical-surgical conditions. Emphasizes alterations in normal physiology as the basis for symptoms. The student moves from integration and application of knowledge and skills utilized in nursing the patient with a single medical or surgical condition to those necessary to nurse the patient with life-threatening conditions and/or injuries.

5.618 Physical and Mental Illness III
(4 class hrs/wk) 4 credits

5.619 Physical and Mental Illness III Lab
(12 class hrs/wk) 4 credits
A continuation of Physical and Mental Illness II. Mental health concepts and principles are integrated throughout Physical and Mental Illnesses II and III.

5.609 Survey of Nursing I (1 class hr/wk) 1 credit
Major historical events which influenced the progress of nursing and the contributions made by selected leaders in the nursing field during specific periods of history.

5.620 Survey of Nursing II (3 class hrs/wk) 3 credits
Seminar discussion focusing on responsibilities of new graduates, opportunities for employment, nursing organizations, legislation and legal responsibilities.

For course descriptions of the following, refer to indicated department:

Applied Physics for Nurses I, II	Science
Anatomy and Physiology	Science
Microbiology	Science
General Psychology	Social Science
Community Health	Health and Physical Education
Literature, Writing, Speech	Language Arts
American Institutions	Social Science
Human Development and Individual Differences	Social Science

Nursing, Practical

One Year Program

The program prepares men and women to participate in the care of the sick, in rehabilitation, and in the prevention of illness.

The practical nurse is a nursing assistant who works under the guidance of a physician and/or registered nurse. According to assignment she will apply selected nursing measures to meet the patients' basic physical needs of hygiene, comfort, safety, nutrition and elimination in a relatively stable, clinical situation. The practical nurse assists in the more complex nursing situations by preparing equipment, supplies and physical environment and by helping the registered nurse perform nursing measures. She/he utilizes knowledge of fundamental social and psychological concepts to identify significant patient responses and communicate such responses to the appropriate personnel.

Admission to Program

Candidates must make application and be accepted as regular College students according to the admission procedures outlined in the Catalog.

Applicants to this program are required to submit a high school transcript or have satisfactorily completed the equivalency test (G.E.D.). They must be in good physical and mental health as determined by a doctor's examination. A pre-entrance test, a personal interview, and three letters of reference are required. Applicants are selected on the basis of the above.

	F Lec/Cl°	W Lec/Cl	Sp Lec/Cl	Sum°° Lec/Cl
Fundamentals of Nursing	6-12			
Physical Sciences	4-1	3-1		
History & Trends of Practical Nursing I, II	1			1
Maternal and Child Health Nursing		5-15		
Communication Skills 1.102		3		
Conditions of Illness I, II			7-15	6-24
Human Relations I 1.608			3	
	11-13	11-16	10-15	7-24

°Lec.=Number of Hours lecture per week. Cl.=Number of Hours in clinical facilities per week.

°°Summer term is 8 weeks in length. Credits are computed on a ⅔ basis.

Courses

5.500 Fundamentals of Nursing (6 class hrs/wk) 6 credits

5.501 Fundamentals of Nursing Lab
(12 class hrs/wk) 4 credits

Introduces basic human needs of hygiene, comfort and safety, nutrition and elimination. Fundamental physical, social, and emotional concepts, as applied to self and others, are correlated with clinical practice. Focus is on identification of patients' needs arrived at through observation and application of a problem solving approach. Therapeutic measures based upon nursing principles appropriate to this level of practitioner are applied to uncomplicated conditions of illness.

5.503 Maternal-Child Health Nursing
(5 class hrs/wk) 5 credits

5.504 Maternal-Child Health Nursing Lab
(15 class hrs/wk) 5 credits

Fundamental physical, emotional and community health concepts are applied to the nursing care of the family throughout the normal process of pregnancy and childbirth and to the newborn infant and child. Selected concepts of nutrition and pharmacology are integrated. Laboratory experiences are selected to help the student apply theoretical concepts.

5.505, 5.508 Conditions of Illness I and II
(7 hrs lec/15 hrs lab) 12 credits
(6 hrs lec/24 hrs lab) 9 credits (Summer Term—⅔ total credits)
Theory and application of selected supportive, therapeutic, and rehabilitative measures during disease and injury. Selected concepts of nutrition and pharmacology are integrated throughout the two terms.

5.510, 5.513 Physical Sciences I and II
(4 hrs lec/1 hr lab per wk) 4 credits
(3 hrs lec/1 hr lab per wk) 3 credits
A two-term course which identifies selected fundamental concepts of microbiology, chemistry, physics, anatomy and physiology.

5.502, 5.509 History and Trends of Practical Nursing I and II
(1 hr lec/wk) 1 credit (1 hr lec/wk) 1 credit
Major historical events which influenced the progress of Practical Nursing. Current nursing trends, community health agencies, membership in nursing organizations, licensure, and job opportunities and responsibilities.

For course descriptions of the following, refer to indicated department:

Communication Skills 1.102	Language Arts
Human Relations I 1.608	Social Science

Nursing, Aide

This is a one-term program to prepare nurse aides to work in: (1) hospitals, (2) nursing homes, or (3) home health agencies. The program is offered twice yearly. For information inquire at the Nursing Department.

Curriculum

Philosophy of Health Agencies
Social and Psychological Needs of the Ill
Foods and Nutrition
Accident Prevention and First Aid
Basic Nursing Skills
Rehabilitation
Cleaning and Care Tasks of Home and Health Agencies

Paradental—Paramedical

Director

Dickson, John P., D.M.D., University of Oregon Dental School; Fellow, International College of Dentists.

Faculty

Deming, Marie, Certificate of Dental Hygiene, University of Oregon Dental School; B.S. in Health Education, University of Oregon. Part-time.

Mitchum, Jack, D.D.S., Instructor at University of Oregon Dental School.

Olson, Joyce, Certificate in Dental Hygiene, University of Oregon Dental School.

Peterson, Muriel A., Graduate Dental Hygienist, University of Oregon; Oregon Vocational Approval.

Strong, Terry, Certified Dental Assistant; Member of American Dental Assistant Association.

Dental Assistant

One Year Program

The dental assistant's responsibilities are three-fold: She serves as a receptionist-secretary-bookkeeper, a technical or chairside assistant, and in some offices may complete some laboratory procedures. This program prepares its graduates for employment in private or group practice, with emphasis on modern concepts of chairside assisting and "four-handed" dentistry. The course is fully accredited by the American Dental Association's Council on Dental Education. Satisfactory completion of the course fulfills the education requirement for dental assistant certification, and graduating students are eligible to take the Certification Examination administered by the Certifying Board of the American Dental Assistants Association. Those who complete this examination successfully may become certified upon fulfilling the employment and membership requirements of the Board.

Oregon law requires dental assistants who expose dental X-rays to hold a Certificate of Radiological Proficiency. The Oral Roentgenology class prepares students for the Radiological Proficiency Examination.

The dental assisting program includes basic health sciences, oral anatomy and pathology, radiographic technique, fundamentals of chairside assisting, basic office record keeping, and supervised clinical experience. Concepts of oral health service, psychological considerations in patient treatment, and an understanding of auxiliary personnel's professional responsibilities are an integral part of the program.

The program accepts one class per year, beginning fall term. Applicants are asked to take an aptitude test and appear for a personal interview. Books, special clothing and miscellaneous costs total approximately $215 for the year.

	F H-C°	W H-C	S H-C
Clinical Laboratory I, II, III	6-4	12-8	4-4
Applied Psychology in Dentistry		2-2	
Pre-Clinical Orientation	4-2		
Dental Health Education	1-1	1-1	1-1
Health Sciences	4-4		
Dental Anatomy	3-1		
Oral Roentgenology I, II, III	3-1	4-2	6-2
Typing II		5-3	
Professional Office Communications	3-3		
Theater Workshop	3-3		
Oral Pathology		2-2	
Bookkeeping and Accounting for Dental Assistants			5-3
Occupational Internship			24-6
	27-19	25-18	40-16

°H—hours, C—credits

Dental Hygiene

Two Year Program

The Dental Hygienist is a professional member of the dental health team. She is educated so that she can be employed in the private office, in public health facilities, in industry, and in teaching dental health in school rooms. Her duties include the oral prophylaxis (cleaning and scaling of the teeth), fluoride applications, dental health education, radiographic techniques, polishing alloy restorations, and office management.

She must pass the Oregon State Board of Dental Examiners Examination to practice her profession in this state. She must pass, in addition, a National Board Examination.

Class size is 16. Applicants must have had high school math, and chemistry within five years of application date. They are asked to take an aptitude test and appear for a personal interview. Special costs total about $350 for books, uniforms and shoes.

First Year

	F H-C°	W H-C	S H-C
General Chemistry 104, 105, 102	7-5	6-4	5-3
Elem. Human Anatomy and Physiology I, II and Labs	6-4	6-4	
English Composition, Wr 111, 112	3-3	3-3	
Physical Education	1	1	1
Dental Anatomy I	3-1		
Dental Hygiene I, II, III	4	4	2
Dental Procedures I, II		1	1
Elem. Microbiology			6-4
Oral Roentgenology I			1
Fundamentals of Speech			3-3
First Aid			3
	18	18	18

°H—hours, C—credits

Second Year

General Psychology	3-3		
General Sociology	3-3		
Periodontology	1		1
Oral Biology	2	2	
Dental Procedures III, IV, V	2	2	3
Dental Hygiene IV, V, VI	3	3	4
Oral Roentgenology II, III, IV	2	2	1
Dental Health Education	2	1	2
Pharmacology		2	
Nutrition		3-3	
Physical Education		3-1	3-1
Clinical Caries Prevention			3-1
Personal Health			3-3
	18	16	18

Dental Courses

5.433 Applied Psychology in Dentistry
(2 class hrs/wk) 2 credits
Maturation of patients; public relations; contact with the public. Applied psychology with patients, particularly children.

5.439 Bookkeeping and Accounting for Dental Assistants (2 class, 3 lab hrs/wk) 3 credits
Basic principles of bookkeeping and accounting applied to the dental office. Includes bank deposits, statement reconciliation, computing payroll deductions, figuring of simple interest, profit-loss statements, keeping of tax records, completion of dental insurance forms, and accounts receivable.

DH 223 Clinical Caries Prevention (3 class hrs/wk) 3 credits
Clinical application of preventing decay by stressing education, diet, nutrition, food theories, and fluoride theories.

5.404 Clinical Laboratory I (3 class hrs/wk, 3 lab hrs/wk) 4 credits
Basic chairside assisting, including positioning of patient, oral evacuation techniques, instrument transfer, rubber dam procedure. Survey of instruments; instrument sharpening, annotation of teeth and cavity classification; charting completion of patient health histories; sterilization procedures; operation and care of dental office and laboratory equipment; ordering, care, and storage of dental supplies; the structure, physical properties, and manipulation of dental materials.

5.405 Clinical Laboratory II (6 class hrs/wk, 6 lab hrs/wk) 8 credits
Specialties of dentistry, basic principles of treatment, role of the assistant in each, instrument set-ups for various procedures, application of dental materials and dental procedures to simple laboratory procedures. Summary and review and supervised clinical experience.

5.406 Clinical Laboratory III (4 class hrs/wk) 4 credits
Summary and review of course content and practice.
Prerequisite: Completion of all courses in dental assistant program.

DH 113 Dental Anatomy (3 lab hrs/wk) 1 credit
Anatomy and physiology of the teeth and their supporting structures. A laboratory course combined with a self-teaching course of instruction provided in a seven volume series of textbooks developed at the University of Oregon Dental School. The laboratory work involves the drawing of individual teeth, and detailed study of the anatomy of teeth through the use of clay restorations on plaster models.
Prerequisite: Admission to the dental hygiene program.

5.415 Dental Anatomy (3 lab hrs/wk) 1 credit
Anatomy and physiology of the teeth and their supporting structures. A laboratory course combined with a self-teaching course of instruction provided in a seven volume series of textbooks developed at the University of Oregon Dental School. The laboratory work involves the drawing of individual teeth, and detailed study of the anatomy of the teeth through the use of clay restorations on plaster models.
Prerequisites: Admission to the dental hygiene or dental assistant program.

DH 240, 241, 242 Dental Health Education

Fall Term—(2 class hrs/wk) 2 credits;

Winter Term—(1 class hr/wk) 1 credit;

Spring Term—(2 class, 3 lab hrs/wk) 2 credits
Planning, developing and evaluating instructional materials for various age levels (pre-school through geriatric group). Field experiences in the Eugene Public Schools; classroom talks; visual aids in education; motivation for acceptance of dental health

5.407, 5.408, 5.409 Dental Health Education (1 class hr/wk) 1 credit
Basic principles of patient education in the dental office including oral hygiene, preventive and restorative dentistry and the techniques involved in communicating with patients. Dental Health Education II will be a continuation of this course dealing mainly with nutrition and communication through visual aids.

DH 118, 119, 120, 220, 221, 222 Dental Hygiene I, II, III, IV, V, VI

First Year: 4 Credits Fall and Winter Terms, 2 Credits Spring Term

Second Year: 3 Credits Fall and Winter Terms, 4 Credits Spring Term

Theory of stains and hard deposits on the teeth; principles and methods for removal of these deposits. Beginning with laboratory techniques on manikins, the student proceeds to the performance of the oral prophylaxis on live patients during winter term, first year. Routine examination procedures, charting of oral conditions, patient appointment procedures, and recalls. Dental assisting techniques; fluoride application, theory, and techniques; the child patient, and child management.

DH 130, 131, 232, 233, 234 Dental Procedures I, II, III, IV, V

First Year: 1 class hr/wk, 1 Credit Winter; Spring Term 3 lab hrs/wk, 1 Credit

Second Year: 2 class hrs/wk, 2 Credits Fall and Winter Terms; 3 class hrs/wk, 3 Credits Spring Term

Designed to familiarize the student with procedures used in dentistry; orientation to dentistry, dental materials, operative dentistry, endodontics, oral surgery, prosthetic dentistry, four-handed dental assisting, medical emergencies, polishing of alloy restorations, and dentistry in public health.

Bi 121, 122 Elementary Human Anatomy & Physiology I, II (3 class, 3 lab hrs/wk) 4 credits each
Medically oriented study of the human body beginning with the single cell and continuing through histology to the skeletal, muscular, and nervous systems. Emphasis is on the body as a complex, carefully integrated group of systems functioning as a whole.

Bi 211 Elementary Microbiology (3 class, 3 lab hrs/wk) 4 credits
Medically oriented study of bacteria and other microorganisms concerned with normal and pathogenic behavior for those in the health occupations. Emphasis is on sterile techniques and application of the course content to diagnosis, prevention, and treatment.

5.410 Health Sciences (4 class hrs/wk) 4 credits
Basic study of structure and function of cells, tissues, organs, and systems of the human body. Bacteriology, microbiology, physiology, and the importance of these as related to dentistry. First aid procedures for dental emergencies.

5.436 Occupational Internship (24 class hrs/wk) 6 credits
Students are assigned to two private dental offices for 3 weeks each to gain practical clinical experience. Completion of course depends upon satisfactory compilation of a procedures manual for offices in which they serve. Prerequisite: Completion of first and second terms of dental assistant curriculum.

DH 228, 229 Oral Biology (2 class hrs/wk) 2 credits each
Fall term will be devoted to oral embryology and microscopic anatomy. An understanding of the development of the face and oral cavity, the basic structure, the oral tissues is essential to the dental hygienist. The second term will be basic pathology and oral pathology. Oral manifestations of disease.

5.435 Oral Pathology (1 class, 1 lab hrs/wk) 2 credits
The study of oral pathology. Normal tissues, diseased or injured tissues, developmental anomalies, dental caries, abcesses and cysts.

DH 109, 210, 211, 212 Oral Roentgenology I, II, III, IV
First year, Spring Term, 1 class hr/wk, 1 credit; Second year, Fall & Winter Terms, 4 class hrs/wk, 2 credits; Spring Term, 2 class hrs/wk, 1 credit.

Lecture and laboratory course covering theory and development of X-ray films, and the correct use of X-ray machines. Techniques for exposing, processing, and mounting films with clinical practice on the patient.

5.416 Oral Roentgenology I (2 class, 1 lab hrs/wk) 1 credit
The complete theory background of X-ray, terminology, safety factors, biological effects of radiation; darkroom procedures; operation of the dental X-ray machine, including the breakdown of the functions; and the legal aspects pertaining to X-ray films.

5.417 Oral Roentgenology II (1 class, 3 lab hrs/wk) 2 credits
Continuation of Oral Roentgenology I.
Prerequisite: Oral Roentgenology I.

5.418 Oral Roentgenology III
(15 lab hrs wk for 3 wks) 2 credits
Continuation of Oral Roentgenology II.
Prerequisite: Oral Roentgenology II.

DH 226, 227 Periodontology (1 class hr/wk) 1 credit each
Review of the etiology, classification and treatment of periodontal diseases; prevention is emphasized. Principles of therapy.

DH 230 Pharmacology (2 class hrs/wk) 2 credits
The inner action of drugs and their effect orally. Application of pharmacology to the therapy of oral diseases.

5.401 Pre-Clinical Orientation (4 class hrs/wk) 2 credits
Survey of the history of dentistry and its professional development, professional ethics, the laws governing the profession, the roles of the several members of the dental health team with emphasis on dental assistant's role, areas of professional service. The dental profession's relation to community and role in the community. Introduction to dental office environment includes purposes of dentistry, professional terminology, and conduct, basic principles of dental health, and detailing of responsibilities delegated to the dental assistant.

5.419 Professional Office Communications
(3 class hrs/wk) 3 credits
Development of personal oral communication skills. Principles of composition, business letters, and telephone procedure with emphasis on informal communication with patients in various office situations.

Inhalation Therapy

Two year associate degree program

This program will begin its first year of operation in the Fall of 1969. Prospective students should apply immediately. The curriculum is to be announced.

Medical Office Assistant

One year program

The medical office assistant is a member of the paramedical health team. As an office assistant, she acts as secretary, receptionist, and bookkeeper. As a technical assistant, she prepares patients for examination or treatment, takes temperatures, measures height and weight, sterilizes instruments, stands by to assist the physician as he examines or treats patients. She may perform certain simple laboratory tests, take X-rays, and give other medical assistance to patients under the physician's supervision.

	F H-C*	W H-C	S H-C
Typing I, II, III	5-3(2)**	5-3(2)	5-3(2)
Office Procedures I, II, III	4-3	4-3	4-3
Bookkeeping I, II	4-3	4-3	
Community Relationships	2-2		
Health Sciences	4-4		
Medical Office Assistant		3-3	
Medical Terminology	2-2		
Medical Law & Ethics		2-2	
Elective		3-3	
Laboratory Orientation			3-3
Occupational Internship			24-6
	21-17	21-18	36-15

*H=hours, C=credits

**3 credits if taken for vocational credit; 2 credits if taken for college transfer.

Courses

5.480 Community Relationships (2 class hrs/wk) 2 credits
Community resources available to the ill, health agencies which may assist the patients or which help maintain the health and welfare of the community, function of the caseworker.

5.483 Medical Terminology (2 class hrs/wk) 2 credits
Medical terminology; pronunciation, meaning, and derivation.

5.484 Medical Law & Ethics (3 class hrs/wk) 2 credits
Ethics of the profession, laws governing the profession.

5.485 Laboratory Orientation (3 lab hrs/wk) 3 credits
Laboratory procedures and how to do them: Hematology, urinalysis, radiology, electrocardiology, immunology.

5.486 Occupational Internship (24 lab hrs/wk) 6 credits
Students are assigned to clinical practices in medical offices. This is similar to on-the-job training.

5.481 Health Sciences (4 class hrs/wk) 4 credits
Structure and function of cells, tissues, organs, and systems of the human body.

5.482 Medical Office Assistant (3 class hrs/wk) 3 credits
Specifics of medical office assisting: Examination room techniques, sterilization of instruments, injection techniques, geriatrics, cardiac resuscitation.

Suggested College Transfer Curriculums

Dentistry

Preprofessional Program

This curriculum has been approved by the University of Oregon Dental School. Students should be informed that admission to professional schools of dentistry is *highly competitive.* Students are advised to devote a minimum of three years to their preprofessional education. Those beginning a predentistry program at a community college should plan to transfer to an accredited, four-year institution experienced in predental education upon completion of their freshman year.

Freshman Year

	F H-C*	W H-C	S H-C
Wr 111, 112, 113 English Composition[1]	3	3	3
Ch 201, 202, 203 General Chemistry	4	4	4
Mth 101 College Algebra[2]	4		
Mth 102 Trigonometry		4	
Mth 200 Calculus with Analytical Geometry			4
Social science sequence (OSU, UO, OCE, EOC, SOC)	3	3	3
Z 201, 202, 203 General Zoology (PSU)	3	3	3
Physical Education	1		1
Personal Health		2	
	15-16	16-17	15-16

Total: 46-49 hours

[1]Students planning to transfer to PSU should complete Wr 111 and 6 hours of humanities or social science. The second and third terms of English Composition will be completed after transfer during the sophomore and junior years. Students transferring to OCE should complete Wr 111, Sp 111 Fundamentals of Speech, and 3 hours of electives. Students transferring to UO, OSU, SOC, or EOC should complete Wr 111, 112, and 113.

[2]Students should register in mathematics at level indicated by placement test scores.

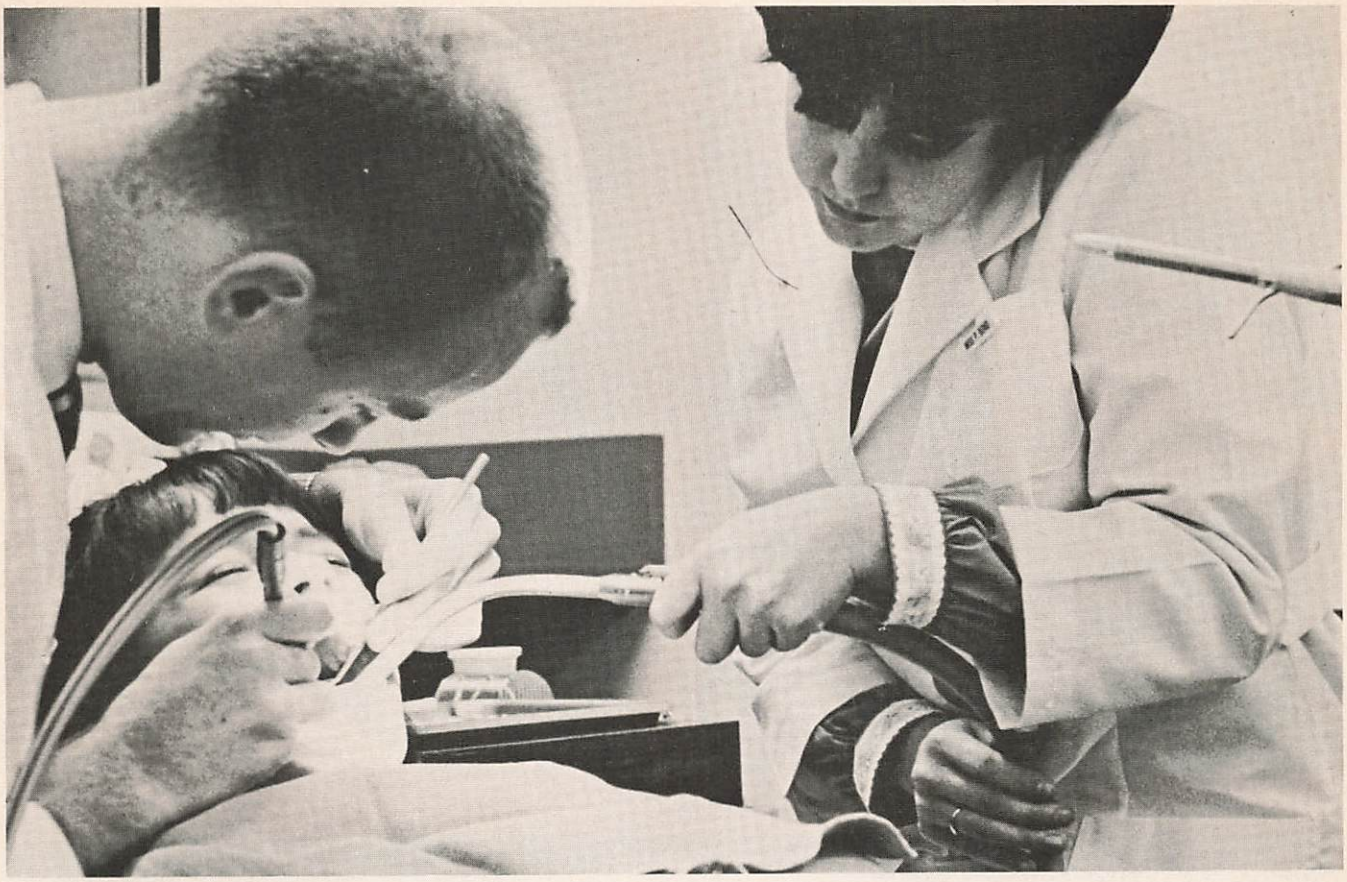
Medical Technology

Professional Program

This curriculum has been approved by the University of Oregon Medical School and the colleges and universities in the Oregon State System of Higher Education offering curricula for students interested in medical technology.

Students should be informed that admission to professional schools of medical technology is *competitive.* Preprofessional studies must include stipulated courses in the basic sciences and general education courses required for a baccalaureate degree. The preprofessional program is three years in length.

Those beginning the preprofessional program at a community college should plan to transfer to an accredited, four-year institution upon completion of the freshman year.



Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Ch 201, 202, 203 General Chemistry (or Ch 101, 102, 103)	4	4	4
Mth 95 Intermediate Algebra[2]	4		
Mth 101 College Algebra		4	
Mth 102 Trigonometry			4
Social science sequence (UO, OSU, OCE, EOC)	3	3	3
Z 201, 202, 203 General Zoology (PSU, SOC)	3	3	3
Physical Education	1		1
Personal Health		2	
	15-16	16-17	15-16

Total: 46-49 hours

[1]Students planning to transfer to PSU should complete Wr 111 and 6 hours of humanities or social science. The second and third terms of English Composition will be completed after transfer during the sophomore and junior years. Students transferring to OCE should complete Wr 111, Sp 111 Fundamentals of Speech, and 3 hours of electives. Students transferring to UO, OSU, SOC, or EOC should complete Wr 111, 112, 113.

[2]Students should register for mathematics at the level indicated by placement test scores.

Medicine

Preprofessional Program

This curriculum has been approved by the University of Oregon Medical School and the colleges and universities in the Oregon State System of Higher Education offering premedical curricula as suitable for Oregon community college students interested in premedicine.

Students should be informed that admission to professional schools of medicine is *highly competitive*. Preprofessional studies must include stipulated courses in the basic sciences and general education courses required for a baccalaureate degree. A minimum of three years is required to complete the preprofessional program. Many students complete four years of study before applying for admission to a medical school.

Those beginning a premedical program at a community college should plan to transfer to an accredited, four-year institution experienced in premedical education upon completion of the freshman year.

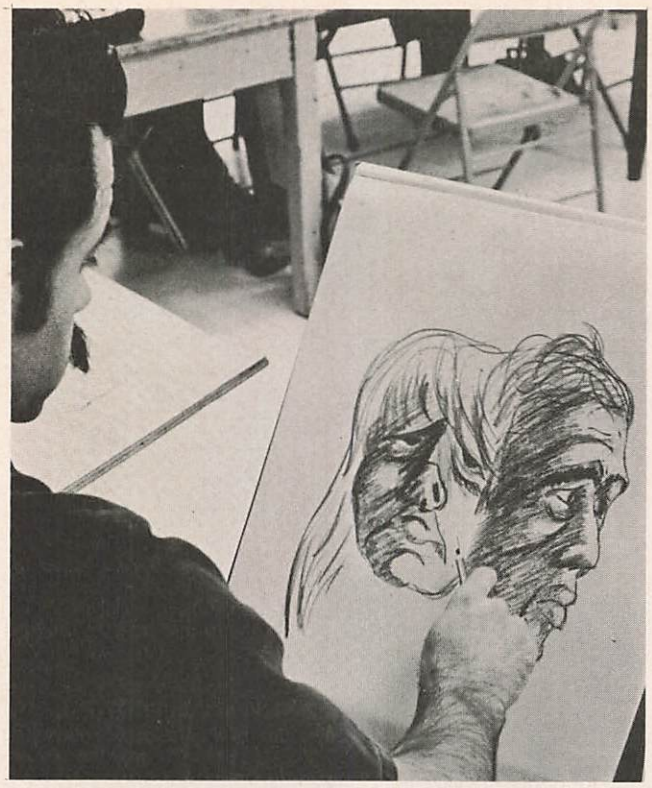
Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Ch 201, 202, 203 General Chemistry	4	4	4
Mth 101 College Algebra[2]	4		
Mth 102 Trigonometry		4	
Mth 200 Calculus with Analytic Geometry			4
Literature sequence (OSU, UO, OCE, EOC, SOC)	3	3	3
Z 201, 202, 203 General Zoology (PSU)	3	3	3
Physical Education	1		1
Personal Health		2	
	15-16	16-17	15-16

Total: 46-49 hours.

[1]Students planning to transfer to PSU should complete Wr 111 and 6 hours humanities or social science. The second and third terms of English Composition will be completed after transfer during the sophomore and junior years. Students transferring to OCE should complete Wr 111, Sp 111 Fundamentals of Speech, and 3 hours of electives. Students transferring to UO, OSU, SOC, or EOC should complete Wr 111, 112, and 113.

[2]Students should register in mathematics at level indicated by placement test scores. All students should complete 12 hours of mathematics during the freshman year.



Performing Arts

Chairman

Ragozzino, Edward—B.S., M.S., Speech, University of Oregon.

Faculty

Cammack, Nathan—B.S., M.S., Music, University of Washington.

Crafts, Nicola—B.S., M.S., Speech, University of Oregon. (Adult Education—Part-time.)

Norman, Robert—B.S., University of Puget Sound; M.M., Music, University of Southern California. Part-time.

The Program

The Performing Arts Department brings together the performing disciplines of music, drama, and dance. The objective of all three is the same: theory, technique, and performance. The department is not solely for the undergraduate student, but is intended to make facilities and staff available to the community for whatever its cultural interests may be.

Dance Courses

Ballet
Offered through the Adult Education Department; non-credit, non-graded.

Contemporary Dance
Offered through the Adult Education Department; non-credit, non-graded.

Drama Courses

Sp 229 Interpretation (3 class hrs/wk) 2 credits
Art of re-creating prose fiction, poetry, or drama through the medium of oral reading by an interpreter to an audience.

Sp 250 Speech and Theatre Workshop
(3 class hrs/wk) 2 credits each term (6 hrs. max.)
Beginning course in acting for any level of competence. Study of the methods, techniques, and theory of acting as an art form. Performance of laboratory exercises and cuttings from plays is the basic teaching approach. Individual instruction is provided; no prior acting experience required.

Sp 252 Make-Up (2 class hrs/wk) 1 credit
History, purpose and techniques of application of theatrical make-up; the use of make-up in the various theatrical media, with emphasis on stage and television performers.

Sp 261, 262, 263 Theatre Principles
(3 class hrs/wk) 1 credit each
Development of the physical theatre; mechanics of its stage and shops; planning and construction of stage settings and properties, basic principles of stage lighting.

Sp 264, 265, 266 Production Workshop
(3 class hrs/wk) 3 credits each
Practical experience in construction, painting, and handling of scenery, and the lighting of plays.
Prerequisite: Sp 261, 262, 263, or concurrent registration.

Sp 267, 268, 269 Appreciation of Drama
(3 class hrs/wk) 2 credits
The theatre as an art form. A non-performance course to make the spectator a more intelligent playgoer and to make theatre a part of his cultural life.

Music Courses

Mus 50 Basic Piano
(2 class hrs/wk) 1 credit each term (3 hrs. max.)
Classroom instruction to fit the needs of beginners.

Mus 51 Basic Voice
(2 class hrs/wk) 1 credit each term (5 hrs. max.)
For beginners in vocal music. Deals primarily with the development of breath control, tone production, articulation, and enunciation in a group situation. Classroom performance of songs. Study of song literature.

Mus 111, 112, 113 Music Theory I
(5 class hrs/wk) 4 credits each
Thorough groundwork in the elements of music: melody, harmony and rhythm. Entering students should be well-versed in the materials of music: key signature, time signature, scales and notational style.

Mus 190 Applied Music
(1 or 2 half-hour lessons/wk) 1-2 credits any term
Individual instruction in technical and stylistic aspects of artistic solo performance. Students specializing in performance normally enroll for 2 half-hour lessons per week in their major instrument each term during their undergraduate years. Non-music specialists enroll for 1 half-hour lesson per week.
Prerequisite: Permission of instructor.

Mus 195 Band
(3 class hrs/wk) 1 credit each term (6 hrs. max.)
To give woodwind, brass and percussion students rehearsal and performance opportunities in concert and stage band literature.

Mus 196 Orchestra (3 class hrs/wk) 1 credit (6 hrs. max.)
To give string instrument students (violin, viola, cello, string bass and piano) an opportunity to study and perform Baroque through Contemporary chamber orchestra literature.

Mus 197 Chorus
(5 class hrs/wk) 1 credit each term (6 hrs. max.)
College Concert Choir. No prior choral experience necessary.

Mus 201, 202, 203 Introduction to Music and its Literature (3 class hrs/wk) 3 credits each
Enjoyment and understanding of music through listening and study of its elements, forms and historical styles.

Mus 211, 212, 213 Music Theory II
(5 class hrs/wk) 4 credits each
Continued studies in the elements of music, with emphasis upon composition, analysis of various musical styles and trends, and increased keyboard facility. Mus 213 is devoted to the analysis of 20th Century music plus increased emphasis upon composition in the modern vein.

Mus 214, 215, 216 Keyboard Harmony
(2 class hrs/wk) 1 credit each
Application of theoretical principles to the piano; exercises in modulation, transposition and the development of extempore playing. To be taken concurrently with Mus 211, 212, 213.

Mus 290 Applied Music
(1 or 2 half-hour lessons/wk) 1-2 credits any term
See Mus 190 description.
Prerequisite: Satisfactory completion of Mus 190 or permission of instructor.

Suggested Transfer Curriculum

Music

This program has been approved by the University of Oregon, Oregon State University, Portland State University, and Southern Oregon College. Students successfully completing it with appropriate options will be able to transfer to the institution of their choice and, subject to proficiency examinations in performance and music theory, complete requirements for a bachelor of arts degree in music with two additional years of work. Students may also transfer to the University of Oregon and complete a B.Mus. degree program. Bachelor of science degree programs, which do not require completion of a foreign language, are offered at OSU, PSU, and SOC. Those planning to transfer to these programs should complete science and social science sequences instead of the two years of foreign language. Students planning to become music teachers in the public schools should complete Psy 201, 202 and Sp 111 during the sophomore year in place of one of the general education sequences.

Freshman Year

	F	W	S
Wr. 111, 112, 113 English Composition[1]	3	3	2-3
Mus 111, 112, 113 Music Theory I	4	4	4
Mus 190 Applied Music	1	1	1
Mus 195 Band or Mus 196 Orchestra or Mus 197 Chorus	1	1	1
First or Second Year French or German	4	4	4
HE 250 Personal Health			2
Physical Education	1	1	
Mus 50 Basic Piano (optional)[2]	1	1	1
	14-15	14-15	15-16

Sophomore Year

	F	W	S
Mus 211, 212, 213 Music Theory II	3	3	3
Mus 214, 215, 216 Keyboard Harmony	1	1	1
Mus 190 or 290 Applied Music	1	1	1
Mus 195 Band or Mus 196 Orchestra or Mus 197 Chorus	1	1	1
Literature sequence	3	3	3
Second Year French or German[3]	4	4	4
Mus 201, 202, 203 Introduction to Music and Its Literature (UO, OSU)	3	3	3
Science or social science sequence (PSU)	3	3	3
Three hours of humanities (excluding literature, Sp 111 Fundamentals of Speech, and 2 hours elective (SOC)	3	3	3
Physical Education[4]	1	1	1
	17	17	16-17

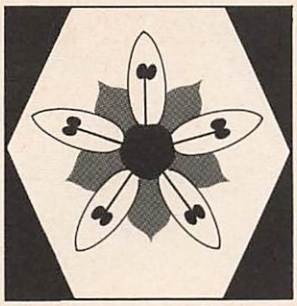
Total: 93 hours[4]

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112, and 3 hours of electives. Students transferring to UO or SOC should complete Wr 111, 112, 113.

[2]Students who cannot pass the proficiency examination for Mus 214, 215, 216 Keyboard Harmony should complete work in Mus 50 Basic Piano as required to attain this proficiency during the freshman year.

[3]If the second year language was completed during the freshman year, students should complete a science sequence meeting general education requirements of the institution to which transferring.

[4]Students may find it necessary to delay completion of the physical education requirement until after transfer, in order to hold transfer credits within the 93-hour limitation.



Science

Chairman

Jacobs, John W.—B.S., M.S., Biological Science, Oregon State University.

Faculty

Armstrong, Mabel—B.S., Chemistry, Oregon State University; M.S., Biochemistry, Oregon State University.

Boettcher, Robert J.—B.A., Biology, Jamestown College, Jamestown, North Dakota; M.A., Biology, University of Oregon.

Favier, Victor E.—B.A., Zoology, University of Colorado; M.S., Biology, University of Oregon; Oregon Vocational Approval.

Fraga, Richard T.—B.S., Botany, Oregon State University; M.S., Biology, University of Oregon.

Gubrud, Allan—B.A., Economics, Pacific University, Forest Grove, Oregon; M.S., Science, Syracuse University. (On leave).

Heiserman, Glenn R.—B.S., M.S., Biology, University of Michigan.

Hodges, Hayden—B.S., Industrial Arts; M.A.T., Physics, Colorado State University, Ft. Collins, Colorado.

John, Stephen W.—B.S., Chemistry, Ft. Lewis College, Durango, Colorado; M.S., Chemistry, University of Oregon.

Manley, William D.—B.A., Physics, Northwest Nazarene College, Nampa, Idaho; M.S., General Science, Oregon State University.

Marston, Jay R.—B.S., Biology, Eastern Montana College; M.S., Biology, University of Oregon.

Mitchell, Michael H.—B.S., M.A.T., Physical Science, Washington State University.

Pepperdine, Wendall—B.S., University of California, Berkeley; M.S., Chemistry, University of Oregon.

Romanek, Richard—B.S., Radio Eng., Tri-State College, Angola, Indiana; B.A., Physics, University of Oregon.

Rowe, Freeman—B.S., Biology, Pacific University, Forest Grove, Oregon; M.S., Science, Oregon State University.

Scales, Jack D.—B.S., Technical Education, Oklahoma State University; Oregon Vocational Certificate; Associate Degree Electrical Technology, Oregon State University.

Courses

4.300 Practical Physics I (3 Class—2 lab hrs/wk) 4 credits
Introductory practical physics covering heat, light, and sound.

4.302 Practical Physics II (3 class—2 lab hrs/wk) 4 credits
Introductory practical physics covering matter, measurements, mehanics, and machines.
Prerequisite: Mathematics I (4.200), or equivalent.

4.304 Practical Physics III (3 class—3 lab hrs/wk) 4 credits
Introductory practical physics covering magnetism and eletricity.
Prerequisite: Mathematics II (4.202), or equivalent.

6.370 Applied Physics I (3 class—2 lab hrs/wk) 4 credits
Mechanics of measurement, vectors, kinematics, work power-energy, machines and rotational motion.
Prerequisite: Technical Math I concurrently or approval of department head.

6.371 Applied Physics II (3 class—2 lab hrs/wk) 4 credits
Structure of matter, heat, sound, and light.
Prerequisite: Technical Math II or approval of department head.

6.366 Applied Physics III (3 class—2 lab hrs/wk) 4 credits
Magnetism and electricity, including basic electric currents, sources, electromagnetism, alternating current, generators, and motors.
Prerequisite: Technical Math II or approval of department head.

Ph 201, 202, 203 General Physics
(3 lecture—1 discussion—3 lab hrs/wk) 4 credits each
Study of energy and physical phenomena, including the fundamental principles of mechanics, heat, sound, light, electricity, magnetism, and a brief introduction to modern physics. Course series may be started with any sequence.
Prerequisite: Math 102, Trigonometry, or equivalent high school trigonometry.

Ph 207, 208, 209 Introductory Classical Physics
(2 lecture—2 recitation—3 lab hrs/wk) 4 credits each
Mechanics, heat, light, sound, electricity, and magnetism. For students in engineering and the physical sciences.

GS 104, 105, 106 Physical Science
(3 class—2 lab hrs/wk) 4 credits
Principles of physics, chemistry, astronomy, geology; development and application of the scientific method.
Prerequisite: One year of high school algebra, or equivalent.
Students may enter any term.

G 201, 202, 203 Geology (3 class—3 lab hrs/wk) 4 credits each
Earth materials, processes and forms, formation of economic mineral deposits, the main events in earth history. Field work where applicable.

Ch 101, 102, 103 General Chemistry
(3 class—3 lab hrs/wk) 3 credits each
Terminal service course for students with no previous training in chemistry. Course cannot be used for a prerequisite for further training in chemistry. Algebra recommended.

Ch 104, 105, 106 General Chemistry
104: (3 lecture—1 recitation—3 lab hrs/wk) 5 credits
105 & 106: (3 lecture—3 lab hrs/wk) 4 credits each
Prepares students for further work in chemistry; requires no chemistry background but assumes a working knowledge of algebra.

Ch 226, 227 Organic Chemistry
(3 lecture—6 lab hrs/wk) 5 credits
For students not majoring in chemistry or chemical engineering. A systematic coverage of aliphatic and aromatic chemistry.
Prerequisites: Ch 106 with grade of C or better.

Ch 234 Quantitative Analysis (3 lect—6 lab hrs/wk) 5 credits
Gravimetric and volumetric analysis and an introduction to instrumental analysis.
Prerequisite: Ch 106 with grade of C or better.

Bi 101, 102, 103 General Biology
(6 lect—lab hrs/wk) 4 credits each
Basic principles of Biology and the methods and purposes of scientific research as a human activity. Student may enter any term with consent of instructor.

Bi 101B, 102B, 103B General Biology (B series)
(6 lect—lab hrs/wk) 4 credits each
A field course emphasizing natural history of native Oregon animal and plant species. Field trips, lecture, lab, and projects. The course carries the same credits as Bi 101, 102, 103, and will be limited to elementary education majors and biology majors. Student may enter any term.

Bi 121, 122 Elementary Human Anatomy & Physiology
(3 class–3 lab hrs/wk) 4 credits
Medically oriented study of the human body, beginning with the single cell and continuing through histology to the skeletal, muscular, and nervous systems. Previous chemistry or chemistry concurrently is recommended.

Bi 211 Elementary Microbiology
(3 class–3 lab hrs/wk) 4 credits
Medically oriented study of bacteria and other microorganisms concerned with normal and pathogenic behavior.

Bot 201, 202, 203 General Botany
(3 lect–lab hrs/wk) 4 credits
201: Structure of cells and seed plants,, metabolism and growth.
202: Reproduction and genetics. Taxonomy of lower plants.
203: Taxonomy of vascular plants, identification of native plants, ecology, evolution. Student may enter first or second term.
Prerequisite: Bot 202 for 203.

Z 201, 202, 203 General Zoology
(2 class–3 lab hrs/wk) 3 credits
For zoology majors and premedical, dental, nursing, pharmacy students and others. Students may enter any term.

Suggested Curriculums

Applied Science

Recommended for those who plan to transfer in applied science to Portland State College. Upon satisfactory completion of this two-year program, students may transfer to Portland State College ready to begin the **second year** of applied science.

Freshman Year

	F	W	S
GE 101, 102, 103 Engineering Orientation	2	2	2
Mth 95 Intermediate Algebra[1]	4		
Mth 101 College Algebra		4	
Mth 102 Trigonometry			4
Ch 201, 202, 203 General Chemistry[2]	4	4	4
Wr 111, 112 English Composition	3	3	
Electives	2	2	3
Physical Education	1	1	
Personal Health			2
	16	16	15

Sophomore Year

Mth 200, 201, 202 Calculus with Analytic Geometry	4	4	4
Ph 207, 208, 209 Introductory Classical Physics	4	4	4
Ec 201, 202, 203 Principles of Economics	3	3	3
Physical Education	1	1	1
Elective (social science or humanities sequence)	3	3	3
	15	15	15

Total: 92 hours

One year transfer program

Students whose high school records and entrance examination scores show high ability in science and mathematics and readiness to begin calculus may complete this first-year program and transfer to Portland State University ready to begin the second year of applied science studies.

	F	W	S
Mth 200, 201, 202 Calculus with Analytic Geometry	4	4	4
Ph 207, 208, 209 Introductory Classical Physics	4	4	4
Ch 201, 202, 203 General Chemistry	4	4	4
Wr 111 English Composition	3		
Electives		3	3
Physical Education	1	1	1
	16	16	16

Total: 48 hours

[1]Students should begin work in mathematics at the level indicated in placement tests.

[2]Or Ch 101, 102, 103 and 241.

Biology, Botany, Entomology, Microbiology, Zoology, General Science

Recommended for students who plan to transfer in biology to the University of Oregon, Portland State University, or Southern Oregon College, or to a major program in botany, entomology, microbiology, zoology, or the biological science option in general science at Oregon State University. Requirements for the baccalaureate degree may be completed with three additional years of work at the four-year institution.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Mth 200, 201, 202 Calculus with Analytic Geometry	4	4	4
Ch 201, 202, 203 General Chemistry	4	4	4
Humanities or social science sequence	3	3	3
Physical Education	1		1
Personal Health		2	
	15	16	15

Biology (EOC)

This program is recommended for students who plan to transfer to the major program in biology at Eastern Oregon College. Students may complete the requirements for the baccalaureate degree with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
Mathematics[2]	4	4	4
GS 101, 102, 103 General Biology	4	4	4
Ch 201, 202, 203 General Chemistry (or Ch 101, 102, 103 according to placement)	3-4	3-4	3-4
Physical Education	1	1	1
	15-16	15-16	15-16

Sophomore Year

Bot 201, 202, 203 General Botany	4	4	4
Z 201, 202, 203 General Zoology	3	3	3
Ph 201, 202, 203 General Physics	4	4	4
Literature or social science sequence[3]	3	3	3
Personal Health		2	
Physical Education[4]	1		1
	15	16	15

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111 and 6 hours of electives. Students transferring to UO or SOC should complete Wr 111, 112, 113.

[2]Students should enroll in mathematics according to placement test scores and complete a minimum of 12 hours of work numbered 101 and above.

[3]Students planning to teach in the secondary schools should complete Psy 201, 202 General Psychology and Sp 111 Fundamentals of Speech.

[4]Students who completed 48 hours of work in freshman year should postpone completion of 1 hour of physical education until after transfer in order to hold total hours credit to 93.

Chemistry

Recommended for those who plan to transfer in chemistry to the University of Oregon, Oregon State University, Portland State University, or Southern Oregon College. Because of the highly professional and exacting nature of the instruction, students wishing to complete a major program in chemistry within the normal four-year period should plan to take all work on a campus offering a major program. However, those students who

prefer to begin their studies at a community college may complete the program outlined below, realizing, however, that more than three years will be required to complete remaining requirements after transfer. The amount of time required to complete the major program will depend upon the requirements of the department, the ability and industry of the student, and his level of achievement in mathematics at the time of transfer.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Mathematics[2]	4	4	4
Ch 201, 202, 203 General Chemistry	4	4	4
GL 50, 51, 52 First-year German (UO, PSU)[3]	4	4	4
GS 101, 102, 103 General Biology (OSU)	4	4	4
Social science, foreign language, or literature sequence (SOC)	3-4	3-4	3-4
Physical Education	1		1
Personal Health		2	
	15-16	16-17	15-16

Total: 46-49 hours

[1]PSU students should complete Wr 111 and 6 hours of social science or humanities.

[2]Students should enroll in mathematics at the level indicated by placement scores.

[3]UO: German language study strongly recommended. PSU: students should complete work in German or Russian.

General Science, General Studies in Science

Recommended for those who plan to transfer in general science to the University of Oregon and Oregon State University or in general studies in science to Portland State University, Eastern Oregon College, Oregon College of Education, Southern Oregon College. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Mathematics[2]	4	4	4
GS 101, 102, 103 General Biology	4	4	4
Physical Education	1		1
Personal Health		2	
	15	16	15

Sophomore Year

Social science sequence	3	3	3
Select two:			
Ch 201, 202, 203 General Chemistry (or Ch 101, 102, 103)			
Ph 201, 202, 203 General Physics (or Geol 101, 102, 103)	3-4	3-4	3-4
Foreign language or second humanities sequence	3-4	3-4	3-4
Physical Education	1	1	1
Electives to bring total hours to 93	0-3	0-3	0-3
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU, OCE, or PSU should complete Wr 111, 112 and 3 hours of electives. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113.

[2]Students should enroll in mathematics at the level indicated by entrance examination scores. Students transferring to OSU or UO must complete mathematics through Mth 201 Calculus with Analytic Geometry before end of sophomore year.

Geology

Approved by Oregon State University and Portland State University for students who plan to transfer in geology. Requirements for the baccalaureate degree may be completed with two additional years of work. The University of Oregon also offers a major program in geology.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Mathematics[2]	4	4	4
G 201, 202, 203 Geology	3	3	3
G 204, 205, 206 Geology Laboratory	1	1	1
Physical Education	1		1
Personal Health		2	
	15	16	15

Sophomore Year

Ph 201, 202, 203 General Physics	4	4	4
Ch 201, 202, 203 General Chemistry	4	4	4
Physical Education	1	1	1
Electives to bring total hours to 93[3]	6-7	6-7	6-7
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of electives.

[2]Students should enroll in mathematics at the level indicated by placement test scores. Mth 201 Calculus with Analytic Geometry must be completed by the end of the sophomore year.

[3]Portland State University recommends Ec 201, 202, 203 Principles of Economics.

Prepharmacy

This prepharmacy curriculum prepares a student for admission to the Oregon State University School of Pharmacy. The pharmacy curriculum at OSU embraces three years of professional study, during which time courses in the humanities and social sciences are also taken. Transfer students may enter the program as sophomores or juniors. A total of five academic years, with 240 quarter hours, is required for the bachelor's degree.

Freshman Year

	Term hours
Wr 111, 112, 113 English Composition[1]	9
Mathematics[2]	8
Z 201, 202, 203 General Zoology	9
Ch 204, 205, 206 General Chemistry[3]	15
Ec 115 Outlines of Economics	3
Physical Education	3
	47

Sophomore Year

Ch 234 Quantitative Chemistry	4
Microbiology	5
Ch 226, 227, 228, 229 Organic Chemistry[3]	10
Ph 201, 202 Physics	8
BA 302 Organ. Management Theory	3
BA 217 Basic Accounting & Fin. Anal.	3
Sp 111 Fundamentals of Speech	3
Electives	9
Physical Education	3
	48

[1]A year sequence in English composition should be completed before transfer. However, English at Oregon State University (Wr 101, 202, 303) is offered in freshman, sophomore, and junior years.

[2]Students should enroll in mathematics at the level indicated by placement test scores. However, trigonometry and calculus are required. Math 163 may replace calculus.

[3]Or equivalent.

Physics

Two-Year Program

Recommended for those who plan to transfer in physics to Oregon State University, the University of Oregon, or Portland State University. Upon satisfactory completion of the two-year program outlined below, students should be ready to begin the second year of physics studies.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Mathematics[2]	4	4	4
Ch 201, 202, 203 General Chemistry	4	4	4
Physical Education	1		1
Personal Health		2	
	15	16	15

Sophomore Year

	F	W	S
Mathematics (Mth 201, 202, 203)	4	4	4
Ph 207, 208, 209 Introductory Classical Physics	4	4	4
Social science sequence[3]	3	3	3
Physical Education	1	1	1
Electives to bring total hours to 93	3-4	3-4	3-4
	15-16	15-16	15-16

Total: 93 hours

One-Year Program

Students whose high school records and entrance examination scores show high ability in science and mathematics and readiness to begin calculus may complete the following first-year program and transfer to Oregon State University, University of Oregon, or Portland State University ready to begin the second year of physics studies.

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Mth 200, 201, 202 Calculus with Analytic Geometry	4	4	4
Ph 207, 208, 209 Introductory Classical Physics	4	4	4
Ch 201, 202, 203 General Chemistry	4	4	4
Physical Education	1		1
Personal Health		2	
	16	17	16

Total: 49 hours

[1]Students planning to transfer to OSU should complete Wr 111, 112 and 3 hours of electives. PSU students should complete Wr 111 and 6 hours of humanities or social science. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113.

[2]Students should register in mathematics at level indicated by placement test scores.

[3]Students who plan to teach in the secondary schools should complete Psy 201, 202 General Psychology.

Social Science

Chairman

Beals, William J., Jr.—B.A., History Franklin and Marshall College; M.A., History, University of Southern California.

Faculty

Allen, Dale—Oregon Vocational Approval. Part-time.

Carley, Dorrance—Oregon Vocational Approval. Part-time.

Cohen, Joanna—A.A., Psychology, Phoenix Junior College; B.A., Psychology, Arizona State; M.A., Psychology, California State College.

Delf, Gregory—A.A., Social Science, Blackhawk College; B.A., M.A., History, University of Iowa.

Dudley, Larkin—A.B., University of Georgia. Part-time.

Jaegers, Marvin—B.S. with Distinction, M.S., Education, Indiana University.

Klemke, Lloyd—B.A., M.A., Sociology, San Fernando State College.

Klobas, John R.—B.S., Science, Oregon State University; M.A., Sociology, University of Oregon.

Lutz, Paula—B.S., M.A., Anthropology, University of Oregon.

Malm, Paul M.—B.A., History, Southern California College; M.A., History, Claremont University.

McCulloch, John R.—B.S., Law, L.L.B., Law, University of Oregon; Oregon Vocational Approval.

Mitchell, Ronald F.—B.A., Psychology, Fresno State College.

Molenkamp, Harold – B.A., M.A., Philosophy, University of Denver.

Searl, Gary H. – B.B.A., Business Administration, M.S., Interdisciplinary Studies, University of Oregon.

Simpson, Peter—B.A., M.A., History, University of Wyoming.

Wehner, Gordon—B.A., Accounting, Economics and Humanities, Lewis and Clark College; M.A., Accounting and Business Statistics, University of Oregon.

Programs

Fire Prevention Technology

Two Year Associate Degree Program

The majority of fire fighters employed in Oregon have learned their skills on the job. Complexities in the science of fire fighting, and increasing knowledge of better methods of fire fighting, have created a need for a comprehensive training program in this field.

Demand for qualified fire fighters is greater than the supply of trained personnel. Training in this program could qualify a student to work in the Safety Division of an industrial firm or provide background for fire underwriting. Persons interested in entering this field should be in good physical health and be able to demonstrate stamina under physical strain.

The curriculum is designed for pre-employment training as well as for employed persons in fire protection and allied occupations. Options include single courses in specialized areas of study, a one-year core of selected subjects from a two-year pre-employment curriculum, and advanced courses at the company officer level.

During the 1969-70 College year this program will be offered only to employed firemen.

First Year

	F		W		S	
	H	C°	H	C	H	C
Communication Skills I	3	3				
Fire Apparatus and Equipment	4	3				
Mathematics	3	3				
Introduction to Fire Protection	3	3				
Practical Physics I	5	4				
	18	16				
Introduction to Psychology			3	3		
Drafting I			4	2		
Elementary Science for Fire Fighting			5	3		
Practical Physics II			5	4		
Communication Skills II			3	3		
			20	16		
Fire Fighting Skills I					9	3
Fire Service Hydraulics					3	3
Drafting II					4	2
Fire Reports and Records					3	3
Fire Company Organization and Station Assignments					3	3
General Education Elective					3	3
					25	17

°H=hours, C=credits

Second Year

	F		W		S	
	H	C°	H	C	H	C
American Institutions	3	3				
Hazardous Material I	3	3				
Fundamentals of Fire Prevention	5	4				
Fire Fighting Skills II	9	3				
Fire Pump Construction & Operation	8	4				
	28	17				
Fire Fighting Skills III			5	2		
Hazardous Materials II			5	3		
Psychology of Human Relations			3	3		
Building Construction for Fire Prevention			5	3		
Fire Department Communications and Alert Systems			2	2		
First Aid			2	1		
			22	14		
Fire Service Rescue Practices					8	4
Water Distribution Systems					3	3
Fixed Systems and Extinguishers					5	2
Fire Investigation					6	4
Fire Fighting Tactics and Strategy					3	3
					25	16

°H=hours, C=credits

Fire Prevention Courses

5.264 Building Construction for Fire Prevention
(2 class—3 lab hrs/wk) 3 credits
Classification of buildings; structural features affecting fire spread; effect of fire on structural strength; fire stops and rating of materials; fire retardants; Sanborne maps.

5.258 Company Organization and Station Assignment
(3 class hrs/wk) 3 credits
Fire company organization and operation; company responsibilities in station: record keeping, state communications; and watch, housekeeping and house privileges, tours and public relations, company organization for response to alarms, company morale.

5.253 Fire Apparatus and Equipment (2 class–3 lab hrs/wk) 3 credits
Familiarization with different types of fire apparatus; principles of application, care, and preventive maintenance; safe operating practices, emergency and non-emergency; National Board standards.

5.267 Fire Department Communications and Alerting Systems (2 class hrs/wk) 2 credits
Dispatching, receiving, and radio communication procedures; FCC regulations; municipal box alarm; telephone and tone-activated alarm; recording messages; tap-out procedures, running cards.

5.257 Fire Department Hydraulics (3 class–3 lab hrs/wk) 4 credits
Review of basic mathematics hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculations to hydraulic problems; fire ground water-supply problems: Underwriters' requirements for pumps and accessories.

5.250 Fire Fighting Skills I (9 lab hrs wk) 3 credits
Individual skills using small tools and minor equipment, practice in forcible entry, use of masks.

5.251 Fire Fighting Skills II (1 class–6 lab hrs/wk) 3 credits
Practice in team skills used in fire ground operation, including hose and ladder evolutions, salvage, overhaul, rescue, fire attack.

5.252 Fire Fighting Skills III (2 class–3 lab hrs/wk) 2 credits
Practice in skills involving multi-company operations, including simultaneous activities of ladder, engine, and salvage companies; manning large stream appliances, coordinating commuications.

5.274 Fire Fighting Tactics & Strategy (3 class hrs/wk) 3 credits
Response and size-up; fire ground tactics; analysis and postmortem; prefire surve yand planning.

5.273 Fire Investigation (3 class–3 lab hrs/wk) 4 credits
Effect on fire prevention by isolating cause of fire; interpreting clues and burn patterns leading to point of origin; identifying sources of ignition and materials ignited; preservation of the fire scene.

5.270 Fire Reports & Records (3 class hrs/wk) 3 credits
Analysis of fire department records and reports systems, their origins, types and functions. Application of these systems to the areas of pre-fire surveys, routine inspections, post-fire reporting, cost-accounting, research and planning.
Prerequisite: Communications Skills I, II.

5.272 Fixed Systems and Extinguishers (2 class–3 lab hrs/wk) 2 credits
Portable extinguisher equipment; sprinkler system; protection systems for special hazards; fire alarm and detection system; ventilating systems.

5.262 Fundamentals of fire Prevention (3 class hrs/wk) 3 credits
Organization and function of a fire prevention bureau; fire prevention codes; state and local laws and ordinances; familiarization with principles of fire prevention; the inspector's job; public relations.

5.260 Hazardous Materials I (2 class–3 lab hrs/wk) 3 credits
Review of basic chemistry; identification of hazardous materials by color, symbol, and marking; recommended safe practices for storage and handling of solids, liquids, and gases; methods for fire control of these materials.

5.261 Hazardous Materials II (2 class–3 lab hrs/wk) 3 credits
Methods for combating fires in hazardous chemicals and similar materials; radiation hazards of the fire service; space age fuel; highway transportation explosives.

5.254 Introduction to Fire Protection (3 class hrs/wk) 3 credits
Philosophy, history of fire protection, loss of life and property by fire; role and responsibility of fire department in the community; organizations, sources of professional literature; survey of professional career opportunities.

5.256 Physical Science of Fire (3 class–3 lab hrs/wk) 3 credits
Characteristics and behavior of fire; fundamentals of physical laws and chemical reactions occurring in fire and fire suppression; analysis of factors contributing to fire and to its confinement, control, and extinquishment.

5.263 Pump Operation and Practical Hydraulics (2 class–3 lab hrs/wk) 3 credits
Principles of fire apparatus pumping operations; fire ground water supply; construction and operation of fire service pumps and accessories; pump operation under emergency conditions; rule-of-thumb hydraulics.

5.268 Rescue Practices (6 lab hrs/wk) 2 credits
Electrical; use of rescue tools; common rescue carries; search and rescue procedures; handling nets; care of victim, excavation emergencies; evacuations.

5.269 Water Distribution Systems (3 class hrs/wk) 3 credits
Main systems; hydrants; residential and commercial districts; fire flow requirements; pumping stations high pressure systems storage tanks and cisterns; mobile supplies.

Law Enforcement

Two Year Associate Degree Program

The law enforcement curriculum is designed for young men and women desiring to pursue an educational program which will prepare them for career employment in police departments, sheriffs' offices, and various other law enforcement-related agencies. It also provides opportunities for those persons already engaged in law enforcement occupations to obtain further training for additional competency, or retraining that will help them qualify for higher-level positions.

The curriculum, which leads to an Associate of Science Degree, has been developed cooperatively by the State Department of Education and the State Advisory Board on Police Standards and Training. The program of studies covers basic police science knowledge, skills, and techniques.

Those who meet minimum physical, emotional, intellectual, citizenship, and moral standards are eligible for the program, provided they meet the school entrance requirements. These minimal requirements are directly related to statutory requirements and common hiring practices which limit entrance into law enforcement occupations. Local police departments make a routine investigations, inluding fingerprinting, of all applicants. Students may participate in the program on a full-time or part-time basis.

	F		W		S	
	H	C*	H	C	H	C
First Year						
Introduction to Law Enforcement	3	3				
Patrol & Traffic I	5	3				
First Aid I	2	1				
P.E. (incluidng defensive tactics)	3	1				
Communications Skills I	3	3				
Typing I	5	3				
	21	14				
Patrol & Traffiic			5	3		
First Aid II			2	1		
Communications Skills II			3	3		
Typing II			5	3		
Administration of Justice			3	3		
			18	13		
Patrol & Traffic					5	3
First Aid III					2	1
Criminal Law I					3	3
Elective						2
Introduction to Psychology					3	3
					13	12

*H=hours, C=credits

Second Year

	F		W		S	
	H	C*	H	C	H	C
Criminal Law II	3	3				
Police Report Writing I	4	2				
Criminal Investigation I	3	3				
Problems of Physical and Photographic Evidence I	3	1				
Fundamentals of Speech	3	3				
	16	12				
Police Report Writing II			4	2		
Criminal Investigation II			3	3		
Problems of Physical and Photographic Evidence II			3	1		
Juvenile Procedures			5	3		
Firearms I			2	1		
American Institutions			3	3		
Police and Community Relations I			3	3		
			23	16		
Criminal Investigation III					3	3
Problems of Physical and Photographic Evidence III					3	1
Firearms II					2	1
Criminal Evidence					3	3
Jail Procedures					2	1
Human Relations I					3	3
Police Report Writing III					4	2
					20	14

*H=hours, C=credits

Law Enforcement Courses

5.202 Administration of Justice (3 class hrs/wk) 3 credits
Review of court systems; procedures from incident to final disposion; principles of constitutional, federal, state, and civil laws as they apply to and affect law enforcement.

5.222 Criminal Evidence (3 class hrs/wk) 3 credits
Kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

5.216 Criminal Investigation I (3 class hrs/wk) 3 credits
Fundamentals of investigation; crime scene search; sketching and recording; collection and preservation of physical evidence; scientific aids; modus operandi; sources of information interviews and interrogation, follow-up, and case preparation.

5.217 Criminal Investigation II (3 class hrs/wk) 3 credits
Continuation of Criminal Investigation I.

5.218 Criminal Investigation III (3 class hrs/wk) 3 credits
Continuation of Criminal Investigation II.

5.208 Criminal Law I (3 class hrs/wk) 3 credits
The structure definitions and the most frequently used section of the Penal Code and other criminal statutes.

5.238 Criminal Law II (3 class hrs/wk) 3 credits
Continuation of Criminal Law I.

LE 113 Elements of Law for Police Officers
(3 class hrs/wk) 3 credits
Overview of the salient principles of law which have special application to police work, inucluding criminal law, law of arrests, search, seizure, and evidence, automobile law. Discussion of court procedures.

5.226 Firearms I (2 lab hrs/wk) 1 credit
Moral aspects, legal provisions, safety precautions, and restrictions covering the use of firearms firing of the sidearm riot shotgun and other weapons. Combined lecture and laboratory (range).

5.227 Firearms II (2 lab hrs/wk) 1 credit
Law enforcement uses of riflles, shotguns, Thompson submachine guns; legal and moral aspects. Use of rifles and shotguns in sports and the laws pertaining to such.

5.200 Introduction to Law Enforcement
(3 class hrs/wk) 3 credits
The philosophy and history of law enforcement; crime and police problems; organization and jurisdiction of local, state and federal law enforcement agencies; survey of professional career opportunities, qualifications required, and police ethics.

5.232 Jail Procedures (2 lab hrs/wk) 1 credit
Receiving, booking, and searching, care and custody of prisoners; laws relating to commitments, holding orders, and warrants; duties and responsibilities of the officer as outlined in the law regarding property and belongings of prisoners. Detention of prisoners for outside agencies.

5.236 Juvenile Procedures (2 class–3 lab hrs/wk) 3 credits
The organization, functions, and jurisdiction of juvenile agencies; processing and detention; case disposition; statutes and court procedures.

LE 112 Organization and Administration of Law Enforcement Agencies (3 class hrs/wk) 3 credits
Application of the principles of organization and administration to law enforcement agencies at the federal, state, and municipal levels.

5.209, 5.210, 5.211 Patrol and Traffic Procedures I, II, III (2 class–3 lab hrs/wk) 3 credits each
Purposes and types of patrols, assignments, response to emergencies, action to be taken. Traffic law enforcement, regulation and control; fundamentals of traffic accident investigation; Oregon Motor Vehicle Code.

5.242, 5.243 Police and Community Relations I, II
(2 class hrs/wk) 2 credits each
Police and minority groups, social change and law enforcement, and principles of programming in police and community relations.

LE 111 Police and Society (3 class hrs/wk) 3 credits
Agencies dealing with the administration of justice. Requirements for entering police service. Origin and evolution of law enforcement agencies. Police problems, functions of the courts, prosecuting and defense attorneys, correctional measures; American and foreign police systems.

5.239, 5.240, 5.241 Police Report Writing
(2 class–2 lab hrs/wk) 2 credits each
Knowledge of the principles of composition and basic forms of writing reports.

5.233, 5.234, 5.235 Problems of Physical and Photographic Evidence I, II, III (3 lab hrs/wk) 1 credit each
Various uses of photography in police work. Techniques of locating, collecting and identifying physical evidence. Use of fingerprinting, casts and molds, photography and sketching.

Transfer and Occupational Courses

Anthropology

Anth 101, 102, 103 General Anthropology
(2 lec–1 discuss. hr/wk) 3 credits each
101: Physical Anthorology; 102: Archeology: study of historic cultures; 103: Organization and functioning of culture. May be taken out of sequence.

Economics

EC 201, 202, 203 Principles of Economics
(3 class hrs/wk) 3 credits each
General economics principles and policies and their relation to specific goals and policies of our national economy.
Prerequisite: Sophomore standing, 201 prerequisite for 202.

Geography

Geog 105, 106, 107 Introductory Geography
(2 class–1 lab hr/wk) 3 credits each
Introduction to field of geography. 105: Physical and regional survey of the world. 106: Economic geography. 107: Cultural geography. Must be taken in sequence.

Geog 221 Field Geography (3 class hrs/wk) 3 credits
In-depth study of a limited area near Eugene; a basis for introductory training in the interpretation of interrelated physical and cultural constituents of a total environment within Lane County, and the compilation of data and the construction of maps.
Prerequisite: One sequence in Social Science.

History

Hst 101, 102, 103 History of Western Civilization
(3 class hrs/wk) 3 credits each
101: Origins and development of western civilization from ancient times to the middle ages. 102: The end of the middle ages to 1789. 103: From 1789 to the present. May be taken out of sequence.

Hst 201, 202, 203 History of the United States
(3 class hrs/wk) 3 credits each
201: The United States in the 17th and 18th centuries. 202: Development of political, social, and economic institutions in the American democracy, Civil War, and industrial revolution in the 19th century. 203: Changes occurring in the 20th century technical revolutions and global conflicts.
May be taken out of sequence.

Philosophy

PHL 201, 202, 203 Problems of Philosophy
(3 class hrs/wk) 3 credits each
Introduction to philosophical problems through the study of philosophical classics. May be taken out of sequence.

Political Science

PS 201, 202, 203 American Governments
(3 class hrs/wk) 3 credits each
201: Principles of American constitutional system, political process, and organization of national government; 202: Powers and functions of national government; prerequisite 201; 203: Practical operations and contemporary reforms in government at state and local level.

PS 205 International Relations (3 class hrs/wk) 3 credits
Analysis of the nature of relations among states; contemporary international issues; a study of the motivating factors: nationalism, imperialism, economic rivalries, quest for security.

Psychology

0.500 Orientation to College (2 class hrs/wk) 2 credits
Role of the student, his opportunities at Lane Community College. Courses, programs, services and facilities. Focus is on the individual in terms of his vocational and educational choice, self-awareness and effective study.

1.606 Introduction to Psychology (3 class hrs/wk) 3 credits
Concept of human behavior and an understanding of the fundamental motivational drives. Relationship of the individual to his social environment.

1.608 Human Relations I (3 class hrs/wk) 3 credits
Principles of psychology for understanding of personal relationships on the job. Motivations, feelings, emotions, and principles of learning are considered with particular reference to "on-the-job" problems.

1.609 Human Relations II (3 class hrs/wk) 3 credits
A follow-up study of the relationship of executive, managerial, supervisory, and worker relationships. Continues study of personal and group dynamics so that the student may learn to apply the basic attitudes of behavioral science to business.
Prerequisite: Social Psychology Psy 215.

Psy 201, 202, 203 General Psychology
(3 class hrs/wk) 3 credits each
Basic principles and theories of behavior. Sophomore standing recommended. Make be taken out of sequence.

Psy 215 Social Psychology (3 class hrs/wk) 3 credits
Individual behavior in relation to culture. Features of human nature which man shares with other animals and those features which are unique; special attention to the social behavior of animals, to language and communication, and to man's attitude towards social issues.

Psy 217 Human Development and Individual Differences
(3 class hrs/wk) 3 credits
Study of the development of behavior and personality through the prenatal period, infancy, childhood, adolescence, and adult life.
Prerequisite: General Psychology, Psy 201, 202.

Sociology

1.600 American Institutions (3 class hrs/wk) 3 credits
A study of the effect of American social, economic, and political institutions upon the individual as a citizen and as a worker in business and industry.

Soc 204, 205, 206 General Sociology
(3 class hrs/wk) 3 credits each
Introduction to the sociological perspective with particular emphasis on the analysis and understanding of modern society and contemporary social problems. Prerequisite: 204 prerequisite for 205.

Suggested Curriculums

Anthropology

Approved by the University of Oregon for students who plan to transfer in anthropology. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition	3	3	3
Anth 101, 102, 103 General Anthropology[1]	3	3	3
GS 101, 102, 103 General Biology	4	4	4
First year foreign language[2] or Literature sequence	3-4	3-4	3-4
Physical Education	1		1
Personal Health		2	
	14-15	14-15	14-15

Sophomore Year

	F	W	S
Second year foreign language[2] or electives	4	4	4
Second science sequence[3]	3-4	3-4	3-4
Social Science sequence	3	3	3
Literature sequence (if not taken in freshman year or second humanities sequence)	3	3	3
Physical education	1	1	1
Electives to bring total hours to 93	0-3	0-3	0-3
	14-17	14-17	14-17

Total: 93 hours

[1]Students planning to transfer to UO may substitute Anth 207, 208, 209 Introduction to Cultural Anthropology. Students should **not** take both Anth 101, 102, 103 and 207, 208, 209.

[2]Students planning to do graduate study should complete two years of German, French, or Spanish.

[3]Students transferring to UO may use Psy 201, 202, 203 toward completing the science requirement provided laboratory work is completed after transfer.

Economics

Recommended for those who plan to transfer in economics to the University of Oregon, Oregon State University, or Portland State University. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Mathematics[2]	4	4	4
Social science sequence	3	3	3
Physical Education	1		1
Personal Health		2	
	14	15	14

Sophomore Year

	F	W	S
Ec 201, 202, 203 Principles of Economics	3	3	3
BA 211, 212, 213 Principles of Accounting (PSU)	3	3	3
BA 232 Introduction to Business Statistics (OSU)	3		
First or second year foreign language (OSU)	4	4	4
Second humanities sequence	3	3	3
Second science sequence (with lab)[3]	3-4	3-4	3-4
Physical Education	1	1	1
Electives to bring total hours to 93	2-4	2-7	2-7
	15-17	15-17	15-17

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112, and 3 hours of electives. Students transferring to UO should complete Wr 111, 112, 113.

[2]Students should enroll in mathematics at level indicated by placement test scores. Courses must be completed through Mth 200 to meet group requirement at University of Oregon.

[3]Students planning to transfer to UO may use Psy 201, 202, 203 to meet science requirement if laboratory work is completed after transfer.

Education, Elementary

Successful completion of this program will permit students to transfer to any institution of the Oregon State System of Higher Education offering a program in elementary education and, upon admission to the professional teacher educational program, complete requirements for a baccalaureate degree with two additional years of work. Programs in elementary education are offered at Eastern Oregon College, Oregon College of Education, Oregon State University, Portland State University, Southern Oregon College, and the University of Oregon. Admission to the professional program is based on several qualifications—academic, personal, social, and ability to speak and write adequately. Application for admission should be made immediately upon transfer to the four-year institution.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Mth 191, 192 Mathematics for Elementary Teachers[2]	3	3	
GS 104, 105, 106 Physical Science	4	4	4
Literature sequence[3]	3	3	3
Physical Education	1		1
Personal Health		2	
Elective			3
	14	15	14

Sophomore Year

	F	W	S
Psy 201, 202 General Psychology	3	3	
Sp 111 Fundamentals of Speech			3
Hts 201, 202, 203 History of the United States (UO, OSU, SOC, EOC) / Hst 101, 102, 103 History of Western Civilization (OCE)	3	3	3
Soc 204, 205, 206 General Sociology or Anth 101, 102, 103 General Anthropology (PSU)			
GS 101, 102, 103 General Biology	4	4	4
Geog 105, 106, 107 Introductory Geography[4]	3	3	3
Physical Education	1	1	1
Electives to bring total hours to 93[5]	2-3	2-3	2-3
	16-17	16-17	16-17

Total: 93 hours

[1]Students planning to transfer to OSU, PSU, or OCE should complete Wr 111, 112 and 3 hours of electives. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113.

[2]SOC students should take AA 201 Survey of Visual Arts, Mus 201 Introduction to Music and Its Literature, and Sp 111 Fundamentals of Speech or electives. AA 201, Mus 201, and Sp 111 should be completed sometime during the transfer program.

[3]Students transferring to EOC or SOC should take Eng 107, 108, 109 World Literature.

[4]UO requires 105; OSU, EOC, OCE, 105 and 106; PSU and SOC, 105,106,107.

[5]Recommended: Hst 201, 202 History of the United States (PSU); AA 201 Survey of the Visual Arts and Mus 201 Introduction to Music and Its Literature (EOC); Hst 101, 102, Soc 204, 205, 206, or Anth 101, 102, 103 (SOC); courses in one of the following areas of concentration: art, English, mathematics, modern languages, music, physical education and health, science,, speech (OSU).

Education, Secondary

Those planning to become high school teachers should enroll in the transfer program for the subject they plan to teach, being sure to include Psy 201, 202 General Psychology. Students who will complete their programs at PSU, SOC, EOC, or UO should also take Sp 111 Fundamentals of Speech. Students planning to teach social studies should complete the transfer program in general social science. Admission to the professional program in education is based on several qualifications—academic, personal, social, and ability to speak and write adequtely. Application for admission should be made immediately upon transfer to the four-year institution.

Subject Norms

Teacher Preparation Programs at System Institutions
(Four-Year Basic Norm)

Subject Norms	Institutions					
	OSU	UO	PSU	EOC	ECE	SOC
Art[1]	x	x	x	x	x	x
Biology	x	x	x	x	x	x
Business[2]	x	x	x	x		x
Chemistry	x	x	x	x	x	x
French	x	x	x	x	x[6]	x
General Science—Physical Science	x	x	x	x	x	x
German	x	x	x	x		x
Health and Physical Education[3]	x	x	x	x	x	x
Home Economics	x	x[4]				
Industrial Arts[5]	x					
Latin		x				
Journalism	x[6]	x	x[6]	x[6]	x[6]	x[6]
Literature, Writing, and Language	x	x	x	x	x	x
Mathematics	x	x	x	x	x	x
Music	x	x	x	x	x	x
Physics	x	x	x	x		x
Russian	x	x	x[6]			
Social Studies	x	x	x	x	x	x
Spanish	x	x	x	x	x[6]	x
Speech and Drama	x	x	x	x[6]	x[6]	x[6]

[1]See Art

[2]See Business

[3]See Physical Education

[4]Student teaching not offered. Students should plan to complete requirements in an additional teaching field.

[5]Transfer program not available at present because of specialized course work required.

[6]Students interested in this area should plan also to complete requirement in an additional teaching field.

General Social Science

Recommended for those who plan to transfer in general studies or a divisional major program in general social science to Eastern Oregon College, Oregon College of Education, Oregon State University, Portland State University, Southern Oregon College or University of Oregon. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence[2]	3	3	3
Science sequence (with laboratory or 12 hours of mathematics numbered 101 and above)[3]	3-4	3-4	3-4
History sequence	3	3	3
Physical Education	1		1
Personal Health		2	
Elective	2		0-2
	15-16	14-15	14-15

Sophomore Year

	F	W	S
Second humanities or science sequence	3-4	3-4	3-4
Social science sequences (select three different: anthropology, sociology economics, geography, political science, psychology, religion[4]	9	9	9
Physical Education	1	1	1
Electives to bring total to 93 hours[5]	2-3	2-3	2-3
	16	16	16

Total: 93 hours

[1]Students planning to transfer to OSU, PSU, or OCE should complete Wr. 111,112 and 3 hours of electives. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113.

[2]Students transferring to PSC may substitute a foreign language or philosophy. Students planning to teach should take philosophy.

[3]PSU students may take a non-laboratory science. Mth 95 is acceptable.

[4]Students planning to teach should complete Psy 201, 202; students planning to transfer to PSU, OCE, or SOC should fill out the year's schedule with Sp 111 Fundamentals of Speech. Students planning to transfer to the UO may use Psy 201, 202, 203 to meet science requirement provided laboratory work is completed after transfer. UO will also accept philosophy toward the social science major.

[5]OSU students should complete both a second humanities and a second science sequence during the sophomore year. Students planning to teach should note that certification requirements call for courses in five different social sciences: U.S. and world history, geography, political science, economics, and sociology or anthropology.

Geography

Recommended for those who plan to transfer in geography to the University of Oregon or Portland State University or the program in physical and resource geography at Oregon State University. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Geog 105, 106, 107 Introductory Geography	3	3	3
G 201, 202, 203 Geology	3	3	3
G 204, 205, 206 Geology Laboratory	1	1	1
First year foreign language (recommended UO and PSU) Mathematics through Mth 102	4	4	4
Trigonometry (OSU)	4	4	4
Physical Education	1		1
Personal Health		2	
	15	16	15

Sophomore Year

	F	W	S
Ch 101, 102, 103 or 201, 202, 203) General Chemistry (recommended OSU, PSU))	4	4	4
Ph 201, 202, 203 General Physics (recommended UO)[2])	4	4	4
Social Science sequence[3]	3	3	3
Literature sequence	3	3	3
Second year foreign language or social science sequence (UO, PSU))	3-4	3-4	3-4
Bot 201, 202, 203 General Botany (OSU)	4	4	4
Physical Education	1	1	1
Electives to bring total hours to 93	0-3	0-3	0-3
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of elective. Students tranferring to UO should complete Wr 111, 112, 113.

[2]Ph 201 requires Mth 101 College Algebra previously or parallel. If student's placement test scores indicate the need to complete this course, it should be taken in place of the elective hours fall term. If the student does not have the background to take Mth 101, he should take the appropriate chemistry sequence instead of physics.

[3]Students planning to teach should complete Psy 201, 202. Students planning to transfer to PSU should fill out the program with Sp 111 Fundamentals of Speech. Ec 201, 202, 203 is recommended for students transferring to OSU.

History

Recommended for those who plan to transfer in history to the University of Oregon State University, Portland State University, Eastern Oregon College, or Southern Oregon College. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Hst 101, 102, 103 History of Western Civilization)	3	3	3
Science sequence (with laboratory, or 12 hours of mathematics)[2])	3-4	3-4	3-4
Foreign language or humanities sequence[3]	3-4	3-4	3-4
Physical Education	1		1
Personal Health		2	
Electives	0-2	0-2	0-2
	15	16	15

Sophomore Year

	F	W	S
Hst 201, 202,203 History of the United States)	3	3	3
Literature sequence (UO, OSU, EOC, SOC)	3	3	3
Second science sequence (UO, OSU, EOC, SOC)[4]	3-4	3-4	3-4
Second humanities or science sequence (PSU)[4]	3-4	3-4	3-4
Second year foreign language or social science sequence other than history)	3-4	3-4	3-4
Physical Education	1	1	1
Electives to bring total to 93 hours[5]	0-6	0-6	0-6
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112, and 3 hours of electives. Students transferring to UO, EOC, or SOC should complete Wr 111, 112, 113.

[2]PSU students may complete requirements with a non-laboratory science.

[3]A foreign language is required for students transferring to the UO and is recommended for those transferring to OSU. The language requirement for the B.A. degree may be met in any one of the following ways: (1) Two years (normally 24 term hours) of college work in a foreign language; (2) One year of college work at the second-year or higher level; or (3) Examination showing language competence equivalent to that attained at the end of two years of college study. PSU students wishing to teach should complete a humanities sequence in philosophy. For those wishing the B.A., the humanities sequence should be foreign language or, if the foreign language requirement can be met by examination, literature or philosophy.

[4]Students planning to teach should complete Psy 201, 202 instead of a second science. Those planning to transfer to PSU, EOC, or SOC should fill out the year with Sp 111 Fundamentals of Speech. Students transferring to UO may use Psy 201, 202, 203 to meet science requirements provided laboratory work is completed after transfer.

[5]Students planning to teach should notice that certification requirements call for courses in five different social sciences: U.S. and world history, geography, political science, economics, and sociology or anthropology.

Law, Preprofessional

As a general rule a baccalaureate degree is required before entry into the School of Law at the University of Oregon. In exceptional cases applicants, who have completed three academic years of undergraduate work and whose background and academic record clearly demonstrate outstanding potential for legal studies, may be admitted without a baccalaureate degree at the discretion of the School of Law.

No particular form of prelegal education is prescribed. Intellectual maturity and breadth of educational background are more important than particular subject matter. The School of Law does emphasize the importance of well developed writing skills. The applicant's entire background, including his academic achievement, educational experience, and extra-curricular activities will be considered in connection with his application.

The community college student should follow the transfer curriculum indicated for the field of study and institution in which he plans to complete his baccalaureate degree. However, the University of Oregon School of Law recommends that the following courses, which contain substantive material or emphasize specific skills desirable as background for the study of law, be included in the student's community college program if possible.

PS 201, 202, 203	American Governments
Ec 201, 202, 203	Principles of Economics
BA 211, 212, 213	Principles of Accounting
Wr 226	Expository Writing

After transfer, the student should consult the institution's prelegal advisor for assistance in planning his upper-division program.

Law Enforcement, Transfer

Recommended for those who plan to transfer to the Certificate Program in Law Enforcement at Portland State University or Southern Oregon College. To earn this certificate at Portland State University the student must also earn a baccalaureate degree in political science, psychology, or sociology. Students must earn a baccaleaureate degree in general studies in the social sciences at Southern Oregon College. Requirements for a degree and certificate may be completed with two years additional work at the four-year institutions.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
LE 111, 112, 113 Law Enforcement and Society	3	3	3
Soc 204, 205, 206 General Sociology	3	3	3
Science sequence[2]	4	4	4
Physical Education	1		1
Personal Health		2	
	14	15	14

Sophomore Year

Psy 201, 202, 203 General Psychology	3	3	3
PS 201, 202, 203 American Governments	3	3	3
Hst 201, 202, 203 History of the United States	3	3	3
Humanities sequence[3]	3	3	3
Second humanities sequence[4]	3	3	3
Physical Education	1	1	1
	16	16	16

Total: 91 hours

[1]Students planning to transfer to PSU should complete Wr 111, 112 and 3 hours of elective.

[2]Students planning to transfer to PSU are urged to take 12 hours of mathematics. Students planning to transfer SOC should take GS 101, 102, 103 General Biology or another laboratory science.

[3]Students planning to transfer to SOC should complete three courses from AA 201, Survey of Visual Arts, Mus 201 History of Music and Its Literature, Phl 201 Introduction to Philosophy, and Sp 111 Fundamentals of Speech. Students planning to transfer to PSU should complete Sp 111, 112, 113 Fundamentals of Speech.

[4]Students planning to transfer to SOC should take this second sequence in Introduction to Literature or World Literature.

Philosophy

Recommended for those who plan to transfer in philosophy to the University of Oregon or Portland State University. Requirements for the baccalaureate degree may be completed with two additional years of work at the four-year institution.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Science sequence (with laboratory or 12 hours of mathematics numbered 101 or above)	3-4	3-4	3-4
Physical Education	1		1
Personal Health		2	
Social science sequence	3	3	3
	13-14	14-15	13-14

Sophomore Year

	F	W	S
Hst 101, 102, 103 History of Western Civilization	3	3	3
Select Three:			
Phl 201 Problems of Philosophy			
Phl 202 Elementary Ethics			
Phl 203 Elementary Logic			
Phl 204 Elementary Aesthetics			
or			
Phl 201, 202, 203 Problems of Philosophy	3	3	3
Second science sequence[2]	3-4	3-4	3-4
Second humanities sequence[2]	3	3	3
Physical Education	1	1	1
Electives to bring total hours to 93	2-3	3-4	3-4
	16-17	16-17	16-17

Total: 93 hours

[1]Students transferring to PSU should complete Wr 111, 112 and 3 hours of electives. The third term of English Composition will be completed during the junior year.

[2]Students transferring to UO may use Psy 201, 202, 203 General Psychology to meet science requirement if laboratory work is completed after transfer. PSU students should complete either a second science or a second humanities sequence and electives to bring total hours to 93.

Political Science

This program has been approved by Oregon State University, the University of Oregon, and Portland State University for those who plan to transfer in political science. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Science sequence (with laboratory or 12 hours of mathematics[2] numbered 101 and above)	3-4	3-4	3-4
Hst 101, 102, 103 History of Western Civilization	3	3	3
Physical Education	1		1
Personal Health		2	
Electives[3]	2-3	0-2	2-3
	15-16	15-16	15-16

Sophomore Year

PS 201, 202, 203 American Governments	3	3	3
Second humanities sequence (OSU, UO)	3	3	3
Second science sequence (OSU, UO)	3-4	3-4	3-4
Second humanities or science[2] sequence PSU)	3-4	3-4	3-4
Physical Education	1	1	1
Social science sequence (History of the United States, economics, geography, sociology, anthropology, or psychology[3])	3	3	3
Electives to bring total hours to 93[3]	2-6	2-6	2-6
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of electives.

[2]The science requirement at PSU need not be met with a laboratory course. Mth 95 is acceptable as part of a mathematics sequence.

Psychology

Recommended for students who plan to transfer in psychology to the University of Oregon, Oregon State University, or Portland State University. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Science sequence (with laboratory or 12 hours of mathematics numbered 101 and above)[2]	3-4	3-4	3-4
Social science sequence (anthropology or sociology recommended)	3	3	3
Physical Education	1		1
Personal Health		2	
Electives	0-2	0-2	0-2
	15-16	15-16	15-16

Sophomore Year

	F	W	S
Psy 201, 202, 203 General Psychology	3	3	3
Second science sequence[2]	3-4	3-4	3-4
Second humanities sequence	3	3	3
Physical Education	1	1	1
Electives (additional science or social science; foreign language if planning to do graduate work)[3]	5-6	5-6	5-6
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of electives. Students transferring to UO should complete Wr 111, 112, 113.

[2]Students planning to transfer to OSU should complete Bi 101, 102, 103 and 12 hours of mathematics, according to placement. UO students should select biology, physics, chemistry, or mathematics as one of their science sequences.

[3]OSU students should complete Hst 101, 102, 103; anthropology or sociology, whichever is not completed during the freshman year, is recommended as additional elective hours. UO recommends biology or mathematics, if not already taken to meet science requirement.

Sociology

Recommended for those who plan to transfer in sociology to the University of Oregon, Oregon State University, or Portland State University. Requirements for the baccalaureate degree may be completed with two additional years of work.

Freshman Year

	F	W	S
Wr 111, 112, 113 English Composition[1]	3	3	3
Literature sequence	3	3	3
Science sequence (with laboratory or 12 hours of mathematics numbered 101 and above)	3-4	3-4	3-4
Social science sequence (anthropology, or History of Western Civilization recommended)	3	3	3
Physical Education	1		1
Personal Health		2	
Electives	0-2		0-2
	15-16	15-16	15-16

Sophomore Year

	F	W	S
Soc 204, 205, 206 General Sociology	3	3	3
Ec 201, 202, 203 Principles of Economics[2]	3	3	3
Second science sequence (OSU, UO)[3]	3-4	3-4	3-4
Foreign language or second humanities sequence (OSU, UO)	3-4	3-4	3-4
Physical Education	1	1	1
Second humanities or science sequence (PSU)[4]	3-4	3-4	3-4
Electives to bring total hours to 93[5]	0-6	0-6	0-6
	15-16	15-16	15-16

Total: 93 hours

[1]Students planning to transfer to OSU or PSU should complete Wr 111, 112 and 3 hours of electives. Students transferring to UO should complete Wr 111, 112, 113.

[2]Psy 201, 202, 203 is recommended as an acceptable alternative for students transferring to PSU. OSU students should take Hst 101, 102, 103 if they did not already do so in the freshman year.

[3]Students transferring to UO may use Psy 201, 202, 203 to meet science requirement provided laboratory work is completed after transfer.

[4]The science requirement at PSU need not be met with a laboratory course. Mth 95 is acceptable.

[5]PSU students who do not have a satisfactory score on the mathematics placement examination should complete Mth 95 Intermediate Algebra.

Special Training Programs

Director

Murray, Larry D.—B.S., Business Education, M.S., Accounting, University of North Dakota.

Faculty

Grant, Rosemary—Oregon Vocational Certificate. Part-time.

Lamoreaux, Lucille—B.A., German and Russian, University of Oregon. Part-time.

Loomis, Helen—B.S., Education, University of Minnesota. Part-time.

Lynn, Helen—Oregon Vocational Certificate. Part-time.

Merrill, Mary—Oregon Vocational Certificate. Part-time.

Mobley, George—Certified Welding Instructor. Part-time.

Wilson, Mildred—B.S., Elementary Education, Oregon College of Education. Part-time.

The Program

This department provides training opportunities for under-employed and under-educated persons. Courses vary from Adult Basic Education, a pre-occupational course, to clerical training for entry level stenographers and typists.

Some courses and students are selected and sponsored by local and state agencies. Those interested in participating may obtain information concerning requirements, qualifications, and type of programs by inquiring at the department office on the second floor of the Administration Building.

Programs

Adult Basic Education (Indeterminate Length)
Tuition-free, open to persons 18 years of age and over. This course is offered in most geographical areas in Lane County, and students can attend during the day or evening. Basic mathematics, reading, and spelling are taught, with the program planned to provide individual help. Students are encouraged to develop and prepare themselves for later occupational or academic training.

Building Maintenance and Repair (15 weeks)
New skills are introduced in weekly segments; therefore, students may enroll any Monday and remain until they have completed the entire cycle of course requirements. Floor maintenance (stripping, sealing, waxing, and polishing), maintenance of grounds, general maintenance including plumbing, electrical, hardware, wood; safety, job requirements, and employer relations are covered.

Clerical Assessment (24 weeks)
Students may enroll in this program at any time. Instructors assess students' capability in a variety of clerical areas. The two principal objective are to provide entry level skills as a clerk-typist, and to identify special strengths students may have in clerical or stenographic areas.

Typical courses are English, typing, shorthand, and business machines.

Clerk Typist (24 weeks)
A concentrated occupational training program which will provide entry level skills as a typist. Instruction is given in the areas of typing, business English, mathematics, bookkeeping, and accounting, office machines, office practice, and introduction to key punch. The courses include instruction in job finding techniques, personal grooming, and office relations. Students are requested to take a Civil Service examination prior to completion.

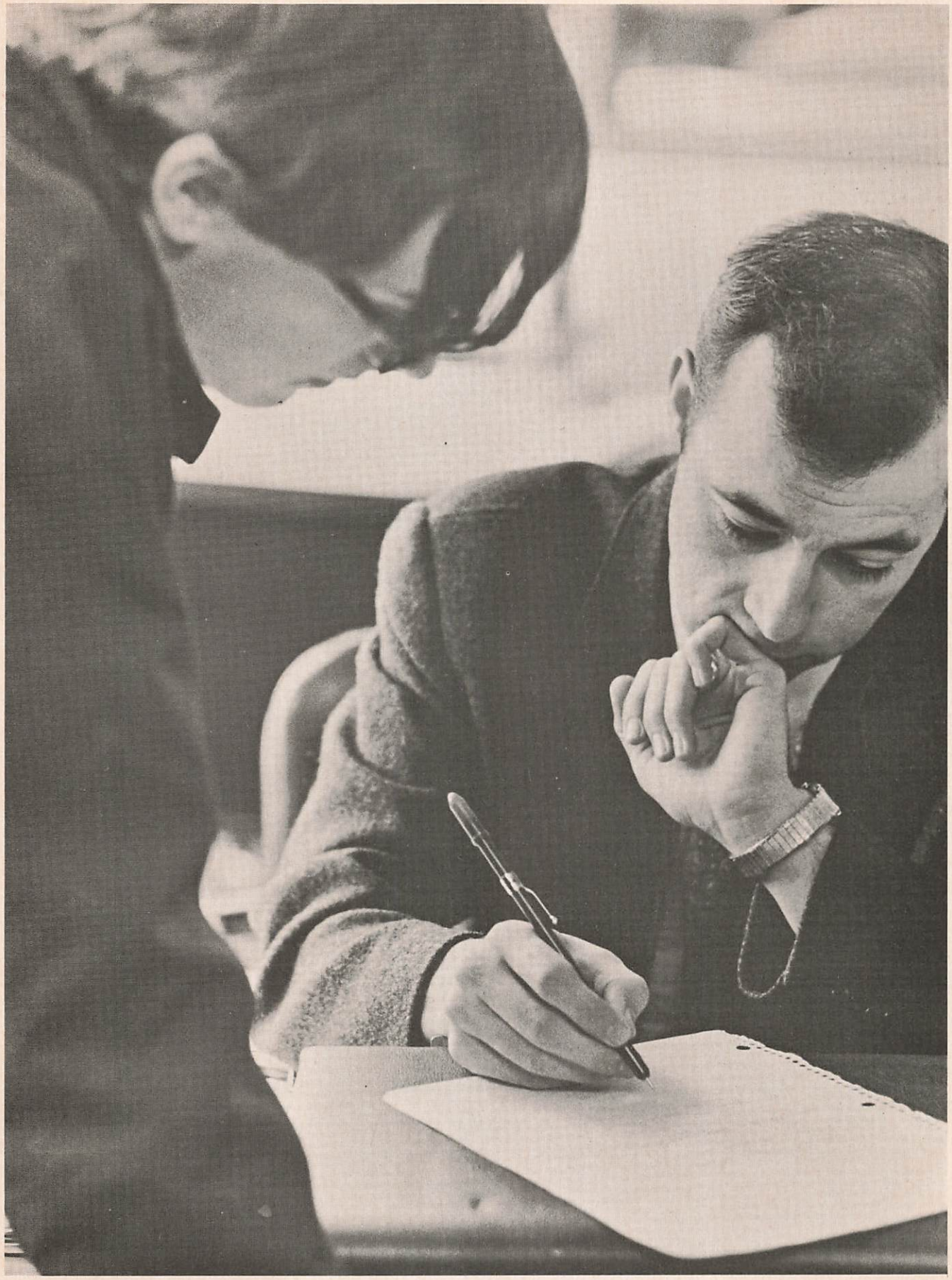
Clerk Steno (30 weeks)
Trainees are instructed in shorthand and use of adding machines, calculators, and dictating machines. Practice in working with figures and simple bookkeeping is included. Students must be able to type accurately at a minimum of 40 words per minute and take dictation at a minimum of 80 words per minute. Before the end of the course most trainees will have some exposure to PBX Board, key punch, duplicating machines, and other office equipment.

Dinner Cook (24 weeks)
Instruction in food costs and control, food purchasing and menu constructions are some of the skills covered. Students will work and study at the College's new Food Service Center developing proficiencies required in this rapidly growing occupation. Developing correct work habits and an appreciation of the trades arts are a part of the program.

Nurse Aide (12 weeks)
This is a practical course that includes instruction in nursing skills, ethics, anatomy and physiology, basic nutrition, rehabilitation, first aid, homemaking skills and orientation to nursing. Each student is expected to exhibit proficiency in all of the following: personal health care of homebound individuals in order that they may regain and/or maintain their best possible physical psychosocial health and degree of independence; use of body mechanics and exercise; maintenance of good posture and prevention of deformity; planning and preparing nutritious meals and maintaining a home environment conducive to good health.

Welding (12 weeks)
The three basic elements in this 12-week program are blueprint reading, shop layout, and a concentrated arc welding lab. Students are encouraged to take the state-administrated welding exam at the end of the course, which, if passed, permits easiest entry into the job market.

The use of the oxygen acetylene torch, metal arc welding, blueprint reading, and other skills are taught.



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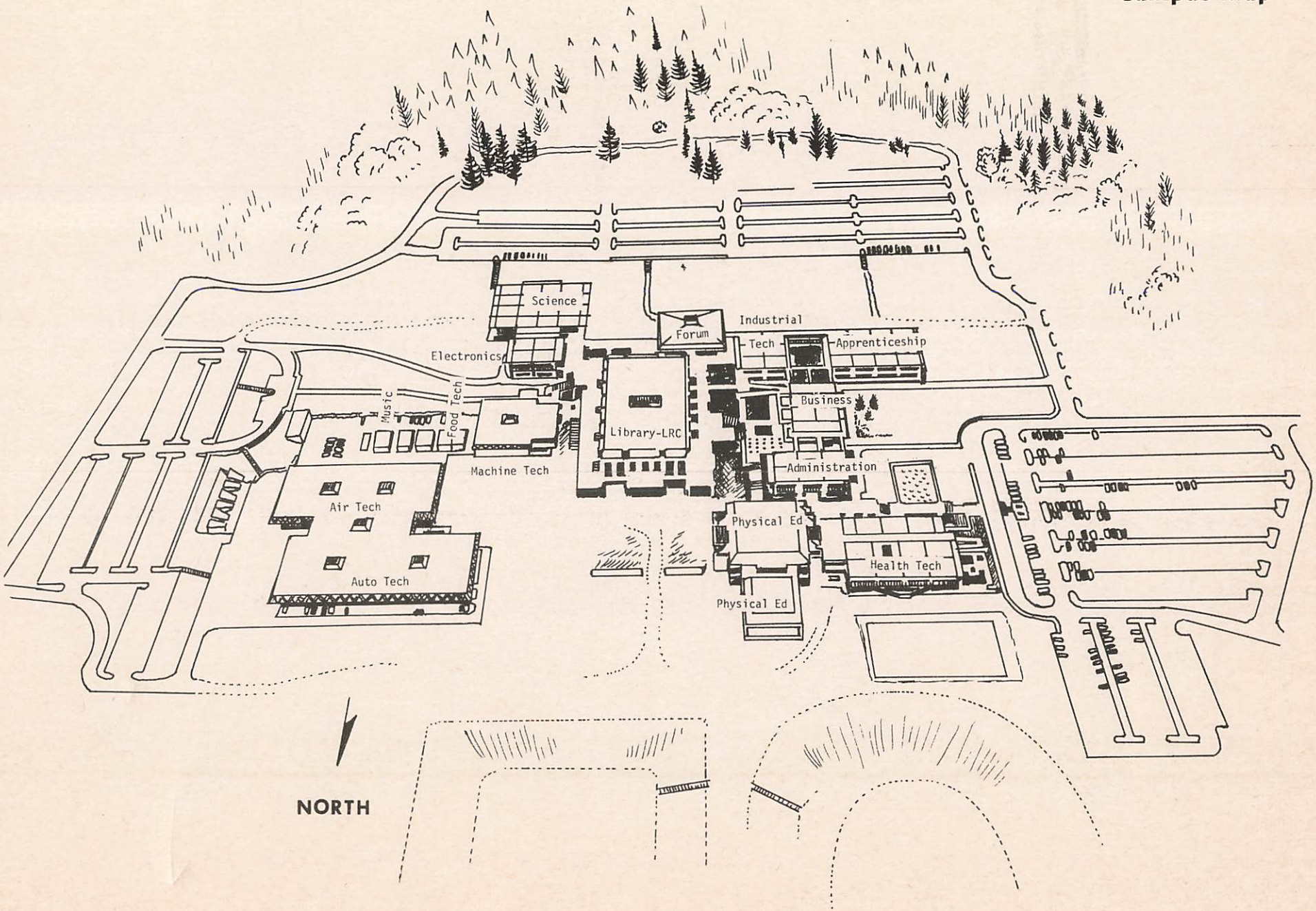
Campus Map


Science
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Music
Food Tech
Business
Library-LRC
Machine Tech
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Air Tech
Physical Ed
Auto Tech
Health Tech
Physical Ed
NORTH